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## STATEMENT OF BASIS

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Title V Air Operation Permit Renewal  
Permit No. 0570123-036-AV

### APPLICANT

The applicant for this project is Buckeye Terminals, LLC. The applicant's responsible official and mailing address are: Michael Miller, Buckeye Terminals, LLC, 848 McCloskey Blvd., Tampa, FL 33605.

### FACILITY DESCRIPTION

The applicant operates the existing Buckeye Terminals, LLC - Tampa North facility, which is located in Hillsborough County at 504 North 19<sup>th</sup> Street, Tampa, Florida.

Buckeye Terminals, LLC - Tampa North Terminal is a bulk gasoline terminal which consists of: 1) twelve petroleum liquid storage tanks for storage and handling of the petroleum products (gasoline, distillate, and denatured ethanol) and additives; 2) a truck loading rack with four loading bays; and 3) a marine loadout operation. Details of the equipment are as follows:

#### Loading Rack

The loading rack consists of four (4) truck-loading bays. The Eastern loading bay (Lane 3, Bay C) consists of five (5) loading arms; three (3) for gasoline, and two (2) for distillate or residual oil. The second bay (Lane 2, Bay B) consists of four (4) loading arms; three (3) for gasoline and one (1) for distillate or residual oil. The third bay (Lane 1, Bay A) consists of five (5) loading arms; four (4) for gasoline and one (1) for distillate, residual oil, or denatured ethanol. The (Western) fourth loading bay (Lane 4, Bay D) consists of five (5) loading arms; three (3) for gasoline and two (2) for distillate or residual oil. An emergency generator is also at the site to operate the loading rack in emergencies where the primary power is unavailable.

The facility also has the capability to load limited quantities of gasoline and distillate fuel into marine vessels at the facility's dock directly from the storage tanks. The products are pumped to the dock using the same piping that transfers fuel from the vessels into the storage tanks. The marine loading operation is uncontrolled.

Volatile organic compound (VOC) emissions generated during the truck loading operations are primarily controlled by a John Zink "ZTOF" (Zink Thermal Oxidizer Flare) Vapor Combustion Unit (VCU), Model ZCT-5-9-50-X-2/8-2/8 (Serial No. VC-9077984). The backup control device is a McGill Vapor Recovery Unit (VRU), Model No. 704. To minimize loading losses, all petroleum products are bottom loaded into the tanker trucks.

#### Storage Tanks

The storage tank farm consists of twelve storage tanks. Five of the tanks are large internal floating roof tanks that can store gasoline or any other petroleum product with a lower vapor pressure (i.e. distillates, denatured ethanol, additives, etc.). There are two fixed cone roof tanks that store distillates or any other petroleum product with a lower vapor pressure. In addition, there are five smaller fixed roof tanks that store additives or red dye to be mixed into the finished product being delivered to the trucks.

In addition, butane is received by trucks and pumped to Tanks 1802 and 1812. The butane is blended into the gasoline in these tanks in order to increase the RVP of the gasoline. As part of the butane blending project, the butane pipping for Tank 1801 has been installed, however, the blending nozzles have not been installed. The butane blending equipment for Tanks 1803 and 1806 as well as the nozzles in Tank 1801, are authorized to be installed under Construction Permit No. 0570123-033-AC.

The VOC emission limits for all of the storage tanks were calculated by using Tanks 4.09d and the highest average vapor pressure from the approved products for storage in each tank group.

This facility also includes miscellaneous insignificant emissions units and activities.

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### REGULATED EMISSIONS UNIT IDENTIFICATION NUMBERS AND DESCRIPTIONS

EU No.	Brief Description
<i>Regulated Emissions Units</i>	
001	Internal Floating Roof Tanks (1801, 1802, 1803, 1806, & 1812)
002	Fixed Roof Tanks (1804 & 1805)
003	Truck Loading Rack
008	Marine Loading
009	Additive Storage Tanks (1807, 1809, 1810, 1811, and 1814)
010	Emergency Generator Engine

### APPLICABLE REGULATIONS

Based on the Title V air operation permit renewal application received on June 2, 2017, this facility is not a major source of hazardous air pollutants (HAP). A summary of applicable regulations is shown in the following table:

Regulation	EU No(s).
40 CFR 60, Subpart A, NSPS General Provisions	001, 003, 010
40 CFR 60, Subpart Kb	001
40 CFR 60, Subpart XX	003
40 CFR 60, Subpart IIII	010
40 CFR 63, Subpart A, NESHAP General Provisions	001, 003
40 CFR 63, Subpart BBBBBB	001, 003
Rule 62-296.500, F.A.C.	001, 003
Rule 62-296.508, F.A.C.	001
Rule 62-296.510, F.A.C.	003

### PROJECT DESCRIPTION

The purpose of this permitting project is to renew the existing Title V permit for the above referenced facility.

### PROCESSING SCHEDULE AND RELATED DOCUMENTS

Title V Air Operation Permit Renewal (No. 0570123-031-AV) issued February 1, 2013

Title V Air Operation Administrative Correction (No. 0570123-032-AV) issued February 10, 2014

Title V Air Operation Permit Revision (No. 0570123-035-AV) issued December 21, 2015

Application for a Title V Air Operation Permit Renewal received June 2, 2017

### PRIMARY REGULATORY REQUIREMENTS

Standard Industrial Classification (SIC) Code: 4226 – Special Warehousing and Storage.

North American Industry Classification System (NAICS): 493110 – General Warehousing and Storage.

HAP: The facility is not identified as a major source of hazardous air pollutants (HAP).

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Title IV: The facility does not operate units subject to the acid rain provisions of the Clean Air Act.

Title V: The facility is a Title V major source of air pollution in accordance with Chapter 62-213, Florida Administrative Code (F.A.C.).

PSD: The facility is not a Prevention of Significant Deterioration (PSD)-major source of air pollution in accordance with Rule 62-212.400, F.A.C.

NSPS: The facility operates units subject to the New Source Performance Standards (NSPS) of 40 Code of Federal Regulations (CFR) 60. The facility is subject to 40 CFR 60 Subpart XX- Standards of Performance for Bulk Gasoline Terminals. Tank 1812 is subject to requirements of 40 CFR 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. The emergency generator is subject to 40 CFR 60 Subpart IIII - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines.

NESHAP: The facility operates units subject to the National Emissions Standards for Hazardous Air Pollutants (NESHAP) of 40 CFR 63. The facility is subject to 40 CFR 63 Subpart BBBB - Gasoline Distribution Bulk Terminals, Bulk Plants, Bulk Plants and Pipeline Facilities.

CAIR: The facility is not subject to the Clean Air Interstate Rule (CAIR) set forth in Rule 62-296.470, F.A.C.

CAM: Compliance Assurance Monitoring (CAM) applies to emissions unit No. 003 (Truck Loading Rack). EU No. 003 is subject to CAM for the regulated emissions of volatile organic compounds, which are controlled primarily by a vapor combustion unit. A secondary vapor recovery unit serves as a back-up if the VCU is inoperable.

GHG: The facility is not identified as a major source of greenhouse gas (GHG) pollutants.

### PROJECT REVIEW

The following changes to the permit made as part of this renewal are shown in ~~strike through~~ format for deletions and in double underline format for additions. For ease of identification, all changes have also been highlighted in yellow within the permit document.

During the review of this project, as requested by the applicant, the potential VOC emissions from EU Nos. 001, 002, 003, and 008 were re-evaluated. The changes discussed below result in a decrease in facility-wide potential VOC emissions from 186.9 to 184.5 tons/year.

1. The potential VOC emissions from EU No. 001 (Internal Floating Roof Tanks), which includes emissions due to degassing, increased from 72.7 to 76.1 tons/year. This increase is due to a relaxation of the maximum RVP limits on gasoline as specified in 40 CFR 60 80.27 - *Controls and prohibitions on gasoline volatility*. Using the higher allowable RVP limit of 10.5 psi for the period of May through September results in an increase in potential VOC emissions of 3.4 tons/year. The process description and Specific Condition No. A.1. were updated as follows to reflect this change.

Subsection A. Facility Description - The facility-wide VOC PTE, based on these emission units, is ~~186.9~~ 184.5 tons per year.

#### A.1. Permitted Capacity.

A)

Tank No.	Product	Throughput maximum (gallons per consecutive 12 month period)	VOC Emissions (tons per consecutive 12 month period)
Total of 5 Tanks	Gasoline/Ethanol	700,000,000	<del>42.7</del> <u>46.1</u> *

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- B) The above tanks are authorized to store gasoline having an annual weighted average RVP of ~~11.5~~ 11.8 psi or less and authorized to store lower RVP fuels, such as denatured ethanol.
2. In addition, the potential VOC emissions from EU No. 002 (Fixed Roof Tanks) decreased from 1.6 tons/year to 1.2 tons/year. Previously, the potential VOC emissions were calculated based on each tank in the emission unit handling 159,000,000 gallons/year. However, Permit No. 0570123-035-AV stipulates an overall throughput of 159,000,000 gallons/year that applies to all the tanks within EU No. 002. The emissions were recalculated using TANKS 4.09d based on a maximum combined throughput of 159,000,000 gallons/year. Specific Condition No. B.1. was updated as follows to reflect this change.

### B.1. Permitted Capacity

#### A) EU 002-Tanks 1804 & 1805

Tank No.	Product	Throughput maximum (gallons per consecutive 12 month period)	VOC Emissions (tons per consecutive 12 month period)
1804	Distillate	n/a	n/a
1805	Distillate	n/a	n/a
2 Tanks Combined	Distillate	159,000,000	<del>1.6</del> <u>1.2</u>

3. Also, the potential emissions from EU No. 008 (Marine Loading) were decreased from 9.8 tons/year to 4.5 tons/year. According to Buckeye, products are loaded into Ships/Ocean Barges. Previously, the potential emissions were based on the products being loaded into Shallow Draft Barges, which are considered to be higher emitting vessels based on emission factors from AP 42 5<sup>th</sup> Edition, Ch. 5.2. Specific Condition No. C.1. was updated as follows to reflect this change.

### C.1. Permitted Capacity

#### D) EU 008-Marine Loading System

Product	Throughput maximum (gallons per consecutive 12 month period)	VOC Emissions (tons per consecutive 12 month period)
Gasoline	5,000,000	<del>9.8</del> <u>4.5</u>

4. The applicant also requested that the VOC emissions from EU No. 003 (Truck Loading Rack) be re-evaluated. The applicant requested that the emissions due to the loading of leaking trucks be reduced from 13 mg/L of gasoline loaded to 8 mg/L of gasoline loaded. Based on EPA-453/R-94-002b, *Gasoline Distribution Industry (Stage I) – Background Information for Promulgated Standards*, November 1994, the leakage emission factor for cargo tank trucks that are subject to the 1-inch decay limit is 8 mg/L. In addition, it states that the leakage emission factor for cargo tank trucks that are subject to the 3-inch decay limit is 13 mg/L.

According to Buckeye, all of the trucks loaded at Buckeye's terminal are certified to the 1-inch decay limit specified in 40 CFR 63 Subpart R – *NESHAP for Gasoline Distribution Facilities*, which is the most stringent limit, so that the truck will be able to load at any gasoline terminal. However, Buckeye does not have any procedures to lock out trucks tested to the 3-inch decay limit that is specified in 40 CFR 60 Subpart XX – *Standards of Performance for Bulk Gasoline Terminals* and 40 CFR 63 Subpart BBBBBB – *NESHAP for Source Category: Gasoline Distribution Bulk Terminals, Bulk Plants, and Pipeline*

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*Facilities.* Therefore, because trucks tested to the 3-inch decay limit can load product at the Terminal, the emissions will remain at 13 mg/L of gasoline loaded.

5. EU No. 006 (Additive Storage Tank No. 1811) was incorporated as follows into EU 009 (Additive Storage Tanks (1807, 1809, 1810, 1811, and 1814) so that all of the additive tanks are grouped under one emission unit.

~~EU006—Additive Storage Tank (1811)~~

EU009 - Additive Storage Tanks (1807, 1809, 1810, 1811, & 1814)

6. Condition No. FW11 was changed as follow to accurately reflect the potential HAP emissions of the facility rather than listing the maximum allowable HAP emissions. In addition, the permitting note was deleted because this note is duplicated in Subsection A of the permit.

FW11.C) The HAP emissions, as defined in Rule 62-210.200, F.A.C., shall be less than ~~40~~ 3.3 tons in any 12 consecutive month period for any individual HAP, and less than ~~25~~ 11 tons in any 12 consecutive month period for any combination of HAPs.

~~{Permitting Note: The facility wide emissions include approximately 30 tons/yr attributed to degassing (landing losses) of the tanks for scheduled maintenance or product changeovers.}~~

7. Specific Condition Nos. FW6 and A.4. were added to accurately reflect the requirements of 40 CFR 63 Subpart BBBBBB.
8. Specific Condition No. D.4. was added to accurately reflect the requirements of 40 CFR 60 Subpart IIII.

## CONCLUSION

This project renews Title V air operation permit No. 0570123-035-AV, which was effective on December 21, 2015. This Title V air operation permit renewal is issued under the provisions of Chapter 403, Florida Statutes (F.S.), and Chapters 62-4, 62-210, and 62-213, F.A.C.