# MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY AIR QUALITY DIVISION

June 6, 2018

PERMIT TO INSTALL 586-92B

ISSUED TO

Buckeye Terminals, LLC – Niles West Terminal

LOCATED AT 2150 South 3<sup>rd</sup> Street Niles, Michigan

IN THE COUNTY OF Berrien

## STATE REGISTRATION NUMBER B9085

The Air Quality Division has approved this Permit to Install, pursuant to the delegation of authority from the Michigan Department of Environmental Quality. This permit is hereby issued in accordance with and subject to Section 5505(1) of Article II, Chapter I, Part 55, Air Pollution Control, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended. Pursuant to Air Pollution Control Rule 336.1201(1), this permit constitutes the permittee's authority to install the identified emission unit(s) in accordance with all administrative rules of the Department and the attached conditions. Operation of the emission unit(s) identified in this Permit to Install is allowed pursuant to Rule 336.1201(6).

DATE OF RECEIPT OF ALL INFORMATION REQUIRED BY RULE 203:  June 5, 2018			
June 6, 2018	SIGNATURE:		
DATE PERMIT VOIDED:	SIGNATURE:		
DATE PERMIT REVOKED:	SIGNATURE:		

## **PERMIT TO INSTALL**

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### **Common Abbreviations / Acronyms**

Common Acronyms Pollutant / Measurement Abbreviations				
AQD	Air Quality Division	acfm Actual cubic feet per minute		
BACT	Best Available Control Technology	BTU	British Thermal Unit	
CAA	Clean Air Act	°C	Degrees Celsius	
CAM	Compliance Assurance Monitoring	co	Carbon Monoxide	
CEM	Continuous Emission Monitoring	CO <sub>2</sub> e	Carbon Dioxide Equivalent	
CFR	Code of Federal Regulations	dscf	Dry standard cubic foot	
СОМ	Continuous Opacity Monitoring	dscm	Dry standard cubic meter	
Department/	Michigan Department of Environmental	°F	Degrees Fahrenheit	
department	Quality	gr	Grains	
EU	Emission Unit	HAP	Hazardous Air Pollutant	
FG	Flexible Group	Hg	Mercury	
GACS	Gallons of Applied Coating Solids	hr	Hour	
GC	General Condition	HP	Horsepower	
GHGs	Greenhouse Gases	H <sub>2</sub> S	Hydrogen Sulfide	
HVLP	High Volume Low Pressure*	kW	Kilowatt	
ID	Identification	lb	Pound	
IRSL	Initial Risk Screening Level	m	Meter	
ITSL	Initial Threshold Screening Level	mg	Milligram	
LAER	Lowest Achievable Emission Rate	mm	Millimeter	
MACT	Maximum Achievable Control Technology	MM	Million	
MAERS	Michigan Air Emissions Reporting System	MW	Megawatts	
MAP	Malfunction Abatement Plan	NMOC	Non-methane Organic Compounds	
MDEQ	Michigan Department of Environmental Quality	NO <sub>x</sub>	Oxides of Nitrogen	
MSDS	Material Safety Data Sheet	ng PM	Nanogram Particulate Matter	
NA	Not Applicable		Particulate Matter equal to or less than 10	
NAAQS	National Ambient Air Quality Standards	PM10	microns in diameter	
NESHAP	National Emission Standard for Hazardous Air Pollutants	PM2.5	Particulate Matter equal to or less than 2.5 microns in diameter	
NSPS	New Source Performance Standards	pph	Pounds per hour	
NSR	New Source Review	ppm	Parts per million	
PS	Performance Specification	ppmv	Parts per million by volume	
PSD	Prevention of Significant Deterioration	ppmw	Parts per million by weight	
PTE	Permanent Total Enclosure	psia	Pounds per square inch absolute	
PTI	Permit to Install	psig	Pounds per square inch gauge	
RACT	Reasonable Available Control Technology	scf	Standard cubic feet	
ROP	Renewable Operating Permit	sec	Seconds	
SC	Special Condition	SO <sub>2</sub>	Sulfur Dioxide	
SCR	Selective Catalytic Reduction	TAC	Toxic Air Contaminant	
SNCR	Selective Non-Catalytic Reduction	Temp	Temperature	
SRN	State Registration Number	THC	Total Hydrocarbons	
TEQ	Toxicity Equivalence Quotient	tpy	Tons per year	
USEPA/EPA	United States Environmental Protection Agency	μg	Microgram	
VE	Visible Emissions	μm VOC	Micrometer or Micron Volatile Organic Compounds	
	VIOLO ETITOSIONO	yr	Year	
		1.		

<sup>\*</sup>For HVLP applicators, the pressure measured at the gun air cap shall not exceed 10 psig.

#### **GENERAL CONDITIONS**

- 1. The process or process equipment covered by this permit shall not be reconstructed, relocated, or modified, unless a Permit to Install authorizing such action is issued by the Department, except to the extent such action is exempt from the Permit to Install requirements by any applicable rule. (R 336.1201(1))
- 2. If the installation, construction, reconstruction, relocation, or modification of the equipment for which this permit has been approved has not commenced within 18 months, or has been interrupted for 18 months, this permit shall become void unless otherwise authorized by the Department. Furthermore, the permittee or the designated authorized agent shall notify the Department via the Supervisor, Permit Section, Air Quality Division, Michigan Department of Environmental Quality, P.O. Box 30260, Lansing, Michigan 48909-7760, if it is decided not to pursue the installation, construction, reconstruction, relocation, or modification of the equipment allowed by this Permit to Install. (R 336.1201(4))
- 3. If this Permit to Install is issued for a process or process equipment located at a stationary source that is not subject to the Renewable Operating Permit program requirements pursuant to R 336.1210, operation of the process or process equipment is allowed by this permit if the equipment performs in accordance with the terms and conditions of this Permit to Install. (R 336.1201(6)(b))
- 4. The Department may, after notice and opportunity for a hearing, revoke this Permit to Install if evidence indicates the process or process equipment is not performing in accordance with the terms and conditions of this permit or is violating the Department's rules or the Clean Air Act. (R 336.1201(8), Section 5510 of Act 451, PA 1994)
- 5. The terms and conditions of this Permit to Install shall apply to any person or legal entity that now or hereafter owns or operates the process or process equipment at the location authorized by this Permit to Install. If the new owner or operator submits a written request to the Department pursuant to R 336.1219 and the Department approves the request, this permit will be amended to reflect the change of ownership or operational control. The request must include all of the information required by subrules (1)(a), (b), and (c) of R 336.1219 and shall be sent to the District Supervisor, Air Quality Division, Michigan Department of Environmental Quality. (R 336.1219)
- 6. Operation of this equipment shall not result in the emission of an air contaminant which causes injurious effects to human health or safety, animal life, plant life of significant economic value, or property, or which causes unreasonable interference with the comfortable enjoyment of life and property. (R 336.1901)
- 7. The permittee shall provide notice of an abnormal condition, start-up, shutdown, or malfunction that results in emissions of a hazardous or toxic air pollutant which continue for more than one hour in excess of any applicable standard or limitation, or emissions of any air contaminant continuing for more than two hours in excess of an applicable standard or limitation, as required in Rule 912, to the Department. The notice shall be provided not later than two business days after start-up, shutdown, or discovery of the abnormal condition or malfunction. Written reports, if required, must be filed with the Department within 10 days after the start-up or shutdown occurred, within 10 days after the abnormal conditions or malfunction has been corrected, or within 30 days of discovery of the abnormal condition or malfunction, whichever is first. The written reports shall include all of the information required in Rule 912(5). (R 336.1912)
- 8. Approval of this permit does not exempt the permittee from complying with any future applicable requirements which may be promulgated under Part 55 of 1994 PA 451, as amended or the Federal Clean Air Act.
- 9. Approval of this permit does not obviate the necessity of obtaining such permits or approvals from other units of government as required by law.
- 10. Operation of this equipment may be subject to other requirements of Part 55 of 1994 PA 451, as amended and the rules promulgated thereunder.

- 11. Except as provided in subrules (2) and (3) or unless the special conditions of the Permit to Install include an alternate opacity limit established pursuant to subrule (4) of R 336.1301, the permittee shall not cause or permit to be discharged into the outer air from a process or process equipment a visible emission of density greater than the most stringent of the following. The grading of visible emissions shall be determined in accordance with R 336.1303. (R 336.1301)
  - a) A six-minute average of 20 percent opacity, except for one six-minute average per hour of not more than 27 percent opacity.
  - b) A visible emission limit specified by an applicable federal new source performance standard.
  - c) A visible emission limit specified as a condition of this Permit to Install.
- 12. Collected air contaminants shall be removed as necessary to maintain the equipment at the required operating efficiency. The collection and disposal of air contaminants shall be performed in a manner so as to minimize the introduction of contaminants to the outer air. Transport of collected air contaminants in Priority I and II areas requires the use of material handling methods specified in R 336.1370(2). (R 336.1370)
- 13. The Department may require the permittee to conduct acceptable performance tests, at the permittee's expense, in accordance with R 336.2001 and R 336.2003, under any of the conditions listed in R 336.2001. (R 336.2001)

#### **SPECIAL CONDITIONS**

#### **EMISSION UNIT SUMMARY TABLE**

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

Emission Unit II)		Installation Date / Modification Date	Flexible Group ID
		1993	NA
EUTANK#1	1,382,000-gallon gasoline storage tank with an internal floating roof with primary and secondary seals.	1972	FGIRTANKS
EUTANK#3	771,000-gallon gasoline storage tank with an internal floating roof with primary and secondary seals.	1972	FGIRTANKS

Changes to the equipment described in this table are subject to the requirements of R 336.1201, except as allowed by R 336.1278 to R 336.1290.

## The following conditions apply to: EULOADRACK

**<u>DESCRIPTION</u>**: Two-bay loading rack and associated control device.

Flexible Group ID: NA

**POLLUTION CONTROL EQUIPMENT:** Vapor Combustion Unit

#### I. EMISSION LIMITS

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
1. VOC	26.4 pph	Hourly	EULOADRACK	SC VI.3	R 336.1225, R 336.1702(a)
2. VOC	35 mg/L of gasoline loaded	Monthly average	EULOADRACK	SC VI.3	R 336.1225, R 336.1702(a)

#### II. MATERIAL LIMITS

	Material	Limit	Time Period / Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
1.	Gasoline	90,000 gallons per hour	Hourly	EULOADRACK	SC VI.2	R 336.1225, R 336.1702(a)
2.	Gasoline	23,000,000 gallons per month	Monthly average	EULOADRACK	SC VI.2	R 336.1225, R 336.1702(a)

#### 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 336.1225, R 336.1609, R 336.1702(a), R 336.1910)
- 2. The permittee shall not load any delivery vessel with gasoline unless all provisions of Rule 609 and Rule 627 are met. (R 336.1205(1)(a), R 336.1225, R 336.1609, R 336.1627, R 336.1702(d), R 336.1910)
- 3. To minimize loading rack control device downtime, the permittee shall implement and maintain an approved malfunction abatement plan (MAP). The MAP shall include the following:
  - a. Recordkeeping provisions for part replacements, repairs and maintenance with respect to the loading rack control device.
  - b. Procedures for maintaining and operating EULOADRACK, the loading rack control device, and any monitoring equipment in a satisfactory manner during malfunction events.
  - c. A program for corrective action for all malfunction events.

If the malfunction abatement plan fails to address or inadequately addresses an event that meets the characteristics of a malfunction at the time the plan is initially developed, the owner or operator shall revise the malfunction abatement plan within 45 days after such an event occurs. (R 336.1205(3), R 336.1225, R 336.1702(a), R 336.1910)

#### IV. DESIGN/EQUIPMENT PARAMETERS

- 1. The permittee shall not fill any delivery vessel unless the vapor balance system is installed, maintained and operated in a satisfactory manner as follows:
  - a. The vapor-tight collection line shall be connected to the delivery vessel before any gasoline is transferred.
  - b. The vapor-tight collection line shall close upon disconnection so as to prevent release of gasoline vapor.
  - c. Hatch and other openings on the delivery vessel shall be closed and vapor-tight to prevent emission of displaced gasoline vapor during transfer operations, except under emergency conditions.
  - d. The liquid transfer line shall be equipped with a device, or a procedure shall be implemented, to prevent liquid drainage from the line when it is disconnected and not in use.

The permittee shall develop written procedures for the operation of all the control measures described above, and such procedures shall be available in an accessible location near the transfer equipment. (R 336.1205(1)(a), R 336.1225, R 336.1608, R 336.1609, R 336.1702(d))

#### V. TESTING/SAMPLING

NA

#### VI. MONITORING/RECORDKEEPING

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

- 1. All required calculations shall be completed in a format acceptable to the AQD District Supervisor and made available by the 15th day of the calendar month, for the previous calendar month, unless otherwise specified in any recordkeeping, reporting or notification special condition. (R 336.1205(3), R 336.1225, R 336.1702(a))
- 2. The permittee shall keep records of the EULOADRACK throughput of each specific petroleum product for each calendar month and 12-month rolling time period. All records shall be kept on file for a period of at least five years and made available to the Department upon request. (R 336.1205(1)(a), R 336.1225, R 336.1702(a))
- 3. The permittee shall keep the following information on a monthly basis for EULOADRACK:
  - a. Controlled VOC emission calculations.
  - b. Fugitive VOC emission calculations using an emission factor based on current gasoline distribution facilities loading rack collection system emission factors.
  - c. Miscellaneous VOC emission calculations from pumps, valves, and fittings based on current gasoline distribution facilities emission factors.

All records shall be kept on file for a period of at least five years and made available to the Department upon request. (R 336.1205(1)(a), R 336.1225, R 336.1702(a))

- 4. The permittee shall keep records of the following:
  - a. Part replacements, repairs and maintenance for the loading rack control device as specified in the malfunction abatement plan (MAP).
  - b. All loading rack control device malfunctions or failures.

All records shall be kept on file for a period of at least five years and made available to the Department upon request. (R 336.1205(1)(a), R 336.1225, R 336.1627, R 336.1702(a), R 336.1910)

#### VII. REPORTING

NA

### VIII. STACK/VENT RESTRICTIONS

The exhaust gases from the stacks listed in the table below shall be discharged unobstructed vertically upwards to the ambient air unless otherwise noted:

Stack & Vent ID	Maximum Exhaust Diameter/Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SVVDU	96	45	R 336.1225

## IX. OTHER REQUIREMENTS

NA

### Footnotes:

<sup>&</sup>lt;sup>1</sup>This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

### 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
FGIFRTANKS	All storage tanks with internal floating roofs.	EUTANK#1, EUTANK#3
FGFACILITY	All process equipment source-wide including equipment covered by other permits, grand-fathered equipment and exempt equipment.	NA

## The following conditions apply to: FGIFRTANKS

**DESCRIPTION:** All storage tanks with internal floating roofs.

Emission Units: EUTANK#1, EUTANK#3

POLLUTION CONTROL EQUIPMENT: Welded internal floating roofs

#### I. EMISSION LIMITS

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
1. VOC		12-month rolling time period as determined at the end of each calendar month.		SC VI.2	R 336.1225, R 336.1702(a)

#### **II. MATERIAL LIMITS**

NA

#### **III. PROCESS/OPERATIONAL RESTRICTIONS**

- 1. The permittee shall not load any stationary vessel with gasoline unless all provisions of Rule 607 and Rule 627 are met. (R 336.1205(1)(a), R 336.1607, R 336.1627, R 336.1910)
- 2. The permittee shall not operate any stationary vessel unless all provisions of Rule 604 are met. (R 336.1205(1)(a), R 336.1604)

#### IV. DESIGN/EQUIPMENT PARAMETERS

1. The permittee shall equip and maintain the internal floating roof storage tanks with a welded deck, liquid mounted primary seal configuration, and a secondary seal. (R 336.1205(1)(a), R 336.1604)

#### V. TESTING/SAMPLING

NA

#### VI. MONITORING/RECORDKEEPING

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

- 1. All required calculations shall be completed in a format acceptable to the AQD District Supervisor and made available by the 15th day of the calendar month, for the previous calendar month, unless otherwise specified in any recordkeeping, reporting or notification special condition. (R 336.1205(1)(a))
- 2. The permittee shall keep records of the FGIFRTANKS throughput of each specific petroleum product for each calendar month and 12-month rolling time period. All records shall be kept on file for a period of at least five years and made available to the Department upon request. (R 336.1205(1)(a))

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3. The permittee shall keep, in a satisfactory manner, monthly and 12-month rolling time period records of VOC emissions calculations for FGIFRTANKS, as required by SC I.1. All records shall be kept on file for a period of at least five years and made available to the Department upon request. (R 336.1205(1)(a))

#### VII. REPORTING

NA

#### VIII. STACK/VENT RESTRICTIONS

NA

#### IX. OTHER REQUIREMENTS

1. The permittee shall comply with all applicable provisions of the Standards of Performance for Source Category: Gasoline Distribution Bulk Terminals, Bulk Plants, and Pipeline Facilities, as specified in 40 CFR Part 63, Subpart A and Subpart BBBBBB, as they apply to FGIFRTANKS. **(40 CFR 63, Subparts A and BBBBBB)** 

## The following conditions apply Source-Wide to: FGFACILITY

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

**POLLUTION CONTROL EQUIPMENT: NA** 

#### I. EMISSION LIMITS

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
1.VOC	70 tpy	12-month rolling time period as determined at the end of each calendar month.	FGFACILITY	SC VI.2	R 336.1205(3), R 336.1225, R 336.1702(a)
2. HAP	Less than 9 tpy	12-month rolling time period as determined at the end of each calendar month.		SC VI.2	R 336.1205(1)(a), R 336.1205(3)
3. Total HAP	Less than 22.5 tpy	12-month rolling time period as determined at the end of each calendar month.	FGFACILITY	SC VI.2	R 336.1205(1)(a), R 336.1205(3)

#### II. MATERIAL LIMITS

NA

#### III. PROCESS/OPERATIONAL RESTRICTIONS

NA

#### IV. DESIGN/EQUIPMENT PARAMETERS

NA

#### V. TESTING/SAMPLING

NA

#### VI. MONITORING/RECORDKEEPING

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

- 1. All required calculations shall be completed in a format acceptable to the AQD District Supervisor and made available by the 15th day of the calendar month, for the previous calendar month, unless otherwise specified in any recordkeeping, reporting or notification special condition. (R 336.1205(1)(a))
- 2. The permittee shall keep, in a satisfactory manner, records of monthly and 12-month rolling time period VOC, individual HAP, and total HAP emission rate calculations for FGFACILITY. All records shall be kept on file for a period of at least five years and made available to the Department upon request. (R 336.1205(1)(a) & (3), R 336.1225, R 336.1702(a))

## VII. REPORTING

NA

## VIII. STACK/VENT RESTRICTIONS

NA

## IX. OTHER REQUIREMENTS

NA