

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

#### DEPARTMENT ORDER

Cold Brook Energy, Inc. Penobscot County Hampden, Maine A-542-71-I-M Departmental Findings of Fact and Order Air Emission License Amendment #2

### FINDINGS OF FACT

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

# I. REGISTRATION

### A. Introduction

Cold Brook Energy, Inc. (Cold Brook) was issued Air Emission License A-542-71-G-R on December 13, 2017, for the operation of emission sources associated with their bulk gasoline and fuel oil terminal. The license was subsequently amended on February 18, 2020 (A-542-71-H-M) to clarify recordkeeping requirements.

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

Cold Brook has requested a minor revision to their license in order to address the applicable requirements of *Control of Petroleum Storage Facilities*, 06-096 Code of Maine Rules (C.M.R.) ch. 171.

In addition, the Department is taking the opportunity to address new and revised applicable requirements pursuant to the following rules and regulations:

- 1. Visible Emissions Regulation, 06-096 C.M.R. ch. 101;
- 2. Degassing of Petroleum Storage Tanks, Marine Vessels, and Transport Vessels, 06-096 C.M.R. ch. 170;
- 3. Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984, and On or Before October 4, 2023, 40 C.F.R. Part 60, Subpart Kb;
- 4. Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After October 4, 2023, 40 C.F.R. Part 60, Subpart Kc; and

Cold Brook Energy, Inc.		Departmental
Penobscot County		Findings of Fact and Order
Hampden, Maine		Air Emission License
A-542-71-I-M	2	Amendment #2

- 5. National Emission Standards for Hazardous Air Pollutants for Source Category: Gasoline Distribution Bulk Terminals, Bulk Plants, and Pipeline Facilities, 40 C.F.R. Part 63, Subpart BBBBBB.
- B. Emission Equipment

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

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

### **Petroleum Storage**

# **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

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

<u>Internal Floating Roof (IFR) Tank</u> means an aboveground petroleum storage tank with both a permanent fixed roof and a second roof designed to float on the surface of the stored liquid. Pursuant to this definition, Tanks #9, #44, #66, and #90 are IFR tanks.

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

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

### D. Application Classification

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

3

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

### E. Facility Classification

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

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

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

# 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.

### A. Chapter 101

In 2023, the Department completed rulemaking on revisions to *Visible Emissions Regulation*, 06-096 Code of Maine Rules (C.M.R.) ch. 101. The revised rule went into effect on January 1, 2024. The following section identifies applicable visible emissions requirements and addresses necessary revisions to applicable requirements due to this rulemaking.

4

The applicable visible emissions standard for Fugitive Emissions contained in 06-096 C.M.R. ch. 101 changed to the following:

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

Cold Brook shall not cause or allow visible emissions within 20 feet of ground level, measured as any level of opacity and not including water vapor, beyond the legal boundary of the property on which such emissions occur. Compliance with this standard shall be determined pursuant to EPA Test Method 22.

[06-096 C.M.R. ch. 101, § 4(C)]

B. Chapter 170

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

Tank	Capacity (Gallons)	<b>Current Product Stored</b>	Roof Type	Date Installed
#9	1,600,000	Gasoline	Internal Floating	1995
#44	1,325,000	Distillate Fuel	Internal Floating	1959
#66	756,000	Gasoline/Ethanol	Internal Floating	1971
#90	250,000	Gasoline/Ethanol	Internal Floating	1939

### 1. Notification

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

- a. Identification of the tank(s) to be degassed;
- b. Date(s) when degassing will occur;

c. A description of the control device to be used and its control effectiveness; andd. The parameters to be monitored during degassing.[06-096 C.M.R. ch. 115, BPT]

5

2. Chapter 170 Requirements

Cold Brook shall comply with all applicable requirements of the most current version of 06-096 C.M.R. ch. 170 including, but not limited to, the following:

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

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

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

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

- (2) The vapor control system used in the degassing process shall be free of liquid and vapor leaks. This includes, but is not limited to, the degassing equipment, vacuum truck, pumps, hoses, and connections.
- (3) Any visible or audible liquid or vapor leak originating from the vapor control device or other associated product recovery device shall be repaired as soon as possible.
- (4) Cold Brook shall comply with the following to control emissions from any sludge removed from a storage tank containing, or which most recently contained, gasoline, ethanol, or a gasoline/ethanol blend. These requirements do not apply when sludge is immediately transferred (e.g., pumped) to a floating roof tank whose roof is not resting on its legs.

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

6

- (ii) The removed sludge must be transported in containers that are vapor-tight and free of liquid leaks; and
- (iii)Until final disposal, removed sludge must be stored in containers that are vapor-tight and free of liquid leaks or in tanks that are vented to a vapor control system designed to achieve a VOC control efficiency of at least 95%.
- b. Inspection Requirements [06-096 C.M.R. ch. 170, §§ 5 and 6]

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

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

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

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

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

(1) Cold Brook's contact person name and telephone number;

- (2) Storage tank capacity;
- (3) The product most recently stored in the storage tank prior to degassing;

7

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

### C. <u>Chapter 171</u>

Cold Brook is a petroleum storage facility as that term is defined in *Control of Petroleum Storage Facilities*, 06-096 C.M.R. ch. 171. Cold Brook shall comply with all applicable requirements of the most current version of 06-096 C.M.R. ch. 171 including, but not limited to, the following:

- 1. Internal Floating Roof Tanks
  - a. Floating Roofs

Tanks #35, #89, #91, #92, and #93 are fixed roof tanks which store distillate fuel. Because they were installed prior to the effective date of 06-096 C.M.R. ch. 171, they are not required to be retrofitted with a floating roof. [06-096 C.M.R. ch. 171, 4(A)]

b. Tank Inspections

The tank inspection requirements contained in 06-096 C.M.R. ch. 171, § 5(B) for internal floating roof tanks do not apply to Tanks #35, #89, #91, #92, and #93 because these tanks have fixed roofs. Cold Brook's IFR tanks (Tanks #9, #44, #66, and #90) are subject to the following inspection requirements regardless of the product being stored.

(1) Visual Inspections

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

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

8

- (b) The inspection of the internal floating roof must measure the percent LEL inside the vapor space within three feet of the internal floating roof. The PID or LEL meter must be equipped with Teflon sample tubing of sufficient length to meet this requirement. The external inspection of the IFR tank does not include or require human entry into the confined space between the tank's floating and fixed roofs.
- (c) Cold Brook shall use a PID or LEL meter that logs data at 15 second intervals and for which the manufacturer has published correction factors for the VOC in the tank to be measured.
- (d) Readings must be taken when the wind speed is no more than five miles per hour above the average wind speed for the facility location.
- (e) Readings must be conducted for a minimum of five minutes after the sample line purge is complete or in accordance with manufacturer recommendations, whichever is longer.

[06-096 C.M.R. ch. 171, § 5(B)(2)]

Note: Cold Brook is subject to a requirement in 40 C.F.R. Part 63, Subpart BBBBBB to conduct annual LEL monitoring of the IFR tanks beginning no later than May 8, 2027. That monitoring must be conducted pursuant to the requirements of 40 C.F.R. § 63.425(j). The Department has determined that the methods used by § 63.425(j) are more stringent than those required by 06-096 C.M.R. ch. 171. Therefore, an annual LEL monitoring event conducted to comply with Subpart BBBBBB will be considered equivalent to one monthly monitoring event to comply with 06-096 C.M.R. ch. 171, i.e., Cold Brook is not required to conduct two separate tank inspections in the same month provided the more stringent methods are used.

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

Cold Brook Energy, Inc. Penobscot County Hampden, Maine A-542-71-I-M

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

9

- (5) Cold Brook shall notify the Department at least 30 days before an inspection is to be performed from within the internal floating roof tank. If an inspection is unplanned and the facility could not have known about the inspection 30 days in advance, then the owner or operator shall notify the Department at least seven days before the inspection. Notification shall be made either by telephone immediately followed by written documentation demonstrating why the inspection was unplanned, or in writing only and sent such that it is received at least seven days before the inspection. [06-096 C.M.R. ch. 171, § 5(B)(5)]
- 2. Loading Rack
  - a. Liquid petroleum product shall not be loaded into any tank truck or trailer whose most recent previous load was gasoline unless vapors displaced from the tank truck or trailer are captured and routed to the VCU. The vapor collection and VOC control systems shall be maintained in good working order and must be operated at all times product is being transferred to such tank trucks or trailers. [06-096 C.M.R. ch. 171, 4(C)(1)]
  - b. All loading and vapor lines shall be equipped with fittings which make vapor-tight connections and which close automatically when disconnected. [06-096 C.M.R. ch. 171, § 4(C)(2)]
  - c. The pressure in the vapor collection system shall not exceed the tank truck or trailer pressure relief settings. [06-096 C.M.R. ch. 171, § 4(C)(3)]
- 3. Inspections Using Optical Gas Imaging

Cold Brook shall perform inspections in accordance with the following:

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

Cold Brook Energy, Inc.	Departmental
Penobscot County	Findings of Fact and Order
Hampden, Maine	Air Emission License
A-542-71-I-M 10	0 Amendment #2

- b. The optical gas imaging equipment used must meet the following specifications as verified by the manufacturer:
  - (1) Capable of imaging gases in the spectral range for benzene; and
  - (2) Capable of imaging a gas that is half methane and half propane at a concentration of 10,000 ppm at a flow rate of  $\leq 60$  grams per hour from a quarter inch diameter orifice.

[06-096 C.M.R. ch. 171, § 5(A)(2)]

- c. Cold Brook was required to submit an optical gas imaging leak detection and repair plan by October 3, 2023. [06-096 C.M.R. ch. 171, § 5(A)(3)] This plan was submitted on October 2, 2023 and approved by the Department on January 18, 2024.
- d. If visible emissions are observed in a fugitive emissions component using optical gas imaging equipment, within two calendar days Cold Brook shall determine whether a leak, as defined by 06-096 C.M.R. ch. 171, is present by using photo ionization detection (PID) technology or flame ionization detection (FID) technology. Alternatively, Cold Brook may elect to presume that a leak is present without further confirmation. If a leak is determined or presumed to be present, Cold Brook shall initiate corrective action and repair the leak within 15 calendar days.
  - (1) If the presence of a leak cannot be confirmed due to safety concerns or physical constraints, Cold Brook shall presume the leak to be confirmed and initiate corrective action and repair the leak within 15 calendar days.
  - (2) If a leak cannot be repaired within 15 days, Cold Brook shall notify the Department of the leak, the reason for the delay, and the expected date of the repair. Cold Brook shall promptly notify the Department of the date that the leak is successfully repaired. A fugitive emissions component is considered repaired when the optical gas imaging equipment shows no indication of visible emissions or there is no longer indication of a leak as that term is defined in this regulation under normal use conditions.

[06-096 C.M.R. ch. 171, § 5(A)(5)]

- e. For all quarterly inspections conducted using optical gas imaging equipment Cold Brook shall keep the following records:
  - (1) The date of the inspection;
  - (2) Identification and description of the equipment and areas inspected;
  - (3) A description of any leaks detected;
  - (4) An electronic recording of the optical gas imaging equipment images; and

- (5) A description of any resulting corrective actions or repairs and the dates they were made.[06-096 C.M.R. ch. 171, § 7(B)]
- 4. Fenceline Monitoring

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

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

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

- d. Cold Brook was required to submit a site-specific fenceline monitoring plan prepared by a qualified, independent, third-party entity by November 3, 2023. [06-096 C.M.R. ch. 171, § 6(B)(4)] This plan was submitted on November 3, 2023 and approved by the Department on March 19, 2024.
- e. No later than six months after approval of the site-specific fenceline monitoring plan (i.e., no later than September 19, 2024), Cold Brook shall commence monitoring in accordance with this Chapter through use of a qualified, independent, third-party entity. Monitoring must be conducted in accordance with the site-specific fenceline monitoring plan as approved by the Department. [06-096 C.M.R. ch. 171, § 6(B)(5)]
- f. Cold Brook shall keep the following records:
  - (1) Coordinates of all passive monitors and the meteorological station used. Coordinates shall be determined using a method with an accuracy of three meters or less.

(2) Average ambient temperature and barometric pressure measurements for the sampling period.

12

- (3) Individual sample results.
- (4) Method detection limit for each sample.
- [06-096 C.M.R. ch. 171, § 7(C)]
- g. Cold Brook shall submit a report to the Department for each calendar quarter with the following information. Each quarterly report must be electronically submitted no later than 45 days after the end of the reporting period.
  - (1) Facility name and address.
  - (2) Year and reporting quarter (i.e., Quarter 1, Quarter 2, Quarter 3, or Quarter 4).
  - (3) For each passive monitor:
    - (i) The latitude and longitude location coordinates;
    - (ii) The sampler name; and
    - (iii)Identification of the type of sampler (e.g., regular monitor, duplicate, field blank, etc.)
  - (4) The beginning and ending dates for each sampling period.
  - (5) Individual sample results in units of micrograms per cubic meter  $(\mu g/m^3)$  for each monitor for each sampling period that ends during the reporting period. Results below the method detection limit shall be flagged as such and reported at the method detection limit.
  - (6) Meteorological data collected during each sampling period, including wind speed and direction.

[06-096 C.M.R. ch. 171, § 8]

# D. 40 C.F.R. Part 60, Subparts Kb

EPA has finalized changes to *Petroleum Liquid Storage Vessels*) for Which Construction, *Reconstruction, or Modification Commenced After July 23, 1984, and On or Before October 4, 2023*, 40 C.F.R. Part 60, Subpart Kb (Subpart Kb). The final rule became effective on October 15, 2024.

All tanks at the facility, except for Tank #9, were installed prior to 1973 and are therefore not subject to Subpart Kb.

Tank #9 is subject to Subpart Kb. It 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 commenced after July 23, 1984. [40 C.F.R. § 60.110b(a)]

The changes to Subpart Kb are limited to the reporting and recordkeeping requirements in 40 C.F.R. § 60.115b. The updated requirements applicable to Tank #9 are shown below.

- 1. Cold Brook shall keep a record of each inspection performed as required by 40 C.F.R. §§ 60.113b(a)(2) 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. § 60.115b(a)(2)]
- 2. If any of the conditions described in 40 C.F.R. § 60.113b(a)(2) are detected during the annual visual inspection, Cold Brook shall submit a report to the Department and EPA within 30 days of the inspection. The report shall identify the storage vessel, the nature of the defects, and the date the storage vessel was emptied or the nature of and date the repair was made. Cold Brook shall submit these reports in PDF format via the Compliance and Emissions Data Reporting Interface (CEDRI), which can be accessed through EPA's Central Data Exchange (<u>https://cdx.epa.gov</u>) following the procedures specified in 40 C.F.R. § 60.115b(e). [40 C.F.R. § 60.115b(a)(3)]
- 3. Cold Brook shall keep readily accessible records showing the dimension of Tank #9 and an analysis showing its capacity. [40 C.F.R. § 60.116b(b)]
- Cold Brook shall maintain for Tank #9 a record of the product stored, the period of storage, and the maximum true vapor pressure of the product during the storage period. [40 C.F.R. § 60.116b(c)]

# E. <u>40 C.F.R. Part 60, Subpart Kc</u>

EPA has finalized a new rule, *Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After October 4, 2023*, 40 C.F.R. Part 60, Subpart Kc (Subpart Kc). The final rule became effective on October 15, 2024.

All tanks at the facility were installed prior to October 15, 2024. Existing storage vessels can become subject to Subpart Kc if modified. Pursuant to 40 C.F.R. § 60.110c(e), a modification occurs if the storage vessel is used to store a VOL that has a greater maximum true vapor pressure than all VOL historically stored or permitted to be stored. The fixed roof tanks have historically been permitted to store distillate fuel, and the internal floating roof tanks have historically been permitted to store both distillate fuel and gasoline. Therefore, the facility's tanks are not subject to Subpart Kc provided they continue to store the products for which they are currently licensed. Cold Brook shall maintain records of the type and maximum true vapor pressure for each product stored in each tank.

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

On May 8, 2024, EPA finalized changes to *National Emission Standards for Hazardous Air Pollutants for Source Category: Gasoline Distribution Bulk Terminals, Bulk Plants, and Pipeline Facilities,* 40 C.F.R. Part 63, Subpart BBBBBB. The final rule became effective on July 8, 2024.

Cold Brook Energy, Inc.		Departmental
Penobscot County		Findings of Fact and Order
Hampden, Maine		Air Emission License
A-542-71-I-M	14	Amendment #2

Cold Brook is subject to 40 C.F.R. Part 63, Subpart BBBBBB. The facility is considered an existing bulk gasoline terminal that is not subject to either *National Emission Standards* for Gasoline Distribution Facilities (Bulk Gasoline Terminals and Pipeline Breakout Stations), 40 C.F.R. Part 63, Subpart R, or *National Emission Standards for Hazardous Air* Pollutants from Petroleum Refineries, 40 C.F.R. Part 63, Subpart CC.

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

Cold Brook shall comply with the applicable requirements of the most current version of 40 C.F.R. Part 63, Subpart BBBBBB. Below is a summary of the currently applicable requirements.

- 1. General Requirements
  - a. 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 Table 2, Row 1 of 40 C.F.R. Part 63, Subpart BBBBBB, and shall remain subject to those requirements even if daily gasoline throughput later falls below 250,000 gallons per day. [40 C.F.R. § 63.11081(f)]

Cold Brook shall notify the Department of such an event in the first semiannual report required to be submitted after it occurs. [06-096 C.M.R. ch. 115, BPT]

- b. 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 Table 2, Row 1 of 40 C.F.R. Part 63, Subpart BBBBBB no later than three years after the facility becomes subject to the requirements. [40 C.F.R. § 63.11083(c)]
- c. Cold Brook must, at all times, operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require Cold Brook to make any further efforts to reduce emissions if levels required by the applicable standard have been achieved. Determination of whether a source is operating in

compliance with operation and maintenance requirements will be based on information available to the Department which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. [40 C.F.R. § 63.11085(a)]

15

- d. Cold Brook shall not allow gasoline to be handled in a manner that would result in vapor releases to the atmosphere for extended periods of time. Measures to be taken include, but are not limited to, the following:
  - (1) Minimize gasoline spills;
  - (2) Clean up spills as expeditiously as practicable;
  - (3) Cover all open gasoline containers and all gasoline storage tank fill-pipes with a gasketed seal when not in use; and
  - (4) Minimize gasoline sent to open waste collection systems that collect and transport gasoline to reclamation and recycling devices, such as oil/water separators.

[40 C.F.R. § 63.1185(b)]

2. Emission Limits and Management Practices for Storage Tanks

Tanks #9, #66, and #90 are IFR gasoline storage tanks with capacities greater than  $151 \text{ m}^3$  (39,890 gallons) each. They will be referred to collectively as tanks in gasoline service. Tank #44 is also an IFR tank, however, it does not currently store gasoline. If Cold Brook chooses to store gasoline in Tank #44, it will also become a tank in gasoline service.

- a. Tanks in gasoline service must comply with one of the compliance options in Table 1, Row 2. [40 C.F.R. § 63.11087(a)] Cold Brook currently complies with Row 2(b) which requires each storage tank be equipped according to the requirements of 40 C.F.R. § 60.112b(a)(1), except for the secondary seal requirements in § 60.112b(a)(1)(ii)(B) and the requirements in §§ 60.112b(a)(1)(iv) through (ix). Those requirements are described below:
  - (1) Each IFR shall be equipped with either a liquid-mounted seal or a mechanical shoe seal. [40 C.F.R. § 60b.112(a)(1)(ii)]
  - (2) Each IFR shall float on the stored liquid surface at all times, except during intervals when the storage vessel is completely emptied or subsequently emptied and refilled. [40 C.F.R. § 60b.112(a)(1)(i)]
  - (3) When the roof is resting on the leg supports, the process of filling, emptying, or refilling shall be continuous and shall be accomplished as rapidly as possible. [40 C.F.R. § 60b.112(a)(1)(i)]
  - (4) Each opening in a noncontact internal floating roof except for automatic bleeder vents (vacuum breaker vents) and the rim space vents shall provide a projection below the liquid surface. [40 C.F.R. § 60b.112(a)(1)(iii)]

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

16

- 3. Storage Tank Inspections
  - a. Cold Brook shall perform inspections of the IFR systems according to the requirements of 40 C.F.R. § 60.113b(a) as described below. [40 C.F.R. § 63.11092(f)(1)(i)]
    - (1) At least once every 12 months, Cold Brook shall visually inspect the internal floating roof and the rim seal through manholes and roof hatches on the fixed roof. Any of the following conditions constitutes a failure in the integrity of the internal floating roof system.
      - (i) The internal floating roof is not resting on the surface of the product inside the tank;
      - (ii) There is liquid accumulated on the roof;
      - (iii)The seal is detached; or
      - (iv)There are holes or tears in the seal fabric.
      - [40 C.F.R. § 60.113b(a)(2)]

Note: Cold Brook is subject to a requirement in 06-096 C.M.R. ch. 111 to conduct monthly visual inspections of each tank in gasoline service. The Department has determined that the methods used by § 63.113b(a)(2) are more stringent than those required by 06-096 C.M.R. ch. 111. Therefore, an annual inspection conducted to comply with Subpart BBBBBB will be considered equivalent to one monthly inspection to comply with 06-096 C.M.R. ch. 111, i.e., Cold Brook is not required to conduct two separate tank inspections in the same month provided the more stringent methods are used.

- (2) If a failure is detected, as described in (1) above, Cold Brook shall repair the item(s) or empty and remove the storage vessel from service within 45 days. A 30-day extension may be requested from the Administrator. Such a request for extension must document that alternate storage capacity is unavailable and specify a schedule of actions Cold Brook will take that will assure that the control equipment will be repaired or the vessel will be emptied as soon as possible. [40 C.F.R. § 60.113b(a)(2)]
- (3) Each time the IFR storage vessel is emptied and degassed, or at least every 10 years, Cold Brook shall visually inspect the IFR, seals, gaskets, slotted membranes, and sleeve seals (if any). If any of the following conditions are

discovered during this inspection, Cold Brook shall repair the items as necessary so that none of the conditions exist before refilling.

17

(i) The IFR has defects;

(ii) If the seals have holes, tears, or other openings in the seal or seal fabric;(iii)Gaskets no longer close off the liquid surfaces from the atmosphere; or(iv)The slotted membrane has more than 10% open area.[40 C.F.R. § 113b(a)(4)]

- b. No later than May 8, 2027, Cold Brook shall conduct LEL monitoring according to the provisions of 40 C.F.R. § 63.425(j) as described below. [40 C.F.R. §§ 63.11087(g) and 63.11092(f)(1)(ii)]
  - (1) Cold Brook shall conduct LEL monitoring at least once every 12 months. If the measurement cannot be performed due to wind speeds exceeding those specified in § 63.425(j)(3)(iii), the measurement must be performed within 30 days of the previous attempt. [40 C.F.R. § 63.425(j)(1)]
  - (2) Cold Brook shall check the calibration of the LEL meter per manufacturer specifications immediately before and after the measurements as specified in §§ 63.425(j)(2)(i) and (ii). If tubing will be used for the measurements, the tubing must be attached during calibration so that the calibration gas travels through the entire measurement system. Any tubing used must be non-crimping and made of Teflon or other inert material. [40 C.F.R. §§ 63.425(j) and (j)(2)]
  - (3) Cold Brook shall conduct measurements as specified below.
    - (i) Measurements of the vapors within the IFR storage vessel shall be collected no more than 3 feet above the IFR.
    - (ii) Measurements shall be taken for a minimum of 20 minutes, logging the measurements at least once every 15 seconds, or until one 5-minute average as determined according to § 63.425(j)(5)(ii) exceeds 25% of the LEL without the use of purge gas.
    - (iii)Measurements shall be taken when the wind speed at the top of the tank is 5 mph or less to the extent practicable, but in no case shall measurements be taken when the sustained wind speed is greater than the annual average wind speed at the site or 15 mph, whichever is less.
    - (iv)Measurements should be conducted when the IFR is floating with limited product movement (limited filling or emptying of the tank).
    - [40 C.F.R. § 63.425(j)(3)]
  - (4) Cold Brook shall use the methods in 40 C.F.R. §§ 425(j)(4) and (5) to determine the actual vapor concentration within the storage vessel and calculate the 5-minute rolling average to demonstrate compliance with the emission limit in Subpart BBBBBB, Table 1, Row 2(c).

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

18

4. Emission Limits and Management Practices for the Loading Rack

The Loading Rack is a bulk gasoline terminal loading rack with a throughput less than 250,000 gal/day. Cold Brook shall use the following management practices when filling gasoline and/or ethanol cargo tanks at the Loading Rack:

- 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. [40 C.F.R. § 63.11088(a) and Table 2, Row 2(a)]
- 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. [40 C.F.R. § 63.11088(a) and Table 2, Row 2(b)]
- c. No later than May 8, 2027, Cold Brook shall limit the loading of gasoline into gasoline cargo tanks that are vapor tight using the following procedures as specified in 40 C.F.R. § 60.502a(e).
  - (1) Cold Brook shall obtain the vapor tightness annual certification test documentation for each gasoline cargo tank which is to be loaded at the Loading Rack. If Cold Brook does not know the previous contents of the cargo tank, it must assume that cargo tank is a gasoline cargo tank.
  - (2) Cold Brook shall obtain and record the cargo tank identification number of each gasoline cargo tank which is to be loaded at the Loading Rack.
  - (3) Cold Brook shall cross-check each cargo tank identification number with the file of gasoline cargo tank vapor tightness documentation described in (1) prior to loading any liquid product into the gasoline cargo tank.

5. Equipment Leak Inspections

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

19

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

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

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

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

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

- (2) During normal duties, Cold Brook shall record leaks identified by audio, visual, or olfactory methods. [40 C.F.R. § 60.502a(j)(2)]
- (3) Cold Brook shall conduct instrument monitoring pursuant to paragraph (1) above of each pressure relief device annually and within five calendar days after each pressure release. [40 C.F.R. § 60.502a(j)(4)(i)]
- (4) For open-ended valves or lines, Cold Brook shall comply with the following. [40 C.F.R. § 60.502a(j)(6)]
  - (i) Each open-ended valve or line shall be equipped with a cap, blind flange, plug, or a second valve, except for:
    - 1. Open-ended valves or lines in an emergency shutdown system which are designed to open automatically in the event of a process upset; or
    - 2. Open-ended valves or lines containing materials which would autocatalytically polymerize or would present an explosion, serious overpressure, or other safety hazard if capped or equipped with a double block and bleed system.
    - [40 C.F.R. §§ 60.482-6a(a), (d), and (e)]
  - (ii) Each open-ended valve or line equipped with a second valve shall be operated in a manner such that the valve on the process fluid end is closed before the second valve is closed. [40 C.F.R. § 60.482-6a(b)]
  - (iii)When a double block-and-bleed system is being used, the bleed valve or line may remain open during operations that require venting the line between the block valves but shall comply with paragraph (i) above. [40 C.F.R. § 60.482-6a(c)]
- (5) A leak is detected if any of the following occurs:
  - Emissions are observed when using OGI;

<sup>[40</sup> C.F.R. § 60.502a(j)(1)]

• An instrument reading of 10,000 ppm or greater when using Method 21; or

21

• Evidence of a potential leak is found at any time by audio, visual, olfactory, or any other detection method for any equipment in gasoline service.

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

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

- B. Repair is completed as soon as practicable, but not later than six months after the leak was detected.
- 6. Recordkeeping

Note: Regardless of the requirements of Subpart BBBBBB, Standard Condition (8) requires records to be maintained for a minimum of six years.

- a. Cold Brook shall keep records as specified in 40 C.F.R. § 60.115b for the visual inspections conducted pursuant to § 60.113b(a) except that records shall be kept for at least 5 years. [40 C.F.R. § 63.11094(a)] The following information shall be included in the inspection records:
  - (1) Identification of the storage vessel that was inspected;
  - (2) The date of the inspection; and
  - (3) The observed condition of each component of the control equipment (seals, IFR, and fittings).
  - [40 C.F.R. § 60.115b(a)(2)]
- b. No later than May 8, 2027, Cold Brook shall keep records of each annual LEL monitoring event that includes the information in 40 C.F.R. §§ 63.11094(a)(2)(i) through (ix). [40 C.F.R. § 63.11094(a)(2)]
- c. No later than May 8, 2027, Cold Brook shall keep records in either hardcopy or electronic form of the test results for each gasoline cargo tank loading at the facility as specified in 40 C.F.R. §§ 63.11094(b)(1) through (3). Records shall be kept for a minimum of 5 years. [40 C.F.R. § 63.11094(b)]

Note: Records of tank truck vapor tightness documentation is also required by *Standards of Performance for Bulk Gasoline Terminals*, 40 C.F.R. Part 60, Subpart XX, 40 C.F.R. § 60.502(e)(1) pursuant to 40 C.F.R. § 60.505(a), (b), (d), and (e). The records required by 40 C.F.R. Part 63, Subpart BBBBBB are determined to be at least as stringent as the NSPS requirements. Therefore, the NSPS requirements are streamlined to the Subpart BBBBBB requirements, and only the Subpart BBBBBB requirements shall be included in the Order section of this air emission license.

- d. 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(c)]
- e. For equipment leak inspections conducted pursuant to § 63.11089(b) (i.e., inspections conducted using sight, sound, and smell), Cold Brook shall record in the logbook for each leak that is detected the information specified in 40 C.F.R. §§ 63.11094(d)(1) through (7). [40 C.F.R. § 63.11094(d)]

22

f. No later than May 8, 2027, Cold Brook shall maintain records of each leak inspection and leak identified under 40 C.F.R. § 63.11089(c) (i.e., OGI or Method 21 inspections) as specified in 40 C.F.R. §§ 63.11094(e)(1) through (5). [40 C.F.R. § 63.11094(e)]

23

- g. Cold Brook shall maintain records for at least five years of each instance when liquid product was loaded into gasoline cargo tanks not using submerged filling, or, if applicable, not equipped with vapor collection or balancing equipment that is compatible with the terminal's vapor collection system. These records shall include at a minimum:
  - (1) Date and time of liquid product loading into gasoline carbo tank not using submerged filling, improperly equipped, or improperly connected;
  - (2) Type of deviation (e.g., not submerged filling, incompatible equipment, not properly connected); and
  - (3) Cargo tank identification number. [40 C.F.R. § 63.11094(i)]
- h. Cold Brook shall keep the following records for each deviation of an emissions limitation (including operating limit), work practice standard, or operation and maintenance requirement.
  - (1) Date, start time, and duration of each deviation;
  - (2) List of the affected sources or equipment for each deviation, an estimate of the quantity of each regulated pollutant emitted over any emission limit and a description of the method used to estimate emissions; and
  - (3) Actions taken to minimize emissions in accordance with § 63.11085(a) (i.e., general duty to minimize emissions).
  - [40 C.F.R. § 63.11094(k)]
- i. Cold Brook shall maintain records of the average gasoline throughput (in gallons per day) for at least 5 years. [40 C.F.R. § 63.11094(1)]
- 7. Reporting
  - a. Prior to May 8, 2027, Cold Brook shall submit to the Department and EPA semiannual compliance reports with the following information, as applicable. [40 C.F.R. § 63.11095(c)]
    - (1) If any conditions that constitute a failure in the integrity of the IFR system are detected during an inspection of an IFR, Cold Brook shall submit a report to the Department and EPA. The report shall identify the storage vessel, the nature of

the defect(s), and the date the storage vessel was emptied or the nature of the repair and date the repair was made. [40 C.F.R. \$ 60.115b(a)(3)]

- (2) For the Loading Rack, each loading of a gasoline cargo tank for which vapor tightness documentation had not been previously obtained by the facility.
- (3) For equipment leak inspections, the number of equipment leaks not repaired within 15 days after detection.
- b. On and after May 8, 2027, Cold Brook shall submit to the Department and EPA semiannual compliance reports that contain the information in 40 C.F.R. §§ 63.11095(d)(1) and (4) through (9), as applicable. [40 C.F.R. § 11095(d)]
- c. Cold Brook shall submit semiannual compliance reports to the Department and EPA with the information outlined in paragraphs (a) and (b) above according to the requirements of 40 C.F.R. § 63.13. Beginning May 8, 2027, or once the report template for Subpart BBBBBB has been available on the CEDRI website for one year, whichever date is later, Cold Brook shall submit all subsequent semiannual compliance reports using the appropriate electronic report template on the CEDRI website and following the procedure specified in 40 C.F.R. § 63.9(k), except any medium submitted through mail to EPA must be sent to the attention of the Gasoline Distribution Sector Lead. The date report templates become available will be listed on the CEDRI website. [40 C.F.R. § 11095(e)]
- G. Annual Emissions

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

# ORDER

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

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

The Department hereby grants Air Emission License Amendment A-542-71-I-M. For clarity and simplicity, the conditions contained this amendment shall replace all conditions found in Air Emission License A-542-71-G-R and amendment A-542-71-H-M.

<u>Severability</u>. The invalidity or unenforceability of any provision of this License Amendment or part thereof shall not affect the remainder of the provision or any other provisions. This License

Cold Brook Energy, Inc.
Penobscot County
Hampden, Maine
A-542-71-I-M

Amendment shall be construed and enforced in all respects as if such invalid or unenforceable provision or part thereof had been omitted.

25

For clarity and simplicity, the following shall replace all Conditions in Air Emission License A-542-71-G-R and amendment A-542-71-H-M.

### 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 beginning actual 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] Payment of the annual air emission license fee for Cold Brook is due by the end of May of each year. [38 M.R.S. § 353-A(3)]
- (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 the written test report by the Department, or another alternative timeframe approved by the Department, the licensee shall re-test the non-complying emission source under circumstances representative of the facility's

normal process and operating conditions and in accordance with the Department's air emission compliance test protocol and 40 C.F.R. Part 60 or other method approved or required by the Department; and

27

- B. The days of violation shall be presumed to include the date of stack test and each and every day of operation thereafter until compliance is demonstrated under normal and representative process and operating conditions, except to the extent that the facility can prove to the satisfaction of the Department that there were intervening days during which no violation occurred or that the violation was not continuing in nature; and
- C. The licensee may, upon the approval of the Department following the successful demonstration of compliance at alternative load conditions, operate under such alternative load conditions on an interim basis prior to a demonstration of compliance under normal and representative process and operating conditions. [06-096 C.M.R. ch. 115]
- (13) Notwithstanding any other provisions in the State Implementation Plan approved by the EPA or Section 114(a) of the CAA, any credible evidence may be used for the purpose of establishing whether a person has violated or is in violation of any statute, regulation, or license requirement. [06-096 C.M.R. ch. 115]
- (14) The licensee shall maintain records of malfunctions, failures, downtime, and any other similar change in operation of air pollution control systems or the emissions unit itself that would affect emissions and that is not consistent with the terms and conditions of the air emission license. The licensee shall notify the Department within two (2) days or the next state working day, whichever is later, of such occasions where such changes result in an increase of emissions. The licensee shall report all excess emissions in the units of the applicable emission limitation. [06-096 C.M.R. ch. 115]
- (15) Upon written request from the Department, the licensee shall establish and maintain such records, make such reports, install, use and maintain such monitoring equipment, sample such emissions (in accordance with such methods, at such locations, at such intervals, and in such a manner as the Department shall prescribe), and provide other information as the Department may reasonably require to determine the licensee's compliance status. [06-096 C.M.R. ch. 115]
- (16) The licensee shall notify the Department within 48 hours and submit a report to the Department on a quarterly basis if a malfunction or breakdown in any component causes a violation of any emission standard (38 M.R.S. § 605). [06-096 C.M.R. ch. 115]

### **SPECIFIC CONDITIONS**

#### (17) 06-096 C.M.R. ch. 170 Requirements

Cold Brook shall comply with all applicable requirements of the most current version of 06-096 C.M.R. ch. 170 including, but not limited to, the following:

28

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

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

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

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

- 2. The vapor control system used in the degassing process shall be free of liquid and vapor leaks. This includes, but is not limited to, the degassing equipment, vacuum truck, pumps, hoses, and connections.
- 3. Any visible or audible liquid or vapor leak originating from the vapor control device or other associated product recovery device shall be repaired as soon as possible.
- 4. Cold Brook shall comply with the following to control emissions from any sludge removed from a storage tank containing, or which most recently contained, gasoline, ethanol, or a gasoline/ethanol blend. These requirements do not apply when sludge is immediately transferred (e.g., pumped) to a floating roof tank whose roof is not resting on its legs.

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

29

- b. The removed sludge must be transported in containers that are vapor-tight and free of liquid leaks; and
- c. Until final disposal, removed sludge must be stored in containers that are vaportight and free of liquid leaks or in tanks that are vented to a vapor control system designed to achieve a VOC control efficiency of at least 95%.
- B. Inspection Requirements [06-096 C.M.R. ch. 170, §§ 5 and 6]

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

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

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

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

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

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

Cold Brook Energy, Inc.	Departmental
Penobscot County	Findings of Fact and Order
Hampden, Maine	Air Emission License
A-542-71-I-M 30	0 Amendment #2

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

#### (18) 06-096 C.M.R. ch. 171 Requirements

Cold Brook shall comply with all applicable requirements of the most current version of 06-096 C.M.R. ch. 171 including, but not limited to, the following:

- A. Internal Floating Roof Tanks
  - 1. Visual Inspections

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

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

[06-096 C.M.R. ch. 171, § 5(B)(2)]

Note: Cold Brook is subject to a requirement in 40 C.F.R. Part 63, Subpart BBBBBB to conduct annual LEL monitoring of the IFR tanks beginning no later than May 8, 2027. That monitoring must be conducted pursuant to the requirements of 40 C.F.R. § 63.425(j). The Department has determined that the methods used by § 63.425(j) are more stringent than those required by 06-096 C.M.R. ch. 171. Therefore, an annual LEL monitoring event conducted to comply with Subpart BBBBBB will be considered equivalent to one monthly monitoring event to comply with 06-096 C.M.R. ch. 171, i.e., Cold Brook is not required to conduct two separate tank inspections in the same month provided the more stringent methods are used.

31

- 3. If a leak is detected, Cold Brook shall initiate corrective action and repair the leak within 15 calendar days. If the leak cannot be repaired within 15 days, Cold Brook shall notify the Department of the leak, the reason for the delay, and the expected date of the repair. Cold Brook shall promptly notify the Department of the date that the leak is successfully repaired. [06-096 C.M.R. ch. 171, § 5(B)(3)]
- 4. For each IFR tank, at least once every five calendar years and each time the tank is emptied and degassed, Cold Brook shall conduct a complete inspection by visually inspecting the floating roof deck, deck fittings, and rim seals from within the internal floating roof tank. The inspection may be performed entirely from the top side of the floating roof as long as there is visual access to all deck components. [06-096 C.M.R. ch. 171, § 5(B)(4)]
- 5. Cold Brook shall notify the Department at least 30 days before an inspection is to be performed from within the internal floating roof tank. If an inspection is unplanned and the facility could not have known about the inspection 30 days in advance, then the owner or operator shall notify the Department at least seven days before the inspection. Notification shall be made either by telephone immediately followed by written documentation demonstrating why the inspection was unplanned, or in writing only and sent such that it is received at least seven days before the inspection. [06-096 C.M.R. ch. 171, § 5(B)(5)]
- B. Loading Rack
  - Liquid petroleum product shall not be loaded into any tank truck or trailer whose most recent previous load was gasoline unless vapors displaced from the tank truck or trailer are captured and routed to the VCU. The vapor collection and VOC control systems shall be maintained in good working order and must be operated at all times product is being transferred to such tank trucks or trailers. [06-096 C.M.R. ch. 171, § 4(C)(1)]
  - 2. All loading and vapor lines shall be equipped with fittings which make vapor-tight connections and which close automatically when disconnected. [06-096 C.M.R. ch. 171, § 4(C)(2)]

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

Cold Brook shall perform inspections in accordance with the following:

32

- 1. At least once per calendar quarter Cold Brook shall conduct an inspection survey of each petroleum storage tank and facility fugitive emissions component using optical gas imaging equipment. The first inspection survey shall be performed in the first full calendar quarter after the Department's approval of the optical gas imaging leak detection and repair plan, but in no case shall the first inspection survey be performed later than June 30, 2024. [06-096 C.M.R. ch. 171, § 5(A)(1)]
- 2. The optical gas imaging equipment used must meet the following specifications as verified by the manufacturer:
  - a. Capable of imaging gases in the spectral range for benzene; and
  - b. Capable of imaging a gas that is half methane and half propane at a concentration of 10,000 ppm at a flow rate of  $\leq 60$  grams per hour from a quarter inch diameter orifice.

[06-096 C.M.R. ch. 171, § 5(A)(2)]

- 3. If visible emissions are observed in a fugitive emissions component using optical gas imaging equipment, within two calendar days Cold Brook shall determine whether a leak, as defined by 06-096 C.M.R. ch. 171, is present by using photo ionization detection (PID) technology or flame ionization detection (FID) technology. Alternatively, Cold Brook may elect to presume that a leak is present without further confirmation. If a leak is determined or presumed to be present, Cold Brook shall initiate corrective action and repair the leak within 15 calendar days.
  - a. If the presence of a leak cannot be confirmed due to safety concerns or physical constraints, Cold Brook shall presume the leak to be confirmed and initiate corrective action and repair the leak within 15 calendar days.
  - b. If a leak cannot be repaired within 15 days, Cold Brook shall notify the Department of the leak, the reason for the delay, and the expected date of the repair. Cold Brook shall promptly notify the Department of the date that the leak is successfully repaired. A fugitive emissions component is considered repaired when the optical gas imaging equipment shows no indication of visible

emissions or there is no longer indication of a leak as that term is defined in this regulation under normal use conditions.

[06-096 C.M.R. ch. 171, § 5(A)(5)]

- 4. For all quarterly inspections conducted using optical gas imaging equipment Cold Brook shall keep the following records:
  - a. The date of the inspection;
  - b. Identification and description of the equipment and areas inspected;

33

- c. A description of any leaks detected;
- d. An electronic recording of the optical gas imaging equipment images; and
- e. A description of any resulting corrective actions or repairs and the dates they were made.

[06-096 C.M.R. ch. 171, § 7(B)]

D. Fenceline Monitoring

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

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

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

4. No later than six months after approval of the site-specific fenceline monitoring plan (i.e., no later than September 19, 2024), Cold Brook shall commence monitoring in accordance with this Chapter through use of a qualified, independent, third-party entity. Monitoring must be conducted in accordance with the site-specific fenceline monitoring plan as approved by the Department. [06-096 C.M.R. ch. 171, § 6(B)(5)]

- 5. Cold Brook shall keep the following records:
  - a. Coordinates of all passive monitors and the meteorological station used. Coordinates shall be determined using a method with an accuracy of three meters or less.

34

- b. Average ambient temperature and barometric pressure measurements for the sampling period.
- c. Individual sample results.
- d. Method detection limit for each sample.

[06-096 C.M.R. ch. 171, § 7(C)]

- 6. Cold Brook shall submit a report to the Department for each calendar quarter with the following information. Each quarterly report must be electronically submitted no later than 45 days after the end of the reporting period.
  - a. Facility name and address.
  - b. Year and reporting quarter (i.e., Quarter 1, Quarter 2, Quarter 3, or Quarter 4).
  - c. For each passive monitor:
    - (i) The latitude and longitude location coordinates;
    - (ii) The sampler name; and
    - (iii)Identification of the type of sampler (e.g., regular monitor, duplicate, field blank, etc.)
  - d. The beginning and ending dates for each sampling period.
  - e. Individual sample results in units of micrograms per cubic meter  $(\mu g/m^3)$  for each monitor for each sampling period that ends during the reporting period. Results below the method detection limit shall be flagged as such and reported at the method detection limit.
  - f. Meteorological data collected during each sampling period, including wind speed and direction.

[06-096 C.M.R. ch. 171, § 8]

### (19) 40 C.F.R. Part 60, Subpart Kb Requirements

For Tank #9, Cold Brook shall comply with all applicable requirements of the most current version of 40 C.F.R. Part 60, Subpart Kb, including, but not limited to, the following:

- A. Tank Standards
  - 1. Cold Brook shall equip and operate Tank #9 with a fixed roof in combination with an internal floating roof employing a mechanical shoe seal. The internal floating roof shall rest or be floating on the liquid surface (but not necessarily in complete contact with it) at all times, except 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. [40 C.F.R. § 60.112b(a)]

35

- 2. 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. [40 C.F.R. § 60.112b(a)(1)(iii)]
- 3. 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. [40 C.F.R. § 60.112b(a)(1)(iv)]
- 4. 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 leg supports. [40 C.F.R. § 60.112b(a)(1)(v)]
- 5. 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. [40 C.F.R. § 60.112b(a)(1)(vi)]
- 6. 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% of the opening. [40 C.F.R. § 60.112b(a)(1)(vii)]
- 7. 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. [40 C.F.R. § 60.112b(a)(1)(viii)]
- 8. Each penetration of the internal floating roof that allows for passage of a ladder shall have a gasketed sliding cover. [40 C.F.R. § 60.112b(a)(1)(ix)]
- B. Inspections
  - 1. Cold Brook shall visually inspect the internal floating roof and the primary seal through manholes and roof hatches on the fixed roof at least once every 12 months. If the internal floating roof is not resting on the surface of the liquid 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 the 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. Such a request for an extension must document that alternate storage capacity is unavailable and specify a schedule of actions Cold Brook will take that will assure that the control equipment will be repaired or the vessel will be emptied as soon as possible. [40 C.F.R. § 60.113b(a)(2)]

36

- 2. Cold Brook shall visually inspect each internal floating roof, primary seal, secondary seal, gaskets, slotted membranes, and sleeve seals (if any) each time Tank #9 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% 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. In no event shall inspections conducted in accordance with this provision occur at intervals greater than 10 years. [40 C.F.R. § 60.113b(a)(4)]
- C. Notifications

Cold Brook shall notify the Department in writing at least 30 days prior to refilling Tank #9 after it has been emptied and degassed and an inspection performed to afford the Department the opportunity to have an observer present. If the inspection of Tank #9 was not planned and Cold Brook could not have known about it 30 days in advance, Cold Brook shall notify the Department at least 7 days prior to refilling Tank #9. Notification shall be made by telephone to the Department's regional inspector immediately followed by written documentation demonstrating why the inspection was unplanned. Alternatively, the notification may be made in writing provided it is received by the Department at least 7 days prior to refilling. [40 C.F.R. § 60.113b(a)(5)]

- D. Recordkeeping and Reporting
  - 1. Cold Brook shall keep a record of each inspection performed as required by 40 C.F.R. §§ 60.113b(a)(2) 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. § 60.115b(a)(2)]
  - 2. If any of the conditions described in 40 C.F.R. § 60.113b(a)(2) are detected during the annual visual inspection, Cold Brook shall submit a report to the Department and EPA within 30 days of the inspection. The report shall identify the storage vessel, the nature of the defects, and the date the storage vessel was emptied or the nature of and date the repair was made. Cold Brook shall submit these reports in PDF format via the Compliance and Emissions Data Reporting Interface (CEDRI),

which can be accessed through EPA's Central Data Exchange (<u>https://cdx.epa.gov</u>) following the procedures specified in 40 C.F.R. § 60.115b(e). [40 C.F.R. § 60.115b(a)(3)]

3. Cold Brook shall keep readily accessible records showing the dimension of Tank #9 and an analysis showing its capacity. [40 C.F.R. § 60.116b(b)]

37

4. Cold Brook shall maintain for Tank #9 a record of the product stored, the period of storage, and the maximum true vapor pressure of the product during the storage period. [40 C.F.R. § 60.116b(c)]

# (20) 40 C.F.R. Part 60, Subpart XX Requirements

Cold Brook shall comply with all applicable requirements of the most current version of 40 C.F.R. Part 60, Subpart XX, including, but not limited to, the following:

# A. Standards

- 1. The Loading Rack shall be equipped with a vapor collection system designed to collect the total organic compound vapors displaced from the tank trucks during product loading. [40 C.F.R. § 60.502(a) and 06-096 C.M.R. ch. 112, § 3(B)]
- 2. Emissions to the atmosphere from the VCU are not to exceed 35 milligrams of total organic compounds per liter of gasoline loaded. [40 C.F.R. § 60.502(b)]
- The VCU shall be designed to prevent any total organic compounds vapors collected at one loading rack from passing to another loading rack.
   [40 C.F.R. § 60.502(d)]
- 4. Loading of liquid product into gasoline tank trucks shall be limited to vapor-tight gasoline trucks using the procedures outlined in 40 C.F.R. § 60.502(e).
- 5. Cold Brook shall act to assure that loading of gasoline tank trucks at the facility are made only into tanks equipped with vapor collection equipment that is compatible with the terminal's vapor collection system. [40 C.F.R. § 60.502(f)]
- 6. Cold Brook shall act to assure that the terminal's and the tank truck's vapor collection systems are connected during each loading of a gasoline tank truck at the affected facility. Examples of actions to accomplish this include training drivers in the hookup procedures and posting visible reminder signs at the affected loading racks. [40 C.F.R. § 60.502(g)]
- 7. The vapor collection and liquid loading equipment shall be designed and operated to prevent gauge pressure in the delivery tank from exceeding 4,500 pascals (450 mm of water) during product loading. [40 C.F.R. § 60.502(h)]

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

# B. Recordkeeping

Cold Brook shall keep records of monthly leak inspections required by 40 C.F.R. § 60.502(j) pursuant to 40 C.F.R. §§ 60.505(c) and (e).

# (21) 40 C.F.R. Part 63, Subpart BBBBBB Requirements

Cold Brook shall comply with all applicable requirements of the most current version of 40 C.F.R. Part 63, Subpart BBBBBB, including, but not limited to, the following:

- 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 40 C.F.R. Part 63, Subpart BBBBBB, and shall remain subject to those requirements even if daily gasoline throughput later falls below 250,000 gallons per day. [40 C.F.R. § 63.11081(f)]

Cold Brook shall notify the Department of such an event in the first semiannual report required to be submitted after it occurs. [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 Table 2, Row 1 of 40 C.F.R. Part 63, Subpart BBBBBB no later than three years after the facility becomes subject to the requirements. [40 C.F.R. § 63.11083(c)]
- 3. Cold Brook must, at all times, operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require Cold Brook to make any further efforts to reduce emissions if levels required by the applicable standard have been achieved. Determination of whether a source is operating in

compliance with operation and maintenance requirements will be based on information available to the Department which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. [40 C.F.R. § 63.11085(a)]

39

- 4. Cold Brook shall not allow gasoline to be handled in a manner that would result in vapor releases to the atmosphere for extended periods of time. Measures to be taken include, but are not limited to, the following:
  - a. Minimize gasoline spills;
  - b. Clean up spills as expeditiously as practicable;
  - c. Cover all open gasoline containers and all gasoline storage tank fill-pipes with a gasketed seal when not in use; and
  - d. Minimize gasoline sent to open waste collection systems that collect and transport gasoline to reclamation and recycling devices, such as oil/water separators.

[40 C.F.R. § 63.1185(b)]

B. Emission Limits and Management Practices for Storage Tanks

Tanks #9, #66, and #90 are IFR gasoline storage tanks with capacities greater than  $151 \text{ m}^3$  (39,890 gallons) each. They will be referred to collectively as tanks in gasoline service. Tank #44 is also an IFR tank, however, it does not currently store gasoline. If Cold Brook chooses to store gasoline in Tank #44, it will also become a tank in gasoline service.

- 1. Tanks in gasoline service shall comply with the requirements described below:
  - a. Each IFR shall be equipped with either a liquid-mounted seal or a mechanical shoe seal. [40 C.F.R. § 60b.112(a)(1)(ii)]
  - b. Each IFR shall float on the stored liquid surface at all times, except during intervals when the storage vessel is completely emptied or subsequently emptied and refilled. [40 C.F.R. § 60b.112(a)(1)(i)]
  - c. When the roof is resting on the leg supports, the process of filling, emptying, or refilling shall be continuous and shall be accomplished as rapidly as possible. [40 C.F.R. § 60b.112(a)(1)(i)]
  - d. Each opening in a noncontact internal floating roof except for automatic bleeder vents (vacuum breaker vents) and the rim space vents shall provide a projection below the liquid surface. [40 C.F.R. § 60b.112(a)(1)(iii)]
- 2. No later than May 8, 2027, Cold Brook shall equip, maintain, and operate each IFR control system to maintain the vapor concentration with the storage tank above the floating roof at or below 25% of the lower explosion limit (LEL) on a 5-minute

rolling average basis without the use of purge gas. [40 C.F.R. § 63.11083(d)(2) and Table 1, Row 2(c)]

40

- C. Storage Tank Inspections
  - 1. Cold Brook shall perform inspections of the IFR systems according to the requirements of 40 C.F.R. § 60.113b(a) as described below. [40 C.F.R. § 63.11092(f)(1)(i)]
    - a. At least once every 12 months, Cold Brook shall visually inspect the internal floating roof and the rim seal through manholes and roof hatches on the fixed roof. Any of the following conditions constitutes a failure in the integrity of the internal floating roof system.
      - (1) The internal floating roof is not resting on the surface of the product inside the tank;
      - (2) There is liquid accumulated on the roof;
      - (3) The seal is detached; or
      - (4) There are holes or tears in the seal fabric.
      - [40 C.F.R. § 60.113b(a)(2)]

Note: Cold Brook is subject to a requirement in 06-096 C.M.R. ch. 111 to conduct monthly visual inspections of each tank in gasoline service. The Department has determined that the methods used by § 63.113b(a)(2) are more stringent than those required by 06-096 C.M.R. ch. 111. Therefore, an annual inspection conducted to comply with Subpart BBBBBB will be considered equivalent to one monthly inspection to comply with 06-096 C.M.R. ch. 111, i.e., Cold Brook is not required to conduct two separate tank inspections in the same month provided the more stringent methods are used.

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

- (2) If the seals have holes, tears, or other openings in the seal or seal fabric;
- (3) Gaskets no longer close off the liquid surfaces from the atmosphere; or
- (4) The slotted membrane has more than 10% open area.

41

- [40 C.F.R. § 113b(a)(4)]
- No later than May 8, 2027, Cold Brook shall conduct LEL monitoring according to the provisions of 40 C.F.R. § 63.425(j) as described below. [40 C.F.R. §§ 63.11087(g) and 63.11092(f)(1)(ii)]
  - a. Cold Brook shall conduct LEL monitoring at least once every 12 months. If the measurement cannot be performed due to wind speeds exceeding those specified in § 63.425(j)(3)(iii), the measurement must be performed within 30 days of the previous attempt. [40 C.F.R. § 63.425(j)(1)]
  - b. Cold Brook shall check the calibration of the LEL meter per manufacturer specifications immediately before and after the measurements as specified in §§ 63.425(j)(2)(i) and (ii). If tubing will be used for the measurements, the tubing must be attached during calibration so that the calibration gas travels through the entire measurement system. Any tubing used must be non-crimping and made of Teflon or other inert material. [40 C.F.R. §§ 63.425(j) and (j)(2)]
  - c. Cold Brook shall conduct measurements as specified below.
    - (1) Measurements of the vapors within the IFR storage vessel shall be collected no more than 3 feet above the IFR.
    - (2) Measurements shall be taken for a minimum of 20 minutes, logging the measurements at least once every 15 seconds, or until one 5-minute average as determined according to § 63.425(j)(5)(ii) exceeds 25% of the LEL without the use of purge gas.
    - (3) Measurements shall be taken when the wind speed at the top of the tank is 5 mph or less to the extent practicable, but in not case shall measurements be taken when the sustained wind speed is greater than the annual average wind speed at the site or 15 mph, whichever is less.
    - (4) Measurements should be conducted when the IFR is floating with limited product movement (limited filling or emptying of the tank).[40 C.F.R. § 63.425(j)(3)]
  - d. Cold Brook shall use the methods in 40 C.F.R. §§ 425(j)(4) and (5) to determine the actual vapor concentration within the storage vessel and calculate the 5-minute rolling average to demonstrate compliance with the emission limit in Subpart BBBBBB, Table 1, Row 2(c).

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

42

D. Emission Limits and Management Practices for the Loading Rack

Cold Brook shall use the following management practices when filling gasoline and/or ethanol cargo tanks at the Loading Rack:

- 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. [40 C.F.R. § 63.11088(a) and Table 2, Row 2(a)]
- 2. 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. [40 C.F.R. § 63.11088(a) and Table 2, Row 2(b)]
- 3. No later than May 8, 2027, Cold Brook shall limit the loading of gasoline into gasoline cargo tanks that are vapor tight using the following procedures as specified in 40 C.F.R. § 60.502a(e).
  - a. Cold Brook shall obtain the vapor tightness annual certification test documentation for each gasoline cargo tank which is to be loaded at the Loading Rack. If Cold Brook does not know the previous contents of the cargo tank, it must assume that cargo tank is a gasoline cargo tank.
  - b. Cold Brook shall obtain and record the cargo tank identification number of each gasoline cargo tank which is to be loaded at the Loading Rack.
  - c. Cold Brook shall cross-check each cargo tank identification number with the file of gasoline cargo tank vapor tightness documentation described in (a) prior to loading any liquid product into the gasoline cargo tank.
- E. Equipment Leak Inspections

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

Cold Brook shall comply with the following until it has begun complying with the requirements of paragraph (2) below. The requirements of this paragraph (1) do not apply when demonstrating compliance with paragraph (2).
 [40 C.F.R. §§ 63.11089(b) and (c)]

a. Cold Brook shall perform a monthly leak inspection of all equipment in gasoline service. For this inspection, detection methods incorporating sight, sound, and smell are acceptable. [40 C.F.R. § 63.11089(b)]

43

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

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

- a. Cold Brook shall conduct leak detection monitoring of all pumps, valves, and connectors in gasoline service using either of the methods specified below:
  - Use optical gas imaging (OGI) to annually monitor all pumps, valves, and connectors in gasoline service as specified in 40 C.F.R. § 60.503a(e)(2) or
  - (2) Use 40 C.F.R. Part 60, Appendix A, Method 21 as specified in 40 C.F.R. §§ 60.503a(e)(1) and 60.502(j)(1)(ii)(A) through (C) except that monitoring shall be conducted annually instead of quarterly.
    [40 C.F.R. § 60.502a(j)(1)]
- b. During normal duties, Cold Brook shall record leaks identified by audio, visual, or olfactory methods.[ 40 C.F.R. § 60.502a(j)(2)]
- c. Cold Brook shall conduct instrument monitoring pursuant to paragraph (a) above of each pressure relief device annually and within five calendar days after each pressure release. [40 C.F.R. § 60.502a(j)(4)(i)]

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

44

- (1) Each open-ended valve or line shall be equipped with a cap, blind flange, plug, or a second valve, except for:
  - (i) Open-ended valves or lines in an emergency shutdown system which are designed to open automatically in the event of a process upset; or
  - (ii) Open-ended valves or lines containing materials which would autocatalytically polymerize or would present an explosion, serious overpressure, or other safety hazard if capped or equipped with a double block and bleed system.
  - [40 C.F.R. §§ 60.482-6a(a), (d), and (e)]
- (2) Each open-ended valve or line equipped with a second valve shall be operated in a manner such that the valve on the process fluid end is closed before the second valve is closed. [40 C.F.R. § 60.482-6a(b)]
- (3) When a double block-and-bleed system is being used, the bleed valve or line may remain open during operations that require venting the line between the block valves but shall comply with paragraph (1) above. [40 C.F.R. § 60.482-6a(c)]
- e. A leak is detected if any of the following occurs:
  - Emissions are observed when using OGI;
  - An instrument reading of 10,000 ppm or greater when using Method 21; or
  - Evidence of a potential leak is found at any time by audio, visual, olfactory, or any other detection method for any equipment in gasoline service.

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

- (1) Cold Brook shall attach a weatherproof and readily visible identification, marked with the equipment identification number, to the leaking equipment. The identification on equipment may be removed after it has been repaired.
- (2) An initial attempt at repair shall be made as soon as practicable, but no later than five calendar days after the leak is detected. An initial attempt at repair is not required if the leak is detected using OGI and the equipment identified as leaking would require elevating the repair personnel more than two meters above a support surface.

Cold Brook Energy, Inc. Penobscot County Hampden, Maine A-542-71-I-M

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

45

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

Note: Regardless of the requirements of Subpart BBBBBB, Standard Condition (8) requires records to be maintained for a minimum of six years.

- 1. Cold Brook shall keep records as specified in 40 C.F.R. § 60.115b for the visual inspections conducted pursuant to § 60.113b(a) except that records shall be kept for at least five years. [40 C.F.R. § 63.11094(a)] The following information shall be included in the inspection records:
  - a. Identification of the storage vessel that was inspected;
  - b. The date of the inspection; and
  - c. The observed condition of each component of the control equipment (seals, IFR, and fittings).
  - [40 C.F.R. § 60.115b(a)(2)]

- 2. No later than May 8, 2027, Cold Brook shall keep records of each annual LEL monitoring event that includes the information in 40 C.F.R. §§ 63.11094(a)(2)(i) through (ix). [40 C.F.R. § 63.11094(a)(2)]
- 3. No later than May 8, 2027, Cold Brook shall keep records in either hardcopy or electronic form of the test results for each gasoline cargo tank loading at the facility as specified in 40 C.F.R. §§ 63.11094(b)(1) through (3). Records shall be kept for a minimum of 5 years. [40 C.F.R. § 63.11094(b)]
- 4. 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(c)]
- 5. For equipment leak inspections conducted pursuant to § 63.11089(b) (i.e., inspections conducted using sight, sound, and smell), Cold Brook shall record in the logbook for each leak that is detected the information specified in 40 C.F.R. §§ 63.11094(d)(1) through (7). [40 C.F.R. § 63.11094(d)]
- No later than May 8, 2027, Cold Brook shall maintain records of each leak inspection and leak identified under 40 C.F.R. § 63.11089(c) (i.e., OGI or Method 21 inspections) as specified in 40 C.F.R. §§ 63.11094(e)(1) through (5). [40 C.F.R. § 63.11094(e)]
- 7. Cold Brook shall maintain records for at least five years of each instance when liquid product was loaded into gasoline cargo tanks not using submerged filling, or, if applicable, not equipped with vapor collection or balancing equipment that is compatible with the terminal's vapor collection system. These records shall include at a minimum:
  - a. Date and time of liquid product loading into gasoline carbo tank not using submerged filling, improperly equipped, or improperly connected;
  - b. Type of deviation (e.g., not submerged filling, incompatible equipment, not properly connected); and
  - c. Cargo tank identification number.
  - [40 C.F.R. § 63.11094(i)]
- 8. Cold Brook shall keep the following records for each deviation of an emissions limitation (including operating limit), work practice standard, or operation and maintenance requirement.
  - a. Date, start time, and duration of each deviation;
  - b. List of the affected sources or equipment for each deviation, an estimate of the quantity of each regulated pollutant emitted over any emission limit and a description of the method used to estimate emissions; and

- c. Actions taken to minimize emissions in accordance with § 63.11085(a) (i.e., general duty to minimize emissions).
  [40 C.F.R. § 63.11094(k)]
- 9. Cold Brook shall maintain records of the average gasoline throughput (in gallons per day) for at least 5 years. [40 C.F.R. § 63.11094(1)]
- G. Reporting
  - 1. Prior to May 8, 2027, Cold Brook shall submit to the Department and EPA semiannual compliance reports with the following information, as applicable. [40 C.F.R. § 63.11095(c)]
    - a. If any conditions that constitute a failure in the integrity of the IFR system are detected during an inspection of an IFR, Cold Brook shall submit a report to the Department and EPA. The report shall identify the storage vessel, the nature of the defect(s), and the date the storage vessel was emptied or the nature of the repair and date the repair was made. [40 C.F.R. § 60.115b(a)(3)]
    - b. For the Loading Rack, each loading of a gasoline cargo tank for which vapor tightness documentation had not been previously obtained by the facility.
    - c. For equipment leak inspections, the number of equipment leaks not repaired within 15 days after detection.
  - 2. On and after May 8, 2027, Cold Brook shall submit to the Department and EPA semiannual compliance reports that contain the information in 40 C.F.R. §§ 63.11095(d)(1) and (4) through (9), as applicable. [40 C.F.R. § 11095(d)]
  - 3. Cold Brook shall submit semiannual compliance reports to the Department and EPA with the information outlined in paragraphs (a) and (b) above according to the requirements of 40 C.F.R. § 63.13. Beginning May 8, 2027, or once the report template for Subpart BBBBBB has been available on the CEDRI website for one year, whichever date is later, Cold Brook shall submit all subsequent semiannual compliance reports using the appropriate electronic report template on the CEDRI website and following the procedure specified in 40 C.F.R. § 63.9(k), except any medium submitted through mail to EPA must be sent to the attention of the Gasoline Distribution Sector Lead. The date report templates become available will be listed on the CEDRI website. [40 C.F.R. § 11095(e)]

#### Following are requirements not addressed elsewhere.

### (22) 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. [06-096 C.M.R. ch. 115, BPT]

48

- B. Compliance with the annual VOC and HAP emission limits shall be demonstrated through the recordkeeping outlined below with calculations of emissions performed at least once annually. Additional calculation of emissions to demonstrate compliance with these limits shall be performed upon request by the Department. [06-096 C.M.R. ch. 115, BPT]
- C. Cold Brook shall maintain the following records showing the following information for each of the petroleum storage tanks: [06-096 C.M.R. ch. 115, BPT]
  - 1. Quantity and type of petroleum liquid stored in each tank on a daily basis;
  - 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 in accordance with the most current version of AP-42 or other alternative method 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.
- 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]

# (23) Loading Rack and Vapor Combustion Unit

- A. Control Requirements
  - Cold Brook shall not allow loading of gasoline into tank trucks and trailers unless they have been certified pursuant to 40 C.F.R. Part 60, Appendix A, Method 27 and labeled as specified in 06-096 C.M.R. ch. 120, § 3(A)(2). [06-096 C.M.R. ch. 120, § 3(A)]

- 2. Loading of liquid product into gasoline tank trucks shall be limited to vapor-tight gasoline trucks that have been certified within the last 12 months as vapor-tight pursuant to 06-096 C.M.R. ch. 120. [06-096 C.M.R. ch. 112, § 3(A)]
- All loading and vapor lines shall be equipped with fittings which make vapor-tight connections and which close automatically when disconnected. [06-096 C.M.R. ch. 112, § 3(D)]
- 4. The vapor control system at the Loading Rack shall be designed and operated such that during loading operations:
  - a. The tank compartments of the tank truck shall not be subjected to a gauge pressure exceeding 18 inches of water or a vacuum exceeding 6 inches of water;
  - b. Readings equal to or greater than 100% of the lower explosion limit (LEL) shall not be obtained within 1 inch around any potential leak source of the tank truck including all loading couplings and vapor lines and fittings employed in transferring gasoline to the tank truck; and
  - c. There shall be no visible or audible liquid or vapor leaks in the vicinity of the Loading Rack.

[06-096 C.M.R. ch. 120, § 3(C)]

- 5. If the vapor collection system exceeds any of the limits listed in (9) above, Cold Brook shall repair and retest the system within fifteen days. Records of all repairs and retests shall be maintained and available for inspection by the Department during normal business hours, and copies shall be provided to the Department upon request. [06-096 C.M.R. ch. 120, § 3(D)]
- 6. The pressure in the vapor collection system shall not exceed the tank truck pressure relief settings. [06-096 C.M.R. ch. 112, § 3(E)]
- 7. Cold Brook shall prevent liquid drainage from the loading device when it is not in use. [06-096 C.M.R. ch. 112, § 3(C)]
- Gasoline shall not be discarded in sewers, stored in open containers, or otherwise handled in any manner that would result in evaporation. [06-096 C.M.R. ch. 112, § 3(E)]
- B. Emission Standards and Testing Requirements
  - 1. Emissions from the VCU shall not exceed the following [06-096 C.M.R. ch. 115, BPT]:

Unit	PM	PM10	SO2	NOx	CO	VOC
	(lb/hr)	(lb/hr)	(lb/hr)	(lb/hr)	(lb/hr)	(lb/hr)
VCU	Negl.	Negl.	Negl.	0.57	2.28	5.0

2. Cold Brook shall not allow the mass emissions of VOC from the Loading Rack to exceed the emission limit of 35 milligrams per liter of gasoline and/or ethanol transferred. 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 and 06-096 C.M.R. ch. 112, §§4 and 6]

50

- Cold Brook shall conduct an annual compliance test of the vapor combustion unit between May 1<sup>st</sup> and October 1<sup>st</sup> 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 35 mg/l emission limit for the Loading Rack. [06-096 C.M.R. ch. 115, BPT]
- C. Recordkeeping

Cold Brook shall record and maintain the following records for the Loading Rack and VCU:

- 1. Gallons of throughput at the loading rack for each product on a monthly and 12-month rolling total basis; [06-096 C.M.R. ch. 137]
- 2. For each exceedance of the operational limits in 06-096 C.M.R. ch. 120, records of all repairs and retests of the vapor control system; [06-096 C.M.R. ch. 120, § 3(D)] and
- 3. Records of any maintenance activities performed (planned or unplanned) on the VCU. [06-096 C.M.R. ch. 115, BPT]

# (24) **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, type, and maximum true vapor pressure of volatile petroleum liquids in each tank and the period of storage.

#### (25) Gasoline and Ethanol Storage Tanks

- A. Notifications
  - 1. Cold Brook shall notify the Department within 30 days of switching product in any of the IFR tanks, e.g., changing from storing distillate fuel to gasoline. [06-096 C.M.R. ch. 115, BPT]

51

- 2. Cold Brook shall notify the Department at least seven days in advance of any planned degassing event, and as soon as possible for any unplanned degassing event, subject to the requirements of 06-096 C.M.R. ch. 170 and provide the following information:
  - a. Identification of the tank(s) to be degassed;
  - b. Date(s) when degassing will occur;
  - c. A description of the control device to be used and its control effectiveness; and
  - d. The parameters to be monitored during degassing. [06-096 C.M.R. ch. 115, BPT]
- B. All IFR tanks shall be equipped, maintained, and operated such that: [incorporated under 06-096 C.M.R. ch. 115, BPT for tanks storing distillate fuel]
  - 1. There is an IFR with closure seal(s) to reduce visual space between the roof edge and tank wall. [06-096 C.M.R. ch. 111, § 2(A)(1)]
  - 2. The IFR and closure seal(s) are maintained such that there are no visible holes, tears, or other openings in the seal or between the seal and the floating roof; [06-096 C.M.R. ch. 111, § 2(A)(2)]
  - All storage tank openings, except stub drains, are equipped with covers, lids, or seals that shall be closed at all times except when in actual use; [06-096 C.M.R. ch. 111, § 2(A)(3)(a)]
  - 4. Each automatic bleeder vent (vacuum breaker vent) is closed at all times, except when the roof is being floated off or being landed on the roof leg supports; [06-096 C.M.R. ch. 111, § 2(A)(3)(b)]
  - Each rim vent is set to open only when the roof is being floated off the roof leg supports or at the manufacturer's recommended setting. [06-096 C.M.R. ch. 111, § 2(A)(3)(c)]
  - 6. Cold Brook shall not land the roof of a IFR tank, i.e., allow the roof to rest upon its support legs, unless:
    - a. the most recently stored product was distillate oil; or

- b. the tank changes product (e.g., from winter gas to summer gas) and this operation is limited to no more than once per calendar year; or
- c. the tank is subsequently degassed in accordance with 06-096 C.M.R. ch. 170; or

d. Cold Brook is given written approval by the Department. [06-096 C.M.R. ch. 115, BPT]

52

# (26) **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]

# (27) **Fugitive Emissions**

- A. Cold Brook shall not cause emissions of any fugitive dust during any period of construction, reconstruction, or operation without taking reasonable precautions. Such reasonable precautions shall be included in the facility's continuing program of best management practices for suppression of fugitive particulate matter. See 06-096 C.M.R. ch. 101, § 4(C) for a list of potential reasonable precautions.
- B. Cold Brook shall not cause or allow visible emissions within 20 feet of ground level, measured as any level of opacity and not including water vapor, beyond the legal boundary of the property on which such emissions occur. Compliance with this standard shall be determined pursuant to 40 C.F.R. Part 60, Appendix A, Method 22.

[06-096 C.M.R. ch. 101, § 4(C)]

#### (28) **Performance Test Protocol**

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

#### (29) Annual Emission Statements

A. In accordance with *Emission Statements*, 06-096 C.M.R. ch. 137, Cold Brook 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.

Cold Brook Energy, Inc.				
Penobscot County				
Hampden, Maine				
A-542-71-I-M				

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

53

DONE AND DATED IN AUGUSTA, MAINE THIS 10<sup>th</sup> DAY OF DECEMBER, 2024.

DEPARTMENT OF ENVIRONMENTAL PROTECTION BY: for MELANIE LOYZIM, COMMISSIONER

# The term of this license amendment shall be ten (10) years from the issuance of Air Emission License A-542-71-G-R (issued 12/13/2017).

[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:	7/25/2024
Date of application acceptance:	7/25/2024

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