MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY AIR QUALITY DIVISION

MAY 13, 2004

NEW SOURCE REVIEW PERMIT TO INSTALL

27-04

ISSUED TO SUNOCO PARTNERS MARKETING & TERMINAL L.P. OWOSSO TERMINAL

> LOCATED AT 4004 WEST MAIN STREET OWOSSO, MICHIGAN 48867

> > IN THE COUNTY OF SHIAWASSEE

STATE REGISTRATION NUMBER B9181

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 Part 5505(1) of Article II, Chapter I, Part 55 (Air Pollution Control) of P.A. 451 of 1994. 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: MARCH 9, 2004				
DATE PERMIT TO INSTALL APPROVED: MAY 13, 2004	SIGNATURE: LYNN FIEDLER			
DATE PERMIT VOIDED:	SIGNATURE:			
DATE PERMIT REVOKED:	SIGNATURE:			

PERMIT TO INSTALL

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Common Acronyms			Pollutant/Measurement Abbreviations		
AQD	Air Quality Division	Btu	British Thermal Unit		
ANSI	American National Standards Institute	°C	Degrees Celsius		
BACT	Best Available Control Technology	CO	Carbon Monoxide		
CAA	Clean Air Act	dscf	Dry standard cubic foot		
CEM	Continuous Emission Monitoring	dscm	Dry standard cubic meter		
CFR	Code of Federal Regulations	°F	Degrees Fahrenheit		
COM	Continuous Opacity Monitoring	gr	Grains		
EPA	Environmental Protection Agency	Hg	Mercury		
EU	Emission Unit	hr	Hour		
FG	Flexible Group	H_2S	Hydrogen Sulfide		
GACS	Gallon of Applied Coating Solids	hp	Horsepower		
GC	General Condition	lb	Pound		
HAP	Hazardous Air Pollutant	m	Meter		
HVLP	High Volume Low Pressure *	mg	Milligram		
ID	Identification	mm	Millimeter		
LAER	Lowest Achievable Emission Rate	MM	Million		
MACT	Maximum Achievable Control Technology	MW	Megawatts		
MAERS	Michigan Air Emissions Reporting System	NOx	Oxides of Nitrogen		
MAP	Malfunction Abatement Plan	PM	Particulate Matter		
MDEQ	Michigan Department of Environmental Quality	PM-10	Particulate Matter less than 10 microns diameter		
MIOSHA	Michigan Occupational Safety & Health Administration	pph	Pound per hour		
MSDS	Material Safety Data Sheet	ppm	Parts per million		
NESHAP	National Emission Standard for Hazardous Air Pollutants	ppmv	Parts per million by volume		
NSPS	New Source Performance Standards	ppmw	Parts per million by weight		
NSR	New Source Review	psia	Pounds per square inch absolute		
PS	Performance Specification	psig	Pounds per square inch gauge		
PSD	Prevention of Significant Deterioration	scf	Standard cubic feet		
PTE	Permanent Total Enclosure	sec	Seconds		
PTI	Permit to Install	SO_2	Sulfur Dioxide		
RACT	Reasonable Available Control Technology	THC	Total Hydrocarbons		
ROP	Renewable Operating Permit	tpy	Tons per year		
SC	Special Condition Number	μg	Microgram		
SCR	Selective Catalytic Reduction	VOC	Volatile Organic Compounds		
SRN	State Registration Number	yr	Year		
TAC	Toxic Air Contaminant				
VE	Visible Emissions				

Common Abbreviations / Acronyms

* 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 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 R336.1219 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 R336.1219. The written request shall be sent to the District Supervisor, Air Quality Division, Michigan Department of Environmental Quality. **[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 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.
- 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
EUADDITIVETANK#9	238 barrel horizontal gasoline additive storage tank	SVADDITIVETANK
	with a conservation vent	
EUGASLOADING	Gasoline truck loading rack utilizing bottom loading	SVGASLOADING
	and a thermal oxidizer to control emissions	
EUTANK#3	36,000 barrel above ground internal floating roof	NA
	storage tank	
EUTANK#5	25,000 barrel above ground internal floating roof	NA
	storage tank	
EUTANK#6	35,000 barrel above ground internal floating roof	NA
	storage tank	
EUTANK#7	35,000 barrel above ground internal floating roof	NA
	storage tank	
EUTANK#8	40,000 barrel above ground internal floating roof	NA
	storage tank	
	t 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
FGTANKS	EUTANK#3, EUTANK#5, EUTANK#6, EUTANK#7,	NA
	EUTANK#8	
FGFACILITY	All process equipment at the facility including	
	equipment covered by other permits, grand-fathered	
	equipment and exempt equipment.	

The following conditions apply to: EUGASLOADING

Emission Limits

	Pollutant	Equipment	Limit	Time Period	Testing/ Monitoring Method	Applicable Requirement
1.1a	VOC		0.7 pounds of organic vapor per 1,000 gallons of organic compounds loaded.	•	SC 1.7, 1.8, 1.9, and 1.11	R336.1609(2)

Process/Operational Limits

- 1.2 The permittee shall develop written procedures for the operation of all such control measures listed in Special Condition 1.6. Such procedures shall be posted in an accessible, conspicuous location near the loading device. **[R336.1609(4)]**
- 1.3 The vapor collection system shall not be operated unless all of the provisions of the following are met:
 - a) There shall be no gas detector reading greater than or equal to 100% of the lower explosive limit at a distance of 1 inch from the location of the potential leak in the vapor collection system. **[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 627 (items 2 and 3 above) 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 AQD. [**R336.1627(10**)]
- 1.4 Preventative maintenance inspection of the thermal oxidizer, including filling out a preventive maintenance form, shall be performed semiannually (twice each year). The preventive maintenance form, and any changes to the form, shall be approved by the AQD District Supervisor. **[R336.1205(3)**, **R336.1910]**
- 1.5 Establishment of a minimum stack temperature or range of stack temperatures during the loading of gasoline tankers with Stage I service (trucks returning with vapor balance) shall be done during the VOC emission stack test of the thermal oxidizer. This minimum temperature or range of temperatures shall be submitted with the stack test report. **[R336.1205(3), R336.1910]**

Equipment

- 1.6 The loading of delivery vessels with organic compounds having true vapor pressure of more than 1.5 psia shall be equipped, maintained, or controlled with all of the following:
 - a) An interlocking system or procedure to ensure that the vapor-tight collection line is connected before any organic compound can be loaded. **[R336.1609(3)(a)]**
 - b) A device to ensure that the vapor-tight collection line shall close upon disconnection so as to prevent the release of organic vapor. **[R336.1609(3)(b)]**
 - c) 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. **[R336.1609(3)(c)]**

- d) 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.
 [R336.1609(3)(d)]
- e) Hatch openings that are kept closed and vapor-tight during the loading of the delivery vessel. **[R336.1609(3)(e)]**

Testing

1.7 At least once every five years, verification of VOC emission rates from the EUGASLOADING thermal oxidizer, by testing at owner's expense, in accordance with 40 CFR Part 60 Subparts A and XX, will be required. Stack testing procedures and the location of stack testing ports shall be in accordance with the applicable federal Reference Methods, 40 CFR Part 60 Appendix A. No less than 30 days prior to testing, a complete stack test plan shall be submitted to the AQD. The final plan must be approved by the AQD prior to testing. Verification of emission rates includes the submittal of a complete report of the test results to the AQD within 60 days following the last date of the test. **[R336.1205(3)]**

Monitoring

- 1.8 The pilot flame in the thermal oxidizer shall be monitored and maintained during the loading of gasoline product. **[R336.1205(3), R336.1910]**
- 1.9 Visual inspection of the thermal oxidizer, including filling out a daily log report, shall be performed at least once during an 8 hour work shift during days for which the terminal is manned by a facility operator. This shall include pilot flame appearance, pilot indicating light on (monitor), and descriptions of any failures of the flame detection system. If a failure is detected, record the period of time when gasoline was loaded out and the amount (in gallons), until the control system is repaired. The daily log report, and any changes to the report, shall be approved by the AQD District Supervisor. **[R336.1205(3), R336.1910]**

Recordkeeping/Reporting/Notification

- 1.10 The permittee shall keep records of the EUGASLOADING throughput (in gallons) of gasoline, fuel oil, ethanol, and all other products 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. **[R336.1205(3)]**
- 1.11 The permittee shall keep records of the following:
 - a) Compliance with the appropriate leak test for each delivery vessel.
 - b) Part replacements, repairs and maintenance for the loading rack control device as specified in the MAP.
 - c) All thermal oxidizer 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. **[R336.1205(3)]**

1.12 A record of the highest combustible gas detector reading and location for each incidence of leakage shall be maintained per rule 627. **[R336.1205(3), R336.1910]**

The following conditions apply to: EUTANK#3

Emission Limits

	Pollutant	Equipment	Limit	Time Period	Testing/ Monitoring Method	Applicable Requirement
2.1a	VOC	EUTANK#3	4.8 tpy	12-month rolling time period	SC 2.5 and	R336.1225
				as determined at the end of	2.6	R336.1702(a)
				each calendar month		R336.1901

Material Usage Limits

2.2 The petrole um product throughput for EUTANK#3 shall not exceed 144,303,200 gallons per 12-month rolling time period, as determined at the end of each calendar month. **[R336.1225, R336.1702(a), R336.1901]**

Process/Operational Limits

2.3 The permittee shall not store any petroleum product more volatile than gasoline in EUTANK#3. [R336.1225, R336.1702(a)]

Equipment

2.4 The permittee shall not store any petroleum product with vapor pressure greater than 1.5 psia unless the tank is equipped with an internal floating roof with a seal. **[R336.1702(a)]**

Recordkeeping/Reporting/Notification

- 2.5 The permittee shall keep, in a satisfactory manner, monthly and 12-month rolling time period records of the EUTANK#3 throughputs for each petroleum product and the vapor pressure of each petroleum product. All records shall be kept on file for a period of at least five years and made available to the Department upon request. **[R336.1225, R336.1702(a), R336.1901]**
- 2.6 The permittee shall calculate the VOC emission rates from EUTANK#3 for each calendar month and 12month rolling time period, using a method acceptable to the AQD District Supervisor. The permittee shall keep records of the VOC emission rates on file for a period of at least five years and make them available to the Department upon request. **[R336.1225, R336.1702(a), R336.1901]**

The following conditions apply to: FGTANKS

Equipment

- 3.1 While storing organic compounds having a true vapor pressure of more than 1.5 psia, but less than 11 psia, the following shall be met:
 - 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 the vessel wall. **[R336.1604(1)(b), R336.1702(d)]**
 - b) The seal or any seal fabric shall have no visible holes, tears, or other nonfunctional openings.

[R336.1604(1)(b), R336.1702(d)]

- 3.2 All openings, except stub drains, in any stationary vessel subject to the provisions of this rule shall be equipped with covers, lids, or seals such that all of the following conditions are met:
 - a) The cover, lid, or seal is in the closed position at all times, except when in actual use.

[R336.1604(2)(a), R336.1702(d)]

- b) Automatic bleeder vents are closed at all times, except when the roof is floated off, or landed on, the roof leg supports. **[R336.1604(2)(b), R336.1702(d)]**
- 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. [R336.1604(2)(c), R336.1702(d)]

Monitoring

3.3 Annual visual inspection through roof hatch of the tank seals. [R336.1604(2)), R336.1702(d)]

Recordkeeping/Reporting/Notification

3.4 Record to be kept at the terminal of the annual visual inspection through roof hatch of the tank seals; shall include: date inspected; product stored; number of holes, tears or other openings; is floating roof sitting on the product; can product be noticed on top of floating roof. **[R336.1604(2), R336.1702(d)]**

The following conditions apply to: FGFACILITY

	Pollutant	Equipment	Limit	Time Period	Testing/ Monitoring Method	Applicable Requirement		
4.1a	Individual HAP	FGFACILITY	Less than 10 tpy	12-month rolling	SC 4.3 and 4.4	R336.1205(3)		
				time period*				
4.1b	Total HAPs	FGFACILITY	Less than 25 tpy	12-month rolling	SC 4.3 and 4.4	R336.1205(3)		
				time period*				
4.1c	VOC	FGFACILITY	Less than 100 tpy	12-month rolling	SC 4.3 and 4.4	R336.1205(3)		
				time period*				
	* 12-month rolling time period as determined at the end of each calendar month.							

Emission Limits

Material Usage Limits

4.2 The gasoline throughput for FGFACILITY shall not exceed 249,437,000 gallons per 12-month rolling time period, as determined at the end of each calendar month. **[R336.1205(3)]**

Recordkeeping/Reporting/Notification

- 4.3 The permittee shall keep, in a satisfactory manner, monthly and 12-month rolling time period records of the gasoline throughput 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. **[R336.1205(3)]**
- 4.4 The permittee shall calculate the individual HAP, total HAP, and VOC emission rates from FGFACILITY for each calendar month and 12-month rolling time period, using a method acceptable to the AQD District Supervisor. The permittee shall keep records of the individual HAP, total HAP, and VOC emission rates on file for a period of at least five years and make them available to the Department upon request. **[R336.1205(3)]**