

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

JANUARY 31, 2006



STATE REGISTRATION NUMBER
B9215

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: 1/9/2006	
DATE PERMIT TO INSTALL APPROVED: 1/31/2006	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	Btu	British Thermal Unit
BACT	Best Available Control Technology	°C	Degrees Celsius
CAA	Clean Air Act	CO	Carbon Monoxide
CEM	Continuous Emission Monitoring	dscf	Dry standard cubic foot
CFR	Code of Federal Regulations	dscm	Dry standard cubic meter
COM	Continuous Opacity Monitoring	°F	Degrees Fahrenheit
EPA	Environmental Protection Agency	gr	Grains
EU	Emission Unit	Hg	Mercury
FG	Flexible Group	hr	Hour
GACS	Gallon of Applied Coating Solids	H ₂ S	Hydrogen Sulfide
GC	General Condition	hp	Horsepower
HAP	Hazardous Air Pollutant	lb	Pound
HVLP	High Volume Low Pressure *	m	Meter
ID	Identification	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	ng	Nanogram
MDEQ	Michigan Department of Environmental Quality	NOx	Oxides of Nitrogen
MSDS	Material Safety Data Sheet	PM	Particulate Matter
NESHAP	National Emission Standard for Hazardous Air Pollutants	PM-10	Particulate Matter less than 10 microns 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 Number	SO ₂	Sulfur Dioxide
SCR	Selective Catalytic Reduction	THC	Total Hydrocarbons
SRN	State Registration Number	tpy	Tons per year
TAC	Toxic Air Contaminant	µg	Microgram
TEQ	Toxicity Equivalence Quotient	VOC	Volatile Organic Compound
VE	Visible Emissions	yr	Year
VOL	Volatile Organic Liquid		

* For High Volume Low Pressure (HVLP) applicators, the pressure measured at the HVLP gun air cap shall not exceed ten (10) pounds per square inch gauge (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. **[R336.1201(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, if it is decided not to pursue the installation, construction, reconstruction, relocation, or modification of the equipment allowed by this Permit to Install. **[R336.1201(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 R336.1210, 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. **[R336.1201(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. **[R336.1201(8), Section 5510 of Act 451, PA 1994]**
5. The AQD District Supervisor shall be notified, in writing, of a change in ownership or operational control of the stationary source or emission unit(s) authorized by this Permit to Install pursuant to R336.1219. The notification shall include all of the information required by R336.1219(1)(a) and (b). In addition, a new owner or operator must submit a written statement pursuant to R336.1219(1)(c), agreeing to and accepting the terms and conditions of this Permit to Install, and shall notify the AQD District Supervisor of any change in the contact person for this Permit to Install. **[R336.1219]**
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. **[R336.1901]**
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). **[R336.1912]**
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 R336.1301, 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 R336.1303. **[R336.1301]**
 - 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 R336.1370(2). **[R336.1370]**
13. The Department may require the permittee to conduct acceptable performance tests, at the permittee's expense, in accordance with R336.2001 and R336.2003, under any of the conditions listed in R336.2001. **[R336.2001]**

SPECIAL CONDITIONS

Emission Unit Identification

Emission Unit ID	Emission Unit Description	Stack Identification
EULOADRACK	Loading rack, installed prior to December 17, 1988, and associated flare, installed in 1981.	SV-FLARE
EUTANK1	50,000 barrel storage tank installed in 1960. The internal floating roof was installed in 1981.	NA
EUTANK2	50,000 barrel storage tank installed in 1960. The internal floating roof was installed in 1981.	NA
EUTANK3	80,000 barrel internal floating roof storage tank installed in 1976.	NA
EUTANK4	30,000 gallon fixed roof storage tank installed in 1988.	NA
EUTANK5	30,000 gallon fixed roof storage tank installed in 1988.	NA
Changes to the equipment described in this table are subject to the requirements of R336.1201, except as allowed by R336.1278 to R336.1290.		

Flexible Group Identification

Flexible Group ID	Emission Units Included in Flexible Group	Stack Identification
FGIFRTANKS	All storage tanks with internal floating roofs: EUTANK1, EUTANK2, and EUTANK3.	NA
FGFIXROOFTANKS	All storage tanks with fixed roofs: EUTANK4 and EUTANK5.	NA
FGFACILITY	All process equipment at the stationary source including equipment covered by other permits, grandfathered equipment and exempt equipment.	NA

The following conditions apply to: EULOADRACK

Emission Limits

	Pollutant	Equipment	Limit	Time Period	Testing/ Monitoring Method	Applicable Requirements
1.1a	VOC	EULOADRACK emissions through the flare	10 tpy	12-month rolling time period as determined at the end of each calendar month.	SC 1.9	R336.1205(3), R336.1901
1.1b	VOC	EULOADRACK emissions through the flare	0.7 lb of organic vapor per 1,000 gallons of organic compounds loaded	Per testing protocol	SC 1.6	R336.1205(3), R336.1609, R336.1901

Material Usage Limits

1.2 The EULOADRACK throughput shall not exceed the following: **[R336.1205(3), R336.1901]**

- a) 180,000,000 gallons of gasoline per 12-month rolling time period as determined at the end of each calendar month.
- b) 21,500,000 gallons of ethanol per 12-month rolling time period as determined at the end of each calendar month.

Process/Operational Limits

1.3 The permittee shall not load any delivery vessel with an organic compound having a true vapor pressure greater than 1.5 psia or any delivery vessel that carried, as its previous load, an organic compound having a true vapor pressure greater than 1.5 psia unless all provisions of Rule 609 are met. The provisions of Rule 609 include, but are not limited to, filling the delivery vessel by a submerged fill pipe, and the following, which apply if the loading facility is located in any area listed in Table 61-a of Part 6 of the Michigan air pollution control rules: **[R336.1205(3), R336.1609, R336.1901, R336.1910]**

- a) The delivery vessel shall be controlled by a vapor recovery system that captures all displaced organic vapor and air by means of a vapor-tight collection line. **[R336.1609(2)]**
- b) The delivery vessel shall be equipped maintained, or controlled with the following: **[R336.1609(3)]**
 - i) An interlocking system or procedure to ensure that the vapor-tight collection line is connected before any organic compound can be loaded.
 - ii) A device to ensure that the vapor-tight collection line shall close upon disconnection so as to prevent the release of organic vapor.
 - iii) A device to accomplish complete drainage before the loading device is disconnected, or a device to prevent liquid drainage from the loading device when not in use.
 - iv) 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.
 - v) Hatch openings that are kept closed and vapor-tight during the loading of the delivery vessel.
- c) The permittee shall develop written procedures for the operation of all control measures required by Rule 609 and shall post the procedures in an accessible, conspicuous location near the loading device. **[R336.1609(4)]**

- 1.4 The permittee shall not load any delivery vessel subject to control, as specified in SC 1.3, unless all provisions of Rule 627 are met. The provisions of Rule 627 include, but are not limited to, the following: **[R336.1205(3), R336.1627, R336.1901, R336.1910]**
- a) There shall be no gas detector reading greater than or equal to 100 percent of the lower explosive limit at a distance of one inch from the location of the potential leak in the vapor collection system. Leaks shall be detected by a combustible gas detector using the test procedure described in Rule 2005. **[R336.1627(6)]**
 - b) There shall be no visible leaks, except from the disconnection of bottom loading dry breaks and from raising top loading vapor heads, where a few drops are permitted. **[R336.1627(7)]**
 - c) The vapor collection system shall be designed and operated to prevent gauge pressure in the delivery vessel from exceeding 0.6 pounds per square inch and to prevent vacuum from exceeding -0.2 pounds per square inch gauge. **[R336.1627(8)]**
 - d) Any delivery vessel or component of a vapor collection system that fails to meet any provision of this rule shall not be operated until the necessary repairs have been made, the vessel or collection system has been retested, and the test results have been submitted to the department. **[R336.1627(10)]**
- 1.5 No later than 60 days after issuance of this permit, the permittee shall submit to the AQD District Supervisor, for review and approval, a malfunction abatement/preventative maintenance plan for EULOADRACK. After approval of the malfunction abatement/preventative maintenance plan by the AQD District Supervisor, the permittee shall not operate EULOADRACK unless the malfunction abatement/preventative maintenance plan, or an alternate plan approved by the AQD District Supervisor, is implemented and maintained. The plan shall incorporate procedures recommended by the equipment manufacturer as well as incorporating standard industry practices. At a minimum Rule 911 requires the plan to include:
- a) Identification of the equipment and control equipment and the supervisory personnel responsible for overseeing the inspection, maintenance, and repair.
 - b) Description of the items or conditions to be inspected and frequency of the inspections or repairs.
 - c) Description of equipment and add-on air pollution control device operating parameters that shall be monitored to detect a malfunction or failure, the normal operating range of the equipment and a description of the method of monitoring or surveillance procedures.
 - d) Identification of the major replacement parts that shall be maintained in inventory for quick replacement.
 - e) A description of the corrective procedures or operational changes that shall be taken in the event of a malfunction or failure to achieve compliance with the applicable emission limits.

If at any time the malfunction abatement plan (MAP) fails to address or inadequately addresses an event that meets the characteristics of a malfunction, the permittee shall amend the MAP within 45 days after such an event occurs. The permittee shall also amend the MAP within 45 days, if new equipment is installed or upon request from the District Supervisor. The permittee shall submit the MAP to the AQD District Supervisor for review and approval. If the AQD does not notify the permittee within 90 days of submittal, the MAP or amended MAP shall be considered approved. Until an amended plan is approved, the permittee shall implement corrective procedures or operational changes to achieve compliance with all applicable emission limits. **[R336.1205(3), R336.1901, R336.1910, R336.1911]**

Testing

- 1.6 The department may require the owner or operator of any vapor collection system subject to the provisions of Rule 627(5) to test the system in accordance with R336.2005. The tests shall be conducted within 60 days following receipt of written notification from the department. Notification of the exact time and location of the test shall be given to the department, in writing, not less than seven days before

Comment: For testing, verify dates, etc.

the actual test. Documentation of the test that states the date and location of the test, test procedures, the type of equipment used, and the results of the test shall be submitted to the department within 60 days following the last date of the test. **[R336.1627(9), R336.2001, R336.2003, R336.2004]**

Recordkeeping/Reporting/Notification

- 1.7 The permittee shall complete all required calculations in a format acceptable to the AQD District Supervisor and make them available by the last day of the calendar month, for the previous calendar month, unless otherwise specified in any recordkeeping, reporting or notification special condition. **[R336.1205(3), R336.1901]**
- 1.8 The permittee shall keep records of the EULOADRACK throughput of gasoline and ethanol for each calendar month and 12-month rolling time period. The permittee shall keep all records on file for a period of at least five years and make them available to the Department upon request. **[R336.1205(3), R336.1901]**
- 1.9 The permittee shall keep, in a satisfactory manner, monthly and 12-month rolling time period records of VOC emissions calculations for EULOADRACK, as required by SC 1.1a. The permittee shall keep all records on file for a period of at least five years and make them available to the Department upon request. **[R336.1205(3), R336.1901]**
- 1.10 The permittee shall keep records of the following:
 - a) Compliance with the appropriate leak test for each delivery vessel loaded at the facility.
 - b) Part replacements, repairs and maintenance for the loading rack control device as specified in the malfunction abatement plan (MAP).
 - c) All flare malfunctions or failures.

The permittee shall keep all records on file for a period of at least five years and make them available to the Department upon request. **[R336.1205(3), R336.1627, R336.1901, R336.1910]**

Deleted: 2

Stack/Vent Restrictions

	Stack & Vent ID	Maximum Diameter (inches)	Minimum Height Above Ground Level (feet)	Applicable Requirements
1.11	SVFLARE	NA	20	R336.1901
The exhaust gases shall be discharged unobstructed vertically upwards to the ambient air.				

The following conditions apply to: FGIFRTANKS

Emission Limits

	Pollutant	Equipment	Limit	Time Period	Testing/ Monitoring Method	Applicable Requirements
2.1	VOC	FGIFRTANKS	22 tpy	12-month rolling time period as determined at the end of each calendar month.	SC 2.7	R336.1205(3), R336.1901

Material Usage Limits

- 2.2 The FGIFRTANKS throughput shall not exceed the following: **[R336.1205(3), R336.1901]**
- a) 180,000,000 gallons per 12-month rolling time period as determined at the end of each calendar month.

Process/Operational Limits

- 2.3 The permittee shall not operate any FGIFRTANKS stationary vessel unless all provisions of Rule 604 are met. The provisions of Rule 604 include, but are not limited to, the following: **[R336.1205(3), R336.1604, R336.1901, R336.1910]**
- a) The vessel is 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 or roof edge and vessel wall. The seal or any seal fabric shall not have visible holes, tears, or other nonfunctional openings. **[R336.1604(1)(b)]**
 - b) All openings, except stub drains, in any stationary vessel subject to the provisions of this rule shall be equipped with covers, lids, or seals so that all of the following conditions are met: **[R336.1604(2)]**
 - i) The cover, lid, or seal is in the closed position at all times, except when in actual use.
 - ii) Automatic bleeder vents are closed at all times, except when the roof is floated off, or landed on, the roof leg supports.
 - iii) 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.
- 2.4 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 K, as they apply to EUTANK3. The provisions of 40 CFR Part 60 Subpart K include, but are not limited to, equipping EUTANK3 with a floating roof. **[40 CFR Part 60 Subparts A & K]**

Recordkeeping / Reporting / Notification

- 2.5 The permittee shall complete all required calculations in a format acceptable to the AQD District Supervisor and make them available by the last day of the calendar month, for the previous calendar month, unless otherwise specified in any recordkeeping, reporting or notification special condition. **[R336.1205(3), R336.1901]**
- 2.6 The permittee shall keep records of the FGIFRTANKS throughput of each specific petroleum product for each calendar month and 12-month rolling time period. The permittee shall keep all records on file for a period of at least five years and make them available to the Department upon request. **[R336.1205(3), R336.1901]**
- 2.7 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 2.1a. The permittee shall keep all

records on file for a period of at least five years and make them available to the Department upon request. **[R336.1205(3), R336.1901]**

- 2.8 The permittee shall keep records of inspections and operating information for EUTANK3 in accordance with the federal Standards of Performance for New Stationary sources as specified in 40 CFR Part 60 Subparts A and K, as they apply to EUTANK3. The permittee shall keep all records on file for a period of at least five years and make them available to the Department upon request.
- a) The provisions of 40 CFR Part 60 Subpart K include, but are not limited to maintaining a record of the petroleum liquid stored, the period of storage, and the maximum true vapor pressure of that liquid during the respective storage period. This applies to storage vessels storing petroleum liquids with a Reid vapor pressure of more than 6.9 kPa (1.0 psia) and storage vessels not equipped with a vapor recovery and return or disposal system. **[40 CFR Part 60 Subparts A & K, 40 CFR 60.113, 40 CFR 60.115a]**

The following conditions apply to: FGFIXROOFTANKS

Emission Limits

	Pollutant	Equipment	Limit	Time Period	Testing/ Monitoring Method	Applicable Requirements
3.1	VOC	FGFIXROOFTANKS	1.5 tpy	12-month rolling time period as determined at the end of each calendar month.	SC 3.7	R336.1205(3), R336.1702(a), R336.1901

Material Usage Limits

- 3.2 The FGFIXROOFTANKS throughput shall not exceed the following: **[R336.1205(3), R336.1702(a), R336.1901]**
- a) 21,500,000 gallons per 12-month rolling time period as determined at the end of each calendar month.
- 3.3 The permittee shall not store any compound in FGFIXROOFTANKS having a maximum true vapor pressure of 15.0 kPa (2.175 psia) or more. **[R336.1205(3), R336.1702(a), R336.1901, 40 CFR Part 60 Subparts A & Kb]**

Equipment

- 3.4 The permittee shall equip and maintain FGFIXROOFTANKS with conservation vents. **[R336.1205(3), R336.1702(a), R336.1901]**

Recordkeeping/Reporting/Notification

- 3.5 The permittee shall complete all required calculations in a format acceptable to the AQD District Supervisor and make them available by the last day of the calendar month, for the previous calendar month, unless otherwise specified in any recordkeeping, reporting or notification special condition. **[R336.1205(3), R336.1702(a), R336.1901]**
- 3.6 The permittee shall keep records of the FGFIXROOFTANKS throughput of each specific product for each calendar month and 12-month rolling time period. The permittee shall keep all records on file for a period of at least five years and make them available to the Department upon request. **[R336.1205(3), R336.1702(a), R336.1901]**
- 3.7 The permittee shall keep, in a satisfactory manner, monthly and 12-month rolling time period records of VOC emission calculations for FGFIXROOFTANKS, as required by SC 3.1a. The permittee shall keep all records on file for a period of at least five years and make them available to the Department upon request. **[R336.1205(3), R336.1702(a), R336.1901]**
- 3.8 The permittee shall keep records of the liquid stored, the period of storage, and the maximum true vapor pressure of that liquid during the respective storage period. The permittee shall keep all records on file for a period of at least five years and make them available to the Department upon request. **[R336.1205(3), R336.1702(a), R336.1901, 40 CFR Part 60 Subparts A & Kb]**

The following conditions apply to: FGFACILITY

Emission Limits

	Pollutant	Equipment	Limit	Time Period	Testing/ Monitoring Method	Applicable Requirements
4.1a	VOC	FGFACILITY	50 tpy	12-month rolling time period as determined at the end of each calendar month.	SC 4.3	R336.1205(3)
4.1b	Each HAP	FGFACILITY	Less than 9 tpy	12-month rolling time period as determined at the end of each calendar month.	SC 4.3	R336.1205(3)
4.1c	Total HAPs	FGFACILITY	Less than 22.5 tpy	12-month rolling time period as determined at the end of each calendar month.	SC 4.3	R336.1205(3)

Recordkeeping/Reporting/Notification

- 4.2 The permittee shall complete all required calculations in a format acceptable to the AQD District Supervisor and make them available by the last day of the calendar month, for the previous calendar month, unless otherwise specified in any recordkeeping, reporting or notification special condition. **[R336.1205(3)]**
- 4.3 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, as required by SC 4.1a, SC 4.1b and SC 4.1c. The permittee shall keep all records on file for a period of at least five years and make them available to the Department upon request. **[R336.1205(3)]**