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

B438073305			
FACILITY: Buckeye Terminals, LLC		SRN / ID: B4380	
LOCATION: 6777 BROOKLYN RD, NAPOLEON		DISTRICT: Jackson	
CITY: NAPOLEON		COUNTY: JACKSON	
CONTACT: Edwin Barbour, Terminal Operator		ACTIVITY DATE: 08/28/2024	
STAFF: Stephanie Weems	COMPLIANCE STATUS: Compliance	SOURCE CLASS: SM OPT OUT	
SUBJECT: On-site PCE inspection conducted for FCE in FY24.			
RESOLVED COMPLAINTS:			

Scheduled Partial Compliance Inspection (PCE) and Full Compliance Evaluation (FCE) of Buckeye Terminals, LLC (B4380)

Facility Contacts:

Edwin Barbour – Terminal Operator

517-492-6955

ebarbour@buckeye.com

Purpose

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On August 28, 2024 I conducted an announced compliance inspection of Buckeye Terminals, LLC located at 6777 Brooklyn Rd. Napoleon, MI. The purpose of the inspection was to determine the facility's compliance status with the applicable federal and state air pollution regulations, particularly Michigan Act 451, Part 55, Air Pollution Control Act and administrative rules and Opt-out Permit to Install (PTI) 437-93C.

Facility Location

The facility is located in Napoleon Township. It is immediately surrounded by commercial and industrial operations, as well as agricultural fields.

Facility Background

PTI 437-93C was approved for this facility on June 6, 2017.

A Full Compliance Evaluation (FCE) and Inspection (PCE) was conducted July 15, 2020 by AQD staff. At that time, the facility was found to be in compliance.

This Buckeye Terminal facility is a petroleum bulk terminal. The facility has many storage tanks consisting of both fixed roof and floating roof tanks.

Typically, one or two operators are onsite during business hours, and one must be on call at night to respond quickly in case of an emergency. This terminal is a 24/7 automated facility. This means that tanker trucks can pick up/drop off products at any time using keycard access. A keycard is granted by Buckeye after each driver completes specified training and demonstrates proper certification, as specified in the permit.

Regulatory Applicability

Active Permits:

Opt-Out Permit PTI 437-93C for the following emission units:

Emission Unit Description	Elovible Group ID
(Process Equipment & Control Devices)	
Truck loading rack with permanent vapor recovery unit (VRU) and portable vapor combustion unit (PVCU). The PVCU is located southwest of the truck loading rack.	FGFACILITY
1.5 million gallon external floating roof storage tank, installed in 1953. The tank was retrofitted with a snow cover, converting it to an internal floating roof tank.	FGIFRTANKS
840,000 gallon external floating roof storage tank, installed in 1953. The tank was retrofitted with a snow cover, converting it to an internal floating roof tank.	FGIFRTANKS
1.5 million gallon vertical fixed roof tank, installed in 1953.	FGFIXEDROOFTANKS
1.8 million gallon vertical fixed roof tank, installed in 1953.	FGFIXEDROOFTANKS
100,000 gallon vertical fixed roof tank, installed in 1953.	FGFIXEDROOFTANKS
420,000 gallon vertical fixed roof tank, installed in 1967.	FGFIXEDROOFTANKS
840,000 gallon internal floating roof tank, installed in 1979.	FGIFRTANKS
420,000 gallon internal floating roof tank for gasoline, ethanol, or distillate.	FGIFRTANKS
	 Emission Unit Description (Process Equipment & Control Devices) Truck loading rack with permanent vapor recovery unit (VRU) and portable vapor combustion unit (PVCU). The PVCU is located southwest of the truck loading rack. 1.5 million gallon external floating roof storage tank, installed in 1953. The tank was retrofitted with a snow cover, converting it to an internal floating roof storage tank, installed in 1953. The tank was retrofitted with a snow cover, converting it to an internal floating roof tank. 840,000 gallon external floating roof storage tank, installed in 1953. The tank was retrofitted with a snow cover, converting it to an internal floating roof tank. 1.5 million gallon vertical fixed roof tank, installed in 1953. 1.8 million gallon vertical fixed roof tank, installed in 1953. 100,000 gallon vertical fixed roof tank, installed in 1953. 420,000 gallon vertical fixed roof tank, installed in 1957. 840,000 gallon internal floating roof tank, installed in 1979. 420,000 gallon internal floating roof tank for gasoline, ethanol, or distillate.

This facility is subject to the following federal regulations:

- 40 CFR Part 60, Subpart A – General Provisions

- 40 CFR 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. (Note: Only EUTANK7 is subject to this subpart)

- 40 CFR 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 (Note: Only EUTANK21 is subject to this subpart).

- 40 CFR Part 60, Subpart XX – Standards of Performance for Bulk Gasoline Terminals

- 40 CFR Part 63, Subpart BBBBBB – National Emission Standards for Hazardous Air Pollutants (NESHAP) for Source Category: Gasoline Distribution Bulk Terminals, Bulk Plants, and Pipeline Facilities

Though EGLE does not have delegation over the NESHAP – Subpart BBBBBB, compliance reports submitted by the company indicate that they are maintaining compliance with this subpart.

Furthermore, it appears that Buckeye Terminals operates multiple tanks under PTI exemption rules. As understood from previous inspection reports, Tank 10 is operated under Rule 290, and tanks 8, 9, 14, 17, 18, 19, and 20 are operated under Rule 284(2)(i).

Arrival & Facility Contact

No visible emissions or odors were observed upon my approach to the facility. I arrived at approximately 8:55 AM, proceeded to the facility office to see with the terminal operators, provided my identification, and met with Ed, the terminal operator.

NOTE: To gain access to the facility, a phone call must be made to the terminal operator for them to open the gate. Entrance will be granted through the truck exit gate.

A pre-inspection discussion was held with Ed. I informed him of my intent to conduct a facility inspection and to review the various records as necessary. He extended his full cooperation during the inspection, accompanied me during the full duration of the inspection, and fully addressed my questions.

Pre-Inspection Meeting

I began by explaining to Ed what processes I would like to see at the facility. We then discussed some basics of the site.

The facility has 2 employees, Ed and Jordan. Their normal work hours span from 6:00 AM to 4:00 PM with additional hours put in for emergencies or loads outside of normal working hours.

Ed began by showing me the overview board that shows the layout of the facility (see Image 2 attached). We went over the safety procedures and the emergency muster information.

I then inquired whether there had been any changes at the facility since issuance of the most recent permit. Ed confirmed that the only change that has occurred is that the VRU is now equipped with a CEMS.

Onsite Inspection

Steel-toed boots, safety glasses, and a hard hat are required for the inspection.

EULOADRACK

Consists of 2 bays controlled by a vapor recovery unit (VRU).

Due to dangers associated with the load rack and the need to be fitted with a fireresistant jumpsuit, we did not go under the load rack. We were, however, able to see from a distance the vapor hoses that are used at the rack to ensure proper vapor collection. Procedures for the operation of control measures required by Rule 609 continue to remain posted near the loading device as required by the permit, and they were able to be seen during our walk around the outside of the loading rack.

Ed confirmed that LDAR checks relying on sight, smell, and sound are conducted daily. He also explained that Buckeye relies on US EPA Test Method 27 truck certifications to ensure that the delivery vessels are equipped with pressure-vacuum relief valves that are vapor tight and set to prevent the emission of displaced organic vapor during the loading of the delivery vessel, except under emergency conditions, as required by their permit. Each tanker truck is Method 27 certified annually and Buckeye receives each certification and files onsite. Furthermore, Buckeye's internal computer system keeps track of Method 27 certifications and will block access to trucks that do not have the required certification.

We then observed the control device. Ed explained how the vapors are collected in the VRU, and we were able to observe the unit in operation. The control device appeared to be well maintained and operating within normal operating parameters.

FGIFRTANKS- Consisting of 4 internal floating-roof storage tanks (EUTANK1, EUTANK2, EUTANK7, and EUTANK21) and FGFIXEDROOFTANKS -Consisting of 4 fixed-roof storage tanks (EUTANK3, EUTANK4, EUTANK5, and EUTANK6). These tanks are all equipped with conservation vents.

A tour of the tank field was conducted. The field was very neat and well maintained. Ed pointed out the different tanks and explained what each tank holds. Each tank was well-labeled with the tank number and what is held in the tank.

Ed explained how the regular and premium gasoline, #2 diesel, and the #1 diesel (kerosene) are received via a pipeline directly from a refinery. Denatured ethanol and other fuel additives (distillates) are delivered to the site by tanker trucks and stored in the tanks onsite.

The yearly and 10-year required inspections for EUTANK21 were completed and documented as required by 40 CFR Part 60, Subpart Kb. Additionally, as stated above, though EGLE does not have delegation over the NESHAP – 40 CFR Part 63,

Subpart BBBBBB, Buckeye has been submitting the required notifications, and it appears they are in compliance with this regulation.

FGFACILITY

Consisting of all process equipment source-wide including equipment covered by other permits, grand-fathered equipment and exempt equipment.

As stated above, it is understood from previous inspection reports that Tank 10 is operated under Rule 290, and tanks 8,9, 14, 17, 18, 19, and 20 are operated under Rule 284(2)(i). These tanks are used to store the additives. Ed explained that these additives are added to the specified fuel as the fuel is pumped to the tanker truck in the loading rack. He explained that the computer system is designed to add the additive into the fuel based upon the number of gallons that are being pumped to the load rack.

Overall, the facility appeared well-kept and maintained. No odors, leaks, or spills were observed at any point during the inspection.

Post-Inspection Meeting

I held a brief post-inspection meeting with Ed. I explained that there didn't appear to be any compliance concerns and that a report of this inspection would be sent to him after being reviewed by my supervisor.

I thanked Ed for his time and cooperation, and I departed the facility around 9:55 AM.

Recordkeeping Request and Review

The following record request was sent to Buckeye Terminals – Napoleon on 8/28/2024:

DOCUMENT REQUEST

PLEASE PROVIDE THE LAST 12 MONTHS OF RECORDS.

SEND TO WEEMSS@MICHIGAN.GOV BY SEPTEMBER 6TH.

EULOADRACK

- Throughput records (for each calendar month and 12-month rolling) for each specific petroleum product for EULOADRACK (Condition VI.2)
- Monthly and 12-month rolling VOC emission calculations records for EULOADRACK (Condition VI.3)
- Records showing compliance with the appropriate leak test for each delivery vessel (Condition VI.4a)
- Records showing part replacements, repairs, and maintenance for the loading rack control device (Condition VI.4b)
- Records showing all VRU malfunctions or failures. (Condition VI.4c)

FGIFRTANKS

- Monthly and 12 month rolling throughput records for each specific petroleum product for FGIFRTANKS. (Condition VI.1)
- Monthly and 12 month rolling VOC emission calculation records for FGIFRTANKS (Condition VI.2)

https://intranet.egle.state.mi.us/maces/WebPages/ViewActivityReport.aspx?ActivityID=24... 9/26/2024

• Records of inspections and operating information for each tank in FGIFRTANKS showing compliance with 40 CFR Part 60 Subparts A, Ka, and Kb (Condition VI.4)

FGFIXEDROOFTANKS

- Monthly and 12 month rolling throughput records for each specific petroleum product for each tank for FGFIXEDROOFTANKS (Condition VI.1)
- Monthly and 12 month rolling VOC emission calculation records for FGFIXEDROOFTANKS (Condition VI.2)

FGFACILITY

- Monthly and 12 month rolling VOC emission rate calculations for FGFACILITY (Condition VI.1)
- Monthly and 12 month rolling total HAPs emission calculations for FGFACILITY (Condition VI.2)
- Records to show compliance for Tank 10 with Rule 290.
- Also, if there are any other tanks or processes operating under a Permit to Install (PTI) exemption, please include all necessary records to show compliance with the applicable rule.

On 9/5/2024, the company sent the following (attached in paper file) records.

Attachment 1 is the loading rack throughput and emissions records. The rolling rack throughput report shows the throughput records for each specific petroleum product (for each calendar month and 12-month rolling) as required by special condition EULOADRACK VI.2. The facility reports a 12-month rolling throughput total of 108,794,200 gallons as of July 2024.

Furthermore, the Location Rolling report shows the monthly and 12-month rolling VOC emission calculation records for EULOADRACK, as required by special condition VI.3. These records show that, as of July 2024, the facility had a 12-month rolling VOC emission rate of 2.94 tons. This is well below the permitted limit of 12.6 tons outlined in special condition I.1.

Attachment 2 includes a sample of facility's trailer certifications. These records show compliance with EULOADRACK special condition VI.4a.

Attachment 3 is the preventative maintenance records for the loading rack control device. Attached records indicate that preventative maintenance has been conducted on unit. These records show compliance.

Attachment 4 is the throughput and emission records for FGIFRTANKS, FGFIXEDROOFTANKS, and Tank 10 that operates under a Rule 290 PTI exemption.

• FGIFRTANKS (consisting of EUTANK1, EUTANK2, EUTANK7, and EUTANK21) show a combined throughput of 76,650,395 gallons. This is well below the material limit of 300 million gallons outlined in FGIFRTANKS special condition II.1. Furthermore, as of July 2024, these 4 tanks have a 12-month rolling combined VOC emission rate of 4.3916 tons, which is below the 13.2 tons limit in FGIFRTANKS special condition I.1.

FGFIXEDROOFTANKS (consisting of EUTANK3, EUTANK4, EUTANK5, and EUTANK6) show a combined throughput of 32,119,407 gallons and a 12-month rolling VOC emission of 0.531 as of July 2024. Since PTI 437-93C does not have emission or material limits, it appears that the submitted monitoring/recordkeeping documents submitted show compliance with special conditions VI.1 and VI.2. Additionally, the facility reports that EUTANK5 is currently empty. The company indicates that EUTANK5 is a pressure relief tank for the pipeline, and the tank is normally empty, only seeing product if there is an upset condition on the pipeline.

Finally, Tank 10 is being operated under a Rule 290 PTI exemption. As of July 2024, the facility reports a rolling throughput of 4,050 gallons and rolling VOC emissions of 0.0326 tons. This tank appears to still be in compliance with this exemption.

Attachment 5 is the seal inspection report for EUTANK21. This is the only tank at the facility that is subject to 40 CFR Part 60, Subpart Kb. This inspection was conducted in January of 2024 and found no issues.

Attachment 6 is the emission calculations of VOC and HAPs for FGFACILITY. The Locations Emission report shows the monthly and 12-month rolling emission calculations for both VOC and HAPs. As of July 2024, the 12-month rolling VOC total is 7.9924 tons, and the 12-month rolling HAPs total is 0.2911 tons. These emissions are well below the FGFACILITY emissions limits of 82 tons and 9 tons, respectively. Furthermore, these records demonstrate compliance with FGFACILITY special conditions VI.1 and VI.2.

The submitted records appear to show compliance with the associated permit requirements and PTI exemptions.

Compliance Summary

Based upon the facility inspection, review of the records, and review of applicable requirements it appears that this facility is in compliance at the time of this inspection.

NAME__________

DATE 8/28/2024 SUPERVISOR