



DEPARTMENT ORDER

**Cold Brook Energy, Inc.
Penobscot County
Hampden, Maine
A-542-71-G-R (SM)**

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

FINDINGS OF FACT

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

I. REGISTRATION

A. Introduction

Cold Brook Energy, Inc. (Cold Brook) has applied to renew their Air Emission License for the operation of emission sources associated with their bulk gasoline and fuel oil terminal.

The equipment addressed in this license is located at 809 Main Road North, Hampden, Maine.

B. Emission Equipment

The following equipment is addressed in this air emission license:

Petroleum Storage

Tank	Capacity (Gallons)*	Current Product Stored	Roof Type	Date Installed
#9	1,600,000	Gasoline	Internal Floating	1995
#35	420,000	Distillate Fuel	Fixed	1918
#44	1,325,000	Distillate Fuel	Internal Floating	1959
#66	756,000	Gasoline/Ethanol	Internal Floating	1971
#89	240,000	Distillate Fuel	Fixed	1939
#90	250,000	Gasoline/Ethanol	Internal Floating	1939
#91	252,000	Distillate Fuel	Fixed	1939
#92	504,000	Distillate Fuel	Fixed	1939
#93	492,000	Distillate Fuel	Fixed	1939

*Capacities updated to reflect data provided as part of the most recent application.

Process Equipment

Equipment	Production Rate	Pollution Control Equipment	Date of Installation
Loading Rack	136,863,357 gal/yr	Vapor Combustion Unit (VCU)	1991

C. Definitions

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 (20,000 gallons) 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 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 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 means a delivery tank truck or railcar which is loading gasoline or which has loaded gasoline on the immediately previous load. [40 C.F.R. Part 63, Subpart BBBBBB]

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]

Loading rack means the loading arms, pumps, meters, shutoff valves, relief valves, and other piping and valves necessary to fill delivery tank trucks. [40 C.F.R. Part 60, Subpart XX]

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 application for Cold Brook does not include the licensing of increased emissions or the installation of new or modified equipment. Therefore, the license is considered to be a renewal of currently licensed emission units only and has been processed through *Major and Minor Source Air Emission License Regulations*, 06-096 Code of Maine Rules (C.M.R.) ch. 115. With the annual volatile organic compound (VOC) limit of 49.9 tons per year, Cold Brook is licensed below the major source thresholds for criteria pollutants and is considered a synthetic minor. With the annual hazardous air pollutant (HAP) limits of 9.9 tons per year for any single HAP and 24.9 tons per year for total HAPs, Cold Brook is licensed below the major source thresholds for HAP and is considered an area source of 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. Process Description

The operations of Cold Brook's bulk petroleum distribution terminal consist of the receipt, storage, and distribution of petroleum products. Products handled at the facility are received via pipeline or 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. 40 C.F.R. Part 63, Subpart BBBBBB

Cold Brook's Hampden terminal is subject to *National Emission Standards for Hazardous Air Pollutants (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 less 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 BBBB contains requirements applicable to both the Loading Rack and the Gasoline and Ethanol Storage Tanks. 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 BBBB.

1. General Requirements

Cold Brook 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. Cold Brook 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. Cold Brook 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. Cold Brook shall record each detection of a liquid or vapor leak in the log book. When a leak is detected, Cold Brook shall make an initial attempt at repair as soon as practicable, but no later than five calendar days after the leak is detected. Cold Brook 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, Cold Brook 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. Cold Brook 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. Cold Brook 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.
- c. Cold Brook shall maintain records of the following information in the log book 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 Reporting

- a. Cold Brook submitted an Initial Notification as specified in 40 C.F.R. § 63.9(b) on May 12, 2010. [40 C.F.R. §§ 63.11087(d) and 63.11093(a)]
- b. Cold Brook submitted a Notification of Compliance Status as specified in 40 C.F.R. § 63.9(h) on June 12, 2010. [40 C.F.R. §§ 63.11087(d) and 63.11093(b)]

- c. Cold Brook shall submit a semiannual compliance report to EPA and the Department which shall include the following information [40 C.F.R. §§ 63.11087(e) and 63.11095(a) and 06-096 C.M.R. ch. 115, BPT]:
- (1) For Tanks #9, #66, and #90, the following information:
 - (i) A description of the control equipment and certifies 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 and 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 list 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; and
 - (3) For equipment leak inspections, the number of equipment leaks not repaired within fifteen days after detection.
- d. Cold Brook 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); and

- (3) 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.

D. Loading Rack and Vapor Combustion Unit

Cold Brook 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 1991.

1. Process Description

The Loading Rack at Cold Brook is equipped with a John Zink VCU which was installed in 1991. 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, a 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 VCU.

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 17,123 gallons/hour (which was derived from the facility's maximum yearly quantity of bottom loaded product of 150,000,000 gallons/year):

- NO_x – 0.0334 lb/1,000 gal of product loaded based on data from the VCU manufacturer
- CO – 0.133 lb/1,000 gal of product loaded based on stack testing conducted May 12, 2004
- VOC – 35 milligrams/liter (0.292 lb/1,000 gal) of product loaded based on 06-096 C.M.R. ch. 112 and 40 C.F.R. Part 60, Subpart XX

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.	0.57	2.28	5.0

The VCU annual potential-to-emit (PTE) calculations are based on the facility's estimated maximum quantity of bottom loaded product (estimated at 130,000,000 gallons/year) plus a safety factor of 20,000,000 gallons/year (13.3%) for a total of 150,000,000 gallons/year of product that can be bottom loaded at the Loading Rack. The PTE was calculated using VOC and CO emission factors obtained during stack testing and a NO_x emission factor provided by the VCU manufacturer.

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

- a. The Loading Rack shall be equipped with and maintained with a vapor combustion unit 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 (plus 18) inches of water, nor a vacuum exceeding -6 (minus 6) inches of water. [06-096 C.M.R. ch. 115, BPT]
- c. Any tank truck carrying gasoline and/or ethanol or which has carried gasoline and/or ethanol 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 vapor combustion unit shall not exceed 35 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. Cold Brook shall conduct an annual compliance test of the VCU between May 1st and October 1st of each calendar year. This is different than in the previous air emission license, which required the compliance test to be completed prior to May 15th of every calendar year. This change is being made based on feedback from the facility and it will allow Cold Brook 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 and 40 C.F.R. Part 60, Subpart XX]
 - g. Cold Brook shall conduct a leak inspection of all equipment at the Loading Rack and around the vapor combustion unit utilizing sight, sound, and smell at a minimum of once per month. All leaks must be repaired as quickly as possible, but within fifteen 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. Cold Brook shall maintain an inspection log documenting routine leak inspections to include 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. Cold Brook 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 Cold Brook 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 tank trucks or trailer compartments. [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. Cold Brook shall not permit or suffer gasoline and/or ethanol to be loaded into any tank trucks or trailers unless [06-096 C.M.R. ch. 112(3.)]:
 - (1) The tank truck or trailer 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 is being transferred to tank trucks 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 the United States Environmental Protection Agency.
 - (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 tank truck or trailer pressure relief settings.
- b. Cold Brook 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. Cold Brook shall not allow the mass emissions of volatile organic compounds from the Loading Rack to exceed the emission limit of 35 milligrams per liter of gasoline and/or ethanol transferred. Cold Brook shall demonstrate compliance with this standard using methods promulgated in 40 C.F.R. § 60.503 or other methods approved by the Department and the US EPA. [06-096 C.M.R. ch. 112 (4. and 6.)]
4. New Source Performance Standards (NSPS): 40 C.F.R. Part 60, Subpart XX

Since the Loading Rack is located at a bulk gasoline terminal and was installed after December 17, 1980, the Loading Rack is subject to *Standards of Performance for Bulk Gasoline Terminals*, 40 C.F.R. Part 60, Subpart XX. [40 C.F.R. § 60.500(a-b)]

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) Cold Brook's Loading Rack shall be equipped with a vapor collection system designed to collect the total organic compounds vapors displaced from tank trucks 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 Cold Brook'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) Cold Brook shall act to assure that the terminal's and tank truck's vapor collection systems are connected during each loading of a gasoline tank truck 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) Cold Brook shall act to assure that loadings of gasoline tank trucks 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) Cold Brook shall limit the loadings of liquid product into only vapor-tight gasoline tank trucks using the following procedures [40 C.F.R. § 60.502(e)]:
 - (i) Cold Brook shall obtain the vapor tightness documentation for each gasoline tank truck which is to be loaded at the Loading Rack;
 - (ii) Cold Brook shall require the tank identification number to be recorded as each gasoline tank truck is loaded at the Loading Rack;
 - (iii) Cold Brook 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 tank truck 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 tank truck 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, Cold Brook must return to biweekly monitoring until such time as these conditions are again met;

- (iv) Cold Brook shall notify the owner or operator of each non-vapor-tight gasoline tank truck loaded at the Loading Rack within one week of the documentation cross-check;
- (v) Cold Brook shall take steps assuring that the non-vapor-tight gasoline tank truck will not be reloaded at the Loading Rack until vapor tightness documentation for that tank is obtained;
- (vi) Alternate procedures to those described above for limiting gasoline tank truck loadings may be used upon application to, and approval by, the Administrator.

- (6) Each calendar month, Cold Brook shall inspect the vapor collection system, the vapor processing system, and each loading rack handling gasoline and/or ethanol during the loading of gasoline tank trucks 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 tank trucks shall not exceed 35 milligrams of total organic compounds per liter of gasoline loaded. [40 C.F.R. § 60.502(b)]
- (2) The vapor collection and liquid loading equipment at Cold Brook 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 tank truck; and
 - (ii) During the performance test, the pressure shall be recorded every five minutes while a gasoline tank truck 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) Cold Brook 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). Cold Brook shall conduct additional performance tests as required by the Department. Cold Brook conducted the initial performance tests for 40 C.F.R. §§ 60.502(b) and (h) in 1995. [40 C.F.R. § 60.503(a-d) and 06-096 C.M.R. ch. 115, BPT]

c. Recordkeeping

- (1) Cold Brook shall maintain vapor tightness documentation for each gasoline tank truck which is to be loaded at the Loading Rack. Cold Brook 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) Cold Brook 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) Cold Brook shall keep documentation of all notifications sent to operators of non-vapor-tight gasoline tank trucks as required in 40 C.F.R. § 60.502(e)(4) for a minimum of two years. [40 C.F.R. § 60.505(d)]

- (4) Cold Brook 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)]

d. Notifications and Reports

Whenever Cold Brook is required to conduct the performance tests required by 40 C.F.R. §§ 60.502(b) and (h), Cold Brook 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. National Emission Standards for Hazardous Air Pollutants (NESHAP):
40 C.F.R. Part 63, Subpart BBBB

Since the Loading Rack is located at a bulk gasoline terminal with a gasoline throughput of less than 250,000 gallons per day and was constructed before November 9, 2006, the Loading Rack is considered subject to *NESHAP for Source Category: Gasoline Distribution Bulk Terminals, Bulk Plants, and Pipeline Facilities*, 40 C.F.R. Part 63, Subpart BBBB 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 BBBB applicable to the Loading Rack and VCU are included below:

a. General Requirements

- (1) If Cold Brook's gasoline throughput through the Loading Rack ever exceeds 250,000 gallons per day (calculated by summing the current day's throughput, plus the throughput for the previous 364 days, and then dividing that sum by 365), Cold Brook shall become subject to the requirements listed in Item 1 of Table 2 of this subpart, and shall remain subject to those requirements even if daily gasoline throughput later falls below 250,000 gallons per day. Cold Brook shall notify the Department of this exceedance in the first semiannual report required to be submitted after the exceedance occurs. [40 C.F.R. § 63.11081(f), 40 C.F.R. Part 63, Subpart BBBB, Table 2, and 06-096 C.M.R. ch. 115, BPT]
- (2) If Cold Brook's gasoline throughput through the Loading Rack ever exceeds 250,000 gallons per day as calculated above, Cold Brook shall comply with the requirements listed in Item 1 of Table 2 of this subpart no later than three years after the facility becomes subject to the requirements. [40 C.F.R. § 63.11083(c)]

b. Work Practice Standards

Cold Brook shall use the following management practices when filling gasoline cargo tanks at the Loading Rack [40 C.F.R. § 63.11088(a), 40 C.F.R. Part 63, Subpart BBBBBB, Table 2(2).(a-b), and 06-096 C.M.R. ch. 115, BPT]:

- (1) Cold Brook shall use submerged filling with a submerged fill pipe that is no more than six inches from the bottom of the cargo tank; and
- (2) Cold Brook shall make records available to the Administrator and the Department within 24 hours of a request by the Administrator or Department to document the facility's gasoline throughput.

c. Recordkeeping

Cold Brook 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)(1);
- (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;
 - (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, Cold Brook may comply with one of the two following options:
 - (i) Cold Brook 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 Cold Brook is in compliance using this alternative; or
 - (ii) Cold Brook may use a terminal automation system provided that the records is an exact duplicate image of the original paper records 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 Cold Brook is in compliance using this alternative.

E. Distillate Fuel Storage Tanks

Cold Brook currently operates five storage tanks (Tanks #35, #89, and #91-93) with fixed roofs used to store distillate fuel and one tank (Tank #44) with an internal floating roof used to store diesel fuel only. Each of these tanks varies in size and throughput depending on the demand for distillate fuels throughout the year. Tank #35 was installed in 1918, Tank #44 was installed in 1959, and Tanks #89 and #91-93 were all installed in 1939.

1. BPT Findings

BPT for the Distillate Fuel Storage Tanks shall include the following:

- a. Cold Brook shall conduct routine inspections of the perimeter and roof of all Distillate Fuel Storage Tanks at a minimum of once every month. [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 [06-096 C.M.R. ch. 115, BPT]:

- (1) Records documenting any detected leaks, holes, tears, or other opening 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. New Source Performance Standards (NSPS): 40 C.F.R. Part 60, Subparts, K, Ka, and Kb

Tanks #35, #44, #89, and #91-93 were all installed prior to 1973; therefore, they are not subject to New Source Performance Standards (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]

F. Gasoline and Ethanol Storage Tanks

In addition to the Distillate Fuel Storage Tanks, Cold Brook operates one tank with an internal floating roof used to store gasoline (Tank #9) and two tanks with internal floating roofs used to store either gasoline or ethanol (Tanks #66 and #90). Tanks #9, #66, and #90 were installed in 1995, 1971, and 1939 and have capacities of 1,600,000 gallons, 756,000 gallons, and 250,000 gallons, respectively.

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

Tanks #9, #66, and #90 are subject to *Petroleum Liquid Storage Vapor Control*, 06-096 C.M.R. ch. 111. Tanks #9, #66, and #90 are considered fixed 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 #9, #66, and #90 are included below:

a. Prohibition

Cold Brook shall not empty and degas Tanks #9, #66, or #90 for the purpose of performing a complete inspection between June 1 and August 31 of each calendar year. Cold Brook may empty and degas Tanks #9, #66, or #90 during that time for the purpose of performing a repair which is immediately necessary for the proper function of the vessel. If Tanks #9, #66, or #90 are emptied and degassed for the purpose of performing a repair which is immediately necessary for the proper function of the vessel between June 1 and August 31 of any calendar year, Cold Brook 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.)]

b. Work Practice Standards

Tanks #9, #66, and #90 shall be equipped, maintained, and operated in accordance with the following [06-096 C.M.R. ch. 111(2).(A.) and (3).(A.-C.) 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 well;
- (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, Cold Brook 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

Cold Brook shall maintain the following records for Tank #9, #66, and #90, 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. New Source Performance Standards (NSPS): 40 C.F.R. Part 60, Subparts K, Ka, and Kb

Tanks #66 and #90 were both installed prior to 1973; therefore, they are not subject to New Source Performance Standards (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 #9 is 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. Tank #9 is considered a storage vessel with a capacity greater than or equal to 75 cubic meters that is used to store volatile organic liquids (VOL) for which construction, reconstruction, or modification is 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 Tank #9 are included below:

- a. Work Practice Standards

- (1) Tank #9 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 break 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) Tank #9 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, Cold Brook 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, or there is liquid accumulated on the roof, or the seal is detached, or there are holes or tears in the seal fabric, Cold Brook 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), Cold Brook 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) Cold Brook 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, or the gaskets no longer close off the liquid surfaces from the atmosphere, or the slotted membrane has more than 10 percent open area, Cold Brook 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.

(iv) Cold Brook 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 Cold Brook could not have known about the inspection 30 days in advance of refilling the tank, Cold Brook 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) Cold Brook 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) Cold Brook 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)(2). [40 C.F.R. § 60.116b(c) and (e)]; and
- (3) Cold Brook 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 Cold Brook shall keep for the life of the source. [40 C.F.R. § 60.116b(a-b)]

c. Notifications and Reports

Cold Brook 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, Cold Brook 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 defects, 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, of defects in the internal floating roof, or other control equipment defects listed in 40 C.F.R. § 60.113b(a)(3)(ii), Cold Brook 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. National Emission Standards for Hazardous Air Pollutants (NESHAP):
40 C.F.R. Part 63, Subpart BBBBBB

Tanks #9, #66, and #90 are subject to *NESHAP for Source Category: Gasoline Distribution Bulk Terminals, Bulk Plants, and Pipeline Facilities*, 40 C.F.R. Part 63, Subpart BBBBBB. Tanks #9, #66, and #90 are considered existing gasoline storage tanks with a capacity greater than or equal to 151 cubic meters. [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 Tanks #9, #66, and #90 are included below:

a. Tanks #9, #66, and #90 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 break vents) and the rim space vents is to provide a projection below the liquid surface.

b. Cold Brook shall perform inspections of the floating roof system for Tanks #9, #66, and #90 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, Cold Brook 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/ethanol inside the

storage vessel, or there is liquid accumulated on the roof, or 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):
 - (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) 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, or the secondary seal has holes, tears, or other openings in the seal or the seal fabric, or 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 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;
- (4) 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 Tanks #9, #66, and #90, Cold Brook 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). [40 C.F.R. §§ 63.11087(e) and 63.11094(a)]

G. Storage and Blending of Ethanol

Cold Brook may store either gasoline or ethanol in Tanks #66 and #90. Cold Brook 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.

H. Annual Emission Limits and Facility-Wide Recordkeeping

In order for Cold Brook to remain a minor source of criteria pollutants and an area source of HAP, Cold Brook shall limit facility-wide VOC emissions to no more than 49.9 tons per year, and Cold Brook shall limit HAP emissions to 9.9 tons per year for any single HAP and 24.9 tons per year for total HAP, all on a 12-month rolling total basis. Compliance with these limits will also satisfy the recordkeeping requirements of *Bulk Terminal Petroleum Liquid Transfer Requirements*, 06-096 C.M.R. ch. 112(1)(C). In order to document compliance with these limits, Cold Brook 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 emissions [06-096 C.M.R. ch. 115, BPT]:
 - a. Quantity and type of petroleum liquid stored in each tank;
 - b. Reid vapor pressure or maximum true vapor pressure, as necessary to calculate tank emissions;
 - c. Average storage temperature;
 - 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 the 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. Cold Brook shall calculate and record the monthly and 12-month rolling total facility VOC and HAP emissions (in tons) from the Loading Rack, petroleum storage tanks, and fugitive sources (i.e., pumps, valves, flanges). [06-096 C.M.R. ch. 115, BPT]
3. Cold Brook 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]

I. 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.

J. Annual Emissions

1. Total Annual Emissions

Cold Brook shall be restricted to the following annual emissions, based on a 12-month rolling total:

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

	<u>PM</u>	<u>PM₁₀</u>	<u>SO₂</u>	<u>NO_x</u>	<u>CO</u>	<u>VOC</u>
VCU	-	-	-	2.5	10.0	N/A
Facility Wide Limit	-	-	-	-	-	49.9
Total TPY	-	-	-	2.5	10.0	49.9

<u>Pollutant</u>	<u>Tons/year</u>
Single HAP	9.9
Total HAP	24.9

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 (CO₂e).

The quantity of CO₂e emissions from this facility is less than 100,000 tons per year, based on the following:

- the facility's maximum quantity of bottom loaded product;
- 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-542-71-G-R 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 Emission Limit and Facility-wide Recordkeeping

- A. Cold Brook 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 any single HAP and 24.9 tons per year for total HAP, both based on a 12-month rolling total. Compliance with these limits shall be determined using the information required by subparts B., C., and D. of this Condition.
[06-096 C.M.R. ch. 115, BPT]

- B. Cold Brook shall maintain the following records showing the following information for each of the petroleum storage tanks in order to calculate monthly and 12-month rolling total VOC emissions [06-096 C.M.R. ch. 115, BPT]:
1. Quantity and type of petroleum liquid stored in each tank;
 2. Reid vapor pressure or maximum true vapor pressure, as necessary to calculate tank emissions;
 3. Average storage temperature;
 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 the 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.
- C. Cold Brook shall calculate and record the monthly and 12-month rolling total facility VOC and HAP emissions (in tons) from the Loading Rack, petroleum storage tanks, and fugitive sources (i.e., pumps, valves, flanges). [06-096 C.M.R. ch. 115, BPT]
- D. Cold Brook 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) **40 C.F.R. Part 63, Subpart BBBB General Requirements**

A. General Requirements

Cold Brook 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. Cold Brook 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. Cold Brook 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. Cold Brook shall record each detection of a liquid or vapor leak in the log book. When a leak is detected, Cold Brook shall make an initial attempt at repair as soon as practicable, but no later than five calendar days after the leak is detected. Cold Brook 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, Cold Brook 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. Cold Brook 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. Cold Brook 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 actions taken during periods of malfunction to minimize emissions in accordance with 40 C.F.R. § 63.11085(a), including corrective actions taken to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation.
3. Cold Brook shall maintain records of the following information in the log book 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 Reporting

1. Cold Brook shall submit a semiannual compliance report to EPA and the Department which shall include the following information [40 C.F.R. §§ 63.11087(e) and 63.11095(a) and 06-096 C.M.R. ch. 115, BPT]:
 - a. For Tanks #9, #66, and #90, the following information:
 - (1) A description of the control equipment and certifies 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 and the reason it did not meet the specifications of 40 C.F.R. §§ 61.112b(a)(1) or 60.113b(a)(3) and list each repair made.
 - b. For the Loading Rack, each loading of a gasoline cargo tank for which vapor tightness documentation had not be previously obtained by the facility; and
 - c. For equipment leak inspections, the number of equipment leaks not repaired within fifteen days after detection.
2. Cold Brook 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); and

c. 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.

(18) Loading Rack and Vapor Combustion Unit

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

<u>Unit</u>	<u>PM (lb/hr)</u>	<u>PM₁₀ (lb/hr)</u>	<u>SO₂ (lb/hr)</u>	<u>NO_x (lb/hr)</u>	<u>CO (lb/hr)</u>	<u>VOC (lb/hr)</u>
VCU	Negl.	Negl.	Negl.	0.57	2.28	5.0

B. General Requirements

1. If Cold Brook's gasoline throughput through the Loading Rack ever exceeds 250,000 gallons per day (calculated by summing the current day's throughput, plus the throughput for the previous 364 days, and then dividing that sum by 365), Cold Brook shall become subject to the requirements listed in Item 1 of Table 2 of this subpart, and shall remain subject to those requirements even if daily gasoline throughput later falls below 250,000 gallons per day. Cold Brook shall notify the Department of this exceedance in the first semiannual report required to be submitted after the exceedance occurs. [40 C.F.R. § 63.11081(f), 40 C.F.R. Part 63, Subpart BBBB, Table 2, and 06-096 C.M.R. ch. 115, BPT]
2. If Cold Brook's gasoline throughput through the Loading Rack ever exceeds 250,000 gallons per day as calculated above, Cold Brook shall comply with the requirements listed in Item 1 of Table 2 of this subpart no later than three years after the facility becomes subject to the requirements. [40 C.F.R. § 63.11083(c)]

C. Emission Standards and Testing Requirements

1. Cold Brook shall not allow the mass emissions of volatile organic compounds (VOCs) from the Loading Rack to exceed the emission limit of 35 milligrams per liter of gasoline and/or ethanol transferred. Cold Brook 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. 115, BPT, 06-096 C.M.R. ch. 112 (4. and 6.), and 40 C.F.R. § 60.502(b)]

2. The vapor collection and liquid loading equipment at Cold Brook shall be designed and operated to prevent gauge pressure in the delivery tank from exceeding 4,500 Pascals (450 mm of water) during product loading. [40 C.F.R. § 60.502(h)]
3. Cold Brook shall conduct an annual compliance test of the vapor combustion unit 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 (C.)(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)]

D. Work Practice Standards

1. All gasoline and/or ethanol loading into tank trucks or trailers shall comply with the following [06-096 C.M.R. ch. 115, BPT, 06-096 C.M.R. ch. 112 (3.), and 40 C.F.R. § 60.502(a), (d), and (e)]:
 - a. Cold Brook shall limit the loadings of liquid product into only tank trucks or trailers 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) Cold Brook shall obtain the vapor tightness documentation for each gasoline and/or ethanol tank truck which is to be loaded at the Loading Rack;
 - (2) Cold Brook shall require the tank identification number to be recorded as each gasoline and/or ethanol tank truck is loaded at the Loading Rack;
 - (3) Cold Brook 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 and/or ethanol tank truck 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 and/or ethanol tank truck 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, Cold Brook shall return to biweekly monitoring until such time as these condition are met;

- (4) Cold Brook shall notify the owner or operator of each non-vapor-tight gasoline and/or ethanol tank truck loaded at the Loading Rack within one week of the documentation cross-check; and
 - (5) Cold Brook shall take steps assuring that the non-vapor-tight gasoline and/or ethanol tank truck will not be reloaded at the Loading Rack until vaportightness documentation for that tank is obtained;
 - (6) Alternate procedures to those described above may be used upon application to, and approval by, the Department and the 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 tank trucks curing product loading. This system must be in operation at all times gasoline and/or ethanol is being transferred to tanks trucks at the Loading Rack, as well as any time a truck 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 station of the Loading Rack from passing to another station of the Loading Rack, and shall direct all vapors to the vapor combustion unit;
 - c. A means shall be provided to prevent liquid drainage form 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 with fittings which make vapor-tight connections and which close automatically when disconnected; and
 - e. The pressure in the vapor collection system shall not be allowed to exceed the tank truck or trailer pressure relief settings.
2. Cold Brook shall use the following management practices when filling gasoline and/or ethanol cargo tanks at the Loading Rack [40 C.F.R. § 63.11088(a), 40 C.F.R. Part 63, Subpart BBBBBB, Table 2(2.)(a-b), and 06-096 C.M.R. ch. 115, BPT]:
 - a. Cold Brook shall use submerged filling with a submerged fill pipe that is no more than six inches from the bottom of the cargo tank; and
 - b. Cold Brook shall make records available to the EPA and the Department within 24 hours of a request by the EPA or the Department to document the facility's gasoline throughput.
3. 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 (plus 18) inches of water, nor a vacuum exceeding -6 (minus 6) inches of water. [06-096 C.M.R. ch. 115, BPT]

4. 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 fitting employed in the transfer of gasoline and/or ethanol are prohibited. [06-096 C.M.R. ch. 115, BPT]
5. No pressure-vacuum vent in Cold Brook'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)]
6. Cold Brook shall act to assure that the terminal's and tank truck's vapor collection systems are connected during each loading of a gasoline tank truck 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)]
7. Cold Brook shall act to assure that loadings of gasoline tank trucks 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)]
8. Cold Brook 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.)]
9. At a minimum of once per month, Cold Brook shall inspect the vapor collection system, the vapor combustion unit, and the Loading Rack during the loading of gasoline and/or ethanol tank trucks 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)]

E. Recordkeeping

1. Cold Brook shall maintain the following test result records for each gasoline and/or ethanol 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 and/or ethanol cargo tank loading at the facility on site, Cold Brook may comply with one of the two following options:
 - (1) Cold Brook 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 Cold Brook is in compliance using this alternative; or
 - (2) Cold Brook may use a terminal automation system provided that the records are an exact duplicate image of the original paper records 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 Cold Brook is in compliance using this alternative.
2. Cold Brook 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. § 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. Cold Brook shall keep documentation of all notifications sent to operators of non-vapor-tight gasoline tank trucks as required in 40 C.F.R. § 60.502(e)(4) for a minimum of two years. [40 C.F.R. § 60.505(d)]
4. Cold Brook 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)]

F. Notifications and Reports

Whenever Cold Brook is required to conduct the performance tests required by 40 C.F.R. §§ 60.502(b) and (h), Cold Brook 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]

(19) **Distillate Fuel Storage Tanks**

- A. Cold Brook shall conduct routine inspections of the perimeter and roof of all Distillate Fuel Storage Tanks at a minimum of once every month. [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 [06-096 C.M.R. ch. 115, BPT]:
 1. Records documenting any detected leaks, holes, tears, or other opening and corrective action taken; and
 2. Monthly throughput records specifying quantity and types of volatile petroleum liquids in each tank and the period of storage.

(20) **Gasoline and Ethanol Storage Tanks**

A. Prohibition

Cold Brook shall not empty and degas Tanks #9, #66, or #90 for the purpose of performing a complete inspection between June 1 and August 31 of each calendar year. Cold Brook may empty and degas Tanks #9, #66, or #90 during that time for the purpose of performing a repair which is immediately necessary for the proper function of the vessel. If Tanks #9, #66, or #90 are emptied and degassed for the purpose of performing a repair which is immediately necessary for the proper function of the vessel between June 1 and August 31 of any calendar year, Cold Brook shall notify the Department within 24 after the tank is emptied and degassed. [06-096 C.M.R. ch. 111(2).(C.) and (D.)]

B. Work Practice Standards

1. Tanks #9, #66, and #90 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 BBBB, 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; and
 - 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.
2. Tank #9 shall be equipped with a fixed roof in combination with an internal floating roof meeting the following additional specifications [40 C.F.R. § 60.112b(a)(1)]:
 - a. 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;
 - b. 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
 - c. Each penetration of the internal floating roof that allows for passage of a ladder shall have a gasketed sliding cover.
3. Tanks #9, #66, and #90 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. Cold Brook 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, or there is liquid accumulated on the roof, or 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. Cold Brook 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, or the secondary seal has holes, tears, or other openings in the seal or the seal fabric, or 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. Cold Brook 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. Cold Brook shall maintain a record of each inspection performed as required by 40 C.F.R. § 60.113b(a)(1-4) for a minimum of five years. 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. Cold Brook shall maintain the following record for Tank #9 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 Cold Brook 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 [40 C.F.R. § 60.116b(a-c) and (e) and 06-096 C.M.R. ch. 115, BPT]:

Cold Brook 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)(2).

3. Cold Brook shall maintain the following records for Tanks #9, #66, and #90 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]:
 - 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. A record of the monthly throughput quantities and types of volatile petroleum liquids for each storage vessel and period of storage; and
 - e. Records of the average monthly storage temperatures and maximum true vapor pressures or Reid vapor pressures of the petroleum liquids stored.

D. Notifications and Reports

Cold Brook shall submit the following notifications and reports for Tank #9 [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, Cold Brook 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 defects, 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, of defects in the internal floating roof, or other control equipment defects listed in 40 C.F.R. § 60.113b(a)(3)(ii), Cold Brook 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.

(21) Storage and Blending of Ethanol

Cold Brook may store gasoline or ethanol in Tanks #66 and #90 and may distribute a gasoline/ethanol blend from the facility's Loading Rack. Cold Brook 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]

(22) **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]

(23) **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.

(24) Cold Brook 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 13 DAY OF December, 2017.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: Marc Allen Robert Cove 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: 11/23/2015

Date of application acceptance: 11/24/2015

Date filed with the Board of Environmental Protection:

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

