

**MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR QUALITY DIVISION**

August 15, 2017

**PERMIT TO INSTALL
100-17**

**ISSUED TO
Buckeye Terminals, LLC**

**LOCATED AT
205 Marion Avenue
River Rouge, Michigan**

**IN THE COUNTY OF
Wayne**

**STATE REGISTRATION NUMBER
B2987**

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 28, 2017	
DATE PERMIT TO INSTALL APPROVED: August 15, 2017	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 _{2e}	Carbon Dioxide Equivalent
CFR	Code of Federal Regulations	dscf	Dry standard cubic foot
COM	Continuous Opacity Monitoring	dscm	Dry standard cubic meter
Department/ department	Michigan Department of Environmental Quality	°F	Degrees Fahrenheit
EU	Emission Unit	gr	Grains
FG	Flexible Group	HAP	Hazardous Air Pollutant
GACS	Gallons of Applied Coating Solids	Hg	Mercury
GC	General Condition	hr	Hour
GHGs	Greenhouse Gases	HP	Horsepower
HVLP	High Volume Low Pressure*	H ₂ S	Hydrogen Sulfide
ID	Identification	kW	Kilowatt
IRSL	Initial Risk Screening Level	lb	Pound
ITSL	Initial Threshold Screening Level	m	Meter
LAER	Lowest Achievable Emission Rate	mg	Milligram
MACT	Maximum Achievable Control Technology	mm	Millimeter
MAERS	Michigan Air Emissions Reporting System	MM	Million
MAP	Malfunction Abatement Plan	MW	Megawatts
MDEQ	Michigan Department of Environmental Quality	NMOC	Non-methane Organic Compounds
MSDS	Material Safety Data Sheet	NO _x	Oxides of Nitrogen
NA	Not Applicable	ng	Nanogram
NAAQS	National Ambient Air Quality Standards	PM	Particulate Matter
NESHAP	National Emission Standard for Hazardous Air Pollutants	PM ₁₀	Particulate Matter equal to or less than 10 microns in diameter
NSPS	New Source Performance Standards	PM _{2.5}	Particulate Matter equal to or less than 2.5 microns in diameter
NSR	New Source Review	pph	Pounds per hour
PS	Performance Specification	ppm	Parts per million
PSD	Prevention of Significant Deterioration	ppmv	Parts per million by volume
PTE	Permanent Total Enclosure	ppmw	Parts per million by weight
PTI	Permit to Install	psia	Pounds per square inch absolute
RACT	Reasonable Available Control Technology	psig	Pounds per square inch gauge
ROP	Renewable Operating Permit	scf	Standard cubic feet
SC	Special Condition	sec	Seconds
SCR	Selective Catalytic Reduction	SO ₂	Sulfur Dioxide
SNCR	Selective Non-Catalytic Reduction	TAC	Toxic Air Contaminant
SRN	State Registration Number	Temp	Temperature
TEQ	Toxicity Equivalence Quotient	THC	Total Hydrocarbons
USEPA/EPA	United States Environmental Protection Agency	tpy	Tons per year
VE	Visible Emissions	µg	Microgram
		µm	Micrometer or Micron
		VOC	Volatile Organic Compounds
		yr	Year

*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 ID	Emission Unit Description (Process Equipment & Control Devices)	Installation Date / Modification Date	Flexible Group ID
EUTANK16	Tank 16- 2,968,000 gallons tank with internal floating roof control.	1/1/1928/ 9/1/2017	FGMACT6B FGGASNSPS
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.			

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
FGGASNSPS	Four petroleum products/denatured ethanol storage tanks, each equipped with a floating roof, and NSPS subject	EUTANK12, EUTANK16, EUTANK22 & EUTANK56
FGGASTANKS	Eight petroleum products storage tanks each equipped with a floating roof	EUTANK14, EUTANK15, EUTANK17, EUTANK18, EUTANK20, EUTANK23, EUTANK24 & EUTANK25

The following conditions apply to: FGGASNSPS

DESCRIPTION

Emissions from four petroleum products/denatured ethanol storage tanks, each equipped with an internal floating roof including landing (3 events/year/tank) and cleanings.

Emission Units: EUTANK12, EUTANK16, EUTANK22, & EUTANK56

POLLUTION CONTROL EQUIPMENT

Internal floating Roof

I. EMISSION LIMIT(S)

NA

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall comply with all provisions of the federal Standards of Performance for New Stationary Sources as specified in 40 CFR Part 60 Subparts A and Kb, as they apply to FGGASNSPS.² **(40 CFR Part 60, Subparts A & Kb)**
2. The permittee shall not store any petroleum product in EUTANK16 other than denatured ethanol. **(R 336.1225)**

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The vessel shall be equipped and maintained with a floating cover or roof which rests upon, and is supported, by the liquid being contained, and has a closure seal or seals to reduce the space between the cover roof and the vessel wall.² **(R 336.1604(1)(b)), (40 CFR 60.112b(a)(1))**
2. The seal or any seal fabric shall have no visible holes, tears or other nonfunctional openings. **(R 336.1604(1)(b)), (40 CFR 60.112b(a)(1))**
3. The permittee shall equip all emission units within FGGASNSPS with covers that completely cover all openings except for those which are no larger than necessary to allow safe clearance for the floating roof. The openings shall be covered at all times except when in actual use.² **(40 CFR Part 60.112b(1)(C)(iii thru ix))**
4. EUTANK16 shall be equipped and maintained with a floating cover or roof which rests upon, and is supported, by the liquid being contained, and has a closure seal or seals to reduce the space between the cover roof and the vessel wall.² **(R 336.1702(a), (40 CFR 60.112b(a)(1))**

V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. **(R 336.1213(3)(b)(ii))**

NA

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. **(R 336.1213(3)(b)(ii))**

1. After installing the control equipment required to meet §60.112b(a)(1) (permanently affixed roof and internal floating roof), each owner or operator shall:
 - a. Visually inspect the internal floating roof, the primary seal, and the secondary seal (if one is in service), prior to filling the storage vessel with VOL. If there are holes, tears, or other openings in the primary seal, the secondary seal, or the seal fabric or defects in the internal floating roof, or both, the owner or operator shall repair the items before filling the storage vessel. **(40 CFR 60.113b(a)(1))**
 - b. For vessels equipped with a liquid-mounted or mechanical shoe primary seal, visually inspect the internal floating roof and the primary seal or the secondary seal (if one is in service) through manholes and roof hatches on the fixed roof at least once every 12 months after initial fill. If the internal floating roof is not resting on the surface of the VOL inside the storage vessel, or there is liquid accumulated on the roof, or the seal is detached, or there are holes or tears in the seal fabric, the owner or operator shall repair the items or empty and remove the storage vessel from service within 45 days. If a failure that is detected during inspections required in this paragraph cannot be repaired within 45 days and if the vessel cannot be emptied within 45 days, a 30-day extension may be requested from the Administrator in the inspection report required in §60.115b(a)(3). **(40 CFR 60.113b(a)(2))**
 - c. For vessels equipped with a double-seal system as specified in §60.112b(a)(1)(ii)(B): **(40 CFR 60.113b(a)(3))**
 - (1) Visually inspect the vessel as specified in paragraph (a)(4) of §60.113b(a)(3) at least every 5 years;
or
 - (2) Visually inspect the vessel as specified in paragraph (a)(2) of §60.113b(a)(3).
 - d. In no event shall inspections conducted in accordance with this provision occur at intervals greater than 10 years in the case of vessels conducting the annual visual inspection as specified in paragraphs (a)(2) and (a)(3)(ii) of §60.113b(a)(4) and at intervals no greater than 5 years in the case of vessels specified in paragraph (a)(3)(i) of §60.113b(a)(4). **(40 CFR 60.113b(a)(4))**
 - e. Notify the Administrator in writing at least 30 days prior to the filling or refilling of each storage vessel for which an inspection is required by paragraphs (a)(1) and (a)(4) of §60.113b(a)(5) to afford the Administrator the opportunity to have an observer present. If the inspection required by paragraph (a)(4) of §60.113b(a)(5) is not planned and the owner or operator could not have known about the inspection 30 days in advance or refilling the tank, the owner or operator shall notify the Administrator at least 7 days prior to the refilling of the storage vessel. Notification shall be made by telephone immediately followed by written documentation, or by express mail so that it is received by the Administrator at least 7 days prior to the refilling. **(40 CFR 60.113b(a)(5))**
2. The permittee shall keep readily accessible records that show the dimensions of each storage vessel and an analysis that show the capacity of the storage vessel. The records shall be kept as long as the storage vessel remains in operation. **(40 CFR 60.110b), (40 CFR 60.116b)**
3. The owner or operator of each storage vessel in FGGASNSPS shall maintain a record of the volatile organic liquid (VOL) stored, the period of storage, and the maximum true vapor pressure of that VOL during the respective storage period. **(40 CFR 60.116b(c))**
4. The owner or operator of each storage vessel in FGGASNSPS shall notify the Administrator within 30 days when the maximum true vapor pressure of the liquid exceeds the respective maximum true vapor pressure values for each volume range, 5.2 KPa (0.75 psia) maximum for vessels equal to or greater than 151 m³ (950 bbl.) and 27.6 KPa (4.0 psia) for vessels between 75 m³ and 150 m³ (476 - 950 bbl.). This condition is not applicable to storage vessels less than 75 m³. **(40 CFR 60.116(d))**

VII. REPORTING

NA

VIII. STACK/VENT RESTRICTION(S)

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 Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
NA	NA	NA	NA

IX. OTHER REQUIREMENT(S)

1. Applicant shall equip all openings, except stub drains, in the stationary vessel, with covers, lids, or seals such that all of the following conditions are met: **(R 336.1604(2))**
 - a. The cover, lid, or seal is to be maintained in the closed position at all times, except when in actual use. **(R 336.1604(2)(a))**
 - b. Automatic bleeder vents are closed at all times, except when the roof is floated off, or landed on, the roof leg supports. **(R 336.1604(2)(b))**
 - c. Rim, vents, if provided, are set at the manufacturer's recommended setting or are set to open when the roof is being floated off the roof leg supports. **(R 336.1604(2)(c))**
2. The permittee shall not store any organic compound with a true vapor pressure (as defined in R 336.1120(i)) of 11 or more psia at actual storage conditions. **(R 336.1605)**
3. The permittee shall not equip any storage tank with an external floating roof. **(R 336.1623)**
4. The permittee shall comply with all applicable provisions of Rules 604 and 605. **(R 336.1604 and R 336.1605)**

Footnotes:

¹This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

²This condition is federally enforceable and was established pursuant to Rule 201(1)(a).

The following conditions apply to: FGGASTANKS

DESCRIPTION

Emissions from eight petroleum products storage tanks each equipped with an internal floating roof including landing emissions (3/year/tank) and cleanings.

Emission Units: EUTANK14, EUTANK15, EUTANK17, EUTANK18, EUTANK20, EUTANK23, EUTANK24 & EUTANK25

POLLUTION CONTROL EQUIPMENT

Internal floating roof

I. EMISSION LIMIT(S)

NA

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

NA

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The vessel shall be equipped and maintained with a floating cover or roof which rests upon, and is supported, by the liquid being contained and has a closure seal or seals to reduce the space between the cover roof and the vessel wall.² **(R 336.1604(1)(b))**
2. The seal or any seal fabric shall have no visible holes, tears or other malfunctional openings.
(R 336.1604(1)(b))
3. The permittee shall equip all emission units within FGGASTANKS with covers that completely cover all openings except for those which are no larger than necessary to allow safe clearance for the floating roof. The openings shall be covered at all times except when in actual use.² **(R 336.1604(2))**

V. TESTING/SAMPLING

Records shall be maintained on file for a period of 5 years. **(R 336.1213(3)(b)(ii))**

NA

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of 5 years. **(R 336.1213(3)(b)(ii))**

1. The permittee shall monitor and keep records of true vapor pressure (as defined in R336.1120(i)) of all organic compounds stored, in psia, at actual storage conditions. **(R 336.1213(3)(b)(ii))**

- The permittee shall keep readily accessible records that show the dimensions of each storage vessel and an analysis that show the capacity of the storage vessel. The record shall be kept as long as the storage vessel remains in operation. **(40 CFR 60.110b), (40 CFR 60.111b)**

VII. REPORTING

NA

VIII. STACK/VENT RESTRICTION(S)

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 Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
NA	NA	NA	NA

IX. OTHER REQUIREMENT(S)

- The permittee shall equip all openings, except stub drains, in the stationary vessel, with covers, lids, or seals such that all of the following conditions are met: **(R 336.1604(2))**
 - The cover, lid, or seal is in the closed position at all times, except when in actual use. **(R 336.1604(2)(a))**
 - Automatic bleeder vents are closed at all times, except when the roof is floated off, or landed on, the roof leg supports. **(R 336.1604(2)(b))**
 - Rim, vents, if provided, are set at the manufacturer's recommended setting or are set to open when the roof is being floated off the roof leg supports. **(R 336.1604(2)(c))**
- The permittee shall not store any organic compound with a true vapor pressure (as defined in R 336.1120(i)) of 11 or more psia at actual storage conditions. **(R 336.1605)**
- The permittee shall comply with all applicable provisions of Rules 604 and 605. **(R 336.1604 and R 336.1605)**

Footnotes:

¹This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

²This condition is federally enforceable and was established pursuant to Rule 201(1)(a).