MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY AIR QUALITY DIVISION

May 30, 2007

PERMIT TO INSTALL

No. 303-01A

ISSUED TO

Marathon Petroleum Company, LLC

LOCATED AT

3005 Holton Road North Muskegon, Michigan 49445

IN THE COUNTY OF

Muskegon

STATE REGISTRATION NUMBER

B9072

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: 3/19/2007				
DATE PERMIT TO INSTALL APPROVED: 5/30/2007	SIGNATURE:			
DATE PERMIT VOIDED:	SIGNATURE:			
DATE PERMIT REVOKED:	SIGNATURE:			

PERMIT TO INSTALL

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Common Abbreviations / Acronyms

	Common Acronyms		ollutant/Measurement Abbreviations
AQD	Air Quality Division	Btu	British Thermal Unit
BACT	Best Available Control Technology	°C	Degrees Celsius
CAA	Clean Air Act	СО	Carbon Monoxide
CEM	Continuous Emission Monitoring	dscf	Dry standard cubic foot
CFR	Code of Federal Regulations	dscm	Dry standard cubic meter
СОМ	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	NO _x	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	Reasonably Available Control Technology	scf	Standard cubic feet
ROP	Renewable Operating Permit	sec	Seconds
SC	Special Condition	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

^{*} 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. (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, 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 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 R 336.1219. The notification shall include all of the information required by R 336.1219(1)(a) and (b). In addition, a new owner or operator must submit a written statement pursuant to R 336.1219(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. (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 nor does it affect any liability for past violations under the Natural Resources and Environmental Protection Act, 1994 PA 451.
- 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 Identification

Emission Unit ID	Emission Unit Description	Stack Identification
EURACKS	5 lane terminal truck loading rack (2 lanes installed in 1978, 3 installed	SV-VRU, SV-
	in 1991) with a carbon adsorption vapor recovery unit as the primary	RANE,
	control device. Two portable vapor combustion units (a Zink unit and a	SV-ZINK
	RANE unit) are available as back up control devices.	
EU20-8	654,000 gallon internal floating roof storage tank constructed in 1990.	No stack
EU35-4	1,181,000 gallon internal floating roof storage tank constructed in 1954.	No stack
EU40-11	1,492,000 gallon internal floating roof storage tank constructed in 1991.	No stack
EU80-2	2,873,000 gallon internal floating roof storage tank with a secondary	No stack
	seal, constructed in 2000.	
EU80-3	2,789,000 gallon internal floating roof storage tank constructed in 1950.	No stack
EU80-9	2,803,000 gallon internal floating roof storage tank constructed in 1990.	No stack
EU80-10	2,800,000 gallon internal floating roof storage tank constructed in 1990.	No stack
EUO-84-	64,000 gallon internal floating roof storage tank constructed in 1991.	No stack
12		
EUO-84-	65,000 gallon internal floating roof storage tank constructed in 2000.	No stack
13		
EUT-7	27,000 gallon internal floating roof storage tank constructed in 1990.	No stack
EU-SVE1	Soil vapor extraction system (SVE), a 170 ACFM blower, and an air flow	SV-SVE1
	distribution system. This SVE system is identified as "'Celery Lane'	
	system".	
EU-SVE2	SVE system, a 200 ACFM blower, and an air flow distribution system.	SV-SVE2
	This SVE system is identified as "Loading Rack /Tank Farm' system".	
Changes to	the equipment described in this table are subject to the requirements of R3	36.1201,

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
FG-IFRTANKS	All storage tanks with internal floating roofs:	No stack
	EU20-8, EU35-4, EU40-11, EU80-2, EU80-3,	
	EU80-9, EU80-10, EUO-84-12, EUO-84-13, and	
	EUT-7.	
FGFACILITY	All equipment at the stationary source including	SV-VRU, SV-RANE,
	equipment covered by other permits,	SV-ZINK
	grandfathered equipment and exempt	
	equipment.	
FG-REMEDIATION	EU-SVE1	SV-SVE1
	EU-SVE2	SV-SVE2

The following conditions apply to: EURACKS

Emission Limits

	Pollutant	Equipment	Limit	Time Period	Testing/ Monitoring Method	Applicable Requirements
1.1a	VOC	EURACKS emissions through	23.5 tpy	12-month rolling time	SC 1.13, 1.14, 1.15,	R 336.1205(3), R 336.1225,
		the VRU and VCUs		period*	1.14, 1.15, 1.16, and 1.17	R 336.1702(a)
1.1b	VOC	EURACKS emissions through the VRU and VCUs	10 mg / t of gasoline loaded	Testing protocol	SC 1.19, 1.11, and 1.13	R 336.1702(a)
1.1c	VOC	EURACKS fugitive emissions	22 tpy	12-month rolling time period*	SC 1.14, 1.15, 1.16, and 1.17	R 336.1205(3), R 336.1225, R 336.1702(a)
1.1d	VOC	EURACKS fugitive emissions	9 mg / ℓ of gasoline loaded	Testing protocol	GC 14 and SC 1.16 and 1.17	R 336.1702(a)
	* Based up	oon a 12-month rollin	ng time period as deter	mined at the	end of each ca	alendar month.

1.2 The permittee shall limit the VOC emissions exhausted through each of the EURACKS control devices (the VRU, Rane VCU, and Zink VCU) such that the following equation is satisfied. (R 336.1225)

$$VRU * 0.109 + Rane * 0.151 + Zink * 0.0133 \le 1.34$$

Where:

VRU = VOC emissions, in tons, from the VRU for the current 12-month rolling time period,

Rane = VOC emissions, in tons, from the Rane VCU for the current 12-month rolling time period, determined assuming an emission rate of 10 mg per Liter of gasoline loaded or determined from emission testing data, and

Zink = VOC emissions, in tons, from the Zink VCU for the current 12-month rolling time period, determined assuming an emission rate of 10 mg per Liter of gasoline loaded or determined from emission testing data.

1.3 The following emission limit applies for the months of December, 2002, through May, 2003, only:

	Pollutant	Equipment	Limit	Time Period	Testing/ Monitoring Method	Applicable Requirements
1.3a	VOC	EURACKS	1.9 tons per month	Monthly	SC 1.13,	R336.1205(3),
		emissions through		-	1.14, 1.15,	R336.1225,
		the VRU and			1.16, and	R336.1702(a)
		VCUs			1.17	, ,

Material Usage Limits

1.4 The EURACKS throughput shall not exceed the following: (R 336.1205(3), R 336.1225, R 336.1702(a))

- a) a total of 550,000,000 gallons of gasoline and ethanol per 12-month rolling time period and
- b) 150,000,000 gallons of distillate per 12-month rolling time period.

Process/Operational Limits

- 1.5 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 any delivery vessel which, as its previous load, contained an organic compound having a true vapor pressure greater than 1.5 psia. (R 336.1205(3), R 336.1225, R 336.1702(a), R 336.1910)
- 1.6 The permittee shall not load any delivery vessel with gasoline unless all provisions of Rule 627 and Rule 706 are met. (R 336.1205(3), R 336.1225, R 336.1702(d), R 336.1706, R 336.1910)
- 1.7 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 Subpart XX, as they apply to EURACKS. (R 336.1205(3), R 336.1225, R 336.1702(a), R 336.1910, 40 CFR Part 60 Subpart XX)
- 1.8 To minimize loading rack control device downtime, the permittee shall implement and maintain an approvable malfunction abatement plan (MAP). The MAP shall be submitted to the AQD District Supervisor by January 31, 2003, and 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 EURACKS, 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 336.1706, R 336.1910, 40 CFR Part 60 Subpart XX)

Equipment

- 1.9 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 organic compound is transferred.
 - b) The vapor-tight collection line shall close upon disconnection so as to prevent release of organic 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(3), R 336.1225, R 336.1706, 40 CFR Part 60 Subpart XX)

Testing

- 1.10 At least once each calendar year, starting in the year 2003, a Relative Accuracy Test Audit (RATA) on the VOC continuous emission monitor on the VRU, by testing at owner's expense, in accordance with Department requirements, will be required. No less than 30 days prior to testing, a complete 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. (R 336.1205(3), R 336.1225, R 336.1702(a), R 336.2001, R 336.2003, R 336.2004)
- 1.11 At least once every five years, verification of VOC emission rates from the EURACKS VRU, 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. (R 336.1205(3), R 336.1225, R 336.1702(a), R 336.2001, R 336.2003, R 336.2004)

Monitoring

- 1.12 The permittee shall monitor emissions and operating information in accordance with the federal Standards of Performance for New Stationary Sources as specified in 40 CFR Part 60 Subparts A and XX. (R 336.1205(3), R 336.1225, R 336.1702(a), R 336.1910, 40 CFR Part 60 Subpart XX)
- 1.13 The permittee shall install, calibrate, maintain and operate in a satisfactory manner a device to monitor and record the VOC concentration of the VRU exhaust on a continuous basis. (R 336.1205(3), R 336.1225, R 336.1702(a)]

Recordkeeping/Reporting/Notification

- 1.14 The permittee shall keep records of the EURACKS 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(3), R 336.1225, R 336.1702(a))
- 1.15 The permittee shall keep the following information, in an acceptable format, on a monthly and 12-month rolling time period basis for EURACKS:
 - a) Controlled VOC emission calculations based on the VRU continuous VOC monitoring data mg/L equivalency from the most recent VRU performance test.

- 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 or monitoring data, if available.
- d) The hours of operation of each portable VCU.
- e) The amount of gasoline loaded while each portable VCU was operating.
- f) The controlled VOC emission rate from each portable VCU.
- g) Demonstration that the equation in Special Condition 1.2 is satisfied for the current 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(3), R 336.1225, R 336.1702(a))

- 1.16 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 malfunction abatement plan (MAP).
 - c) 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(3), R 336.1225, R 336.1702(a), R 336.1910, 40 CFR Part 60 Subpart XX)

1.17 The permittee shall keep records of emissions and operating information to comply with the federal Standards of Performance for New Stationary sources as specified in 40 CFR Part 60 Subparts A and XX. All source emissions data and operating information shall be kept on file for a period of at least five years and made available to the Department upon request. (R 336.1205(3), R 336.1225, R 336.1702(a), R 336.1910, 40 CFR Part 60 Subpart XX)

Stack/Vent Restrictions

	Stack & Vent ID	Maximum Diameter (inches)	Minimum Height Above Ground Level (feet)	Applicable Requirements				
1.18a	SV-VRU	12	58	R 336.1225				
1.18b	SV-RANE	90	13	R 336.1225				
1.18c	SV-ZINK	30	35	R 336.1225				
	The exhaust gases shall be discharged unobstructed vertically upwards to the ambient air.							

The following conditions apply to: FG-IFRTANKS

Emission Limits

	Pollutant	Equipment	Limit	Time Period	Testing/ Monitoring Method	Applicable Requirements
2.1a	VOC	FG-IFRTANKS	33.1 tpy	12-month rolling time period as determined at the end of each calendar month.	SC 2.10	R 336.1205(3), R 336.1225, R 336.1702(a), R 336.1901

Material Usage Limits

2.2 The FG-IFRTANKS gasoline and ethanol throughput shall not exceed a total of 550,000,000 gallons per 12-month rolling time period. (R 336.1205(3), R 336.1225, R 336.1702(a), R 336.1901)

Process/Operational Limits

2.3 The permittee shall not load any stationary vessel listed below with gasoline or store gasoline in any stationary vessel listed below unless all provisions of the rules listed below are met, as they apply to each stationary vessel.

	Equipment	Rule	Applicable Requirement
2.3a	EU20-8	604, 627, 704	R 336.1205(3), R 336.1702(d), R 336.1704, R 336.1901
2.3b	EU35-4	604, 607, 627	R 336.1205(3), R 336.1604, R 336.1607, R 336.1627,
			R 336.1901
2.3c	EU40-11	604, 627, 704	R 336.1205(3), R 336.1225, R 336.1702(d), R 336.1704
2.3d	EU80-2	604, 627, 704	R 336.1205(3), R 336.1225, R 336.1702(a), R 336.1704
2.3e	EU80-3	604, 607, 627	R 336.1205(3), R 336.1604, R 336.1607, R 336.1627,
			R 336.1901
2.3f	EU80-9	604, 627, 704	R 336.1205(3), R 336.1702(d), R 336.1704, R 336.1901
2.3g	EU80-10	604, 627, 704	R 336.1205(3), R 336.1702(d), R 336.1704, R 336.1901
2.3h	EUO-84-12	604, 627, 704	R 336.1205(3), R 336.1225, R 336.1702(d), R 336.1704
2.3i	EUO-84-13	604, 627, 704	R 336.1205(3), R 336.1225, R 336.1702(d), R 336.1704
2.3j	EUT-7	604, 627, 704	R 336.1205(3), R 336.1225, R 336.1702(d), R 336.1704

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 Kb, as they apply to EU20-8, EU40-11, EU80-2, EU80-9, EU80-10, EU0-84-12, EU084-13, and EUT-7. (R 336.1205(3), R 336.1225, R 336.1702(a), R 336.1901, 40 CFR Part 60 Subparts A and Kb)

Equipment

2.5 The permittee shall equip and maintain the storage tanks with the deck and seal configuration listed in the following table, or a deck and seal configuration that results in the same or lower VOC emissions from the tank.

	Equipment	Туре	Deck	Primary Seal	Secondary Seal	Applicable Requirement
2.5a	EU20-8	Internal floating	Welded	Mechanical Shoe	None	R 336.1205(3), R 336.1702(d),
2.5b	EU35-4	roof Internal floating	Bolted	Mechanical Shoe	None	R 336.1901 R 336.1205(3), R 336.1604,
2.5c	EU40-11	roof Internal	Welded	Mechanical	None	R 336.1901 R 336.1205(3),
0.54	F1100 0	floating roof	\\\ - 1 -11	Shoe	Dina manustad	R 336.1225, R 336.1702(d)
2.5d	EU80-2	Internal floating roof	Welded	Mechanical Shoe	Rim-mounted	R 336.1205(3), R 336.1225, R 336.1702(a)
2.5e	EU80-3	Internal floating roof	Bolted	Vapor Mounted	None	R 336.1205(3), R 336.1604, R 336.1901
2.5f	EU80-9	Internal floating roof	Welded	Mechanical Shoe	None	R 336.1205(3), R 336.1702(d), R 336.1901
2.5g	EU80-10	Internal floating roof	Welded	Mechanical Shoe	None	R 336.1205(3), R 336.1702(d), R 336.1901
2.5h	EUO-84-12	Internal floating roof	Welded	Mechanical Shoe	None	R 336.1205(3), R 336.1225, R 336.1702(d)
2.5i	EUO-84-13	Internal floating roof	Welded	Mechanical Shoe	None	R 336.1205(3), R 336.1225, R 336.1702(d)
2.5j	EUT-7	Internal floating roof	Welded	Mechanical Shoe	None	R 336.1205(3), R 336.1225, R 336.1702(d)

Monitoring

2.6 The permittee shall perform inspections and monitor operating information for FG-IFRTANKS in accordance with the federal Standards of Performance for New Stationary sources as specified in 40 CFR Part 60 Subparts A and Kb. (R 336.1205(3), R 336.1225, R 336.1702(a), R 336.1901, 40 CFR Part 60 Subparts A and Kb)

Recordkeeping / Reporting / Notification

2.7 The permittee shall keep records of the FG-IFRTANKS 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(3), R 336.1225, R 336.1702(a), R 336.1901)

- 2.8 The permittee shall keep, in a satisfactory manner, monthly and 12-month rolling time period records of VOC emissions calculations for FG-IFRTANKS. 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(3), R 336.1225, R 336.1702(a), R 336.1901)
- 2.9 The permittee shall keep records of inspections and operating information for FG-IFRTANKS in accordance with the federal Standards of Performance for New Stationary sources as specified in 40 CFR Part 60 Subparts A and Kb. 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(3), R 336.1225, R 336.1702(a), R 336.1901, 40 CFR Part 60 Subpart Kb)

The following conditions apply to: FG-REMEDIATION

Emission Limits

	Pollutant	Limit	Time Period	Equipment	Testing/ Monitoring Method	Applicable Requirements
3.1	VOC	5 tpy		FG- REMEDIATION	SC 3.2	R 336.1225, R 336.1702(a)
			calendar month.			

Monitoring

3.2 The permittee shall monitor the gas flow rate and the VOC concentration at the outlet of the soil vapor extraction system using Appendix 1. The monitoring frequency shall be quarterly. The vapor stream(s) shall be analyzed using 40 CFR Part 60 – Method 18, Measurement of Gaseous Organic Compound Emissions by Gas Chromatography or equivalent. (R 336.1702(a))

Recordkeeping / Reporting / Notification

3.3 The permittee shall keep, in a satisfactory manner, monthly and annual records of the total VOC emissions from FG-REMEDIATION. Annual records shall be based on a 12-month rolling time period as determined at the end of each calendar month. All records, including Appendix 1, shall be kept on file for a record of at least five years and made available to the Department upon request. (R 336.1205, R 336.1702(a))

Stack/Vent Restrictions

	Stack & Vent	Maximum Diameter	Minimum Height Above	Applicable	
	ID	(inches)	Ground Level (feet)	Requirements	
3.4a	SV-SVE1	4	30	R 336.1225,	
				R 336.1901	
3.4b	SV-SVE2	4	32.5	R 336.1225,	
				R 336.1901	
	The exhaust gases shall be discharged unobstructed vertically upwards to the ambient air.				

The following conditions apply to: FGFACILITY

Emission Limits

	Pollutant	Equipment	Limit	Time Period	Testing/ Monitoring Method	Applicable Requirements
4.1a	VOC	FGFACILITY	85.5 tpy	12-month rolling time period as determined at the end of each calendar month.	SC 4.2	R 336.1205(3)

	Pollutant	Equipment	Limit	Time Period	Testing/ Monitoring Method	Applicable Requirements
4.1b	Total HAPs	FGFACILITY	. ,	12-month rolling time period as determined at the end of each calendar month.	SC 4.2	R 336.1205(3)

Recordkeeping/Reporting/Notification

4.2 The permittee shall keep, in a satisfactory manner, records of monthly and 12-month rolling time period VOC 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(3))

APPENDIX 1 Soil Remediation Emission Calculation and Recordkeeping

Source Name		Contact Person		
Location		County		
Recordkeeping Period		Permit Number	Pollutant(s)	
Start Date	End Date			

	V	С	Es	P_{s}
Date	Air Volume Flow Rate (ft³/min)	Inlet Concentration (mg/m³) ¹	Control Efficiency (Percent)	VOC Emissions (lbs/hr) ²
EXAMPLE	1,000	10,000	95	1.9

Parts per million (ppm) in air is by volume and does not equal milligrams per liter (mg/ℓ).

EQUATION TO CALCULATE EMISSIONS:

$$P_{s} \frac{lbs}{hr} = V \frac{ft^{3}}{min} \times 0.02832 \frac{m^{3}}{ft^{3}} \times 60 \frac{min}{hr} \times C \frac{mg}{m^{3}} \times 0.001 \frac{g}{mg} \times 0.002205 \frac{lbs}{g} \times \frac{(100 - E_{s})}{100}$$

Signature:	Date:		
Telephone Number:			

² Identify which pollutant the emissions are being calculated for.