



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

DEPARTMENT ORDER

**Buckeye Terminals, LLC
Penobscot County
Bangor, Maine
A-202-71-L-R**

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

FINDINGS OF FACT

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

I. REGISTRATION

A. Introduction

Buckeye Terminals, LLC (Buckeye) has applied to renew their Air Emission License for the operation of emission sources associated with their petroleum storage and distribution facility.

The equipment addressed in this license is located at 730 Main Street, Bangor Maine.

B. Emission Equipment

The following equipment is addressed in this air emission license:

Petroleum Storage

Tank	Capacity (Gallons)	Product Stored	Roof Type	Date Installed
#1	434,454	Distillate Fuel	Fixed	1957
#2	635,418	Distillate Fuel	Fixed	1957
#6	253,456	Distillate Fuel	Fixed	1895
#8	1,027,804	Distillate Fuel	Fixed	1913
#9	478,380	Gasoline, Ethanol, Distillate Fuel	Internal Floating	1913
#10	373,669	Distillate Fuel	Fixed	1920
#11	1,061,298	Gasoline, Ethanol, Distillate Fuel	Internal Floating	1920
#14*	576	Additive	N/A	1998
#15**	18,613	Petroleum Contact Water	Fixed	2008

Tank	Capacity (Gallons)	Product Stored	Roof Type	Date Installed
#16	347,256	Gasoline, Ethanol, Distillate Fuel	Internal Floating	1925
#18	183,498	Gasoline, Ethanol, Distillate Fuel	Internal Floating	1917
#19	253,429	Distillate Fuel	Fixed	1924
#20	967,050	Gasoline, Ethanol, Distillate Fuel	Internal Floating	1972
#21*	3,008	Additive	N/A	1990
#22*	3,008	Additive	N/A	1998
#23*	4,136	Additive	N/A	1990
ODU*	298	Distillate Fuel	N/A	1998

* These tanks are insignificant activities pursuant to *Major and Minor Source Air Emission License Regulations*, 06-096 Code of Maine Rules (C.M.R.) ch. 115, Appendix B, § B.7, and are mentioned for completeness only.

** This tank is considered an insignificant activity pursuant to 06-096 C.M.R. ch. 115, Appendix B, § A.25, and is mentioned for completeness only.

Process Equipment

Equipment	Production Rate	Pollution Control Equipment
Loading Rack	230,000 gal/4 hours	Vapor Recovery Unit (VRU)

Buckeye may operate small stationary engines smaller than 0.5 MMBtu/hr. These engines are considered insignificant activities and are not required to be included in this license. However, they are still subject to applicable State and Federal regulations. More information regarding requirements for small stationary engines is available on the Department's website at the link below.

<http://www.maine.gov/dep/air/publications/docs/SmallRICEGuidance.pdf>

Additionally, Buckeye may operate portable engines used for maintenance or emergency-only purposes. These engines are considered insignificant activities and are not required to be included in this license. However, they may still be subject to applicable State and Federal regulations.

C. Definitions

Distillate Fuel means the following:

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

- Kerosene, as defined in ASTM D3699;
- Biodiesel, as defined in ASTM D6751; or
- Biodiesel blends, as defined in ASTM D7467.

Equipment in gasoline service 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.

Internal Floating Roof (IFR) Tank means an aboveground petroleum storage tank with both a permanent fixed roof and a second roof designed to float on the surface of the stored liquid. Pursuant to this definition, Tanks #9, #11, #16, #18, and #20 are IFR tanks.

Open-ended valve or line 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.

Portable or Non-Road Engine means an internal combustion engine which is portable or transportable, meaning designed to be and capable of being carried or moved from one location to another. Indicia of transportability include, but are not limited to, wheels, skids, carrying handles, dolly, trailer, or platform. This definition does NOT include engines which remain or will remain at a location (excluding storage locations) for more than 12 consecutive months or a shorter period of time for an engine located at a seasonal source. A location is any single site at a building, structure, facility, or installation. Any engine that replaces an engine at a location and that is intended to perform the same or similar function as the engine replaced will be included in calculating the consecutive time period.

An engine is not a non-road (portable) engine if it remains or will remain at a location for more than 12 consecutive months or for a shorter period of time if sited at a seasonal source. A seasonal source is a source that remains in a single location for two years or more and which operates for fewer than 12 months in a calendar year. If an engine operates at a seasonal source for one entire season, the engine does not meet the criteria of a non-road (portable) engine and is subject to applicable stationary engine requirements.

Records or Logs mean either hardcopy or electronic records.

D. Application Classification

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

The application for Buckeye does not include the licensing of increased emissions or the installation of new or modified equipment. Therefore, the license is considered to be a renewal of currently licensed emission units only and has been processed through *Major and Minor Source Air Emission License Regulations*, 06-096 Code of Maine Rules (C.M.R.) ch. 115.

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 Buckeye 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.

II. **BEST PRACTICAL TREATMENT (BPT)**

A. Introduction

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

BPT for existing emissions equipment means that method which controls or reduces emissions to the lowest possible level considering:

- the existing state of technology;
- the effectiveness of available alternatives for reducing emissions from the source being considered; and
- the economic feasibility for the type of establishment involved.

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

Buckeye is subject to the *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 facility is considered an existing bulk gasoline terminal that is not subject to *National Emission Standards for Gasoline Distribution Facilities (Bulk Gasoline Terminals and Pipeline Breakout Stations)*, 40 C.F.R. Part 63, Subparts R, or *National Emission Standards for Hazardous Air Pollutants from Petroleum Refineries*, 40 C.F.R. Part 63, Subpart CC. The Loading Rack is a bulk gasoline terminal loading rack with a throughput greater than 250,000 gal/day.

Buckeye is subject applicable standards in 40 C.F.R. Part 63, Subpart BBBBBB. Buckeye shall continuously comply with all applicable requirements of the most current version of this subpart as described below. Should EPA adopt changes to this regulation that results in new or modified applicable requirements, Buckeye shall apply to reopen this air emission license to update the applicable requirements within 60 days of publication of the final rule in the Federal Register.

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 (tank 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.

Buckeye shall comply with all applicable requirements of 40 C.F.R. Part 63, Subpart BBBBBB including, but not limited to, the following.

1. General Requirements

- a. Buckeye 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 Buckeye 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)]
- b. Buckeye 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 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. § 63.11085(b)]

2. Emission Limits and Management Practices for Storage Tanks

Tanks #9, #11, #16, #18, and #20 are IFR storage tanks with capacity greater than 151 m³ (39,890 gallons) each. They will be referred to collectively as tanks in gasoline service. They are subject to the following requirements when storing gasoline.

- 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)] Buckeye 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 a liquid-mounted seal, a vapor-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, Buckeye shall equip, maintain, and operate each IFR control system to maintain the vapor concentration within 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)]

3. Emission Limits and Management Practices for the Loading Rack

The Loading Rack is a bulk gasoline terminal loading rack with a throughput greater than 250,000 gal/day subject to the following requirements:

- a. Buckeye shall equip the Loading Rack with a vapor collection system designed to collect the total organic compound (TOC) vapors displaced from cargo tanks during product loading.

- b. Until May 8, 2027, Buckeye shall reduce emissions of TOC to less than or equal to 80 mg/l of gasoline loaded into gasoline cargo tanks at the loading rack.

Note: This standard has been streamlined to the more stringent BPT standard of 35 mg/l of product transferred, and only the more stringent standard is included in the Order section of this license.

- c. No later than May 8, 2027, Buckeye shall reduce emissions of TOC to less than or equal to 19,200 parts per million by volume (ppmv) as propane determined on a 3-hour rolling average considering all periods when the vapor recovery system is processing gasoline vapors, including periods when liquid product is being loaded during carbon bed regeneration, and when preparing the beds for reuse.
- d. No later than May 8, 2027, Buckeye shall operate the vapor recovery system to minimize air or nitrogen intrusion except as needed for the system to operate as designed for the purpose of removing VOC from the adsorption media or to break vacuum in the system and bring the system back to atmospheric pressure. Consistent with 40 C.F.R. § 63.4, the use of diluents to achieve compliance with a relevant standard based on the concentration of a pollutant in the effluent discharged to the atmosphere is prohibited.
- e. Buckeye shall operate the vapor collection system to prevent any TOC vapors collected at one loading lane from passing through another lane to the atmosphere.
- f. Until May 8, 2027, Buckeye shall limit the loading of gasoline to gasoline cargo tanks that are vapor tight using the procedures specified in 40 C.F.R. §§ 60.502(e) through (j).
- g. No later than May 8, 2027, Buckeye shall use the procedures specified in 40 C.F.R. §§ 63.11092(g) and (h) to load liquid product into gasoline cargo tanks.

[40 C.F.R. Part 63, Subpart BBBBBB, Table 2, Row 1 and Table 3, Row 3]

4. Testing Requirements

Buckeye conducts performance tests in accordance with 40 C.F.R. § 63.11092(a)(1)(i).

5. Continuous Emissions Monitoring System (CEMS)

a. Until May 8, 2027, Buckeye shall do the following:

- (1) Buckeye shall install, calibrate, certify, operate, and maintain, according to the manufacturer's specifications, a Continuous Emissions Monitoring System (CEMS) capable of measuring organic compound concentration. [40 C.F.R. § 63.11092(b)]
- (2) Buckeye developed an operating parameter value for the CEMS of 27,300 ppmv that demonstrates compliance with the facility's emission limit (35 mg/l) pursuant to 40 C.F.R. §§ 63.11092(b)(3) and (4). Buckeye shall operate the VRU in a manner not to exceed 27,300 ppmv on a six hour block average basis. [40 C.F.R. § 63.11092(d)(1)] Operation of the VRU in a manner that exceeds 27,300 ppmv on a six hour block average basis shall constitute a violation of the emission standard. [40 C.F.R. § 63.11092(d)(3)]
- (3) For any performance tests conducted, Buckeye shall document the reasons for any change in the operating parameter value since the previous performance test. [40 C.F.R. § 63.11092(c)]

b. No later than May 8, 2027, Buckeye shall do the following:

- (1) Buckeye shall install, operate, and maintain a CEMS to measure the concentration of TOC in the atmospheric vent from the VRU in accordance with 40 C.F.R. Part 60, § 60.504a(b). [40 C.F.R. § 63.11092(e)(4)]
- (2) Buckeye shall conduct performance evaluations on the VOC CEMS as specified in 40 C.F.R. §§ 60.503a(a) and (d). [40 C.F.R. § 63.11092(e)(4)]
- (3) If the VOC CEMS requires maintenance such that it is off-line for more than 15 minutes, Buckeye may use the following limited alternative monitoring methods as specified in 40 C.F.R. § 60.504a(e).
 - (i) Determine the quantity of liquid product loaded in gasoline cargo tanks for the past 10 adsorption cycles prior to the CEMS going off-line and select the smallest of these values as the product loading quantity operating limit.

(ii) Determine the vacuum pressure, purge gas quantities, and duration of the vacuum/purge cycles used for the past 10 desorption cycles prior to the CEMS going off-line. Buckeye must operate the VRU desorption cycles as follows:

1. The vacuum pressure for each desorption cycle must be at or above the average vacuum pressure from the past 10 desorption cycles. Note: a higher vacuum means a lower absolute pressure.
2. Purge gas quantity used for each desorption cycle must be at or above the average quantity of purge gas used from the past 10 desorption cycles.
3. Duration of the vacuum/purge cycle for each desorption cycle must be at or above the average duration of the vacuum/purge cycle used from the past 10 desorption cycles.

[40 C.F.R. § 63.11902(e)(4)]

6. Storage Tank Inspections

a. Buckeye 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, Buckeye 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: Buckeye 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., Buckeye 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, Buckeye 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 Buckeye 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, Buckeye 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, Buckeye shall repair the items as necessary so that none of the conditions exist before refilling.
 - (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, Buckeye shall conduct LEL monitoring of equipment in gasoline service 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) Buckeye 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) Buckeye 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) Buckeye 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) Buckeye 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)]

7. Equipment Leak Inspections

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

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

Buckeye 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) Buckeye 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.
[40 C.F.R. § 60.502a(j)(1)]
- (2) During normal duties, Buckeye shall record leaks identified by audio, visual, or olfactory methods. [40 C.F.R. § 60.502a(j)(2)]
- (3) Buckeye shall conduct instrument monitoring pursuant to paragraph (1) above for 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, Buckeye 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;
- 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 from any equipment in gasoline service, Buckeye shall comply with the following requirements: [40 C.F.R. § 60.502a(j)(7)]

- (i) Buckeye 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. Buckeye demonstrates that emissions of purged material resulting from immediate repair are greater than the fugitive emissions likely to result from delay of 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.

(iv) If a leak cannot be repaired within 15 days, Buckeye shall notify the Department of the leak, the reason for the delay, and the expected date of the repair. Buckeye shall promptly notify the Department of the date that the leak is successfully repaired. [06-096 C.M.R. ch. 115, BPT]

8. General Recordkeeping Requirements

Any records required to be maintained by 40 C.F.R. Part 63, Subpart BBBBBBB that are submitted electronically via the EPA's Compliance Emissions Reporting Interface (CEDRI) may be maintained in electronic format. This ability to maintain electronic copies does not affect the requirement for facilities to make records, data, and reports available upon request to the Department or EPA as part of an on-site compliance evaluation. [40 C.F.R. § 63.11094(o)]

9. Recordkeeping

Note: Regardless of the requirements of Subpart BBBBBBB, Standard Condition (6) requires records to be maintained for a minimum of six years.

- a. Buckeye 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)(1)] 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, Buckeye 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, Buckeye 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 BBBB are determined to be at least as stringent as the NSPS requirements. Therefore, the NSPS requirements are streamlined to the Subpart BBBB requirements, and only the Subpart BBBB requirements shall be included in the Order section of this air emission license.

- d. Buckeye 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), Buckeye 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)]
- f. No later than May 8, 2027, Buckeye 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)]
- g. No later than May 8, 2027, Buckeye shall keep up-to-date, readily accessible records of the CEMS data. The records shall indicate the time intervals during which loadings of gasoline cargo tanks have occurred or, alternatively, shall record the operating parameter data only during such loadings. The date and time of day

shall also be indicated at reasonable intervals on this record. [40 C.F.R. § 63.11094(f)(1)]

h. No later than May 8, 2027, Buckeye shall keep the following records:

- (1) Each 3-hour rolling average TOC concentration (as propane) measured by the CEMS;
- (2) For each deviation of the 3-hour rolling average TOC concentration (as propane), the start date and time, duration, cause, and the corrective action taken;
- (3) For each period when there was a CEMS outage or the CEMS was out of control, the start date and time, duration, cause, and the corrective action taken. For each limited CEMS outage where the alternative monitoring methods are used, the corrective action taken shall include an indication of the use of the limited alternative monitoring methods.
- (4) For CEMS outages where the limited alternative monitoring methods are used, the records described in 40 C.F.R. §§ 63.11094(g)(1)(vi)(A) – (D);
- (5) Each inspection or calibration of the CEMS including a unique identifier, make, and model number of the CEMS, the date of calibration check, the type of CEMS (e.g., flame ionization detector, nondispersive infrared analyzer), and an indication of whether methane is excluded from the TOC concentration reported;

[40 C.F.R. § 63.11094(g)(1)]

- i. No later than May 8, 2027, Buckeye shall keep records of all 5-minute time periods during which liquid product is loaded into gasoline cargo tanks or assumed to be loaded into gasoline cargo tanks and records of all 5-minute time periods when there was no liquid product loaded into gasoline cargo tanks. [40 C.F.R. § 63.11094(g)(3)]
- j. Buckeye shall maintain records of each instance in which liquid product was loaded into a gasoline cargo tank for which vapor tightness documentation required under 40 C.F.R. § 502(e)(1) was not provided or available in the terminal's records. These records shall include, at a minimum:
 - (1) Cargo tank owner and address;
 - (2) Cargo tank identification number;
 - (3) Date and time liquid product was loaded into a gasoline cargo tank without proper documentation; and

- (4) Date proper documentation was received or statement that proper documentation was never received

[40 C.F.R. § 63.11094(h)]

- k. Buckeye shall maintain records 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 cargo 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)]

- l. Buckeye 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)]

- m. Buckeye shall maintain records of the average gasoline throughput (in gallons per day) for at least 5 years. [40 C.F.R. § 63.11094(l)]

10. Reports

- a. Prior to May 8, 2027, Buckeye shall submit to the Department and EPA semiannual compliance reports with the following information, as applicable. [40 C.F.R. § 63.11095(c)(1)]
 - (1) If any conditions that constitute a failure in the integrity of the IFR system are detected during an inspection of an IFR, Buckeye 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.

[40 C.F.R. § 63.11095(c)(1)]

- b. Prior to May 8, 2027, Buckeye shall submit to the Department and EPA excess emissions reports at the time the semiannual compliance report is submitted. The sections 40 C.F.R. §§ 63.11095(c)(2)(i) through (v) identify what constitutes an excess emissions event and the information to be included in the excess emissions report. [40 C.F.R. § 63.11095(c)(2)]
- c. On and after May 8, 2027, Buckeye shall submit to the Department and EPA semiannual compliance reports that contain the information in 40 C.F.R. §§ 63.11095(d)(1), (2), and (4) through (9), as applicable. [40 C.F.R. § 11095(d)]
- d. Buckeye shall submit semiannual compliance reports to the Department and EPA with the information outlined in paragraphs (a) through (c) above according to the requirements of 40 C.F.R. § 63.13. Beginning May 8, 2027, or once the report template for Subpart BBBBBBB has been available on the CEDRI website for one year, whichever date is later, Buckeye 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)]

Submissions to the Department shall be made via hardcopy to the regional inspector, through an electronic submission system provided by the Department, or other method as approved by the Department. [06-096 C.M.R. ch. 115, BPT]

C. Control of Petroleum Storage Facilities, 06-096 C.M.R. ch. 171

Buckeye is a petroleum storage facility as that term is defined in 06-096 C.M.R. ch. 171. Following are applicable requirements of 06-096 C.M.R. ch. 171 not addressed elsewhere.

1. Inspections Using Optical Gas Imaging

Buckeye shall perform inspections in accordance with the following:

- a. At least once per calendar quarter Buckeye shall conduct an inspection survey of each internal floating roof tank, each fixed roof tank, and facility fugitive emissions

component using optical gas imaging equipment. [06-096 C.M.R. ch. 171, § 5(A)(1)]

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

(1) Capable of imaging gases in the spectral range for benzene; and

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

[06-096 C.M.R. ch. 171, § 5(A)(2)]

- c. Buckeye 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.

- d. If visible emissions are observed in a fugitive emissions component using optical gas imaging equipment, within two calendar days Buckeye 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, Buckeye may elect to presume that a leak is present without further confirmation. If a leak is determined or presumed to be present, Buckeye 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, Buckeye 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, Buckeye shall notify the Department of the leak, the reason for the delay, and the expected date of the repair. Buckeye 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, Buckeye 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)]

2. Fenceline Monitoring

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

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

When extenuating circumstances do not permit safe deployment or retrieval of passive samplers (e.g., extreme weather, power failure), sampler placement or retrieval earlier or later than the prescribed schedule is allowed but must occur as soon as safe access to sampling sites is possible.

[06-096 C.M.R. ch. 171, § 6(B)(3)]

- d. Buckeye 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 1, 2023.
- e. Buckeye shall conduct fenceline monitoring 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. Buckeye shall keep the following records:
 - (1) Coordinates of all passive monitors and the meteorological station used. Coordinates shall be determined using a method with an accuracy of three meters or less.

- (2) Average ambient temperature and barometric pressure measurements for the sampling period.
 - (3) Individual sample results.
 - (4) Method detection limit for each sample.
[06-096 C.M.R. ch. 171, § 7(C)]
- g. Buckeye 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 ($\mu\text{g}/\text{m}^3$) 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. Internal Floating Roof Tanks

The following internal floating roof (IFR) tanks are used to store gasoline, ethanol, gasoline/ethanol blends, or distillate fuel. Annual throughput for each tank varies depending on the product stored, size, and demand.

Tank	Capacity (Gallons)	Roof Type	Date Installed
#9	478,380	Internal Floating	1913
#11	1,061,298	Internal Floating	1920
#16	347,256	Internal Floating	1917
#18	183,498	Internal Floating	1917
#20	967,050	Internal Floating	1972

Buckeye shall meet the following requirements for Tanks #9, #11, #16, #18, and #20 regardless of what product is being stored. When distillate fuel is being stored, the following requirements are incorporated through 06-096 C.M.R. ch. 115, BPT.

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

Buckeye shall comply with all requirements of 06-096 C.M.R. ch. 111 applicable to the IFR tanks including, but not limited to, the following.

- a. All IFR tanks shall be equipped, maintained, and operated such that:
 - (1) There is an IFR with closure seal(s) between the roof edge and the tank wall; [06-096 C.M.R. ch. 111, § 3(A)(1)]
 - (2) The IFR and closure seal(s) are maintained such that there are no holes, tears, or other openings in the seal or between the seal and the floating roof; [06-096 C.M.R. ch. 111, § 3(A)(2)]
 - (3) All storage tank openings, except stub drains, are equipped with covers, lids, or seals. Each cover over an opening in an IFR, except for automatic bleeder vents (vacuum breaker vents) and rim space vents, shall be closed at all times, except when the cover must be open for access. [06-096 C.M.R. ch. 111, § 3(A)(3) and 40 C.F.R. § 63.1063(b)(3)] and
 - (4) Each automatic bleeder vent (vacuum breaker vent) and rim space vent is closed at all times, except when required to be open to relieve excess pressure or vacuum, in accordance with the manufacturer's design. [06-096 C.M.R. ch. 111, § 3(A)(3) and 40 C.F.R. § 63.1063(b)(4)]
- b. Buckeye shall comply with the following source inspection requirements for the IFR tanks:
 - (1) Routine inspections of floating roofs shall be conducted through roof hatches once every month. [06-096 C.M.R. ch. 111, § 3(A)(4)]
 - (2) A complete inspection of the floating roof and seal shall be performed at least once every ten calendar years and each time the IFR tank is emptied and degassed. Buckeye shall perform an inspection by visually inspecting the floating roof deck, deck fittings, and rim seals from within the storage vessel. 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. 111, § 3(A)(5)]

**2. *Degassing of Petroleum Storage Tanks, Marine Vessels, and Transport Vessels,*
06-096 C.M.R. ch. 170**

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

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

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

(2) 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]

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

(4) 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.

(5) 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.

(6) Buckeye 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 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, Buckeye shall vent emissions from the vessel receiving the sludge to a vapor control system designed to achieve a VOC control efficiency of at least 95%;**

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

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

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

During a degassing event of a storage tank whose most recently stored product was gasoline, ethanol, or gasoline/ethanol blend, Buckeye 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 frequency and method as recommended by the manufacturer, 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, Buckeye 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

Buckeye 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) Buckeye's contact person name and telephone number;
- (2) Storage tank capacity;
- (3) The product most recently stored in the storage tank prior to degassing;
- (4) Volume (cubic feet) of vapor space degassed;

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

3. *Control of Petroleum Storage Facilities, 06-096 C.M.R. ch. 171*

The following is a discussion of the applicable requirements of *Control of Petroleum Storage Facilities*, 06-096 C.M.R. ch. 171, specific to Buckeye's IFR tanks.

a. Tank Inspections

The IFR tanks are subject to the following inspection requirements regardless of the product being stored.

(1) Visual Inspections

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

(2) Instrument Inspections

(i) At least once per calendar month, Buckeye 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.

(ii) 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.

(iii) Buckeye 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 VOCs in the tank to be measured.

(iv) 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.

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

[06-096 C.M.R. ch. 171, § 5(B)(2)]

(3) If a leak is detected, Buckeye shall initiate corrective action and repair the leak within 15 calendar days. If the leak cannot be repaired within 15 days, Buckeye shall notify the Department of the leak, the reason for the delay, and the expected date of the repair. Buckeye 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, Buckeye 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) Buckeye 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)]

4. New Source Performance Standards (NSPS)

All of the IFR tanks were constructed prior to 1973, and none have been reconstructed or modified. Therefore, they are not subject to any of the following New Source Performance Standards:

- 40 C.F.R. Part 60, Subpart K – *Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced after June 11, 1973, and Prior to May 19, 1978*
- 40 C.F.R. Part 60, Subpart Ka – *Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction or Modification Commenced After May 18, 1978, and Prior to July 23, 1984*

- 40 C.F.R. Part 60, Subpart Kb – *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*

All tanks at the facility were installed prior to October 15, 2024. If modified, existing storage vessels can become subject to *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. Pursuant to 40 C.F.R. § 60.110c(e), a modification occurs if the storage vessel is used to store a volatile organic liquid (VOL) that has a greater maximum true vapor pressure than all VOL historically stored or permitted to be stored in that vessel. Buckeye's internal floating roof tanks have historically been permitted to store 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. Buckeye shall maintain records of the type and maximum true vapor pressure for each product stored in each tank. This recordkeeping requirement is added through BPT.

5. Best Practical Treatment (BPT)

An updated BPT analysis for the IFR tanks was performed as part of this renewal application. The Department determined that the standards and requirements of applicable State and Federal regulations as well as the following additional requirements represent BPT for these tanks.

- a. Buckeye shall not land the roof of an IFR tank, i.e., allow the IFR to rest upon its support legs, unless:
 - (1) the most recently stored product was distillate oil, jet fuel, or kerosene; or
 - (2) the tank changes product (e.g., from winter gas to summer gas) and roof landings are limited to no more than five times per calendar year for all IFR tanks at the facility combined; or
 - (3) the tank is subsequently degassed in accordance with 06-096 C.M.R. ch. 170; or
 - (4) Buckeye is given written approval by the Department.
- b. Buckeye 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:
 - (1) Identification of the tank(s) to be degassed;
 - (2) Date(s) when degassing will occur;
 - (3) A description of the control device to be used and its control effectiveness; and

(4) The parameters to be monitored during degassing.

- c. If any holes, tears, or other openings are present, the source shall notify the Department in writing within 10 days of the discovery of such holes, tears, or other openings and the course of action to be taken for repair. Buckeye shall demonstrate to the Department that all repairs were made as soon as practicable and that the IFR tank was either repaired or emptied and removed from service within 45 days.
- d. The following records shall be maintained at the source and available for inspection by the Department:
 - (1) Inspection log documenting routine monthly inspections of floating roof covers and seals, including LEL readings from such inspections, which are to include notification and explanation of any excessive increases in LEL readings as compared to normal operating conditions; [06-096 C.M.R. ch. 115, BPT] and
 - (2) Inspection log documenting any detected leaks, holes, tears, or other openings and the corrective action taken.

6. Periodic Monitoring

Buckeye shall record data and maintain records for the following periodic monitoring values for the IFR tanks. Additional recordkeeping requirements are included with the requirements for 40 C.F.R. Part 63, Subpart BBBBBB.

- a. Records of product stored and throughput for each tank on a monthly basis; [06-096 C.M.R. ch. 137]
- b. Records of any tank degassing, including the notification provided to the Department, date and time degassing began and ended, and monitoring data collected during degassing; [06-096 C.M.R. ch. 115, BPT]
- c. Inspection log documenting routine monthly inspections of floating roof covers and seals, including LEL readings from such inspections, which are to include notification and explanation of any excessive increases in LEL readings as compared to normal operating conditions; [06-096 C.M.R. ch. 115, BPT]
- d. Inspection log documenting any detected leaks, holes, tears, or other openings and the corrective action taken. [06-096 C.M.R. ch. 115, BPT]

E. Loading Rack

Buckeye operates a loading rack with two bays used to dispense petroleum products into tank trucks. A Vapor Recovery Unit (VRU) is used to control emissions whenever gasoline is loaded or whenever a truck is loaded that carried gasoline as its most recent previous load.

The VRU is a carbon adsorption system manufactured by John Zink Company. It has a maximum process rate of 230,000 gallons of product loaded per four-hour period

(gal/4 hrs). The VRU controls emissions of VOC to 35 milligrams per liter of product loaded (mg/l) or less.

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

Buckeye shall comply with all requirements of 06-096 C.M.R. ch. 112 applicable to the Loading Rack including, but not limited to, the following:

- a. Loading of liquid product into gasoline tank trucks shall be limited to those which have been certified within the last 12 months as vapor-tight pursuant to *Gasoline Tank Truck Tightness Self-Certification*, 06-096 C.M.R. ch. 120. [06-096 C.M.R. ch. 112, § 3(A)]
- b. Buckeye shall vent all displaced vapors and gases to the VRU which shall be maintained in good working order and operated at all times gasoline is being transferred to tank trucks. [06-096 C.M.R. ch. 112, § 3(B)]
- c. Buckeye shall prevent liquid drainage from the loading device when it is not in use. [06-096 C.M.R. ch. 112, § 3(C)]
- d. 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)]
- e. 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)]
- f. Buckeye shall not allow gasoline to 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)]
- g. Emissions of VOC from the VRU shall not exceed 35 mg/l of gasoline transferred. [06-096 C.M.R. ch. 112, § 4(A)]

2. *Gasoline Tank Truck Tightness Self-Certification*, 06-096 C.M.R. ch. 120

Buckeye shall comply with all requirements of 06-096 C.M.R. ch. 120 applicable to the Loading Rack including, but not limited to, the following:

- a. Buckeye 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)]

- b. The vapor control system at the Loading Rack shall be designed and operated such that during loading operations:
 - (1) 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;
 - (2) Readings equal to or greater than 100% of the lower explosive 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
 - (3) 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)]
- c. If the vapor control system exceeds any of the limits listed in (b), Buckeye shall repair and retest the system within fifteen (15) 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)]

3. *Control of Petroleum Storage Facilities*, 06-096 C.M.R. ch. 171

Control of Petroleum Storage Facilities, 06-096 C.M.R. ch. 171, contains the following applicable requirements specific to Buckeye's 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 VRU. The vapor collection and VOC control systems shall be maintained in good working order and must be operated at all times product is being transferred to such tank trucks or trailers. [06-096 C.M.R. ch. 171, § 4(C)(1)]
- b. All loading and vapor lines shall be equipped with fittings which make vapor-tight connections and which close automatically when disconnected. [06-096 C.M.R. ch. 171, § 4(C)(2)]
- c. The pressure in the vapor collection system shall not exceed the tank truck or trailer pressure relief settings. [06-096 C.M.R. ch. 171, § 4(C)(3)]

4. New Source Performance Standards (NSPS)

The Loading Rack is subject to the New Source Performance Standard (NSPS) titled *Standards of Performance for Bulk Gasoline Terminals*, 40 C.F.R. Part 60, Subpart XX. These standards apply to loading racks at bulk gasoline terminals which deliver liquid product into gasoline tank trucks and were constructed after December 17, 1980.

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)]
- (2) Emissions to the atmosphere from the VRU are not to exceed 35 milligrams of total organic compounds per liter of gasoline loaded. [40 C.F.R. § 60.502(b)]
- (3) The VRU shall be designed to prevent any TOC 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) Buckeye 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) Buckeye 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 VRU, 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 fifteen (15) calendar days after it is detected. [40 C.F.R. § 60.502(j)]

b. Recordkeeping

Buckeye shall keep the following records pursuant to 40 C.F.R. § 60.505:

- (1) Records of tank truck vapor tightness documentation required by 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 these NSPS requirements. Therefore, these Subpart XX 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.

- (2) Records of monthly leak inspections required under 40 C.F.R. § 60.502(j) pursuant to 40 C.F.R. §§ 60.505(c) and (e).

5. Best Practical Treatment (BPT)

An updated BPT analysis for the Loading Rack was performed as part of this renewal application. The Department determined that the standards and requirements of applicable State and Federal regulations as well as the following additional requirements represent BPT for the Loading Rack:

- a. Emissions from the VRU shall not exceed 35 milligrams of VOC per liter of product transferred. If emissions exceed 10 mg/l of product transferred, Buckeye shall take corrective action to ensure emissions do not exceed 35 mg/l of product transferred. Buckeye shall keep records of all corrective actions taken in response to this requirement.
- b. Buckeye shall not exceed a petroleum product throughput at the loading rack as follows (based on a 12-month rolling total):

Product	Throughput Limit
gasoline/ethanol (combined)	195,000,000 gallons
distillate fuel	125,000,000 gallons

- c. The Loading Rack shall not exceed a product loading rate of 230,000 gallons per four-hour block period.

6. Periodic Monitoring

Buckeye shall record data and maintain records for the following periodic monitoring values for the IFR tanks. Additional recordkeeping requirements are included with the requirements for 40 C.F.R. Part 63, Subpart BBBB.

- a. Hours of operation on a monthly and calendar year basis; [06-096 C.M.R ch. 137]
- b. 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]
- c. Records of monthly leak inspections required under 40 C.F.R. § 60.502(j) pursuant to 40 C.F.R. §§ 60.505(c) and (e);
- d. 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)]
- e. Records of any maintenance activities performed (planned or unplanned) on the VRU; [40 C.F.R. § 70.6(c)(1)]

- f. Records of all corrective actions taken in response to the VRU exceeding a VOC emission rate of 10 mg/l. [06-096 C.M.R. ch. 115, BPT]

F. Fixed Roof Tanks

The following fixed roof tanks are used to store distillate fuels. Annual throughput for each tank varies.

Tank	Capacity (Gallons)	Roof Type	Date Installed
#1	434,454	Fixed	1957
#2	635,418	Fixed	1957
#6	253,456	Fixed	1895
#8	1,027,804	Fixed	1913
#10	373,669	Fixed	1920
#19	253,429	Fixed	1924

1. New Source Performance Standards (NSPS)

All of the fixed roof tanks were constructed prior to 1973, and none have been reconstructed or modified. Therefore, they are not subject to any of the following New Source Performance Standards:

- 40 C.F.R. Part 60, Subpart K – *Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced after June 11, 1973, and Prior to May 19, 1978*
- 40 C.F.R. Part 60, Subpart Ka – *Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction or Modification Commenced After May 18, 1978, and Prior to July 23, 1984*
- 40 C.F.R. Part 60, Subpart Kb – *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*

All fixed roof tanks at the facility were installed prior to October 15, 2024. If modified, existing storage vessels can become subject to *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. 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 in that vessel. Buckeye's fixed roof tanks have historically been permitted to store distillate fuels. Therefore, the facility's tanks are not subject to Subpart Kc provided they continue to store the products for which they are currently licensed. Buckeye shall

maintain records of the type and maximum true vapor pressure for each product stored in each tank. This recordkeeping requirement is added through BPT.

2. Best Practical Treatment (BPT)

An updated BPT analysis for the fixed roof tanks was performed as part of this renewal application. The Department determined that the standards and requirements of applicable State and Federal regulations as well as the following additional requirements represent BPT for the fixed roof tanks.

Buckeye shall conduct routine inspections of the perimeter and roof of all Distillate Fuel Storage Tanks at a minimum of once every month.

3. *Degassing of Petroleum Storage Tanks, Marine Vessels, and Transport Vessels*, 06-096 C.M.R. ch. 170

The products stored in the fixed roof tanks are not affected products as that term is defined in *Degassing of Petroleum Storage Tanks, Marine Vessels, and Transport Vessels*, 06-096 C.M.R. ch. 170. Therefore, 06-096 C.M.R. ch. 170 is not applicable to these tanks.

4. *Control of Petroleum Storage Facilities*, 06-096 C.M.R. ch. 171

All of the fixed roof tanks store distillate fuel. They were installed prior to the effective date of 06-096 C.M.R. ch. 171 and are therefore not required to be retrofitted with a floating roof. [06-096 C.M.R. ch. 171, § 4(A)]

5. Periodic Monitoring

Buckeye shall record data and maintain records for the following periodic monitoring values for the fixed roof tanks:

- a. For each tank, records of the petroleum liquid stored, the period of storage, and the maximum true vapor pressure of that liquid during the respective storage period; [06-096 C.M.R. ch. 115, BPT]
- b. Records of product stored and throughput for each tank on a monthly basis; [06-096 C.M.R. ch. 137]
- c. Inspection log documenting the monthly inspections of the fixed roof tanks including the date and results of each inspection and documentation of corrective action taken. [06-096 C.M.R. ch. 115, BPT]

G. Facility-Wide Annual Emission Limits

Buckeye is subject to the following facility-wide annual emission limits established through BPT:

Pollutant	Emission Limit (tpy)
VOC	49.9
Single HAP	7.9
Total HAP	19.9

The VOC and HAP limits include emissions from all licensed emissions equipment and processes, including emissions from the petroleum storage tanks, facility piping, and the Loading Rack. In addition to emissions from normal operation, emissions from both routine and non-routine maintenance activities shall be included, such as roof landings, tank degassing, and tank cleaning.

The scope of these emission limitations does not include emissions from non-licensed equipment or processes which are considered insignificant activities pursuant to 06-096 C.M.R. ch. 140, Appendix B.

1. Compliance Demonstration

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

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

a. Petroleum Storage Tanks

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

b. Tank Maintenance

Emissions from tank maintenance (both planned and unplanned), including roof landings, tank degassing, and tank cleaning, shall be included when calculating the facility's annual facility-wide VOC and HAP emissions. Emissions from these operations shall be calculated in accordance with the methodology contained in the most current version of AP-42, Fifth Edition, Volume 1, Chapter 7 and taking into account the control efficiency of any control equipment approved by the Department for use.

c. Facility Piping

Operation of the facility's equipment will result in fugitive emissions of VOC and HAP from the terminal's piping. Buckeye shall keep an updated inventory of system components (e.g., valves, pump seals, connectors, flanges, etc.) and calculate fugitive emissions using emission factors obtained from EPA's *Protocol for Equipment Leak Emission Estimates*, EPA-453/R-95-017, dated November 1995.¹

d. Loading Rack

In accordance with the preamble to 40 C.F.R. Part 63, Subpart R published in the Federal Register on December 14, 1994, fugitive VOC emissions from the Loading Rack are assumed to be 0.8% of the vapors displaced during loading.

Emissions of VOC from the collected gases sent to the VRU shall be based on data from the VOC CEMS. Emissions of HAP shall be determined based on the mass of VOC emissions and speciation data from AP-42, other industry publications, or SDSs.

2. Recordkeeping Requirements

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

- a. Monthly throughput for each petroleum storage tank;
- b. Monthly throughput of each product at the Loading Rack;
- c. Equipment and product information necessary to calculate emissions from the petroleum storage tanks in accordance with AP-42, Chapter 7;
- d. Process and product information necessary to calculate emissions from tank maintenance operations in accordance with AP-42, Chapter 7; and

¹ https://www.epa.gov/sites/default/files/2020-09/documents/protocol_for_equipment_leak_emission_estimates.pdf

- e. Equipment and product information necessary to calculate emissions from facility piping in accordance with EPA's *Protocol for Equipment Leak Emission Estimates*.

H. General Process Emissions

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

I. Fugitive Emissions

Buckeye 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.

Buckeye 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.

J. VOC RACT

Reasonably Available Control Technology for Facilities that Emit Volatile Organic Compounds, 06-096 C.M.R. ch. 134 (VOC RACT) is applicable to sources that have the potential to emit quantities of VOC equal to or greater than 40 tons/year from non-exempt equipment. Pursuant to compliance Option A contained in 06-096 C.M.R. ch. 134, § 3(A)(1), Buckeye has installed and operates a system to capture and control VOC emissions such that the total VOC emissions do not exceed 15% of the uncontrolled VOC emissions on a daily basis. Buckeye's use of internal floating roofs for all gasoline storage and a vapor recovery system that controls emissions to 35 mg/l of gasoline loaded meets this requirement. The VOC RACT requirements are incorporated into this renewal.

K. Performance Test Protocol

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

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

L. Emission Statements

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

Every third year, or as requested by the Department, Buckeye 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. The Department will use these reports to calculate and invoice for the applicable annual air quality surcharge for the subsequent three billing periods. Buckeye 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)]

M. Annual Emissions

The table below provides an estimate of facility-wide annual emissions for the purposes of calculating the facility's annual air license fee and establishing the facility's potential to emit (PTE). Only licensed equipment is included, i.e., emissions from insignificant activities are excluded. Similarly, unquantifiable fugitive particulate matter emissions are not included except when required by state or federal regulations. Maximum potential emissions were calculated based on the facility-wide annual emission limits for each pollutant.

This information does not represent a comprehensive list of license restrictions or permissions. That information is provided in the Order section of this license.

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

Pollutant	Tons/year
VOC	49.9
Single HAP	7.9
Total HAP	19.9

III. AMBIENT AIR QUALITY ANALYSIS

The level of ambient air quality impact modeling required for a minor source is determined by the Department on a case-by-case basis. In accordance with 06-096 C.M.R. ch. 115, an ambient air quality impact analysis is not required for a minor source if the total licensed annual emissions of any pollutant released do not exceed the following levels and there are no extenuating circumstances:

Pollutant	Tons/Year
PM ₁₀	25
PM _{2.5}	15
SO ₂	50
NO _x	50
CO	250

The total licensed annual emissions for the facility are below the emission levels contained in the table above and there are no extenuating circumstances; therefore, an ambient air quality impact analysis is not required as part of this license.

This determination is based on information provided by the applicant regarding licensed emission units. If the Department determines that any parameter (e.g., stack size, configuration, flow rate, emission rates, nearby structures, etc.) deviates from what was included in the application, the Department may require Buckeye to submit additional information and may require an ambient air quality impact analysis at that time.

ORDER

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

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

The Department hereby grants Air Emission License A-202-71-L-R subject to the following conditions.

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

STANDARD CONDITIONS

- (1) Employees and authorized representatives of the Department shall be allowed access to the licensee's premises during business hours, or any time during which any emissions units are in operation, and at such other times as the Department deems necessary for the purpose of performing tests, collecting samples, conducting inspections, or examining and copying records relating to emissions (38 M.R.S. § 347-C).

- (2) The licensee shall acquire a new or amended air emission license prior to 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 Buckeye is due by the end of February 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
 - 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) 40 C.F.R. Part 63, Subpart BBBBBB

Buckeye shall continuously comply with all applicable requirements of the most current version of *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, including, but not limited to, those listed in this air emission license.

Should EPA adopt changes to this regulation that result in new or modified applicable requirements, the requirements associated with 40 C.F.R. Part 63, Subpart BBBBBB included in this Order shall expire, except for the general requirement to continuously comply with the most current version of the regulation. Buckeye shall apply to reopen this air emission license to update the applicable requirements within 60 days of publication of the final rule in the Federal Register. [06-096 C.M.R. ch. 115, BPT]

A. General Requirements

- 1. Buckeye 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 Buckeye 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)]

2. Buckeye 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 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. § 63.11085(b)]

B. Emission Limits and Management Practices for Storage Tanks

Tanks #9, #11, #16, #18, and #20 are IFR storage tanks with capacity greater than 151 m³ (39,890 gallons) each. They will be referred to collectively as tanks in gasoline service. They are subject to the following requirements when storing gasoline.

1. Tanks in gasoline service must comply with one of the compliance options in Table 1, Row 2. [40 C.F.R. § 63.11087(a)] Buckeye 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:
 - a. Each IFR shall be equipped with a liquid-mounted seal, a vapor-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, Buckeye shall equip, maintain, and operate each IFR control system to maintain the vapor concentration within 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)]

C. Emission Limits and Management Practices for the Loading Rack

The Loading Rack is a bulk gasoline terminal loading rack with a throughput greater than 250,000 gal/day subject to the following requirements:

1. Buckeye shall equip the Loading Rack with a vapor collection system designed to collect the total organic compound (TOC) vapors displaced from cargo tanks during product loading.
2. No later than May 8, 2027, Buckeye shall reduce emissions of TOC to less than or equal to 19,200 parts per million by volume (ppmv) as propane determined on a 3-hour rolling average considering all periods when the vapor recovery system is processing gasoline vapors, including periods when liquid product is being loaded during carbon bed regeneration, and when preparing the bends for reuse.
3. No later than May 8, 2027, Buckeye shall operate the vapor recovery system to minimize air or nitrogen intrusion except as needed for the system to operate as designed for the purpose of removing VOC from the adsorption media or to break vacuum in the system and bring the system back to atmospheric pressure. Consistent with 40 C.F.R. § 63.4, the use of diluents to achieve compliance with a relevant standard based on the concentration of a pollutant in the effluent discharged to the atmosphere is prohibited.
4. Buckeye shall operate the vapor collection system to prevent any TOC vapors collected at one loading lane from passing through another lane to the atmosphere.
5. Until May 8, 2027, Buckeye shall limit the loading of gasoline to gasoline cargo tanks that are vapor tight using the procedures specified in 40 C.F.R. §§ 60.502(e) through (j).
6. No later than May 8, 2027, Buckeye shall use the procedures specified in 40 C.F.R. §§ 63.11092(g) and (h) to load liquid product into gasoline cargo tanks.

[40 C.F.R. Part 63, Subpart BBBB, Table 2, Row 1 and Table 3, Row 3]

D. Continuous Emissions Monitoring System (CEMS)

1. Until May 8, 2027, Buckeye shall do the following:
 - a. Buckeye shall install, calibrate, certify, operate, and maintain, according to the manufacturer's specifications, a Continuous Emissions Monitoring System (CEMS) capable of measuring organic compound concentration. [40 C.F.R. § 63.11092(b)]
 - b. Buckeye developed an operating parameter value for the CEMS of 27,300 ppmv that demonstrates compliance with the facility's emission limit (35 mg/l) pursuant to 40 C.F.R. §§ 63.11092(b)(3) and (4). Buckeye shall operate the VRU in a manner not to exceed 27,300 ppmv on a six hour block average basis. [40 C.F.R. § 63.11092(d)(1)] Operation of the VRU in a manner that exceeds 27,300 ppmv on a six hour block average basis shall constitute a violation of the emission standard. [40 C.F.R. § 63.11092(d)(3)]
 - c. For any performance tests conducted, Buckeye shall document the reasons for any change in the operating parameter value since the previous performance test. [40 C.F.R. § 63.11092(c)]
2. No later than May 8, 2027, Buckeye shall do the following:
 - a. Buckeye shall install, operate, and maintain a CEMS to measure the concentration of TOC in the atmospheric vent from the VRU in accordance with 40 C.F.R. Part 60, § 60.504a(b). [40 C.F.R. § 63.11092(e)(4)]
 - b. Buckeye shall conduct performance evaluations on the VOC CEMS as specified in 40 C.F.R. §§ 60.503a(a) and (d). [40 C.F.R. § 63.11092(e)(4)]
 - c. If the VOC CEMS requires maintenance such that it is off-line for more than 15 minutes, Buckeye may use the following limited alternative monitoring methods as specified in 40 C.F.R. § 60.504a(e).
 - (1) Determine the quantity of liquid product loaded in gasoline cargo tanks for the past 10 adsorption cycles prior to the CEMS going off-line and select the smallest of these values as the product loading quantity operating limit.
 - (2) Determine the vacuum pressure, purge gas quantities, and duration of the vacuum/purge cycles used for the past 10 desorption cycles prior to the

CEMS going off-line. Buckeye must operate the VRU desorption cycles as follows:

- (i) The vacuum pressure for each desorption cycle must be at or above the average vacuum pressure from the past 10 desorption cycles. Note: a higher vacuum means a lower absolute pressure.
- (ii) Purge gas quantity used for each desorption cycle must be at or above the average quantity of purge gas used from the past 10 desorption cycles.
- (iii) Duration of the vacuum/purge cycle for each desorption cycle must be at or above the average duration of the vacuum/purge cycle used from the past 10 desorption cycles.

[40 C.F.R. § 63.11902(e)(4)]

E. Storage Tank Inspections

1. Buckeye 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, Buckeye 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: Buckeye 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 BBBB will be considered equivalent to one monthly inspection to comply with 06-096 C.M.R. ch. 111, i.e., Buckeye 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, Buckeye 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 Buckeye 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, Buckeye 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, Buckeye 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.

[40 C.F.R. § 113b(a)(4)]

- 2. No later than May 8, 2027, Buckeye shall conduct LEL monitoring of equipment in gasoline service 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. Buckeye 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. Buckeye 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. Buckeye 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 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.

(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. Buckeye 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)]

F. Equipment Leak Inspections

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

Buckeye 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)]

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

2. No later than May 8, 2027, Buckeye 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. Buckeye shall conduct leak detection monitoring of all pumps, valves, and connectors in gasoline service using either of the methods specified below:
 - (1) 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, Buckeye shall record leaks identified by audio, visual, or olfactory methods. [40 C.F.R. § 60.502a(j)(2)]
- c. Buckeye shall conduct instrument monitoring pursuant to paragraph (1) above for 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, Buckeye shall comply with the following. [40 C.F.R. § 60.502a(j)(6)]
 - (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 (i) 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 from any equipment in gasoline service, Buckeye shall comply with the following requirements: [40 C.F.R. § 60.502a(j)(7)]

- (1) Buckeye 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.
- (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)]
 - (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. Buckeye demonstrates that emissions of purged material resulting from immediate repair are greater than the fugitive emissions likely to result from delay of 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.
- (4) If a leak cannot be repaired within 15 days, Buckeye shall notify the Department of the leak, the reason for the delay, and the expected date of the repair. Buckeye shall promptly notify the Department of the date that the leak is successfully repaired. [06-096 C.M.R. ch. 115, BPT]

G. General Recordkeeping Requirements

Any records required to be maintained by 40 C.F.R. Part 63, Subpart BBBBBBB that are submitted electronically via the EPA's Compliance Emissions Reporting Interface (CEDRI) may be maintained in electronic format. This ability to maintain electronic copies does not affect the requirement for facilities to make records, data, and reports available upon request to the Department or EPA as part of an on-site compliance evaluation. [40 C.F.R. § 63.11094(o)]

H. Recordkeeping

Note: Regardless of the requirements of Subpart BBBBBB, Standard Condition (6) requires records to be maintained for a minimum of six years.

1. Buckeye 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)(1)] 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, Buckeye 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, Buckeye 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. Buckeye 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), Buckeye 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)]
6. No later than May 8, 2027, Buckeye 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. No later than May 8, 2027, Buckeye shall keep up-to-date, readily accessible records of the CEMS data. The records shall indicate the time intervals during which loadings of gasoline cargo tanks have occurred or, alternatively, shall record the operating parameter data only during such loadings. The date and time of day shall also be indicated at reasonable intervals on this record. [40 C.F.R. § 63.11094(f)(1)]
8. No later than May 8, 2027, Buckeye shall keep the following records:
 - a. Each 3-hour rolling average TOC concentration (as propane) measured by the CEMS;
 - b. For each deviation of the 3-hour rolling average TOC concentration (as propane), the start date and time, duration, cause, and the corrective action taken;
 - c. For each period when there was a CEMS outage or the CEMS was out of control, the start date and time, duration, cause, and the corrective action taken. For each limited CEMS outage where the alternative monitoring methods are used, the corrective action taken shall include an indication of the use of the limited alternative monitoring methods.

- d. For CEMS outages where the limited alternative monitoring methods are used, the records described in 40 C.F.R. §§ 63.11094(g)(1)(vi)(A) – (D);
- e. Each inspection or calibration of the CEMS including a unique identifier, make, and model number of the CEMS, the date of calibration check, the type of CEMS (e.g., flame ionization detector, nondispersive infrared analyzer), and an indication of whether methane is excluded from the TOC concentration reported;

[40 C.F.R. § 63.11094(g)(1)]

- 9. No later than May 8, 2027, Buckeye shall keep records of all 5-minute time periods during which liquid product is loaded into gasoline cargo tanks or assumed to be loaded into gasoline cargo tanks and records of all 5-minute time periods when there was no liquid product loaded into gasoline cargo tanks. [40 C.F.R. § 63.11094(g)(3)]
- 10. Buckeye shall maintain records of each instance in which liquid product was loaded into a gasoline cargo tank for which vapor tightness documentation required under 40 C.F.R. § 502(e)(1) was not provided or available in the terminal's records. These records shall include, at a minimum:
 - a. Cargo tank owner and address;
 - b. Cargo tank identification number;
 - c. Date and time liquid product was loaded into a gasoline cargo tank without proper documentation; and
 - d. Date proper documentation was received or statement that proper documentation was never received

[40 C.F.R. § 63.11094(h)]

- 11. Buckeye shall maintain records 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 cargo 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)]

12. Buckeye 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)]

13. Buckeye shall maintain records of the average gasoline throughput (in gallons per day) for at least 5 years. [40 C.F.R. § 63.11094(l)]

I. Reports

1. Prior to May 8, 2027, Buckeye shall submit to the Department and EPA semiannual compliance reports with the following information, as applicable. [40 C.F.R. § 63.11095(c)(1)]
 - a. If any conditions that constitute a failure in the integrity of the IFR system are detected during an inspection of an IFR, Buckeye 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.

[40 C.F.R. § 63.11095(c)(1)]

2. Prior to May 8, 2027, Buckeye shall submit to the Department and EPA excess emissions reports at the time the semiannual compliance report is submitted. The sections 40 C.F.R. §§ 63.11095(c)(2)(i) through (v) identify what constitutes an excess emissions event and the information to be included in the excess emissions report. [40 C.F.R. § 63.11095(c)(2)]
3. On and after May 8, 2027, Buckeye shall submit to the Department and EPA semiannual compliance reports that contain the information in 40 C.F.R. §§ 63.11095(d)(1), (2), and (4) through (9), as applicable. [40 C.F.R. § 11095(d)]

4. Buckeye shall submit semiannual compliance reports to the Department and EPA with the information outlined in paragraphs 1 through 3 above according to the requirements of 40 C.F.R. § 63.13. Beginning May 8, 2027, or once the report template for Subpart BBBB has been available on the CEDRI website for one year, whichever date is later, Buckeye 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)]

Submissions to the Department shall be made via hardcopy to the regional inspector, through an electronic submission system provided by the Department, or other method as approved by the Department. [06-096 C.M.R. ch. 115, BPT]

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

Buckeye is a petroleum storage facility as that term is defined in 06-096 C.M.R. ch. 171. Following are applicable requirements of 06-096 C.M.R. ch. 171 not addressed elsewhere.

A. Inspections Using Optical Gas Imaging

Buckeye shall perform inspections in accordance with the following:

1. At least once per calendar quarter Buckeye shall conduct an inspection survey of each internal floating roof tank, each fixed roof tank, and facility fugitive emissions component using optical gas imaging equipment. [06-096 C.M.R. ch. 171, § 5(A)(1)]
2. The optical gas imaging equipment used must meet the following specifications as verified by the manufacturer:
 - a. Capable of imaging gases in the spectral range for benzene; and
 - b. Capable of imaging a gas that is half methane and half propane at a concentration of 10,000 ppm at a flow rate of ≤ 60 grams per hour from a quarter inch diameter orifice.

[06-096 C.M.R. ch. 171, § 5(A)(2)]

3. If visible emissions are observed in a fugitive emissions component using optical gas imaging equipment, within two calendar days Buckeye 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, Buckeye may elect to presume that a leak is present without further confirmation. If a leak is determined or presumed to be present, Buckeye 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, Buckeye 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, Buckeye shall notify the Department of the leak, the reason for the delay, and the expected date of the repair. Buckeye 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 Buckeye shall keep the following records:
 - a. The date of the inspection;
 - b. Identification and description of the equipment and areas inspected;
 - c. A description of any leaks detected;
 - d. An electronic recording of the optical gas imaging equipment images; and
 - e. A description of any resulting corrective actions or repairs and the dates they were made.

[06-096 C.M.R. ch. 171, § 7(B)]

B. Fenceline Monitoring

Buckeye 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, Buckeye 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. Buckeye shall conduct fenceline monitoring 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. Buckeye shall keep the following records:
 - a. Coordinates of all passive monitors and the meteorological station used. Coordinates shall be determined using a method with an accuracy of three meters or less.
 - b. Average ambient temperature and barometric pressure measurements for the sampling period.
 - c. Individual sample results.
 - d. Method detection limit for each sample.
[06-096 C.M.R. ch. 171, § 7(C)]
6. Buckeye shall submit a report to the Department for each calendar quarter with the following information. Each quarterly report must be electronically submitted no later than 45 days after the end of the reporting period.
 - a. Facility name and address.
 - b. Year and reporting quarter (i.e., Quarter 1, Quarter 2, Quarter 3, or Quarter 4).
 - c. For each passive monitor:
 - (iv) The latitude and longitude location coordinates;
 - (v) The sampler name; and
 - (vi) Identification of the type of sampler (e.g., regular monitor, duplicate, field blank, etc.)
 - d. The beginning and ending dates for each sampling period.
 - e. Individual sample results in units of micrograms per cubic meter ($\mu\text{g}/\text{m}^3$) 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) Internal Floating Roof Tanks

Buckeye shall meet the following requirements for Tanks #9, #11, #16, #18, and #20 regardless of what product is being stored. When distillate fuel is being stored, the following requirements are incorporated through 06-096 C.M.R. ch. 115, BPT.

A. 06-096 C.M.R. ch. 111

Buckeye shall comply with all requirements of 06-096 C.M.R. ch. 111 applicable to the IFR tanks including, but not limited to, the following.

1. All IFR tanks shall be equipped, maintained, and operated such that:
 - a. There is an IFR with closure seal(s) between the roof edge and the tank wall; [06-096 C.M.R. ch. 111, § 3(A)(1)]
 - b. The IFR and closure seal(s) are maintained such that there are no holes, tears, or other openings in the seal or between the seal and the floating roof; [06-096 C.M.R. ch. 111, § 3(A)(2)]
 - c. All storage tank openings, except stub drains, are equipped with covers, lids, or seals. Each cover over an opening in an IFR, except for automatic bleeder vents (vacuum breaker vents) and rim space vents, shall be closed at all times, except when the cover must be open for access. [06-096 C.M.R. ch. 111, § 3(A)(3) and 40 C.F.R. § 63.1063(b)(3)] and
 - d. Each automatic bleeder vent (vacuum breaker vent) and rim space vent is closed at all times, except when required to be open to relieve excess pressure or vacuum, in accordance with the manufacturer's design. [06-096 C.M.R. ch. 111, § 3(A)(3) and 40 C.F.R. § 63.1063(b)(4)]
2. Buckeye shall comply with the following source inspection requirements for the IFR tanks:
 - a. Routine inspections of floating roofs shall be conducted through roof hatches once every month. [06-096 C.M.R. ch. 111, § 3(A)(4)]
 - b. A complete inspection of the floating roof and seal shall be performed at least once every ten calendar years and each time the IFR tank is emptied and degassed. Buckeye shall perform an inspection by visually inspecting the floating roof deck, deck fittings, and rim seals from within the storage vessel. 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. 111, § 3(A)(5)]

B. 06-096 C.M.R. ch. 170

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

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

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

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

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

- b. The probe inlet of the monitoring instrument shall be located in the line between the tank or vessel being degassed and the control device or other location as approved by the Department. [06-096 C.M.R. ch. 170, § 6]
- c. The monitoring device shall be calibrated, maintained, and operated according to the manufacturer's instructions. [06-096 C.M.R. ch. 170, § 7(A)]
- d. The vapor control system used in the degassing process shall be free of liquid and vapor leaks. This includes, but is not limited to, the degassing equipment, vacuum truck, pumps, hoses, and connections.
- e. Any visible or audible liquid or vapor leak originating from the vapor control device or other associated product recovery device shall be repaired as soon as possible.
- f. Buckeye 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 gasoline/ethanol blend. These requirements do not apply when sludge is immediately transferred (e.g., pumped) to a floating roof tank whose roof is not resting on its legs.
 - (1) During sludge removal, Buckeye shall vent emissions from the vessel receiving the sludge to a vapor control system designed to achieve a VOC control efficiency of at least 95%;

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

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

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

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

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

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

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

4. Recordkeeping

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

- a. Buckeye's contact person name and telephone number;
- b. Storage tank capacity;
- c. The product most recently stored in the storage tank prior to degassing;
- d. Volume (cubic feet) of vapor space degassed;
- e. Type of vapor control system used;

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

C. 06-096 C.M.R. ch. 171

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

1. Tank Inspections

The IFR tanks are subject to the following inspection requirements regardless of the product being stored.

a. Visual Inspections.

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

b. Instrument Inspections.

- (1) At least once per calendar month, Buckeye 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.
- (2) 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.
- (3) Buckeye 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 VOCs in the tank to be measured.
- (4) 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.

- (5) 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)]

- c. If a leak is detected, Buckeye shall initiate corrective action and repair the leak within 15 calendar days. If the leak cannot be repaired within 15 days, Buckeye shall notify the Department of the leak, the reason for the delay, and the expected date of the repair. Buckeye shall promptly notify the Department of the date that the leak is successfully repaired. [06-096 C.M.R. ch. 171, § 5(B)(3)]
- d. For each IFR tank, at least once every five calendar years and each time the tank is emptied and degassed, Buckeye 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)]
- e. Buckeye 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)]

D. Best Practical Treatment

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

- 1. Buckeye shall not land the roof of an IFR tank, i.e., allow the IFR to rest upon its support legs, unless:
 - a. the most recently stored product was distillate oil, jet fuel, or kerosene; or
 - b. the tank changes product (e.g., from winter gas to summer gas) and roof landings are limited to no more than five times per calendar year for all IFR tanks at the facility combined; or
 - c. the tank is subsequently degassed in accordance with 06-096 C.M.R. ch. 170; or
 - d. Buckeye is given written approval by the Department.
- 2. Buckeye 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.
3. If any holes, tears, or other openings are present, the source shall notify the Department in writing within 10 days of the discovery of such holes, tears, or other openings and the course of action to be taken for repair. Buckeye shall demonstrate to the Department that all repairs were made as soon as practicable and that the IFR tank was either repaired or emptied and removed from service within 45 days.
 4. The following records shall be maintained at the source and available for inspection by the Department:
 - a. Inspection log documenting routine monthly inspections of floating roof covers and seals, including LEL readings from such inspections, which are to include notification and explanation of any excessive increases in LEL readings as compared to normal operating conditions; [06-096 C.M.R. ch. 115, BPT] and
 - b. Inspection log documenting any detected leaks, holes, tears, or other openings and the corrective action taken.

E. Periodic Monitoring

Buckeye shall record data and maintain records for the following periodic monitoring values for the IFR tanks. Additional recordkeeping requirements are included with the requirements for 40 C.F.R. Part 63, Subpart BBBBBB.

1. Records of product stored and throughput for each tank on a monthly basis; [06-096 C.M.R. ch. 137]
2. Records of any tank degassing, including the notification provided to the Department, date and time degassing began and ended, and monitoring data collected during degassing; [06-096 C.M.R. ch. 115, BPT]
3. Inspection log documenting routine monthly inspections of floating roof covers and seals, including LEL readings from such inspections, which are to include notification and explanation of any excessive increases in LEL readings as compared to normal operating conditions; [06-096 C.M.R. ch. 115, BPT]
4. Inspection log documenting any detected leaks, holes, tears, or other openings and the corrective action taken. [06-096 C.M.R. ch. 115, BPT]

(20) Loading Rack

A. 06-096 C.M.R. ch. 112

Buckeye shall comply with all requirements of 06-096 C.M.R. ch. 112 applicable to the Loading Rack including, but not limited to, the following:

1. Loading of liquid product into gasoline tank trucks shall be limited to those which have been certified within the last 12 months as vapor-tight pursuant to *Gasoline Tank Truck Tightness Self-Certification*, 06-096 C.M.R. ch. 120. [06-096 C.M.R. ch. 112, § 3(A)]
2. Buckeye shall vent all displaced vapors and gases to the VRU which shall be maintained in good working order and operated at all times gasoline is being transferred to tank trucks. [06-096 C.M.R. ch. 112, § 3(B)]
3. Buckeye shall prevent liquid drainage from the loading device when it is not in use. [06-096 C.M.R. ch. 112, § 3(C)]
4. 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)]
5. 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)]
6. Buckeye shall not allow gasoline to 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)]
7. Emissions of VOC from the VRU shall not exceed 35 mg/l of gasoline transferred. [06-096 C.M.R. ch. 112, § 4(A)]

B. 06-096 C.M.R. ch. 120

Buckeye shall comply with all requirements of 06-096 C.M.R. ch. 120 applicable to the Loading Rack including, but not limited to, the following:

1. Buckeye 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. 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 explosive 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)]
3. If the vapor control system exceeds any of the limits listed in 2, Buckeye shall repair and retest the system within fifteen (15) 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)]

C. 06-096 C.M.R. ch. 171

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

1. Liquid petroleum product shall not be loaded into any tank truck or trailer whose most recent previous load was gasoline unless vapors displaced from the tank truck or trailer are captured and routed to the VRU. The vapor collection and VOC control systems shall be maintained in good working order and must be operated at all times product is being transferred to such tank trucks or trailers. [06-096 C.M.R. ch. 171, § 4(C)(1)]
2. All loading and vapor lines shall be equipped with fittings which make vapor-tight connections and which close automatically when disconnected. [06-096 C.M.R. ch. 171, § 4(C)(2)]
3. The pressure in the vapor collection system shall not exceed the tank truck or trailer pressure relief settings. [06-096 C.M.R. ch. 171, § 4(C)(3)]

D. 40 C.F.R. Part 60, Subpart XX

Buckeye shall comply with all requirements of 40 C.F.R. Part 60, Subpart XX applicable to the Loading Rack including, but not limited to, the following:

1. Standards

- a. 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)]
- b. Emissions to the atmosphere from the VRU are not to exceed 35 milligrams of total organic compounds per liter of gasoline loaded. [40 C.F.R. § 60.502(b)]
- c. The VRU shall be designed to prevent any TOC vapors collected at one loading rack from passing to another loading rack. [40 C.F.R. § 60.502(d)]
- d. 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).
- e. Buckeye 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)]
- f. Buckeye 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)]
- g. 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)]
- h. 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)]
- i. Each calendar month, the vapor collection system, the VRU, 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 fifteen (15) calendar days after it is detected. [40 C.F.R. § 60.502(j)]

2. Recordkeeping

Buckeye shall keep records of monthly leak inspections required under 40 C.F.R. § 60.502(j) pursuant to 40 C.F.R. §§ 60.505(c) and (e). [40 C.F.R. § 60.505]

**E. Best Practical Treatment
[06-096 C.M.R. ch. 115, BPT]**

1. Emissions from the VRU shall not exceed 35 milligrams of VOC per liter of product transferred. If emissions exceed 10 mg/l of product transferred, Buckeye shall take corrective action to ensure emissions do not exceed 35 mg/l of product transferred. Buckeye shall keep records of all corrective actions taken in response to this requirement.
2. Buckeye shall not exceed a petroleum product throughput at the loading rack as follows (based on a 12-month rolling total):

Product	Throughput Limit
gasoline/ethanol (combined)	195,000,000 gallons
distillate fuel	125,000,000 gallons

3. The Loading Rack shall not exceed a product loading rate of 230,000 gallons per four-hour block period.

F. Periodic Monitoring

Buckeye shall record data and maintain records for the following periodic monitoring values for the IFR tanks. Additional recordkeeping requirements are included with the requirements for 40 C.F.R. Part 63, Subpart BBBBBB.

1. Hours of operation on a monthly and calendar year basis; [06-096 C.M.R ch. 137]
2. 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]
3. Records of monthly leak inspections required under 40 C.F.R. § 60.502(j) pursuant to 40 C.F.R. §§ 60.505(c) and (e);
4. 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)]
5. Records of any maintenance activities performed (planned or unplanned) on the VRU; [40 C.F.R. § 70.6(c)(1)]
6. Records of all corrective actions taken in response to the VRU exceeding a VOC emission rate of 10 mg/l. [06-096 C.M.R. ch. 115, BPT]

(21) Fixed Roof Tanks

Buckeye shall meet the following requirements for Tanks #1, #2, #6, #8, #10, and #19.

A. Buckeye 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. Periodic Monitoring

Buckeye shall record data and maintain records for the following periodic monitoring values for the fixed roof tanks:

1. For each tank, records of the petroleum liquid stored, the period of storage, and the maximum true vapor pressure of that liquid during the respective storage period; [06-096 C.M.R. ch. 115, BPT]
2. Records of product stored and throughput for each tank on a monthly basis; [06-096 C.M.R. ch. 137]
3. Inspection log documenting the monthly inspections of the fixed roof tanks including the date and results of each inspection and documentation of corrective action taken. [06-096 C.M.R. ch. 115, BPT]

(22) Facility-Wide Annual Emission Limits

A. Buckeye shall not exceed the following facility-wide annual emission limits:

Pollutant	Emission Limit (tpy)
VOC	49.9
Single HAP	7.9
Total HAP	19.9

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

The VOC and HAP limits include emissions from all licensed emissions equipment and processes, including emissions from the petroleum storage tanks, facility piping, and the Loading Rack. In addition to emissions from normal operation, emissions from both routine and non-routine maintenance activities shall be included, such as roof landings, tank degassing, and tank cleaning.

The scope of these emission limitations does not include emissions from non-licensed equipment or processes which are considered insignificant activities pursuant to 06-096 C.M.R. ch. 140, Appendix B.

B. Compliance Demonstration

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

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

1. Petroleum Storage Tanks

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

2. Tank Maintenance

Emissions from tank maintenance (both planned and unplanned), including roof landings, tank degassing, and tank cleaning, shall be included when calculating the facility's annual facility-wide VOC and HAP emissions. Emissions from these operations shall be calculated in accordance with the methodology contained in the most current version of AP-42, Fifth Edition, Volume 1, Chapter 7 and taking into account the control efficiency of any control equipment approved by the Department for use.

3. Facility Piping

Operation of the facility's equipment will result in fugitive emissions of VOC and HAP from the terminal's piping. Buckeye shall keep an updated inventory of system components (e.g., valves, pump seals, connectors, flanges, etc.) and calculate fugitive emissions using emission factors obtained from EPA's *Protocol for Equipment Leak Emission Estimates*, EPA-453/R-95-017, dated November 1995.²

² <https://www3.epa.gov/ttnchie1/efdocs/equiplks.pdf>

4. Loading Rack

In accordance with the preamble to 40 C.F.R. Part 63, Subpart R published in the Federal Register on December 14, 1994, fugitive VOC emissions from the Loading Rack are assumed to be 0.8% of the vapors displaced during loading.

Emissions of VOC from the collected gases sent to the VRU shall be based on data from the VOC CEMS. Emissions of HAP shall be determined based on the mass of VOC emissions and speciation data from AP-42, other industry publications, or SDSs.

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

C. Recordkeeping Requirements

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

1. Monthly throughput for each petroleum storage tank;
2. Monthly throughput of each product at the Loading Rack;
3. Equipment and product information necessary to calculate emissions from the petroleum storage tanks in accordance with AP-42, Chapter 7;
4. Process and product information necessary to calculate emissions from tank maintenance operations in accordance with AP-42, Chapter 7; and
5. Equipment and product information necessary to calculate emissions from facility piping in accordance with EPA's *Protocol for Equipment Leak Emission Estimates*.

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

(23) General Process Sources

Visible emissions from any general process source shall not exceed 20% opacity on a six-minute block average basis. [06-096 C.M.R. ch. 101, § 4(B)(4)]

(24) Fugitive Emissions

A. Buckeye 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. Buckeye 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)]

(25) **Performance Test Protocol**

For any performance testing required by this license, Buckeye 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]

(26) **Annual Emission Statements**

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

B. Every third year, or as requested by the Department, Buckeye 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. Buckeye 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)]

(27) If the Department determines that any parameter value pertaining to construction and operation of the emissions units, including but not limited to stack size, configuration, flow rate, emission rates, nearby structures, etc., deviates from what was submitted in the application or ambient air quality impact analysis for this air emission license, Buckeye may be required to submit additional information. Upon written request from the Department, Buckeye shall provide information necessary to demonstrate AAQS will not be exceeded, potentially including submission of an ambient air quality impact analysis or an application to amend this air emission license to resolve any deficiencies and ensure

**Buckeye Terminals, LLC
Penobscot County
Bangor, Maine
A-202-71-L-R**

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

compliance with AAQS. Submission of this information is due within 60 days of the Department's written request unless otherwise stated in the Department's letter.
[06-096 C.M.R. ch. 115, § 2(O)]

DONE AND DATED IN AUGUSTA, MAINE THIS 2nd DAY OF OCTOBER, 2025.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY:  for
MELANIE LOYZIM, COMMISSIONER

The term of this license shall be ten (10) years from the signature date above.

[Note: If a renewal application, determined as complete by the Department, is submitted prior to expiration of this license, then pursuant to Title 5 M.R.S. § 10002, all terms and conditions of the license shall remain in effect until the Department takes final action on the license renewal application.]

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application: 10/21/2024

Date of application acceptance: 10/24/2024

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