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-R-M**	**Departmental** **Findings of Fact and Order** **Air Emission License** **Amendment #1**

FINDINGS OF FACT

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

I. REGISTRATION

A. Introduction

Irving Oil Terminals Inc. (Irving) was issued Air Emission License A-413-71-Q-R/A on May 9, 2018, for the operation of emission sources associated with their petroleum storage and distribution facility.

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

Irving has requested a minor revision to their license in order to make the following changes:

1. Address the applicable requirements of *Degassing of Petroleum Storage Tanks, Marine Vessels, and Transport Vessels*, 06-096 Code of Maine Rules (C.M.R.) ch. 170;
2. Address the applicable requirements of *Control of Petroleum Storage Facilities*, 06-096 C.M.R. ch. 171;
3. Clarify what degassing activities may occur between June 1st and August 31st of each year; and
4. Remove the previously licensed parts washer.

In addition to the items listed above, this license amendment will clarify how Irving will demonstrate compliance with the facility-wide annual VOC and HAP emission limits.

B. Emission Equipment

The following equipment is addressed in this air emission license amendment:

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

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, residual fuel, and asphalt.

The previously licensed parts washer, with a capacity of 30 gallons, is removed from this air emission license.

C. Definitions

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.

Heated Bulk Storage Tank means a bulk storage tank with a capacity greater than 39,000 gallons containing either residual oil or asphalt. Pursuant to this definition, Tank #4 is a heated bulk storage tank.

Internal Floating Roof (IFR) Tank means an aboveground petroleum storage tank with both a permanent fixed roof and a second roof designed to float on the surface of the stored liquid. Pursuant to this definition, Tanks #1-#2, #5-#8, and #10-#12 are IFR tanks.

Records or *Logs* mean either hardcopy or electronic records.

D. Application Classification

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

This amendment will not increase licensed emissions of any pollutant. Therefore, this amendment is determined to be a minor revision and has been processed as such.

E. Facility Classification

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

II. BEST PRACTICAL TREATMENT (BPT)

A. Introduction

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

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. Tank Degassing

Asphalt, #6 fuel oil, and distillate fuel are not affected products as that term is defined in *Degassing of Petroleum Storage Tanks, Marine Vessels, and Transport Vessels*, 06-096 C.M.R. ch. 170. Therefore, this rule is not applicable to Tanks #3, #4, #9, #13, and #16. However, as a requirement of BPT, Irving shall notify the Department at least seven days in advance of any planned degassing event, and as soon as possible for any unplanned degassing event for these tanks. Irving shall provide the Department with the identification of the tank to be degassed and the date(s) when degassing will occur. [06-096 C.M.R. ch. 115, BPT]

The following internal floating roof (IFR) tanks are subject to the requirements of 06-096 C.M.R. ch. 170 whenever the most recent previous product stored was gasoline (including aviation gasoline), ethanol, or a gasoline/ethanol blend.

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
#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
#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

1. Notification

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

a. Identification of the tank(s) to be degassed;
b. Date(s) when degassing will occur;
c. A description of the control device to be used and its control effectiveness; and
d. The parameters to be monitored during degassing.

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

2. Chapter 170 Requirements

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

a. Control Requirements [06-096 C.M.R. ch. 170, § 4]

(1) When emptying and degassing a storage tank whose most recently stored product was gasoline, ethanol, or a gasoline/ethanol blend, Irving shall:

(i) To the extent practicable, empty the storage tank of product; and
(ii) Exhaust the vapor space of the storage tank to a vapor control system designed to achieve a VOC control efficiency of at least 95% until the VOC concentration is less than 5,000 ppmv, measured as methane, or is 10% or less of the lower explosive limit (LEL), as methane, for at least one hour.

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

The probe inlet of the monitoring instrument shall be located in the line between the tank or vessel being degassed and the control device or other location as approved by the Department. [06-096 C.M.R. ch. 170, § 6]

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

(2) The vapor control system used in the degassing process shall be free of liquid and vapor leaks. This includes, but is not limited to, the degassing equipment, vacuum truck, pumps, hoses, and connections.

(3) Any visible or audible liquid or vapor leak originating from the vapor control device or other associated product recovery device shall be repaired as soon as possible.

(4) Irving shall comply with the following to control emissions from any sludge removed from a storage tank containing, or which most recently contained, gasoline, ethanol, or a gasoline/ethanol blend. These requirements do not apply when sludge is immediately transferred (e.g., pumped) to a floating roof tank whose roof is not resting on its legs.

(i) During sludge removal, Irving shall vent emissions from the vessel receiving the sludge (including vacuum trucks) to a vapor control system designed to achieve a VOC control efficiency of at least 95%;

(ii) The removed sludge must be transported in containers that are vapor-tight and free of liquid leaks; and

(iii) Until final disposal, removed sludge must be stored in containers that are vapor-tight and free of liquid leaks or in tanks that are vented to a vapor control system designed to achieve a VOC control efficiency of at least 95%.

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

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

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

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

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

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

d. Recordkeeping

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

(1) Irving's contact person name and telephone number;
(2) Storage tank capacity;
(3) The product most recently stored in the storage tank prior to degassing;
(4) Volume (cubic feet) of vapor space degassed;
(5) Type of vapor control system used;
(6) Design control efficiency of the vapor control system;

(7) Results of all liquid and vapor leak inspections and repairs conducted in accordance with the provisions of 06-096 C.M.R. ch. 170, § 5;
(8) Results of testing conducted in accordance with 06-096 C.M.R. ch. 170, § 6;
(9) Estimate of VOC emissions from the degassing event before control efficiency is applied (i.e., pre-control emissions); and
(10) Estimate of VOC emissions from the degassing event after application of controls.

C. Clarification Regarding Summertime Degassing

When storing gasoline or ethanol, the IFR tanks are subject to *Petroleum Liquid Storage Vapor Control*, 06-096 C.M.R. ch. 111. These tanks 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)]

Irving's current license inaccurately states that the IFR tanks may be emptied and degassed for the purposes of performing a complete inspection between June 1st and August 31st of each year provided the vapors are controlled. This statement is in error as it contradicts 06-096 C.M.R. ch. 111, and as such, Irving should not assume it has been granted authority to perform emptying or degassing of gasoline or ethanol tanks for the purposes of performing an inspection between June 1st and August 31st of each year, even if vapors being degassed are controlled through use of a vapor processing system such as a vapor combustion unit or similar control device.

In addition, the adoption of 06-096 C.M.R. ch. 170 did not in any way change the requirements of 06-096 C.M.R. ch. 111. Until rulemaking is undertaken to revise 06-096 C.M.R. ch. 111 and EPA approves the revised rule into the State Implementation Plan, the prohibition against summer degassing stands.

D. Chapter 171

Irving is a petroleum storage facility as that term is defined in *Control of Petroleum Storage Facilities,* 06-096 C.M.R. ch. 171. Irving shall comply with all requirements of 06-096 C.M.R. ch. 171 including the following:

1. Heated Bulk Storage Tank (Tank #4)

a. Insulation

Tank #4 shall be fully insulated in a manner that minimizes temperature fluctuation of the stored material. [06-096 C.M.R. ch. 171, § 4(B)] Tank #4 is already fully insulated.

b. Testing and Monitoring Requirements

(1) Irving shall continuously monitor and record on an hourly average basis the liquid temperature of Tank #4. This monitor shall record accurate and reliable data at least 95% of the source operating time in each calendar quarter. A minimum of one data point in at least two of the four distinct 15-minute quadrants constitutes a valid hour. [06-096 C.M.R. ch. 171, § 6(A)(1)]

(2) Irving shall conduct emissions testing for VOC and HAP on Tank #4 at least twice per calendar year with at least four months between tests. Testing shall occur during periods when the tank it being heated. [06-096 C.M.R. ch. 171, §§ 6(A)(2) and (6)]

(3) Irving shall use the results of emissions testing to develop emission factors for both standing losses and working losses. These emission factors shall be used for reporting emissions pursuant to *Emission Statements*, 06-096 C.M.R. ch. 137. [06-096 C.M.R. ch. 171, § 6(A)(3)]

(4) Emissions testing shall be conducted in accordance with the facility's Performance Test Protocol as approved by the Department and the Bureau of Air Quality's Performance Testing Guidance. [06-096 C.M.R. ch. 171, § 6(A)(4)]

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

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

c. Recordkeeping Requirements

Irving shall keep the following records for Tank #4:

(1) The quantity on a monthly basis of any product added to the tank;
(2) Safety Data Sheets (SDS) for the products identified in (1) above;
(3) The temperature of the stored liquid on an hourly average basis;
[06-096 C.M.R. ch. 171, § 7(A)]

2. Internal Floating Roof Tanks

a. Floating Roofs

Tanks #3, #9, #13, and #14 are fixed roof tanks which store distillate fuel. Since they were installed prior to the effective date of 06-096 C.M.R. ch. 171, they are not required to be retrofitted with a floating roof. [06-096 C.M.R. ch. 171, § 4(A)]

b. Tank Inspections

The tank inspection requirements contained in 06-096 C.M.R. ch. 171, § 5(B) for internal floating roof tanks do not apply to Tanks #3, #9, #13, and #14 because these tanks have fixed roofs. Irving's IFR tanks are subject to the following inspection requirements regardless of the product being stored.

(1) Visual Inspections

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

(2) Instrument Inspections

(a) At least once per calendar month, Irving shall conduct an external inspection of the internal floating roof for each IFR tank using photo ionization detection (PID) technology or, in lieu of PID technology, an LEL meter.

(b) The inspection of the internal floating roof must measure the percent LEL inside the vapor space within three feet of the internal floating roof. The PID or LEL meter must be equipped with Teflon sample tubing of sufficient length to meet this requirement. The external inspection of the IFR tank does not include or require human entry into the confined space between the tank's floating and fixed roofs.

(c) Irving shall use a PID or LEL meter that logs data at 15 second intervals and for which the manufacturer has published correction factors for the VOC in the tank to be measured.

(d) Readings must be taken when the wind speed is no more than five miles per hour above the average wind speed for the facility location.

(e) Readings must be conducted for a minimum of five minutes after the sample line purge is complete or in accordance with manufacturer recommendations, whichever is longer.

[06-096 C.M.R. ch. 171, § 5(B)(2)]

(3) If a leak is detected, Irving shall initiate corrective action and repair the leak within 15 calendar days. If the leak cannot be repaired within 15 days, Irving shall notify the Department of the leak, the reason for the delay, and the expected date of the repair. Irving shall promptly notify the Department of the date that the leak is successfully repaired. [06-096 C.M.R. ch. 171, § 5(B)(3)]

(4) For each IFR tank, at least once every five calendar years and each time the tank is emptied and degassed, Irving shall conduct a complete inspection by visually inspecting the floating roof deck, deck fittings, and rim seals from within the internal floating roof tank. The inspection may be performed entirely from the top side of the floating roof as long as there is visual access to all deck components. [06-096 C.M.R. ch. 171, § 5(B)(4)]

(5) Irving shall notify the Department at least 30 days before an inspection is to be performed from within the internal floating roof tank. If an inspection is unplanned and the facility could not have known about the inspection 30 days in advance, then the owner or operator shall notify the Department at least seven days before the inspection. Notification shall be made either by telephone immediately followed by written documentation demonstrating why the inspection was unplanned, or in writing only and sent such that it is received at least seven days before the inspection. [06-096 C.M.R. ch. 171, § 5(B)(5)]

3. Loading Rack

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

b. All loading and vapor lines shall be equipped with fittings which make vapor-tight connections and which close automatically when disconnected. [06-096 C.M.R. ch. 171, § 4(C)(2)]

c. The pressure in the vapor collection system shall not exceed the tank truck or trailer pressure relief settings. [06-096 C.M.R. ch. 171, § 4(C)(3)]

4. Inspections Using Optical Gas Imaging

Irving shall perform inspections in accordance with the following:

a. At least once per calendar quarter Irving shall conduct an inspection survey of each petroleum storage tank and facility fugitive emissions component using optical gas imaging equipment. The first inspection survey shall be performed in the first full calendar quarter after the Department's approval of the optical gas imaging leak detection and repair plan, but in no case shall the first inspection survey be performed later than June 30, 2024. [06-096 C.M.R. ch. 171, § 5(A)(1)]

b. The optical gas imaging equipment used must meet the following specifications as verified by the manufacturer:

(1) Capable of imaging gases in the spectral range for benzene; and
(2) Capable of imaging a gas that is half methane and half propane at a concentration of 10,000 ppm at a flow rate of ≤ 60 grams per hour from a quarter inch diameter orifice.

[06-096 C.M.R. ch. 171, § 5(A)(2)]

c. Irving was required to submit an optical gas imaging leak detection and repair plan by October 3, 2023. [06-096 C.M.R. ch. 171, § 5(A)(3)] This plan was submitted on October 3, 2023.

d. If visible emissions are observed in a fugitive emissions component using optical gas imaging equipment, within two calendar days Irving shall determine whether a leak, as defined by 06-096 C.M.R. ch. 171, is present by using photo ionization detection (PID) technology or flame ionization detection (FID) technology. Alternatively, Irving may elect to presume that a leak is present without further confirmation. If a leak is determined or presumed to be present, Irving shall initiate corrective action and repair the leak within 15 calendar days.

(1) If the presence of a leak cannot be confirmed due to safety concerns or physical constraints, Irving shall presume the leak to be confirmed and initiate corrective action and repair the leak within 15 calendar days.

(2) If a leak cannot be repaired within 15 days, Irving shall notify the Department of the leak, the reason for the delay, and the expected date of the repair. Irving shall promptly notify the Department of the date that the leak is successfully repaired. A fugitive emissions component is considered repaired when the optical gas imaging equipment shows no indication of visible emissions or there is no longer indication of a leak as that term is defined in this regulation under normal use conditions.

[06-096 C.M.R. ch. 171, § 5(A)(5)]

e. For all quarterly inspections conducted using optical gas imaging equipment Irving shall keep the following records:

(1) The date of the inspection;
(2) Identification and description of the equipment and areas inspected;
(3) A description of any leaks detected;
(4) An electronic recording of the optical gas imaging equipment images; and
(5) A description of any resulting corrective actions or repairs and the dates they were made.

[06-096 C.M.R. ch. 171, § 7(B)]

5. Fenceline Monitoring

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

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

b. The target analytes shall be benzene, ethylbenzene, toluene, and xylenes. [06-096 C.M.R. ch. 171, § 6(B)(2)]

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

When extenuating circumstances do not permit safe deployment or retrieval of passive samplers (e.g., extreme weather, power failure), sampler placement or retrieval earlier or later than the prescribed schedule is allowed but must occur as soon as safe access to sampling sites is possible.
[06-096 C.M.R. ch. 171, § 6(B)(3)]

d. Irving is required to submit a site-specific fenceline monitoring plan prepared by a qualified, independent, third-party entity by November 3, 2023. [06-096 C.M.R. ch. 171, § 6(B)(4)]

e. No later than six months after approval of the site-specific fenceline monitoring plan, Irving shall commence monitoring in accordance with this Chapter through use of a qualified, independent, third-party entity. In no case shall monitoring commence later than November 4, 2024. Monitoring must be conducted in accordance with the site-specific fenceline monitoring plan as approved by the Department. [06-096 C.M.R. ch. 171, § 6(B)(5)]

f. Irving shall keep the following records:

(1) Coordinates of all passive monitors and the meteorological station used. Coordinates shall be determined using a method with an accuracy of three meters or less.
(2) Average ambient temperature and barometric pressure measurements for the sampling period.
(3) Individual sample results.
(4) Method detection limit for each sample.
[06-096 C.M.R. ch. 171, § 7(C)]

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

(1) Facility name and address.
(2) Year and reporting quarter (i.e., Quarter 1, Quarter 2, Quarter 3, or Quarter 4).
(3) For each passive monitor:
  (i) The latitude and longitude location coordinates;
  (ii) The sampler name; and
  (iii) Identification of the type of sampler (e.g., regular monitor, duplicate, field blank, etc.)
(4) The beginning and ending dates for each sampling period.
(5) Individual sample results in units of micrograms per cubic meter ($\mu g/m^3$) for each monitor for each sampling period that ends during the reporting period. Results below the method detection limit shall be flagged as such and reported at the method detection limit.
(6) Meteorological data collected during each sampling period, including wind speed and direction.
[06-096 C.M.R. ch. 171, § 8]

E. Facility-Wide VOC and HAP Emissions

Irving is subject to facility-wide emission limits of 49.9 tpy of VOC and 9.9 for all HAP combined, both on a 12-month rolling total basis.

These emission limits include emissions from all licensed emissions equipment and processes, including emissions from petroleum storage tanks (both heated and unheated), the loading rack, facility piping, and licensed combustion equipment (i.e., boilers and generators). In addition to emissions from normal operation, emissions from both routine and non-routine maintenance actives shall be included, e.g., tank degassing and tank cleaning.

The scope of this emission limitation does not include emissions from non-licensed equipment or processes which are considered insignificant activities pursuant to 06-096 C.M.R. ch. 115, Appendix B.

1. Compliance Demonstration

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

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

a. Heated Bulk Storage Tank

As described earlier, Irving is required to conduct emissions testing for VOC and HAP on the heated bulk storage tank pursuant to 06-096 C.M.R. ch. 171. The results of the emissions testing shall be used to develop emission factors for both standing and working losses.

Testing shall be performed under conditions that represent normal, maximum operation. To document normal operating conditions, both during the test and throughout the year, Irving shall continuously monitor and record the liquid temperature of each heated tank.

Tank #4 shall be assumed to be emitting at the same rate as normal operating conditions unless the tank has been emptied and degassed or the temperature of the stored product is below 130 °F. At these temperatures, the stored product is a solid.

b. Non-Heated Bulk Storage Tanks

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

c. Tank Maintenance

Emissions from tank maintenance (both planned and unplanned), including tank degassing and cleaning, as well as emissions from landing and refloating of floating roofs shall be included when calculating the facility's annual facility-wide VOC/HAP emissions. Emissions from these operations shall be calculated in accordance with the methodology contained in the most current version of AP-42, Fifth Edition, Volume 1, Chapter 7.

d. Loading Rack

Irving utilizes a John Zink vapor combustion unit (VCU) on the loading rack to control emissions of VOC and HAP when loading trucks for which the most recent previous load was gasoline. This equipment is subject to an emission limit of 10 milligrams of VOC per liter of product transferred. Compliance is demonstrated by annual performance testing. VOC emissions from the VCU shall be based on the liters of product transferred and the emission rate demonstrated at the most recent performance test. HAP emissions will be based on the expected normal HAP content of the gasoline vapors being controlled and the destruction efficiency of the VCU.

Loading of distillate fuel shall be calculated in accordance with the most current version of AP-42, Fifth Edition, Volume 1, Chapter 5.2, *Transportation and Marketing of Petroleum Liquids*.

Loading of asphalt and #6 fuel oil takes place at the nearby Sprague facility and is not included in this air emission license.

e. Facility Piping

Operation of the facility's equipment will result in fugitive emissions of VOC from the plant's piping. Irving shall keep an updated inventory of system components

[1] https://www3.epa.gov/ttn/chief/ap42/ch07/index.html

(e.g., valves, pump seals, connectors, flanges, etc.) and calculate fugitive emissions using emission factors obtained from EPA's *Protocol for Equipment Leak Emission Estimates*, EPA-453/R-95-017, dated November 1995.[2] Emissions of HAP shall be based on VOC emissions and the constituents of the products handled.

f. Combustion Equipment

Combustion equipment, including boilers and generators, emit small amounts of VOC due to incomplete combustion. VOC emissions from this equipment shall be estimated based on the amount of fuel fired and the equipment's licensed emission limits. HAP emissions from this equipment shall be based on emission factors from the appropriate section of AP-42.

2. Recordkeeping Requirements

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

a. VOC and HAP emission factors developed from the most recent emissions testing for the heated bulk storage tank for both standing and working losses;
b. Hours the heated bulk storage tanks spent being filled (i.e., experiencing working losses) on a monthly basis;
c. Monthly throughput for each heated and non-heated bulk storage tank;
d. Equipment and product information necessary to calculate emissions from the non-heated bulk storage tanks in accordance with AP-42, Chapter 7;
e. Process and product information necessary to calculate emissions from tank maintenance operations in accordance with AP-42, Chapter 7;
f. Equipment and product information necessary to calculate emissions from the loading rack in accordance with AP-42, Chapter 5.2;
g. Equipment and product information necessary to calculate emissions from facility piping in accordance with EPA's *Protocol for Equipment Leak Emission Estimates*; and
h. Fuel use on a monthly basis for the facility's boilers and generators.

F. Annual Emissions

This license amendment will not change the facility's licensed annual emissions.

[2] https://www3.epa.gov/ttnchie1/efdocs/equiplks.pdf

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 Amendment A-413-71-R-M subject to the conditions found in Air Emission License A-413-71-Q-R/A and the following conditions.

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

SPECIFIC CONDITIONS

The following shall replace Condition (16) of Air Emission License A-413-71-Q-R/A:

(16) **Facility-Wide VOC and HAP Emission Limits**

A. Irving shall not exceed an annual combined 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 not exceed an annual combined biofuel, distillate fuel, residual fuel, and asphalt throughput limit for the facility of 120,000,000 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]

C. Irving shall not exceed a facility-wide emission limit of 49.9 tpy of VOC on a 12-month rolling total basis. [06-096 C.M.R. ch. 115, BPT]

D. Irving shall not exceed a facility-wide emission limit of 9.9 tpy for all HAP combined on a 12-month rolling total basis. [06-096 C.M.R. ch. 115, BPT]

E. Compliance with the facility-wide VOC emission limit shall be demonstrated by calculating actual emissions at least once annually as required by *Emission Statements*, 06-096 C.M.R. ch. 137. [06-096 C.M.R. ch. 115, BPT]

F. Compliance with the facility-wide HAP emission limit shall be demonstrated by calculating actual emissions at least once every three years as required by *Emission Statements*, 06 096 C.M.R. ch. 137. [06-096 C.M.R. ch. 115, BPT]

G. Irving shall maintain records necessary to calculate annual VOC or HAP emissions for any consecutive 12-month period and shall provide a demonstration of compliance with the facility-wide VOC and HAP emission limits for any consecutive 12-month period upon request by the Department. [06-096 C.M.R. ch. 115, BPT]

H. Actual emissions of VOC and HAP shall be calculated as follows with all emissions summed to provide an annual total:
[06-096 C.M.R. ch. 115, BPT]

1. Heated Bulk Storage Tanks

   a. As described in the Findings of Fact of this license, Irving is required to conduct emissions testing for VOC and HAP on the heated bulk storage tanks pursuant to 06-096 C.M.R. ch. 171. The results of the emissions testing shall be used to develop emission factors for both standing and working losses. These emission factors shall be used both for demonstrating compliance with the annual facility-wide VOC and HAP emission limits and for reporting emissions pursuant to *Emission Statements*, 06-096 C.M.R. ch. 137.

   b. Tank #4 shall be assumed to be emitting at the same rate as a normal operating conditions unless the tank has been emptied and degassed or the temperature of the stored product is below 130 °F.

2. Non-Heated Bulk Storage Tanks

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

3. Tank Maintenance

   Emissions from tank maintenance (both planned and unplanned), including tank degassing and cleaning, as well as emissions from landing and refloating of floating roofs shall be included when calculating the facility's annual facility-wide VOC/HAP emissions. Emissions from these operations shall be calculated in accordance with the methodology contained in the most current version of AP-42, Fifth Edition, Volume 1, Chapter 7.

4. Loading Racks

   Loading of distillate fuel shall be calculated in accordance with the most current version of AP-42, Fifth Edition, Volume 1, Chapter 5.2, *Transportation and Marketing of Petroleum Liquids*.

5. Facility Piping

   Irving shall keep an updated inventory of system components (e.g., valves, pump seals, connectors, flanges, etc.) and the number of each, and calculate fugitive emissions using emission factors obtained from EPA's *Protocol for Equipment Leak Emission Estimates*, EPA-453/R-95-017, dated November 1995. Emissions of HAP shall be based on VOC emissions and the constituents of the products handled.

6. Combustion Equipment

   Combustion equipment, including boilers and generators, emit small amounts of VOC due to incomplete combustion. VOC emissions from this equipment shall be estimated based on the amount of fuel fired and the equipment's licensed emission limits. HAP emissions from this equipment shall be based on emission factors from the appropriate section of AP-42.

I. Irving shall keep the following records in order to calculate emissions as described above for compliance demonstration with the facility-wide annual VOC and HAP emission limits: [06-096 C.M.R. ch. 115, BPT]

1. VOC and HAP emission factors developed from the most recent emissions testing for the heated bulk storage tank for both standing and working losses;
2. Hours the heated bulk storage tanks spent being filled (i.e., experiencing working losses) on a monthly basis;
3. Monthly throughput for each heated and non-heated bulk storage tank;
4. Equipment and product information necessary to calculate emissions from the non-heated bulk storage tanks in accordance with AP-42, Chapter 7;
5. Process and product information necessary to calculate emissions from tank maintenance operations in accordance with AP-42, Chapter 7;
6. Equipment and product information necessary to calculate emissions from the loading rack in accordance with AP-42, Chapter 5.2;
7. Equipment and product information necessary to calculate emissions from facility piping in accordance with EPA's *Protocol for Equipment Leak Emission Estimates*; and
8. Fuel use on a monthly basis for the facility's boilers and generators.

The following shall replace Condition (22)(A) of Air Emission License A-413-71-Q-R/A:

(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)]

Condition (24) of Air Emission License A-413-71-Q-R/A is deleted.
(Removal of Parts Washer)

The following are new conditions:

(29) **Tank Degassing**

A. Irving shall notify the Department at least seven days in advance of any planned degassing event, and as soon as possible for any unplanned degassing event for Tanks #3, #4, #9, #13, and #16. Irving shall provide the Department with the identification of the tank to be degassed and the date(s) when degassing will occur. [06-096 C.M.R. ch. 115, BPT]

B. Irving shall comply with all requirements of 06-096 C.M.R. ch. 170 applicable to the IFR tanks including, but not limited to, the following. These requirements apply whenever the most recent previous product stored in the IFR tank was gasoline, ethanol, or a gasoline/ethanol blend.

1. Control Requirements [06-096 C.M.R. ch. 170, § 4 unless otherwise noted]

   a. When emptying and degassing a storage tank whose most recently stored product was gasoline, ethanol, or a gasoline/ethanol blend, Irving shall:

      (1) To the extent practicable, empty the storage tank of product; and
      (2) Exhaust the vapor space of the storage tank to a vapor control system designed to achieve a VOC control efficiency of at least 95% until the VOC concentration is less than 5,000 ppmv, measured as methane, or is 10% or less of the lower explosive limit (LEL), as methane, for at least one hour.

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

   b. The probe inlet of the monitoring instrument shall be located in the line between the tank or vessel being degassed and the control device or other location as approved by the Department. [06-096 C.M.R. ch. 170, § 6]

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

   d. The vapor control system used in the degassing process shall be free of liquid and vapor leaks. This includes, but is not limited to, the degassing equipment, vacuum truck, pumps, hoses, and connections.

   e. Any visible or audible liquid or vapor leak originating from the vapor control device or other associated product recovery device shall be repaired as soon as possible.

   f. Irving shall comply with the following to control emissions from any sludge removed from a storage tank containing, or which most recently contained gasoline, ethanol, or a gasoline/ethanol blend. These requirements do not apply when sludge is immediately transferred (e.g., pumped) to a floating roof tank whose roof is not resting on its legs.

      (1) During sludge removal, Irving shall vent emissions from the vessel receiving the sludge (including vacuum trucks) to a vapor control system designed to achieve a VOC control efficiency of at least 95%;

      (2) The removed sludge must be transported in containers that are vapor-tight and free of liquid leaks; and

      (3) Until final disposal, removed sludge must be stored in containers that are vapor-tight and free of liquid leaks or in tanks that are vented to a vapor

control system designed to achieve a VOC control efficiency of at least 95%.

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

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

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

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

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

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

4. Recordkeeping

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

   a. Irving's contact person name and telephone number;
   b. Storage tank capacity;
   c. The product most recently stored in the storage tank prior to degassing;
   d. Volume (cubic feet) of vapor space degassed;
   e. Type of vapor control system used;
   f. Design control efficiency of the vapor control system;
   g. Results of all liquid and vapor leak inspections and repairs conducted in accordance with the provisions of 06-096 C.M.R. ch. 170, § 5;
   h. Results of testing conducted in accordance with 06-096 C.M.R. ch. 170, § 6;
   i. Estimate of VOC emissions from the degassing event before control efficiency is applied (i.e., pre-control emissions); and

j. Estimate of VOC emissions from the degassing event after application of controls.

5. Irving shall notify the Department at least seven days in advance of any planned degassing event, and as soon as possible for any unplanned degassing event, subject to the requirements of 06-096 C.M.R. ch. 170 and provide the following information:
   e. Identification of the tank(s) to be degassed;
   f. Date(s) when degassing will occur;
   g. A description of the control device to be used and its control effectiveness; and
   h. The parameters to be monitored during degassing.
   [06-096 C.M.R. ch. 115, BPT]

(30) **Chapter 171**

Irving shall comply with all applicable requirements of 06-096 C.M.R. ch. 171 including, but not limited to, the following.

A. Heated Bulk Storage Tank (Tank #4)

1. Insulation

   Tank #4 shall be fully insulated in a manner that minimizes temperature fluctuation of the stored material. [06-096 C.M.R. ch. 171, § 4(B)]

2. Testing and Monitoring Requirements

   a. Irving shall continuously monitor and record on an hourly average basis the liquid temperature of Tank #4. This monitor shall record accurate and reliable data at least 95% of the source operating time in each calendar quarter. A minimum of one data point in at least two of the four distinct 15-minute quadrants constitutes a valid hour. [06-096 C.M.R. ch. 171, § 6(A)(1)]

   b. Irving shall conduct emissions testing for VOC and HAP on Tank #4 at least twice per calendar year with at least four months between tests. Testing shall occur during periods when the tank is being heated.
   [06-096 C.M.R. ch. 171, §§ 6(A)(2) and (6)]

   c. Irving shall use the results of emissions testing to develop emission factors for both standing losses and working losses. These emission factors shall be used for reporting emissions pursuant to *Emission Statements*, 06-096 C.M.R. ch. 137. [06-096 C.M.R. ch. 171, § 6(A)(3)]

d. Emissions testing shall be conducted in accordance with the facility's Performance Test Protocol as approved by the Department and the Bureau of Air Quality's Performance Testing Guidance. [06-096 C.M.R. ch. 171, § 6(A)(4)]

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

3. Recordkeeping Requirements

Irving shall keep the following records for Tank #4:

a. The quantity on a monthly basis of any product added to the tank;
b. Safety Data Sheets (SDS) for the products identified in (1) above;
c. The temperature of the stored liquid on an hourly average basis;
[06-096 C.M.R. ch. 171, § 7(A)]

B. Internal Floating Roof Tanks

Irving's IFR tanks are subject to the following inspection requirements regardless of the product being stored.

1. Visual Inspections.

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

2. Instrument Inspections.

a. At least once per calendar month, Irving shall conduct an external inspection of the internal floating roof for each IFR tank using photo ionization detection (PID) technology or, in lieu of PID technology, an LEL meter.

b. The inspection of the internal floating roof must measure the percent LEL inside the vapor space within three feet of the internal floating roof. The PID or LEL meter must be equipped with Teflon sample tubing of sufficient length to meet this requirement. The external inspection of the IFR tank does not include or require human entry into the confined space between the tank's floating and fixed roofs.

c. Irving shall use a PID or LEL meter that logs data at 15 second intervals and for which the manufacturer has published correction factors for the VOC in the tank to be measured.

d. Readings must be taken when the wind speed is no more than five miles per hour above the average wind speed for the facility location.

e. Readings must be conducted for a minimum of five minutes after the sample line purge is complete or in accordance with manufacturer recommendations, whichever is longer.

[06-096 C.M.R. ch. 171, § 5(B)(2)]

3. If a leak is detected, Irving shall initiate corrective action and repair the leak within 15 calendar days. If the leak cannot be repaired within 15 days, Irving shall notify the Department of the leak, the reason for the delay, and the expected date of the repair. Irving shall promptly notify the Department of the date that the leak is successfully repaired. [06-096 C.M.R. ch. 171, § 5(B)(3)]

4. For each IFR tank, at least once every five calendar years and each time the tank is emptied and degassed, Irving shall conduct a complete inspection by visually inspecting the floating roof deck, deck fittings, and rim seals from within the internal floating roof tank. The inspection may be performed entirely from the top side of the floating roof as long as there is visual access to all deck components. [06-096 C.M.R. ch. 171, § 5(B)(4)]

5. Irving shall notify the Department at least 30 days before an inspection is to be performed from within the internal floating roof tank. If an inspection is unplanned and the facility could not have known about the inspection 30 days in advance, then the owner or operator shall notify the Department at least seven days before the inspection. Notification shall be made either by telephone immediately followed by written documentation demonstrating why the inspection was unplanned, or in writing only and sent such that it is received at least seven days before the inspection. [06-096 C.M.R. ch. 171, § 5(B)(5)]

C. Loading Rack

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

2. All loading and vapor lines shall be equipped with fittings which make vapor-tight connections and which close automatically when disconnected. [06-096 C.M.R. ch. 171, § 4(C)(2)]

3. The pressure in the vapor collection system shall not exceed the tank truck or trailer pressure relief settings. [06-096 C.M.R. ch. 171, § 4(C)(3)]

D. Inspections Using Optical Gas Imaging

Irving shall perform inspections in accordance with the following:

1. At least once per calendar quarter Irving shall conduct an inspection survey of each petroleum storage tank and facility fugitive emissions component using optical gas imaging equipment. The first inspection survey shall be performed in the first full calendar quarter after the Department's approval of the optical gas imaging leak detection and repair plan, but in no case shall the first inspection survey be performed later than June 30, 2024. [06-096 C.M.R. ch. 171, § 5(A)(1)]

2. The optical gas imaging equipment used must meet the following specifications as verified by the manufacturer:

   a. Capable of imaging gases in the spectral range for benzene; and

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

   [06-096 C.M.R. ch. 171, § 5(A)(2)]

3. If visible emissions are observed in a fugitive emissions component using optical gas imaging equipment, within two calendar days Irving shall determine whether a leak, as defined by 06-096 C.M.R. ch. 171, is present by using photo ionization detection (PID) technology or flame ionization detection (FID) technology. Alternatively, Irving may elect to presume that a leak is present without further confirmation. If a leak is determined or presumed to be present, Irving shall initiate corrective action and repair the leak within 15 calendar days.

   a. If the presence of a leak cannot be confirmed due to safety concerns or physical constraints, Irving shall presume the leak to be confirmed and initiate corrective action and repair the leak within 15 calendar days.

b. If a leak cannot be repaired within 15 days, Irving shall notify the Department of the leak, the reason for the delay, and the expected date of the repair. Irving shall promptly notify the Department of the date that the leak is successfully repaired. A fugitive emissions component is considered repaired when the optical gas imaging equipment shows no indication of visible emissions or there is no longer indication of a leak as that term is defined in this regulation under normal use conditions.

[06-096 C.M.R. ch. 171, § 5(A)(5)]

4. For all quarterly inspections conducted using optical gas imaging equipment Irving shall keep the following records:

   a. The date of the inspection;
   b. Identification and description of the equipment and areas inspected;
   c. A description of any leaks detected;
   d. An electronic recording of the optical gas imaging equipment images; and
   e. A description of any resulting corrective actions or repairs and the dates they were made.

   [06-096 C.M.R. ch. 171, § 7(B)]

E. Fenceline Monitoring

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

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

2. The target analytes shall be benzene, ethylbenzene, toluene, and xylenes. [06-096 C.M.R. ch. 171, § 6(B)(2)]

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

   When extenuating circumstances do not permit safe deployment or retrieval of passive samplers (e.g., extreme weather, power failure), sampler placement or retrieval earlier or later than the prescribed schedule is allowed but must occur as soon as safe access to sampling sites is possible. [06-096 C.M.R. ch. 171, § 6(B)(3)]

4. No later than six months after approval of the site-specific fenceline monitoring plan, Irving shall commence monitoring in accordance with this Chapter through use of a qualified, independent, third-party entity. In no case shall monitoring commence later than November 4, 2024. Monitoring must be conducted in accordance with the site-specific fenceline monitoring plan as approved by the Department. [06-096 C.M.R. ch. 171, § 6(B)(5)]

5. Irving shall keep the following records:

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

   [06-096 C.M.R. ch. 171, § 7(C)]

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

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

   [06-096 C.M.R. ch. 171, § 8]

DONE AND DATED IN AUGUSTA, MAINE THIS 17th DAY OF NOVEMBER, 2023.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: _____ for _____
MELANIE LOYZIM, COMMISSIONER

The term of this license amendment shall be ten (10) years from the issuance of Air Emission License A-413-71-Q-R/A (issued 5/19/2018).

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application: 8/16/2023
Date of application acceptance: 8/16/2023

Date filed with the Board of Environmental Protection:

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

FILED

NOV 17, 2023

State of Maine
Board of Environmental Protection