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

DEPARTMENT ORDER

Irving Oil Terminals Inc. **Waldo County** **Searsport, Maine** **A-413-71-Q-R/A (SM)**	**Departmental** **Findings of Fact and Order** **Air Emission License** **Renewal and Amendment**

FINDINGS OF FACT

After review of the air emission license renewal and amendment applications, 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

Irving Oil Terminals Inc. (Irving) has applied to renew their Air Emission License for the operation of emission sources associated with their bulk petroleum storage and distribution facility.

Irving has also requested an amendment to their license in order to update tank capacities and current products stored in each tank, remove Tanks #14 and #15 from their license, and add an existing parts washer and a new emergency generator to their license.

The equipment addressed in this license is located at 52 Station Avenue, Searsport, Maine.

B. Emission Equipment

The following equipment is addressed in this air emission license:

Fuel Burning Equipment

Equipment	Max. Capacity	Maximum Firing Rate	Fuel Type, % sulfur	Date of Manuf.	Date of Install.	Stack #
Vapor Combustion Unit (VCU)	80,784 cubic feet of vapor/minute	21 scf/hr	Propane, negl.	2011	2011	2

Stationary Engines

Equipment	Max. Input Capacity (MMBtu/hr)	Rated Output Capacity (HP)	Fuel Type, % sulfur	Firing Rate (gal/hr)	Date of Manuf.	Date of Install.	Stack #
Generator #1	0.7	100	Propane, Negl.	7.4	1999	1999	1
Generator #2*	0.9	77	Distillate fuel, 0.0015%	6.3	2018	2018	3

*New in this license

Petroleum Storage Tanks

Tank	Capacity (Gallons)*	Products Stored	Roof Type	Date Installed
#1	7,350,000	Distillate Fuel/Ethanol/Gasoline	Internal Floating	1972
#2	7,350,000	Distillate Fuel/Ethanol/Gasoline	Internal Floating	1972
#3	3.360,000	Distillate Fuel	Fixed	1972
#4**	7,350,000	Asphalt/Residual Fuel/Distillate Fuel	Fixed	1972
#5	3,360,000	Distillate Fuel/Ethanol/Gasoline	Internal Floating	1972
#6	5,250,000	Distillate Fuel/Ethanol/Gasoline	Internal Floating	1972
#7	5,670,000	Distillate Fuel/Ethanol/Gasoline	Internal Floating	1968
#8	5,670,000	Distillate Fuel/Ethanol/Gasoline	Internal Floating	1968
#9	4.620,000	Distillate Fuel	Fixed	1952
#10	2,100,000	Distillate Fuel/Ethanol/Gasoline	Internal Floating	1952
#11	1,680,000	Distillate Fuel/Ethanol/Gasoline	Internal Floating	1952
#12	756,000	Distillate Fuel/Ethanol/Gasoline	Internal Floating	1952
#13	2,100,000	Distillate Fuel	Fixed	1952
#16	168,000	Biofuel/Distillate Fuel	Fixed	2013

*Capacities updated to reflect data provided as part of the most recent application
** Tank #4 is heated in order to be capable of storing residual fuel and asphalt

Tanks #14 and #15 have been dismantled and removed from the facility and are hereby removed from this air emission license.

Process Equipment

Equipment	Production Rate	Pollution Control Equipment	Date of Installation
Loading Rack	340,000,000 gallons/year*	Vapor Combustion Unit (VCU)	1972 (Loading Rack) 1991 (Loading Rack Overhaul) 2011 (VCU)

*220,000,000 gallon/year of gasoline and ethanol and 120,000,000 gallons/year of biofuel, distillate fuel, and residual fuel

Insignificant Activities

Equipment	Max. Capacity	Maximum Firing Rate	Fuel Type, % sulfur	Date of Manuf.	Date of Install.	Stack #
HTP Elite Boiler	0.3 MMBtu/hr	N/A	Propane, negl.	2013	2013	4
Reflecto-Ray Systems Heaters (4)	<1.0 MMBtu/hr [each]	N/A	Distillate fuel, 0.5%	2013	2013	5-8

The units above are considered insignificant activities per Appendix B. of *Major and Minor Source Air Emission License Regulations*, 06-096 C.M.R. ch. 115. However, these units may still be subject to applicable state and federal regulations. These units are listed for information purposes only and will not be addressed any further in this air emission license.

Irving also loads distillate fuel onto railcars. At no time is gasoline ever loaded onto railcars, nor does Irving ever load distillate fuel onto railcars that carried gasoline on their most recent previous load; therefore, the railcar loading area is not subject to any federal or state regulations and thus will not be discussed any further as part of this air emission license.

C. Definitions

Bulk Gasoline Terminal. For the purposes of this license, *bulk gasoline terminal* means any gasoline facility which receives gasoline by pipeline, ship or barge, and has a gasoline throughput greater than 75,700 liters per day. Gasoline throughput shall be the maximum calculated design throughput as may be limited by compliance with an enforceable condition under Federal, State or local law and discoverable by the Administrator and any other person. [40 C.F.R. Part 60, Subpart XX]

Distillate Fuel. For the purposes of this license, *distillate fuel* means the following:

- Fuel oil that complies with the specifications for fuel oil numbers 1 or 2, as defined by the American Society for Testing and Materials (ASTM) in ASTM D396;
- Diesel fuel oil numbers 1 or 2, as defined in ASTM D975;
- Kerosene, as defined in ASTM D3699;
- Biodiesel, as defined in ASTM D6751; or
- Biodiesel blends, as defined in ASTM D7467.

Equipment. For the purposes of this license, *equipment* 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. This definition also includes the entire vapor processing system except for the exhaust port(s) or stack(s). [40 C.F.R. Part 63, Subpart BBBBBB]

Gasoline. For the purposes of this license, *gasoline* means any petroleum distillate or petroleum distillate/alcohol blend having a Reid vapor pressure of 27.6 kilopascals or greater, which is used as a fuel for internal combustion engines. [40 C.F.R. Part 63, Subpart BBBBBB]

Gasoline Cargo Tank. For the purposes of this license, *gasoline cargo tank* means a delivery tank, trailer, or railcar used at bulk gasoline terminals which is loading gasoline and/or ethanol or which has loaded gasoline and/or ethanol on the immediately previous load. [40 C.F.R. Part 60, Subpart XX & 40 C.F.R. Part 63, Subpart BBBBBB]

In Gasoline Service. For the purposes of this license, *in gasoline service* means that a piece of equipment is used in a system that transfers gasoline or gasoline vapors. [40 C.F.R. Part 63, Subpart BBBBBB]

Operating Parameter Value. For the purposes of this license, *operating parameter value* means a value for an operating or emission parameter of the vapor processing system (e.g., temperature) which, if maintained continuously by itself or in combination with one or more other operating parameter values, determines that an owner or operator has complied with the applicable emission standard. The operating parameter value is determined using the procedures in 40 C.F.R. § 63.11092(b). [40 C.F.R. Part 63, Subpart BBBBBB]

D. Application Classification

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

The modification of a minor source is considered a major or minor modification based on whether or not expected emission increases exceed the "Significant Emission" levels as defined in the Department's *Definitions Regulation*, 06-096 Code of Maine Rules (C.M.R.) ch. 100. The emission increases are determined by subtracting the current licensed annual emissions preceding the modification from the maximum future licensed annual emissions, as follows:

Pollutant	Current License (TPY)	Future License (TPY)	Net Change (TPY)	Significant Emission Levels
PM	0.1	0.1	--	100
PM_{10}	0.1	0.1	--	100
SO_2	0.1	0.1	--	100
NO_x	6.1	6.0	-0.1	100
CO	14.3	14.4	+0.1	100
VOC	49.9	49.9	--	50
CO_2e	<100,000	<100,000	--	100,000

This modification is determined to be a minor modification; therefore, this license is considered to be a renewal of currently licensed emission units with a minor modification and has been processed through *Major and Minor Source Air Emission License Regulations*, 06-096 C.M.R. ch. 115.

With the annual volatile organic compound (VOC) limit of 49.9 tons per year and the annual hazardous air pollutant (HAP) limit of 9.9 tons per year for total HAPs, the facility is licensed as follows:

- As a synthetic minor source of air emissions, because the licensed emissions are below the major source thresholds for criteria air pollutants; and
- As an area source HAP, because the licensed emissions are below the major source thresholds for HAP.

II. BEST PRACTICAL TREATMENT (BPT) AND EMISSION STANDARDS

A. Introduction

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

BPT for new sources and modifications requires a demonstration that emissions are receiving Best Available Control Technology (BACT), as defined in *Definitions Regulation*, 06-096 C.M.R. ch. 100. BACT is a top-down approach to selecting air emission controls considering economic, environmental and energy impacts.

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. Process Description

The operations of Irving's bulk petroleum distribution terminal consist of the receipt, storage, and distribution of petroleum products. Products handled at the facility are received via oil tanker and transferred via product piping to the terminal's tank farm. Final distribution of product occurs at the facility's truck Loading Rack, where products are loaded onto tanker trucks for transport to other facilities.

C. Generator #1

Irving operates Generator #1 as an emergency generator. Generator #1 is a generator set consisting of an engine and an electrical generator. Generator #1 has an engine rated at 0.7 MMBtu/hr which fires propane. Generator #1 was manufactured and installed in 1999.

1. BPT Findings

The BPT emission limits for Generator #1 are based on the following:

PM/PM_{10}	- 0.05 lb/MMBtu based on 06-096 C.M.R. ch. 115, BPT
SO_2	- 0.0006 lb/MMBtu, based on firing propane
NO_x	- 2.27 lb/MMBtu based on AP-42, Table 3.2-3, dated 7/00
CO	- 3.51 lb/MMBtu based on AP-42, Table 3.2-3, dated 7/00
VOC	- 0.03 lb/MMBtu based on AP-42, Table 3.2-3, dated 7/00
Opacity	- 06-096 C.M.R. ch. 115, BPT

The BPT emission limits for Generator #1 are the following:

Unit	PM (lb/hr)	PM_{10} (lb/hr)	SO_2 (lb/hr)	NO_x (lb/hr)	CO (lb/hr)	VOC (lb/hr)
Generator #1	0.04	0.04	0.01	1.59	2.46	0.02

Visible emissions from Generator #1 shall not exceed 10% opacity on a six-minute block average basis.

Generator #1 shall be limited to 100 hours of operation per calendar year, excluding operating hours during emergency situations. There is no limit on emergency operation. Generator #1 shall be equipped with a non-resettable hour-meter to record operating time. To demonstrate compliance with the operating hours limit, Irving shall keep records of the total hours of operation and the hours of emergency operation for the unit.

Emergency generators are only to be operated for maintenance purposes and for situations arising from sudden and reasonably unforeseeable events beyond the control of the source. Emergency generators are not to be used for prime power when reliable offsite power is available; nor to operate or to be contractually obligated to be available in a demand response program, during a period of deviation from standard voltage or frequency, or supplying power during a non-emergency situation as part of a financial arrangement with another entity.

2. NSPS: 40 C.F.R. Part 60, Subpart JJJJ

   Due to the date of manufacture of the spark ignition emergency engine listed above, the engine is not subject to the NSPS *Standards of Performance for Spark Ignition Internal Combustion Engines (SI ICE),* 40 C.F.R. Part 60, Subpart JJJJ since the unit was manufactured prior to January 1, 2009. [40 C.F.R. § 60.4230]

3. NESHAP: 40 C.F.R. Part 63, Subpart ZZZZ

   NESHAP for Stationary Reciprocating Internal Combustion Engines, 40 C.F.R. Part 63, Subpart ZZZZ is not applicable to the emergency engine listed above. The unit is considered an existing, emergency stationary reciprocating internal combustion engine at an area HAP source. However, it is considered exempt from the requirements of 40 C.F.R. Part 63, Subpart ZZZZ since it is categorized as a commercial emergency engine and it does not operate or is not contractually obligated to be available in a demand response program, during a period of deviation from standard voltage or frequency, or for supplying power during a non-emergency situation as part of a financial arrangement with another entity as specified in 40 C.F.R. § 63.6640(f)(4)(ii). EPA's memo *Guidance Regarding Definition of Residential, Commercial, and Institutional Emergency Stationary RICE in the NESHAP for Stationary RICE,* dated August 9, 2010, specifically exempts emergency engines located at Petroleum Bulk Terminals (NAICS code 424710) such as Irving from this regulation because they are considered to be commercial emergency engines.

   Operation of any emergency engine in a demand response program, during a period of deviation from standard voltage or frequency, or for supplying power during a non-emergency situation as part of a financial arrangement with another entity as specified in 40 C.F.R. § 63.6640(f)(4)(ii), would cause the engine to be subject to 40 C.F.R. Part 63, Subpart ZZZZ and require compliance with all applicable requirements.

D. Generator #2

Irving intends to operate Generator #2 as an emergency generator. Generator #2 is a generator set consisting of an engine and an electrical generator. The unit is a Caterpillar Model D80-8 gen set with an engine rated at 0.9 MMBtu/hr (77 kW output) which fires distillate fuel. Generator #2 was manufactured 2018 and will be installed at the facility in mid-2018.

1. BACT Findings

a. Particulate Matter (PM & PM_{10})

Particulate matter emissions from distillate fuel-fired engines are generally controlled through proper operation and maintenance. Additionally, this engine is subject to 40 C.F.R. Part 60, Subpart IIII, which means it is required to meet EPA emission standards for emergency stationary engines as discussed below. Given the small size of the unit (0.9 MMBtu/hr) and the operating hours restriction included in 40 C.F.R. Part 60, Subpart IIII, additional control for particulate matter is not economically feasible. BACT for PM/PM_{10} emissions from Generator #2 shall be proper operation and maintenance of the unit, installation of an EPA certified emergency stationary engine as required in 40 C.F.R. § 60.4205(b), and a PM/PM_{10} emission limit of 0.1 lb/hr.

b. Sulfur Dioxide (SO_2)

For an emergency engine that fires distillate fuel and operates for only short periods of time, the use of wet scrubbers or other additional SO_2 add-on control methods are not economically feasible considering the minimal emissions due to the limited use of the engine. The most practical method for limiting SO_2 emissions of such an engine is the use of low sulfur fuel, such as distillate fuel with a sulfur content no greater than 0.0015% by weight. BACT for SO_2 emissions from Generator #2 shall be the use of distillate fuel with a sulfur content no greater than 0.0015% by weight, installation of an EPA certified emergency stationary engine as required in 40 C.F.R. § 60.4205(b), and an SO_2 emission limit of 0.01 lb/hr.

c. Nitrogen Oxides (NO_x)

Potentially available control options for reducing emissions of NO_x from distillate fuel-fired generators include combustion controls, selective catalytic reduction (SCR), and non-selective catalytic reduction (NSCR). Combustion controls are typically implemented through design features such as electronic engine controls, injection systems, combustion chamber geometry, and turbocharging systems. Most new engines are designed with these features as standard equipment.

SCR and NSCR are both post-combustion NO_x reduction technologies. SCR injects ammonia to react with NO_x in the gas stream in the presence of a catalyst to form nitrogen and water. NSCR uses a catalyst to convert CO, NO_x, and hydrocarbons into carbon dioxide, nitrogen, and water without the use of an additional reagent, and requires strict air-to-fuel control to maintain high reduction effectiveness without increasing hydrocarbon emissions. For a unit of this size (0.9 MMBtu/hr) and usage (emergency back-up engine), neither SCR nor NSCR are economically feasible considering the small size of the unit and the minimal emissions due to the limited use of the engine.

BACT for NO_x emissions from Generator #2 shall be the use of good combustion controls, proper operation and maintenance of the unit, installation of an EPA certified emergency stationary engine as required in 40 C.F.R. § 60.4205(b), and a NO_x emission limit of 3.79 lb/hr.

d. Carbon Monoxide (CO) and Volatile Organic Compounds (VOC)

CO and VOC emissions are a result of incomplete combustion, caused by conditions such as insufficient residence time or limited oxygen availability. CO and VOC emissions from distillate fuel-fired generators are generally controlled through proper operation and maintenance. Oxidation catalysts have been used on larger generators to reduce CO and VOC emission levels in the exhaust, but, like SCR and NSCR, use of an oxidation catalyst on such a small emergency engine with limited yearly use would not provide a significant environmental benefit and would not be economically feasible. BACT for CO and VOC emissions from Generator #2 shall be proper operation and maintenance of the unit, installation of an EPA certified emergency stationary engine as required in 40 C.F.R. § 60.4205(b), and emission limits of 0.82 lb/hr for CO and 0.3 lb/hr for VOC.

e. Greenhouse Gases (GHG)

Emissions of greenhouse gases from small emergency engines are minimized through proper operation and maintenance of the unit and maintaining the unit's efficiency. There are no specific GHG emission requirements for Generator #2 at this time.

f. Visible Emissions

BACT for visible emissions from Generator #2 shall be the following:

Visible emissions from Generator #2 shall not exceed 10% opacity on a six-minute block average basis, except for no more than one six-minute block average in a one-hour period to accommodate periods of startup and load changes. During such periods, the facility may elect to comply with the following work practice standards in lieu of this opacity standard:

(1) The unit operator shall maintain a log (written or electronic) of the date, time, and duration of all unit startups;
(2) The unit shall be operated in accordance with the manufacturer's emission-related operating instructions;
(3) The unit operator shall minimize the engine's time spent at idle and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the non-startup emission limitations apply; and

(4) The unit, including any associated air pollution control equipment, shall be operated at all times in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Department that may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the unit.

2. Emission Limits

The BACT emission limits for Generator #2 are based on the following:

PM/PM_{10}	- 0.12 lb/MMBtu based on 06-096 C.M.R. ch. 115, BACT
SO_2	- combustion of distillate fuel with a maximum sulfur content not to exceed 15 ppm (0.0015% sulfur by weight)
NO_x	- 4.41 lb/MMBtu based on AP-42, Table 3.3-1, dated 10/96
CO	- 0.95 lb/MMBtu based on AP-42, Table 3.3-1, dated 10/96
VOC	- 0.35 lb/MMBtu based on AP-42, Table 3.3-1, dated 10/96
Opacity	- 06-096 C.M.R. ch. 115, BACT

The BACT emission limits for Generator #2 are the following:

Unit	PM (lb/hr)	PM_{10} (lb/hr)	SO_2 (lb/hr)	NO_x (lb/hr)	CO (lb/hr)	VOC (lb/hr)
Generator #2	0.10	0.10	0.01	3.79	0.82	0.30

Visible emissions from Generator #2 shall not exceed 10% opacity on a six-minute block average basis, except for no more than one six-minute block average in a one-hour period to accommodate periods of startup and load changes. During such periods, the facility may elect to comply with the following work practice standards in lieu of the opacity standard:

a. The unit operator shall maintain a log (written or electronic) of the date, time, and duration of all unit startups;
b. The unit shall be operated in accordance with the manufacturer's emission-related operating instructions;
c. The unit operator shall minimize the engine's time spent at idle and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the non-startup emission limitations apply; and
d. The unit, including any associated air pollution control equipment, shall be operated at all times in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to

the Department that may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the unit.

3. NSPS: 40 C.F.R. Part 60, Subpart IIII

Standards of Performance for Stationary Compression Ignition Internal Combustion Engines, 40 C.F.R. Part 60, Subpart IIII is applicable to Generator #2 since the unit was ordered after July 11, 2005, and manufactured after April 1, 2006. [40 C.F.R. § 60.4200] By meeting the requirements of 40 C.F.R. Part 60, Subpart IIII, the unit also meets the requirements found in the *National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines*, 40 C.F.R. Part 63, Subpart ZZZZ. [40 C.F.R. § 63.6590(c)]

A summary of the currently applicable federal 40 C.F.R. Part 60, Subpart IIII requirements is listed below.

a. Emergency Engine Designation and Operating Criteria

Under 40 C.F.R. Part 60, Subpart IIII, a stationary reciprocating internal combustion engine (ICE) is considered an **emergency** stationary ICE (emergency engine) as long as the engine is operated in accordance with the following criteria. Operation of an engine outside of the criteria specified below may cause the engine to no longer be considered an emergency engine under 40 C.F.R. Part 60, Subpart IIII, resulting in the engine being subject to requirements applicable to **non-emergency** engines.

(1) Emergency Situation Operation (On-Site)

There is no operating time limit on the use of an emergency engine to provide electrical power or mechanical work during an emergency situation. Examples of use of an emergency engine during emergency situations include the following:

- Use of an engine to produce power for critical networks or equipment (including power supplied to portions of a facility) because of failure or interruption of electric power from the local utility (or the normal power source, if the facility runs on its own power production);
- Use of an engine to mitigate an on-site disaster or equipment failure;
- Use of an engine to pump water in the case of fire, flood, natural disaster, or severe weather conditions; and
- Similar instances.

(2) Non-Emergency Situation Operation

An emergency engine may be operated up to a maximum of 100 hours per calendar year for maintenance checks, readiness testing, and other non-emergency situations as described below.

(i) An emergency engine may be operated for a maximum of 100 hours per calendar year for maintenance checks and readiness testing, provided that the tests are recommended by federal, state, or local government; the manufacturer; the vendor; the regional transmission organization or equivalent balancing authority and transmission operator; or the insurance company associated with the engine. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency ICE more than 100 hours per calendar year.

(ii) An emergency engine may be operated for up to 50 hours per calendar year for other non-emergency situations. **However, these operating hours are counted as part of the 100 hours per calendar year operating limit described in paragraph (2) and (2) (i) above.**

The 50 hours per calendar year operating limit for other non-emergency situations cannot be used for peak shaving, demand response, or to generate income for a facility by providing power to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

[40 C.F.R. §§ 60.4211(f) and 60.4219]

b. 40 C.F.R. Part 60, Subpart IIII Requirements

(1) Manufacturer Certification Requirement
The engine shall be certified by the manufacturer as meeting the applicable emission standards for new nonroad compression ignition engines found in 40 C.F.R. § 60.4202. [40 C.F.R. § 60.4205(b)]

(2) Ultra-Low Sulfur Fuel Requirement
The fuel fired in the engine shall not exceed 15 ppm sulfur (0.0015% sulfur), except that any existing fuel purchased (or otherwise obtained) prior to October 1, 2010, may be used until depleted. [40 C.F.R. § 60.4207(b)]

(3) Non-Resettable Hour Meter Requirement
A non-resettable hour meter shall be installed and operated on the engine. [40 C.F.R. § 60.4209(a)]

(4) Operation and Maintenance Requirements
The engine shall be operated and maintained according to the manufacturer's emission-related written instructions or according to alternate procedures developed by Irving that are approved by the engine manufacturer. Irving may only change those emission-related settings that are permitted by the manufacturer. [40 C.F.R. § 60.4211(a)]

(5) Annual Time Limit for Maintenance and Testing
As an emergency engine, the unit shall be limited to 100 hours/year for maintenance checks and readiness testing. Up to 50 hours/year of the 100 hours/year may be used in non-emergency situations (this does not include peak shaving, demand response, or to generate income for a facility by providing power to an electric grid or otherwise supply power as part of a financial arrangement with another entity). [40 C.F.R. § 60.4211(f)]

(6) Initial Notification Requirement
No initial notification is required under 40 C.F.R. Part 60, Subpart IIII for emergency engines. [40 C.F.R. § 60.4214(b)]

(7) Recordkeeping
Irving shall keep records that include maintenance conducted on the engine and the hours of operation of the engine recorded through the non-resettable hour meter. Documentation shall include the number of hours the unit operated for emergency purposes, the number of hours the unit operated for non-emergency purposes, and the reason the engine was in operation during each time. [40 C.F.R. § 60.4214(b)]

E. NESHAP: 40 C.F.R. Part 63, Subpart BBBBBB

Irving's Searsport terminal is subject to *NESHAP for Source Category: Gasoline Distribution Bulk Terminals, Bulk Plants, and Pipeline Facilities*, 40 C.F.R. Part 63, Subpart BBBBBB. The emission sources at the facility specifically subject to this regulation include all gasoline storage tanks, gasoline loading racks, vapor collection-equipped gasoline cargo tanks, and equipment components in gasoline service that meet the criteria specified in Tables 1 through 3 of the subpart. The facility is considered an existing bulk gasoline terminal with a gasoline throughput of greater than 250,000 gallons per day which is not subject to 40 C.F.R. Part 63, Subparts R, *NESHAP for Gasoline Distribution Facilities (Bulk Gasoline Terminals and Pipeline Breakout Stations)* or CC, *NESHAP from Petroleum Refineries*. [40 C.F.R. §§ 63.11081(a)(1) and 63.11082]

The regulation 40 C.F.R. Part 63, Subpart BBBBBB contains requirements applicable to both the Loading Rack and to any tanks currently storing gasoline or that will store gasoline in the future. Requirements specific to a piece of equipment will be included in the section that addresses that equipment. Below is a summary of the facility-wide applicable requirements of 40 C.F.R. Part 63, Subpart BBBBBB.

1. General Requirements

   Irving shall, 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. Equipment Leak Inspections

   a. Irving shall perform a monthly leak inspection of all equipment in gasoline service. Detection methods incorporating sight, sound, and smell are acceptable. [40 C.F.R. § 63.11089(a)]
   b. Irving shall maintain a log book to be signed by the owner or operator at the completion of each leak inspection. A section of the log book 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. Irving shall record each detection of a liquid or vapor leak in the log book. When a leak is detected, Irving shall make an initial attempt at repair as soon as practicable, but no later than five calendar days after the leak is detected. Irving shall complete repair or replacement of leaking equipment within fifteen calendar days after detection of each leak. [40 C.F.R § 63.11089(c)]
   d. If repair of leaking equipment is not feasible within fifteen days, Irving shall provide a reason why the repair was not feasible and the date the repair was completed in the semiannual compliance report specified in 40 C.F.R. § 63.11095(b). [40 C.F.R. § 63.11089(d)]

3. Recordkeeping

   a. Irving shall prepare and maintain a record describing the types, identification numbers, and locations of all equipment in gasoline service. [40 C.F.R. § 63.11094(d)]

b. Irving shall keep the following records [40 C.F.R. § 63.11094(f)]:

(1) Irving shall keep an up-to-date, readily accessible record of the continuous monitoring data required under 40 C.F.R. §§ 63.11092(b) or 63.11092(e). This record 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;
(2) Irving shall record and report all data and calculations, engineering assessments, and manufacturer's recommendations used in determining the operating parameter value under 40 C.F.R. §§ 63.11092(b) or 63.11092(e) simultaneously with the Notification of Compliance Status required under 40 C.F.R. § 63.11093(b);
(3) Irving shall keep an up-to-date, readily accessible copy of the monitoring and inspection plan required under 40 C.F.R. § 63.11092(b)(1)(iii)(B)(*2*);
(4) Irving shall keep an up-to-date, readily accessible record of all system malfunctions, as specified in 40 C.F.R. § 63.11092(b)(1)(iii)(B)(*2*)(*v*); and
(5) If Irving requests approval to use a vapor processing system or monitor an operating parameter other than those specified in 40 C.F.R. § 63.11092(b), Irving shall submit a description of planned reporting and recordkeeping procedures.

c. Irving shall keep the following records [40 C.F.R. § 63.11094(g)]:

(1) Records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment; and
(2) Records of action taken during periods of malfunction to minimize emissions in accordance with 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.

d. Irving shall maintain records of the following information for each leak detected during equipment leak inspections [40 C.F.R. § 63.11094(e)]:

(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 calendar days of its discovery;
(6) The expected date of successful repair of the leak if the leak is not repaired within fifteen days; and
(7) The date of successful repair of the leak.

4. Notifications and Reports

   a. Irving submitted their Initial Notification to the Department and the Environmental Protection Agency (EPA) on May 6, 2008. [40 C.F.R. §§ 63.11087(d) and 63.11093(a) and 06-096 C.M.R. ch. 115, BPT]
   b. Irving should have submitted a Notification of Compliance Status as specified in 40 C.F.R. § 63.9(h), which shall specify which of the compliance options in Table 1 of this subpart is being used to comply with this subpart. Irving submitted their Notification of Compliance Status to the Department and EPA on April 19, 2018. [40 C.F.R. §§ 63.11087(d) and 63.11093(b) and 06-096 C.M.R. ch. 115, BPT]
   c. Irving shall submit a Notification of Performance Test to the Department and EPA, as specified in 40 C.F.R. § 63.9(e), prior to initiating testing required by either 40 C.F.R. § 63.11092(a) or 40 C.F.R. § 63.11092(b). [40 C.F.R. § 63.11093(c) and 06-096 C.M.R. ch. 115, BPT]
   d. Irving shall submit any additional notifications specified in 40 C.F.R. § 63.9, as applicable, to the Department and EPA. [40 C.F.R. § 63.11093(d) and 06-096 C.M.R. ch. 115, BPT]
   e. Irving shall submit a semiannual compliance report to EPA and the Department which shall include the following information [40 C.F.R. §§ 63.11087(e), 63.11095(a), and 63.11095(d), and 06-096 C.M.R. ch. 115, BPT]:

      (1) For any tanks currently in gasoline service, the following information:

         (i) A description of the control equipment and certification that the control equipment meets the specifications of 40 C.F.R. §§ 60.112b(a)(1) and 60.113b(a)(1);
         (ii) If any of the conditions described in 40 C.F.R. § 60.113b(a)(2) are detected during the annual visual inspection required by 40 C.F.R. § 60.113b(a)(2), identification of the storage vessel, the nature of the defects, and the date the storage vessel was emptied or the nature of and date the repair was made; and
         (iii)After each inspection required by 40 C.F.R. § 60.113b(a)(3) that finds holes or tears in the seal or seal fabric, or defects in the internal floating roof, or other control equipment defects listed in 40 C.F.R. § 60.113b(a)(3)(ii), identification of the storage vessel, the reason it did not meet the specifications of 40 C.F.R. § 61.112b(a)(1) or 40 C.F.R. § 60.113b(a)(3), and a list of each repair made.

      (2) For the Loading Rack, each loading of a gasoline cargo tank for which vapor tightness documentation had not been previously obtained by the facility;
      (3) For equipment leak inspections, the number of equipment leaks not repaired within fifteen days after detection; and
      (4) A report 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 the facility during a malfunction of an affected source to minimize emissions in accordance with 40 C.F.R. § 63.11085(a), including actions taken to correct a malfunction.

f. Irving shall submit an excess emissions report along with each semiannual compliance report to EPA and the Department which shall include the following information [40 C.F.R. §§ 63.11087(e) and 63.11095(b) and 06-096 C.M.R. ch. 115, BPT]:

(1) Each instance of a non-vapor-tight gasoline cargo tank loading at the facility in which the owner or operator 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 in accordance with 40 C.F.R. § 63.11094(b);
(3) Each exceedance or failure to maintain, as appropriate, the monitored parameter value determined under 40 C.F.R. § 63.11092(b). The report shall include the monitoring data for the days on which exceedances or failures to maintain have occurred, and a description and timing of the steps taken to repair or perform maintenance on the vapor collection and processing systems or the CMS;
(4) Each instance in which malfunctions discovered during the monitoring and inspections required under 40 C.F.R. § 11092(b)(1)(iii)(B)(*2*) were not resolved according to the necessary corrective actions described in the monitoring and inspection plan. The report shall include a description of the malfunction and the timing of the steps taken to correct the malfunction; and
(5) For each occurrence of an equipment leak for which no repair attempt was made within five days or for which the repair was not completed within fifteen days after detection:

(i) The date on which the leak was detected;
(ii) The date of each attempt to repair the leak;
(iii)The reasons for the delay of repair; and
(iv)The date of successful repair.

F. Loading Rack and Vapor Combustion Unit

Irving operates a truck Loading Rack equipped with bottom loading and controlled by a John Zink Vapor Combustion Unit (VCU) equipped with a propane-fired pilot. The Loading Rack was installed in 1972 and upgraded in 1991. The VCU was added in 2011 and replaced a carbon absorption system previously in place.

1. Process Description

The hydrocarbon vapors from trucks filling at the Loading Rack are transported by vapor piping to the detonation arrestor of the VCU. Until loading occurs at the Loading Rack, the VCU is in a standby mode with no pilot flame, closed vapor block valve, and the air-assist blower turned off. When product loading is set to begin, an electrical signal is sent from the Loading Rack to the VCU to initiate automatic start-up of the unit.

The start-up sequence consists of a short air purge using the air-assist blower. This purges the stack of any combustibles prior to pilot ignition. The air purge is followed by automatic electronic ignition of the pilot. After pilot ignition, product loading begins at the Loading Rack, and an air-vapor mixture begins to flow from the trucks being loaded to the VCU.

Flow through the VCU first consists of the air-vapor mixture from the Loading Rack flowing through the detonation arrestor. Once sufficient flow is available, the pressure monitoring controls will automatically open the vapor block valve, allowing the air-vapor mixture to flow through the flame arrestor to the burner, where the combustible vapors are ignited by the pilot and burned. The air-assist blower provides partial combustion air and mixing energy to the burner tips to assure smokeless combustion.

As the loading operation is completed, vapor flow to the combustion system decreases. When vapor flow is insufficient to maintain minimum burner velocity, the pressure monitoring system automatically closes the vapor block valve. The pilot and air-assist blower remain on for a brief time period after loading is complete. If no further loading occurs, the combustion unit will go back to standby mode to await automatic restart as described above.

2. BPT Findings

The BPT emission limits for the VCU were based on the following emission factors and a maximum hourly quantity of product loaded of 576,000 gallons/hour, which was derived from the facility's total number of loading arms (16) and the maximum volume of product loaded from each arm per minute (9,600 gallons):

NO_x	–	4 milligrams/liter of product loaded based on the manufacturer's performance guarantee
CO	–	10 milligrams/liter of product loaded based on the manufacturer's performance guarantee
VOC	–	10 milligrams/liter of product loaded based on the manufacturer's performance guarantee
Visible Emissions	–	06-096 C.M.R. ch. 115, BPT

Unit	PM (lb/hr)	PM_{10} (lb/hr)	SO_2 (lb/hr)	NO_x (lb/hr)	CO (lb/hr)	VOC (lb/hr)
VCU	Negl.	Negl.	Negl.	19.23	48.07	48.07

The VCU annual potential-to-emit (PTE) calculations are based on the facility's estimated maximum quantity of bottom loaded product, estimated at 340,000,000 gallons per year for distillate fuel and gasoline/ethanol combined on a 12-month rolling total basis, and emissions guarantees from the VCU manufacturer for NO_x, CO, and VOC.

Visible emissions from the VCU shall not exceed 10% opacity based on a six-minute block average basis.

The BPT requirements for the Loading Rack and VCU shall include the following:

a. The Loading Rack shall be equipped and maintained with a VCU that captures displaced VOC vapors whenever gasoline and/or ethanol is being transferred into a tank truck at the Loading Rack. [06-096 C.M.R. ch. 115, BPT]
b. All loading and vapor lines shall be equipped and maintained in good working order such that vapor tight fittings close automatically when disconnected and the pressure in the vapor collection system shall not be allowed to exceed +18 inches of water or a vacuum exceeding -6 inches of water. [06-096 C.M.R. ch. 115, BPT]
c. Any tank truck carrying gasoline or which has carried gasoline as the most recent previous load shall utilize the vapor collection system during the entire loading process. [06-096 C.M.R. ch. 115, BPT]
d. Leaks greater than 100% of the lower explosive limit (LEL) obtained within one inch around any potential leak source of the tank truck, including all loading couplings, vapor lines, and fittings employed in the transfer of gasoline and/or ethanol, are prohibited. [06-096 C.M.R. ch. 115, BPT]
e. VOC emissions from the VCU shall not exceed 10 milligrams per liter of product transferred. Compliance with this limit shall be determined by methods promulgated in 40 C.F.R. § 60.503 or other methods approved by the Department. [06-096 C.M.R. ch. 115, BPT]
f. Irving shall conduct an annual compliance test of the VCU between May 1st and October 1st of each calendar year. This is different than the facility's previous air emission license, which required the compliance test to be completed prior to May 15th of each calendar year. This change is being made based on feedback from the facility and will allow Irving more flexibility in scheduling future tests while still ensuring proper VCU performance. A report containing the test results shall be submitted to the Department within 30 days of the completion of the test in accordance with the Department's stack test protocol. [06-096 C.M.R. ch. 115, BPT]

g. Irving shall conduct a leak inspection of all equipment at the Loading Rack and around the VCU utilizing sight, sound, and smell at a minimum of once per month. All leaks must be repaired as quickly as possible, but within 15 calendar days, with the first attempt at repair made no later than five days from the initial detection of the leak. [06-096 C.M.R. ch. 115, BPT]
h. Irving shall maintain an inspection log documenting routine leak inspections which includes the date of detection, nature of the leak and detection method, date of repair attempts and methods used, details of any delays in repairs, and the final date of repair. Irving shall make these records available for inspection by the Department. [06-096 C.M.R. ch. 115, BPT]

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

The Loading Rack at Irving is subject to *Bulk Terminal Petroleum Liquid Transfer Requirements*, 06-096 C.M.R. ch. 112. The Loading Rack is located at a bulk gasoline terminal that has a daily throughput of gasoline of 20,000 gallons or more and the appurtenant equipment necessary to load gasoline cargo tanks. [06-096 C.M.R. ch. 112(1.)(B.)]

The requirements of 06-096 C.M.R. ch. 112 applicable to the Loading Rack and VCU are included below:

a. Irving shall not permit gasoline and/or ethanol to be loaded into any gasoline cargo tank unless [06-096 C.M.R. ch. 112(3.)]:

(1) The gasoline cargo tank has 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;
(2) The facility is equipped to vent all displaced vapors and gases only to a vapor control system that has been properly installed and which is maintained in good working order, and which must be in operation at all times gasoline and/or ethanol is being transferred to gasoline cargo tanks from the storage tanks. This vapor control system shall consist of one of the following:

(i) An absorber/adsorption unit or condensation system which processes and recovers all vapors and gases from the equipment being controlled such that mass emissions of volatile organic compounds do not exceed 35 milligrams per liter of gasoline transferred; or
(ii) A vapor collection system which directs all vapors to a fuel gas system, such as a thermal oxidizer; or
(iii) Any other compliance plan that has express written approval by the Department and EPA.

(3) A means is provided to prevent liquid drainage from the loading device when it is not in use or to accomplish complete drainage before the loading device is disconnected. There shall be no liquid drainage from the loading device;
(4) All loading and vapor lines are equipped with fittings which make vapor-tight connections and which close automatically when disconnected; and
(5) The pressure in the vapor collection system is not allowed to exceed the gasoline cargo tank pressure relief settings.

b. Irving shall not allow gasoline and/or ethanol to be discarded in sewers or stored in open containers or allow gasoline to be handled in any manner that would result in evaporation. [06-096 C.M.R. ch. 112(3.)(E.)]

c. Irving shall not allow the mass emissions of VOC from the Loading Rack to exceed the emission limit of 35 milligrams per liter of gasoline and/or ethanol transferred. Irving shall demonstrate compliance with this standard using methods promulgated in 40 C.F.R. § 60.503 or other methods approved by the Department and EPA. [06-096 C.M.R. ch. 112 (4. and 6.)] This emission limit shall be streamlined to the lower limit required by Section 3.E.(5)(h) of 06-096 C.M.R. ch. 115.

4. NSPS: 40 C.F.R. Part 60, Subpart XX

The Loading Rack at Irving was originally installed in 1972, prior to the applicability date of December 17, 1980, included in *Standards of Performance for Bulk Gasoline Terminals*, 40 C.F.R. Part 60, Subpart XX. In 1991, however, Irving undertook a complete overhaul of the Loading Rack, which included changing the Loading Rack from top-loading to bottom-loading and replacing every component of the Loading Rack besides the enclosure. The Department has determined that such an extensive overhaul is classified as a reconstruction of the Loading Rack per 40 C.F.R. § 60.506; therefore, the Loading Rack at Irving is subject to 40 C.F.R. Part 60, Subpart XX. [40 C.F.R. §§ 60.500(a-b) and 60.506]

The requirements of 40 C.F.R. Part 60, Subpart XX applicable to the Loading Rack and VCU are included below:

a. Work Practice Standards

(1) Irving's Loading Rack shall be equipped with a vapor collection system designed to collect the total organic compounds vapors displaced from gasoline cargo tanks during product loading. The vapor collection system shall be designed to prevent any total organic compounds vapors collected at one station of the Loading Rack from passing to another station of the Loading Rack. [40 C.F.R. § 60.502(a) and (d)]
(2) No pressure-vacuum vent in Irving's 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)]

(3) Irving shall act to assure that the terminal's and gasoline cargo tank's vapor collection systems are connected during each loading of a gasoline cargo tank at the Loading Rack. Examples of actions to accomplish this include training drivers in the hookup procedures and posting visible reminder signs at the Loading Rack. [40 C.F.R. § 60.502(g)]

(4) Irving shall act to assure that loadings of gasoline cargo tanks at the Loading Rack 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)]

(5) Irving shall limit the loadings of liquid product into only vapor-tight gasoline cargo tanks using the following procedures [40 C.F.R. § 60.502(e)]:

(i) Irving shall obtain the vapor tightness documentation for each gasoline cargo tank which is to be loaded at the Loading Rack;

(ii) Irving shall require the tank identification number to be recorded as each gasoline cargo tank is loaded at the Loading Rack;

(iii) Irving shall cross-check each tank identification number obtained above with the file of tank vapor tightness documentation within two weeks after the corresponding tank is loaded, unless either of the following conditions is maintained:

1. If less than an average of one gasoline cargo tank per month over the last 26 weeks is loaded without vapor tightness documentation then the documentation cross-check shall be performed each quarter; or

2. If less than an average of one gasoline cargo tank per month over the last 52 weeks is loaded without vapor tightness documentation then the documentation cross-check shall be performed semiannually.

If either the quarterly or semiannual cross-checks above reveal that the conditions allowing them were not maintained, Irving must return to biweekly monitoring until such time as these conditions are again met;

(iv) Irving shall notify the owner or operator of each non-vapor-tight gasoline cargo tank loaded at the Loading Rack within one week of the documentation cross-check; and

(v) Irving shall take steps assuring that the non-vapor-tight gasoline cargo tank will not be reloaded at the Loading Rack until vapor tightness documentation for that tank is obtained.

Alternate procedures to those described above for limiting gasoline cargo tank loadings may be used upon application to, and approval by, the Administrator.

(6) Each calendar month, Irving shall inspect the vapor collection system, the vapor processing system, and each loading rack handling gasoline and/or ethanol during the loading of gasoline cargo tanks for total organic compounds 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 15 calendar days after it is detected. [40 C.F.R. § 60.502(j)]

b. Emission Standards and Testing Requirements

(1) Emissions from the vapor collection system due to the loading of liquid product into gasoline cargo tanks shall not exceed 35 milligrams of total organic compounds per liter of gasoline loaded. [40 C.F.R. § 60.502(b)] This limit shall be streamlined to the lower limit required by Section 3.E.(5)(h) of 06-096 C.M.R. ch. 115.

(2) The vapor collection and liquid loading equipment at Irving 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. This level is not to be exceeded when measured by the procedures specified below [40 C.F.R. §§ 60.502(h) and 60.503(d)]:

(i) A pressure measurement device (liquid manometer, magnehelic gauge, or equivalent instrument), capable of measuring up to 500 mm of water gauge pressure with ±2.5 mm of water precision, shall be calibrated and installed on the terminal's vapor collection system at a pressure tap located as close as possible to the connection with the gasoline cargo tank;

(ii) During the performance test, the pressure shall be recorded every five minutes while a gasoline cargo tank is being loaded; the highest instantaneous pressure that occurs during each loading shall also be recorded. Every loading position must be tested at least once during the performance test.

(3) Irving shall conduct initial performance tests as required by 40 C.F.R. § 60.8 using the test methods in Appendix A of 40 C.F.R. Part 60 and the procedures included in 40 C.F.R. § 60.503(b) through (d) to demonstrate compliance with the standards listed in 40 C.F.R. §§ 60.502(b) and (h). Irving shall conduct additional performance tests as required by the Department. Irving conducted the initial performance tests for 40 C.F.R. §§ 60.502(b) and (h) on January 24, 2012. [40 C.F.R. § 60.503(a-d) and 06-096 C.M.R. ch. 115, BPT]

c. Recordkeeping

(1) Irving shall maintain vapor tightness documentation for each gasoline cargo tank which is to be loaded at the Loading Rack. Irving shall keep the documentation on file at the terminal in a permanent form available for inspection, except as provided for in 40 C.F.R. § 60.505(e). This documentation shall be updated at least once per year to reflect current test results as determined by Method 27, and shall include, as a minimum, the following information [40 C.F.R. § 60.505(a-b) and (e)]:

(i) Test title: Gasoline Delivery Tank Truck Pressure Test-EPA Reference Method 27;
(ii) Tank owner and address;
(iii) Tank identification number;
(iv) Testing location;
(v) Date of test;
(vi) Tester name and signature;
(vii) Witnessing inspector, if any: Name, signature, and affiliation; and
(viii) Test results: Actual pressure change in five minutes, mm of water (average for two runs).

(2) Irving shall maintain monthly leak inspection records which shall include the following information [40 C.F.R. § 60.505(c)]:

(i) Date of inspection;
(ii) Findings (may indicate no leak discovered; or location, nature, and severity of each leak);
(iii) Leak determination method;
(iv) Corrective action (date each leak repaired; reasons for any repair interval in excess of 15 days); and
(v) Inspector name and signature.

(3) Irving shall keep documentation of all notifications sent to operators of non-vapor-tight gasoline cargo tanks as required in 40 C.F.R. § 60.502(e)(4) for a minimum of two years. [40 C.F.R. § 60.505(d)] The length of the records retention component shall be streamlined to the six-year retention timeframe required under 06-096 C.M.R. ch. 115.

(4) Irving shall keep records of all replacements or additions of components performed on the vapor processing system for a minimum of three years. [40 C.F.R. § 60.505(f)] The length of the records retention component shall be streamlined to the six-year retention timeframe required under 06-096 C.M.R. ch. 115.

d. Notifications and Reports

Whenever Irving is required to conduct the performance tests required by 40 C.F.R. §§ 60.502(b) and (h), Irving shall submit all reports and notifications required by 40 C.F.R. § 60.8 to both the Department and EPA. [40 C.F.R. § 60.503(a) and 06-096 C.M.R. ch. 115, BPT]

5. NESHAP: 40 C.F.R. Part 63, Subpart BBBBBB

Since the Loading Rack is located at a bulk gasoline terminal with a gasoline throughput of more than 250,000 gallons per day and was constructed before November 9, 2006, the Loading Rack is subject to *NESHAP for Source Category: Gasoline Distribution Bulk Terminals, Bulk Plants, and Pipeline Facilities*, 40 C.F.R. Part 63, Subpart BBBBBB as an existing unit at an affected source. [40 C.F.R. §§ 63.11081(a) and 63.11082(a) and (d)]

The requirements of 40 C.F.R. Part 63, Subpart BBBBBB applicable to the Loading Rack and VCU are included below:

a. Work Practice Standards [40 C.F.R. § 63.11088(a) and 40 C.F.R. Part 63, Subpart BBBBBB, Table 2(1.)(a, c, and d)]

(1) Irving shall equip the Loading Rack with a vapor collection system designed to collect the total organic compound vapors displaced from cargo tanks during product loading;
(2) Irving shall design and operate the vapor collection system to prevent any total organic compound vapors collected at one lane of the Loading Rack from passing through another lane to the atmosphere; and
(3) Irving 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). For the purposes of this section, the term "gasoline tank truck" as used in the sections above means "cargo tank" as defined in 40 C.F.R. § 63.11100.

b. Emission Standards and Testing and Monitoring Requirements

(1) Irving shall reduce emissions of total organic compounds from the Loading Rack to less than or equal to 80 mg/l of gasoline loaded into gasoline cargo tanks. [40 C.F.R. § 63.11088(a) and 40 C.F.R. Part 63, Subpart BBBBBB, Table 2(1.)(b.)] This limit shall be streamlined to the lower limit required by 06-096 C.M.R. ch. 115, BPT.

(2) In order to demonstrate compliance with the limit above, Irving shall do one of the following [40 C.F.R. § 63.11092(a)]:

(i) Irving shall conduct a performance test on the vapor processing and collection systems according to one of the following two options:

1. Irving shall use the test methods and procedures in 40 C.F.R. § 60.503 of this chapter, except a reading of 500 part per million (ppm) shall be used to determine the level of leaks to be repaired under 40 C.F.R. § 60.503(b) of this chapter; or

2. Irving shall use alternative test methods and procedures in accordance with the alternative test method requirements in 40 C.F.R. § 63.7(f); or

(ii) If Irving is operating the gasoline Loading Rack in compliance with an enforceable State permit that requires the Loading Rack to meet an emission limit of 80 milligrams (mg) or less, per liter of gasoline loaded (mg/l), Irving may submit a statement by a responsible official of the facility certifying the compliance status of the Loading Rack in lieu or the test required above. Irving submitted this statement to the Department and EPA on April 19, 2018.

(3) Irving shall install, calibrate, certify, operate, and maintain, according to the manufacturer's specifications, a continuous monitoring system (CMS) while gasoline vapors are displaced to the vapor processing system. This CMS shall be installed by January 10, 2011 and shall meet the following operational and monitoring requirements. [40 C.F.R. § 63.11092(b)]

(i) For each performance test conducted under 40 C.F.R. § 63.11092(a)(1), Irving shall determine a monitored operating parameter value for the vapor processing system using the procedures specified below:

1. Irving shall monitor the presence of a thermal oxidation system pilot flame using a heat-sensing device, such as an ultraviolet beam sensor or a thermocouple, installed in proximity of the pilot light, to indicate the presence of a flame. The heat-sensing device shall send a positive parameter value to indicate that the pilot flame is on, or a negative parameter value to indicate that the pilot flame is off; and

2. Irving shall develop and submit to the Administrator a monitoring and inspection plan that describes the facility's approach for meeting the following requirements:

i. The thermal oxidation system shall be equipped to automatically prevent gasoline loading operations from beginning at any time that the pilot flame is absent;

ii. Irving shall verify, during each day of operation of the Loading Rack, the proper operation of the assist-air blower and the vapor line valve. Verification shall be through visual observation, or through an automated alarm or shutdown system that monitors system operation. A manual or electronic record of the start and end of a shutdown event may be used;

iii. Irving shall perform semi-annual preventative maintenance inspections of the thermal oxidation system, including the automated alarm or shutdown system for those units so equipped, according to the recommendations of the manufacturer of the system;

iv. The monitoring plan developed according to part b., above, shall specify conditions that would be considered malfunctions of the thermal oxidation system during the inspections or automated monitoring performed under parts b. and c., above, describe specific corrective actions that will be taken to correct any malfunction, and define what Irving would consider to be a timely repair for each potential malfunction; and

v. Irving shall document any system malfunction, as defined in the monitoring and inspection plan, and any activation of the automated alarm or shutdown system with a written entry into a log book or other permanent form of record. Such record shall also include a description of the corrective action taken and whether such corrective actions were taken in a timely manner, as defined in the monitoring and inspection plan, as well as an estimate of the amount of gasoline loaded during the period of the malfunction.

Irving shall submit an updated monitoring and inspection plan to the Administrator within 30 days of the issuance of this air emission license. Irving shall also submit a new monitoring and inspection plan to the Administrator whenever the plan is updated. [06-096 C.M.R. ch. 115, BPT]

Monitoring an alternative operating parameter or a parameter of a vapor processing system other than those listed above will be allowed upon demonstrating to the EPA's satisfaction that the alternative parameter demonstrates continuous compliance with the emissions standard in 40 C.F.R. § 63.11088(a).

(ii) Determine an operating parameter value based on the parameter data monitored during the performance test, supplemented by engineering assessments and the manufacturer's recommendations;

(iii) Provide for the Administrator'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 a description

of why the value, monitoring frequency, and averaging time demonstrate continuous compliance with the emission standard in 40 C.F.R. § 63.11088(a); and

(iv) If Irving has chosen to comply with the performance testing alternatives provided under 40 C.F.R. § 63.11092(a)(2) or (3), the monitored operating parameter value may be determined according to the provisions below:

1. Monitor an operating parameter that has been approved by the EPA and is specified in your facility's current enforceable operating permit. At the time the Administrator requires a new performance test, you must determine the monitored operating parameter value according to the requirements specified in 40 C.F.R. § 63.11092(b); or

2. Determine an operating parameter value based on engineering assessment and the manufacturer's recommendation and submit the information specified in 40 C.F.R. § 63.11092(b)(4) for approval by the EPA. At the time a new performance test is required, you must determine the monitored operating parameter value according to the requirements specified in 40 C.F.R. § 63.11092(b).

(4) For performance tests performed after the initial test required under 40 C.F.R. § 63.11092(a), Irving shall document the reasons for any change in the operating parameter value since the previous performance test. [40 C.F.R. § 63.11092(c)]

(5) Irving shall comply with the following requirements [40 C.F.R. § 63.11092(d)]:

(i) Irving shall operate the vapor processing system in a manner not to exceed or not to go below, as appropriate, the operating parameter value for the parameters described in 40 C.F.R. § 63.11092(b)(1);

(ii) In cases where an alternative parameter pursuant to 40 C.F.R. §§ 63.11092(b)(1)(iv) or 63.11092(b)(5)(i) is approved, Irving shall operate the vapor processing system in a manner not to exceed or not to go below, as appropriate, the alternative operating parameter value;

(iii) Operation of the vapor processing system in a manner exceeding or going below the operating parameter value, as appropriate, shall constitute a violation of the emission standard in 40 C.F.R. § 63.11088(a), except as specified in the next section;

(iv) For the monitoring and inspection, as required under 40 C.F.R. § 63.11092(b)(1)(iii)(B)(*2*), malfunctions that are discovered shall not constitute a violation of the emission standard in 40 C.F.R. § 63.11088(a) if corrective actions as described in the monitoring and inspection plan are followed. Irving must:

1. Initiate corrective action to determine the cause of the problem within one hour;

2. Initiate corrective action to fix the problem within 24 hours;
3. Complete all corrective actions needed to fix the problem as soon as practicable consistent with good air pollution control practices for minimizing emissions;
4. Minimize periods of start-up, shutdown, or malfunction; and
5. Take any necessary corrective actions to restore normal operation and prevent the recurrence of the cause of the problem.

(6) Performance tests conducted for this subpart shall be conducted under such conditions as the Administrator specifies to the facility, based on representative performance (i.e., performance based on normal operating conditions) of the affected source. Upon request, Irving shall make available to the Administrator such records as may be necessary to determine the conditions of performance tests. [40 C.F.R. § 63.11092(g)]

c. Recordkeeping

Irving shall keep the following test result records for each gasoline cargo tank loading at the facility [40 C.F.R. § 63.11094(b-c)]:

(1) Annual certification testing performed under 40 C.F.R. § 63.11092(f);

(2) Documentation for each test, including the following:

(i) Name of test;
(ii) Cargo tank owner's name and address;
(iii)Cargo tank identification number;
(iv)Test location and date;
(v) Tester name and signature; and
(vi)Witnessing inspector, if any: Name, signature, and affiliation.

(3) As an alternative to keeping records of the test results for each gasoline cargo tank loading at the facility on site, Irving may comply with one of the two following options:

(i) Irving may have an electronic copy of each record instantly available at the terminal, provided that the record is an exact duplicate image of the original paper records with certifying signatures and that the Administrator is notified in writing that Irving is in compliance using this alternative; or
(ii) Irving may use a terminal automation system provided each record is an exact duplicate image of the original paper record with certifying signature, that the documentation can be made available for inspection by the Administrator's or Department's delegated representatives during the course of the site visit or within a mutually agreeable time frame, and that

the Administrator is notified in writing that Irving is in compliance using this alternative.

G. Storage of Biofuel, Distillate Fuel, Residual Fuel, and Asphalt

This section applies to any tanks that either currently store biofuel, distillate fuel, residual fuel, or asphalt, or that may store biofuel, distillate fuel, residual fuel, or asphalt in the future. This includes all 14 storage tanks at the facility, with regulatory applicability for Tanks #3, #4, #9, #13, and #16 specifically mentioned because they do not have internal floating roofs and thus are only capable of storing biofuel, distillate fuel, residual fuel, or asphalt.

1. BPT Findings

BPT for Tanks #1-16 when storing biofuel, distillate fuel, residual fuel, or asphalt shall include the following:

a. Irving shall conduct routine inspections of all tanks storing biofuel, distillate fuel, residual fuel, or asphalt at a minimum of once every month around the perimeter of the tank and roof. [06-096 C.M.R. ch. 115, BPT]
b. The following records shall be maintained at the source and available for inspection by the Department for any tanks that have stored biofuel, distillate fuel, residual fuel, or asphalt in the last six years [06-096 C.M.R. ch. 115, BPT]:

(1) Records documenting any detected leaks, holes, tears, or other openings and the corrective action taken; and
(2) Monthly throughput records specifying quantity and types of volatile petroleum liquids in each tank and the period of storage.

2. *Petroleum Liquid Storage Vapor Control*, 06-096 C.M.R. ch. 111

Tanks #3, #4, #9, #13, and #16 are not subject to *Petroleum Liquid Storage Vapor Control*, 06-096 C.M.R. ch. 111. These tanks are considered fixed roof storage vessels with capacities greater than 39,000 gallons, but they do not contain volatile petroleum liquids whose true vapor pressure is greater than 1.0 psia or whose Reid vapor pressure is greater than 4 psi (any petroleum liquid whose true vapor pressure is between 1.0 and 1.52 psia is subject to the recordkeeping requirements in Section 5(B) of 06-096 C.M.R. ch. 111). [06-096 C.M.R. ch. 111(1.)(B.-C.)]

3. NSPS: 40 C.F.R. Part 60, Subparts K, Ka, and Kb

Tanks #3, #4, #9, and #13 were all installed prior to 1973; therefore, they are not subject to NSPS: 40 C.F.R. Part 60, Subparts K, Ka, and Kb for storage vessels for petroleum liquids manufactured after June 11, 1973. [40 C.F.R. §§ 60.110, 60.110a, and 60.110b]

Tank #16 was installed after July 23, 1984, and has a capacity greater than 151 m^3, but stores a liquid with a maximum true vapor pressure less than 3.5 kilopascals (kPa); therefore, Tank #16 is not subject to *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*, 40 C.F.R. Part 60, Subpart Kb. [40 C.F.R. § 60.110b(b)]

4. NESHAP: 40 C.F.R. Part 63, Subpart BBBBBB

Tanks #3, #4, #9, #13, and #16 are not subject to *NESHAP for Source Category: Gasoline Distribution Bulk Terminals, Bulk Plants, and Pipeline Facilities*, 40 C.F.R. Part 63, Subpart BBBBBB. Tanks #3, #4, #9, #13, and #16 are located at a bulk gasoline terminal as defined in the subpart and have capacities greater than 75 cubic meters, but they are not considered gasoline storage tanks as defined in the subpart. [40 C.F.R. §§ 63.11081(a), 63.11082(a) and (d), & 63.11100]

H. Storage of Gasoline and Ethanol

The following sections include requirements for tanks that either currently store gasoline or ethanol or that may store gasoline or ethanol in the future. This includes Tanks #1-2, Tanks #5-8, and Tanks #10-12.

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

When storing gasoline or ethanol, Tanks #1-2, #5-8, and #10-12 are subject to *Petroleum Liquid Storage Vapor Control*, 06-096 C.M.R. ch. 111. Tanks #1-2, #5-8, and #10-12 are considered internal floating roof storage vessels with capacities greater than 39,000 gallons containing volatile petroleum liquids whose true vapor pressure is greater than 1.52 psia (10.5 kilopascals) or whose Reid vapor pressure is greater than 4 psi. [06-096 C.M.R. ch. 111(1.)(B.)]

The requirements of 06-096 C.M.R. ch. 111 applicable to Tanks #1-2, #5-8, and #10-12 when storing gasoline or ethanol are included below:

a. Empty and Degas Requirements

Irving shall not empty and degas any tanks currently storing gasoline or ethanol for the purpose of performing a complete inspection between June 1st and August 31st of each calendar year. Irving may empty and degas these tanks during that time for the purpose of performing a repair which is immediately necessary for the proper function of the vessel. If these tanks are emptied and degassed for the purpose of performing a repair which is immediately necessary for the proper function of the vessel between June 1st and August 31st of any calendar year, Irving shall notify the Department within 24 hours after the tank is emptied and degassed. [06-096 C.M.R. ch. 111(2.)(C.) and (D.)]

Notwithstanding the above, Irving may empty and degas tanks for the purposes of performing maintenance and/or a complete inspection between June 1st and August 31st of each calendar year provided that the vapors being degassed are conducted to a vapor processing system, such as a vapor combustion unit (or similar control device), and are not off gassed to the atmosphere prior to being controlled. [06-096 C.M.R. ch. 115, BPT]

b. Work Practice Standards

Any tanks used to store gasoline or ethanol shall be equipped, maintained, and operated in accordance with the following [06-096 C.M.R. ch. 111(2.)(A.) and (3.) and 06-096 C.M.R. ch. 115, BPT]:

(1) There is an internal floating roof with closure seal(s) between the roof edge and tank wall and these are maintained so as to prevent vapor leakage;
(2) The internal floating roof and the closure seal(s) will be maintained such that there are no visible holes, tears, or other openings in the seal or between the seal and the floating roof;
(3) The seal is uniformly in place around the circumference of the cover between the cover and the tank wall;
(4) The cover is uniformly floating on or above the liquid and no liquid is accumulated on the cover;
(5) All storage tank openings, except stub drains, are equipped such that:

(i) The cover, lid, or seal is in the closed position at all times, except when in actual use;
(ii) Automatic bleeder vents are closed at all times except when the roof is being floated off or being landed on the roof leg supports; and
(iii)Rim vents, if provided, are set to open only when the roof is being floated off the roof leg supports or at the manufacturer's recommended setting.

(6) Routine visual inspections are conducted through the roof hatches once every month;
(7) Lower explosive limit (LEL) readings are done at a minimum of every six months with the inspection of the floating roof cover and seals;
(8) A complete inspection of cover and seal is performed at least once every ten years and each time the vessel is emptied and degassed; and
(9) If any holes, tears, or other openings are present, Irving shall make repairs as soon as practical after initial detection of the leak, but no later than 15 calendar days after initial detection of the leak. The first attempt at repair shall be made no later than five days from initial detection of the leak.

c. Recordkeeping

Irving shall maintain the following records for any tanks that have stored gasoline or ethanol in the past two years for a minimum of two years, shall make them available for inspection during normal business hours, and shall provide them to the Department upon request [06-096 C.M.R. ch. 111(5.)(A.) and 06-096 C.M.R. ch. 115, BPT]:

(1) Reports of the results of inspections conducted under this section;
(2) Inspection log documenting LEL readings to be done at a minimum of every six months with the inspection of the floating roof covers and seals, which shall include explanation of any excessive increases in LEL readings as compared to normal operating conditions;
(3) Inspection log documenting any detected leaks, holes, tears, or other openings and the corrective action taken;
(4) A record of the monthly throughput quantities and types of volatile petroleum liquids for each storage vessel and period of storage; and
(5) Records of the average monthly storage temperatures and maximum true vapor pressures or Reid vapor pressures of the petroleum liquids stored.

2. NSPS: 40 C.F.R. Part 60, Subparts K, Ka, and Kb

Tank #6 has an internal floating roof and is capable of storing either gasoline or ethanol. However, Tank #6 and its internal floating roof were both installed prior to June 11, 1973; therefore, Tank #6 is not subject to NSPS: 40 C.F.R. Part 60, Subparts K, Ka, and Kb for storage vessels for petroleum liquids manufactured after June 11, 1973. [40 C.F.R. §§ 60.110, 60.110a, and 60.110b]

Tanks #1-2, #5, #7-8, and #10-12 were all originally installed prior to June 11, 1973; However, these tanks were all retrofitted with internal floating roofs after the 40 C.F.R. Part 60, Subpart Kb applicability date of July 23, 1984. The Department considers the retrofitting of these tanks reconstruction as defined in 40 C.F.R. Part 60, Subpart A; therefore, Tanks #1-2, #5, #7-8, and #10-12 are subject to *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*, 40 C.F.R. Part 60, Subpart Kb when storing gasoline or ethanol. When storing gasoline or ethanol, these tanks are all considered storage vessels with a capacity greater than or equal to 75 cubic meters that are used to store volatile organic liquids for which construction, reconstruction, or modification commenced after July 23, 1984. [40 C.F.R. § 60.110b(a)]

The requirements of 40 C.F.R. Part 60, Subpart Kb applicable to the aforementioned tanks when storing gasoline or ethanol are included below:

a. Work Practice Standards

(1) All tanks currently storing gasoline or ethanol shall be equipped with a fixed roof in combination with an internal floating roof meeting the following specifications [40 C.F.R. § 60.112b(a)(1)]:

(i) The internal floating roof shall rest or float on the liquid surface (but not necessarily in complete contact with it) inside a storage vessel that has a fixed roof. The internal floating roof shall be floating on the liquid surface at all times, except during initial fill and during those intervals when the storage vessel is completely emptied or subsequently emptied and refilled. 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;

(ii) Each internal floating roof shall be equipped with one of the following closure devices between the wall of the storage vessel and the edge of the internal floating roof:

1. A foam- or liquid-filled seal mounted in contact with the liquid (liquid-mounted seal). A liquid-mounted seal means a foam- or liquid-filled seal mounted in contact with the liquid between the wall of the storage vessel and the floating roof continuously around the circumference of the tank;

2. Two seals mounted one above the other so that each forms a continuous closure that completely covers the space between the wall of the storage vessel and the edge of the internal floating roof. The lower seal may be vapor-mounted, but both must be continuous; or

3. A mechanical shoe seal. A mechanical shoe seal is a metal sheet held vertically against the wall of the storage vessel by springs or weighted levers and is connected by braces to the floating roof. A flexible coated fabric (envelope) spans the annular space between the metal sheet and the floating roof.

(iii) Each opening in a noncontact internal floating roof except for automatic bleeder vents (vacuum breaker vents) and the rim space vents is to provide a projection below the liquid surface;

(iv) Each opening in the internal floating roof except for leg sleeves, automatic bleeder vents, rim space vents, column wells, ladder wells, sample wells, and stub drains is to be equipped with a cover or lid which is to be maintained in a closed position at all times (i.e., no visible gap) except when the device is in actual use. The cover or lid shall be equipped with a gasket.

Covers on each access hatch and automatic gauge float well shall be bolted except when they are in use;

(v) Automatic bleeder vents shall be equipped with a gasket and are to be closed at all times when the roof is floating except when the roof is being floated off or is being landed on the roof supports;

(vi) Rim space vents shall be equipped with a gasket and are to be set to open only when the internal floating roof is not floating or at the manufacturer's recommended setting;

(vii) Each penetration of the internal floating roof for the purpose of sampling shall be a sample well. The sample well shall have a slit fabric cover that covers at least 90 percent of the opening;

(viii) Each penetration of the internal floating roof that allows for passage of a column supporting the fixed roof shall have a flexible fabric sleeve seal or a gasketed sliding cover; and

(ix) Each penetration of the internal floating roof that allows for passage of a ladder shall have a gasketed sliding cover.

(2) Each tank currently storing gasoline or ethanol shall be inspected according to the following requirements [40 C.F.R. § 60.113b(a) and 06-096 C.M.R. ch. 115, BPT]:

(i) For vessels equipped with a liquid-mounted or mechanical shoe primary seal, Irving shall visually inspect the internal floating roof and the primary seal or the secondary seal (if one is in service) through manholes and roof hatches on the fixed roof at least once every 12 months after initial fill. If the internal floating roof is not resting on the surface of the product inside the storage vessel, there is liquid accumulated on the roof, the seal is detached, or there are holes or tears in the seal fabric, Irving shall repair the items or empty and remove the storage vessel from service within 45 days. If a failure that is detected during inspections required in this paragraph cannot be repaired within 45 days and if the vessel cannot be emptied within 45 days, a 30-day extension may be requested from the Department in the inspection report required in 40 C.F.R. § 60.115b(a)(3). Such a request for an extension must document that alternate storage capacity is unavailable and specify a schedule of actions the company will take to that will assure that the control equipment will be repaired or the vessel will be emptied as soon as possible;

(ii) For vessels equipped with a double-seal system as specified in 40 C.F.R. § 60.112b(a)(1)(ii)(B), Irving shall:

1. Visually inspect the vessel as specified in the paragraph below at least every five years; or

2. Visually inspect the vessel as specified in the paragraph above.

(iii) Irving shall visually inspect the internal floating roof, the primary seal, the secondary seal (if one is in service), gaskets, slotted membranes and sleeve seals (if any) each time the storage vessel is emptied and degassed. If the internal floating roof has defects, the primary seal has holes, tears, or other openings in the seal or the seal fabric, the gaskets no longer close off the liquid surfaces from the atmosphere, or the slotted membrane has more than 10 percent open area, Irving shall repair the items as necessary so that none of the conditions specified in this paragraph exist before refilling the storage vessel with product. In no event shall inspections conducted in accordance with this provision occur at intervals greater than 10 years; and

(iv) Irving shall notify the Department and EPA in writing at least 30 days prior to the filling or refilling of each storage vessel for which an inspection is required by 40 C.F.R. § 60.113b(a)(4) to afford the Department and EPA the opportunity to have an observer present. If the inspection required by 40 C.F.R. § 60.113b(a)(4) is not planned and Irving could not have known about the inspection 30 days in advance of refilling the tank, Irving shall notify the Department and EPA at least seven days prior to the refilling of the storage vessel. Notification shall be made by telephone immediately followed by written documentation demonstrating why the inspection was unplanned. Alternatively, this notification including the written documentation may be made in writing and sent by express mail so that it is received by the Department and EPA at least seven days prior to the refilling.

b. Recordkeeping Requirements

(1) Irving shall keep a record of each inspection performed as required by 40 C.F.R. § 60.113b(a)(1-4). Each record shall identify the storage vessel on which the inspection was performed and shall contain the date each vessel was inspected and the observed condition of each component of the control equipment (seals, internal floating roof, and fittings) [40 C.F.R. § 60.115b(a)(2)];

(2) Irving shall maintain a record of the product stored, the period of storage, and the maximum true vapor pressure of that product during the respective storage period for each storage vessel. The maximum true vapor pressure may be determined using the procedures in 40 C.F.R. § 60.116b(e). [40 C.F.R. § 60.116b(c) and (e)]; and

(3) Irving shall keep copies of all records required by 40 C.F.R. Part 60, Subpart Kb for a minimum of two years, except for readily accessible records showing the dimensions of each storage vessel and an analysis showing the capacity of each storage vessel, which Irving shall keep for the life of the source. [40 C.F.R. § 60.116b(a-b)] The length of the records retention component shall be streamlined to the six-year retention timeframe required under 06-096 C.M.R. ch. 115.

c. Notifications and Reports

Irving shall submit the following notifications and reports [40 C.F.R. § 60.115b(a)(3-4) and 06-096 C.M.R. ch. 115, BPT]:

(1) If any of the conditions described in 40 C.F.R. § 60.113b(a)(2) are detected during the annual visual inspection required by that section, Irving shall furnish a report the Department and EPA within 30 days of the inspection. This report shall identify the storage vessel, the nature of the defect(s), and the date the storage vessel was emptied or the nature of and date the repair was made; and

(2) After each inspection required by 40 C.F.R. § 60.113b(a)(3) that finds holes or tears in the seal or seal fabric, defects in the internal floating roof, or other control equipment defects listed in 40 C.F.R. § 60.113b(a)(3)(ii), Irving shall furnish a report to the Department and EPA within 30 days of the inspection that identifies the storage vessel and the reason it did not meet the specifications of 40 C.F.R. §§ 60.112b(a)(1) or 60.113b(a)(3) and list each repair made.

3. NESHAP: 40 C.F.R. Part 63, Subpart BBBBBB

When storing gasoline, Tanks #1-2, #5-8, and #10-12 are subject to *NESHAP for Source Category: Gasoline Distribution Bulk Terminals, Bulk Plants, and Pipeline Facilities*, 40 C.F.R. Part 63, Subpart BBBBBB. When storing ethanol, however, Tanks #1-2, #5-8, and #10-12 are not subject to 40 C.F.R. Part 63, Subpart BBBBBB. When storing gasoline these tanks are all considered existing gasoline storage tanks with a capacity greater than or equal to 75 cubic meters. When storing ethanol, these tanks are not considered gasoline storage tanks as defined in the subpart. [40 C.F.R. §§ 63.11081(a), 63.11082(a) and (d), & 63.11100]

The requirements of 40 C.F.R. Part 63, Subpart BBBBBB applicable to the aforementioned tanks when storing gasoline are included below:

a. All tanks currently storing gasoline shall meet the following specifications [40 C.F.R. § 63.11087(a) and 40 C.F.R. Part 63, Subpart BBBBBB, Table 1(2.)(b)]:

(1) The internal floating roof shall rest or float on the liquid surface (but not necessarily in complete contact with it) inside a storage vessel that has a fixed roof. The internal floating roof shall be floating on the liquid surface at all times, except during initial fill and during those intervals when the storage vessel is completely emptied or subsequently emptied and refilled. 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;

(2) Each internal floating roof shall be equipped with one of the following closure devices between the wall of the storage vessel and the edge of the internal floating roof:

(i) A foam- or liquid-filled seal mounted in contact with the liquid (liquid-mounted seal). A liquid-mounted seal means a foam- or liquid-filled seal in contact with the liquid between the wall of the storage vessel and the floating roof continuously around the circumference of the tank;
(ii) A single seal that forms a continuous closure that completely covers the space between the wall of the storage vessel and the edge of the internal floating roof. This seal may be vapor-mounted; or
(iii)A mechanical shoe seal. A mechanical shoe seal is a metal sheet held vertically against the wall of the storage vessel by springs or weighted levers and is connected by braces to the floating roof. A flexible coated fabric (envelope) spans the annular space between the metal sheet and the floating roof.

(3) Each opening in a noncontact internal floating roof except for automatic bleeder vents (vacuum breaker vents) and the rim space vents is to provide a projection below the liquid surface.

b. Irving shall perform inspections of the floating roof system for all tanks currently storing gasoline according to the following requirements [40 C.F.R. §§ 63.11087(c) and 63.11092(e) and 06-096 C.M.R. ch. 115, BPT]:

(1) For vessels equipped with a liquid-mounted or mechanical shoe primary seal, Irving shall visually inspect the internal floating roof and the primary seal or the secondary seal (if one is in service) through manholes and roof hatches on the fixed roof at least once every 12 months after initial fill. If the internal floating roof is not resting on the surface of the gasoline inside the storage vessel, there is liquid accumulated on the roof, the seal is detached, or there are holes or tears in the seal fabric, the owner or operator shall repair the items or empty and remove the storage vessel from service within 45 days. If a failure that is detected during inspections required in this paragraph cannot be repaired within 45 days and if the vessel cannot be emptied within 45 days, a 30-day extension may be requested from the Department in the inspection report required in 40 C.F.R. § 60.115b(a)(3). Such a request for an extension must document that alternate storage capacity is unavailable and specify a schedule of actions the company will take that will assure that the control equipment will be repaired or the vessel will be emptied as soon as possible;

(2) For vessels equipped with a double-seal system as specified in 40 C.F.R. § 60.112b(a)(1)(ii)(B) or with a single vapor-mounted seal:

(i) Visually inspect the vessel as specified in the paragraph below at least every 5 years; or
(ii) Visually inspect the vessel as specified in the paragraph above.

(3) Irving shall visually inspect the internal floating roof, the primary seal, the secondary seal (if one is in service), gaskets, slotted membranes and sleeve seals (if any) each time the storage vessel is emptied and degassed. If the internal floating roof has defects, the primary seal has holes, tears, or other openings in the seal or the seal fabric, the secondary seal has holes, tears, or other openings in the seal or the seal fabric, the gaskets no longer close off the liquid surfaces from the atmosphere, or the slotted membrane has more than 10 percent open area, the owner or operator shall repair the items as necessary so that none of the conditions specified in this paragraph exist before refilling the storage vessel with gasoline. In no event shall inspections conducted in accordance with this provision occur at intervals greater than 10 years in the case of vessels conducting the annual visual inspection and at intervals no greater than 5 years in the case of vessels specified in section 1 of the above paragraph/requirement; and

(4) Irving shall notify the Department and EPA in writing at least 30 days prior to the filling or refilling of each storage vessel for which an inspection is required by 40 C.F.R. § 60.113b(a)(4) to afford the Department and EPA the opportunity to have an observer present. If the inspection required by 40 C.F.R. § 60.113b(a)(4) is not planned and the owner or operator could not have known about the inspection 30 days in advance of refilling the tank, the owner or operator shall notify the Department and EPA at least 7 days prior to the refilling of the storage vessel. Notification shall be made by telephone immediately followed by written documentation demonstrating why the inspection was unplanned. Alternatively, this notification including the written documentation may be made in writing and sent by express mail so that it is received by the Department and EPA at least 7 days prior to the refilling.

c. For all tanks currently storing gasoline, Irving shall keep a record of each inspection performed as required by 40 C.F.R. § 60.113b(a)(1), (a)(2), (a)(3), and (a)(4). Each record shall identify the storage vessel on which the inspection was performed and shall contain the date the vessel was inspected and the observed condition of each component of the control equipment (seals, internal floating roof, and fittings). These records shall be kept for at least five years. [40 C.F.R. §§ 63.11087(e) and 63.11094(a)]

I. Storage and Blending of Ethanol

Irving may store ethanol in any of the facility's internal floating roof tanks. Irving may distribute gasoline/ethanol blend from the facility's Loading Rack. The use of internal floating roofs and the VCU are considered BPT for the storage and blending of ethanol at the facility.

J. Parts Washer

The parts washer has a design capacity of 30 gallons and is located in the terminal's maintenance garage. The parts washer is subject to *Solvent Cleaners*, 06-096 C.M.R. ch. 130 and records shall be kept documenting compliance.

K. Annual Emission Limits and Facility-Wide Recordkeeping

In order for Irving to remain a minor source of criteria air pollutants and an area source of HAP, Irving shall limit facility-wide VOC emissions to no more than 49.9 tons per year, and Irving shall limit HAP emissions to 9.9 tons per year of total HAP, both on a 12-month rolling total basis. Compliance with these limits will also satisfy the recordkeeping requirements of *Bulk Petroleum Liquid Transfer Requirements*, 06-096 C.M.R. ch. 112(1.)(C.). In order to document compliance with these limits, Irving shall record the following information:

1. Records shall be maintained showing the following information for each of the petroleum storage tanks in order to calculate monthly and 12-month rolling total VOC and HAP emissions [06-096 C.M.R. ch. 115, BPT]:

    a. Quantity and type of product stored in each tank;
    b. Reid vapor pressure or maximum true vapor pressure, as necessary to calculate tank emissions;
    c. Storage temperatures, as necessary to calculate tank emissions;
    d. Throughput for each tank;
    e. Tank emissions calculated using EPA TANKS program or an alternative approved by the Department;
    f. Tank truck emissions assuming 1.3% of vapors are displaced during loading (based on assumed capture efficiency of 98.7% as given in 40 C.F.R. Part 63, Subpart R);
    g. Dates and results of annual VCU testing; and
    h. HAP speciation data as given by the American Petroleum Institute (API) or other speciation data as obtained by a supplier.

2. Irving shall calculate and record the 12-month rolling total facility VOC and HAP emissions (expressed in tons) from the Loading Rack, storage tanks, and fugitive sources (i.e. pumps, valves, and flanges). [06-096 C.M.R. ch. 115, BPT]

3. Irving shall maintain records of all monthly inspections and leak inspections of all equipment utilizing sight, smell, and sound. [06-096 C.M.R. ch. 115, BPT]

Additionally, Irving shall not exceed an annual facility-wide gasoline and ethanol throughput limit of 220,000,000 gallons, based on a 12-month rolling total. Compliance with this limit shall be demonstrated by monthly records kept on-site and made available to the Department upon request. [06-096 C.M.R. ch. 115, BPT]

L. Fugitive Emissions

Visible emissions from a fugitive emission source (including stockpiles and roadways) shall not exceed 20% opacity, except for no more than five minutes in any one-hour period during which time visible emissions shall not exceed 30% opacity. Compliance shall be determined by an aggregate of the individual fifteen-second opacity observations which exceed 20% in any one hour.

M. General Process Emissions

Visible emissions from any general process source shall not exceed 20% opacity on a six-minute block average basis.

N. Annual Emissions

1. Total Annual Emissions

Irving shall be restricted to the following annual emissions, based on a 12-month rolling total. The tons per year limits were calculated based on 100 hours/year of operation for Generators #1 and #2 and a throughput of 340,000,000 gallons/year (for all fuels combined) for the Loading Rack/VCU and the Tanks:

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

	PM	PM_{10}	SO_2	NO_x	CO	VOC	Total HAP
Generators #1 & #2	0.1	0.1	0.1	0.3	0.2	0.1	--
Tanks	--	--	--	--	--	35.6	9.9
Loading Rack/VCU	--	--	--	5.7	14.2	14.2	--
Total TPY	**0.1**	**0.1**	**0.1**	**6.0**	**14.4**	**49.9**	**9.9**

2. Greenhouse Gases

Greenhouse gases are considered regulated pollutants as of January 2, 2011, through 'Tailoring' revisions made to EPA's *Approval and Promulgation of Implementation Plans,* 40 C.F.R. Part 52, Subpart A, § 52.21, *Prevention of Significant Deterioration of Air Quality* rule. Greenhouse gases, as defined in 06-096 C.M.R. ch. 100, are the aggregate group of the following gases: carbon dioxide, nitrous oxide, methane, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride. For licensing purposes, greenhouse gases (GHG) are calculated and reported as carbon dioxide equivalents (CO_2e).

The quantity of CO_2e emissions from this facility is less than 100,000 tons per year, based on the following:

- the facility's maximum licensed quantity of bottom-loaded product, non-emergency operating hours restrictions, and maximum fuel use for the non-engine fuel burning equipment;
- worst case emission factors from the following sources: U.S. EPA's AP-42, the Intergovernmental Panel on Climate Change (IPCC), and *Mandatory Greenhouse Gas Reporting,* 40 C.F.R. Part 98; and
- global warming potentials contained in 40 C.F.R. Part 98.

No additional licensing actions to address GHG emissions are required at this time.

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
PM_{10}	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.

ORDER

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

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

The Department hereby grants Air Emission License A-413-71-Q-R/A subject to the following conditions.

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

STANDARD 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]

(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:

A. Within thirty (30) days following receipt of such test results, the licensee shall re-test the non-complying emission source under circumstances representative of the facility's normal process and operating conditions and in accordance with the Department's air emission compliance test protocol and 40 C.F.R. Part 60 or other method approved or required by the Department; and

B. The days of violation shall be presumed to include the date of stack test and each and every day of operation thereafter until compliance is demonstrated under normal and representative process and operating conditions, except to the extent that the facility can prove to the satisfaction of the Department that there were intervening days during which no violation occurred or that the violation was not continuing in nature; and

C. The licensee may, upon the approval of the Department following the successful demonstration of compliance at alternative load conditions, operate under such alternative load conditions on an interim basis prior to a demonstration of compliance under normal and representative process and operating conditions.

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

(13) Notwithstanding any other provisions in the State Implementation Plan approved by the EPA or Section 114(a) of the CAA, any credible evidence may be used for the purpose of establishing whether a person has violated or is in violation of any statute, regulation, or Part 70 license requirement. [06-096 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]

SPECIFIC CONDITIONS

(16) **Annual Limits and Facility-Wide Recordkeeping**

A. Irving shall not exceed an annual gasoline and ethanol throughput limit for the facility of 220,000,000 gallons, based on a 12-month rolling total. Compliance with this limit shall be demonstrated by monthly records kept on-site and made available to the Department upon request. [06-096 C.M.R. ch. 115, BPT]

B. Irving shall be limited to annual facility VOC emissions of 49.9 tons per year based on a 12-month rolling total, and to annual facility HAP emissions of 9.9 tons per year for total HAP based on a 12-month rolling total. Compliance with these limits shall be determined using the information required by subparts C., D., and E. of this Condition. [06-096 C.M.R. ch. 115, BPT]

C. Records shall be maintained showing the following information for each of the petroleum storage tanks in order to calculate monthly and 12-month rolling total VOC and HAP emissions [06-096 C.M.R. ch. 115, BPT]:

1. Quantity and type of product stored in each tank;
2. Reid vapor pressure or maximum true vapor pressure, as necessary to calculate tank emissions;
3. Storage temperatures, as necessary to calculate tank emissions;
4. Throughput for each tank;
5. Tank emissions calculated using EPA TANKS program or an alternative approved by the Department;
6. Tank truck emissions assuming 1.3% of vapors are displaced during loading (based on assumed capture efficiency of 98.7% as given in 40 C.F.R. Part 63, Subpart R);
7. Dates and results of annual VCU testing; and
8. HAP speciation data as given by the American Petroleum Institute (API) or other speciation data as obtained by a supplier.

D. Irving shall calculate and record the 12-month rolling total facility VOC and HAP emissions (expressed in tons) from the Loading Rack, storage tanks, and fugitive sources (i.e. pumps, valves, and flanges). [06-096 C.M.R. ch. 115, BPT]

E. Irving shall maintain records of all monthly inspections and leak inspections of all equipment utilizing sight, smell, and sound. [06-096 C.M.R. ch. 115, BPT]

(17) **Distillate Fuel Requirements**

A. Prior to July 1, 2018, all distillate fuel combusted at the facility shall have a maximum sulfur content not to exceed 0.5% by weight. [06-096 C.M.R. ch. 115, BPT]

B. Beginning July 1, 2018, Irving shall not purchase or otherwise obtain distillate fuel to be combusted at the facility with a maximum sulfur content that exceeds 0.0015% by weight (15 ppm). [06-096 C.M.R. ch. 115, BPT]

C. Compliance shall be demonstrated by fuel records from the supplier showing the type and percent sulfur of the fuel used in combustion units. [06-096 C.M.R. ch. 115, BPT]

(18) **Generators #1 and #2**

A. Generators #1 and #2 shall be limited to 100 hours of operation per calendar year, excluding operating hours during emergency situations. [06-096 C.M.R. ch. 115, BPT]

B. Irving shall keep records that include maintenance conducted on the engine and the hours of operation of the engine recorded through the non-resettable hour meter. Documentation shall include the number of hours each unit operated for emergency purposes, the number of hours each unit operated for non-emergency purposes, and the reason the engine was in operation during each time. [06-096 C.M.R. ch. 115, BPT]

C. Emissions shall not exceed the following [06-096 C.M.R. ch. 115, BPT & 06-096 C.M.R. ch. 115, BACT]:

Unit	PM (lb/hr)	PM_{10} (lb/hr)	SO_2 (lb/hr)	NO_x (lb/hr)	CO (lb/hr)	VOC (lb/hr)
Generator #1	0.04	0.04	0.01	1.59	2.46	0.02
Generator #2	0.10	0.10	0.01	3.79	0.82	0.30

D. Visible Emissions

1. Visible emissions from Generator #1 shall not exceed 10% opacity on a six-minute block average basis. [06-096 C.M.R. ch. 115, BPT]

2. Visible emissions from Generator #2 shall not exceed 10% opacity on a six-minute block average basis, except for no more than one six-minute block average in a one-hour period to accommodate periods of startup and load changes. During such periods, the facility shall comply with the following work practice standards:

   a. The unit operator shall maintain a log (written or electronic) of the date, time, and duration of all unit startups;
   b. The unit shall be operated in accordance with the manufacturer's emission-related operating instructions;
   c. The unit operator shall minimize the engine's time spent at idle and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the non-startup emission limitations apply; and

d. The unit, including any associated air pollution control equipment, shall be operated at all times in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Department that may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the unit.

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

E. Generator #1 is only to be operated for maintenance purposes and for situations arising from sudden and reasonably unforeseeable events beyond the control of the source. Generator #1 is not to be used for prime power when reliable offsite power is available; nor to operate or to be contractually obligated to be available in a demand response program, during a period of deviation from standard voltage or frequency, or supplying power during a non-emergency situation as part of a financial arrangement with another entity. [06-096 C.M.R. ch. 115, BPT]

F. Generator #2 shall meet the applicable requirements of 40 C.F.R. Part 60, Subpart IIII, including the following:

1. Manufacturer Certification
The engine shall be certified by the manufacturer as meeting the applicable emission standards for new nonroad compression ignition engines found in 40 C.F.R. § 60.4202. [40 C.F.R. § 60.4205(b)]

2. Ultra-Low Sulfur Distillate Fuel
The distillate fuel fired in the engine shall not exceed 15 ppm sulfur (0.0015% sulfur by weight), except that any existing distillate fuel purchased (or otherwise obtained) prior to October 1, 2010, may be used until depleted. Compliance with the fuel sulfur content limit shall be based on fuel records from the supplier documenting the type of fuel delivered and the sulfur content of the fuel. [40 C.F.R. § 60.4207(b) and 06-096 C.M.R. ch. 115, BPT]

3. Non-Resettable Hour Meter
A non-resettable hour meter shall be installed and operated on the engine. [40 C.F.R. § 60.4209(a)]

4. Annual Time Limit for Maintenance and Testing

a. The engine shall be limited to 100 hours/year for maintenance checks and readiness testing. Up to 50 hours/year of the 100 hours/year may be used in non-emergency situations (this does not include peak shaving, demand response, or to generate income for a facility by providing power to an electric grid or otherwise supply power as part of a financial arrangement with another

entity). These limits are based on a calendar year. Compliance shall be demonstrated by records (electronic or written log) of all engine operating hours. [40 C.F.R. § 60.4211(f) and 06-096 C.M.R. ch. 115, BPT]

b. Irving shall keep records that include maintenance conducted on the engine and the hours of operation of the engine recorded through the non-resettable hour meter. Documentation shall include the number of hours the unit operated for emergency purposes, the number of hours the unit operated for non-emergency purposes, and the reason the engine was in operation during each time. [40 C.F.R. § 60.4214(b)]

5. Operation and Maintenance
The engine shall be operated and maintained according to the manufacturer's emission-related written instructions or according to alternate procedures developed by Irving that are approved by the engine manufacturer. Irving may only change those emission-related settings that are permitted by the manufacturer. [40 C.F.R. § 60.4211(a)]

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

A. General Requirements

Irving shall, 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. Irving shall perform a monthly leak inspection of all equipment in gasoline service. Detection methods incorporating sight, sound, and smell are acceptable. [40 C.F.R. § 63.11089(a)]
2. Irving shall maintain a log book to be signed by the owner or operator at the completion of each leak inspection. A section of the log book 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. Irving shall record each detection of a liquid or vapor leak in the log book. When a leak is detected, Irving shall make an initial attempt at repair as soon as practicable, but no later than five calendar days after the leak is detected. Irving shall complete repair or replacement of leaking equipment within fifteen calendar days after detection of each leak. [40 C.F.R § 63.11089(c)]
4. If repair of leaking equipment is not feasible within fifteen days, Irving shall provide a reason why the repair was not feasible and the date the repair was completed in the semiannual compliance report specified in 40 C.F.R. § 63.11095(b). [40 C.F.R. § 63.11089(d)]

C. Recordkeeping

1. Irving shall prepare and maintain a record describing the types, identification numbers, and locations of all equipment in gasoline service. [40 C.F.R. § 63.11094(d)]

2. Irving shall keep the following records [40 C.F.R. § 63.11094(f)]:

   a. Irving shall keep an up-to-date, readily accessible record of the continuous monitoring data required under 40 C.F.R. §§ 63.11092(b) or 63.11092(e). This record 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;
   b. Irving shall record and report all data and calculations, engineering assessments, and manufacturer's recommendations used in determining the operating parameter value under 40 C.F.R. §§ 63.11092(b) or 63.11092(e) simultaneously with the Notification of Compliance Status required under 40 C.F.R. § 63.11093(b);
   c. Irving shall keep an up-to-date, readily accessible copy of the monitoring and inspection plan required under 40 C.F.R. § 63.11092(b)(1)(iii)(B)(2);
   d. Irving shall keep an up-to-date, readily accessible record of all system malfunctions, as specified in 40 C.F.R. § 63.11092(b)(1)(iii)(B)(2)(v); and
   e. If Irving requests approval to use a vapor processing system or monitor an operating parameter other than those specified in 40 C.F.R. § 63.11092(b), Irving shall submit a description of planned reporting and recordkeeping procedures.

3. Irving shall keep the following records [40 C.F.R. § 63.11094(g)]:

   a. Records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment; and
   b. Records of action taken during periods of malfunction to minimize emissions in accordance with 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.

4. Irving shall maintain records of the following information for each leak detected during equipment leak inspections [40 C.F.R. § 63.11094(e)]:

   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 calendar days of its discovery;
f. The expected date of successful repair of the leak if the leak is not repaired within fifteen days; and
g. The date of successful repair of the leak.

D. Notifications and Reports

1. Irving shall submit a Notification of Performance Test to the Department and EPA, as specified in 40 C.F.R. § 63.9(e), prior to initiating testing required by either 40 C.F.R. § 63.11092(a) or 40 C.F.R. § 63.11092(b). [40 C.F.R. § 63.11093(c) and 06-096 C.M.R. ch. 115, BPT]
2. Irving shall submit any additional notifications specified in 40 C.F.R. § 63.9, as applicable, to the Department and EPA. [40 C.F.R. § 63.11093(d) and 06-096 C.M.R. ch. 115, BPT]
3. Irving shall submit a semiannual compliance report to EPA and the Department which shall include the following information [40 C.F.R. §§ 63.11087(e), 63.11095(a), and 63.11095(d), and 06-096 C.M.R. ch. 115, BPT]:

   a. For any tanks currently in gasoline service, the following information:

      (1) A description of the control equipment and certification that the control equipment meets the specifications of 40 C.F.R. §§ 60.112b(a)(1) and 60.113b(a)(1);
      (2) If any of the conditions described in 40 C.F.R. § 60.113b(a)(2) are detected during the annual visual inspection required by 40 C.F.R. § 60.113b(a)(2), identification of the storage vessel, the nature of the defects, and the date the storage vessel was emptied or the nature of and date the repair was made; and
      (3) After each inspection required by 40 C.F.R. § 60.113b(a)(3) that finds holes or tears in the seal or seal fabric, or defects in the internal floating roof, or other control equipment defects listed in 40 C.F.R. § 60.113b(a)(3)(ii), identification of the storage vessel, the reason it did not meet the specifications of 40 C.F.R. § 61.112b(a)(1) or 40 C.F.R. § 60.113b(a)(3), and a list of each repair made.

   b. For the Loading Rack, each loading of a gasoline cargo tank for which vapor tightness documentation had not been previously obtained by the facility;
   c. For equipment leak inspections, the number of equipment leaks not repaired within fifteen days after detection; and
   d. A report 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 the facility during a

malfunction of an affected source to minimize emissions in accordance with 40 C.F.R. § 63.11085(a), including actions taken to correct a malfunction.

4. Irving shall submit an excess emissions report along with each semiannual compliance report to EPA and the Department which shall include the following information [40 C.F.R. §§ 63.11087(e) and 63.11095(b) and 06-096 C.M.R. ch. 115, BPT]:

   a. Each instance of a non-vapor-tight gasoline cargo tank loading at the facility in which the owner or operator 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 in accordance with 40 C.F.R. § 63.11094(b);
   c. Each exceedance or failure to maintain, as appropriate, the monitored parameter value determined under 40 C.F.R. § 63.11092(b). The report shall include the monitoring data for the days on which exceedances or failures to maintain have occurred, and a description and timing of the steps taken to repair or perform maintenance on the vapor collection and processing systems or the CMS;
   d. Each instance in which malfunctions discovered during the monitoring and inspections required under 40 C.F.R. § 63.11092(b)(1)(iii)(B)(*2*) were not resolved according to the necessary corrective actions described in the monitoring and inspection plan. The report shall include a description of the malfunction and the timing of the steps taken to correct the malfunction; and
   e. For each occurrence of an equipment leak for which no repair attempt was made within five days or for which the repair was not completed within fifteen days after detection:

      (1) The date on which the leak was detected;
      (2) The date of each attempt to repair the leak;
      (3) The reasons for the delay of repair; and
      (4) The date of successful repair.

(20) **Loading Rack and Vapor Combustion Unit**

A. Emissions shall not exceed the following [06-096 C.M.R. ch. 115, BPT]:

Unit	PM (lb/hr)	PM_{10} (lb/hr)	SO_2 (lb/hr)	NO_x (lb/hr)	CO (lb/hr)	VOC (lb/hr)
VCU	Negl.	Negl.	Negl.	19.23	48.07	48.07

B. Work Practice Standards

1. All gasoline and/or ethanol loading into gasoline cargo tanks shall comply with the following [06-096 C.M.R. ch. 115, BPT, 06-096 C.M.R. ch. 112 (3.), 40 C.F.R. § 60.502(a), (d), and (e), 40 C.F.R. § 63.11088(a), and 40 C.F.R. Part 63, Subpart BBBBBB, Table 2(1.)(a, c, and d)]:

   a. Irving shall limit the loadings of liquid product into only gasoline cargo tanks that have been certified within the last 12 months as vapor-tight pursuant to 06-096 C.M.R. ch. 120 using the following procedures:

      (1) Irving shall obtain the vapor tightness documentation for each gasoline cargo tank which is to be loaded at the Loading Rack;
      (2) Irving shall require the tank identification number to be recorded as each gasoline cargo tank is loaded at the Loading Rack;
      (3) Irving shall cross-check each tank identification number obtained above with the file of tank vapor tightness documentation within two weeks after the corresponding tank is loaded, unless either of the following conditions is maintained:

         (i) If less than an average of one gasoline cargo tank per month over the last 26 weeks is loaded without vapor tightness documentation then the documentation cross-check shall be performed each quarter; or
         (ii) If less than an average of one gasoline cargo tank per month over the last 52 weeks is loaded without vapor tightness documentation then the documentation cross-check shall be performed semiannually.

         If either the quarterly or semiannual cross-checks above reveal that the conditions allowing them were not maintained, Irving shall return to biweekly monitoring until such time as these conditions are met.

      (4) Irving shall notify the owner or operator of each non-vapor-tight gasoline cargo tank loaded at the Loading Rack within one week of the documentation cross-check; and
      (5) Irving shall take steps assuring that the non-vapor-tight gasoline cargo tanks will not be reloaded at the Loading Rack until vapor tightness documentation for that tank is obtained.

      Alternate procedures to those described above may be used upon application to, and approval by, the Department and EPA.

   b. The Loading Rack shall be equipped with a vapor collection system that has been properly installed, is maintained in good working order, and is designed to capture and collect the VOC vapors displaced from gasoline cargo tanks during product loading. This system must be in operation at all times gasoline

and/or ethanol is being transferred to gasoline cargo tanks at the Loading Rack, as well as any time a gasoline cargo tank is being loaded at the Loading Rack that carried gasoline and/or ethanol on its most recent previous load. The vapor collection system shall be designed to prevent any VOC vapors collected at one lane of the Loading Rack from passing to another lane of the Loading Rack or out to the atmosphere, and shall direct all vapors to the VCU;

c. A means shall be provided to prevent liquid drainage from the loading device when it is not in use or to accomplish complete drainage before the loading device is disconnected. There shall be no liquid drainage from the loading device;
d. All loading and vapor lines shall be equipped and maintained in good working order with fittings which make vapor-tight connections and which close automatically when disconnected. The pressure in the vapor collection system shall not be allowed to exceed +18 inches of water or a vacuum exceeding -6 inches of water; and
e. The pressure in the vapor collection system shall not be allowed to exceed the gasoline cargo tank pressure relief settings.

2. Leaks greater than 100% of the lower explosive limit (LEL) obtained within one inch around any potential leak source of the gasoline cargo tank, including all loading couplings, vapor lines, and fittings employed in the transfer of gasoline and/or ethanol, are prohibited. [06-096 C.M.R. ch. 115, BPT]

3. No pressure-vacuum vent in Irving's 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)]

4. Irving shall act to assure that the terminal's and gasoline cargo tank's vapor collection systems are connected during each loading of a gasoline cargo tank and each loading of a gasoline cargo tank that carried gasoline and/or ethanol on its most recent previous load, and shall only load into gasoline cargo tanks that are compatible with the terminal's vapor collection system. Examples of actions to accomplish this include training drivers in the hookup procedures and posting visible reminder signs at the Loading Rack. [40 C.F.R. § 60.502(f) and (g)]

5. Irving shall not allow gasoline and/or ethanol to be discarded in sewers or stored in open containers or allow gasoline and/or ethanol to be handled in any manner that would result in evaporation. [06-096 C.M.R. ch. 112(3.)(E.)]

6. At a minimum of once per month, Irving shall inspect the vapor collection system, the VCU, and the Loading Rack during the loading of gasoline cargo tanks for VOC liquid or vapor leaks. Detection methods incorporating sight, sound, or smell are acceptable. Each detection of a leak shall be recorded. All leaks must be repaired as quickly as possible, but within 15 calendar days, with the first attempt at repair made no later than five days from the initial detection of the leak. [06-096 C.M.R. ch. 115, BPT and 40 C.F.R. § 60.502(j)]

C. Emission Standards and Testing and Monitoring Requirements

1. Emissions of VOC from the Loading Rack/VCU shall not exceed 10 milligrams per liter of gasoline and/or ethanol transferred. Irving shall demonstrate compliance with this limit using methods promulgated in 40 C.F.R. § 60.503 or other methods approved by the Department and EPA. [06-096 C.M.R. ch. 115, BPT]

2. The vapor collection and liquid loading equipment at Irving shall be designed and operated to prevent gauge pressure in the gasoline cargo tank from exceeding 4,500 pascals (450 mm of water) during product loading. This level is not to be exceeded when measured by the procedures specified in 40 C.F.R. § 60.503(d). [40 C.F.R. §§ 60.502(h) and 60.503(d)]

3. Irving shall conduct an annual compliance test of the VCU between May 1st and October 1st of each calendar year using the test methods in Appendix A of 40 C.F.R. Part 60 and the procedures included in 40 C.F.R. § 60.503(b) through (d) to demonstrate compliance with the standards listed in Sections (C.)(1.) and (2.) of this Condition. A report containing the test results shall be submitted to the Department within 30 days of the completion of the test in accordance with the Department's stack test protocol. [06-096 C.M.R. ch. 115, BPT and 40 C.F.R. § 60.503(a-d)]

4. Irving shall install, calibrate, certify, operate, and maintain, according to the manufacturer's specifications, a continuous monitoring system (CMS) while gasoline vapors are displaced to the vapor processing system, as follows [40 C.F.R. § 63.11092(b)]:

   a. For each performance test conducted under 40 C.F.R. § 63.11092(a)(1), Irving shall determine a monitored operating parameter value for the vapor processing system using the procedures specified below:

      (1) Irving shall monitor the presence of a thermal oxidation system pilot flame using a heat-sensing device, such as an ultraviolet beam sensor or a thermocouple, installed in proximity of the pilot light, to indicate the presence of a flame. The heat-sensing device shall send a positive parameter value to indicate that the pilot flame is on, or a negative parameter value to indicated that the pilot flame is off; and

(2) Irving shall develop and submit to the Administrator a monitoring and inspection plan that describes the facility's approach for meeting the following requirements:

(i) The thermal oxidation system shall be equipped to automatically prevent gasoline loading operations from beginning at any time that the pilot flame is absent;
(ii) Irving shall verity, during each day of operation of the Loading Rack, the proper operation of the assist-air blower and the vapor line valve. Verification shall be through visual observation, or through an automated alarm or shutdown system that monitors system operation. A manual or electronic record of the start and end of a shutdown event may be used;
(iii) Irving shall perform semi-annual preventative maintenance inspections of the thermal oxidation system, including the automated alarm or shutdown system for those units so equipped, according to the recommendations of the manufacturer of the system;
(iv) The monitoring plan developed according to part 2., above, shall specify conditions that would be considered malfunctions of the thermal oxidation system during the inspections or automated monitoring performed under parts 1. and 2., above, describe specific corrective actions that will be taken to correct any malfunction, and define what Irving would consider to be a timely repair for each potential malfunction; and
(v) Irving shall document any system malfunction, as defined in the monitoring and inspection plan, and any activation of the automated alarm or shutdown system with a written entry into a log book or other permanent form of record. Such record shall also include a description of the corrective action taken and whether such corrective actions were taken in a timely manner, as defined in the monitoring and inspection plan, as well as an estimate of the amount of gasoline loaded during the period of the malfunction.

Irving shall submit an updated monitoring and inspection plan to the Administrator within 30 days of the issuance of this air emission license. Irving shall also submit a new monitoring and inspection plan to the Administrator whenever the plan is updated. [06-096 C.M.R. ch. 115, BPT]

Monitoring an alternative operating parameter or a parameter of a vapor processing system other than those listed above will be allowed upon demonstrating to the EPA's satisfaction that the alternative parameter demonstrates continuous compliance with the emissions standard in 40 C.F.R. § 63.11088(a);

b. Determine an operating parameter value based on the parameter data monitored during the performance test, supplemented by engineering assessments and the manufacturer's recommendations;
c. Provide for the Administrator'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 a description of why the value, monitoring frequency, and averaging time demonstrate continuous compliance with the emission standard in 40 C.F.R. § 63.11088(a); and
d. If Irving has chosen to comply with the performance testing alternatives provided under 40 C.F.R. § 63.11092(a)(2) or (3), the monitored operating parameter value may be determined according to the provisions below:

(1) Monitor an operating parameter that has been approved by the EPA and is specified in your facility's current enforceable operating permit. At the time the Administrator requires a new performance test, you must determine the monitored operating parameter value according to the requirements specified in 40 C.F.R. § 63.11092(b); or
(2) Determine an operating parameter value based on engineering assessment and the manufacturer's recommendation and submit the information specified in 40 C.F.R. § 63.11092(b)(4) for approval by the EPA. At the time a new performance test is required, you must determine the monitored operating parameter value according to the requirements specified in 40 C.F.R. § 63.11092(b).

5. For performance tests performed after the initial test required under 40 C.F.R. § 63.11092(a), Irving shall document the reasons for any change in the operating parameter value since the previous performance test. [40 C.F.R. § 63.11092(c)]

6. Irving shall comply with the following requirements [40 C.F.R. § 63.11092(d)]:

a. Irving shall operate the vapor processing system in a manner to exceed or not to go below, as appropriate, the operating parameter value for the parameters described in 40 C.F.R. § 63.11092(b)(1);
b. In cases where an alternative parameter pursuant to 40 C.F.R. §§ 63.11092(b)(1)(iv) or 63.11092(b)(5)(i) is approved, Irving shall operate the vapor processing system in a manner not to exceed or not to go below, as appropriate, the alternative operating parameter value;
c. Operation of the vapor processing system in a manner exceeding or going below the operating parameter value, as appropriate, shall constitute a violation of the emission standard in 40 C.F.R. § 63.11088(a), except as specified in the next section;

d. For the monitoring and inspection, as required under 40 C.F.R. § 63.11092(b)(1)(iii)(B)(*2*), malfunctions that are discovered shall not constitute a violation of the emission standard in 40 C.F.R. § 63.11088(a) if corrective actions as described in the monitoring and inspection plan are followed. Irving must:

(1) Initiate corrective action to determine the cause of the problem within one hour;
(2) Initiate corrective action to fix the problem within 24 hours;
(3) Complete all corrective actions needed to fix the problem as soon as practicable consistent with good air pollution control practices for minimizing emissions;
(4) Minimize periods of start-up, shutdown, or malfunction; and
(5) Take any necessary corrective actions to restore normal operation and prevent the recurrence of the cause of the problem.

7. Performance tests conducted under 40 C.F.R. Part 63, Subpart BBBBBB shall be conducted under such conditions as the Administrator specifies to the facility, based on representative performance (i.e., performance based on normal operation conditions) of the affected source. Upon request, Irving shall make available to the Administrator such records as may be necessary to determine the conditions of performance tests. [40 C.F.R. § 63.11092(g)]

D. Recordkeeping Requirements

1. Irving shall maintain the following test result records for each gasoline cargo tank loading at the facility and shall update this documentation at least once per year to reflect current test results as determined by EPA Method 27 [06-096 C.M.R. ch. 115, BPT, 40 C.F.R. § 60.505(a-b) and (e), and 40 C.F.R. § 63.11094(b-c)]:

a. Annual certification testing performed under 40 C.F.R. § 63.11092(f)(1);

b. Documentation for each test, including the following:

(1) Name of Test: Gasoline Delivery Tank Truck Pressure Test-EPA Reference Method 27;
(2) Tank owner's name and address;
(3) Tank identification number;
(4) Test location and date;
(5) Tester name and signature;
(6) Witnessing inspector, if any: Name, signature, and affiliation; and
(7) Test results: Actual pressure change in five minutes, mm of water (average for two runs).

c. As an alternative to keeping records of the test results for each gasoline cargo tank loading at the facility on site, Irving may comply with one of the two following options:

(1) Irving may have an electronic copy of each record instantly available at the terminal, provided that the record is an exact duplicate image of the original paper records with certifying signatures and that the Administrator is notified in writing that Irving is in compliance using this alternative; or
(2) Irving may use a terminal automation system provided each record is an exact duplicate image of the original paper record with certifying signature, that the documentation can be made available for inspection by the Administrator's or Department's delegated representatives during the course of the site visit or within a mutually agreeable time frame, and that the Administrator is notified in writing that Irving is in compliance using this alternative.

2. Irving shall maintain monthly leak inspection records which shall be made available for inspection by the Department and shall include the following information [06-096 C.M.R. ch. 115, BPT and 40 C.F.R. § 60.505(c)]:

a. Date of inspection;
b. Findings (may indicate no leak discovered; or, location, nature, and severity of each leak);
c. Leak detection method;
d. Corrective action (date of repair attempts and methods used, details of any delay in repairs, and the final date of repair); and
e. Inspector name and signature.

3. Irving shall keep documentation of all notifications sent to operators of non-vapor-tight gasoline cargo tanks as required in 40 C.F.R. § 60.502(e)(4) for a minimum of six years. [40 C.F.R. § 60.505(d) & 06-096 C.M.R. ch. 115(3.)(E.)(5)(h)]

4. Irving shall keep records of all replacements or additions of components performed on the vapor processing system for a minimum of six years. [40 C.F.R. § 60.505(f) & 06-096 C.M.R. ch. 115(3.)(E.)(5)(h)]

E. Notifications and Reports

Whenever Irving is required to conduct the performance tests required by 40 C.F.R. §§ 60.502(b) and (h), Irving shall submit all reports and notifications required by 40 C.F.R. § 60.8 to both the Department and EPA. [40 C.F.R. § 60.503(a) and 06-096 C.M.R. ch. 115, BPT]

(21) **Storage of Biofuel, Distillate Fuel, Residual Fuel, and Asphalt**

Tanks #1-16 shall each be subject to the following requirements when storing biofuel, distillate fuel, residual fuel, or asphalt:

A. Irving shall conduct routine inspections of all tanks currently storing biofuel, distillate fuel, residual fuel, or asphalt at a minimum of once every month around the perimeter of the tank and roof. [06-096 C.M.R. ch. 115, BPT]

B. The following records shall be maintained at the source and available for inspection by the Department for any tanks that have stored biofuel, distillate fuel, residual fuel, or asphalt in the last six years [06-096 C.M.R. ch. 115, BPT]:

1. Records documenting any detected leaks, holes, tears, or other openings and the corrective action taken; and
2. Monthly throughput records specifying quantity and types of volatile petroleum liquids in each tank and the period of storage.

(22) **Storage of Gasoline and Ethanol**

Tanks #1-2, #5-8, and #10-12 shall be subject to the following requirements when storing gasoline or ethanol:

A. Empty and Degas Requirements

Irving shall not empty and degas any tanks currently storing gasoline or ethanol for the purpose of performing a complete inspection between June 1st and August 31st of each calendar year. Irving may empty and degas these tanks during that time for the purpose of performing a repair which is immediately necessary for the proper function of the vessel. If these tanks are emptied and degassed for the purpose of performing a repair which is immediately necessary for the proper function of the vessel between June 1st and August 31st of any calendar year, Irving shall notify the Department within 24 hours after the tank is emptied and degassed. [06-096 C.M.R. ch. 111(2.)(C.) and (D.)]

Notwithstanding the above, Irving may empty and degas tanks for the purposes of performing maintenance and/or a complete inspection between June 1st and August 31st of each calendar year provided that the vapors being degassed are conducted to a vapor processing system, such as a vapor combustion unit (or similar control device), and are not off gassed to the atmosphere prior to being controlled. [06-096 C.M.R. ch. 115, BPT]

B. Work Practice Standards

1. Any tanks storing gasoline or ethanol at Irving shall be equipped, maintained, and operated in compliance with the following [06-096 C.M.R. ch. 111(2.)(A.) and (3.)(A.-C.), 40 C.F.R. § 60.112b(a)(1), 40 C.F.R. § 63.11087(a) and 40 C.F.R. Part 63, Subpart BBBBBB, Table 1(2.)(b), and 06-096 C.M.R. ch. 115, BPT]:

   a. There is an internal floating roof with closure seal(s) between the roof edge and tank wall and these are maintained so as to prevent vapor leakage;
   b. The internal floating roof and closure seal(s) will be maintained such that there are no visible holes, tears, or other openings in the seal or between the seal and the floating roof;
   c. The seal is uniformly in place around the circumference of the cover between the cover and the tank well;
   d. The cover is uniformly floating on or above the liquid (but not necessarily in contact with it) and no liquid is accumulated on the cover;
   e. The internal floating roof shall be floating on the liquid surface at all times, except during initial fill and during those intervals when the storage vessel is completely emptied or subsequently emptied and refilled. 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;
   f. Each internal floating roof shall be equipped with one of the following closure devices between the wall of the storage vessel and the edge of the internal floating roof:

      (1) A foam- or liquid-filled seal mounted in contact with the liquid (liquid-mounted seal). A liquid-mounted seal means a foam- or liquid-filled seal in contact with the liquid between the wall of the storage vessel and the floating roof continuously around the circumference of the tank;
      (2) Two seals mounted one above the other so that each forms a continuous closure that completely covers the space between the wall of the storage vessel and the edge of the internal floating roof. The lower seal may be vapor-mounted, but both must be continuous; or
      (3) A mechanical shoe seal. A mechanical shoe seal is a metal sheet held vertically against the wall of the storage vessel by springs or weighted levers and is connected by braces to the floating roof. A flexible coated fabric (envelope) spans the annular space between the metal sheet and the floating roof.

   g. Each opening in a noncontact internal floating roof except for automatic bleeder vents (vacuum breaker vents) and the rim space vents is to provide a projection below the liquid surface;
   h. Each opening in the internal floating roof, except for stub drains, are to be equipped with a cover or lid which is to be maintained in a closed position at all times (i.e., no visible gap) except when the device is in actual use. The cover

or lid shall be equipped with a gasket. Covers on each access hatch and automatic gauge float well shall be bolted except when they are in use;

i. Automatic bleeder vents shall be equipped with a gasket and are to be closed at all times when the roof is floating except when the roof is being floated off or is being landed on the roof supports;
j. Rim space vents, if provided, shall be equipped with a gasket and are to be set to open only when the internal floating roof is not floating or at the manufacturer's recommended setting;
k. Each penetration of the internal floating roof for the purpose of sampling shall be a sample well. The sample well shall have a slit fabric cover that covers at least 90 percent of the opening;
l. Each penetration of the internal floating roof that allows for passage of a column supporting the fixed roof shall have a flexible fabric sleeve seal or a gasketed sliding cover; and
m. Each penetration of the internal floating roof that allows for passage of a ladder shall have a gasketed sliding cover.

2. Any tanks currently storing gasoline or ethanol at Irving shall be inspected according to the following requirements [06-096 C.M.R. ch. 111(2.)(A.), 40 C.F.R. § 60.113b(a), 40 C.F.R. §§ 63.11087(c) and 63.11092(e), and 06-096 C.M.R. ch. 115, BPT]:

   a. Lower explosive limit (LEL) readings are done at a minimum of every six months with the inspection of the floating roof cover and seals;
   b. Irving shall conduct routine visual inspections of the internal floating roof and the primary seal or secondary seal (if one is in service) through the manholes and roof hatches on the fixed roof at least once every month. If the internal floating roof is not resting on the surface of the gasoline/ethanol inside the storage vessel, there is liquid accumulated on the roof, the seal is detached, or there are holes or tears in the seal fabric, the owner or operator shall make repairs as soon as practical after initial detection of the leak, but no later than 15 calendar days after initial detection of the leak. The first attempt at repair shall be made no later than five days from initial detection of the leak;
   c. Irving shall visually inspect the cover, the internal floating roof, the primary seal, the secondary seal (if one is in service), gaskets, slotted membranes, and sleeve seals (if any) each time the storage vessel is emptied and degassed. If the internal floating roof has defects, the primary seal has holes, tears, or other openings in the seal or the seal fabric, the secondary seal has holes, tears, or other openings in the seal or the seal fabric, the gaskets no longer close off the liquid surfaces from the atmosphere, or the slotted membrane has more than 10 percent open area, the owner or operator shall repair the items as necessary so that none of the conditions specified in this paragraph exist before refilling the storage vessel with gasoline/ethanol. In no event shall inspections conducted in accordance with this provision occur at intervals greater than 10 years in the case of vessels conducting monthly visual inspections; and

d. Irving shall notify the EPA and the Department in writing at least 30 days prior to the filling or refilling of each storage vessel for which an inspection is required by the paragraph above to afford the EPA and the Department the opportunity to have an observer present. If the inspection required by the paragraph above is not planned and the owner or operator could not have known about the inspection 30 days in advance of refilling the tank, the owner or operator shall notify the Administrator and the Department at least seven days prior to the refilling of the storage vessel. Notification shall be made by telephone immediately followed by written documentation demonstrating why the inspection was unplanned. Alternatively, the notification including the written documentation may be made in writing and sent by express mail so that it is received by the EPA and the Department at least seven days prior to the refilling.

C. Recordkeeping Requirements

1. Irving shall maintain a record of each inspection performed as required by 40 C.F.R. § 60.113b(a)(1-4). Each record shall identify the storage vessel on which the inspection was performed and shall contain the date each vessel was inspected and the observed condition of each component of the control equipment (seals, internal floating roof, and fittings). [40 C.F.R. § 60.115b(a)(2) and 40 C.F.R. §§ 63.11087(e) and 63.11094(a)]

2. Irving shall maintain the following records for all tanks currently storing gasoline or ethanol or that have stored gasoline or ethanol within the past two years for a minimum of six years, except for readily accessible records showing the dimensions of each storage vessel and an analysis showing the capacity of each storage vessel, which Irving shall keep for the life of the source, shall make the available for inspection during normal business hours, and shall provide them to the Department upon request [06-096 C.M.R. ch. 111(5.)(A.), 40 C.F.R. § 60.116b(a-c) and (e), and 06-096 C.M.R. ch. 115, BPT]:

   a. Reports of the results of inspections conducted under this chapter;
   b. Inspection log documenting LEL readings to be done at a minimum of every six months with the inspection of the floating roof covers and seals, which shall include explanation of any excessive increases in LEL readings as compared to normal operating conditions;
   c. Inspection log documenting any detected leaks, holes, tears, or other openings and the corrective action taken;
   d. Product stored in each tank;
   e. A record of the monthly throughput quantities and types of volatile petroleum liquids for each storage vessel and period of storage; and
   f. Records of the average monthly storage temperatures and maximum true vapor pressures (which may be determined using the procedures in 40 C.F.R. § 60.116b(e)(2)) or Reid vapor pressures of the petroleum liquids stored.

D. Notifications and Reports

Irving shall submit the following notifications and reports for any tanks currently storing gasoline or ethanol [40 C.F.R. § 60.115b(a)(3-4) and 06-096 C.M.R. ch. 115, BPT]:

1. If any of the conditions described in 40 C.F.R. § 60.113b(a)(2) are detected during the annual visual inspection required by that section, Irving shall furnish a report to the Department and EPA within 30 days of the inspection. This report shall identify the storage vessel, the nature of the defect(s), and the date the storage vessel was emptied or the nature of and date the repair was made; and
2. After each inspection required by 40 C.F.R. § 60.113b(a)(3) that finds holes or tears in the seal or seal fabric, defects in the internal floating roof, or other control equipment defects listed in 40 C.F.R. § 60.113b(a)(3)(ii), Irving shall furnish a report to the Department and EPA within 30 days of the inspection that identifies the storage vessel and the reason it did not meet the specifications of 40 C.F.R. §§ 60.112b(a)(1) or 60.113b(a)(3) and list each repair made.

(23) **Storage and Blending of Ethanol**

Irving may store ethanol in any of the facility's internal floating roof tanks and may distribute a gasoline/ethanol blend from the facility's Loading Rack. Irving shall use the VCU whenever a gasoline/ethanol blend is distributed via the facility's Loading Rack. [06-096 C.M.R. ch. 115, BPT]

(24) **Parts Washer**

The parts washer at Irving is subject to *Solvent Cleaners*, 06-096 C.M.R. ch. 130.

A. Irving shall keep records of the amount of solvent added to each parts washer. [06-096 C.M.R. ch. 115, BPT]

B. The following are exempt from the requirements of 06-096 C.M.R. ch. 130 [06-096 C.M.R. ch. 130]:
   1. Solvent cleaners using less than two liters (68 oz.) of cleaning solvent with a vapor pressure of 1.00 mmHg, or less, at 20° C (68° F);
   2. Wipe cleaning; and,
   3. Cold cleaning machines using solvents containing less than or equal to 5% VOC by weight.

C. The following standards apply to cold cleaning machines that are applicable sources under 06-096 C.M.R. ch. 130.

1. Irving shall attach a permanent conspicuous label to each unit summarizing the following operational standards [06-096 C.M.R. ch. 130]:

   a. Waste solvent shall be collected and stored in closed containers.
   b. Cleaned parts shall be drained of solvent directly back to the cold cleaning machine by tipping or rotating the part for at least 15 seconds or until dripping ceases, whichever is longer.
   c. Flushing of parts shall be performed with a solid solvent spray that is a solid fluid stream (not a fine, atomized or shower type spray) at a pressure that does not exceed 10 psig. Flushing shall be performed only within the freeboard area of the cold cleaning machine.
   d. The cold cleaning machine shall not be exposed to drafts greater than 40 meters per minute when the cover is open.
   e. Sponges, fabric, wood, leather, paper products and other absorbent materials shall not be cleaned in the parts washer.
   f. When a pump-agitated solvent bath is used, the agitator shall be operated to produce no observable splashing of the solvent against the tank walls or the parts being cleaned. Air agitated solvent baths may not be used.
   g. Spills during solvent transfer shall be cleaned immediately. Sorbent material used to clean spills shall then be immediately stored in covered containers.
   h. Work area fans shall not blow across the opening of the parts washer unit.
   i. The solvent level shall not exceed the fill line.

2. The remote reservoir cold cleaning machine shall be equipped with a perforated drain with a diameter of not more than six inches. [06-096 C.M.R. ch. 130]

(25) **Fugitive Emissions**

Visible emissions from a fugitive emission source (including stockpiles and roadways) shall not exceed 20% opacity, except for no more than five minutes in any one-hour period during which time visible emissions shall not exceed 30% opacity. Compliance shall be determined by an aggregate of the individual fifteen-second opacity observations which exceed 20% in any one hour. [06-096 C.M.R. ch. 115, BPT]

(26) **General Process Sources**

Visible emissions from any general process source shall not exceed 20% opacity on a six-minute block average basis. [06-096 C.M.R. ch. 115, BPT]

(27) **Annual Emission Statement**

In accordance with *Emission Statements*, 06-096 C.M.R. ch. 137, the licensee 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.

(28) Irving 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).

DONE AND DATED IN AUGUSTA, MAINE THIS 9 DAY OF May , 2018.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: Mara Allen Robert Cone for
PAUL MERCER, 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: 8/30/2016
Date of application acceptance: 9/1/2016

Date filed with the Board of Environmental Protection:

Filed
MAY 09 2018
State of Maine
Board of Environmental Protection

This Order prepared by Jonathan E. Rice, Bureau of Air Quality.