



Connecticut Department of

**ENERGY &
ENVIRONMENTAL
PROTECTION**

**BUREAU OF AIR MANAGEMENT
NEW SOURCE REVIEW PERMIT
TO CONSTRUCT AND OPERATE A STATIONARY SOURCE**

Issued pursuant to Title 22a of the Connecticut General Statutes (CGS) and Section 22a-174-3a of the Regulations of Connecticut State Agencies (RCSA).

Owner/Operator	Buckeye PT Terminals, LP (Waterfront Terminal)
Address	The Buckeye Building, 6161 Hamilton Boulevard, Allentown, PA 18106
Equipment Location	280 Waterfront Street, New Haven, CT 06512
Equipment Description	Gasoline Storage Tank 218
Town-Permit Numbers	117-0384
Premises Number	519
Stack Number	100
Permit Issue Date	August 5, 2022
Expiration Date	None

for 
Katherine S. Dykes
Commissioner

8/5/2022
Date

This permit specifies necessary terms and conditions for the operation of this equipment to comply with state and federal air quality standards. The Permittee shall at all times comply with the terms and conditions stated herein.

PART I. DESIGN SPECIFICATIONS

A. General Description

Buckeye PT Terminals, LP operates a floating roof gasoline storage tank (Tank 218) at their New Haven Waterfront Terminal which is identified as Tank 218. The tank is used to store/distribute "Fuels" such as gasoline (finished and blend stocks) (annual average RVP 13), W Grade Gasoline, Ethanol, Distillate and less volatile products with an annual average RVP of 13 or less and blending of Butane and W Grade Gasoline (AST).

Emissions from the tank occur during routine standing and working losses, tank landings, fuel switching, degassing and cleaning events.

B. Equipment Design Specifications

1. Maximum Storage Capacity (gallons): 5,565,756
2. Tank Height (ft): 48
3. Tank Diameter (ft): 148
4. Tank Distance to Property Line (ft): 190

C. Control Equipment

1. Roof Type: Internal Floating Roof
2. Roof Seal Type: Dual Rim Seals
3. Portable Vapor Combustor Unit (for tank degassing events only)
 - a. Minimum Overall Control Efficiency: 98%

PART II. OPERATIONAL CONDITIONS

A. Equipment

1. The Permittee shall operate and maintain this equipment to ensure that:
 - a. There are no visible holes, tears or other openings in the seal or any seal fabric or materials; [RCSA §22a-174-20(a)(2)(B)(i)]
 - b. All openings except stub drains are equipped with covers, lids or seals such that: [RCSA §§22a-174-20(a)(2)(B)(ii)(I) through (III)]
 - i. The cover, lid or seal is in the closed position at all times except when in actual use;
 - ii. Automatic bleeder vents are closed at all times except when the roof is being floated off or being landed on the roof leg supports; and
 - iii. Rim vents, if provided, are set to open to the manufacturer's recommended setting when the roof is floated off the roof leg supports or cables.

- c. All tank gauging and sampling devices are vapor-tight except when tank gauging or sampling is taking place; and [RCSA §22a-174-20(a)(2)(B)(iii)]
 - d. No liquid accumulates on the top of the floating roof.
[RCSA §22a-174-20(a)(2)(B)(iv)]
2. Tank Degassing events:
 - a. “Degassing” means “degassing” as defined in RCSA §22a-174-20(a)(1)(C).
 - b. The Permittee shall not perform degassing of this tank during the period from June 1 through August 31 of any calendar year except that the Permittee may degas this tank at any time for the purpose of performing a repair that is necessary for safe and proper function of the tank.
[RCSA §§22a-174-20(a)(9)(A) and (B)]
 - c. When this tank contains any VOC with a vapor pressure greater than 0.75 pounds per square inch or greater under standard conditions, the Permittee shall utilize an air pollution control device(s) having an overall minimum control efficiency of 98 percent by weight to control the VOC and organic HAP vapor emissions from the storage tank for the duration of the degassing event.
 - d. In conducting any degassing activities, the Permittee shall not open the interior vapor space of the tank to the atmosphere through a hatch or manway until the degassing event is complete, except for the limited time necessary to connect or disconnect degassing equipment or to conduct tank contents or emissions sampling or to facilitate removal of gasoline vapors/liquids from the tank to the control device. Notwithstanding the terms of this Paragraph, the Permittee shall not be precluded from introducing liquids to or removing liquids from the tank
3. If any piping, valves, vents, seals, gaskets or covers of roof openings are found to have defects or visible gaps, the Permittee shall:
[RCSA §§22a-174-20(a)(4)(A) through (C)]
 - a. If the tank is not storing liquid, complete repairs or replacements prior to filling the tank;
 - b. If the tank is storing liquid, complete repairs or replacements or remove the tank from service within 45 days after discovery of the defect or visible gap. If the Permittee anticipates that a repair or replacement cannot be completed or the tank emptied within such 45 day period, the Permittee shall make repairs or completely empty the tank as soon as possible; and
 - c. Any evidence of leakage shall also be treated as a malfunction of control equipment as described in RCSA §22a-174-7.
4. Upon the next painting of the tank or by March 7, 2024, whichever is sooner, the external surface of the tank shall be either mill-finished aluminum or painted and maintained white. The requirement to use mill-finished aluminum or white paint shall not apply to words and logograms applied to the external surface of the storage tank for purposes of identification provided such symbols do not cover more than 20 percent of the external surface area of the tank’s sides and top or more than 200 square feet (18.6 square meters), whichever is less. [RCSA §22a-174-20(a)(7)]
5. When performing a roof landing, the Permittee shall:
[RCSA §22a-174-20(a)(8)]

- a. When the roof is resting on its leg supports or suspended by cables or hangers, empty and refill the tank as a continuous process; and
 - b. After the tank is degassed for the first time, any in-service roof landing shall be with the landed height of the floating roof at its minimum setting.
6. The Permittee shall clean the tank using one or more of the following methods: [RCSA §§22a-174-20(a)(9)(C)(i) through (ii)]
- a. Using any of the following cleaning agents:
 - i. Diesel fuel;
 - ii. A solvent with an initial boiling point of greater than 302 degrees Fahrenheit;
 - iii. A solvent with a vapor pressure less than 0.5 pounds per square inch;
 - iv. A solvent with 50 grams per liter VOC content or less; or
 - v. Another cleaning agent approved by the commissioner and the Administrator.
 - b. Steam cleaning
7. Between May 1 and September 15, the Permittee shall not offer for sale, sell or deliver to any dispensing facility in Connecticut gasoline with a Reid Vapor Pressure in excess of 9.0 pounds per square inch. [RCSA §22a-174-20(a)(11)]

PART III. ALLOWABLE EMISSION LIMITS

The Permittee shall not cause or allow this equipment to exceed the emission limits stated herein at any time.

A. Criteria Pollutants

Pollutant	tpy
VOC	14.9

B. Hazardous Air Pollutants

- 1. This equipment shall not cause an exceedance of the Maximum Allowable Stack Concentration (MASC) for any hazardous air pollutant (HAP) emitted and listed in RCSA Section 22a-174-29. [STATE ONLY REQUIREMENT]
- 2. The premises-wide emissions of all Federal Hazardous Air Pollutants (HAP), as listed in section 112(b) of the Clean Air Act and 40 CFR 63 Subpart C (as amended from time to time), shall not equal or exceed 10 TPY for any individual HAP or 25 TPY for all HAP in aggregate.

- C.** Demonstration of compliance with the above emission limit may be met by calculating the emission rates using emission factors for *Internal Floating Roof Tanks with Liquid Heel* as defined in AP-42, Fifth Edition, Volume I Chapter 7: Liquid Storage Tanks (June 2020) for the following modes of operation:

1. Routine Standing and Working Losses
2. Roof Landing/Fuel Switching
3. Tank Degassing/Cleanings

The commissioner may require other means (e.g. stack testing) to demonstrate compliance with the above emission limits, as allowed by state or federal statute, law or regulation.

PART IV. MONITORING, RECORD KEEPING AND REPORTING REQUIREMENTS

A. Monitoring

1. The Permittee shall monitor the amount of gasoline throughput in gallons using either rack meters or tank gauging.
2. The Permittee shall conduct the following inspections as follows:
 - a. Once per month visually inspect the floating roof deck, deck fittings and rim seal system through the roof hatches of the fixed roof to determine compliance with the requirements of Part II.A.1 of this permit.
 - b. Whenever the tank is emptied and degassed, but no less than once every 10 years, the Permittee shall conduct an inspection from within the tank by:
[RCSA §§22a-174-20(a)(3)(B)(i) through (ii)]
 - i. Visually inspecting the floating roof deck, deck fittings and rim seal system to determine compliance with the requirements in Part II.A.1 of this permit; and
 - ii. Physically measuring the gaps between any deck fitting gasket, seal or wiper and any surface that such gasket, seal or wiper is intended to seal. Gaps shall not exceed 0.125 inches.
 - c. When using a control device, the Permittee shall:
 - i. Not intentionally bypass control device; and
 - ii. Ensure there are no avoidable leaks by sight or sound.
 - d. The inspection specified in Part IV.A.2.b. of this permit may be performed entirely from the top side of the floating roof as long as there is visual access to all deck components specified in Part II.A.1 of this permit.
[RCSA §22a-174-20(a)(3)(C)]

B. Record Keeping

1. The Permittee shall keep records of the monthly gasoline throughput for the tank.
2. The Permittee shall calculate and record the monthly and consecutive 12 month VOC and speciated HAP emissions from the tank in units of tons. Emissions shall be the sum of standing losses, working losses, and any other events that generate emissions. The consecutive 12 month emissions shall be determined by adding the current month's emissions to that of the previous 11 months. Such records shall include a detailed sample calculation. The Permittee shall make these calculations within 30 days of the

end of the previous month.

3. The Permittee shall calculate and record the monthly and consecutive 12 month speciated HAP and total HAP emissions from the premises in units of tons. The consecutive 12 month emissions shall be determined by adding the current month's emissions to that of the previous 11 months for the premises.
4. The Permittee shall keep material safety data sheets (MSDS) or technical data sheets (TDS) or Safety Data Sheets (SDS) for each fuel stored. Such information shall include the quantity and type of each hazardous air pollutant contained in the fuel. For paperwork reduction, these sheets may be kept on computer file in electronic form, access to above paperwork requirement may also be allowed via internet on-demand.
5. The Permittee shall make and keep records of when this tank is degassed and shall include the following information:
 - a. Identification of the facility and tank degassed;
 - b. Identification of the VOC stored;
 - c. An explanation of the need to degas the tank;
 - d. The date the Permittee determined that degassing would be necessary;
 - e. The dates that the degassing commenced and was completed;
 - f. The date that inspection, repair and refilling was or is anticipated to be completed;
 - g. Records of the outlet VOC emissions in mass, determined by calculating uncontrolled emissions using AP-42 Chapter 7 methodologies, and then applying an overall control efficiency of the lesser of: 98% or the control efficiency reported by the vendor for the VCU during the degassing operation; and
 - h. A copy of the most recent stack test for the VCU provided by the vendor.
6. The Permittee shall maintain records of the following information:
[RCSA §§22a-174-20(a)(10)(B)(i) through (viii)]
 - a. For a tank equipped with a vapor loss control device specified in RCSA §22a-174-20(a):
 - i. Type of VOC stored, vapor pressure and monthly throughput;
 - ii. A Material Safety Data Sheet or Environmental Data Sheet for each VOC stored; and
 - iii. Records of the inspections conducted under RCSA §22a-174-20(a)(3) including, but not limited to, date of the inspection, results and corrective actions taken, if applicable;
 - b. Documentation of control device used for tank cleanings and degassing events to include the destruction and capture efficiency, if applicable, using an

- applicable EPA reference method or alternate method as approved by the commissioner and the Administrator;
- c. Date and type of maintenance performed on air pollution control equipment, if applicable;
 - d. Documentation of any leak detected pursuant to subdivision RCSA §22a-174-20(a)(4), including, but not limited to, the date the leak was detected, location of the leak, type of repair made and the date of repair and explanation of the reason for delaying repair, if applicable;
 - e. For each floating roof landing event, the tank contents before landing and after refilling, landed height of the floating roof, height of any liquid remaining in the bottom of the tank after landing, duration of landing and landing emissions calculated using AP-42 Chapter 7 methodology;
 - f. Dates of all tank degassing activities performed pursuant to subparagraphs RCSA §§22a-174-20(a)(9) (A) or (B);
 - g. Date, cleaning method and cleaning agents used for any cleaning performed pursuant to RCSA §22a-174-20(a)(9)(C); and
 - h. Any approval by the commissioner or Administrator issued pursuant to this subsection.
7. In addition to the requirement of RCSA §22a-174-4, the commissioner may require the Permittee to provide records of the analysis of gasoline samples to determine compliance with the provisions of RCSA §22a-174-20(a)(11) and Part II.A.7 of this permit. [RCSA §22a-174-20(a)(12)]
- a. Samples to be analyzed for Reid Vapor Pressure shall be collected and handled to the applicable procedures in American Society for Testing and Materials method D5842-95(2000), "Standard Practice for Sampling and Handling of Fuels for Volatility Measurement." [RCSA §22a-174-20(a)(13)]
 - b. Reid Vapor Pressure (RVP) shall be determined using American Society for Testing and Materials method D5191-07(2007), except that the following correlation shall be used: $RVP \text{ psi} = (0.956 * X) - 0.347$. [RCSA §22a-174-20(a)(14)]
8. The Permittee shall keep all records required by this permit for a period of no less than five years and shall submit such records to the commissioner upon request.

C. Reporting

1. If the Permittee anticipates that a repair or replacement cannot be completed or the tank cannot be emptied within 45 days after discovery of a defect or visible gap, pursuant to RCSA §22a-174-20(a)(4)(B), the Permittee shall notify the commissioner prior to the end of such 45 day period. [RCSA §22a-174-20(a)(4)(B)]
2. The Permittee shall notify the commissioner when this tank is emptied and degassed within 72 hours of completing the degassing.
3. The Permittee shall notify the commissioner in accordance with the applicable requirements found in RCSA §22a-174-7(e).
4. All notifications shall be submitted to the Compliance Assistance and Coordination Unit of the Bureau of Air Management.

PART V. STACK EMISSION TEST REQUIREMENTS

No stack testing required at this time.

PART VI. OPERATION AND MAINTENANCE REQUIREMENTS

- A.** The Permittee shall operate and maintain this equipment in accordance with the manufacturer's specifications and written recommendations.
- B.** The Permittee shall properly operate the control equipment at all times that this equipment is in operation and emitting air pollutants.

PART VII. SPECIAL REQUIREMENTS

- A.** The Permittee shall comply with all applicable sections of the following New Source Performance Standard(s) at all times.

Title 40 CFR Part 60, Subpart Kb and A

Copies of the Code of Federal Regulations (CFR) are available online at the U.S. Government Printing Office website.

- B.** The Permittee shall comply with all applicable sections of the following National Emission Standards for Hazardous Air Pollutants at all times.

Title 40 CFR Part 63, Subpart BBBBBB and A

Copies of the Code of Federal Regulations (CFR) are available online at the U.S. Government Printing Office website.

C. Premises Emissions Summary

- 1. On January 1st of each calendar year, if the potential emissions of NO_x and/or VOC from the premises are equal to or greater than 25 tons per year per pollutant, then for such pollutant(s), the Permittee shall:
 - a. Monitor NO_x and/or VOC emissions, as applicable, from the premises for such calendar year.
 - b. Calculate and record annual NO_x and/or VOC emissions, as applicable, from the premises for such calendar year, in units of tons. The Permittee shall make these calculations on or before February 1st of the following year with respect to the previous calendar year. Such records shall include a sample calculation(s).
 - c. If actual NO_x and/or VOC emissions, as applicable, from the premises are equal to or greater than 25 tons for such calendar year, the Permittee shall submit to the commissioner, on or before March 1st of the following year, an annual emissions summary with respect to the premises for the previous calendar year. Such summary shall be submitted on forms prescribed or provided by the commissioner.

2. A Permittee is exempt from Part VII.C.1 requirements of this permit if, on January 1st of the subject year, the premises was operating in accordance with any of the following:
 - a. A valid Title V permit issued pursuant to RCSA section 22a-174-33;
 - b. RCSA section 22a-174-33a; or
 - c. RCSA section 22a-174-33b.
- D. The Permittee shall not cause or permit the emission of any substance or combination of substances which creates or contributes to an odor beyond the property boundary of the premises that constitutes a nuisance as set forth in RCSA Section 22a-174-23. [STATE ONLY REQUIREMENT]
- E. The Permittee shall operate this facility at all times in a manner so as not to violate or contribute significantly to the violation of any applicable state noise control regulations, as set forth in RCSA Sections 22a-69-1 through 22a-69-7.4. [STATE ONLY REQUIREMENT]

PART VIII. ADDITIONAL TERMS AND CONDITIONS

- A. This permit does not relieve the Permittee of the responsibility to conduct, maintain and operate the regulated activity in compliance with all applicable requirements of any federal, municipal or other state agency. Nothing in this permit shall relieve the Permittee of other obligations under applicable federal, state and local law.
- B. Any representative of the DEEP may enter the Permittee's site in accordance with constitutional limitations at all reasonable times without prior notice, for the purposes of inspecting, monitoring and enforcing the terms and conditions of this permit and applicable state law.
- C. This permit may be revoked, suspended, modified or transferred in accordance with applicable law.
- D. This permit is subject to and in no way derogates from any present or future property rights or other rights or powers of the State of Connecticut and conveys no property rights in real estate or material, nor any exclusive privileges, and is further subject to any and all public and private rights and to any federal, state or local laws or regulations pertinent to the facility or regulated activity affected thereby. This permit shall neither create nor affect any rights of persons of municipalities who are not parties to this permit.
- E. Any document, including any notice, which is required to be submitted to the commissioner under this permit shall be signed by a duly authorized representative of the Permittee and by the person who is responsible for actually preparing such document, each of whom shall certify in writing as follows: "I have personally examined and am familiar with the information submitted in this document and all attachments thereto, and I certify that based on reasonable investigation, including my inquiry of those individuals responsible for obtaining the information, the submitted information is true, accurate and complete to the best of my knowledge and belief. I understand that any false statement made in the submitted information may be punishable as a criminal offense under Section 22a-175 of the Connecticut General Statutes, under Section 53a-157b of the Connecticut General Statutes, and in accordance with any applicable statute."

- F.** Nothing in this permit shall affect the commissioner's authority to institute any proceeding or take any other action to prevent or abate violations of law, prevent or abate pollution, recover costs and natural resource damages, and to impose penalties for violations of law, including but not limited to violations of this or any other permit issued to the Permittee by the commissioner.
- G.** Within 15 days of the date the Permittee becomes aware of a change in any information submitted to the commissioner under this permit, or that any such information was inaccurate or misleading or that any relevant information was omitted, the Permittee shall submit the correct or omitted information to the commissioner.
- H.** The date of submission to the commissioner of any document required by this permit shall be the date such document is received by the commissioner. The date of any notice by the commissioner under this permit, including but not limited to notice of approval or disapproval of any document or other action, shall be the date such notice is personally delivered or the date three days after it is mailed by the commissioner, whichever is earlier. Except as otherwise specified in this permit, the word "day" means calendar day. Any document or action which is required by this permit to be submitted or performed by a date which falls on a Saturday, Sunday or legal holiday shall be submitted or performed by the next business day thereafter.
- I.** Any document required to be submitted to the commissioner under this permit shall, unless otherwise specified in writing by the commissioner, be directed to: Office of Director; Enforcement Division; Bureau of Air Management; Department of Energy and Environmental Protection; 79 Elm Street, 5th Floor; Hartford, Connecticut 06106-5127.