DEPARTMENT OF ENVIRONMENTAL QUALITY AIR QUALITY DIVISION ACTIVITY REPORT: On-site Inspection

B913266370

FACILITY: Buckeye Terminals, LLC	SRN / ID: B9132			
LOCATION: 2303 S. 3rd Street, NILI	ES .	DISTRICT: Kalamazoo		
CITY: NILES		COUNTY: BERRIEN		
CONTACT: Tony Kozel, Terminal M	CONTACT: Tony Kozel , Terminal Manager			
STAFF: Matthew Deskins	STAFF: Matthew Deskins COMPLIANCE STATUS: Compliance			
SUBJECT: Unannounced Scheduled	had met with Joe Garvin (Terminal Operator) since			
Tony had just left prior to staff's arrival.				
RESOLVED COMPLAINTS:				

On February 9, 2023 AQD staff (Matt Deskins) went to conduct an unannounced scheduled inspection of the Buckeye Terminal (B9132) (formerly Shell Oil) facility located in Niles, Berrien County. The purpose of the inspection was to determine the facilities compliance with their Opt-Out permit (PTI No. 214-16) as well as any other applicable state and federal air regulations that the AQD is delegated to enforce. The facility is also subject to 40 CFR Part 63 Subpart BBBBBB (NESHAP for Gasoline Distribution Bulk Terminals, Bulk Plants, and Pipeline Facilities at area sources) which took effect in 2008. However, the AQD is not delegated to enforce this regulation so staff will not be making any compliance determination with regards to it. Staff departed for the facility at approximately 10:55 a.m.

Staff arrived at the facility at approximately 12:45 p.m. after travel time and having lunch. Staff walked up to the entrance door and noted it was locked. Staff then rang the doorbell as directed by the instructions posted on the door. Staff was let in and greeted by Joe Garvin who is a Terminal Operator. Staff introduced them self to Joe, signed in, and asked if Tony Kozel was available. Tony is the Terminal Manager with whom staff has met with during previous inspections. Joe mentioned that Tony had just left but asked if there was anything that he could help staff with. Staff said that would be great if he could and staff proceeded to explain what the inspection would entail. Joe said he would assist staff the best he could and then led staff to the control / conference room. Staff then pulled out their previous inspection report that contains all the PTI conditions as well as what staff had observed previously. The following summarizes staff's discussions with Joe, operational observations, their permit conditions, and the overall facility compliance status.

According to Joe, Buckeye Terminals still consists of a North and South Terminal and both currently have loadout racks. The VOC emissions from the North Terminal rack are controlled by an open flare while the South Terminal had been controlled by a carbon bed adsorption system. From previous inspections, staff recalled that the South Terminal had been shut down and asked Joe if that status had changed at all. Joe said that it hasn't and that they still consider it idled for loading purposes. He said that they still use the tanks located across the street from it though. He confirmed that all the lines and loading arms at the South Terminal had been drained and purged with Nitrogen as staff had been told previously. He said all truck loading is done at the North Terminal and like staff had also been told previously, he doesn't think that they will ever use the South Terminal one for loading again. Staff then asked about the carbon adsorption system and Joe said its status was still the same (disconnected and being used for parts on systems at other locations). Staff then asked about the flare and other equipment at the North Terminal and Joe said that they still conduct daily and monthly Leak Detection and Repair (DAR) Inspections. He said that the daily inspections are recorded on paper and monthly inspections are inputted into an electronic database. He said they also inspect all the equipment including the load out equipment monthly. He said that Cimarron Energy comes out twice a year to inspect the open flare and its components. He then showed staff a folder full of maintenance records for it. Staff then asked about the tanker vapor tightness testing for the trucks that come in to load. Joe said that Buckeye still uses a database that regulates this and that they use a two

card/two swipe system for the trucks that come in. He said that one card will allow the driver to open the gate and enter the facility and the other one to load the tanker. If the tanker has an expired certification, the system will lock out both the driver and the tanker and will not allow the tanker to be loaded. Joe said that Buckeye's computers track the tanker number(s) and it is equipped with a 30-day warning system for their customers so locking tankers out is typically not an issue. He then showed staff the program on the computer along with e-mail notifications that are sent to trucking companies regarding the certifications. Staff then asked about the products stored in the tanks at the North and South Terminal and if any of their contents had changed. Staff then showed Joe the emission unit table so that he could review it. After Joe reviewed it, he confirmed that there are six tanks in use at the North Terminal and five tanks at the South Terminal and all products stored in them were the same. The follow is the EU-Table of the permit and in bold will be staff's comments regarding them.

PLEASE NOTE: Staff included the capacity of each tank in barrels. To convert to gallons, multiply the barrels capacity by 42.

EMISSION UNIT SUMMARY TABLE

The descriptions provided below are for informational purposes and do not constitute enforceable conditions.

Emission Unit ID	Emission Unit Description (Process Equipment & Control Devices)	Flexible Group ID
EUTANK_N-7	Fixed roof tank storing distillate. (Located at North Terminal and has a capacity of 29,787 barrels. Stores Ultra Low Sulfur Diesel)	FGFIXEDROOFTANKS FGFACILITY
EUTANK_N-8	Fixed roof tank storing distillate. (Removed. Was an additive tank at the South Terminal)	FGFIXEDROOFTANKS FGFACILITY
EUTANK_N-9	Fixed roof tank storing distillate. (Located at North Terminal and has a capacity of 39,571 barrels. Stores Ultra Low Sulfur Diesel)	FGFIXEDROOFTANKS FGFACILITY
EUTANK_N-90	Fixed roof tank storing distillate. (Located at South Terminal. This is a Pencil Tank that has been out of service for years)	FGFIXEDROOFTANKS FGFACILITY
EUTANK_N-91		FGFIXEDROOFTANKS

Emission Unit ID	Emission Unit Description (Process Equipment & Control Devices)	Flexible Group ID
	Fixed roof tank storing distillate. (Located at South Terminal. This is a Pencil Tank that has been out of service for years)	FGFACILITY
EUTANK_N-92	Fixed roof tank storing distillate. (Located at South Terminal. This is a Pencil Tank that has been out of service for years)	FGFIXEDROOFTANKS FGFACILITY
EUTANK_N-94	Fixed roof tank storing distillate. (Located at South Terminal. This is a calibration tank that has not been in service for years. It was used previously to prove that rack meters were accurate)	FGFIXEDROOFTANKS FGFACILITY
EUTANK_N-10	Internal floating roof tank storing gasoline, ethanol or transmix. (Located at South Terminal and has a capacity of 48,541 barrels. Stores Regular Gasoline)	FGIFRTANKS FGFACILITY
EUTANK_N-22	Internal floating roof tank storing gasoline, ethanol or transmix. (Located at North Terminal and has a capacity of 38,762 barrels. Stores Regular Gasoline)	FGIFRTANKS FGFACILITY
EUTANK_N-23	Internal floating roof tank storing gasoline, ethanol or transmix. (Located at North Terminal and has a capacity of 20,500 barrels. Stores Ethanol)	FGIFRTANKS FGFACILITY
EUTANK_N-24	Internal floating roof tank storing gasoline, ethanol or transmix. (Located at North Terminal and has a capacity of 21,945 barrels. Stores Premium Gasoline)	FGIFRTANKS FGFACILITY
EUTANK_N-30	Internal floating roof tank storing gasoline, ethanol or transmix. (Located at South Terminal and has a capacity of 30,587 barrels. Stores Regular Gasoline)	FGIFRTANKS FGFACILITY

Emission Unit ID	Emission Unit Description (Process Equipment & Control Devices)	Flexible Group ID
EUTANK_N-33	Internal floating roof tank storing gasoline, ethanol or transmix. (Located at North Terminal and has a capacity of 29,161 barrels. Stores Regular Gasoline)	FGIFRTANKS FGFACILITY
EUTANK_N-50	Internal floating roof tank storing gasoline, ethanol or transmix. (Located at South Terminal and has a capacity of 69,672 barrels. Stores Regular Gasoline)	FGIFRTANKS FGFACILITY
EUTANK_N-70	Internal floating roof tank storing gasoline, ethanol or transmix. (Located at South Terminal and has a capacity of 20,648 barrels. Stores Regular Gasoline)	FGIFRTANKS FGFACILITY
EUTANK_N-80	Internal floating roof tank storing gasoline, ethanol or transmix. (Located at South Terminal and has a capacity of 31,405 barrels. Stores Premium Gasoline)	FGIFRTANKS FGFACILITY
EULOADRACK	Truck loading rack.	FGFACILITY

Staff then asked Joe if they still had the 90,000-gallon pressurized Butane tank that had been installed back in the Summer of 2014 under the AQD Rule 290. He said that they still have the tank still and it is used to boost the Reid Vapor Pressure (RVP) of the gasoline at certain times of the year to meet seasonal specifications. Staff then asked Joe if he had access to the records required to be kept by the permit for their tank and load-out operations. Joe said he thought he did but after looking for things that staff mentioned they needed to see, he wasn't sure where they were located and ended up contacting Tony. With Tony on the phone staff tried to explain what they needed and although Tony knew what staff wanted to see, he couldn't remember exactly where it was located. He then said he would get with Dhaval Shah (Sr. Specialist for Air Compliance) of Buckeye to see if he could assist. Tony ended up calling us back a little bit later and asked if it would be alright to get staff the records early next week. He mentioned that he was going to be out of the office and Dhaval is currently wrapped up with an internal work project and isn't available. Staff mentioned that would be fine and that they can e-mail them to staff early next week. After hanging up with Tony, staff made a list of the records they needed to see so Joe could give it to Tony. Staff also made small talk with Joe about various environmental regulations and each other's backgrounds before going out to view tank and terminal operations.

Once outside, it was raining pretty hard and no trucks were currently being loaded that staff could observe. While out in the load rack area, staff used the AQD's Rangefinder to measure

the height of the open flare although there isn't a stack requirement in the permit for it. After taking a 3-Point Reading/Measurement the height was calculated as being 21 foot above ground level. While in the loadout area, staff did not detect any petroleum odors and the loadout racks appeared to be fairly clean with only minor staining on the concrete noted. With it raining pretty steady, staff did not proceed to look at any roofs or anything associated with the storage tanks due to safety concerns of climbing the steps. Staff then proceeded with Joe back to the office. Prior to leaving, staff mentioned to Joe that they would have to wait for a review of the records before a compliance determination could be made. Joe said that he understood and staff thanked him for his time and departed at approximately 2:35 p.m.

Staff received the records that they requested on the afternoon of 2/14. After reviewing them, the following are staff's observations and comments regarding the recordkeeping requirements for PTI No. 214-16.

SPECIAL CONDITIONS

The following conditions apply to: EULOADRACK

DESCRIPTION: Truck loading rack.

Flexible Group ID: FGFACILITY

POLLUTION CONTROL EQUIPMENT: Vapor recovery unit (VRU) and flare.

I. EMISSION LIMITS

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
1. VOC	25 mg per liter of organic liquid loaded	Test protocol*	EULOADRACK	GC 13	R 336.1205
2. VOC**	8 mg/liter	Test protocol*	EULOADRACK	GC 13	R 336.1205

^{*}Test protocol shall specify averaging time.

AQD Inspection Comment: Appears to be in COMPLIANCE. The facility conducted stack testing in 1999 and the equipment passed. Currently, the facility also uses the annual NSPS tank tightness test to demonstrate compliance as well as monitoring according to the new NESHAP (40 CFR Part 63 Subpart BBBBBB).

II. MATERIAL LIMITS

^{**} Fugitive VOC from trucks meeting the NSPS-level annual test (3 inches pressure change)

Material	Limit	Time Period / Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
1. Gasoline	273,613,125 gallons	12-month rolling time period as determined at the end of each calendar month.		VI.1	R 336.1205
2. Distillate	365,000,000 gallons	12-month rolling time period as determined at the end of each calendar month.		VI.1	R 336.1205

AQD Inspection Comment: Appears to be in COMPLIANCE. 12-Month Rolling records reviewed by staff ending December of 2022 indicated Gasoline throughputs at 116,030,218 gallons and Distillate throughputs at 30,214,012 gallons.

III. PROCESS/OPERATIONAL RESTRICTIONS

1. The permittee shall install, maintain and operate in a satisfactory manner, a vapor tight collection line which delivers the organic vapor to a loading rack control device when loading any delivery vessel with an organic compound having a true vapor pressure greater than 1.5 psia, or when loading a delivery vessel which has previously contained an organic compound having a true vapor pressure greater than 1.5 psia. (R 336.1609)

AQD Inspection Comment: Appears to be in COMPLIANCE. The facility uses vapor tight collection lines.

- 2. To minimize VRU and flare downtime, Applicant shall implement and follow an approved written malfunction abatement plan (MAP). The MAP shall have recordkeeping provisions for the following with respect to the VRU and flare:
- a. VRU carbon replacements
- b. repairs
- c. maintenance

AQD Inspection Comment: Appears to be in COMPLIANCE. The facility has a MAP and they are recording any maintenance activities done on the VRUs which are sent to their corporate office and entered on computer. As mentioned earlier, the South Terminal has been shut down and the carbon system there is no longer being maintained for operational purposes. They also contract with a company (Cimarron Energy) that does preventative maintenance on the flare on a semi-annual basis.

The following records shall be kept on file for the previous five year period and made available to the Department upon request:

- a. delivery vessel specific records of compliance with the NSPS-level annual test (3 inches pressure change)
- b. MAP recordkeeping provisions bulleted above

(R 336.1611)

AQD Inspection Comment: Appears to be in COMPLIANCE. Tanker/Delivery Vessel certification records are tracked by computer as well as control device maintenance activities. All preventative maintenance records are sent to their corporate office and entered on computer.

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. (R 336.1201(3))

1. The permittee shall keep records of the EULOADRACK throughput of each specific petroleum product for each calendar month and 12-month rolling time period. The permittee shall keep all records on file at the facility and make them available to the Department upon request. (R 336.1205)

AQD Inspection Comment: Appears to be in COMPLIANCE. The facility is tracking the above information.

FLEXIBLE GROUP SUMMARY TABLE

The descriptions provided below are for informational purposes and do not constitute enforceable conditions.

Flexible Group ID	Flexible Group Description	Associated Emission Unit IDs
FGFIXEDROOFTANKS	Storage tanks with fixed roofs storing distillate	EUTANK_N-7
		EUTANK_N-8
		EUTANK_N-9
		EUTANK_N-90
		EUTANK_N-91
		EUTANK_N-92
		EUTANK_N-94
FGIFRTANKS	Internal floating roof tanks storing gasoline, ethanol or transmix.	EUTANK_N-10

Flexible Group II	exible Group ID Flexible Group Description	
		EUTANK_N-22
		EUTANK_N-23
		EUTANK_N-24
		EUTANK_N-30
		EUTANK_N-33
		EUTANK_N-50
		EUTANK_N-70
		EUTANK_N-80
FGFACILITY	All process equipment source-wide including equipment covered by other permits, grand-fathered equipment and exempt equipment.	

The following conditions apply to: FGFIXEDROOFTANKS

DESCRIPTION: Storage tanks with fixed roofs storing distillate.

Emission Units: EUTANK_N-7, EUTANK_N-8, EUTANK_N-9, EUTANK_N-90, EUTANK_N-91, EUTANK_N-92, EUTANK_N-94

II. MATERIAL LIMITS

Material	Limit	Time Period / Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
1. Distillates	700,000,000 gallons	12-month rolling time period as determined at the end of each calendar month.	FGFIXEDROOFTANKS	VI.1	R 336.1205

AQD Inspection Comment: Appears to be in COMPLIANCE. 12-Month Rolling records reviewed by staff ending December of 2022 indicated Distillate tank throughputs at 60,414,855. Only tank #7 and tank #9 are used for distillate currently.

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. (R 336.1201(3))

1. The permittee shall keep records of the FGFIXEDROOFTANKS throughput of distillate for each calendar month and 12-month rolling time period. The permittee shall keep all records on file at the facility and make them available to the Department upon request. (R 336.1205)

AQD Inspection Comment: Appears to be in COMPLIANCE with the above.

The following conditions apply to: FGIFRTANKS

<u>DESCRIPTION:</u> Storage tanks with internal floating roofs storing gasoline, ethanol or transmix

Emission Units: EUTANK_N-10, EUTANK_N-22, EUTANK_N-23, EUTANK_N-24, EUTANK_N-30, EUTANK N-33, EUTANK N-50, EUTANK N-70, EUTANK N-80

POLLUTION CONTROL EQUIPMENT: Internal floating roof

II. MATERIAL LIMITS

Material	Limit	Time Period / Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
1. Gasoline, ethanol, or transmix	800,000,000 gallons	12-month rolling time period as determined at the end of each calendar month.	FGIFRTANKS	VI.1	R 336.1205 R 336.1225

AQD Inspection Comment: Appears to be in COMPLIANCE. 12-Month Rolling records reviewed by staff ending December of 2022 indicated the tank throughputs for the materials listed above at 301,795,992 gallons.

IV. DESIGN/EQUIPMENT PARAMETERS

1. Applicant shall not store gasoline in tanks unless they have internal floating roofs with seals. (R 336.1604, R 336.1702)

AQD Inspection Comment: Appears to be in COMPLIANCE. Staff did not go up and look at the roofs during this inspection but will assume that they all have IFRs as required.

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. (R 336.1201(3))

1. The permittee shall keep records of the EULOADRACK throughput of each specific petroleum product for each calendar month and 12-month rolling time period. The

permittee shall keep all records on file at the facility and make them available to the Department upon request. (R 336.1205)

AQD Inspection Comment: Appears to be in COMPLIANCE.

The following conditions apply to: FGFACILITY

<u>DESCRIPTION:</u> All process equipment source-wide including equipment covered by other permits, grand-fathered equipment and exempt equipment.

I. <u>EMISSION LIMITS</u>

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
1. VOC	80 tons	12-month rolling time period as determined at the end of each calendar month.	FGFACILITY	VI.1	R 336.1205
2. single HAP	8 tons	12-month rolling time period as determined at the end of each calendar month.	FGFACILITY	VI.1	R 336.1205
з. total combined HAPs	20 tons	12-month rolling time period as determined at the end of each calendar month.	FGFACILITY	VI.1	R 336.1205

AQD Inspection Comment: Appears to be in COMPLIANCE. 12-month rolling records reviewed by staff ending December of 2022 indicate VOC emissions at 40.7 tons, single HAP (Typically Hexane) at 0.24 tons, and total combined HAPs at 1.30 tons.

II. MATERIAL LIMITS

Material	Limit	Time Period / Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
1. gasoline additive	136,875 gallons	12-month rolling time period as determined at the end of each calendar month.	FGIFRTANKS	VI.1	R 336.1205

AQD Inspection Comment: Appears to be in COMPLIANCE with the above. Although not listed under the EU table since they are permit exempt, tank numbers 6, 93, 98, and 99 all store gasoline additives. The 12-month rolling records reviewed by staff ending December of 2022 for these tanks indicate throughputs at 28,679 gallons.

NOTE: They also have a Stainless-Steel Tank that is a rental that they designate as Tank #14 and it stores Red Dye additive. Also, a Tank designated as 1VH stores condensate from the vapor knockout.

III. PROCESS/OPERATIONAL RESTRICTIONS

1. The permittee shall comply with all provisions of the National Emission Standards for Hazardous Air Pollutants, 40 CFR Part 63, Subpart BBBBBB, as they apply to FGFACILITY. (40 CFR Part 63, Subpart BBBBBB)

AQD Inspection Comment: Did not make a compliance determination since the AQD is not delegated to enforce this regulation at the present time. However, the facility did submit the Initial Notification and has been submitting Semi-Annual Reports.

IV. DESIGN/EQUIPMENT PARAMETERS

The permittee shall not fill any vessel at the facility unless it is equipped with submerged fill piping. (R 336.1205, R 336.1609)

AQD Inspection Comment: Appears to be in COMPLIANCE with the above.

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. (R 336.1201(3))

1. The permittee shall keep, in a satisfactory manner, monthly and 12-month rolling time period VOC and HAP emission calculation records for FGFACILITY, as required by SC I.1, SC I.2, and SC I.3. The permittee shall keep all records on file and make them available to the Department upon request. (R 336.1205)

AQD Inspection Comment: Appears to be in COMPLIANCE with the above.

<u>INSPECTION SUMMARY:</u> The facility appears to be in Compliance with the terms and conditions of PTI No. 214-16 for the reasons stated in the AQD Inspection comments above. The 90,000-gallon pressurized Butane tank also appears to be in Compliance with the AQD

Rule 290 permit exemption since emissions are well below 1,000 pounds per month for Butane. A previous PTE submittal for this tank indicated fugitive emissions would be at most 1.56 pounds per day or 46.5 pounds for a 31-day month.

<u>NOTE:</u> As mentioned previously, the facility has been submitting reports required by the federal NESHAP for Gasoline Distribution Bulk Terminals, Bulk Plants, and Pipeline Facilities as specified in 40 CFR Part 63 Subparts A and BBBBBB. The facility had submitted the initial notification and the notification of compliance status on time as required (May 9, 2008 for the initial notification and January 10, 2011 for the notification of compliance status). They have been submitting on-going semi-annual compliance reports but the DEQ-AQD does not review them nor makes any compliance determinations regarding them since we aren't delegated by the DEQ to enforce the regulation.

_{IAME} Matt Deskins	_{DATE} 2/15/23	SUPERVISOR RAL	2/15/23