



November 19, 2015

Douglas L. Erwin, PE
Senior Air Pollution Control Engineer
San Diego Air Pollution Control District
10124 Old Grove Road
San Diego, CA 92131

**Subject: SFPP, L.P. – Mission Valley Terminal
Title V Permit Renewal Application
SFPP, L.P. Mission Valley Terminal (APCD2011-TVP-00031)
9950 San Diego Mission Road, San Diego, CA 92108**

Dear Mr. Erwin,

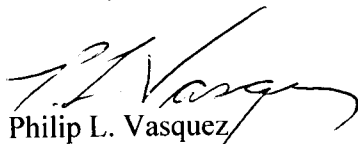
SFPP L.P. (SFPP) submits this Title V Permit renewal application for its Mission Valley Terminal located at 9950 San Diego Mission Road, San Diego, CA 92108. The existing Title V permit was issued on January 31, 2012 with an expiration date of January 31, 2017. This renewal application has been prepared in accordance with the San Diego Air Pollution Control District ("SDAPCD") Title V Federal Operating Program.

This Title V renewal application does not include any significant changes to the facility or its operations since 2012. However, emission calculations and data submitted with this renewal application have been updated to reflect some changes due to improvements in data collection and emission estimating techniques over the last five years. These updates result in minor changes to the overall potential emissions from the facility. The Potential to Emit (PTE) is estimated to project worst case scenarios, typically assuming gasoline is the product, unless there is a requirement that dictates otherwise.

The site related information and emissions estimations are included in this application. Forms required for Title V permit renewal are also included.

If you have any questions please call Mr. Paul Liao at (714) 560-4991 or Ms. Yijin Wang at (714) 560-4886.

Sincerely,


Philip L. Vasquez
Director of Operations
For SFPP, L.P.

Attachments

A. Permit Application Package

Cc: Frank Luera, Craig Bishop, Yijin Wang - SFPP, L.P.
Paul Liao, Yorke Engineering LLC

Application for Title V Permit Renewal

Prepared for:

SFPP, L.P.

Mission Valley Terminal

Federal Operating Permit:

APCD2011-TVP-00031

9950 San Diego Mission Road

San Diego, CA 92108

November 2015

Table of Contents

1.0 Executive Summary1

1.1 Contact Information1

2.0 Facility Site Diagram1

3.0 Process And Emissions Description2

3.1 List of Permitted Equipment.....2

4.0 Emissions Summary6

5.0 Compliance Certification6

5.1 Information on Determination of Compliance Status6

5.2 Compliance Plan6

5.3 Schedule for Submission of Compliance Certifications6

Table of Appendices

Appendix A – Facility Diagram

Appendix B - PTE Calculations

Table 1:	Summary of Potential to Emit
Table 2:	Storage Tank Emissions
Table 3:	Truck Loading PTE Calculations
Table 4:	Offspec Unloading Emissions from the Pump Sleeves
Table 5:	Ethanol Unloading Emissions from Two Ethanol Unloading Racks
Table 6:	MVS Ethanol Unloading Emissions from One Ethanol Unloading Rack
Table 7:	Emissions from Combustion Activities
Table 8:	Emissions from Sump/UST/ Oil Water Separator
Table 9:	Fugitive VOC Emissions

Appendix C – Tanks Database Reports-TANKS 4.09D Program Output

Appendix D – Title V Application Forms

1401-A1, A2 - Stationary Source Summary
1401-G - Insignificant Activity List
1401-H1 - Applicable Requirements Summary Checklist
1401-H2 –List of Permits by Equipment Category
1401-I –Certification Statement
1401-K –Compliance Certification Schedule
1401-L –Schedule of Compliance
1401-M –Abatement Devices
1401-N –Alternative Operating Scenarios
1401-Q – Permit Shield

Appendix E – CAM Plan

Mission Valley Terminal Title V Permit Renewal Application

1.0 EXECUTIVE SUMMARY

SFPP, L.P. (SFPP) owns and operates a petroleum products distribution terminal facility located at 9950 San Diego Mission Road in San Diego, CA (Mission Valley Terminal Facility). The existing Title V permit was issued on January 31, 2012 with an expiration date of January 31, 2017. SFPP submits this application to renew the Title V Permit. Per Title V Permit Condition (I)(B)(1) and San Diego Air Pollution Control District (SDAPCD) Rule 1410(h), the operator shall submit to the Executive Officer an application for the renewal at least 12 months, but no more than 18 months, prior to the expiration date of the Title V permit. Therefore, the Title V renewal application is due on January 31, 2016.

The Mission Valley Terminal's operations include receiving the multi petroleum products via pipeline and transferring the petroleum products from storage tanks into trucks via loading racks. It also transfers denatured ethanol, red dye diesel, and gasoline additives via loading rack. The ethanol is received via tanker trucks at the Mission Valley Terminal. Emissions of air pollutants from the Mission Valley Terminal are regulated under the jurisdiction of SDAPCD and it operates under SDAPCD issued Title V Permit and Permit to Operate (PTOs) for individual equipment at the site.

1.1 Contact Information

Paul Liao

Senior Environmental Engineer,
Yorke Engineering, LLC

Phone: (714) 560-4991

Fax: (714) 560-6655

Cellular: (949) 573-1859

Email: paul_liao@kindermorgan.com

Yijin Wang

Manager, Air Quality
SFPP, L.P.

Phone: (714) 560- 4886

Fax: (714) 560-6655

Cellular: (714) 308-8748

Email: yijin_wang@kindermorgan.com

2.0 FACILITY SITE DIAGRAM

A Facility Diagram is provided in Appendix A. This diagram includes the property boundaries, an illustration of adjacent streets and roads, a directional arrow, the equipment layout, and the location of emission points and pollution control equipment.

3.0 PROCESS AND EMISSIONS DESCRIPTION

The Mission Valley Terminal consists of 30 storage tanks for refined petroleum products and denatured ethanol. Petroleum products are transferred to the tanks via pipeline only. The Mission Valley terminal also stores additives, and red dye in smaller storage tanks. These products are received by tanker trucks or in totes. There are six loading racks at the Mission Valley terminal. The Terminal has one vapor combustion unit for abating VOC emissions during loading operations. Also, there are three ethanol unloading stations and one off-spec unloading station at the facility. The Mission Valley terminal also operates a permitted wastewater treatment system consists of an oil water separator and two permitted underground storage tanks.

3.1 List of Permitted Equipment

Table 3-1 shows a list of loading racks at the Mission Valley terminal, their PTO#, and Equipment Description.

Table 3-1: Permitted Loading Racks

Equipment ID	PTO #	Equipment Description
MV Rack 1	005135	4 Vapor control connectors & 16 bottom loading arms; 4 premium unleaded, 4 regular unleaded, 2 blended unleaded, 2 transmix and 4 non-gasoline product
MV Rack 2	005136	4 vapor control connectors; 12 bottom loading heads: 2 premium, 4 midgrade & 6 unleaded
MV Rack 3	005137	4 vapor control connectors: 8 bottom load arms; 4 premium, 4 unleaded
MV Rack 4	005138	4 vapor control connectors, 8 bottom load arms: 4 premium, 4 regular, 4 no-lead, no non-gasoline product
MV Rack 5	005139	Eight (8) loading arms, which can dispense gasoline and/or ethanol and four (4) vapor connectors. There are four (4) loading arms for diesel.
MV Rack 8	005140	4 vapor control connectors, 12 loading arms for gasoline and 4 loading arms for diesel.

Table 3-2 shows the list of storage tanks, corresponding PTO#, year of construction, last reconstruction or last modification, capacity in gallons, applicability of 40 CFR 60, and capability of storing type of product(s). **Note that capacity of MV-29 is incorrectly listed in the current PTO. The correct capacity is listed in the Table 3-2 below in bold format and red color. Also note SPFF would like to revise the description of each floating roof tank to get a flexibility of storing gasoline, jet, diesel, transmix, and ethanol (collectively known as multiple products) as shown in the Table 3-2 below.**

Mission Valley Terminal Title V Permit Renewal Application



Table 3-2: Permitted Storage Tanks

Source Description	PTO #	Year Constructed/Last Reconstructed/ Last Modified	Applicable Following Subparts of 40 CFR 60: Ka, or Kb	Capacity (Gallons)	Product Stored
MV - 1	002772	1962	None	840,000	Multiple Products (Gasoline, Diesel, Jet-fuel, Transmix, and Ethanol)
MV - 2	002773	1962	None	584,000	Multiple Products
MV - 3	002779	1972	None	2,100,000	Multiple Products
MV - 4	005504	1969	None	1,260,000	Multiple Products
MV - 5	002777	1963	None	1,150,000	Multiple Products
MV - 6	002778	1963	None	1,155,000	Multiple Products
MV - 7	002774	1963	None	845,900	Multiple Products
MV - 8	002784	1962	None	845,900	Multiple Products
MV - 9	030271	1963	None	846,000	Multiple Products
MV - 10	890939	1963	None	846,000	Multiple Products
MV - 11	N/A	1963	None	336,000	Diesel
MV - 12	002775	1962	None	1,903,400	Multiple Products
MV - 13	002776	1963	None	1,504,000	Multiple Products
MV - 14	002783	1966	None	846,000	Multiple Products
MV - 15	002780	1968	None	840,000	Multiple Products
MV - 16	002781	1968	None	840,000	Multiple Products
MV - 17	N/A	1968	None	840,000	Diesel
MV - 18	002782	1969	None	3,415,104	Multiple Products
MV - 19	972647	1999	Kb	4,200,000	Multiple Products
MV - 21	976948	1962	None	558,000	Multiple Products
MV - 22	002785	1963	None	475,000	Multiple Products
MV - 23	008103	1979	Ka	2,100,000	Multiple Products
MV - 25	977156	2002	Kb	2,163,000	Multiple Products
MV - 26	004076	1970	None	1,381,800	Multiple Products
MV - 27	004075	1963	None	1,015,000	Multiple Products
MV - 28	004074	1963	None	1,015,000	Multiple Products
MV - 29	004851	2002	Kb	630,000	Multiple Products
MV - 30	977195	1963	None	451,080	Multiple Products
MV - 31	004508	1962	None	126,000	Multiple Products
MV - 32	004509	1962	None	126,000	Multiple Products

Mission Valley Terminal Title V Permit Renewal Application



Table 3-3 shows a list of other emission units at the combined terminal facility, their PTO# or Application#, and description of the equipment.

Table 3-3: Permitted Other Emission Units

Equipment	Current PTO #	Description
Vapor Combustion Unit (VCU)	APCD2005-PTO-860515	John Zink vapor combustion unit for controlling the air emissions during product loading operations.
Ethanol unloading station (Rack #6)	APCD2011-PTO-000752	Denatured ethanol cargo tank unloading station consisting of four denatured ethanol unloading arms each equipped with a dry disconnect cargo tank coupler, three 330 gallon per minute transfer pump with a bypass (recirculation) pressure relief valve, one 113.5 gallon deaerator, and two vapor return arms each with a shutoff valve
Ethanol unloading station (Rack #7)	APCD2011-PTO-000753	Denatured ethanol cargo tank unloading station consisting of: four denatured ethanol unloading arms each equipped with a dry disconnect cargo tank coupler, one suction accumulator (352 gallon capacity), two 600 gallon per minute 30 HP transfer pumps, one 120 gallon deaerator equipped with a solenoid controlled vapor vent connected to the vapor return line, two vapor return hoses with a shut-off valve
MVS Ethanol unloading station (Rack #9)	APCD2012-PTO-001130	Denatured ethanol cargo tank unloading station consisting of two denatured ethanol unloading arms each equipped with poppet type shutoff valve and drybreak adaptor, two 420 gallon per minute 25 HP transfer pumps, one 80 gallon deaerator, and one vapor return arms with a shutoff valve
Off-spec unloading station	APCD2011-PTO-000751	Off-specification fuel cargo tank unloading station consisting of two off-spec fuel unloading arms each equipped with a dry disconnect cargo tank coupler, one 330 gallon per minute transfer pump with a bypass, one 113.5 gallon deaerator, two vapor return arms, and one Varec 350 vacuum breaker valve
Soil Vapor Extraction and Treatment Equipment	APCD2011-PTO-974060	This unit consists of tone thermal oxidizer, on 42-hp blower, and one 100-hp blower
Emergency engine	APCD2011-PTO-000868	Emergency Diesel Engine Generator: Iveco FPT model F4GE9485AJ; serial number 0800311; Engine Family AVEXL06.7DGB; tier 3 certified; 131 bhp rated; turbocharged with charge air cooler; driving an 80 kW generator

Mission Valley Terminal Title V Permit Renewal Application

KINDER MORGAN

Equipment	Current PTO #	Description
MV 4000 gallon transmix UST (connected to existing VCU)	APCD2011-PTO-000885	4,000-gallon underground storage tank capable of containing and transferring gasoline, ethanol, diesel, jet fuel and/or transmix, connected to the existing VCU
Oil/water separator tank & emergency overflow tank	APCD2011-PTO-000883	4,000 gal oil/water separator Tank manifolded to a 4,000 emergency flow tank and 18,000 gallon wastewater storage tank
Underground storage tank for waste water	APCD2011-PTO-000884	The sump is a double-walled UST approximately 32'-0" long with an 8' -0" diameter and a capacity of 10,000 gallons.

Table 3-4 shows a list the Rule 11 exempted equipment and activities. The Rule 11 citations are also provided. In addition, please refer to Form 1401-G for a list of insignificant activities per Regulation XIV, Appendix A.

Table 3-4: SDAPCD Rule 11 Exempted Equipment and Activities

Equipment Descriptions	Rule 11 Citation
Provers	(d)(19)(ii).
Touch-up paints and other architectural coatings	(d)(15)(ii)
Any coating or adhesive materials application operation (portable or stationary) where 20 gallons or less of liquid coatings or adhesive materials are applied per consecutive 12-month period.	(d)(15)(iii)
Any coating or adhesive materials application operation at a stationary source where the VOC emissions from such operation are 150 pounds or less per consecutive 12-month period, excluding surface preparation and cleanup solvents.	(d)(15)(iv)
Solvent wipe cleaning operations, not associated with any permitted operation, provided the solvent is applied from a container that minimizes emissions to the air, such as but not limited to, squeeze containers with narrow tips, spray bottles, or dispensers with press down caps; and the uncontrolled VOC emissions from all such operations located at the stationary source do not exceed 5 tons per calendar year, or the total purchase of solvents for such operations does not exceed 1,500 gallons per calendar year.	(d)(16)(viii)
Personal and company vehicle	(d)(1)(i)
Propane tank, diesel tanks, additive tanks	(d)(17)(iv)
Comfort air conditioning, vacuum cleaner, air compressor, hot water heater, and other plant support equipment	(d)(6)(ii)

Table 3-5 shows a list of currently active Authority to Construct.

Table 3-5: Currently active Authority to Construct

Equipment	Description
MV-28	ATC was extended to June 16, 2016
MV-07	ATC application is under SDAPCD review

4.0 EMISSIONS SUMMARY

Please refer to Table 1 in Appendix B for the Summary of Emissions for Loading Racks, Ethanol Offloading, Sumps, Fugitives and other Activities at the Mission Valley Terminal.

This section of the Title V renewal application presents a summary of the terminal's PTE for criteria pollutants and the potential emission calculations for each unit.

5.0 COMPLIANCE CERTIFICATION

In Appendix D of this application, a signed copy of the 'Title V Compliance Certification' Form is provided. The form was signed by the Terminal's responsible official for air quality compliance, who certifies that based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. The Terminal's responsible official also certifies that the sources in the "Title V Application-Compliance Plan" Form are in compliance with the applicable requirements, and the sources will comply with future-effective applicable requirements on a timely basis.

5.1 Information on Determination of Compliance Status

Compliance requirements applicable to the facility include federally enforceable numeric mass emissions limits established in the current operating permit. The existing permit also contains operating restrictions, and enforceable requirements for emissions and operations monitoring, recordkeeping, and reporting. Compliance Plan

The terminal facility intends to maintain compliance with existing requirements and meet new compliance requirements in a timely fashion. Please refer to Appendix E for the CAM Plan.

5.2 Schedule for Submission of Compliance Certifications

The Terminal is in compliance as seen in the 'Title V Compliance Certification' Form found in appendix D.

Mission Valley Terminal Title V Permit Renewal Application

KINDER MORGAN
STP, L.P.

APPENDIX A – FACILITY DIAGRAM

APPENDIX B - PTE CALCULATIONS

Table 1:	Summary of Potential to Emit
Table 2:	Storage Tank Emissions
Table 3:	Truck Loading PTE Calculations
Table 4:	Offspec Unloading Emissions from the Pump Sleeves
Table 5:	Ethanol Unloading Emissions from Two Ethanol Unloading Racks
Table 6:	MVS Ethanol Unloading Emissions from One Ethanol Unloading Rack
Table 7:	Emissions from Combustion Activities
Table 8:	Emissions from Sump/UST/ Oil Water Separator
Table 9:	Fugitive VOC Emissions

SFPP, LLC
Kinder Morgan
Mission Vally Terminal
San Diego, CA

Summary of Potential To Emit from Mission Valley Terminal							
	VOC	Nox	CO	SOx	PM10	Total HAPs	n-Hexane
	(Tons)						
Tanks	48.56	-	-	-	-	2.86	1.39
Loading Operations	141.78	-	-	-	-	7.44	2.27
Ethanol Unloading	0.95	-	-	-	-	Negligible	Negligible
Off-Spec Unloading	0.42	-	-	-	-	0.02	0.01
Combustion	5.02	33.03	6.38	0.04	1.09	Negligible	Negligible
OWS	0.16	-	-	-	-	Negligible	Negligible
UST	0.21	-	-	-	-	Negligible	Negligible
Fugitive	4.37	-	-	-	-	0.23	0.07
Total	201.47	33.03	6.38	0.04	1.09	10.56	3.74

SFP, LLC
Kinder Morgan
Mission Vally Terminal
San Diego, CA

Storage Tank Emissions

Tank Identification	Tank Type	Working Loss (lb/yr)	Total Breathing Loss (lb/yr)	Total Loss (lb/yr)	Product Used in Estimation
MV-01	External Floating Roof Tank	5,931.63	2,774.83		Gasoline
MV-02	External Floating Roof Tank	7,117.95	2,565.45		Gasoline
MV-03	Internal Floating Roof Tank	4,161.99	2,287.31		Gasoline
MV-04	Internal Floating Roof Tank	4,874.42	2,131.65		Gasoline
MV-05	External Floating Roof Tank	5,084.25	3,012.35		Gasoline
MV-06	External Floating Roof Tank	5,084.25	2,725.08		Gasoline
MV-07	External Floating Roof Tank	5,931.63	2,784.97		Gasoline
MV-08	External Floating Roof Tank	5,931.63	2,497.69		Gasoline
MV-09	Internal Floating Roof Tank	6,030.49	2,116.95		Gasoline
MV-10	Internal Floating Roof Tank	6,030.49	1,826.54		Gasoline
MV-12	External Floating Roof Tank	3,964.42	3,220.41		Gasoline
MV-13	External Floating Roof Tank	4,448.72	3,263.76		Gasoline
MV-14	Internal Floating Roof Tank	5,881.05	2,134.32		Gasoline
MV-15	Internal Floating Roof Tank	6,030.49	1,969.97		Gasoline
MV-16	Internal Floating Roof Tank	6,030.49	2,181.09		Gasoline
MV-18	External Floating Roof Tank	3,235.43	3,987.74		Gasoline
MV-19	Internal Floating Roof Tank	3,068.15	5,498.12		Gasoline
MV-21	Internal Floating Roof Tank	7,260.34	1,586.70		Gasoline
MV-22	Internal Floating Roof Tank	8,084.59	1,906.71		Gasoline
MV-23	Internal Floating Roof Tank	4,186.46	2,285.31		Gasoline
MV-25	Internal Floating Roof Tank	4,236.29	2,594.83		Gasoline
MV-26	Internal Floating Roof Tank	5,156.88	2,247.43		Gasoline
MV-27	Internal Floating Roof Tank	6,030.49	1,626.78		Gasoline
MV-28	Internal Floating Roof Tank	7,569.90	2,125.17		Gasoline
MV-29	Internal Floating Roof Tank	7,569.90	1,865.95		Gasoline
MV-30	Internal Floating Roof Tank	9,149.88	1,507.86		Gasoline
MV-31	Internal Floating Roof Tank	12,258.70	1,902.50		Gasoline
MV-32	Internal Floating Roof Tank	42,258.70	1,533.05		Gasoline
MV-11	Vertical Fixed Roof Tank	8,130.29	45.00	8,175.29	Diesel
MV-17	Vertical Fixed Roof Tank	8,385.03	133.49	8,518.52	Diesel
Total Gasoline Tank Emissions:				80,420 lbs/yr	Gasoline
				40.21 tpy	Gasoline
Total Diesel Tank Emissions:				16,694 lbs/yr	Diesel
				8.35 tpy	Diesel

Note:

- To represent worst case scenario, all tanks having air permit were considered to be storing gasoline.
- A throughput of 1,887,050,000 gallons was inputted in TANKS for each tank. The max working loss (from MV-31 200) plus the sum of all breathing losses gives the total PTE for storage tanks.
- Each gasoline tank was assumed to be handling maximum possible throughput for the facility to represent the worst case scenario. After calculating breathing and working losses separately, total losses were calculated by adding all breathing losses and worst case working loss.
- RVP used for TANKS: Jan, Feb, Dec RVP13.5; Mar - Oct RVP6; Nov RVP 11.5 according to product specification.

Gasoline Vapor HAPs Speciation Data (Weight %)			
HAP	Weight %	Baseline	Emissions
Benzene	0.90%		723.78
Ethyl Benzene	0.10%		80.42
n-Hexane	1.60%		1,286.72
MTBE	0.00%		0.00
Toluene	1.30%		1,045.46
Xylenes	0.50%		402.10
2,2,4-Trimethylpentane	0.80%		643.36
POM as 16-PAH (Naphthalene)	0.05%		40.21
Totals			4,222.06
			2.11

¹Weight percentages for gasoline vapor are from Gasoline Marketing (Stage I and Stage II), Volume III Chapter 11, revised final, Area Source Committee, Emission Inventory Improvement Program, January 2001, Table 11.3-2.

Diesel Vapor HAPs Speciation Data (Weight %)			
HAP	Weight % Diesel	Emissions	tpy
Benzene	0.00%	0.00	0.00
Ethyl Benzene	0.00%	0.00	0.00
n-Hexane	9.00%	1,502.44	0.75
MTBE	0.00%	0.00	0.00
Toluene	0.00%	0.00	0.00
Xylenes	0.00%	0.00	0.00
2,2,4-Trimethylpentane	0.00%	0.00	0.00
POM as 16-PAH (Naphthalene)	0.00%	0.00	0.00
Totals			1502.44
			0.75

¹Weight percentages for diesel vapor are from Identification of Volatile Organic Compound Species Profiles, CARB 1991.

Max single HAP (lbs/yr)	n-Hexane	2789.17
-------------------------	----------	---------

SFPP, LLC
Kinder Morgan
Mission Vally Terminal
San Diego, CA

Truck Loading PTE Calculations

Product	Throughput (1000 Gals)	Fugitives (lbs/yr)	VCU Stack (lbs/yr)	Emissions Total (lbs/yr)	Total (tpy)
Gasoline/Trans	1,887,050	125,985	157,569	283,554	141.78

Fugitive vapor emission rate:

8

mg/l

0.0668 lbs/1000 gal

VCU Stack Emission Rate:

0.0835 lbs/1000 gal

Gasoline Vapor HAPs Speciation Data (Weight %)

HAP	Weight % Baseline Gasoline ¹	Emissions lbs/yr	tpy
Benzene	0.90%	2,552	1.28
Ethyl Benzene	0.10%	284	0.14
n-Hexane	1.60%	4,537	2.27
MTBE	0.00%	-	0.00
Toluene	1.30%	3,686	1.84
Xylenes	0.50%	1,418	0.71
2,2,4-Trimethylpentane	0.80%	2,268	1.13
POM as 16-PAH (Naphthalene)	0.05%	142	0.07
Totals		14,887	7.44

¹Weight percentages for gasoline vapor are from Gasoline Marketing (Stage I and Stage II), Volume III Chapter 11, revised final, Area Source Committee, Emission Inventory Improvement Program, January 2001, Table 11.3-2.

Max single HAP (lbs/yr)	n-Hexane	2.27
-------------------------	----------	------

Explanation of Terms used in calculations

To represent the worst case scenario, it is assumed that all the loaded product is gasoline

VOC Emissions from fugitive vapors are calculated per BID for MACT R. Per BID for MACT R, 8 mg/l (which is equivalent to 99.2% truck capture efficiency) is appropriate for tanker truck tested for 1" leak test every year.

Throughput restrictions used in calculations (per PTO#860515 Condition #14)

- The total volume of all products loaded through all loading racks at this stationary source shall not exceed 5,170,000 gallons in any day, while operating in the by-pass mode, and shall not exceed 167,000 gallons per hour, while operating in the direct mode. Permittee shall record the volume of all products loaded through all loading racks at this facility. (Rule 61.2 and 20.3)

1,887,050,000 gallons

SFPP, LLC
Kinder Morgan
Mission Vally Terminal
San Diego, CA

Mission Valley Terminal Offspec Unloading Emissions From the Pump Sleeves

Fuel	Saturation Factor	Vapor Pressure	Molecular weight	Temperature	Emission Factor (lbs/1000 gal)	Throughputs (gal/day)	Annual Controlled Emissions (lbs/yr)	(tpy)
Offspec	1	6.5	186.00	529.85	10.09	5,735	845	0.42

Emission factors from Off Spec Fuel unloading operations can be determined using AP-42 Section 5.2 Transportation and Marketing of Petroleum Liquids, January 1995.

Explanation of Terms used in calculations

S=Saturation Factor = 1
P= True Vapor Pressure (psia) Average true vapor pressure assuming seasonal variations. It is assumed to be 6.5 psia. (Source: Permit application submitted on 09/21/2007)

M=Molecular Weight of Vapors (lb/lb-mole)

T=Temperature (R) (F+460) - Daily average ambient temperature

Uncontrolled EF = 12.46 SFM/T (Per AP-42, Section 5.2)

Control efficiency: 96% (Source: Permit application submitted on 09/21/2007)

To represent the worst case scenario, it is assumed that all the loaded product is gasoline

¹ Ethanol Accounted For Unloading Loss

Throughput restrictions used in calculations

Total unloading events are calculated as follows:

Maximum amount of offspec unloading	125,706,000	gallons/year
Capacity of one tanker Truck:	8,400	gallons
Total No of trucks:	14,965	per year
Assumed compartments per truck:	5	
Maximum number of unloading events	74,825	per year
Throughput assumed per loading event	27.98	(Source: Permit application submitted on 09/21/2007)
Maximum offspec product for emission	2,093,604	gallons

Permit Conditions used for PTE calculations:

8. The amount of product containing VOCs, as defined by Rule 2 (e.g. gasoline, ethanol and transmix), unloaded under this permit to operate shall not exceed 344,400 gallons per day. (Rules NSR & 1200)

Gasoline Vapor HAPs Speciation Data (Weight %)

HAP	Weight % Baseline	Emissions (lbs/yr)	(tpy)
Benzene	0.90%	7.60	0.00
Ethyl Benzene	0.10%	0.84	0.00
n-Hexane	1.60%	13.52	0.01
MTBE	0.00%	0.00	0.00
Toluene	1.30%	10.98	0.01
Xylenes	0.50%	4.22	0.00
2,2,4-Trimethylpentane	0.80%	6.76	0.00
POM as 16-PAH (Naphthalene)	0.05%	0.42	0.00
Totals		44.35	0.02

¹Weight percentages for gasoline vapor are from Gasoline Marketing (Stage I and Stage II), Volume III Chapter 11, revised final, Area Source Committee, Emission Inventory Improvement Program, January 2001, Table 11.3-2.

Max single HAP (lbs/yr)	n-Hexane	13.52
-------------------------	----------	-------

SFPP, LLC
Kinder Morgan
Mission Vally Terminal
San Diego, CA

Mission Valley Terminal Ethanol Unloading Emissions From Two Ethanol Unloading Racks

Fuel	Saturation Factor	Vapor Pressure	Molecular weight	Temperature	Emission Factor (lbs/1000 gal)	Throughputs (gal/day)	Fugitive Emissions (lbs/yr)	Annual Controlled Emissions (lbs/yr)
Ethanol	1	2.5	49.20	529.85	3.00	38,709	14,128,785	1,900

Emission factors from ethanol unloading operations can be determined using AP-42 Section 5.2 Transportation and Marketing of Petroleum Liquids, January 1995.
Explanation of Terms used in calculations
S=Saturation Factor = 1
P= True Vapor Pressure (psia) Average true vapor pressure assuming seasonal variations. It is assumed to be 2.6 psia. (Source: Permit application submitted to SDAPCD by Kinder Morgan)

M=Molecular Weight of Vapors (lb/lb-mole)
T=Temperature (R) (F+460) - Daily average ambient temperature for San Diego per Tanks program
Uncontrolled EF = 12.46 SPM/T (Per AP-42, Section 5.2)
Control efficiency: 96% (Source: Permit application submitted on 09/21/2007)

Ethanol Accounted For Unloading Loss

Maximum amount of ethanol unloaded: 352,590,000 gallons/year
Capacity of one tanker Truck: 8400 gallons
Total No of trucks: 41,975 per year
Assumed compartments per truck: 5
Maximum number of unloading events: 209,875 per year
Throughput assumed per loading event (gals): 67.32 gallons
Maximum dispec product for emission estimation: 14,128,785 gallons

Permit Conditions used for PTE calculations:
APCD2011-PTO-000752 Condition #7

7. The amount of denatured ethanol unloaded under Permits to Operate APCD2011-PTO-000753 and APCD2011-PTO-000752 shall not exceed 866,000 gallons per day. (Rules NSR & 1200)

Ethanol HAPs Speciation Data (Weight %)

HAP	Weight % Baseline	Emissions lbs/yr	tpy
Benzene	0.045%	0.86	0.00
Ethyl Benzene	0.05%	0.10	0.00
n-Hexane	0.080%	1.52	0.00
MTBE	0.000%	0.00	0.00
Toluene	0.065%	1.24	0.00
Xylenes	0.025%	0.48	0.00
2,2,4-Trimethylpentane	0.040%	0.76	0.00
POM as 18-PAR (Naphthalene)	0.003%	0.05	0.00
Totals		4.99	0.00

Weight percentages for gasoline vapor are from Gasoline Marketing (Stage I and Stage II), Volume III Chapter 11, revised from Area Source Committee, Emission Inventory Improvement Program, January 2001, Table 11.3-2.

Max single HAP (lbs/yr)	n-Hexane	1.52
-------------------------	----------	------

SFPP, LLC
Kinder Morgan
Mission Vally Terminal
San Diego, CA

Mission Valley South Terminal Ethanol Unloading Emissions From One Ethanol Unloading Rack

Fuel	Saturation Factor	Vapor Pressure	Molecular weight	Temperature	Emission Factor (lbs/1000 gal)	Throughputs (gal/day)	Fugitive Emissions (lbs/yr)	Annual Controlled Emissions (lbs/yr)
Ethanol		2.8	49.20	59.85	3.00	32,159	11,738,095	1,310
							103.46	0.76

Emission factors from ethanol unloading operations can be determined using AP-42 Section 5.2 Transportation and Marketing of Petroleum Liquids.
January 1995.
Explanation of Terms used in calculations
S=Saturation Factor = 1
P= True Vapor Pressure (psia) Average true vapor pressure assuming seasonal variations. It is assumed to be 6.5 psia. (Source: Permit application submitted to SDAPCD by Kinder Morgan) on 09/21/2007
M=Molecular Weight of Vapors (lb/lb-mole)
T=Temperature (R) (F+460) - Daily average ambient temperature for San Diego per Tanks program
Uncontrolled EF = 12.46 SPM/T (Per AP-42, Section 5.2) 96% (Source: Permit application submitted on 09/21/2007)
Control efficiency: 96% (Source: Permit application submitted by Kinder Morgan to SDAPCD on 09/21/2007)
Fugitive emissions were provided in the permit application submitted by Kinder Morgan to SDAPCD on 09/21/2007

Ethanol Accounted For Unloading Loss
Maximum amount of ethanol unloaded:
Capacity of one tanker Truck:
Total No of trucks:
Assured compartments per truck:
Maximum number of unloading events:
Throughput assumed per loading event (gals):
Maximum of crispes product for emission estimation:
Permit Conditions used for PTE calculations:
APCD2010-APP-001065, Condition #9

232,000,000 gallons/year
8400 gallons
27,619 per year
5
138,095 per year
85.00 gallons
11,738,095 gallons

9. The amount of denatured ethanol unloaded using the equipment from this permit shall not exceed 232,000,000 gallons per year. (Rule 21)

Ethanol HAPs Speciation Data (Weight %)

HAP	Weight %		Emissions	
	Baseline Gasoline ¹		lbs/yr	tpy
Benzene	0.045%		0.68	0.00
Ethyl Benzene	0.005%		0.08	0.00
n-Hexane	0.080%		1.21	0.00
MTBE	0.000%		0.00	0.00
Toluene	0.065%		0.98	0.00
Xylenes	0.025%		0.38	0.00
2,2,4-Trimethylpentane	0.040%		0.60	0.00
POM as 18-PAH (Naphthalene)	0.003%		0.04	0.00
Totals			3.96	0.00

¹Weight percentages for gasoline vapors are from Gasoline Marketing (Stage I and Stage II), Volume II Chapter 11, revised from Area Source Committee, Emission Inventory Improvement Program, January 2001, Table 11.3-2.

Max single HAP (lbs/yr)	n-Hexane	1.21
-------------------------	----------	------

SFPP, LLC
Kinder Morgan
Mission Vally Terminal
San Diego, CA

John Zink vapor combustion unit:

Maximum vapors routed to VCU: 13,977,292 lbs/year
 Converted to propane: 3,300 1,000 gallons
 Supplemental fuel (propane): 26 1,000 gallons
 (Source: The facility estimated propane usage of 5,200 gallons per year. A factor of Safety of 5 was applied)

Pollutant	Emission Factor	Emission Factor unit	Emissions (lbs/yr)	Reference
NOx	0.0334	lbs/1,000 gal of product	63,027	PTO#860515 Condition #14
CO	3.2	lbs/1,000 gal of propane	10,561	AP-42, Chapter 1, Emission factor Documentation for AP-42 Section 1.5, Table 4.2
SOx	0.02	lbs/1,000 gal of propane	66	AP-42, Chapter 1, Emission factor Documentation for AP-42 Section 1.5, Table 4.2
PM10	0.6	lbs/1,000 gal of propane	1,980	AP-42, Chapter 1, Emission factor Documentation for AP-42 Section 1.5, Table 4.2
VOC	-	lbs/1,000 gal of propane	-	AP-42, Chapter 1, Emission factor Documentation for AP-42 Section 1.5, Table 4.2

Soil vapor extraction unit:

According to APP 2010-001103 Condition#10, total VOC emissions from all onsite remediation combustion equipment shall not exceed 10,140 lbs per calendar year.

12. The total combined VOC emissions from all onsite soil remediation combustion equipment shall not exceed 10,140 lbs per calendar year (Rule 1200)

Supplemental fuel (natural gas): 3 MMBtu/hr
 Maximum natural gas used: 26,280 MMBtu/year

Propane Usage

Pollutant	Emission Factor	Emission Factor unit	Emissions (lbs/year)	Reference
NOx	19	lbs/1,000 gal of propane	494	AP-42, Chapter 1, Emission factor Documentation for AP-42 Section 1.5, Table 4.2
CO	3.2	lbs/1,000 gal of propane	83	AP-42, Chapter 1, Emission factor Documentation for AP-42 Section 1.5, Table 4.2
SOx	0.02	lbs/1,000 gal of propane	1	AP-42, Chapter 1, Emission factor Documentation for AP-42 Section 1.5, Table 4.2
PM10	0.6	lbs/1,000 gal of propane	16	AP-42, Chapter 1, Emission factor Documentation for AP-42 Section 1.5, Table 4.2
VOC	-	-	-	-

Natural Gas Usage

Pollutant	Emission Factor	Emission Factor unit	Emissions (lbs/year)	Reference
NOx	100	lbs/MMScf	2,503	AP-42, Chapter 1, Emission factor Documentation for AP-42 Chapter 1.4, Table 1.4-1
CO	84	lbs/MMScf	2,102	AP-42, Chapter 1, Emission factor Documentation for AP-42 Chapter 1.4, Table 1.4-1
SOx	0.6	lbs/MMScf	15	AP-42, Chapter 1, Emission factor Documentation for AP-42 Chapter 1.4, Table 1.4-1
PM10	7.6	lbs/MMScf	190	AP-42, Chapter 1, Emission factor Documentation for AP-42 Chapter 1.4, Table 1.4-1
VOC	-	-	-	-

Emergency Generator

HP 131
 Annual Operating Hrs. 50 hrs of maintenance/ year

Diesel Usage

Pollutant	Emission Factor	Emission Factor unit	Emissions (lbs/year)	Reference
NOx	2.5/6	g/hp-hr	37	Manufacturer' Data, Assume 92% of Nox (2.8 g/hp-hr NOx+NHC)
CO	0.7	g/hp-hr	10	Manufacturer' Data
SOx	-	-	-	-
PM10	0.12	g/hp-hr	2	Manufacturer' Data
VOC	0.224	g/hp-hr	3	Manufacturer' Data, Assume 8% of VOC (2.8 g/hp-hr NOx+NHC)

Totals

Pollutant	Emissions (lbs/year)
NOx	66,061
CO	12,757
SOx	82
PM10	2,188
VOC	10,040

SFPP, LLC
Kinder Morgan
Mission Vally Terminal
San Diego, CA

Emissions from MVS Sump (APCD2011-PTO-000884)

Facility	Sump	Service	Capacity (gallons)	Maximum Throughput (gallons/yr)
MVS	Rack sump	Washdown from loading rack	10,000	120,000
		Totals	10,000	120,000

Sources of emission:	Emission Factor (lbs/1000 gal.)	Uncontrolled Emissions (lbs/year)	Control Efficiency	Controlled Emissions (lbs/year)	Reference
Filling of UST (assume splash filling)	11.5	1,380	0.00	1,380	AP-42, Chapter 5-2, Table 5.2-7
UST breathing and emptying factor	1	120	0.00	120	AP-42, Chapter 5-2, Table 5.2-7
	Totals	1,500	-	1,500	

*Fugitive emissions from flanges, valves, connectors, and other devices associated with these sumps have been captured in the 'Fugitives' tab
 ** Throughput estimates for Sumps: 12 Turnover/Year for Rack Sump; Per permit application on March 10, 2010.

Emissions from 4,000 gallon UST at SFPP (APCD2011-PTO-000885)

Unloading Activities	Max Drained
Prover drainage	500,000
Scraper Trap	500,000
Sampling	500,000
Total	1,500,000

¹ Per permit condition #5.

Sources of emission:	Emission Factor (lbs/1,000 gal.)	Uncontrolled Emissions (lbs/yr)	Control Efficiency	Controlled Emissions (lbs/yr)	References
Filling of UST (assume splash filling)	11.50	17250.00	0.98	345.00	AP-42, Chapter 5-2, Table 5.2-7
UST breathing and emptying factor	1.00	1500.00	0.98	30.00	AP-42, Chapter 5-2, Table 5.2-7 EPA Protocol for Equipment Leak Estimates, November 1995
Fugitive emissions ¹		40.73	-	40.73	
	Totals	18790.73		415.73	

Emissions from Oil Water Separator (APCD2011-PTO-000883)

Source	Throughput (gal/month)	Emission Factor (lbs./1,000 gal.)	Emissions (lbs./yr)	Emissions (tpy)
Oil Water Separator	308,000	0.20	329	0.16

Max monthly throughput calculated from maximum 50000 gal/day per email on 6-2-2010 (50000*4)*(4000*27)
 Annual Throughput calculated from OWS engineering evaluation. (50000*4)*(4000*361)

Gasoline Vapor HAPs Speciation Data (Weight %)

HAP	Weight % Baseline Gasoline ¹	Emissions (lbs/yr)	Emissions (tpy)
Benzene	0.90%	14	0.01
Ethyl Benzene	0.10%	2	0.00
n-Hexane	1.60%	24	0.01
MTBE	0.00%	0	0.00
Toluene	1.30%	20	0.01
Xylenes	0.50%	8	0.00
2,2,4-Trimethylpentane	0.80%	12	0.01
POM as 16-PAH (Naphthalene)	0.05%	1	0.00
	Totals	79	0.04

¹Weight percentages for gasoline vapor are from Gasoline Marketing (Stage I and Stage II), Volume III Chapter 11, revised final, Area Source Committee, Emission Inventory Improvement Program, January 2001, Table 11.3-2.

Max single HAP (lbs/yr)	n-Hexane	24
-------------------------	----------	----

Gasoline Vapor HAPs Speciation Data (Weight %)

HAP	Weight % Baseline Gasoline ¹	Emissions (lbs/yr)	Emissions (tpy)
Benzene	0.90%	3.74	0.00
Ethyl Benzene	0.10%	0.42	0.00
n-Hexane	1.60%	6.65	0.00
MTBE	0.00%	0.00	0.00
Toluene	1.30%	5.40	0.00
Xylenes	0.50%	2.08	0.00
2,2,4-Trimethylpentane	0.80%	3.33	0.00
POM as 16-PAH (Naphthalene)	0.05%	0.21	0.00
	Totals	21.83	0.01

¹Weight percentages for gasoline vapor are from Gasoline Marketing (Stage I and Stage II), Volume III Chapter 11, revised final, Area Source Committee, Emission Inventory Improvement Program, January 2001, Table 11.3-2.

Max single HAP (lbs/yr)	n-Hexane	6.65
-------------------------	----------	------

Gasoline Vapor HAPs Speciation Data (Weight %)

HAPs	Weight % ¹	Emissions (lbs./yr)	Emissions (tpy)
Benzene	0.90%	3	0.00
Ethyl Benzene	0.10%	0	0.00
n-Hexane	1.60%	5	0.00
MTBE	0.00%	0	0.00
Toluene	1.30%	4	0.00
Xylenes	0.50%	2	0.00
2,2,4-Trimethylpentane	0.80%	3	0.00
POM as 16-PAH (Naphthalene)	0.05%	0	0.00
	Total	17	0.01

¹Weight percentages for gasoline vapor are from Gasoline Marketing (Stage I and Stage II), Volume III Chapter 11, revised final, Area Source Committee, Emission Inventory Improvement Program, January 2001, Table 11.3-2.

Max single HAP (lbs/yr)	n-Hexane	5
-------------------------	----------	---

SFPP, LLC
Kinder Morgan
Mission Vally Terminal
San Diego, CA

Fugitive VOC Emissions

Count			Emission Factors		Emissions		
			Light liquid (lbs/hr-count)	Gas (lbs/hr-count)	Light liquid (lbs./yr)	Gas (lbs./yr)	Total (lbs./yr)
Component	Light	Gas					
Valves	4,992	5	9.48E-05	2.87E-05	4.15E+03	1.26E+00	4,147
Pumps	148	0	1.19E-03	1.43E-04	1.54E+03	0.00E+00	1,543
Other	1,097	0	2.87E-04	2.65E-04	2.75E+03	0.00E+00	2,754
Flanges	1,918	0	1.76E-05	9.26E-05	2.96E+02	0.00E+00	296
Total							8,741

Source: Based on EPA, November 1995, Equipment Leak Emission Factors, page 2-14.

Note: Since the facility specific latest fugitive counts are not available for Mission Valley as well as Mission Valley South terminals, old counts provided by Kinder Morgan on 7/19/10 were doubled and an extra 20% was added to account for Shell terminal fugitive emissions.

Gasoline Vapor HAPs Speciaition Data (Weight %)

HAP	Weight %	Emissions	
		Lbs/Year	(tpy)
Benzene	0.90%	79	0.04
Ethyl Benzene	0.10%	9	0.00
n-Hexane	1.60%	140	0.07
MTBE	0.00%	0	0.00
Toluene	1.30%	114	0.06
Xylenes	0.50%	44	0.02
2,2,4-Trimethylpentane	0.80%	70	0.03
POM as 16-PAH (Naphthalene)	0.05%	4	0.00
Total		459	0.23

¹Weight percentages for gasoline vapor are from *Gasoline Marketing (Stage I and Stage II)*, Volume III Chapter 11, revised final, Area Source Committee, Emission Inventory Improvement Program, January 2001, Table 11.3-2.

Max single HAP (lbs/yr)	n-Hexane	140
-------------------------	----------	-----

Application to Install an Underground Sump
at the SFPP Mission Valley Terminal, Plant # 1069A

Table I

Source	Service	No. Components	Emission Factor (kg/hr/source)	Emission Factor (lb/hr/source)	VOC Emissions (lbs/day)	VOC Emissions (lbs/year)
Valves	Gas	4	1.30 E-05	2.86 E-05	2.75 E-03	1.00
	Light Liquid	20	4.30 E-05	9.47 E-05	4.54 E-02	16.59
Pumps	Light Liquid	1	5.40 E-04	1.19 E-03	2.86 E-02	10.42
Fittings	Light Liquid	50	8.00 E-06	1.76 E-05	2.11 E-02	7.71
Other	Light Liquid	2	1.30 E-04	2.86 E-04	1.37 E-02	5.01
TOTAL					1.12 E-01	40.73

Mission Valley Terminal Title V Permit Renewal Application

KINDER MORGAN
ENERGY SERVICES

APPENDIX C – TANKS DATABASE REPORTS-TANKS 4.09D PROGRAM OUTPUT

TANKS 4.0.9d
Emissions Report - Detail Format
Tank Identification and Physical Characteristics

Identification		MV-01 PTE
User Identification:		San Diego
City:		California
State:		SFPP, L.P.
Company:		External Floating Roof Tank
Type of Tank:		
Description:		
Tank Dimensions		
Diameter (ft):		60.00
Volume (gallons):		746,172.00
Turnovers:		2,528.97
Paint Characteristics		
Internal Shell Condition:		Light Rust
Shell Color/Shade:		White/White
Shell Condition		Good
Roof Characteristics		
Type:		Pontoon
Fitting Category		Detail
Tank Construction and Rim-Seal System		
Construction:		Welded
Primary Seal:		Mechanical Shoe
Secondary Seal		Rim-mounted
Deck Fitting/Status		
Access Hatch (24-in. Diam.)/Bolted Cover, Gasketed		1
Automatic Gauge Float Well/Bolted Cover, Gasketed		1
Vacuum Breaker (10-in. Diam.)/Weighted Mech. Actuation, Gask.		1
Slotted Guide-Pole/Sample Well/Gask. Sliding Cover, w. Float, Wiper		1
Roof Leg (3-in. Diameter)/Adjustable, Pontoon Area, Gasketed		4
Roof Leg (3-in. Diameter)/Adjustable, Center Area, Gasketed		4
Roof Drain (3-in. Diameter)/90% Closed		1
Sample Pipe or Well (24-in. Diam.)/Slotted Pipe-Sliding Cover, Gask.		1

Meteorological Data used in Emissions Calculations: San Diego, California (Avg Atmospheric Pressure = 14.7 psia)

TANKS 4.0.9d

Emissions Report - Detail Format

Liquid Contents of Storage Tank

MV-01 PTE - External Floating Roof Tank
San Diego, California

Mixture/Component	Month	Daily Liquid Surf. Temperature (deg F)			Liquid Bulk Temp (deg F)	Vapor Pressure (psia)			Vapor Mol. Weight	Liquid Mass Fract.	Vapor Mass Fract.	Mol. Weight	Basis for Vapor Pressure Calculations
		Avg.	Min.	Max.		Avg.	Min.	Max.					
Gasoline (RVP 13.5)	Jan	62.52	58.31	66.73	64.22	7.5910	N/A	N/A	62.0000			92.00	Option 4: RVP=13.5, ASTM Slope=3
Gasoline (RVP 13.5)	Feb	63.40	59.09	67.71	64.22	7.7148	N/A	N/A	62.0000			92.00	Option 4: RVP=13.5, ASTM Slope=3
Gasoline (RVP 6)	Mar	64.27	59.97	68.56	64.22	3.2045	N/A	N/A	69.0000			92.00	Option 4: RVP=6, ASTM Slope=3
Gasoline (RVP 6)	Apr	65.84	61.23	70.45	64.22	3.3091	N/A	N/A	69.0000			92.00	Option 4: RVP=6, ASTM Slope=3
Gasoline (RVP 6)	May	66.83	62.67	70.99	64.22	3.3760	N/A	N/A	69.0000			92.00	Option 4: RVP=6, ASTM Slope=3
Gasoline (RVP 6)	Jun	68.09	63.90	72.27	64.22	3.4629	N/A	N/A	69.0000			92.00	Option 4: RVP=6, ASTM Slope=3
Gasoline (RVP 6)	Jul	70.13	65.63	74.64	64.22	3.6082	N/A	N/A	69.0000			92.00	Option 4: RVP=6, ASTM Slope=3
Gasoline (RVP 6)	Aug	70.66	66.31	75.02	64.22	3.6465	N/A	N/A	69.0000			92.00	Option 4: RVP=6, ASTM Slope=3
Gasoline (RVP 6)	Sep	69.67	65.55	73.79	64.22	3.5749	N/A	N/A	69.0000			92.00	Option 4: RVP=6, ASTM Slope=3
Gasoline (RVP 6)	Oct	67.64	63.52	71.77	64.22	3.4321	N/A	N/A	69.0000			92.00	Option 4: RVP=6, ASTM Slope=3
Gasoline (RVP 11.5)	Nov	64.65	60.48	68.81	64.22	6.6146	N/A	N/A	85.0000			92.00	Option 4: RVP=11.5, ASTM Slope=3
Gasoline (RVP 13.5)	Dec	62.45	58.26	66.64	64.22	7.5818	N/A	N/A	62.0000			92.00	Option 4: RVP=13.5, ASTM Slope=3

TANKS 4.0.9d

Emissions Report - Detail Format

Detail Calculations (AP-42)

MV-01 PTE - External Floating Roof Tank

San Diego, California

Month:	January	February	March	April	May	June	July	August	September	October	November	December
Rim Seal Losses (lb):	167.0260	164.6511	76.2351	81.6985	84.4777	86.0397	87.2860	87.3728	82.5202	73.2600	142.6670	157.8431
Seal Factor A (lb-mole/ft-yr):	0.6000	0.6000	0.6000	0.6000	0.6000	0.6000	0.6000	0.6000	0.6000	0.6000	0.6000	0.6000
Seal Factor B (lb-mole/ft-yr (mph) ^n):	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000
Average Wind Speed (mph):	6.0000	6.6000	7.5000	7.8000	7.9000	7.8000	7.5000	7.4000	7.1000	6.5000	5.9000	5.6000
Seal-related Wind Speed Exponent:	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Value of Vapor Pressure Function:	0.1796	0.1838	0.0614	0.0637	0.0651	0.0670	0.0703	0.0711	0.0695	0.0654	0.1483	0.1793
Vapor Pressure at Daily Average Liquid												
Surface Temperature (psia):	7.5910	7.7148	3.2045	3.3091	3.3760	3.4529	3.6082	3.6465	3.5749	3.4321	6.6146	7.5818
Tank Diameter (ft):	60.0000	60.0000	60.0000	60.0000	60.0000	60.0000	60.0000	60.0000	60.0000	60.0000	60.0000	60.0000
Vapor Molecular Weight (lb/lb-mole):	62.0000	62.0000	69.0000	69.0000	69.0000	69.0000	69.0000	69.0000	69.0000	69.0000	65.0000	62.0000
Product Factor:	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Withdrawal Losses (lb):	494.3023	494.3023	494.3023	494.3023	494.3023	494.3023	494.3023	494.3023	494.3023	494.3023	494.3023	494.3023
Net Throughput (gal/mo.):	157.254	166.6000	157.254	166.6000	157.254	166.6000	157.254	166.6000	157.254	166.6000	157.254	166.6000
Shell Clingage Factor (bbl/1000 sqft):	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015
Average Organic Liquid Density (lb/gal):	5.6000	5.6000	5.6000	5.6000	5.6000	5.6000	5.6000	5.6000	5.6000	5.6000	5.6000	5.6000
Tank Diameter (ft):	60.0000	60.0000	60.0000	60.0000	60.0000	60.0000	60.0000	60.0000	60.0000	60.0000	60.0000	60.0000
Roof Fitting Losses (lb):	180.9012	204.3071	87.5506	95.0852	98.7654	100.1377	100.2419	99.9047	93.1570	80.7516	154.0269	168.9204
Value of Vapor Pressure Function:	0.1796	0.1838	0.0614	0.0637	0.0651	0.0670	0.0703	0.0711	0.0695	0.0654	0.1483	0.1793
Vapor Molecular Weight (lb/lb-mole):	62.0000	62.0000	69.0000	69.0000	69.0000	69.0000	69.0000	69.0000	69.0000	69.0000	65.0000	62.0000
Product Factor:	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Tot. Roof Fitting Loss Fact. (lb-mole/yr):	194.9530	215.0938	248.0608	259.7723	263.7555	259.7723	248.0608	244.2367	233.0049	211.6339	191.7415	182.3585
Average Wind Speed (mph):	5.0000	6.6000	7.5000	7.8000	7.9000	7.8000	7.5000	7.4000	7.1000	6.5000	5.9000	5.6000
Total Losses (lb):	842.2294	883.2604	658.0980	671.0860	677.5454	680.4797	681.8302	681.5797	669.9795	648.3138	790.9962	821.0658
Roof Fitting/Status					Quantity	KFa (lb-mole/yr)	Roof Fitting Loss Factors			m	Losses (lb)	
Access Hatch (24-in. Diam./Bolted Cover, Gasketed					1	1.60	KFb (lb-mole/(yr mph^n))		0.00	0.00	10.6416	
Automatic Gauge Float Well/Bolted Cover, Gasketed					1	2.80			0.00	0.00	18.6228	
Vacuum Breaker (10-in. Diam./Weighted Mech. Actuation, Gask.					1	6.20			1.20	0.94	75.2245	
Slotted Guide-Pole/Sample Well/Gask. Sliding Cover, w. Float, Wiper					1	21.00			7.90	1.80	991.5444	
Roof Leg (3-in. Diameter)/Adjustable, Pontoon Area, Gasketed					4	1.30			0.08	0.65	40.3737	
Roof Leg (3-in. Diameter)/Adjustable, Center Area, Gasketed					4	0.53			0.11	0.13	17.6731	
Roof Drain (3-in. Diameter)/90% Closed					1	1.80			0.14	1.10	17.0527	
Sample Pipe or Well (24-in. Diam.)/Slotted Pipe-Sliding Cover, Gask.					1	43.00			0.00	0.00	285.9631	

TANKS 4.0.9d
Emissions Report - Detail Format
Individual Tank Emission Totals

Emissions Report for: January, February, March, April, May, June, July, August, September, October, November, December

MV-01 PTE - External Floating Roof Tank
San Diego, California

Components	Losses(lbs)				Total Emissions
	Rim Seal Loss	Withdrawal Loss	Deck Fitting Loss	Deck Seam Loss	
Gasoline (RVP 13.5)	509.52	1,482.91	554.13	0.00	2,546.56
Gasoline (RVP 6)	658.89	3,954.42	755.59	0.00	5,368.90
Gasoline (RVP 11.5)	142.67	494.30	154.03	0.00	791.00

TANKS 4.0.9d

Emissions Report - Detail Format

Tank Identification and Physical Characteristics

Identification

User Identification: MV-02 PTE
 City: San Diego
 State: California
 Company: SFPP, L.P.
 Type of Tank: External Floating Roof Tank
 Description:

Tank Dimensions

Diameter (ft): 50.00
 Volume (gallons): 513,576.00
 Turnovers: 3,674.33

Paint Characteristics

Internal Shell Condition: Light Rust
 Shell Color/Shade: White/White
 Shell Condition: Good

Roof Characteristics

Type: Pontoon
 Fitting Category: Detail

Tank Construction and Rim-Seal System

Construction: Welded
 Primary Seal: Mechanical Shoe
 Secondary Seal: Rim-mounted

Deck Fitting/Status

Access Hatch (24-in. Diam.)/Bolted Cover, Gasketed
 Automatic Gauge Float Well/Bolted Cover, Gasketed
 Vacuum Breaker (10-in. Diam.)/Weighted Mech. Actuation, Gask.
 Roof Leg (3-in. Diameter)/Adjustable, Pontoon Area, Gasketed
 Roof Leg (3-in. Diameter)/Adjustable, Center Area, Gasketed
 Roof Drain (3-in. Diameter)/90% Closed
 Sample Pipe or Well (24-in. Diam.)/Slotted Pipe-Sliding Cover, Gask.
 Slotted Guide-Pole/Sample Well/Gask. Sliding Cover, w. Float, Wiper

Meteorological Data used in Emissions Calculations: San Diego, California (Avg Atmospheric Pressure = 14.7 psia)

Quantity
1
1
1
5
4
1
1
1

TANKS 4.0.9d

Emissions Report - Detail Format

Liquid Contents of Storage Tank

MV-02 PTE - External Floating Roof Tank
San Diego, California

Mixture/Component	Month	Daily Liquid Surf. Temperature (deg F)			Liquid Bulk Temp (deg F)	Vapor Pressure (psia)			Vapor Mol. Weight	Liquid Mass Fract.	Vapor Mass Fract.	Mol. Weight	Basis for Vapor Pressure Calculations
		Avg.	Min.	Max.		Avg.	Min.	Max.					
Gasoline (RVP 13.5)	Jan	62.52	58.31	66.73	64.22	7.5910	N/A	N/A	62.0000			92.00	Option 4: RVP=13.5, ASTM Slope=3
Gasoline (RVP 13.5)	Feb	63.40	59.09	67.71	64.22	7.7148	N/A	N/A	62.0000			92.00	Option 4: RVP=13.5, ASTM Slope=3
Gasoline (RVP 6)	Mar	64.27	59.97	68.56	64.22	3.2045	N/A	N/A	69.0000			92.00	Option 4: RVP=6, ASTM Slope=3
Gasoline (RVP 6)	Apr	65.84	61.23	70.45	64.22	3.3091	N/A	N/A	69.0000			92.00	Option 4: RVP=6, ASTM Slope=3
Gasoline (RVP 6)	May	66.83	62.67	70.99	64.22	3.3760	N/A	N/A	69.0000			92.00	Option 4: RVP=6, ASTM Slope=3
Gasoline (RVP 6)	Jun	68.09	63.90	72.27	64.22	3.4629	N/A	N/A	69.0000			92.00	Option 4: RVP=6, ASTM Slope=3
Gasoline (RVP 6)	Jul	70.13	65.63	74.64	64.22	3.6082	N/A	N/A	69.0000			92.00	Option 4: RVP=6, ASTM Slope=3
Gasoline (RVP 6)	Aug	70.66	66.31	75.02	64.22	3.6465	N/A	N/A	69.0000			92.00	Option 4: RVP=6, ASTM Slope=3
Gasoline (RVP 6)	Sep	69.67	65.55	73.79	64.22	3.5749	N/A	N/A	69.0000			92.00	Option 4: RVP=6, ASTM Slope=3
Gasoline (RVP 6)	Oct	67.64	63.52	71.77	64.22	3.4321	N/A	N/A	69.0000			92.00	Option 4: RVP=6, ASTM Slope=3
Gasoline (RVP 11.5)	Nov	64.65	60.48	68.81	64.22	6.6146	N/A	N/A	65.0000			92.00	Option 4: RVP=11.5, ASTM Slope=3
Gasoline (RVP 13.5)	Dec	62.45	58.26	66.64	64.22	7.5818	N/A	N/A	62.0000			92.00	Option 4: RVP=13.5, ASTM Slope=3

TANKS 4.0.9d

Emissions Report - Detail Format

Detail Calculations (AP-42)

MV-02 PTE - External Floating Roof Tank

San Diego, California

Month:	January	February	March	April	May	June	July	August	September	October	November	December
Rim Seal Losses (lb):	139.1883	153.8759	63.5292	68.0821	70.3981	71.6988	72.7384	72.8106	68.7668	61.0500	118.8892	131.5360
Seal Factor A (lb-mole/ft-yr):	0.6000	0.6000	0.6000	0.6000	0.6000	0.6000	0.6000	0.6000	0.6000	0.6000	0.6000	0.6000
Seal Factor B (lb-mole/ft-yr (mph)	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000
Seal Factor C (lb-mole/ft-yr (mph)	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000
Average Wind Speed (mph):	6.0000	6.0000	7.5000	7.8000	7.9000	7.8000	7.5000	7.4000	7.1000	6.5000	5.9000	5.6000
Seal-Related Wind Speed	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Exponent:												
Value of Vapor Pressure	0.1796	0.1838	0.0614	0.0637	0.0651	0.0670	0.0703	0.0711	0.0695	0.0664	0.1483	0.1793
Function:												
Vapor Pressure at Daily Average												
Liquid												
Surface Temperature (psia):	7.5910	7.7148	3.2045	3.3091	3.3760	3.4629	3.6082	3.6465	3.5749	3.4321	6.6146	7.5818
Tank Diameter (ft):	50.0000	50.0000	50.0000	50.0000	50.0000	50.0000	50.0000	50.0000	50.0000	50.0000	50.0000	50.0000
Vapor Molecular Weight (lb/lb-mole):	62.0000	62.0000	69.0000	69.0000	69.0000	69.0000	69.0000	69.0000	69.0000	69.0000	65.0000	62.0000
Product Factor:	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Withdrawal Losses (lb):	593.1627	593.1627	593.1627	593.1627	593.1627	593.1627	593.1627	593.1627	593.1627	593.1627	593.1627	593.1627
Net Throughput (gall/mo.):	157,254	166,600	157,254	166,600	157,254	166,600	157,254	166,600	157,254	166,600	157,254	166,600
Shell Clingage Factor (bbl/1000	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015
sqft):												
Average Organic Liquid Density	5.6000	5.6000	5.6000	5.6000	5.6000	5.6000	5.6000	5.6000	5.6000	5.6000	5.6000	5.6000
(lb/gal):												
Tank Diameter (ft):	50.0000	50.0000	50.0000	50.0000	50.0000	50.0000	50.0000	50.0000	50.0000	50.0000	50.0000	50.0000
Roof Fitting Losses (lb):	182.2962	205.7474	88.0924	95.6493	98.3432	100.7318	100.8622	100.5317	93.7675	81.3293	155.2328	170.3047
Value of Vapor Pressure	0.1796	0.1838	0.0614	0.0637	0.0651	0.0670	0.0703	0.0711	0.0695	0.0664	0.1483	0.1793
Function:												
Vapor Molecular Weight (lb/lb-mole):	62.0000	62.0000	69.0000	69.0000	69.0000	69.0000	69.0000	69.0000	69.0000	69.0000	65.0000	62.0000
Product Factor:	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Tot. Roof Fitting Loss Fact. (lb-mole/yr):	196.4564	216.6101	249.5959	261.3135	265.2986	261.3135	249.5959	246.7697	234.5317	213.1481	193.2426	183.8529
Average Wind Speed (mph):	6.0000	6.0000	7.5000	7.8000	7.9000	7.8000	7.5000	7.4000	7.1000	6.5000	5.9000	5.6000
Total Losses (lb):	914.6472	952.7860	744.7644	756.8941	762.9040	765.5943	766.7633	766.5051	755.6970	735.5421	867.2847	895.0033
Roof Fitting/Status					Quantity	kFa (lb-mole/yr)	KFb (lb-mole/yr)	Roof Fitting Loss Factors				
Access Hatch (24-in. Diam./Boiled Cover, Gasketed					1	1.60	0.00	0.00				Losses (lb)
Automatic Gauge Float Well/Boiled Cover, Gasketed					1	2.80	0.00	0.00				10.6416
Vacuum Breaker (10-in. Diam./Weighted Mech. Actuation, Gask.					1	6.20	1.20	0.00				18.6228
Roof Leg (3-in. Diameter)/Adjustable, Pontoon Area, Gasketed					5	1.30	0.08	0.94				75.2245
Roof Leg (3-in. Diameter)/Adjustable, Center Area, Gasketed					4	0.53	0.11	0.65				50.4671
Roof Drain (3-in. Diameter)/90% Closed					1	1.80	0.14	0.13				17.6731
Sample Pipe or Well (24-in. Diam./Slotted Pipe-Sliding Cover, Gask.					1	43.00	0.00	1.10				17.0527
Slotted Guide-Pole/Sample Well/Gask. Sliding Cover, w. Float, Wiper					1	21.00	7.90	0.00				285.6931
												991.5444

TANKS 4.0.9d
Emissions Report - Detail Format
Individual Tank Emission Totals

Emissions Report for: January, February, March, April, May, June, July, August, September, October, November, December

MV-02 PTE - External Floating Roof Tank
San Diego, California

Components	Losses(lbs)				Total Emissions
	Rim Seal Loss	Withdrawal Loss	Deck Fitting Loss	Deck Seam Loss	
Gasoline (RVP 13.5)	424.60	1,779.49	558.35	0.00	2,762.44
Gasoline (RVP 11.5)	118.89	593.16	155.23	0.00	867.28
Gasoline (RVP 6)	549.08	4,745.30	760.31	0.00	6,054.68

TANKS 4.0.9d

Emissions Report - Detail Format

Tank Identification and Physical Characteristics

Identification

User Identification: MV-03 PTE
 City: San Diego
 State: California
 Company: SFPP, L.P.
 Type of Tank: Internal Floating Roof Tank
 Description:

Tank Dimensions

Diameter (ft): 86.50
 Volume (gallons): 2,003,400.00
 Turnovers: 941.92
 Self Supp. Roof? (y/n): N
 No. of Columns: 1.00
 Eff. Col. Diam. (ft): 1.00

Paint Characteristics

Internal Shell Condition: Light Rust
 Shell Color/Shade: White/White
 Shell Condition: Good
 Roof Color/Shade: White/White
 Roof Condition: Good

Rim-Seal System

Primary Seal: Mechanical Shoe
 Secondary Seal: Rim-mounted

Deck Characteristics

Deck Fitting Category: Detail
 Deck Type: Welded

Deck Fitting/Status

	Quantity
Automatic Gauge Float Well/Bolted Cover, Gasketed	1
Access Hatch (24-in. Diam.)/Bolted Cover, Gasketed	1
Column Well (24-in. Diam.)/Built-Up Col.-Sliding Cover, Gask.	1
Ladder Well (36-in. Diam.)/Sliding Cover, Gasketed	1
Roof Leg or Hanger Well/Adjustable	16
Sample Pipe or Well (24-in. Diam.)/Slotted Pipe-Sliding Cover, Gask.	1
Vacuum Breaker (10-in. Diam.)/Weighted Mech. Actuation, Gask.	1
Slotted Guide-Pole/Sample Well/Gask. Sliding Cover, w. Float, Wiper	1
Gauge-Hatch/Sample Well (8-in. Diam.)/Weighted Mech. Actuation, Gask.	1

Meteorological Data used in Emissions Calculations: San Diego, California (Avg Atmospheric Pressure = 14.7 psia)

TANKS 4.0.9d

Emissions Report - Detail Format

Liquid Contents of Storage Tank

MV-03 PTE - Internal Floating Roof Tank
San Diego, California

Mixture/Component	Month	Daily Liquid Surf. Temperature (deg F)			Liquid Bulk Temp (deg F)	Vapor Pressure (psia)			Vapor Mol. Weight	Liquid Mass Fract.	Vapor Mass Fract.	Mol. Weight	Basis for Vapor Pressure Calculations
		Avg.	Min.	Max.		Avg.	Min.	Max.					
Gasoline (RVP 13.5)	Jan	62.52	58.31	66.73	64.22	7.5910	N/A	N/A	62.0000			92.00	Option 4: RVP=13.5, ASTM Slope=3
Gasoline (RVP 13.5)	Feb	63.40	59.09	67.71	64.22	7.7148	N/A	N/A	62.0000			92.00	Option 4: RVP=13.5, ASTM Slope=3
Gasoline (RVP 6)	Mar	64.27	59.97	68.56	64.22	3.2045	N/A	N/A	69.0000			92.00	Option 4: RVP=6, ASTM Slope=3
Gasoline (RVP 6)	Apr	65.84	61.23	70.45	64.22	3.3091	N/A	N/A	69.0000			92.00	Option 4: RVP=6, ASTM Slope=3
Gasoline (RVP 6)	May	66.83	62.67	70.99	64.22	3.3760	N/A	N/A	69.0000			92.00	Option 4: RVP=6, ASTM Slope=3
Gasoline (RVP 6)	Jun	68.09	63.90	72.27	64.22	3.4629	N/A	N/A	69.0000			92.00	Option 4: RVP=6, ASTM Slope=3
Gasoline (RVP 6)	Jul	70.13	65.63	74.64	64.22	3.6082	N/A	N/A	69.0000			92.00	Option 4: RVP=6, ASTM Slope=3
Gasoline (RVP 6)	Aug	70.66	66.31	75.02	64.22	3.6465	N/A	N/A	69.0000			92.00	Option 4: RVP=6, ASTM Slope=3
Gasoline (RVP 6)	Sep	69.67	65.55	73.79	64.22	3.5749	N/A	N/A	69.0000			92.00	Option 4: RVP=6, ASTM Slope=3
Gasoline (RVP 6)	Oct	67.64	63.52	71.77	64.22	3.4321	N/A	N/A	69.0000			92.00	Option 4: RVP=6, ASTM Slope=3
Gasoline (RVP 11.5)	Nov	64.65	60.48	68.81	64.22	6.6146	N/A	N/A	65.0000			92.00	Option 4: RVP=11.5, ASTM Slope=3
Gasoline (RVP 13.5)	Dec	62.45	58.26	66.64	64.22	7.5818	N/A	N/A	62.0000			92.00	Option 4: RVP=13.5, ASTM Slope=3

TANKS 4.0.9d

Emissions Report - Detail Format

Detail Calculations (AP-42)

MV-03 PTE - Internal Floating Roof Tank

San Diego, California

Month:	January	February	March	April	May	June	July	August	September	October	November	December
Rim Seal Losses (lb):	48,1592	49,2973	18,3176	18,9971	19,4344	20,0065	20,9729	21,2296	20,7500	19,8031	41,6915	48,0755
Seal Factor A (lb-mole/ft-yr)	0.6000	0.6000	0.6000	0.6000	0.6000	0.6000	0.6000	0.6000	0.6000	0.6000	0.6000	0.6000
Seal Factor B (lb-mole/ft-yr (mph)	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000
Value of Vapor Pressure	0.1796	0.1838	0.0614	0.0637	0.0651	0.0670	0.0703	0.0711	0.0695	0.0664	0.1483	0.1793
Function:												
Vapor Pressure at Daily Average												
Liquid												
Surface Temperature (psia):	7.5910	7.7148	3.2045	3.3091	3.3760	3.4629	3.6082	3.6485	3.5749	3.4321	6.6146	7.5818
Tank Diameter (ft):	86.5000	86.5000	86.5000	86.5000	86.5000	86.5000	86.5000	86.5000	86.5000	86.5000	86.5000	86.5000
Vapor Molecular Weight (lb/lb-mole):	62.0000	62.0000	69.0000	69.0000	69.0000	69.0000	69.0000	69.0000	69.0000	69.0000	65.0000	62.0000
Product Factor:	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Withdrawal Losses (lb):	346.8324	346.8324	346.8324	346.8324	346.8324	346.8324	346.8324	346.8324	346.8324	346.8324	346.8324	346.8324
Number of Columns:	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Effective Column Diameter (ft):	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Net Throughput (gal/mo.):	157,254,166.6000	157,254,166.6000	157,254,166.6000	157,254,166.6000	157,254,166.6000	157,254,166.6000	157,254,166.6000	157,254,166.6000	157,254,166.6000	157,254,166.6000	157,254,166.6000	157,254,166.6000
Shell Clingage Factor (lb/1000 sqft):	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015
Average Organic Liquid Density (lb/gal):	5.6000	5.6000	5.6000	5.6000	5.6000	5.6000	5.6000	5.6000	5.6000	5.6000	5.6000	5.6000
Tank Diameter (ft):	86.5000	86.5000	86.5000	86.5000	86.5000	86.5000	86.5000	86.5000	86.5000	86.5000	86.5000	86.5000
Deck Fitting Losses (lb):	269.5335	275.9033	102.5185	106.3216	108.7688	111.9711	117.3795	118.8163	116.1320	110.8325	233.3361	269.0651
Function:												
Value of Vapor Pressure	0.1796	0.1838	0.0614	0.0637	0.0651	0.0670	0.0703	0.0711	0.0695	0.0664	0.1483	0.1793
Vapor Molecular Weight (lb/lb-mole):	62.0000	62.0000	69.0000	69.0000	69.0000	69.0000	69.0000	69.0000	69.0000	69.0000	65.0000	62.0000
Product Factor:	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Tot. Roof Fitting Loss Fact. (lb-mole/yr):	290.4700	290.4700	290.4700	290.4700	290.4700	290.4700	290.4700	290.4700	290.4700	290.4700	290.4700	290.4700
Deck Seam Losses (lb):	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Deck Seam Length (ft):	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Deck Seam Loss per Unit Length Factor (lb-mole/ft-yr):	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Deck Seam Length Factor (ft/sqft):	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Tank Diameter (ft):	86.5000	86.5000	86.5000	86.5000	86.5000	86.5000	86.5000	86.5000	86.5000	86.5000	86.5000	86.5000
Vapor Molecular Weight (lb/lb-mole):	62.0000	62.0000	69.0000	69.0000	69.0000	69.0000	69.0000	69.0000	69.0000	69.0000	65.0000	62.0000
Product Factor:	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total Losses (lb):	664.5251	672.0330	467.6686	472.1511	475.0356	478.8101	485.1848	486.8784	483.7144	477.4680	621.8600	663.9730
Roof Fitting/Status					Quantity	kFa (lb-mole/yr)	kFb (lb-mole/yr mph^n)	Roof Fitting Loss Factors	m	Losses (lb)		
Automatic Gauge Float Well/Bolted Cover, Gasketed					1	2.80	0.00	0.00	0.00	18.6228		
Access Hatch (24-in. Diam.)/Bolted Cover, Gasketed					1	1.60	0.00	0.00	0.00	10.6416		
Column Well (24-in. Diam.)/Built-Up Col. Sliding Cover, Gask.					1	33.00	0.00	0.00	0.00	219.4831		
Ladder Well (36-in. Diam.)/Sliding Cover, Gasketed					16	56.00	0.00	0.00	0.00	372.4561		
Roof Leg or Hanger Well/Adjustable					1	7.90	0.00	0.00	0.00	840.6866		
Sample Pipe or Well (24-in. Diam.)/Slotted Pipe-Sliding Cover, Gask.					1	43.00	0.00	0.00	0.00	285.9831		
Vacuum Breaker (10-in. Diam.)/Weighted Mech. Actuation, Gask.					1	6.20	1.20	0.94	0.94	41.2362		
Slotted Guide-Pole/Sample Well/Gask. Sliding Cover, w. Float, Wiper					1	21.00	7.90	1.80	1.80	139.6710		
Gauge-Hatch/Sample Well (8-in. Diam.)/Weighted Mech. Actuation, Gask.					1	0.47	0.02	0.02	0.97	3.1260		

TANKS 4.0.9d
Emissions Report - Detail Format
Individual Tank Emission Totals

Emissions Report for: January, February, March, April, May, June, July, August, September, October, November, December

MV-03 PTE - Internal Floating Roof Tank
San Diego, California

	Losses(lbs)				Total Emissions
	Rim Seal Loss	Withdrawal Loss	Deck Fitting Loss	Deck Seam Loss	
Components					
Gasoline (RVP 13.5)	145.53	1,040.50	814.50	0.00	2,000.53
Gasoline (RVP 6)	159.51	2,774.66	892.74	0.00	3,826.91
Gasoline (RVP 11.5)	41.69	346.83	233.34	0.00	621.86

TANKS 4.0.9d
Emissions Report - Detail Format
Tank Identification and Physical Characteristics

Identification

User Identification: MV-04 PTE
City: San Diego
State: California
Company: SFPP, L.P.
Type of Tank: Internal Floating Roof Tank
Description:

Tank Dimensions

Diameter (ft): 74.00
Volume (gallons): 1,146,600.00
Turnovers: 1,645.78
Self Supp. Roof? (y/n): N
No. of Columns: 1.00
Eff. Col. Diam. (ft): 1.00

Paint Characteristics

Internal Shell Condition: Light Rust
Shell Color/Shade: White/White
Shell Condition: Good
Roof Color/Shade: White/White
Roof Condition: Good

Rim-Seal System

Primary Seal: Mechanical Shoe
Secondary Seal: Rim-mounted

Deck Characteristics

Deck Fitting Category: Detail
Deck Type: Welded

Deck Fitting/Status

	Quantity
Access Hatch (24-in. Diam.)/Bolted Cover, Gasketed	1
Automatic Gauge Float Well/Bolted Cover, Gasketed	1
Column Well (24-in. Diam.)/Built-Up Col.-Sliding Cover, Gask.	1
Ladder Well (36-in. Diam.)/Sliding Cover, Gasketed	1
Roof Leg or Hanger Well/Adjustable	14
Sample Pipe or Well (24-in. Diam.)/Slotted Pipe-Sliding Cover, Gask.	1
Vacuum Breaker (10-in. Diam.)/Weighted Mech. Actuation, Gask.	1
Slotted Guide-Pole/Sample Well/Gask. Sliding Cover, w. Float, Wiper	1
Gauge-Hatch/Sample Well (8-in. Diam.)/Weighted Mech. Actuation, Gask.	1

Meteorological Data used in Emissions Calculations: San Diego, California (Avg Atmospheric Pressure = 14.7 psia)

TANKS 4.0.9d

Emissions Report - Detail Format

Liquid Contents of Storage Tank

MV-04 PTE - Internal Floating Roof Tank San Diego, California

Mixture/Component	Month	Daily Liquid Surf. Temperature (deg F)		Liquid Bulk Temp (deg F)	Vapor Pressure (psia)			Vapor Mol. Weight	Liquid Mass Fract.	Vapor Mass Fract.	Mol. Weight	Basis for Vapor Pressure Calculations
		Avg.	Min.		Avg.	Min.	Max.					
Gasoline (RVP 13.5)	Jan	62.52	58.31	66.73	7.5910	N/A	N/A	62.0000			92.00	Option 4: RVP=13.5, ASTM Slope=3
Gasoline (RVP 13.5)	Feb	63.40	59.09	67.71	7.7148	N/A	N/A	62.0000			92.00	Option 4: RVP=13.5, ASTM Slope=3
Gasoline (RVP 6)	Mar	64.27	59.97	68.56	3.2045	N/A	N/A	69.0000			92.00	Option 4: RVP=6, ASTM Slope=3
Gasoline (RVP 6)	Apr	65.84	61.23	70.45	3.3091	N/A	N/A	69.0000			92.00	Option 4: RVP=6, ASTM Slope=3
Gasoline (RVP 6)	May	66.83	62.67	70.99	3.3760	N/A	N/A	69.0000			92.00	Option 4: RVP=6, ASTM Slope=3
Gasoline (RVP 6)	Jun	68.09	63.90	72.27	3.4629	N/A	N/A	69.0000			92.00	Option 4: RVP=6, ASTM Slope=3
Gasoline (RVP 6)	Jul	70.13	65.63	74.64	3.6082	N/A	N/A	69.0000			92.00	Option 4: RVP=6, ASTM Slope=3
Gasoline (RVP 6)	Aug	70.66	66.31	75.02	3.6465	N/A	N/A	69.0000			92.00	Option 4: RVP=6, ASTM Slope=3
Gasoline (RVP 6)	Sep	69.67	65.55	73.79	3.5749	N/A	N/A	69.0000			92.00	Option 4: RVP=6, ASTM Slope=3
Gasoline (RVP 6)	Oct	67.64	63.52	71.77	3.4321	N/A	N/A	69.0000			92.00	Option 4: RVP=6, ASTM Slope=3
Gasoline (RVP 11.5)	Nov	64.65	60.48	68.81	6.6146	N/A	N/A	65.0000			92.00	Option 4: RVP=11.5, ASTM Slope=3
Gasoline (RVP 13.5)	Dec	62.45	58.26	66.64	7.5818	N/A	N/A	62.0000			92.00	Option 4: RVP=13.5, ASTM Slope=3

TANKS 4.0.9d

Emissions Report - Detail Format

Detail Calculations (AP-42)

MV-04 PTE - Internal Floating Roof Tank

San Diego, California

Month:	January	February	March	April	May	June	July	August	September	October	November	December
Rim Seal Losses (lb):	41,1997	42,1734	15,6705	16,2519	16,6259	17,1154	17,9421	18,1618	17,7514	16,9414	35,6667	41,1281
Seal Factor A (lb-mole/ft-yr):	0.6000	0.6000	0.6000	0.6000	0.6000	0.6000	0.6000	0.6000	0.6000	0.6000	0.6000	0.6000
Seal Factor B (lb-mole/ft-yr (mph)	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000
Λ _n :												
Value of Vapor Pressure	0.1796	0.1838	0.0614	0.0637	0.0651	0.0670	0.0703	0.0711	0.0695	0.0664	0.1483	0.1793
Function:												
Vapor Pressure at Daily Average												
Liquid												
Surface Temperature (psia):	7.5910	7.7148	3.2045	3.3091	3.3760	3.4629	3.6082	3.6465	3.5749	3.4321	6.6146	7.5918
Tank Diameter (ft):	74.0000	74.0000	74.0000	74.0000	74.0000	74.0000	74.0000	74.0000	74.0000	74.0000	74.0000	74.0000
Vapor Molecular Weight (lb/lb-mole):	62.0000	62.0000	69.0000	69.0000	69.0000	69.0000	69.0000	69.0000	69.0000	69.0000	65.0000	62.0000
Product Factor:	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Withdrawal Losses (lb):	406.2016	406.2016	406.2016	406.2016	406.2016	406.2016	406.2016	406.2016	406.2016	406.2016	406.2016	406.2016
Number of Columns:	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Effective Column Diameter (ft):	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Net Throughput (gal/mo.):	157,254,166.6000	157,254,166.6000	157,254,166.6000	157,254,166.6000	157,254,166.6000	157,254,166.6000	157,254,166.6000	157,254,166.6000	157,254,166.6000	157,254,166.6000	157,254,166.6000	157,254,166.6000
Shell Clingage Factor (bbl/1000 sqft):	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015
Average Organic Liquid Density (lb/gal):	5.6000	5.6000	5.6000	5.6000	5.6000	5.6000	5.6000	5.6000	5.6000	5.6000	5.6000	5.6000
Tank Diameter (ft):	74.0000	74.0000	74.0000	74.0000	74.0000	74.0000	74.0000	74.0000	74.0000	74.0000	74.0000	74.0000
Deck Fitting Losses (lb):	254.8723	260.8956	96.9421	100.5383	102.8524	105.8805	110.9947	112.3534	109.8150	104.8038	220.6438	254.4294
Value of Vapor Pressure	0.1796	0.1838	0.0614	0.0637	0.0651	0.0670	0.0703	0.0711	0.0695	0.0664	0.1483	0.1793
Function:												
Vapor Molecular Weight (lb/lb-mole):	62.0000	62.0000	69.0000	69.0000	69.0000	69.0000	69.0000	69.0000	69.0000	69.0000	65.0000	62.0000
Product Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Tot. Roof Fitting Loss Fact. (lb-mole/yr):	274.6700	274.6700	274.6700	274.6700	274.6700	274.6700	274.6700	274.6700	274.6700	274.6700	274.6700	274.6700
Deck Seam Losses (lb):	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Deck Seam Length (ft):	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Deck Seam Loss per Unit Length Factor (lb-mole/ft-yr):	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Deck Seam Length Factor (ft/sqft):	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Tank Diameter (ft):	74.0000	74.0000	74.0000	74.0000	74.0000	74.0000	74.0000	74.0000	74.0000	74.0000	74.0000	74.0000
Vapor Molecular Weight (lb/lb-mole):	62.0000	62.0000	69.0000	69.0000	69.0000	69.0000	69.0000	69.0000	69.0000	69.0000	65.0000	62.0000
Product Factor:	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total Losses (lb):	702.2737	709.2707	518.8143	522.9918	525.6800	529.1976	535.1385	536.7168	533.7681	527.9468	662.5122	701.7592
Roof Fitting/Status					Quantity	KFa (lb-mole/yr)	Roof Fitting Loss Factors KFa (lb-mole/yr mph^n)			m	Losses (lb)	
Access Hatch (24-in. Diam./Bolted Cover, Gasketed					1	1.60	0.00	0.00		0.00	10.6416	
Automatic Gauge Float Well/Bolted Cover, Gasketed					1	2.80	0.00	0.00		0.00	18.6228	
Column Well (24-in. Diam./Built-Up Col.-Sliding Cover, Gask.					1	33.00	0.00	0.00		0.00	219.4831	
Ladder Well (36-in. Diam./Sliding Cover, Gasketed					1	95.00	0.00	0.00		0.00	372.4561	
Roof Leg or Hanger Well/Adjustable					14	7.90	0.00	0.00		0.00	735.6008	
Sample Pipe or Well (24-in. Diam./Slotted Pipe-Sliding Cover, Gask.					1	43.00	0.00	0.00		0.00	285.9931	
Vacuum Breaker (10-in. Diam./Weighted Mech. Actuation, Gask.					1	6.20	1.20	0.94		0.94	41.2362	
Slotted Guide-Pole/Sample Well/Gask. Sliding Cover, w. Float, Wiper					1	21.00	7.90	1.80		1.80	139.6710	
Gauge-Hatch/Sample Well (8-in. Diam./Weighted Mech. Actuation, Gask.					1	0.47	0.02	0.02		0.97	3.1260	

TANKS 4.0.9d
Emissions Report - Detail Format
Individual Tank Emission Totals

Emissions Report for: January, February, March, April, May, June, July, August, September, October, November, December

MV-04 PTE - Internal Floating Roof Tank
San Diego, California

Losses(lbs)					
Components	Rim Seal Loss	Withdrawal Loss	Deck Fitting Loss	Deck Seam Loss	Total Emissions
Gasoline (RVP 13.5)	124.50	1,218.60	770.20	0.00	2,113.30
Gasoline (RVP 6)	136.46	3,249.61	844.18	0.00	4,230.25
Gasoline (RVP 11.5)	35.67	406.20	220.64	0.00	662.51

TANKS 4.0.9d

Emissions Report - Detail Format

Tank Identification and Physical Characteristics

Identification

User Identification:

MV-05 PTE

City:

San Diego

State:

California

Company:

SFP, L.P.

Type of Tank:

External Floating Roof Tank

Description:

Tank Dimensions

Diameter (ft):

70.00

Volume (gallons):

978,600.00

Turnovers:

1,928.32

Paint Characteristics

Internal Shell Condition:

Light Rust

Shell Color/Shade:

White/White

Shell Condition

Good

Roof Characteristics

Type:

Pontoon

Fitting Category

Detail

Tank Construction and Rim-Seal System

Construction:

Welded

Primary Seal:

Mechanical Shoe

Secondary Seal

Rim-mounted

Deck Fitting/Status

Access Hatch (24-in. Diam.)/Bolted Cover, Gasketed

1

Automatic Gauge Float Well/Bolted Cover, Gasketed

1

Vacuum Breaker (10-in. Diam.)/Weighted Mech. Actuation, Gask.

1

Slotted Guide-Pole/Sample Well/Gask, Sliding Cover, w. Float, Wiper

5

Roof Leg (3-in. Diameter)/Adjustable, Pontoon Area, Gasketed

6

Roof Leg (3-in. Diameter)/Adjustable, Center Area, Gasketed

1

Roof Drain (3-in. Diameter)/90% Closed

1

Sample Pipe or Well (24-in. Diam.)/Slotted Pipe-Sliding Cover, Gask.

1

Meteorological Data used in Emissions Calculations: San Diego, California (Avg Atmospheric Pressure = 14.7 psia)

TANKS 4.0.9d

Emissions Report - Detail Format

Liquid Contents of Storage Tank

MV-05 PTE - External Floating Roof Tank
San Diego, California

Mixture/Component	Month	Daily Liquid Surf. Temperature (deg F)			Liquid Bulk Temp (deg F)	Vapor Pressure (psia)			Vapor Mol. Weight	Liquid Mass Fract.	Vapor Mass Fract.	Mol. Weight	Basis for Vapor Pressure Calculations
		Avg.	Min.	Max.		Avg.	Min.	Max.					
Gasoline (RVP 13.5)	Jan	62.52	58.31	66.73	64.22	7.5910	N/A	N/A	62.0000			92.00	Option 4: RVP=13.5, ASTM Slope=3
Gasoline (RVP 13.5)	Feb	63.40	59.09	67.71	64.22	7.7148	N/A	N/A	62.0000			92.00	Option 4: RVP=13.5, ASTM Slope=3
Gasoline (RVP 6)	Mar	64.27	59.97	68.56	64.22	3.2045	N/A	N/A	69.0000			92.00	Option 4: RVP=6, ASTM Slope=3
Gasoline (RVP 6)	Apr	65.84	61.23	70.45	64.22	3.3091	N/A	N/A	69.0000			92.00	Option 4: RVP=6, ASTM Slope=3
Gasoline (RVP 6)	May	66.83	62.67	70.99	64.22	3.3760	N/A	N/A	69.0000			92.00	Option 4: RVP=6, ASTM Slope=3
Gasoline (RVP 6)	Jun	68.09	63.90	72.27	64.22	3.4629	N/A	N/A	69.0000			92.00	Option 4: RVP=6, ASTM Slope=3
Gasoline (RVP 6)	Jul	70.13	65.63	74.64	64.22	3.6082	N/A	N/A	69.0000			92.00	Option 4: RVP=6, ASTM Slope=3
Gasoline (RVP 6)	Aug	70.66	66.31	75.02	64.22	3.6465	N/A	N/A	69.0000			92.00	Option 4: RVP=6, ASTM Slope=3
Gasoline (RVP 6)	Sep	69.67	65.55	73.79	64.22	3.5749	N/A	N/A	69.0000			92.00	Option 4: RVP=6, ASTM Slope=3
Gasoline (RVP 6)	Oct	67.64	63.52	71.77	64.22	3.4321	N/A	N/A	69.0000			92.00	Option 4: RVP=6, ASTM Slope=3
Gasoline (RVP 11.5)	Nov	64.65	60.48	68.81	64.22	6.6146	N/A	N/A	65.0000			92.00	Option 4: RVP=11.5, ASTM Slope=3
Gasoline (RVP 13.5)	Dec	62.45	58.26	66.64	64.22	7.5818	N/A	N/A	62.0000			92.00	Option 4: RVP=13.5, ASTM Slope=3

TANKS 4.0.9d

Emissions Report - Detail Format

Detail Calculations (AP-42)

MV-05 PTE - External Floating Roof Tank

San Diego, California

Month:	January	February	March	April	May	June	July	August	September	October	November	December
Rim Seal Losses (lb):	194.8636	215.4263	88.9409	95.3150	98.5574	100.3797	101.8337	101.9349	96.2736	85.4700	166.4448	184.1503
Seal Factor A (lb-mole/ft-yr):	0.6000	0.6000	0.6000	0.6000	0.6000	0.6000	0.4000	0.6000	0.6000	0.4000	0.6000	0.6000
Seal Factor B (lb-mole/ft-yr) (mph):	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000
Average Wind Speed (mph):	6.0000	6.0000	7.5000	7.8000	7.9000	7.8000	7.5000	7.4000	7.1000	6.5000	5.9000	5.6000
Seal-related Wind Speed Exponent:	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Value of Vapor Pressure Function:	0.1796	0.1838	0.0614	0.0637	0.0651	0.0670	0.0703	0.0711	0.0695	0.0564	0.1483	0.1793
Vapor Pressure at Daily Average Liquid:												
Surface Temperature (psia):	7.5910	7.7148	3.2045	3.3091	3.3760	3.4629	3.6082	3.6465	3.5749	3.4321	6.6148	7.5818
Tank Diameter (ft):	70.0000	70.0000	70.0000	70.0000	70.0000	70.0000	70.0000	70.0000	70.0000	70.0000	70.0000	70.0000
Vapor Molecular Weight (lb/lb-mole):	62.0000	62.0000	69.0000	69.0000	69.0000	69.0000	69.0000	69.0000	69.0000	69.0000	65.0000	62.0000
Product Factor:	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Withdrawal Losses (lb):	423.6877	423.6877	423.6877	423.6877	423.6877	423.6877	423.6877	423.6877	423.6877	423.6877	423.6877	423.6877
Net Throughput (gal/mo.):	157,254.166.6000	157,254.166.6000	157,254.166.6000	157,254.166.6000	157,254.166.6000	157,254.166.6000	157,254.166.6000	157,254.166.6000	157,254.166.6000	157,254.166.6000	157,254.166.6000	157,254.166.6000
Shell Clingage Factor (bbl/1000 sqft):	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015
Average Organic Liquid Density (lb/gal):	5.6000	5.6000	5.6000	5.6000	5.6000	5.6000	5.6000	5.6000	5.6000	5.6000	5.6000	5.6000
Tank Diameter (ft):	70.0000	70.0000	70.0000	70.0000	70.0000	70.0000	70.0000	70.0000	70.0000	70.0000	70.0000	70.0000
Roof Fitting Losses (lb):	183.5258	207.0092	88.5629	96.1377	99.8430	101.2462	101.4008	101.0768	94.2996	81.8360	156.2968	171.5300
Value of Vapor Pressure Function:	0.1796	0.1838	0.0614	0.0637	0.0651	0.0670	0.0703	0.0711	0.0695	0.0564	0.1483	0.1793
Vapor Molecular Weight (lb/lb-mole):	62.0000	62.0000	69.0000	69.0000	69.0000	69.0000	69.0000	69.0000	69.0000	69.0000	65.0000	62.0000
Product Factor:	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Tot. Roof Fitting Loss Fact. (lb-mole/yr):	197.7815	217.9385	250.9288	262.6478	266.6334	262.6478	250.9288	247.1021	235.8627	214.4760	194.5671	185.1756
Average Wind Speed (mph):	6.0000	6.0000	7.5000	7.8000	7.9000	7.8000	7.5000	7.4000	7.1000	6.5000	5.9000	5.6000
Total Losses (lb):	802.0771	846.1231	601.1914	615.1403	622.0880	625.3135	626.9222	626.6983	614.2608	590.9937	746.4293	779.3679
Roof Fitting/Status:	Access Hatch (24-in. Diam./Bolted Cover, Gasketed)											
Automatic Gauge Float Well/Bolted Cover, Gasketed												
Vacuum Breaker (10-in. Diam./Weighted Mech. Actuation, Gask.												
Slotted Guide-Pole/Sample Well/Gask. Sliding Cover, w. Float, Wiper												
Roof Leg (3-in. Diameter)/Adjustable, Pontoon Area, Gasketed												
Roof Leg (3-in. Diameter)/Adjustable, Center Area, Gasketed												
Roof Drain (3-in. Diameter)/90% Closed												
Sample Pipe or Well (24-in. Diam.)/Slotted Pipe-Sliding Cover, Gask.												
Roof Fitting Loss Factors												
Quantity	1	1	1	1	1	1	1	1	1	1	1	1
KFa (lb-mole/yr)	1.60	2.80	6.20	6.20	21.00	1.30	0.53	1.80	43.00	0.00	0.00	0.00
KFb (lb-mole/yr mph^n)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Losses (lb)	10.6416	18.6228	75.2245	991.5444	50.4671	26.5097	17.0527	285.9931	0.00	0.00	0.00	0.00

TANKS 4.0.9d
Emissions Report - Detail Format
Individual Tank Emission Totals

Emissions Report for: January, February, March, April, May, June, July, August, September, October, November, December

MV-05 PTE - External Floating Roof Tank
San Diego, California

	Losses (lbs)				Total Emissions
	Rim Seal Loss	Withdrawal Loss	Deck Fitting Loss	Deck Seam Loss	
Components					2,427.57
Gasoline (RVP 13.5)	594.44	1,271.06	562.06	0.00	
Gasoline (RVP 6)	768.71	3,389.50	764.40	0.00	4,922.61
Gasoline (RVP 11.5)	166.44	423.69	156.30	0.00	746.43

TANKS 4.0.9d
Emissions Report - Detail Format
Tank Identification and Physical Characteristics

Identification

User Identification: MV-06 PTE
City: San Diego
State: California
Company: SFPP, L.P.
Type of Tank: External Floating Roof Tank
Description:

Tank Dimensions

Diameter (ft): 70.00
Volume (gallons): 1,151,640.00
Turnovers: 1,638.58

Paint Characteristics

Internal Shell Condition: Light Rust
Shell Color/Shade: White/White
Shell Condition: Good

Roof Characteristics

Type: Pontoon
Fitting Category: Detail

Tank Construction and Rim-Seal System

Construction: Welded
Primary Seal: Mechanical Shoe
Secondary Seal: Rim-mounted

Deck Fitting/Status

Access Hatch (24-in. Diam.)/Bolted Cover, Gasketed
Automatic Gauge Float Well/Bolted Cover, Gasketed
Vacuum Breaker (10-in. Diam.)/Weighted Mech. Actuation, Gask.
Slotted Guide-Pole/Sample Well/Gask. Sliding Cover, w. Float, Wiper
Roof Leg (3-in. Diameter)/Adjustable, Pontoon Area, Gasketed
Roof Leg (3-in. Diameter)/Adjustable, Center Area, Gasketed
Roof Drain (3-in. Diameter)/90% Closed

Quantity
1
1
1
1
5
6
1

Meteorological Data used in Emissions Calculations: San Diego, California (Avg Atmospheric Pressure = 14.7 psia)

TANKS 4.0.9d

Emissions Report - Detail Format

Liquid Contents of Storage Tank

MV-06 PTE - External Floating Roof Tank
San Diego, California

Mixture/Component	Month		Daily Liquid Surf. Temperature (deg F)		Liquid Bulk Temp (deg F)	Vapor Pressure (psia)			Vapor Mol. Weight	Liquid Mass Fract.	Vapor Mass Fract.	Mol. Weight	Basis for Vapor Pressure Calculations
	Avg.	Min.	Max.			Avg.	Min.	Max.					
Gasoline (RVP 13.5)	62.52	58.31	66.73	64.22	64.22	7.5910	N/A	N/A	62.0000			92.00	Option 4: RVP=13.5, ASTM Slope=3
Gasoline (RVP 13.5)	63.40	59.09	67.71	64.22	64.22	7.7148	N/A	N/A	62.0000			92.00	Option 4: RVP=13.5, ASTM Slope=3
Gasoline (RVP 6)	64.27	59.97	68.56	64.22	64.22	3.2045	N/A	N/A	69.0000			92.00	Option 4: RVP=6, ASTM Slope=3
Gasoline (RVP 6)	65.84	61.23	70.45	64.22	64.22	3.3091	N/A	N/A	69.0000			92.00	Option 4: RVP=6, ASTM Slope=3
Gasoline (RVP 6)	66.83	62.67	70.99	64.22	64.22	3.3760	N/A	N/A	69.0000			92.00	Option 4: RVP=6, ASTM Slope=3
Gasoline (RVP 6)	68.09	63.90	72.27	64.22	64.22	3.4629	N/A	N/A	69.0000			92.00	Option 4: RVP=6, ASTM Slope=3
Gasoline (RVP 6)	70.13	65.63	74.64	64.22	64.22	3.6092	N/A	N/A	69.0000			92.00	Option 4: RVP=6, ASTM Slope=3
Gasoline (RVP 6)	70.66	66.31	75.02	64.22	64.22	3.6465	N/A	N/A	69.0000			92.00	Option 4: RVP=6, ASTM Slope=3
Gasoline (RVP 6)	69.67	65.55	73.79	64.22	64.22	3.5749	N/A	N/A	69.0000			92.00	Option 4: RVP=6, ASTM Slope=3
Gasoline (RVP 6)	67.64	63.52	71.77	64.22	64.22	3.4321	N/A	N/A	69.0000			92.00	Option 4: RVP=6, ASTM Slope=3
Gasoline (RVP 11.5)	64.65	60.48	68.81	64.22	64.22	6.6146	N/A	N/A	65.0000			92.00	Option 4: RVP=11.5, ASTM Slope=3
Gasoline (RVP 13.5)	62.45	58.26	66.64	64.22	64.22	7.5818	N/A	N/A	62.0000			92.00	Option 4: RVP=13.5, ASTM Slope=3

TANKS 4.0.9d
Emissions Report - Detail Format
Detail Calculations (AP-42)

MV-06 PTE - External Floating Roof Tank
San Diego, California

Month:	January	February	March	April	May	June	July	August	September	October	November	December
Rim Seal Losses (lb):	194.8636	215.4263	88.9409	95.3150	98.5574	100.3797	101.8337	101.9349	96.2736	85.4700	166.4448	184.1503
Seal Factor A (lb-mole/ft-yr):	0.6000	0.6000	0.6000	0.6000	0.6000	0.6000	0.6000	0.6000	0.6000	0.6000	0.6000	0.6000
Seal Factor B (lb-mole/ft-yr (mph)	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000
η _n :	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000
Average Wind Speed (mph):	6.0000	6.6000	7.5000	7.8000	7.9000	7.8000	7.5000	7.4000	7.1000	6.5000	5.9000	5.6000
Seal-related Wind Speed Exponent:	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Value of Vapor Pressure Function:	0.1796	0.1838	0.0614	0.0637	0.0651	0.0670	0.0703	0.0711	0.0695	0.0664	0.1483	0.1793
Vapor Pressure at Daily Average Liquid												
Surface Temperature (psia):	7.5910	7.7148	3.2045	3.3091	3.3760	3.4629	3.6082	3.6465	3.5749	3.4321	6.6146	7.5818
Tank Diameter (ft):	70.0000	70.0000	70.0000	70.0000	70.0000	70.0000	70.0000	70.0000	70.0000	70.0000	70.0000	70.0000
Vapor Molecular Weight (lb/lb-mole):	62.0000	62.0000	69.0000	69.0000	69.0000	69.0000	69.0000	69.0000	69.0000	69.0000	85.0000	62.0000
Product Factor:	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Withdrawal Losses (lb):	423.6877	423.6877	423.6877	423.6877	423.6877	423.6877	423.6877	423.6877	423.6877	423.6877	423.6877	423.6877
Net Throughput (gal/mo.):	157,254,166.6000	157,254,166.6000	157,254,166.6000	157,254,166.6000	157,254,166.6000	157,254,166.6000	157,254,166.6000	157,254,166.6000	157,254,166.6000	157,254,166.6000	157,254,166.6000	157,254,166.6000
Shell Clingage Factor (bbl/1000 sqft):	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015
Average Organic Liquid Density (lb/gal):	5.6000	5.6000	5.6000	5.6000	5.6000	5.6000	5.6000	5.6000	5.6000	5.6000	5.6000	5.6000
Tank Diameter (ft):	70.0000	70.0000	70.0000	70.0000	70.0000	70.0000	70.0000	70.0000	70.0000	70.0000	70.0000	70.0000
Roof Fitting Losses (lb):	143.6252	166.1656	73.3864	80.3983	83.7413	84.6704	84.0245	83.4877	77.1079	65.4288	121.7547	131.6986
Value of Vapor Pressure Function:	0.1796	0.1838	0.0614	0.0637	0.0651	0.0670	0.0703	0.0711	0.0695	0.0664	0.1483	0.1793
Vapor Molecular Weight (lb/lb-mole):	62.0000	62.0000	69.0000	69.0000	69.0000	69.0000	69.0000	69.0000	69.0000	69.0000	65.0000	62.0000
Product Factor:	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Tot. Roof Fitting Loss Fact. (lb-mole/yr):	154.7815	174.9385	207.9288	219.6478	223.6334	219.6478	207.9288	204.1021	192.8627	171.4760	151.5671	142.1756
Average Wind Speed (mph):	6.0000	6.6000	7.5000	7.8000	7.9000	7.8000	7.5000	7.4000	7.1000	6.5000	5.9000	5.6000
Total Losses (lb):	762.1764	805.2795	586.0150	599.4009	605.9864	608.7377	609.5458	609.1102	597.0691	574.5865	711.8871	739.5366
Roof Fitting/Status	Roof Fitting Loss Factors											
Access Hatch (24-in. Diam./Bolted Cover, Gasketed	Quantity				KFa(lb-mole/yr)				KFb(lb-mole/(yr mph ⁿ))			
Automatic Gauge Float Well/Bolted Cover, Gasketed	1				1.60				0.00			
Vacuum Breaker (10-in. Diam./Weighted Mech. Actuation, Gasket	1				2.80				0.00			
Slotted Guide-Pole/Sample Well/Gask. Sliding Cover, w. Float, Wiper	1				6.20				1.20			
Roof Leg (3-in. Diameter)/Adjustable, Pontoon Area, Gasketed	5				21.00				7.90			
Roof Leg (3-in. Diameter)/Adjustable, Center Area, Gasketed	6				1.30				0.08			
Roof Drain (3-in. Diameter)/90% Closed	1				0.53				0.11			
					1.80				0.14			
									1.10			
									0.00			
									0.00			
									0.94			
									1.80			
									0.65			
									0.13			
									0.00			
									0.00			
									0.00			
									0.00			
									0.00			
									0.00			
									0.00			
									0.00			
									0.00			
									0.00			
									0.00			
									0.00			
									0.00			
									0.00			
									0.00			
									0.00			
									0.00			
									0.00			
									0.00			
									0.00			
									0.00			
									0.00			
									0.00			
									0.00			
									0.00			
									0.00			
									0.00			
									0.00			
									0.00			
									0.00			
									0.00			
									0.00			
									0.00			
									0.00			
									0.00			
									0.00			
									0.00			
									0.00			
									0.00			
									0.00			
									0.00			
									0.00			
									0.00			
									0.00			
									0.00			
									0.00			
									0.00			
									0.00			
									0.00			
									0.00			
									0.00			
									0.00			
									0.00			
									0.00			
									0.00			
									0.00			
									0.00			
									0.00			
									0.00			
									0.00			
									0.00			
									0.00			
									0.00			
									0.00			
									0.00			
									0.00			
									0.00			
									0.00			
									0.00			
									0.00			
									0.00			
									0.00			
									0.00			
									0.00			
									0.00			
									0.00			
									0.00			
									0.00			
									0.00			
									0.00			
									0.00			
									0.00			
									0.00			
									0.00			
									0.00			
									0.00			
									0.00			
									0.00			
									0.00			
									0.00			
									0.0			

TANKS 4.0.9d
Emissions Report - Detail Format
Individual Tank Emission Totals

Emissions Report for: January, February, March, April, May, June, July, August, September, October, November, December

MV-06 PTE - External Floating Roof Tank
San Diego, California

	Losses (lbs)				Total Emissions
	Rim Seal Loss	Withdrawal Loss	Deck Fitting Loss	Deck Seam Loss	
Components					2,306.99
Gasoline (RVP 13.5)	594.44	1,271.06	441.49	0.00	4,790.45
Gasoline (RVP 6)	768.71	3,389.50	632.25	0.00	711.89
Gasoline (RVP 11.5)	166.44	423.69	121.75	0.00	

TANKS 4.0.9d

Emissions Report - Detail Format

Tank Identification and Physical Characteristics

Identification		
User Identification:	MV-07 PTE	
City:	San Diego	
State:	California	
Company:	SFPD, L.P.	
Type of Tank:	External Floating Roof Tank	
Description:		
Tank Dimensions		
Diameter (ft):	60.00	
Volume (gallons):	845,880.00	
Turnovers:	2,230.87	
Paint Characteristics		
Internal Shell Condition:	Light Rust	
Shell Color/Shade:	White/White	
Shell Condition	Good	
Roof Characteristics		
Type:	Pontoon	
Fitting Category	Detail	
Tank Construction and Rim-Seal System		
Construction:	Welded	
Primary Seal:	Mechanical Shoe	
Secondary Seal	Rim-mounted	
Deck Fitting/Status		Quantity
Access Hatch (24-in. Diam.)/Bolted Cover, Gasketed		1
Automatic Gauge Float Well/Bolted Cover, Gasketed		1
Vacuum Breaker (10-in. Diam.)/Weighted Mech. Actuation, Gask.		1
Slotted Guide-Pole/Sample Well/Gask. Sliding Cover, w. Float, Wiper		1
Roof Leg (3-in. Diameter)/Adjustable, Pontoon Area, Gasketed		5
Roof Leg (3-in. Diameter)/Adjustable, Center Area, Gasketed		4
Roof Drain (3-in. Diameter)/90% Closed		1
Sample Pipe or Well (24-in. Diam.)/Slotted Pipe-Sliding Cover, Gask.		1

Meteorological Data used in Emissions Calculations: San Diego, California (Avg Atmospheric Pressure = 14.7 psia)

TANKS 4.0.9d

Emissions Report - Detail Format

Liquid Contents of Storage Tank

MV-07 PTE - External Floating Roof Tank
San Diego, California

Mixture/Component	Month	Daily Liquid Surf. Temperature (deg F)			Liquid Bulk Temp (deg F)	Vapor Pressure (psia)			Vapor Mol. Weight	Liquid Mass Fract.	Vapor Mass Fract.	Mol. Weight	Basis for Vapor Pressure Calculations
		Avg.	Min.	Max.		Avg.	Min.	Max.					
Gasoline (RVP 13.5)	Jan	62.52	58.31	66.73	64.22	7.5910	N/A	N/A	62.0000			92.00	Option 4: RVP=13.5, ASTM Slope=3
Gasoline (RVP 13.5)	Feb	63.40	59.09	67.71	64.22	7.7148	N/A	N/A	62.0000			92.00	Option 4: RVP=13.5, ASTM Slope=3
Gasoline (RVP 6)	Mar	64.27	59.97	68.56	64.22	3.2045	N/A	N/A	69.0000			92.00	Option 4: RVP=6, ASTM Slope=3
Gasoline (RVP 6)	Apr	65.84	61.23	70.45	64.22	3.3091	N/A	N/A	69.0000			92.00	Option 4: RVP=6, ASTM Slope=3
Gasoline (RVP 6)	May	66.83	62.67	70.99	64.22	3.3760	N/A	N/A	69.0000			92.00	Option 4: RVP=6, ASTM Slope=3
Gasoline (RVP 6)	Jun	68.09	63.90	72.27	64.22	3.4629	N/A	N/A	69.0000			92.00	Option 4: RVP=6, ASTM Slope=3
Gasoline (RVP 6)	Jul	70.13	65.63	74.64	64.22	3.6082	N/A	N/A	69.0000			92.00	Option 4: RVP=6, ASTM Slope=3
Gasoline (RVP 6)	Aug	70.66	66.31	75.02	64.22	3.6465	N/A	N/A	69.0000			92.00	Option 4: RVP=6, ASTM Slope=3
Gasoline (RVP 6)	Sep	69.67	65.55	73.79	64.22	3.5749	N/A	N/A	69.0000			92.00	Option 4: RVP=6, ASTM Slope=3
Gasoline (RVP 6)	Oct	67.64	63.52	71.77	64.22	3.4321	N/A	N/A	69.0000			92.00	Option 4: RVP=6, ASTM Slope=3
Gasoline (RVP 11.5)	Nov	64.65	60.48	68.81	64.22	6.6146	N/A	N/A	65.0000			92.00	Option 4: RVP=11.5, ASTM Slope=3
Gasoline (RVP 13.5)	Dec	62.45	58.26	66.64	64.22	7.5818	N/A	N/A	62.0000			92.00	Option 4: RVP=13.5, ASTM Slope=3

TANKS 4.0.9d

Emissions Report - Detail Format

Detail Calculations (AP-42)

MV-07 PTE - External Floating Roof Tank

San Diego, California

Month:	January	February	March	April	May	June	July	August	September	October	November	December
Rim Seal Losses (lb):	167,0260	184,6511	76,2351	81,6985	84,4777	86,0397	87,2860	87,3728	82,5202	73,2800	142,6670	157,8431
Seal Factor A (lb-mole/ft-yr):	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000
Seal Factor B (lb-mole/ft-yr) (mph):	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000
Average Wind Speed (mph):	6.0000	6.0000	7.5000	7.8000	7.9000	7.8000	7.5000	7.4000	7.1000	6.5000	5.9000	5.6000
Seal-related Wind Speed:	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Exponent:	0.1796	0.1838	0.0614	0.0637	0.0651	0.0670	0.0703	0.0711	0.0695	0.0654	0.1483	0.1793
Function:												
Vapor Pressure at Daily Average:												
Liquid:												
Surface Temperature (psia):	7.5910	7.7148	3.2045	3.3091	3.3760	3.4629	3.6082	3.6465	3.5749	3.4321	6.6146	7.5818
Tank Diameter (ft):	60.0000	60.0000	60.0000	60.0000	60.0000	60.0000	60.0000	60.0000	60.0000	60.0000	60.0000	60.0000
Vapor Molecular Weight (lb/lb-mole):	62.0000	62.0000	69.0000	69.0000	69.0000	69.0000	69.0000	69.0000	69.0000	69.0000	65.0000	62.0000
Product Factor:	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Withdrawal Losses (lb):	494.3023	494.3023	494.3023	494.3023	494.3023	494.3023	494.3023	494.3023	494.3023	494.3023	494.3023	494.3023
Net Throughput (gal/mo.):	157,254,166.6000	157,254,166.6000	157,254,166.6000	157,254,166.6000	157,254,166.6000	157,254,166.6000	157,254,166.6000	157,254,166.6000	157,254,166.6000	157,254,166.6000	157,254,166.6000	157,254,166.6000
Shell Clingage Factor (bbl/1000 sqft):	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015
Average Organic Liquid Density (lb/gal):	5.6000	5.6000	5.6000	5.6000	5.6000	5.6000	5.6000	5.6000	5.6000	5.6000	5.6000	5.6000
Tank Diameter (ft):	60.0000	60.0000	60.0000	60.0000	60.0000	60.0000	60.0000	60.0000	60.0000	60.0000	60.0000	60.0000
Roof Fitting Losses (lb):	182,2962	205,7474	88,0924	95,6493	99,3432	100,7318	100,8622	100,5317	93,7675	81,3293	155,2328	170,3047
Value of Vapor Pressure:	0.1796	0.1838	0.0614	0.0637	0.0651	0.0670	0.0703	0.0711	0.0695	0.0664	0.1483	0.1793
Function:												
Vapor Molecular Weight (lb/lb-mole):	62.0000	62.0000	69.0000	69.0000	69.0000	69.0000	69.0000	69.0000	69.0000	69.0000	65.0000	62.0000
Product Factor:	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Tot. Roof Fitting Loss Fact. (lb-mole/yr):	196,4564	216,6101	249,5959	261,3135	265,2986	261,3135	249,5959	245,7697	234,5317	213,1481	193,2426	183,8529
Average Wind Speed (mph):	6.0000	6.0000	7.5000	7.8000	7.9000	7.8000	7.5000	7.4000	7.1000	6.5000	5.9000	5.6000
Total Losses (lb):	843,6244	884,7007	658,6798	671,6501	678,1232	681,0738	682,4505	682,2068	670,5899	648,8916	792,2020	822,4501
Roof Fitting/Status:												
Access Hatch (24-in. Diam.)/Boiled Cover, Gasketed												
Automatic Gauge Float Well/Boiled Cover, Gasketed												
Vacuum Breaker (10-in. Diam.)/Weighted Mech. Actuation, Gask.												
Slotted Guide-Pole/Sample Well/Gask. Sliding Cover, w. Float, Wiper												
Roof Leg (3-in. Diameter)/Adjustable, Pontoon Area, Gasketed												
Roof Leg (3-in. Diameter)/Adjustable, Center Area, Gasketed												
Roof Drain (3-in. Diameter)/90% Closed												
Sample Pipe or Well (24-in. Diam.)/Slotted Pipe-Sliding Cover, Gask.												
Roof Fitting Loss Factors												
KFa (lb-mole/yr)	1.60	2.80	6.20	21.00	1.30	0.53	1.80	0.14	0.00	0.00	0.00	0.00
KFb (lb-mole/(yr mph^n))	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Losses (lb)	10,6416	18,6228	75,2245	991,5444	50,4671	17,6731	17,0527	285,9931				

TANKS 4.0.9d
Emissions Report - Detail Format
Individual Tank Emission Totals

Emissions Report for: January, February, March, April, May, June, July, August, September, October, November, December

MV-07 PTE - External Floating Roof Tank
San Diego, California

Components	Losses(lbs)				Total Emissions
	Rim Seal Loss	Withdrawal Loss	Deck Fitting Loss	Deck Seam Loss	
Gasoline (RVP 13.5)	509.52	1,482.91	558.35	0.00	2,550.78
Gasoline (RVP 6)	658.89	3,954.42	760.31	0.00	5,373.62
Gasoline (RVP 11.5)	142.67	494.30	155.23	0.00	792.20

TANKS 4.0.9d

Emissions Report - Detail Format

Tank Identification and Physical Characteristics

Identification		
User Identification:	MV-08 PTE	
City:	San Diego	
State:	California	
Company:	SFPP, L.P.	
Type of Tank:	External Floating Roof Tank	
Description:		
Tank Dimensions		
Diameter (ft):	60.00	
Volume (gallons):	845,880.00	
Turnovers:	2,230.87	
Paint Characteristics		
Internal Shell Condition:	Light Rust	
Shell Color/Shade:	White/White	
Shell Condition	Good	
Roof Characteristics		
Type:	Pontoon	
Fitting Category	Detail	
Tank Construction and Rim-Seal System		
Construction:	Welded	
Primary Seal:	Mechanical Shoe	
Secondary Seal	Rim-mounted	
Deck Fitting/Status		Quantity
Access Hatch (24-in. Diam.)/Bolted Cover, Gasketed		1
Automatic Gauge Float Well/Bolted Cover, Gasketed		1
Vacuum Breaker (10-in. Diam.)/Weighted Mech. Actuation, Gask.		1
Slotted Guide-Pole/Sample Well/Gask. Sliding Cover, w. Float, Wiper		1
Roof Leg (3-in. Diameter)/Adjustable, Pontoon Area, Gasketed		5
Roof Leg (3-in. Diameter)/Adjustable, Center Area, Gasketed		4
Roof Drain (3-in. Diameter)/90% Closed		1

Meteorological Data used in Emissions Calculations: San Diego, California (Avg Atmospheric Pressure = 14.7 psia)

TANKS 4.0.9d Emissions Report - Detail Format Liquid Contents of Storage Tank

MV-08 PTE - External Floating Roof Tank
San Diego, California

Mixture/Component	Month	Daily Liquid Surf. Temperature (deg F)			Liquid Bulk Temp (deg F)	Vapor Pressure (psia)			Vapor Mol. Weight	Liquid Mass Fract.	Vapor Mass Fract.	Mol. Weight	Basis for Vapor Pressure Calculations
		Avg.	Min.	Max.		Avg.	Min.	Max.					
Gasoline (RVP 13.5)	Jan	62.52	58.31	66.73	64.22	7.5910	N/A	N/A	62.0000			92.00	Option 4: RVP=13.5, ASTM Slope=3
Gasoline (RVP 13.5)	Feb	63.40	59.09	67.71	64.22	7.7148	N/A	N/A	62.0000			92.00	Option 4: RVP=13.5, ASTM Slope=3
Gasoline (RVP 6)	Mar	64.27	59.97	68.56	64.22	3.2045	N/A	N/A	69.0000			92.00	Option 4: RVP=6, ASTM Slope=3
Gasoline (RVP 6)	Apr	65.84	61.23	70.45	64.22	3.3091	N/A	N/A	69.0000			92.00	Option 4: RVP=6, ASTM Slope=3
Gasoline (RVP 6)	May	66.83	62.67	70.99	64.22	3.3760	N/A	N/A	69.0000			92.00	Option 4: RVP=6, ASTM Slope=3
Gasoline (RVP 6)	Jun	68.09	63.90	72.27	64.22	3.4629	N/A	N/A	69.0000			92.00	Option 4: RVP=6, ASTM Slope=3
Gasoline (RVP 6)	Jul	70.13	65.63	74.64	64.22	3.6082	N/A	N/A	69.0000			92.00	Option 4: RVP=6, ASTM Slope=3
Gasoline (RVP 6)	Aug	70.66	66.31	75.02	64.22	3.6465	N/A	N/A	69.0000			92.00	Option 4: RVP=6, ASTM Slope=3
Gasoline (RVP 6)	Sep	69.67	65.55	73.79	64.22	3.5749	N/A	N/A	69.0000			92.00	Option 4: RVP=6, ASTM Slope=3
Gasoline (RVP 6)	Oct	67.64	63.52	71.77	64.22	3.4321	N/A	N/A	69.0000			92.00	Option 4: RVP=6, ASTM Slope=3
Gasoline (RVP 11.5)	Nov	64.65	60.48	68.81	64.22	6.6146	N/A	N/A	65.0000			92.00	Option 4: RVP=11.5, ASTM Slope=3
Gasoline (RVP 13.5)	Dec	62.45	58.26	66.64	64.22	7.5818	N/A	N/A	62.0000			92.00	Option 4: RVP=13.5, ASTM Slope=3

TANKS 4.0.9d

Emissions Report - Detail Format

Detail Calculations (AP-42)

MV-08 PTE - External Floating Roof Tank

San Diego, California

Month:	January	February	March	April	May	June	July	August	September	October	November	December
Rim Seal Losses (lb):	167.0260	184.6511	76.2351	81.6985	84.4777	86.0397	87.2860	87.3728	82.5202	73.2600	142.6670	157.8431
Seal Factor A (lb-mole/ft ² -yr):	0.6000	0.6000	0.6000	0.6000	0.6000	0.6000	0.6000	0.6000	0.6000	0.6000	0.6000	0.6000
Seal Factor B (lb-mole/ft ² -yr (mph)	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000
Seal Factor C (lb-mole/ft ² -yr (mph)	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000
Average Wind Speed (mph):	6.0000	6.0000	7.5000	7.8000	7.9000	7.8000	7.5000	7.4000	7.1000	6.5000	5.9000	5.6000
Seal-related Wind Speed	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Exponent:												
Value of Vapor Pressure	0.1796	0.1838	0.0614	0.0637	0.0651	0.0670	0.0703	0.0711	0.0695	0.0664	0.1483	0.1793
Function:												
Vapor Pressure at Daily Average												
Liquid												
Surface Temperature (psia):	7.5910	7.7148	3.2045	3.3091	3.3760	3.4629	3.6082	3.6465	3.5749	3.4321	6.6146	7.5818
Tank Diameter (ft):	60.0000	60.0000	60.0000	60.0000	60.0000	60.0000	60.0000	60.0000	60.0000	60.0000	60.0000	60.0000
Vapor Molecular Weight (lb/lb-mole):	62.0000	62.0000	69.0000	69.0000	69.0000	69.0000	69.0000	69.0000	69.0000	69.0000	65.0000	62.0000
Product Factor:	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Withdrawal Losses (lb):	494.3023	494.3023	494.3023	494.3023	494.3023	494.3023	494.3023	494.3023	494.3023	494.3023	494.3023	494.3023
Net Throughput (gal/mo.):	157.254,166.6000	157.254,166.6000	157.254,166.6000	157.254,166.6000	157.254,166.6000	157.254,166.6000	157.254,166.6000	157.254,166.6000	157.254,166.6000	157.254,166.6000	157.254,166.6000	157.254,166.6000
Shell Clingage Factor (lb/1000 sqft):	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015
Average Organic Liquid Density (lb/gal):	5.6000	5.6000	5.6000	5.6000	5.6000	5.6000	5.6000	5.6000	5.6000	5.6000	5.6000	5.6000
Tank Diameter (ft):	60.0000	60.0000	60.0000	60.0000	60.0000	60.0000	60.0000	60.0000	60.0000	60.0000	60.0000	60.0000
Roof Fitting Losses (lb):	142.3955	164.9038	72.9160	79.9099	83.2415	84.1560	83.4858	82.9427	76.5757	64.9221	120.6907	130.4734
Value of Vapor Pressure	0.1796	0.1838	0.0614	0.0637	0.0651	0.0670	0.0703	0.0711	0.0695	0.0664	0.1483	0.1793
Function:												
Vapor Molecular Weight (lb/lb-mole):	62.0000	62.0000	69.0000	69.0000	69.0000	69.0000	69.0000	69.0000	69.0000	69.0000	65.0000	62.0000
Product Factor:	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Tot. Roof Fitting Loss Fact. (lb-mole/yr):	153.4564	173.6101	206.5959	218.3135	222.2986	218.3135	206.5959	202.7697	191.5317	170.1481	150.2426	140.8529
Average Wind Speed (mph):	6.0000	6.0000	7.5000	7.8000	7.9000	7.8000	7.5000	7.4000	7.1000	6.5000	5.9000	5.6000
Total Losses (lb)	803.7238	843.8571	643.4533	655.9107	662.0215	664.4980	665.0741	664.6177	653.3982	632.4844	757.6599	782.6188
Roof Fitting/Status												
Access Hatch (24-in. Diam.)/Bolted Cover, Gasketed												
Automatic Gauge Float Well/Bolted Cover, Gasketed												
Vacuum Breaker (10-in. Diam.)/Weighted Mech. Actuation, Gask.												
Slotted Guide-Pole/Sample Well/Gask. Sliding Cover, w. Float, Wiper												
Roof Leg (3-in. Diameter)/Adjustable, Pontoon Area, Gasketed												
Roof Leg (3-in. Diameter)/Adjustable, Center Area, Gasketed												
Roof Drain (3-in. Diameter)/90% Closed												
Roof Fitting Loss Factors												
Quantity	1	1	1	1	1	1	1	1	1	1	1	1
KFa (lb-mole/yr)	1.60	1.60	1.60	1.60	1.60	1.60	1.60	1.60	1.60	1.60	1.60	1.60
KFb (lb-mole/yr mph^n)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Losses (lb)	10.6416	18.6228	75.2245	991.5444	50.4671	17.6731	17.0527	17.0527	17.0527	17.0527	17.0527	17.0527

TANKS 4.0.9d
Emissions Report - Detail Format
Individual Tank Emission Totals

Emissions Report for: January, February, March, April, May, June, July, August, September, October, November, December

MV-08 PTE - External Floating Roof Tank
San Diego, California

	Losses(lbs)				Total Emissions
	Rim Seal Loss	Withdrawal Loss	Deck Fitting Loss	Deck Seam Loss	
Components					
Gasoline (RVP 6)	658.89	3,954.42	628.15	0.00	5,241.46
Gasoline (RVP 13.5)	509.52	1,482.91	437.77	0.00	2,430.20
Gasoline (RVP 11.5)	142.67	494.30	120.69	0.00	757.66

TANKS 4.0.9d

Emissions Report - Detail Format

Tank Identification and Physical Characteristics

Identification

User Identification: MV-09 PTE
 City: San Diego
 State: California
 Company: SFPP, L.P.
 Type of Tank: Internal Floating Roof Tank
 Description:

Tank Dimensions

Diameter (ft): 60.00
 Volume (gallons): 845,880.00
 Turnovers: 2,230.87
 Self Supp. Roof? (y/n): N
 No. of Columns: 1.00
 Eff. Col. Diam. (ft): 1.00

Paint Characteristics

Internal Shell Condition: Light Rust
 Shell Color/Shade: White/White
 Shell Condition: Good
 Roof Color/Shade: White/White
 Roof Condition: Good

Rim-Seal System

Primary Seal: Mechanical Shoe
 Secondary Seal: Rim-mounted

Deck Characteristics

Deck Fitting Category: Detail
 Deck Type: Welded

Deck Fitting/Status

	Quantity
Automatic Gauge Float Well/Bolted Cover, Gasketed	1
Column Well (24-in. Diam.)/Pipe Col.-Sliding Cover, Gask.	1
Ladder Well (36-in. Diam.)/Sliding Cover, Gasketed	1
Roof Leg or Hanger Well/Adjustable	16
Sample Pipe or Well (24-in. Diam.)/Slotted Pipe-Sliding Cover, Gask.	1
Vacuum Breaker (10-in. Diam.)/Weighted Mech. Actuation, Gask.	1
Slotted Guide-Pole/Sample Well/Gask. Sliding Cover, w. Float, Wiper	1
Gauge-Hatch/Sample Well (8-in. Diam.)/Weighted Mech. Actuation, Gask.	1

Meteorological Data used in Emissions Calculations: San Diego, California (Avg Atmospheric Pressure = 14.7 psia)

TANKS 4.0.9d

Emissions Report - Detail Format

Liquid Contents of Storage Tank

MV-09 PTE - Internal Floating Roof Tank
San Diego, California

Mixture/Component	Month	Daily Liquid Surf. Temperature (deg F)		Liquid Bulk Temp (deg F)	Vapor Pressure (psia)			Vapor Mol. Weight	Liquid Mass Fract.	Vapor Mass Fract.	Mol. Weight	Basis for Vapor Pressure Calculations
		Avg.	Min.		Avg.	Min.	Max.					
Gasoline (RVP 13.5)	Jan	62.52	56.31	66.73	7.5910	N/A	N/A	62.0000			92.00	Option 4: RVP=13.5, ASTM Slope=3
Gasoline (RVP 13.5)	Feb	63.40	59.09	67.71	7.7148	N/A	N/A	62.0000			92.00	Option 4: RVP=13.5, ASTM Slope=3
Gasoline (RVP 6)	Mar	64.27	59.97	68.56	3.2045	N/A	N/A	69.0000			92.00	Option 4: RVP=6, ASTM Slope=3
Gasoline (RVP 6)	Apr	65.84	61.23	70.45	3.3091	N/A	N/A	69.0000			92.00	Option 4: RVP=6, ASTM Slope=3
Gasoline (RVP 6)	May	66.83	62.67	70.99	3.3760	N/A	N/A	69.0000			92.00	Option 4: RVP=6, ASTM Slope=3
Gasoline (RVP 6)	Jun	68.09	63.90	72.27	3.4629	N/A	N/A	69.0000			92.00	Option 4: RVP=6, ASTM Slope=3
Gasoline (RVP 6)	Jul	70.13	65.63	74.64	3.6082	N/A	N/A	69.0000			92.00	Option 4: RVP=6, ASTM Slope=3
Gasoline (RVP 6)	Aug	70.66	66.31	75.02	3.6465	N/A	N/A	69.0000			92.00	Option 4: RVP=6, ASTM Slope=3
Gasoline (RVP 6)	Sep	69.67	65.55	73.79	3.5749	N/A	N/A	69.0000			92.00	Option 4: RVP=6, ASTM Slope=3
Gasoline (RVP 6)	Oct	67.64	63.52	71.77	3.4321	N/A	N/A	69.0000			92.00	Option 4: RVP=6, ASTM Slope=3
Gasoline (RVP 11.5)	Nov	64.65	60.48	68.81	6.6146	N/A	N/A	65.0000			92.00	Option 4: RVP=11.5, ASTM Slope=3
Gasoline (RVP 13.5)	Dec	62.45	58.26	66.64	7.5918	N/A	N/A	62.0000			92.00	Option 4: RVP=13.5, ASTM Slope=3

TANKS 4.0.9d

Emissions Report - Detail Format

Detail Calculations (AP-42)

MV-09 PTE - Internal Floating Roof Tank

San Diego, California

Month:	January	February	March	April	May	June	July	August	September	October	November	December
Rim Seal Losses (lb):	33,4032	34,1946	12,7058	13,1772	13,4805	13,1774	14,5477	14,7257	14,3931	13,7363	28,9190	33,3471
Seal Factor A (lb-mole/ft-yr):	0.6000	0.6000	0.6000	0.6000	0.6000	0.6000	0.6000	0.6000	0.6000	0.6000	0.6000	0.6000
Seal Factor B (lb-mole/ft-yr (mph):	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000
n:	0.1796	0.1838	0.0614	0.0637	0.0651	0.0670	0.0703	0.0711	0.0695	0.0664	0.1463	0.1793
Function:												
Vapor Pressure at Daily Average												
Liquid												
Surface Temperature (psia):	7.5910	7.7148	3.2045	3.3091	3.3760	3.4629	3.6082	3.6465	3.5749	3.4321	6.6146	7.5818
Tank Diameter (ft):	60.0000	60.0000	60.0000	60.0000	60.0000	60.0000	60.0000	60.0000	60.0000	60.0000	60.0000	60.0000
Vapor Molecular Weight (lb/lb-mole):	62.0000	62.0000	69.0000	69.0000	69.0000	69.0000	69.0000	69.0000	69.0000	69.0000	65.0000	62.0000
Product Factor:	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Withdrawal Losses (lb):	502,5406	502,5406	502,5406	502,5406	502,5406	502,5406	502,5406	502,5406	502,5406	502,5406	502,5406	502,5406
Number of Columns:	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Effective Column Diameter (ft):	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Net Throughput (gal/mo.):	157,254,166.6000	157,254,166.6000	157,254,166.6000	157,254,166.6000	157,254,166.6000	157,254,166.6000	157,254,166.6000	157,254,166.6000	157,254,166.6000	157,254,166.6000	157,254,166.6000	157,254,166.6000
Shell Clingage Factor (bbl/1000 sqft):	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015
Average Organic Liquid Density (lb/gal):	5.6000	5.6000	5.6000	5.6000	5.6000	5.6000	5.6000	5.6000	5.6000	5.6000	5.6000	5.6000
Tank Diameter (ft):	60.0000	60.0000	60.0000	60.0000	60.0000	60.0000	60.0000	60.0000	60.0000	60.0000	60.0000	60.0000
Deck Fitting Losses (lb):	260,6255	266,7847	99,1303	102,8077	105,1740	108,2705	113,5001	114,8995	112,2938	107,1695	225,6243	260,1726
Function:												
Value of Vapor Pressure	0.1796	0.1838	0.0614	0.0637	0.0651	0.0670	0.0703	0.0711	0.0695	0.0664	0.1463	0.1793
Vapor Molecular Weight (lb/lb-mole):	62.0000	62.0000	69.0000	69.0000	69.0000	69.0000	69.0000	69.0000	69.0000	69.0000	65.0000	62.0000
Product Factor:	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Tot. Roof Fitting Loss Fact (lb-mole/yr):	280,8700	280,8700	280,8700	280,8700	280,8700	280,8700	280,8700	280,8700	280,8700	280,8700	280,8700	280,8700
Deck Seam Losses (lb):	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Deck Seam Length (ft)	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Deck Seam Loss per Unit Length Factor (lb-mole/ft-yr):	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Deck Seam Length Factor (ft/soft):	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Tank Diameter (ft):	60.0000	60.0000	60.0000	60.0000	60.0000	60.0000	60.0000	60.0000	60.0000	60.0000	60.0000	60.0000
Vapor Molecular Weight (lb/lb-mole):	62.0000	62.0000	69.0000	69.0000	69.0000	69.0000	69.0000	69.0000	69.0000	69.0000	65.0000	62.0000
Product Factor:	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total Losses (lb):	796,5713	803,5200	614,3768	618,5255	621,1952	624,6865	630,5885	632,1559	629,2275	623,4464	757,0639	796,0603
Roof Fitting/Status												
Automatic Gauge Float Well/Bolted Cover, Gasketed												
Column Well (24-in. Diam.)/Pipe Col.-Sliding Cover, Gask.												
Ladder Well (36-in. Diam.)/Sliding Cover, Gasketed												
Roof Leg or Hanger Well/Adjustable												
Sample Pipe or Well (24-in. Diam.)/Slotted Pipe-Sliding Cover, Gask												
Vacuum Breaker (10-in. Diam.)/Weighted Mech. Actuation, Gask												
Slotted Guide-Pole/Sample Well/Gask. Sliding Cover, w. Float, Viper												
Gauge-Hatch/Sample Well (8-in. Diam.)/Weighted Mech. Actuation, Gask.												
Roof Fitting/Status												
Automatic Gauge Float Well/Bolted Cover, Gasketed												
Column Well (24-in. Diam.)/Pipe Col.-Sliding Cover, Gask.												
Ladder Well (36-in. Diam.)/Sliding Cover, Gasketed												
Roof Leg or Hanger Well/Adjustable												
Sample Pipe or Well (24-in. Diam.)/Slotted Pipe-Sliding Cover, Gask												
Vacuum Breaker (10-in. Diam.)/Weighted Mech. Actuation, Gask												
Slotted Guide-Pole/Sample Well/Gask. Sliding Cover, w. Float, Viper												
Gauge-Hatch/Sample Well (8-in. Diam.)/Weighted Mech. Actuation, Gask.												
Roof Fitting/Status												
Automatic Gauge Float Well/Bolted Cover, Gasketed												
Column Well (24-in. Diam.)/Pipe Col.-Sliding Cover, Gask.												
Ladder Well (36-in. Diam.)/Sliding Cover, Gasketed												
Roof Leg or Hanger Well/Adjustable												
Sample Pipe or Well (24-in. Diam.)/Slotted Pipe-Sliding Cover, Gask												
Vacuum Breaker (10-in. Diam.)/Weighted Mech. Actuation, Gask												
Slotted Guide-Pole/Sample Well/Gask. Sliding Cover, w. Float, Viper												
Gauge-Hatch/Sample Well (8-in. Diam.)/Weighted Mech. Actuation, Gask.												
Roof Fitting/Status												
Automatic Gauge Float Well/Bolted Cover, Gasketed												
Column Well (24-in. Diam.)/Pipe Col.-Sliding Cover, Gask.												
Ladder Well (36-in. Diam.)/Sliding Cover, Gasketed												
Roof Leg or Hanger Well/Adjustable												
Sample Pipe or Well (24-in. Diam.)/Slotted Pipe-Sliding Cover, Gask												
Vacuum Breaker (10-in. Diam.)/Weighted Mech. Actuation, Gask												
Slotted Guide-Pole/Sample Well/Gask. Sliding Cover, w. Float, Viper												
Gauge-Hatch/Sample Well (8-in. Diam.)/Weighted Mech. Actuation, Gask.												
Roof Fitting/Status												
Automatic Gauge Float Well/Bolted Cover, Gasketed												
Column Well (24-in. Diam.)/Pipe Col.-Sliding Cover, Gask.												
Ladder Well (36-in. Diam.)/Sliding Cover, Gasketed												
Roof Leg or Hanger Well/Adjustable												
Sample Pipe or Well (24-in. Diam.)/Slotted Pipe-Sliding Cover, Gask												
Vacuum Breaker (10-in. Diam.)/Weighted Mech. Actuation, Gask												
Slotted Guide-Pole/Sample Well/Gask. Sliding Cover, w. Float, Viper												
Gauge-Hatch/Sample Well (8-in. Diam.)/Weighted Mech. Actuation, Gask.												
Roof Fitting/Status												
Automatic Gauge Float Well/Bolted Cover, Gasketed												
Column Well (24-in. Diam.)/Pipe Col.-Sliding Cover, Gask.												
Ladder Well (36-in. Diam.)/Sliding Cover, Gasketed												
Roof Leg or Hanger Well/Adjustable												
Sample Pipe or Well (24-in. Diam.)/Slotted Pipe-Sliding Cover, Gask												
Vacuum Breaker (10-in. Diam.)/Weighted Mech. Actuation, Gask												
Slotted Guide-Pole/Sample Well/Gask. Sliding Cover, w. Float, Viper												
Gauge-Hatch/Sample Well (8-in. Diam.)/Weighted Mech. Actuation, Gask.												
Roof Fitting/Status												
Automatic Gauge Float Well/Bolted Cover, Gasketed												
Column Well (24-in. Diam.)/Pipe Col.-Sliding Cover, Gask.												
Ladder Well (36-in. Diam.)/Sliding Cover, Gasketed												
Roof Leg or Hanger Well/Adjustable												
Sample Pipe or Well (24-in. Diam.)/Slotted Pipe-Sliding Cover, Gask												
Vacuum Breaker (10-in. Diam.)/Weighted Mech. Actuation, Gask												
Slotted Guide-Pole/Sample Well/Gask. Sliding Cover, w. Float, Viper												
Gauge-Hatch/Sample Well (8-in. Diam.)/Weighted Mech. Actuation, Gask.												
Roof Fitting/Status												
Automatic Gauge Float Well/Bolted Cover, Gasketed												
Column Well (24-in. Diam.)/Pipe Col.-Sliding Cover, Gask.												
Ladder Well (36-in. Diam.)/Sliding Cover, Gasketed												
Roof Leg or Hanger Well/Adjustable												
Sample Pipe or Well (24-in. Diam.)/Slotted Pipe-Sliding Cover, Gask												
Vacuum Breaker (10-in. Diam.)/Weighted Mech. Actuation, Gask												
Slotted Guide-Pole/Sample Well/Gask. Sliding Cover, w. Float, Viper												
Gauge-Hatch/Sample Well (8-in. Diam.)/Weighted Mech. Actuation, Gask.												
Roof Fitting/Status												
Automatic Gauge Float Well/Bolted Cover, Gasketed												
Column Well (24-in. Diam.)/Pipe Col.-Sliding Cover, Gask.												
Ladder Well (36-in. Diam.)/Sliding Cover, Gasketed												
Roof Leg or Hanger Well/Adjustable												
Sample Pipe or Well (24-in. Diam.)/Slotted Pipe-Sliding Cover, Gask												
Vacuum Breaker (10-in. Diam.)/Weighted Mech. Actuation, Gask												
Slotted Guide-Pole/Sample Well/Gask. Sliding Cover, w. Float, Viper												
Gauge-Hatch/Sample Well (8-in. Diam.)/Weighted Mech. Actuation, Gask.												
Roof Fitting/Status												
Automatic Gauge Float Well/Bolted Cover, Gasketed												
Column Well (24-in. Diam.)/Pipe Col.-Sliding Cover, Gask.												
Ladder Well (36-in. Diam.)/Sliding Cover, Gasketed												
Roof Leg or Hanger Well/Adjustable												
Sample Pipe or Well (24-in. Diam.)/Slotted Pipe-Sliding Cover, Gask												
Vacuum Breaker (10-in. Diam.)/Weighted Mech. Actuation, Gask												
Slotted Guide-Pole/Sample Well/Gask. Sliding Cover, w. Float, Viper												
Gauge-Hatch/Sample Well (8-in. Diam.)/Weighted Mech. Actuation, Gask.												
Roof Fitting/Status												
Automatic Gauge Float Well/Bolted Cover, Gasketed												
Column Well (24-in. Diam.)/Pipe Col.-Sliding Cover, Gask.												
Ladder Well (36-in. Diam.)/Sliding Cover, Gasketed												
Roof Leg or Hanger Well/Adjustable												
Sample Pipe or Well (24-in. Diam.)/Slotted Pipe-Sliding Cover, Gask												
Vacuum Breaker (10-in. Diam.)/Weighted Mech. Actuation, Gask												
Slotted Guide-Pole/Sample Well/Gask. Sliding Cover, w. Float, Viper												
Gauge-Hatch/Sample Well (8-in. Diam.)/Weighted Mech. Actuation, Gask.												
Roof Fitting/Status												
Automatic Gauge Float Well/Bolted Cover, Gasketed												

TANKS 4.0.9d
Emissions Report - Detail Format
Individual Tank Emission Totals

Emissions Report for: January, February, March, April, May, June, July, August, September, October, November, December

MV-09 PTE - Internal Floating Roof Tank
San Diego, California

Components	Losses(lbs)				Total Emissions
	Rim Seal Loss	Withdrawal Loss	Deck Fitting Loss	Deck Seam Loss	
Gasoline (RVP 6)	110.64	4,020.33	863.24	0.00	4,994.20
Gasoline (RVP 13.5)	100.95	1,507.62	787.58	0.00	2,396.15
Gasoline (RVP 11.5)	28.92	502.54	225.62	0.00	757.08

TANKS 4.0.9d

Emissions Report - Detail Format

Tank Identification and Physical Characteristics

Identification

User Identification: MV-10 PTE
 City: San Diego
 State: California
 Company: SFPP, L.P.
 Type of Tank: Internal Floating Roof Tank
 Description:

Tank Dimensions

Diameter (ft): 60.00
 Volume (gallons): 845,880.00
 Turnovers: 2,230.87
 Self Supp. Roof? (y/n): N
 No. of Columns: 1.00
 Eff. Col. Diam. (ft): 1.00

Paint Characteristics

Internal Shell Condition: Light Rust
 Shell Color/Shade: White/White
 Shell Condition: Good
 Roof Color/Shade: White/White
 Roof Condition: Good

Rim-Seal System

Primary Seal: Mechanical Shoe
 Secondary Seal: Rim-mounted

Deck Characteristics

Deck Fitting Category: Detail
 Deck Type: Welded

Deck Fitting/Status

	Quantity
Automatic Gauge Float Well/Bolted Cover, Gasketed	1
Column Well (24-in. Diam.)/Pipe Col.-Sliding Cover, Gask.	1
Ladder Well (36-in. Diam.)/Sliding Cover, Gasketed	1
Roof Leg or Hanger Well/Adjustable	16
Vacuum Breaker (10-in. Diam.)/Weighted Mech. Actuation, Gask.	1
Slotted Guide-Pole/Sample Well/Gask. Sliding Cover, w. Float, Wiper	1

Meteorological Data used in Emissions Calculations: San Diego, California (Avg Atmospheric Pressure = 14.7 psia)

TANKS 4.0.9d

Emissions Report - Detail Format

Liquid Contents of Storage Tank

MV-10 PTE - Internal Floating Roof Tank
San Diego, California

Mixture/Component	Daily Liquid Surf. Temperature (deg F)			Liquid Bulk Temp (deg F)	Vapor Pressure (psia)			Vapor Mol. Weight	Liquid Mass Fract.	Vapor Mass Fract.	Mol. Weight	Basis for Vapor Pressure Calculations
	Month	Avg.	Min.	Max.	Avg.	Min.	Max.					
Gasoline (RVP 13.5)	Jan	62.52	58.31	66.73	64.22	7.5910	N/A	62.0000			92.00	Option 4: RVP=13.5, ASTM Slope=3
Gasoline (RVP 13.5)	Feb	63.40	59.09	67.71	64.22	7.7148	N/A	62.0000			92.00	Option 4: RVP=13.5, ASTM Slope=3
Gasoline (RVP 6)	Mar	64.27	59.97	68.56	64.22	3.2045	N/A	69.0000			92.00	Option 4: RVP=6, ASTM Slope=3
Gasoline (RVP 6)	Apr	65.84	61.23	70.45	64.22	3.3091	N/A	69.0000			92.00	Option 4: RVP=6, ASTM Slope=3
Gasoline (RVP 6)	May	66.83	62.67	70.99	64.22	3.3760	N/A	69.0000			92.00	Option 4: RVP=6, ASTM Slope=3
Gasoline (RVP 6)	Jun	68.09	63.90	72.27	64.22	3.4629	N/A	69.0000			92.00	Option 4: RVP=6, ASTM Slope=3
Gasoline (RVP 6)	Jul	70.13	65.63	74.64	64.22	3.6082	N/A	69.0000			92.00	Option 4: RVP=6, ASTM Slope=3
Gasoline (RVP 6)	Aug	70.66	66.31	75.02	64.22	3.6465	N/A	69.0000			92.00	Option 4: RVP=6, ASTM Slope=3
Gasoline (RVP 6)	Sep	69.67	65.55	73.79	64.22	3.5749	N/A	69.0000			92.00	Option 4: RVP=6, ASTM Slope=3
Gasoline (RVP 6)	Oct	67.64	63.52	71.77	64.22	3.4321	N/A	69.0000			92.00	Option 4: RVP=6, ASTM Slope=3
Gasoline (RVP 11.5)	Nov	64.65	60.48	68.81	64.22	6.6146	N/A	65.0000			92.00	Option 4: RVP=11.5, ASTM Slope=3
Gasoline (RVP 13.5)	Dec	62.45	58.26	66.64	64.22	7.5818	N/A	62.0000			92.00	Option 4: RVP=13.5, ASTM Slope=3

TANKS 4.0.9d
Emissions Report - Detail Format
Detail Calculations (AP-42)

MV-10 PTE - Internal Floating Roof Tank
San Diego, California

Month:	January	February	March	April	May	June	July	August	September	October	November	December
Rim Seal Losses (lb):	33,403.2	34,194.6	12,705.8	13,177.2	13,480.5	13,877.4	14,547.7	14,725.7	14,393.1	13,736.3	28,919.0	33,347.1
Seal Factor A (lb-mole/ft-yr):	0.6000	0.6000	0.6000	0.6000	0.6000	0.6000	0.6000	0.6000	0.6000	0.6000	0.6000	0.6000
Seal Factor B (lb-mole/ft-yr (mph)	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000
Value of Vapor Pressure	0.1796	0.1838	0.0614	0.0637	0.0651	0.0670	0.0703	0.0711	0.0695	0.0664	0.1483	0.1793
Function:												
Vapor Pressure at Daily Average												
Liquid												
Surface Temperature (psia):	7.5910	7.7148	3.2045	3.3091	3.3760	3.4629	3.6082	3.6465	3.5749	3.4321	6.6146	7.5818
Tank Diameter (ft):	60.0000	60.0000	60.0000	60.0000	60.0000	60.0000	60.0000	60.0000	60.0000	60.0000	60.0000	60.0000
Vapor Molecular Weight (lb/lb-mole):	62.0000	62.0000	69.0000	69.0000	69.0000	69.0000	69.0000	69.0000	69.0000	69.0000	65.0000	62.0000
Product Factor:	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Withdrawal Losses (lb):	502,540.6	502,540.6	502,540.6	502,540.6	502,540.6	502,540.6	502,540.6	502,540.6	502,540.6	502,540.6	502,540.6	502,540.6
Number of Columns:	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Effective Column Diameter (ft):	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Net Throughput (gal/mo.):	157,254,166.6000	157,254,166.6000	157,254,166.6000	157,254,166.6000	157,254,166.6000	157,254,166.6000	157,254,166.6000	157,254,166.6000	157,254,166.6000	157,254,166.6000	157,254,166.6000	157,254,166.6000
Shell Clingage Factor (lb/1000 sqft):	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015
Average Organic Liquid Density (lb/gal):	5.6000	5.6000	5.6000	5.6000	5.6000	5.6000	5.6000	5.6000	5.6000	5.6000	5.6000	5.6000
Tank Diameter (ft):	60.0000	60.0000	60.0000	60.0000	60.0000	60.0000	60.0000	60.0000	60.0000	60.0000	60.0000	60.0000
Deck Fitting Losses (lb):	220,288.7	225,494.7	83,788.0	86,896.2	88,896.3	91,513.6	95,933.8	97,108.1	94,914.2	90,582.9	190,704.6	219,905.9
Value of Vapor Pressure	0.1796	0.1838	0.0614	0.0637	0.0651	0.0670	0.0703	0.0711	0.0695	0.0664	0.1483	0.1793
Function:												
Vapor Molecular Weight (lb/lb-mole):	62.0000	62.0000	69.0000	69.0000	69.0000	69.0000	69.0000	69.0000	69.0000	69.0000	65.0000	62.0000
Product Factor:	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Tot. Roof Fitting Loss Fact. (lb-mole/yr):	237,400.0	237,400.0	237,400.0	237,400.0	237,400.0	237,400.0	237,400.0	237,400.0	237,400.0	237,400.0	237,400.0	237,400.0
Deck Seam Losses (lb):	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Deck Seam Length (ft):	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Deck Seam Loss per Unit Length Factor (lb-mole/ft-yr):	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Deck Seam Length Factor (ft/sqft):	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Tank Diameter (ft):	60.0000	60.0000	60.0000	60.0000	60.0000	60.0000	60.0000	60.0000	60.0000	60.0000	60.0000	60.0000
Vapor Molecular Weight (lb/lb-mole):	62.0000	62.0000	69.0000	69.0000	69.0000	69.0000	69.0000	69.0000	69.0000	69.0000	65.0000	62.0000
Product Factor:	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total Losses (lb):	756,234.5	762,230.0	599,034.5	602,614.0	604,917.5	607,931.6	613,022.1	614,374.5	611,847.9	606,859.8	722,164.3	755,793.7
Roof Fitting/Status					Quantity	kFa (lb-mole/yr)	Roof Fitting Loss Factors			m	Losses (lb)	
Automatic Gauge Float Well/Boiled Cover, Gasketed					1	2.80	0.00	0.00		0.00	18,622.8	
Column Well (24-in. Diam.)/Pipe Col-Sliding Cover, Gask.					1	25.00	0.00	0.00		0.00	166,275.0	
Ladder Well (36-in. Diam.)/Sliding Cover, Gasketed					1	56.00	0.00	0.00		0.00	372,456.1	
Roof Leg or Hanger Well/Adjustable					16	7.90	0.00	0.00		0.00	840,686.6	
Vacuum Breaker (10-in. Diam.)/Weighted Mech. Actuation, Gask.					1	6.20	1.20	1.20		0.94	41,236.2	
Slotted Guide-Pole/Sample Well/Gask. Sliding Cover, w. Float, Wiper					1	21.00	7.90	7.90		1.80	139,671.0	

TANKS 4.0.9d
Emissions Report - Detail Format
Individual Tank Emission Totals

Emissions Report for: January, February, March, April, May, June, July, August, September, October, November, December

MV-10 PTE - Internal Floating Roof Tank
San Diego, California

Components	Losses (lbs)				Total Emissions
	Rim Seal Loss	Withdrawal Loss	Deck Fitting Loss	Deck Seam Loss	
Gasoline (RVP 13.5)	100.95	1,507.62	665.69	0.00	2,274.26
Gasoline (RVP 6)	110.64	4,020.33	729.63	0.00	4,860.60
Gasoline (RVP 11.5)	28.92	502.54	190.70	0.00	722.16

TANKS 4.0.9d
Emissions Report - Detail Format
Tank Identification and Physical Characteristics

Identification

User Identification: MV-11 PTE
City: San Diego
State: California
Company: SFPP, L.P.
Type of Tank: Vertical Fixed Roof Tank
Description:

Tank Dimensions

Shell Height (ft): 40.00
Diameter (ft): 38.00
Liquid Height (ft): 40.00
Avg. Liquid Height (ft): 20.00
Volume (gallons): 339,318.00
Turnovers: 5,561.30
Net Throughput(gal/yr): 1,887,050,000.00
Is Tank Heated (y/n): N

Paint Characteristics

Shell Color/Shade: White/White
Shell Condition: Good
Roof Color/Shade: White/White
Roof Condition: Good

Roof Characteristics

Type: Cone
Height (ft): 1.88
Slope (ft/ft) (Cone Roof): 0.06

Breather Vent Settings

Vacuum Settings (psig): -0.03
Pressure Settings (psig): 0.03

Meteorological Data used in Emissions Calculations: San Diego, California (Avg Atmospheric Pressure = 14.7 psia)

TANKS 4.0.9d Emissions Report - Detail Format Liquid Contents of Storage Tank

MV-11 PTE - Vertical Fixed Roof Tank
San Diego, California

Mixture/Component	Month	Daily Liquid Surf. Temperature (deg F)			Liquid Bulk Temp (deg F)		Vapor Pressure (psia)			Vapor Mol. Weight	Liquid Mass Fract.	Vapor Mass Fract.	Mol. Weight	Basis for Vapor Pressure Calculations	
		Avg.	Min.	Max.			Avg.	Min.	Max.						
Distillate fuel oil no. 2	Jan	62.52	58.31	66.73	64.22	64.22	0.0071	0.0062	0.0082	130.0000			188.00	Option 1: VP60 = .0065 VP70 = .009	
Distillate fuel oil no. 2	Feb	63.40	59.09	67.71	64.22	64.22	0.0074	0.0063	0.0084	130.0000			188.00	Option 1: VP60 = .0065 VP70 = .009	
Distillate fuel oil no. 2	Mar	64.27	59.97	68.56	64.22	64.22	0.0076	0.0065	0.0086	130.0000			188.00	Option 1: VP60 = .0065 VP70 = .009	
Distillate fuel oil no. 2	Apr	65.84	61.23	70.45	64.22	64.22	0.0080	0.0068	0.0091	130.0000			188.00	Option 1: VP60 = .0065 VP70 = .009	
Distillate fuel oil no. 2	May	66.83	62.67	70.99	64.22	64.22	0.0082	0.0072	0.0093	130.0000			188.00	Option 1: VP60 = .0065 VP70 = .009	
Distillate fuel oil no. 2	Jun	68.09	63.90	72.27	64.22	64.22	0.0085	0.0075	0.0097	130.0000			188.00	Option 1: VP60 = .0065 VP70 = .009	
Distillate fuel oil no. 2	Jul	70.13	65.63	74.64	64.22	64.22	0.0090	0.0079	0.0104	130.0000			188.00	Option 1: VP70 = .009 VP80 = .012	
Distillate fuel oil no. 2	Aug	70.66	66.31	75.02	64.22	64.22	0.0092	0.0081	0.0105	130.0000			188.00	Option 1: VP60 = .0065 VP70 = .009	
Distillate fuel oil no. 2	Sep	69.67	65.55	73.79	64.22	64.22	0.0089	0.0079	0.0101	130.0000			188.00	Option 1: VP60 = .0065 VP70 = .009	
Distillate fuel oil no. 2	Oct	67.64	63.52	71.77	64.22	64.22	0.0084	0.0074	0.0095	130.0000			188.00	Option 1: VP60 = .0065 VP70 = .009	
Distillate fuel oil no. 2	Nov	64.65	60.48	68.81	64.22	64.22	0.0077	0.0066	0.0087	130.0000			188.00	Option 1: VP60 = .0065 VP70 = .009	
Distillate fuel oil no. 2	Dec	62.45	58.26	66.64	64.22	64.22	0.0071	0.0062	0.0082	130.0000			188.00	Option 1: VP60 = .0065 VP70 = .009	

TANKS 4.0.9d

Emissions Report - Detail Format

Detail Calculations (AP-42)

MV-11 PTE - Vertical Fixed Roof Tank

San Diego, California

Month:	January	February	March	April	May	June	July	August	September	October	November	December
Standing Losses (lb):	3,3726	3,2109	3,6305	3,9792	3,7560	3,7627	4,4723	4,3627	3,8607	3,7988	3,4309	3,3444
Vapor Space Volume (cu ft):	23,395,2792	23,395,2792	23,395,2792	23,395,2792	23,395,2792	23,395,2792	23,395,2792	23,395,2792	23,395,2792	23,395,2792	23,395,2792	23,395,2792
Vapor Density (lb/cu ft):	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002
Vapor Space Expansion Factor:	0.0290	0.0283	0.0288	0.0312	0.0277	0.0278	0.0301	0.0289	0.0272	0.0274	0.0278	0.0282
Vented Vapor Saturation Factor:	0.9923	0.9920	0.9918	0.9914	0.9911	0.9908	0.9902	0.9900	0.9903	0.9909	0.9917	0.9923
Tank Vapor Space Volume:	23,395,2792	23,395,2792	23,395,2792	23,395,2792	23,395,2792	23,395,2792	23,395,2792	23,395,2792	23,395,2792	23,395,2792	23,395,2792	23,395,2792
Vapor Space Volume (cu ft):	38,0000	38,0000	38,0000	38,0000	38,0000	38,0000	38,0000	38,0000	38,0000	38,0000	38,0000	38,0000
Tank Diameter (ft):	20,6287	20,6287	20,6287	20,6287	20,6287	20,6287	20,6287	20,6287	20,6287	20,6287	20,6287	20,6287
Vapor Space Outage (ft):	40,0000	40,0000	40,0000	40,0000	40,0000	40,0000	40,0000	40,0000	40,0000	40,0000	40,0000	40,0000
Tank Shell Height (ft):	19,9980	19,9980	19,9980	19,9980	19,9980	19,9980	19,9980	19,9980	19,9980	19,9980	19,9980	19,9980
Average Liquid Height (ft):	0.6267	0.6267	0.6267	0.6267	0.6267	0.6267	0.6267	0.6267	0.6267	0.6267	0.6267	0.6267
Roof Outage (ft):	0.6267	0.6267	0.6267	0.6267	0.6267	0.6267	0.6267	0.6267	0.6267	0.6267	0.6267	0.6267
Roof Outage (Cone Roof)	0.6267	0.6267	0.6267	0.6267	0.6267	0.6267	0.6267	0.6267	0.6267	0.6267	0.6267	0.6267
Roof Height (ft):	1.8800	1.8800	1.8800	1.8800	1.8800	1.8800	1.8800	1.8800	1.8800	1.8800	1.8800	1.8800
Roof Slope (ft/ft):	0.0625	0.0625	0.0625	0.0625	0.0625	0.0625	0.0625	0.0625	0.0625	0.0625	0.0625	0.0625
Shell Radius (ft):	19,0000	19,0000	19,0000	19,0000	19,0000	19,0000	19,0000	19,0000	19,0000	19,0000	19,0000	19,0000
Vapor Density	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002
Vapor Density (lb/cu ft):	130,0000	130,0000	130,0000	130,0000	130,0000	130,0000	130,0000	130,0000	130,0000	130,0000	130,0000	130,0000
Vapor Molecular Weight (lb/lb-mole):												
Vapor Pressure at Daily Average Liquid												
Surface Temperature (psia):	0.0071	0.0074	0.0076	0.0080	0.0082	0.0085	0.0090	0.0092	0.0089	0.0084	0.0077	0.0071
Daily Avg. Liquid Surface Temp. (deg. R):	522,1894	523,0702	523,9369	525,5130	526,4988	527,7568	529,8043	530,3327	529,3403	527,3135	524,3186	522,1237
Daily Average Ambient Temp. (deg. F):	57,4000	58,6000	59,5500	62,0000	64,1000	66,7500	70,9500	72,5500	71,3500	67,7500	61,9000	57,4500
Ideal Gas Constant R (psia cu ft / (lb-mol-deg R)):	10,731	10,731	10,731	10,731	10,731	10,731	10,731	10,731	10,731	10,731	10,731	10,731
Liquid Bulk Temperature (deg. R):	523,8858	523,8858	523,8858	523,8858	523,8858	523,8858	523,8858	523,8858	523,8858	523,8858	523,8858	523,8858
Tank Paint Solar Absorptance (Shell):	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700
Tank Paint Solar Absorptance (Roof):	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700
Daily Total Solar Insulation Factor (Btu/sqft day):	969,8944	1,232,5940	1,566,6793	1,937,5679	1,983,5720	2,052,1024	2,200,5847	2,069,8695	1,724,0462	1,394,4017	1,080,9389	904,5368
Vapor Space Expansion Factor:	0.0283	0.0290	0.0288	0.0312	0.0277	0.0278	0.0301	0.0289	0.0272	0.0274	0.0278	0.0282
Vapor Space Expansion Factor (deg. R):	18,8567	17,2431	17,1774	18,4388	16,5418	16,7520	18,0348	17,4126	16,4865	16,5014	16,6653	16,7616
Daily Vapor Pressure Range (psia):	0.0020	0.0021	0.0021	0.0023	0.0021	0.0022	0.0025	0.0024	0.0023	0.0022	0.0021	0.0020
Breather Vent Press. Setting Range(psia):	0.0600	0.0600	0.0600	0.0600	0.0600	0.0600	0.0600	0.0600	0.0600	0.0600	0.0600	0.0600
Vapor Pressure at Daily Average Liquid	0.0071	0.0074	0.0076	0.0080	0.0082	0.0085	0.0090	0.0092	0.0089	0.0084	0.0077	0.0071
Surface Temperature (psia):												
Vapor Pressure at Daily Minimum Liquid	0.0062	0.0063	0.0065	0.0068	0.0072	0.0075	0.0079	0.0081	0.0079	0.0074	0.0066	0.0062
Surface Temperature (psia):												
Vapor Pressure at Daily Maximum Liquid	0.0082	0.0084	0.0086	0.0091	0.0093	0.0097	0.0104	0.0105	0.0101	0.0095	0.0087	0.0082
Daily Avg. Liquid Surface Temp. (deg R):	522,1894	523,0702	523,9369	525,5130	526,4988	527,7568	529,8043	530,3327	529,3403	527,3135	524,3186	522,1237
	517,9763	518,7595	519,6426	520,9033	522,3384	523,5688	525,2956	525,9796	525,2186	523,1882	520,1523	517,9333

Daily Min. Liquid Surface Temp. (deg. R):	526.4036	527.3810	528.2313	530.1227	530.6593	531.9448	534.3129	534.6858	533.4519	531.4389	528.4849	526.3141
Daily Max. Liquid Surface Temp. (deg. R):	17.0000	15.8000	13.5000	12.8000	10.0000	9.7000	10.5000	10.5000	11.5000	13.7000	16.0000	17.3000
Daily Ambient Temp. Range (deg. R):												
Vented Vapor Saturation Factor	0.9923	0.9920	0.9918	0.9914	0.9911	0.9908	0.9902	0.9900	0.9903	0.9909	0.9917	0.9923
Vented Vapor Saturation Factor: Vapor Pressure at Daily Average Liquid:	0.0071	0.0074	0.0076	0.0080	0.0082	0.0085	0.0090	0.0092	0.0089	0.0084	0.0077	0.0071
Surface Temperature (psia):	20.6287	20.6287	20.6287	20.6287	20.6287	20.6287	20.6287	20.6287	20.6287	20.6287	20.6287	20.6287
Vapor Space Outage (ft):	597.1175	615.5591	633.7049	666.7041	687.3437	713.6835	757.1127	770.3889	746.8359	704.4022	641.5856	595.7404
Working Losses (lb):	130.0000	130.0000	130.0000	130.0000	130.0000	130.0000	130.0000	130.0000	130.0000	130.0000	130.0000	130.0000
Vapor Molecular Weight (lb/lb- mole):												
Vapor Pressure at Daily Average Liquid	0.0071	0.0074	0.0076	0.0080	0.0082	0.0085	0.0090	0.0092	0.0089	0.0084	0.0077	0.0071
Surface Temperature (psia):	157.254	166.6000	157.254	166.6000	157.254	166.6000	157.254	166.6000	157.254	166.6000	157.254	166.6000
Net Throughput (gal/mo.):	5,561.3024	5,561.3024	5,561.3024	5,561.3024	5,561.3024	5,561.3024	5,561.3024	5,561.3024	5,561.3024	5,561.3024	5,561.3024	5,561.3024
Annual Turnovers:	0.1721	0.1721	0.1721	0.1721	0.1721	0.1721	0.1721	0.1721	0.1721	0.1721	0.1721	0.1721
Turnover Factor:	339.318.0000	339.318.0000	339.318.0000	339.318.0000	339.318.0000	339.318.0000	339.318.0000	339.318.0000	339.318.0000	339.318.0000	339.318.0000	339.318.0000
Maximum Liquid Volume (gal):	39.9960	39.9960	39.9960	39.9960	39.9960	39.9960	39.9960	39.9960	39.9960	39.9960	39.9960	39.9960
Maximum Liquid Height (ft):	38.0000	38.0000	38.0000	38.0000	38.0000	38.0000	38.0000	38.0000	38.0000	38.0000	38.0000	38.0000
Tank Diameter (ft):	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Working Loss Product Factor:												
Total Losses (lb):	600.4904	618.7701	637.3354	670.6833	691.0997	717.4862	761.5851	774.7526	750.6965	708.2010	645.1265	599.0847

TANKS 4.0.9d
Emissions Report - Detail Format
Individual Tank Emission Totals

Emissions Report for: January, February, March, April, May, June, July, August, September, October, November, December

MV-11 PTE - Vertical Fixed Roof Tank
San Diego, California

Components	Losses(lbs)		Total Emissions
	Working Loss	Breathing Loss	
Distillate fuel oil no. 2	8,130.29	45.00	8,175.29

TANKS 4.0.9d
Emissions Report - Detail Format
Tank Identification and Physical Characteristics

Identification		
User Identification:	MV-12 PTE	
City:	San Diego	
State:	California	
Company:	SFPP, L.P.	
Type of Tank:	External Floating Roof Tank	
Description:		
Tank Dimensions		
Diameter (ft):	90.00	
Volume (gallons):	1,692,264.00	
Turnovers:	1,115.10	
Paint Characteristics		
Internal Shell Condition:	Light Rust	
Shell Color/Shade:	White/White	
Shell Condition	Good	
Roof Characteristics		
Type:	Pontoon	
Fitting Category	Detail	
Tank Construction and Rim-Seal System		
Construction:	Welded	
Primary Seal:	Mechanical Shoe	
Secondary Seal	Rim-mounted	
Deck Fitting/Status		Quantity
Access Hatch (24-in. Diam.)/Bolted Cover, Gasketed		1
Automatic Gauge Float Well/Bolted Cover, Gasketed		1
Vacuum Breaker (10-in. Diam.)/Weighted Mech. Actuation, Gask.		1
Slotted Guide-Pole/Sample Well/Gask. Sliding Cover, w. Float, Wiper		1
Roof Leg (3-in. Diameter)/Adjustable, Pontoon Area, Gasketed		9
Roof Leg (3-in. Diameter)/Adjustable, Center Area, Gasketed		10
Roof Drain (3-in. Diameter)/90% Closed		1

Meteorological Data used in Emissions Calculations: San Diego, California (Avg Atmospheric Pressure = 14.7 psia)

TANKS 4.0.9d **Emissions Report - Detail Format** **Liquid Contents of Storage Tank**

MV-12 PTE - External Floating Roof Tank **San Diego, California**

Mixture/Component	Month	Daily Liquid Surf. Temperature (deg F)			Liquid Bulk Temp (deg F)	Vapor Pressure (psia)			Vapor Mol. Weight	Liquid Mass Fract.	Vapor Mass Fract.	Mol. Weight	Basis for Vapor Pressure Calculations
		Avg.	Min.	Max.		Avg.	Min.	Max.					
Gasoline (RVP 13.5)	Jan	62.52	58.31	66.73	64.22	7.5910	N/A	N/A	62.0000			92.00	Option 4: RVP=13.5, ASTM Slope=3
Gasoline (RVP 13.5)	Feb	63.40	59.09	67.71	64.22	7.7148	N/A	N/A	62.0000			92.00	Option 4: RVP=13.5, ASTM Slope=3
Gasoline (RVP 6)	Mar	64.27	59.97	68.56	64.22	3.2045	N/A	N/A	69.0000			92.00	Option 4: RVP=6, ASTM Slope=3
Gasoline (RVP 6)	Apr	65.84	61.23	70.45	64.22	3.3091	N/A	N/A	69.0000			92.00	Option 4: RVP=6, ASTM Slope=3
Gasoline (RVP 6)	May	66.83	62.67	70.99	64.22	3.3760	N/A	N/A	69.0000			92.00	Option 4: RVP=6, ASTM Slope=3
Gasoline (RVP 6)	Jun	68.09	63.90	72.27	64.22	3.4629	N/A	N/A	69.0000			92.00	Option 4: RVP=6, ASTM Slope=3
Gasoline (RVP 6)	Jul	70.13	65.63	74.64	64.22	3.5082	N/A	N/A	69.0000			92.00	Option 4: RVP=6, ASTM Slope=3
Gasoline (RVP 6)	Aug	70.66	66.31	75.02	64.22	3.6465	N/A	N/A	69.0000			92.00	Option 4: RVP=6, ASTM Slope=3
Gasoline (RVP 6)	Sep	69.67	65.55	73.79	64.22	3.5749	N/A	N/A	69.0000			92.00	Option 4: RVP=6, ASTM Slope=3
Gasoline (RVP 6)	Oct	67.64	63.52	71.77	64.22	3.4321	N/A	N/A	69.0000			92.00	Option 4: RVP=6, ASTM Slope=3
Gasoline (RVP 11.5)	Nov	64.65	60.48	68.81	64.22	6.6146	N/A	N/A	65.0000			92.00	Option 4: RVP=11.5, ASTM Slope=3
Gasoline (RVP 13.5)	Dec	62.45	58.26	66.64	64.22	7.5818	N/A	N/A	62.0000			92.00	Option 4: RVP=13.5, ASTM Slope=3

TANKS 4.0.9d

Emissions Report - Detail Format

Detail Calculations (AP-42)

MV-12 PTE - External Floating Roof Tank

San Diego, California

Month:	January	February	March	April	May	June	July	August	September	October	November	December
Rim Seal Losses (lb):	250.5389	276.9766	114.3526	122.5478	126.7166	129.0596	130.9291	131.0592	123.7803	109.8900	214.0005	236.7647
Seal Factor A (lb-mole/ft-yr):	0.6000	0.6000	0.6000	0.6000	0.6000	0.6000	0.6000	0.6000	0.6000	0.6000	0.6000	0.6000
Seal Factor B (lb-mole/ft-yr (mph):	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000
γ_m :	6.0000	6.0000	7.5000	7.8000	7.9000	7.8000	7.5000	7.4000	7.1000	6.5000	5.9000	5.6000
Average Wind Speed (mph):	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Seal-related Wind Speed:												
Exponent:	0.1796	0.1838	0.0614	0.0637	0.0651	0.0670	0.0703	0.0711	0.0695	0.0664	0.1483	0.1793
Value of Vapor Pressure:												
Function:												
Vapor Pressure at Daily Average:												
Liquid:												
Surface Temperature (psia):	7.5910	7.7148	3.2045	3.3091	3.3760	3.4629	3.6092	3.6465	3.5749	3.4321	6.6146	7.5818
Tank Diameter (ft):	90.0000	90.0000	90.0000	90.0000	90.0000	90.0000	90.0000	90.0000	90.0000	90.0000	90.0000	90.0000
Vapor Molecular Weight (lb/lb-mole):	62.0000	62.0000	69.0000	69.0000	69.0000	69.0000	69.0000	69.0000	69.0000	69.0000	65.0000	62.0000
Product Factor:	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Withdrawal Losses (lb):	329.5348	329.5348	329.5348	329.5348	329.5348	329.5348	329.5348	329.5348	329.5348	329.5348	329.5348	329.5348
Net Throughput (gal/mo.):	157,254,166.6000	157,254,166.6000	157,254,166.6000	157,254,166.6000	157,254,166.6000	157,254,166.6000	157,254,166.6000	157,254,166.6000	157,254,166.6000	157,254,166.6000	157,254,166.6000	157,254,166.6000
Shell Clingage Factor (bbl/1000 sqft):	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015
Average Organic Liquid Density (lb/gal):	5.6000	5.6000	5.6000	5.6000	5.6000	5.6000	5.6000	5.6000	5.6000	5.6000	5.6000	5.6000
Tank Diameter (ft):	90.0000	90.0000	90.0000	90.0000	90.0000	90.0000	90.0000	90.0000	90.0000	90.0000	90.0000	90.0000
Roof Fitting Losses (lb):	151.6643	174.4503	76.4945	83.6315	87.0523	88.0754	87.5830	87.0861	80.6139	68.7532	128.7061	139.6864
Value of Vapor Pressure:	0.1796	0.1838	0.0614	0.0637	0.0651	0.0670	0.0703	0.0711	0.0695	0.0664	0.1483	0.1793
Function:												
Vapor Molecular Weight (lb/lb-mole):	62.0000	62.0000	69.0000	69.0000	69.0000	69.0000	69.0000	69.0000	69.0000	69.0000	65.0000	62.0000
Product Factor:	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Tot. Roof Fitting Loss Fact. (lb-mole/yr):	163.4451	183.6607	216.7349	228.4810	232.4755	228.4810	216.7349	212.8992	201.6320	180.1885	160.2207	150.7988
Average Wind Speed (mph):	6.0000	6.0000	7.5000	7.8000	7.9000	7.8000	7.5000	7.4000	7.1000	6.5000	5.9000	5.6000
Total Losses (lb):	731.7381	780.9618	520.3819	535.7142	543.3038	548.6699	548.0469	547.6801	533.9291	508.1780	672.2415	705.9859
Roof Fitting/Status:												
Access Hatch (24-in. Diam.)/Bolted Cover, Gasketed												
Automatic Gauge Float Well/Bolted Cover, Gasketed												
Vacuum Breaker (10-in. Diam.)/Weighted Mech. Actuation, Gask.												
Slotted Guide-Pole/Sample Well/Gask. Sliding Cover, w. Float, Wiper												
Roof Leg (3-in. Diameter)/Adjustable, Pontoon Area, Gasketed												
Roof Leg (3-in. Diameter)/Adjustable, Pontoon Area, Gasketed												
Roof Drain (3-in. Diameter)/90% Closed												
Roof Fitting Loss Factors												
Quantity	1	1	1	1	1	1	1	1	1	1	1	1
KFa (lb-mole/yr)	1.60	2.80	6.20	21.00	1.30	0.53	1.80	0.14	0.00	0.00	0.00	0.00
KFb (lb-mole/yr mph ^{0.75})	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Losses (lb)	10.6416	18.6228	75.2245	991.5444	90.8408	44.1828	17.0527	0.00	0.00	0.00	0.00	0.00

TANKS 4.0.9d
Emissions Report - Detail Format
Individual Tank Emission Totals

Emissions Report for: January, February, March, April, May, June, July, August, September, October, November, December

MV-12 PTE - External Floating Roof Tank
San Diego, California

	Losses (lbs)				Total Emissions
	Rim Seal Loss	Withdrawal Loss	Deck Fitting Loss	Deck Seam Loss	
Components					4,283.90
Gasoline (RVP 6)	988.34	2,636.28	659.29	0.00	2,218.69
Gasoline (RVP 13.5)	764.28	988.60	465.80	0.00	672.24
Gasoline (RVP 11.5)	214.00	329.53	128.71	0.00	

TANKS 4.0.9d

Emissions Report - Detail Format

Tank Identification and Physical Characteristics

Identification
 User Identification: MV-13 PTE
 City: San Diego
 State: California
 Company: SFPP, L.P.
 Type of Tank: External Floating Roof Tank
 Description:

Tank Dimensions
 Diameter (ft): 80.00
 Volume (gallons): 1,338,750.00
 Turnovers: 1,409.56

Paint Characteristics
 Internal Shell Condition: Light Rust
 Shell Color/Shade: White/White
 Shell Condition: Good

Roof Characteristics
 Type: Pontoon
 Fitting Category: Detail

Tank Construction and Rim-Seal System
 Construction: Welded
 Primary Seal: Mechanical Shoe
 Secondary Seal: Rim-mounted

Deck Fitting/Status
 Access Hatch (24-in. Diam./Bolted Cover, Gasketed
 Automatic Gauge Float Well/Bolted Cover, Gasketed
 Vacuum Breaker (10-in. Diam./Weighted Mech. Actuation, Gask.
 Slotted Guide-Pole/Sample Well/Gask. Sliding Cover, w. Float, Wiper
 Roof Leg (3-in. Diameter)/Adjustable, Pontoon Area, Gasketed
 Roof Leg (3-in. Diameter)/Adjustable, Center Area, Gasketed
 Roof Drain (3-in. Diameter)/90% Closed
 Sample Pipe or Well (24-in. Diam.)/Slotted Pipe-Sliding Cover, Gask.
 Gauge-Hatch/Sample Well (8-in. Diam.)/Weighted Mech. Actuation, Gask.

Meteorological Data used in Emissions Calculations: San Diego, California (Avg Atmospheric Pressure = 14.7 psia)

Quantity
1
1
1
1
7
8
1
1
1

TANKS 4.0.9d
Emissions Report - Detail Format
Liquid Contents of Storage Tank

MV-13 PTE - External Floating Roof Tank
San Diego, California

Mixture/Component	Month	Daily Liquid Surf. Temperature (deg F)			Liquid Bulk Temp (deg F)	Vapor Pressure (psia)			Vapor Mol. Weight	Liquid Mass Fract.	Vapor Mass Fract.	Mol. Weight	Basis for Vapor Pressure Calculations
		Avg.	Min.	Max.		Avg.	Min.	Max.					
Gasoline (RVP 13.5)	Jan	62.52	58.31	66.73	64.22	7.5910	N/A	N/A	62.0000			92.00	Option 4: RVP=13.5, ASTM Slope=3
Gasoline (RVP 13.5)	Feb	63.40	59.09	67.71	64.22	7.7148	N/A	N/A	62.0000			92.00	Option 4: RVP=13.5, ASTM Slope=3
Gasoline (RVP 6)	Mar	64.27	59.97	68.56	64.22	3.2045	N/A	N/A	69.0000			92.00	Option 4: RVP=6, ASTM Slope=3
Gasoline (RVP 6)	Apr	65.84	61.23	70.45	64.22	3.3091	N/A	N/A	69.0000			92.00	Option 4: RVP=6, ASTM Slope=3
Gasoline (RVP 6)	May	66.83	62.67	70.99	64.22	3.3760	N/A	N/A	69.0000			92.00	Option 4: RVP=6, ASTM Slope=3
Gasoline (RVP 6)	Jun	68.09	63.90	72.27	64.22	3.4829	N/A	N/A	69.0000			92.00	Option 4: RVP=6, ASTM Slope=3
Gasoline (RVP 6)	Jul	70.13	65.63	74.64	64.22	3.6082	N/A	N/A	69.0000			92.00	Option 4: RVP=6, ASTM Slope=3
Gasoline (RVP 6)	Aug	70.66	66.31	75.02	64.22	3.6465	N/A	N/A	69.0000			92.00	Option 4: RVP=6, ASTM Slope=3
Gasoline (RVP 6)	Sep	69.67	65.55	73.79	64.22	3.5749	N/A	N/A	69.0000			92.00	Option 4: RVP=6, ASTM Slope=3
Gasoline (RVP 6)	Oct	67.64	63.52	71.77	64.22	3.4321	N/A	N/A	69.0000			92.00	Option 4: RVP=11.5, ASTM Slope=3
Gasoline (RVP 6)	Nov	64.65	60.48	68.81	64.22	6.6146	N/A	N/A	65.0000			92.00	Option 4: RVP=11.5, ASTM Slope=3
Gasoline (RVP 13.5)	Dec	62.45	58.26	66.64	64.22	7.5918	N/A	N/A	62.0000			92.00	Option 4: RVP=13.5, ASTM Slope=3

TANKS 4.0.9d

Emissions Report - Detail Format

Detail Calculations (AP-42)

MV-13 PTE - External Floating Roof Tank

San Diego, California

Month:	January	February	March	April	May	June	July	August	September	October	November	December
Rim Seal Losses (lb):	222.7013	246.2014	101.6468	108.9314	112.6370	114.7196	116.3814	116.4970	110.0269	97.6800	190.2227	210.4575
Seal Factor A (lb-mole/ft ² -yr):	0.6000	0.6000	0.6000	0.6000	0.6000	0.6000	0.6000	0.6000	0.6000	0.6000	0.6000	0.6000
Seal Factor B (lb-mole/ft ² -yr (mph)	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000
Seal Factor C (lb-mole/ft ² -yr (mph)	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000
Average Wind Speed (mph):	6.0000	6.6000	7.5000	7.8000	7.9000	7.8000	7.5000	7.4000	7.1000	6.5000	5.9000	5.6000
Exponent:	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Seal-related Wind Speed	0.1796	0.1838	0.0614	0.0637	0.0651	0.0670	0.0703	0.0711	0.0695	0.0664	0.1483	0.1793
Value of Vapor Pressure												
Function:												
Vapor Pressure at Daily Average												
Liquid												
Surface Temperature (psia):	7.5910	7.7148	3.2045	3.3091	3.3760	3.4629	3.6082	3.6465	3.5749	3.4321	6.6146	7.5818
Tank Diameter (ft):	80.0000	80.0000	80.0000	80.0000	80.0000	80.0000	80.0000	80.0000	80.0000	80.0000	80.0000	80.0000
Vapor Molecular Weight (lb/lb-mole):	62.0000	62.0000	69.0000	69.0000	69.0000	69.0000	69.0000	69.0000	69.0000	69.0000	65.0000	62.0000
Product Factor:	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Withdrawal Losses (lb):	370.7267	370.7267	370.7267	370.7267	370.7267	370.7267	370.7267	370.7267	370.7267	370.7267	370.7267	370.7267
Net Throughput (gal/mo.):	157.254	166.6000157.254	166.6000157.254	166.6000157.254	166.6000157.254	166.6000157.254	166.6000157.254	166.6000157.254	166.6000157.254	166.6000157.254	166.6000157.254	166.6000157.254
Shell Clingage Factor (lb/l/1000 sqft):	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015
Average Organic Liquid Density (lb/gal):	5.6000	5.6000	5.6000	5.6000	5.6000	5.6000	5.6000	5.6000	5.6000	5.6000	5.6000	5.6000
Tank Diameter (ft):	80.0000	80.0000	80.0000	80.0000	80.0000	80.0000	80.0000	80.0000	80.0000	80.0000	80.0000	80.0000
Roof Fitting Losses (lb):	188.0561	211.6818	90.3180	97.9644	101.7139	103.1699	103.4104	103.1086	96.2784	83.7107	150.2137	176.0289
Value of Vapor Pressure	0.1796	0.1838	0.0614	0.0637	0.0651	0.0670	0.0703	0.0711	0.0695	0.0664	0.1483	0.1793
Function:												
Vapor Molecular Weight (lb/lb-mole):	62.0000	62.0000	69.0000	69.0000	69.0000	69.0000	69.0000	69.0000	69.0000	69.0000	65.0000	62.0000
Product Factor:	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Tot. Roof Fitting Loss Fact. (lb-mole/yr):	202.6637	222.8579	255.9018	267.6381	271.6296	267.6381	255.9018	252.0693	240.8121	219.3892	199.4431	190.0325
Average Wind Speed (mph):	6.0000	6.6000	7.5000	7.8000	7.9000	7.8000	7.5000	7.4000	7.1000	6.5000	5.9000	5.6000
Total Losses (lb):	781.4841	828.6099	562.6915	577.6224	585.0776	588.6162	590.5185	590.3323	577.0320	552.1174	721.1630	757.2131
Roof Fitting/Status												
Access Hatch (24-in. Diam./Bolted Cover, Gasketed												
Automatic Gauge Float Well/Bolted Cover, Gasketed												
Vacuum Breaker (10-in. Diam./Weighted Mech. Actuation, Gask.												
Slotted Guide-Pole/Sample Well/Gask. Sliding Cover, w. Float, Wiper												
Roof Leg (3-in. Diameter)/Adjustable, Pontoon Area, Gasketed												
Roof Leg (3-in. Diameter)/Adjustable, Center Area, Gasketed												
Roof Drain (3-in. Diameter)/90% Closed												
Sample Pipe or Well (24-in. Diam./Slotted Pipe-Sliding Cover, Gask.												
Gauge-Hatch/Sample Well (8-in. Diam./Weighted Mech. Actuation, Gask.												
Roof Fitting Loss Factors												
Quantity	1	1	1	1	1	1	1	1	1	1	1	1
KFa (lb-mole/yr)	1.60	2.80	6.20	21.00	7.90	6.20	1.20	0.00	0.00	0.00	10.6416	10.6416
KFb (lb-mole/yr mph ^{0.5})	1.60	2.80	6.20	21.00	7.90	6.20	1.20	0.00	0.00	0.00	18.6228	18.6228
Losses (lb)	1.60	2.80	6.20	21.00	7.90	6.20	1.20	0.00	0.00	0.00	75.2245	75.2245
Roof Fitting Loss Factors												
Quantity	1	1	1	1	1	1	1	1	1	1	1	1
KFa (lb-mole/yr)	1.60	2.80	6.20	21.00	7.90	6.20	1.20	0.00	0.00	0.00	10.6416	10.6416
KFb (lb-mole/yr mph ^{0.5})	1.60	2.80	6.20	21.00	7.90	6.20	1.20	0.00	0.00	0.00	18.6228	18.6228
Losses (lb)	1.60	2.80	6.20	21.00	7.90	6.20	1.20	0.00	0.00	0.00	75.2245	75.2245

TANKS 4.0.9d
Emissions Report - Detail Format
Individual Tank Emission Totals

Emissions Report for: January, February, March, April, May, June, July, August, September, October, November, December

MV-13 PTE - External Floating Roof Tank
San Diego, California

	Losses(lbs)				Total Emissions
	Rim Seal Loss	Withdrawal Loss	Deck Fitting Loss	Deck Seam Loss	
Components					4,624.01
Gasoline (RVP 6)	878.52	2,965.81	779.67	0.00	
Gasoline (RVP 13.5)	679.36	1,112.18	575.77	0.00	2,367.31
Gasoline (RVP 11.5)	190.22	370.73	160.21	0.00	721.16

TANKS 4.0.9d
Emissions Report - Detail Format
Tank Identification and Physical Characteristics

Identification

User Identification: MV-14 PTE
City: San Diego
State: California
Company: SFPP, L.P.
Type of Tank: Internal Floating Roof Tank
Description:

Tank Dimensions

Diameter (ft): 61.50
Volume (gallons): 840,000.00
Turnovers: 2,246.49
Self Supp. Roof? (y/n): N
No. of Columns: 1.00
Eff. Col. Diam. (ft): 1.00

Paint Characteristics

Internal Shell Condition: Light Rust
Shell Color/Shade: White/White
Shell Condition: Good
Roof Color/Shade: White/White
Roof Condition: Good

Rim-Seal System

Primary Seal: Mechanical Shoe
Secondary Seal: Rim-mounted

Deck Characteristics

Deck Fitting Category: Detail
Deck Type: Welded

Deck Fitting/Status

	Quantity
Access Hatch (24-in. Diam.)/Bolted Cover, Gasketed	1
Automatic Gauge Float Well/Bolted Cover, Gasketed	1
Column Well (24-in. Diam.)/Built-Up Col.-Sliding Cover, Gask.	1
Ladder Well (36-in. Diam.)/Sliding Cover, Gasketed	1
Roof Leg or Hanger Well/Adjustable	15
Sample Pipe or Well (24-in. Diam.)/Slotted Pipe-Sliding Cover, Gask.	1
Vacuum Breaker (10-in. Diam.)/Weighted Mech. Actuation, Gask.	1
Slotted Guide-Pole/Sample Well/Gask. Sliding Cover, w. Float, Wiper	1
Gauge-Hatch/Sample Well (8-in. Diam.)/Weighted Mech. Actuation, Gask.	1

Meteorological Data used in Emissions Calculations: San Diego, California (Avg Atmospheric Pressure = 14.7 psia)

TANKS 4.0.9d

Emissions Report - Detail Format

Liquid Contents of Storage Tank

MV-14 PTE - Internal Floating Roof Tank San Diego, California

Mixture/Component	Month	Daily Liquid Surf. Temperature (deg F)			Liquid Bulk Temp (deg F)	Vapor Pressure (psia)			Vapor Mol. Weight	Liquid Mass Fract.	Vapor Mass Fract.	Mol. Weight	Basis for Vapor Pressure Calculations
		Avg.	Min.	Max.		Avg.	Min.	Max.					
Gasoline (RVP 13.5)	Jan	62.52	58.31	66.73	64.22	7.5910	N/A	N/A	62.0000			92.00	Option 4: RVP=13.5, ASTM Slope=3
Gasoline (RVP 13.5)	Feb	63.40	59.09	67.71	64.22	7.7148	N/A	N/A	62.0000			92.00	Option 4: RVP=13.5, ASTM Slope=3
Gasoline (RVP 6)	Mar	64.27	59.97	68.56	64.22	3.2045	N/A	N/A	69.0000			92.00	Option 4: RVP=6, ASTM Slope=3
Gasoline (RVP 6)	Apr	65.84	61.23	70.45	64.22	3.3091	N/A	N/A	69.0000			92.00	Option 4: RVP=6, ASTM Slope=3
Gasoline (RVP 6)	May	66.83	62.67	70.99	64.22	3.3760	N/A	N/A	69.0000			92.00	Option 4: RVP=6, ASTM Slope=3
Gasoline (RVP 6)	Jun	68.09	63.90	72.27	64.22	3.4629	N/A	N/A	69.0000			92.00	Option 4: RVP=6, ASTM Slope=3
Gasoline (RVP 6)	Jul	70.13	65.63	74.64	64.22	3.6082	N/A	N/A	69.0000			92.00	Option 4: RVP=6, ASTM Slope=3
Gasoline (RVP 6)	Aug	70.66	66.31	75.02	64.22	3.6465	N/A	N/A	69.0000			92.00	Option 4: RVP=6, ASTM Slope=3
Gasoline (RVP 6)	Sep	69.67	65.55	73.79	64.22	3.5749	N/A	N/A	69.0000			92.00	Option 4: RVP=6, ASTM Slope=3
Gasoline (RVP 6)	Oct	67.64	63.52	71.77	64.22	3.4321	N/A	N/A	69.0000			92.00	Option 4: RVP=6, ASTM Slope=3
Gasoline (RVP 11.5)	Nov	64.65	60.48	68.81	64.22	6.6146	N/A	N/A	65.0000			92.00	Option 4: RVP=11.5, ASTM Slope=3
Gasoline (RVP 13.5)	Dec	62.45	58.26	66.64	64.22	7.5818	N/A	N/A	62.0000			92.00	Option 4: RVP=13.5, ASTM Slope=3

Roof Fitting/Status	Quantity	kFa (lb-mole/yr)	Roof Fitting Loss Factors kFa (lb-mole/yr mph ^{1/2} n)	m	Losses (lb)
Access Hatch (24-in. Diam.) Bolted Cover, Gasketed	1	1.60	0.00	0.00	10.6416
Automatic Gauge Float Well/Bolted Cover, Gasketed	1	2.80	0.00	0.00	18.6228
Column Well (24-in. Diam.) Built-Up Col.-Sliding Cover, Gask.	1	33.00	0.00	0.00	219.4831
Ladder Well (36-in. Diam.) Sliding Cover, Gasketed	1	56.00	0.00	0.00	372.4561
Roof Leg or Hanger Well/Adjustable	15	7.90	0.00	0.00	788.1437
Sample Pipe or Well (24-in. Diam.) Slotted Pipe-Sliding Cover, Gask.	1	43.00	0.00	0.00	285.9931
Vacuum Breaker (10-in. Diam.) Weighted Mech. Actuation, Gask.	1	6.20	1.20	0.94	41.2362
Slotted Guide-Pipe/Sample Well/Gask. Sliding Cover, w. Float, Wiper	1	21.00	7.90	1.80	139.6710
	1	0.47	0.02	0.97	3.1260

TANKS 4.0.9d
Emissions Report - Detail Format
Individual Tank Emission Totals

Emissions Report for: January, February, March, April, May, June, July, August, September, October, November, December

MV-14 PTE - Internal Floating Roof Tank
San Diego, California

Components	Losses (lbs)				Total Emissions
	Rim Seal Loss	Withdrawal Loss	Deck Fitting Loss	Deck Seam Loss	
Gasoline (RVP 13.5)	103.47	1,470.26	792.35	0.00	2,366.08
Gasoline (RVP 6)	113.41	3,920.70	868.46	0.00	4,902.57
Gasoline (RVP 11.5)	29.64	490.09	226.99	0.00	746.72

TANKS 4.0.9d

Emissions Report - Detail Format

Tank Identification and Physical Characteristics

Identification
User Identification: MV-15 PTE
City: San Diego
State: California
Company: SFPP, L.P.
Type of Tank: Internal Floating Roof Tank
Description:

Tank Dimensions
Diameter (ft): 60.00
Volume (gallons): 726,600.00
Turnovers: 2,597.10
Self Supp. Roof? (y/n): N
No. of Columns: 1.00
Eff. Col. Diam. (ft): 1.00

Paint Characteristics
Internal Shell Condition: Light Rust
Shell Color/Shade: White/White
Shell Condition: Good
Roof Color/Shade: White/White
Roof Condition: Good

Rim-Seal System
Primary Seal: Mechanical Shoe
Secondary Seal: Rim-mounted

Deck Characteristics
Deck Fitting Category: Detail
Deck Type: Welded

Deck Fitting/Status	Quantity
Access Hatch (24-in. Diam.)/Bolted Cover, Gasketed	1
Automatic Gauge Float Well/Bolted Cover, Gasketed	1
Column Well (24-in. Diam.)/Built-Up Col.-Sliding Cover, Gask.	1
Ladder Well (36-in. Diam.)/Sliding Cover, Gasketed	1
Roof Leg or Hanger Well/Adjustable	12
Sample Pipe or Well (24-in. Diam.)/Slotted Pipe-Sliding Cover, Gask.	1
Vacuum Breaker (10-in. Diam.)/Weighted Mech. Actuation, Gask.	1
Slotted Guide-Pole/Sample Well/Gask. Sliding Cover, w. Float, Wiper	1
Gauge-Hatch/Sample Well (8-in. Diam.)/Weighted Mech. Actuation, Gask.	1

Meteorological Data used in Emissions Calculations: San Diego, California (Avg Atmospheric Pressure = 14.7 psia)

TANKS 4.0.9d

Emissions Report - Detail Format

Liquid Contents of Storage Tank

MV-15 PTE - Internal Floating Roof Tank
San Diego, California

Mixture/Component	Month	Daily Liquid Surf. Temperature (deg F)			Liquid Bulk Temp (deg F)	Vapor Pressure (psia)			Vapor Mol. Weight	Liquid Mass Fract.	Vapor Mass Fract.	Mol. Weight	Basis for Vapor Pressure Calculations
		Avg.	Min.	Max.		Avg.	Min.	Max.					
Gasoline (RVP 13.5)	Jan	62.52	58.31	66.73	64.22	7.5910	N/A	N/A	62.0000			92.00	Option 4: RVP=13.5, ASTM Slope=3
Gasoline (RVP 13.5)	Feb	63.40	59.09	67.71	64.22	7.7148	N/A	N/A	62.0000			92.00	Option 4: RVP=13.5, ASTM Slope=3
Gasoline (RVP 6)	Mar	64.27	59.97	68.56	64.22	3.2045	N/A	N/A	69.0000			92.00	Option 4: RVP=6, ASTM Slope=3
Gasoline (RVP 6)	Apr	65.84	61.23	70.45	64.22	3.3091	N/A	N/A	69.0000			92.00	Option 4: RVP=6, ASTM Slope=3
Gasoline (RVP 6)	May	66.83	62.67	70.99	64.22	3.3760	N/A	N/A	69.0000			92.00	Option 4: RVP=6, ASTM Slope=3
Gasoline (RVP 6)	Jun	68.09	63.90	72.27	64.22	3.4629	N/A	N/A	69.0000			92.00	Option 4: RVP=6, ASTM Slope=3
Gasoline (RVP 6)	Jul	70.13	65.63	74.64	64.22	3.6082	N/A	N/A	69.0000			92.00	Option 4: RVP=6, ASTM Slope=3
Gasoline (RVP 6)	Aug	70.66	66.31	75.02	64.22	3.6465	N/A	N/A	69.0000			92.00	Option 4: RVP=6, ASTM Slope=3
Gasoline (RVP 6)	Sep	69.67	65.55	73.79	64.22	3.5749	N/A	N/A	69.0000			92.00	Option 4: RVP=6, ASTM Slope=3
Gasoline (RVP 6)	Oct	67.64	63.52	71.77	64.22	3.4321	N/A	N/A	69.0000			92.00	Option 4: RVP=6, ASTM Slope=3
Gasoline (RVP 11.5)	Nov	64.65	60.48	68.81	64.22	6.6146	N/A	N/A	65.0000			92.00	Option 4: RVP=11.5, ASTM Slope=3
Gasoline (RVP 13.5)	Dec	62.45	58.26	66.64	64.22	7.5818	N/A	N/A	62.0000			92.00	Option 4: RVP=13.5, ASTM Slope=3

TANKS 4.0.9d

Emissions Report - Detail Format

Detail Calculations (AP-42)

MV-15 PTE - Internal Floating Roof Tank

San Diego, California

Month:	January	February	March	April	May	June	July	August	September	October	November	December
Rim Seal Losses (lb):	33.4052	34.1946	12.7058	13.1772	13.4805	13.8774	14.5477	14.7257	14.3931	13.7363	28.9190	33.3471
Seal Factor A (lb-mole/ft-yr):	0.6000	0.6000	0.6000	0.6000	0.6000	0.6000	0.6000	0.6000	0.6000	0.6000	0.6000	0.6000
Seal Factor B (lb-mole/ft-yr (mph) ^n):	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000
Value of Vapor Pressure Function:	0.1796	0.1838	0.0614	0.0637	0.0651	0.0670	0.0703	0.0711	0.0695	0.0664	0.1483	0.1793
Vapor Pressure at Daily Average Liquid												
Surface Temperature (psia):	7.5910	7.7148	3.2045	3.3091	3.3760	3.4829	3.6082	3.6465	3.5749	3.4321	6.6146	7.5818
Tank Diameter (ft):	60.0000	60.0000	60.0000	60.0000	60.0000	60.0000	60.0000	60.0000	60.0000	60.0000	60.0000	60.0000
Vapor Molecular Weight (lb/lb-mole):	62.0000	62.0000	69.0000	69.0000	69.0000	69.0000	69.0000	69.0000	69.0000	69.0000	65.0000	62.0000
Product Factor:	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Withdrawal Losses (lb):	502.5406	502.5406	502.5406	502.5406	502.5406	502.5406	502.5406	502.5406	502.5406	502.5406	502.5406	502.5406
Number of Columns:	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Effective Column Diameter (ft):	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Net Throughput (galmo.):	157,254,166.6000	157,254,166.6000	157,254,166.6000	157,254,166.6000	157,254,166.6000	157,254,166.6000	157,254,166.6000	157,254,166.6000	157,254,166.6000	157,254,166.6000	157,254,166.6000	157,254,166.6000
Shell Clingage Factor (bbl/1000 sqft):	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015
Average Organic Liquid Density (lb/gal):	5.6000	5.6000	5.6000	5.6000	5.6000	5.6000	5.6000	5.6000	5.6000	5.6000	5.6000	5.6000
Tank Diameter (ft):	60.0000	60.0000	60.0000	60.0000	60.0000	60.0000	60.0000	60.0000	60.0000	60.0000	60.0000	60.0000
Deck Fitting Losses (lb):	240.2112	245.8880	91.3656	94.7549	96.9360	99.7899	104.6098	105.8904	103.4981	98.7751	207.9516	239.7938
Value of Vapor Pressure Function:	0.1796	0.1838	0.0614	0.0637	0.0651	0.0670	0.0703	0.0711	0.0695	0.0664	0.1483	0.1793
Vapor Molecular Weight (lb/lb-mole):	62.0000	62.0000	69.0000	69.0000	69.0000	69.0000	69.0000	69.0000	69.0000	69.0000	65.0000	62.0000
Product Factor:	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Tot. Roof Fitting Loss Fact. (lb-mole/yr):	258.8700	258.8700	258.8700	258.8700	258.8700	258.8700	258.8700	258.8700	258.8700	258.8700	258.8700	258.8700
Deck Seam Losses (lb):	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Deck Seam Length (ft):	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Deck Seam Loss per Unit Length Factor (lb-mole/ft-yr):	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Deck Seam Length Factor (ft/sqft):	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Tank Diameter (ft):	60.0000	60.0000	60.0000	60.0000	60.0000	60.0000	60.0000	60.0000	60.0000	60.0000	60.0000	60.0000
Vapor Molecular Weight (lb/lb-mole):	62.0000	62.0000	69.0000	69.0000	69.0000	69.0000	69.0000	69.0000	69.0000	69.0000	65.0000	62.0000
Product Factor:	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total Losses (lb):	776.1570	782.6233	606.6121	610.4728	612.9571	616.2079	621.6982	623.1588	620.4318	615.0520	739.4112	775.6815
Roof Fitting/Status												
Access Hatch (24-in. Diam./Bolted Cover, Gasketed	1						1.60	0.00	0.00	0.00	10.6416	
Automatic Gauge Float Well/Bolted Cover, Gasketed	1						2.80	0.00	0.00	0.00	18.6228	
Column Well (24-in. Diam./Built-Up Col.-Sliding Cover, Gask.	1						33.00	0.00	0.00	0.00	219.4831	
Ladder Well (36-in. Diam./Sliding Cover, Gasketed	12						56.00	0.00	0.00	0.00	372.4561	
Roof Leg or Hanger Well/Adjustable	1						7.90	0.00	0.00	0.00	630.5150	
Sample Pipe or Well (24-in. Diam./Slotted Pipe-Sliding Cover, Gask.	1						43.00	0.00	0.00	0.00	285.9931	
Vacuum Breaker (10-in. Diam./Weighted Mech. Actuation, Gask.	1						6.20	0.00	0.00	0.94	41.2362	
Slotted Guide-Pole/Sample Well/Gask. Sliding Cover, w. Float, Wiper	1						21.00	7.90	1.20	1.80	139.6710	
Gauge-Hatch/Sample Well (8-in. Diam./Weighted Mech. Actuation, Gask.	1						0.47	0.02	0.97	0.97	3.1260	

TANKS 4.0.9d
Emissions Report - Detail Format
Individual Tank Emission Totals

Emissions Report for: January, February, March, April, May, June, July, August, September, October, November, December
MV-15 PTE - Internal Floating Roof Tank
San Diego, California

Components	Losses(lbs)				Total Emissions
	Rim Seal Loss	Withdrawal Loss	Deck Fitting Loss	Deck Seam Loss	
Gasoline (RVP 13.5)	100.95	1,507.62	725.89	0.00	2,334.46
Gasoline (RVP 6)	110.64	4,020.33	795.62	0.00	4,926.59
Gasoline (RVP 11.5)	28.92	502.54	207.95	0.00	739.41

TANKS 4.0.9d

Emissions Report - Detail Format

Tank Identification and Physical Characteristics

Identification

User Identification: MV-16 PTE
 City: San Diego
 State: California
 Company: SFPP, L.P.
 Type of Tank: Internal Floating Roof Tank
 Description:

Tank Dimensions

Diameter (ft): 60.00
 Volume (gallons): 747,978.00
 Turnovers: 2,522.87
 Self Supp. Roof? (y/n): N
 No. of Columns: 1.00
 Eff. Col. Diam. (ft): 1.00

Paint Characteristics

Internal Shell Condition: Light Rust
 Shell Color/Shade: White/White
 Shell Condition: Good
 Roof Color/Shade: White/White
 Roof Condition: Good

Rim-Seal System

Primary Seal: Mechanical Shoe
 Secondary Seal: Rim-mounted

Deck Characteristics

Deck Fitting Category: Detail
 Deck Type: Welded

Deck Fitting/Status

	Quantity
Access Hatch (24-in. Diam.)/Bolted Cover, Gasketed	1
Automatic Gauge Float Well/Bolted Cover, Gasketed	1
Column Well (24-in. Diam.)/Built-Up Col.-Sliding Cover, Gask.	1
Ladder Well (36-in. Diam.)/Sliding Cover, Gasketed	1
Roof Leg or Hanger Well/Adjustable	16
Sample Pipe or Well (24-in. Diam.)/Slotted Pipe-Sliding Cover, Gask.	1
Vacuum Breaker (10-in. Diam.)/Weighted Mech. Actuation, Gask.	1
Slotted Guide-Pole/Sample Well/Gask. Sliding Cover w. Float, Wiper	1
Gauge-Hatch/Sample Well (8-in. Diam.)/Weighted Mech. Actuation, Gask.	1

Meteorological Data used in Emissions Calculations: San Diego, California (Avg Atmospheric Pressure = 14.7 psia)

TANKS 4.0.9d Emissions Report - Detail Format Liquid Contents of Storage Tank

MV-16 PTE - Internal Floating Roof Tank
San Diego, California

Mixture/Component	Month	Daily Liquid Surf. Temperature (deg F)		Liquid Bulk Temp (deg F)	Vapor Pressure (psia)			Vapor Mol. Weight	Liquid Mass Fract.	Vapor Mass Fract.	Mol. Weight	Basis for Vapor Pressure Calculations
		Avg.	Min.	Max.	Avg.	Min.	Max.					
Gasoline (RVP 13.5)	Jan	62.52	58.31	66.73	7.5910	N/A	N/A	62.0000			92.00	Option 4: RVP=13.5, ASTM Slope=3
Gasoline (RVP 13.5)	Feb	63.40	59.09	67.71	7.7148	N/A	N/A	62.0000			92.00	Option 4: RVP=13.5, ASTM Slope=3
Gasoline (RVP 6)	Mar	64.27	59.97	68.56	3.2045	N/A	N/A	69.0000			92.00	Option 4: RVP=6, ASTM Slope=3
Gasoline (RVP 6)	Apr	65.84	61.23	70.45	3.3091	N/A	N/A	69.0000			92.00	Option 4: RVP=6, ASTM Slope=3
Gasoline (RVP 6)	May	66.83	62.67	70.99	3.3760	N/A	N/A	69.0000			92.00	Option 4: RVP=6, ASTM Slope=3
Gasoline (RVP 6)	Jun	68.09	63.90	72.27	3.4629	N/A	N/A	69.0000			92.00	Option 4: RVP=6, ASTM Slope=3
Gasoline (RVP 6)	Jul	70.13	65.63	74.64	3.6082	N/A	N/A	69.0000			92.00	Option 4: RVP=6, ASTM Slope=3
Gasoline (RVP 6)	Aug	70.66	66.31	75.02	3.6465	N/A	N/A	69.0000			92.00	Option 4: RVP=6, ASTM Slope=3
Gasoline (RVP 6)	Sep	69.67	65.55	73.79	3.5749	N/A	N/A	69.0000			92.00	Option 4: RVP=6, ASTM Slope=3
Gasoline (RVP 6)	Oct	67.64	63.52	71.77	3.4321	N/A	N/A	69.0000			92.00	Option 4: RVP=6, ASTM Slope=3
Gasoline (RVP 11.5)	Nov	64.65	60.48	68.81	6.6146	N/A	N/A	65.0000			92.00	Option 4: RVP=11.5, ASTM Slope=3
Gasoline (RVP 13.5)	Dec	62.45	58.26	66.64	7.5818	N/A	N/A	62.0000			92.00	Option 4: RVP=13.5, ASTM Slope=3

TANKS 4.0.9d

Emissions Report - Detail Format

Detail Calculations (AP-42)

MV-16 PTE - Internal Floating Roof Tank

San Diego, California

Month:	January	February	March	April	May	June	July	August	September	October	November	December
Rim Seal Losses (lb):	33.4052	34.1946	12.7058	13.1772	13.4805	13.8774	14.5477	14.7257	14.3931	13.7363	28.9190	33.3471
Seal Factor A (lb-mole/ft-yr):	0.6000	0.6000	0.6000	0.6000	0.6000	0.6000	0.6000	0.6000	0.6000	0.6000	0.6000	0.6000
Seal Factor B (lb-mole/ft-yr (mph)):	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000
Value of Vapor Pressure:	0.1796	0.1838	0.0614	0.0637	0.0651	0.0670	0.0703	0.0711	0.0695	0.0664	0.1483	0.1793
Function:												
Vapor Pressure at Daily Average:												
Liquid:												
Surface Temperature (psia):	7.5910	7.7148	3.2045	3.3091	3.3760	3.4629	3.6082	3.6465	3.5749	3.4321	6.6146	7.5918
Tank Diameter (ft):	60.0000	60.0000	60.0000	60.0000	60.0000	60.0000	60.0000	60.0000	60.0000	60.0000	60.0000	60.0000
Vapor Molecular Weight (lb/lb-mole):	62.0000	62.0000	69.0000	69.0000	69.0000	69.0000	69.0000	69.0000	69.0000	69.0000	65.0000	62.0000
Product Factor:	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Withdrawal Losses (lb):	502.5406	502.5406	502.5406	502.5406	502.5406	502.5406	502.5406	502.5406	502.5406	502.5406	502.5406	502.5406
Number of Columns:	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Effective Column Diameter (ft):	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Net Throughput (gal/min):	157,254,166.6000	157,254,166.6000	157,254,166.6000	157,254,166.6000	157,254,166.6000	157,254,166.6000	157,254,166.6000	157,254,166.6000	157,254,166.6000	157,254,166.6000	157,254,166.6000	157,254,166.6000
Shell Clingage Factor (bbl/1000 sqft):	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015
Average Organic Liquid Density (lb/gal):	5.6000	5.6000	5.6000	5.6000	5.6000	5.6000	5.6000	5.6000	5.6000	5.6000	5.6000	5.6000
Tank Diameter (ft):	60.0000	60.0000	60.0000	60.0000	60.0000	60.0000	60.0000	60.0000	60.0000	60.0000	60.0000	60.0000
Deck Fitting Losses (lb):	269.5335	275.9033	102.5185	106.3216	108.7688	111.9711	117.3795	118.8163	116.1320	110.8325	233.3361	269.0651
Function:												
Value of Vapor Pressure:	0.1796	0.1838	0.0614	0.0637	0.0651	0.0670	0.0703	0.0711	0.0695	0.0664	0.1483	0.1793
Vapor Molecular Weight (lb/lb-mole):	62.0000	62.0000	69.0000	69.0000	69.0000	69.0000	69.0000	69.0000	69.0000	69.0000	65.0000	62.0000
Product Factor:	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Tot. Roof Fitting Loss Fact. (lb-mole/yr):	290.4700	290.4700	290.4700	290.4700	290.4700	290.4700	290.4700	290.4700	290.4700	290.4700	290.4700	290.4700
Deck Seam Losses (lb):	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Deck Seam Length (ft):	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Deck Seam Loss per Unit Length Factor (lb-mole/ft-yr):	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Deck Seam Length Factor (ft/sqft):	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Tank Diameter (ft):	60.0000	60.0000	60.0000	60.0000	60.0000	60.0000	60.0000	60.0000	60.0000	60.0000	60.0000	60.0000
Vapor Molecular Weight (lb/lb-mole):	62.0000	62.0000	69.0000	69.0000	69.0000	69.0000	69.0000	69.0000	69.0000	69.0000	65.0000	62.0000
Product Factor:	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total Losses (lb):	805.4793	812.6386	617.7650	622.0394	624.7900	628.3891	634.4678	636.0827	633.0657	627.1094	764.7957	804.9529
Roof Fitting/Status					Quantity	KFa (lb-mole/yr)	KFb (lb-mole/(yr mph^n))	Roof Fitting Loss Factors				
Access Hatch (24-in. Diam.)/Boiled Cover, Gasketed					1	1.60	0.00	0.00	0.00	0.00	10.6416	10.6416
Automatic Gauge Float Well/Boiled Cover, Gasketed					1	2.80	0.00	0.00	0.00	0.00	18.6228	18.6228
Column Well (24-in. Diam.)/Built-Up Col-Sliding Cover, Gask.					1	33.00	0.00	0.00	0.00	0.00	219.4831	219.4831
Ladder Well (36-in. Diam.)/Sliding Cover, Gasketed					16	56.00	0.00	0.00	0.00	0.00	372.4561	372.4561
Root Leg or Hanger Well/Adjustable					1	7.90	0.00	0.00	0.00	0.00	840.8866	840.8866
Sample Pipe or Well (24-in. Diam.)/Slotted Pipe-Sliding Cover, Gask.					1	43.00	0.00	0.00	0.00	0.00	285.9831	285.9831
Vacuum Breaker (10-in. Diam.)/Weighted Mech. Actuation, Gask.					1	6.20	1.20	0.00	0.94	0.94	41.2362	41.2362
Slotted Guide-Pole/Sample Well/Gask. Sliding Cover, w. Float, Wiper					1	21.00	7.90	1.80	1.80	1.80	139.6710	139.6710
Gauge-Hatch/Sample Well (8-in. Diam.)/Weighted Mech. Actuation, Gask.					1	0.47	0.02	0.02	0.02	0.97	3.1260	3.1260

TANKS 4.0.9d
Emissions Report - Detail Format
Individual Tank Emission Totals

Emissions Report for: January, February, March, April, May, June, July, August, September, October, November, December

MV-16 PTE - Internal Floating Roof Tank
San Diego, California

Components	Losses(lbs)				Total Emissions
	Rim Seal Loss	Withdrawal Loss	Deck Fitting Loss	Deck Seam Loss	
Gasoline (RVP 13.5)	100.95	1,507.62	814.50	0.00	2,423.07
Gasoline (RVP 6)	110.64	4,020.33	892.74	0.00	5,023.71
Gasoline (RVP 11.5)	28.92	502.54	233.34	0.00	764.80

TANKS 4.0.9d
Emissions Report - Detail Format
Tank Identification and Physical Characteristics

Identification

User Identification: MV-17 PTE
City: San Diego
State: California
Company: SFPP, L.P.
Type of Tank: Vertical Fixed Roof Tank
Description:

Tank Dimensions

Shell Height (ft): 40.00
Diameter (ft): 60.00
Liquid Height (ft): 32.08
Avg. Liquid Height (ft): 16.04
Volume (gallons): 678,426.00
Turnovers: 2,781.51
Net Throughput(gal/yr): 1,887,050,000.00
Is Tank Heated (Y/N): N

Paint Characteristics

Shell Color/Shade: White/White
Shell Condition: Good
Roof Color/Shade: White/White
Roof Condition: Good

Roof Characteristics

Type: Cone
Height (ft): 1.88
Slope (ft/ft) (Cone Roof): 0.06

Breather Vent Settings

Vacuum Settings (psig): -0.03
Pressure Settings (psig): 0.03

Meteorological Data used in Emissions Calculations: San Diego, California (Avg Atmospheric Pressure = 14.7 psia)

TANKS 4.0.9d

Emissions Report - Detail Format

Liquid Contents of Storage Tank

MV-17 PTE - Vertical Fixed Roof Tank
San Diego, California

Mixture/Component	Month	Daily Liquid Surf. Temperature (deg F)			Liquid Bulk Temp (deg F)	Vapor Pressure (psia)			Vapor Mol. Weight	Liquid Mass Fract.	Vapor Mass Fract.	Mol. Weight	Basis for Vapor Pressure Calculations
		Avg.	Min.	Max.		Avg.	Min.	Max.					
Distillate fuel oil no. 2	Jan	62.52	58.31	66.73	64.22	0.0071	0.0062	0.0082	130.0000			188.00	Option 1: VP60 = .0065 VP70 = .009
Distillate fuel oil no. 2	Feb	63.40	59.09	67.71	64.22	0.0074	0.0063	0.0084	130.0000			188.00	Option 1: VP60 = .0065 VP70 = .009
Distillate fuel oil no. 2	Mar	64.27	59.97	68.56	64.22	0.0076	0.0065	0.0086	130.0000			188.00	Option 1: VP60 = .0065 VP70 = .009
Distillate fuel oil no. 2	Apr	65.84	61.23	70.45	64.22	0.0080	0.0068	0.0091	130.0000			188.00	Option 1: VP60 = .0065 VP70 = .009
Distillate fuel oil no. 2	May	66.83	62.67	70.99	64.22	0.0082	0.0072	0.0093	130.0000			188.00	Option 1: VP60 = .0065 VP70 = .009
Distillate fuel oil no. 2	Jun	68.09	63.90	72.27	64.22	0.0085	0.0075	0.0097	130.0000			188.00	Option 1: VP60 = .0065 VP70 = .009
Distillate fuel oil no. 2	Jul	70.13	65.63	74.64	64.22	0.0090	0.0079	0.0104	130.0000			188.00	Option 1: VP70 = .009 VP80 = .012
Distillate fuel oil no. 2	Aug	70.66	66.31	75.02	64.22	0.0092	0.0081	0.0105	130.0000			188.00	Option 1: VP60 = .0065 VP70 = .009
Distillate fuel oil no. 2	Sep	69.67	65.55	73.79	64.22	0.0089	0.0079	0.0101	130.0000			188.00	Option 1: VP60 = .0065 VP70 = .009
Distillate fuel oil no. 2	Oct	67.64	63.52	71.77	64.22	0.0084	0.0074	0.0095	130.0000			188.00	Option 1: VP60 = .0065 VP70 = .009
Distillate fuel oil no. 2	Nov	64.65	60.48	68.81	64.22	0.0077	0.0066	0.0087	130.0000			188.00	Option 1: VP60 = .0065 VP70 = .009
Distillate fuel oil no. 2	Dec	62.45	58.26	66.64	64.22	0.0071	0.0062	0.0082	130.0000			188.00	Option 1: VP60 = .0065 VP70 = .009

TANKS 4.0.9d

Emissions Report - Detail Format

Detail Calculations (AP-42)

MV-17 PTE - Vertical Fixed Roof Tank

San Diego, California

Month:	January	February	March	April	May	June	July	August	September	October	November	December
Standing Losses (lb):	10.0075	9.5265	10.7707	11.8043	11.1416	11.2201	13.2843	12.9387	11.4504	11.2882	10.1784	9.9228
Vapor Space Volume (cu ft):	69,517.1622	69,517.1622	69,517.1622	69,517.1622	69,517.1622	69,517.1622	69,517.1622	69,517.1622	69,517.1622	69,517.1622	69,517.1622	69,517.1622
Vapor Density (lb/cu ft):	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002
Vapor Space Expansion Factor:	0.0283	0.0290	0.0288	0.0312	0.0277	0.0278	0.0301	0.0289	0.0272	0.0274	0.0278	0.0282
Vented Vapor Saturation Factor:	0.9908	0.9905	0.9902	0.9897	0.9894	0.9890	0.9884	0.9882	0.9885	0.9892	0.9901	0.9908
Tank Vapor Space Volume	69,517.1622	69,517.1622	69,517.1622	69,517.1622	69,517.1622	69,517.1622	69,517.1622	69,517.1622	69,517.1622	69,517.1622	69,517.1622	69,517.1622
Vapor Space Volume (cu ft):	60.0000	60.0000	60.0000	60.0000	60.0000	60.0000	60.0000	60.0000	60.0000	60.0000	60.0000	60.0000
Tank Diameter (ft):	24.5867	24.5867	24.5867	24.5867	24.5867	24.5867	24.5867	24.5867	24.5867	24.5867	24.5867	24.5867
Vapor Space Outage (ft):	40.0000	40.0000	40.0000	40.0000	40.0000	40.0000	40.0000	40.0000	40.0000	40.0000	40.0000	40.0000
Tank Shell Height (ft):	16.0400	16.0400	16.0400	16.0400	16.0400	16.0400	16.0400	16.0400	16.0400	16.0400	16.0400	16.0400
Average Liquid Height (ft):	0.6267	0.6267	0.6267	0.6267	0.6267	0.6267	0.6267	0.6267	0.6267	0.6267	0.6267	0.6267
Roof Outage (ft):	0.6267	0.6267	0.6267	0.6267	0.6267	0.6267	0.6267	0.6267	0.6267	0.6267	0.6267	0.6267
Roof Outage (Cone Roof)	0.6267	0.6267	0.6267	0.6267	0.6267	0.6267	0.6267	0.6267	0.6267	0.6267	0.6267	0.6267
Roof Height (ft):	1.8800	1.8800	1.8800	1.8800	1.8800	1.8800	1.8800	1.8800	1.8800	1.8800	1.8800	1.8800
Roof Slope (ft/ft):	0.0625	0.0625	0.0625	0.0625	0.0625	0.0625	0.0625	0.0625	0.0625	0.0625	0.0625	0.0625
Shell Radius (ft):	30.0000	30.0000	30.0000	30.0000	30.0000	30.0000	30.0000	30.0000	30.0000	30.0000	30.0000	30.0000
Vapor Density	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002
Vapor Density (lb/cu ft):	130.0000	130.0000	130.0000	130.0000	130.0000	130.0000	130.0000	130.0000	130.0000	130.0000	130.0000	130.0000
Vapor Molecular Weight (lb/lb-mole):												
Vapor Pressure at Daily Average												
Liquid												
Surface Temperature (psia):	0.0071	0.0074	0.0076	0.0080	0.0082	0.0085	0.0090	0.0092	0.0089	0.0084	0.0077	0.0071
Daily Avg. Liquid Surface Temp. (deg. R):	522.1894	523.0702	523.9369	525.5130	526.4988	527.7568	529.8043	530.3327	529.3403	527.3135	524.3186	522.1237
Daily Average Ambient Temp. (deg. F):	57.4000	58.6000	59.5500	62.0000	64.1000	66.7500	70.9500	72.5500	71.3500	67.7500	61.9000	57.4500
Ideal Gas Constant R (psia cu ft / (lb-mol-deg R)):	10.731	10.731	10.731	10.731	10.731	10.731	10.731	10.731	10.731	10.731	10.731	10.731
Liquid Bulk Temperature (deg. R):	523.8858	523.8858	523.8858	523.8858	523.8858	523.8858	523.8858	523.8858	523.8858	523.8858	523.8858	523.8858
Tank Paint Solar Absorptance (Shell):	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700
Tank Paint Solar Absorptance (Roof):	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700	0.1700
Daily Total Solar Insulation Factor (Btu/sq ft day):	969.8944	1,232.5940	1,566.6793	1,937.5679	1,983.5720	2,052.1024	2,200.5647	2,069.8695	1,724.0452	1,394.4017	1,080.9389	904.5368
Vapor Space Expansion Factor	0.0283	0.0290	0.0288	0.0312	0.0277	0.0278	0.0301	0.0289	0.0272	0.0274	0.0278	0.0282
Vapor Space Expansion Factor: (deg. R):	16.8567	17.2431	17.1774	18.4388	16.6418	16.7520	18.0348	17.4126	16.4865	16.5014	16.6853	16.7616
Daily Vapor Pressure Range (psia):	0.0020	0.0021	0.0021	0.0023	0.0021	0.0022	0.0025	0.0024	0.0023	0.0022	0.0021	0.0020
Breather Vent Press. Setting Range (psia):	0.0600	0.0600	0.0600	0.0600	0.0600	0.0600	0.0600	0.0600	0.0600	0.0600	0.0600	0.0600
Vapor Pressure at Daily Average Liquid	0.0071	0.0074	0.0076	0.0080	0.0082	0.0085	0.0090	0.0092	0.0089	0.0084	0.0077	0.0071
Surface Temperature (psia):												
Vapor Pressure at Daily Minimum Liquid	0.0062	0.0063	0.0065	0.0068	0.0072	0.0075	0.0079	0.0081	0.0079	0.0074	0.0066	0.0062
Surface Temperature at Daily Vapor Pressure at Daily Maximum Liquid												
Vapor Pressure at Daily												
Maximum Liquid												
Surface Temperature (psia):	0.0062	0.0084	0.0086	0.0091	0.0093	0.0097	0.0104	0.0105	0.0101	0.0095	0.0087	0.0082
Daily Avg. Liquid Surface Temp. (deg R):	522.1894	523.0702	523.9369	525.5130	526.4988	527.7568	529.8043	530.3327	529.3403	527.3135	524.3186	522.1237
Daily Avg. Liquid Surface Temp. (deg F):	517.9753	518.7595	519.6425	520.9033	522.3384	523.5688	525.2956	525.9796	525.2186	523.1882	520.1523	517.9333

Daily Min. Liquid Surface Temp. (deg. R):	526.4036	527.3810	528.2313	530.1227	530.6593	531.9448	534.3129	534.6858	533.4519	531.4389	528.4849	526.3141
Daily Max. Liquid Surface Temp. (deg. R):	17.0000	15.8000	13.5000	12.8000	10.0000	9.7000	10.5000	10.5000	11.5000	13.7000	16.0000	17.3000
Daily Ambient Temp. Range (deg. R):												
Vented Vapor Saturation Factor:	0.9908	0.9905	0.9902	0.9897	0.9894	0.9890	0.9884	0.9882	0.9885	0.9892	0.9901	0.9908
Vented Vapor Saturation Factor:												
Vapor Pressure at Daily Average Liquid:	0.0071	0.0074	0.0076	0.0080	0.0082	0.0085	0.0090	0.0092	0.0089	0.0084	0.0077	0.0071
Surface Temperature (psia):	24.5867	24.5867	24.5867	24.5867	24.5867	24.5867	24.5867	24.5867	24.5867	24.5867	24.5867	24.5867
Vapor Space Outage (ft):												
Working Losses (lb):	615.8266	634.8461	653.5604	687.5936	708.8798	736.0449	780.8349	794.5280	770.2360	726.4728	661.8015	614.4063
Vapor Molecular Weight (lb/lb-mole):	130.0000	130.0000	130.0000	130.0000	130.0000	130.0000	130.0000	130.0000	130.0000	130.0000	130.0000	130.0000
Vapor Pressure at Daily Average Liquid												
Surface Temperature (psia)	0.0071	0.0074	0.0076	0.0080	0.0082	0.0085	0.0090	0.0092	0.0089	0.0084	0.0077	0.0071
Net Throughput (gal/mo.):	157,254	166,600	157,254	166,600	157,254	166,600	157,254	166,600	157,254	166,600	157,254	166,600
Annual Turnovers:	2,781.5119	2,781.5119	2,781.5119	2,781.5119	2,781.5119	2,781.5119	2,781.5119	2,781.5119	2,781.5119	2,781.5119	2,781.5119	2,781.5119
Turnover Factor:	0.1775	0.1775	0.1775	0.1775	0.1775	0.1775	0.1775	0.1775	0.1775	0.1775	0.1775	0.1775
Maximum Liquid Volume (gal):	678,426.0000	678,426.0000	678,426.0000	678,426.0000	678,426.0000	678,426.0000	678,426.0000	678,426.0000	678,426.0000	678,426.0000	678,426.0000	678,426.0000
Maximum Liquid Height (ft):	32.0758	32.0758	32.0758	32.0758	32.0758	32.0758	32.0758	32.0758	32.0758	32.0758	32.0758	32.0758
Tank Diameter (ft):	60.0000	60.0000	60.0000	60.0000	60.0000	60.0000	60.0000	60.0000	60.0000	60.0000	60.0000	60.0000
Working Loss Product Factor:	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total Losses (lb):	625.8341	644.3725	664.3311	699.3978	720.0214	747.2650	794.0992	807.4667	781.6864	737.7410	671.9799	624.3291

TANKS 4.0.9d
Emissions Report - Detail Format
Individual Tank Emission Totals

Emissions Report for: January, February, March, April, May, June, July, August, September, October, November, December

MV-17 PTE - Vertical Fixed Roof Tank
San Diego, California

		Losses(lbs)	
Components	Working Loss	Breathing Loss	Total Emissions
Distillate fuel oil no. 2	8,385.03	133.49	8,518.52

TANKS 4.0.9d

Emissions Report - Detail Format

Tank Identification and Physical Characteristics

Identification	
User Identification:	MV-18 PTE
City:	San Diego
State:	California
Company:	SFPD, L.P.
Type of Tank:	External Floating Roof Tank
Description:	
Tank Dimensions	
Diameter (ft):	110.00
Volume (gallons):	3,077,424.00
Turnovers:	613.19
Paint Characteristics	
Internal Shell Condition:	Light Rust
Shell Color/Shade:	White/White
Shell Condition	Good
Roof Characteristics	
Type:	Pontoon
Fitting Category	Detail
Tank Construction and Rim-Seal System	
Construction:	Welded
Primary Seal:	Mechanical Shoe
Secondary Seal	Rim-mounted
Deck Fitting/Status	
Access Hatch (24-in. Diam.)/Bolted Cover, Gasketed	1
Automatic Gauge Float Well/Bolted Cover, Gasketed	1
Vacuum Breaker (10-in. Diam.)/Weighted Mech. Actuation, Gask.	1
Slotted Guide-Pole/Sample Well/Gask. Sliding Cover, w. Float, Wiper	1
Roof Leg (3-in. Diameter)/Adjustable, Pontoon Area, Gasketed	12
Roof Leg (3-in. Diameter)/Adjustable, Center Area, Gasketed	12
Roof Drain (3-in. Diameter)/90% Closed	1
Sample Pipe or Well (24-in. Diam.)/Slotted Pipe-Sliding Cover, Gask.	1
Gauge-Hatch/Sample Well (8-in. Diam.)/Weighted Mech. Actuation, Gask.	1

Meteorological Data used in Emissions Calculations: San Diego, California (Avg Atmospheric Pressure = 14.7 psia)

TANKS 4.0.9d

Emissions Report - Detail Format

Liquid Contents of Storage Tank

MV-18 PTE - External Floating Roof Tank
San Diego, California

Mixture/Component	Month	Daily Liquid Surf. Temperature (deg F)			Liquid Bulk Temp (deg F)	Vapor Pressure (psia)			Vapor Mol. Weight	Liquid Mass Fract.	Vapor Mass Fract.	Mol. Weight	Basis for Vapor Pressure Calculations
		Avg.	Min.	Max.		Avg.	Min.	Max.					
Gasoline (RVP 13.5)	Jan	62.52	58.31	66.73	64.22	7.5910	N/A	N/A	62.0000			92.00	Option 4: RVP=13.5, ASTM Slope=3
Gasoline (RVP 13.5)	Feb	63.40	59.09	67.71	64.22	7.7148	N/A	N/A	62.0000			92.00	Option 4: RVP=13.5, ASTM Slope=3
Gasoline (RVP 6)	Mar	64.27	59.97	68.56	64.22	3.2045	N/A	N/A	69.0000			92.00	Option 4: RVP=6, ASTM Slope=3
Gasoline (RVP 6)	Apr	65.84	61.23	70.45	64.22	3.3091	N/A	N/A	69.0000			92.00	Option 4: RVP=6, ASTM Slope=3
Gasoline (RVP 6)	May	66.83	62.67	70.99	64.22	3.3760	N/A	N/A	69.0000			92.00	Option 4: RVP=6, ASTM Slope=3
Gasoline (RVP 6)	Jun	68.09	63.90	72.27	64.22	3.4629	N/A	N/A	69.0000			92.00	Option 4: RVP=6, ASTM Slope=3
Gasoline (RVP 6)	Jul	70.13	65.63	74.64	64.22	3.6082	N/A	N/A	69.0000			92.00	Option 4: RVP=6, ASTM Slope=3
Gasoline (RVP 6)	Aug	70.66	66.31	75.02	64.22	3.6465	N/A	N/A	69.0000			92.00	Option 4: RVP=6, ASTM Slope=3
Gasoline (RVP 6)	Sep	69.67	65.55	73.79	64.22	3.5749	N/A	N/A	69.0000			92.00	Option 4: RVP=6, ASTM Slope=3
Gasoline (RVP 6)	Oct	67.64	63.52	71.77	64.22	3.4321	N/A	N/A	69.0000			92.00	Option 4: RVP=6, ASTM Slope=3
Gasoline (RVP 11.5)	Nov	64.65	60.48	68.81	64.22	6.6146	N/A	N/A	65.0000			92.00	Option 4: RVP=11.5, ASTM Slope=3
Gasoline (RVP 13.5)	Dec	62.45	58.26	66.64	64.22	7.5818	N/A	N/A	62.0000			92.00	Option 4: RVP=13.5, ASTM Slope=3

TANKS 4.0.9d

Emissions Report - Detail Format

Detail Calculations (AP-42)

MV-18 PTE - External Floating Roof Tank

San Diego, California

Month:	January	February	March	April	May	June	July	August	September	October	November	December
Rim Seal Losses (lb):	306.2143	338.5270	139.7643	149.7807	154.8759	157.7395	160.0244	160.1834	151.2870	134.3100	261.5562	289.3791
Seal Factor A (lb-mole/ft-yr):	0.4000	0.4000	0.6000	0.6000	0.6000	0.6000	0.6000	0.6000	0.6000	0.6000	0.4000	0.6000
Seal Factor B (lb-mole/ft-yr (mph) ^n):	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000
Average Wind Speed (mph):	6.0000	6.0000	7.5000	7.8000	7.9000	7.8000	7.5000	7.4000	7.1000	6.5000	5.9000	5.6000
Seal-related Wind Speed Exponent:	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Value of Vapor Pressure Function:	0.1796	0.1838	0.0614	0.0637	0.0651	0.0670	0.0703	0.0711	0.0695	0.0664	0.1483	0.1793
Vapor Pressure at Daily Average Liquid												
Surface Temperature (psia):	7.5910	7.7148	3.2045	3.3091	3.3760	3.4629	3.6082	3.6465	3.5749	3.4321	6.6146	7.5818
Tank Diameter (ft):	110.0000	110.0000	110.0000	110.0000	110.0000	110.0000	110.0000	110.0000	110.0000	110.0000	110.0000	110.0000
Vapor Molecular Weight (lb/lb-mole):	62.0000	62.0000	69.0000	69.0000	69.0000	69.0000	69.0000	69.0000	69.0000	69.0000	65.0000	62.0000
Product Factor:	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Withdrawal Losses (lb):	269.6194	269.6194	269.6194	269.6194	269.6194	269.6194	269.6194	269.6194	269.6194	269.6194	269.6194	269.6194
Net Throughput (gal/mo.):	157,254.166	166,600.157	157,254.166	166,600.157	157,254.166	166,600.157	157,254.166	166,600.157	157,254.166	166,600.157	157,254.166	166,600.157
Shell Clingage Factor (bbl/1000 sqft):	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015
Average Organic Liquid Density (lb/gal):	5.6000	5.6000	5.6000	5.6000	5.6000	5.6000	5.6000	5.6000	5.6000	5.6000	5.6000	5.6000
Tank Diameter (ft):	110.0000	110.0000	110.0000	110.0000	110.0000	110.0000	110.0000	110.0000	110.0000	110.0000	110.0000	110.0000
Roof Fitting Losses (lb):	197.4902	221.4069	93.9678	101.7617	105.6027	107.1690	107.5893	107.3341	100.3949	87.6128	168.3710	185.4009
Value of Vapor Pressure Function:	0.1796	0.1838	0.0614	0.0637	0.0651	0.0670	0.0703	0.0711	0.0695	0.0664	0.1483	0.1793
Vapor Molecular Weight (lb/lb-mole):	62.0000	62.0000	69.0000	69.0000	69.0000	69.0000	69.0000	69.0000	69.0000	69.0000	65.0000	62.0000
Product Factor:	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Tot. Roof Fitting Loss Fact (lb-mole/yr):	212.8306	233.0964	266.2430	278.0125	282.0148	278.0125	266.2430	262.3993	251.1083	229.6160	209.5978	200.1500
Average Wind Speed (mph):	6.0000	6.0000	7.5000	7.8000	7.9000	7.8000	7.5000	7.4000	7.1000	6.5000	5.9000	5.6000
Total Losses (lb):	773.3239	829.5532	503.3516	521.1618	530.0980	534.5279	537.2332	537.1369	521.3013	491.5423	699.5466	744.3994
Roof Fitting/Status												
Access Hatch (24-in. Diam./Bolted Cover, Gasketed					Quantity	KFa(lb-mole/yr	Roof Fitting Loss Factors			m	Losses(lb)	
Automatic Gauge Float Well/Bolted Cover, Gasketed					1	1.60	KFb(lb-mole/yr mph^n)		0.00	0.00	10.6416	
Vacuum Breaker (10-in. Diam./Weighted Mech. Actuation, Gask.					1	2.80			0.00	0.00	18.6228	
Slotted Guide-Pole/Sample Well/Gask. Sliding Cover, w. Float, Wiper					1	6.20			1.20	0.94	75.2245	
Roof Leg (3-in. Diameter)/Adjustable, Pontoon Area, Gasketed					12	21.00			7.90	1.80	991.5444	
Roof Leg (3-in. Diameter)/Adjustable, Pontoon Area, Gasketed					12	1.30			0.08	0.65	121.1211	
Roof Drain (3-in. Diameter)/Adjustable, Center Area, Gasketed					12	0.53			0.11	0.13	53.0193	
Roof Drain (3-in. Diameter)/50% Closed					1	1.80			0.14	1.10	17.0527	
Sample Pipe or Well (24-in. Diam./Slotted Pipe-Sliding Cover, Gask.					1	43.00			0.00	0.00	285.9931	
Gauge-Hatch/Sample Well (8-in. Diam./Weighted Mech. Actuation, Gask.					1	0.47			0.02	0.97	3.7194	

TANKS 4.0.9d
Emissions Report - Detail Format
Individual Tank Emission Totals

Emissions Report for: January, February, March, April, May, June, July, August, September, October, November, December

MV-18 PTE - External Floating Roof Tank
San Diego, California

		Losses(lbs)				Total Emissions
Components	Rim Seal Loss	Withdrawal Loss	Deck Fitting Loss	Deck Seam Loss		
Gasoline (RVP 13.5)	934.12	808.86	604.30	0.00		2,347.28
Gasoline (RVP 6)	1,207.97	2,156.96	811.43	0.00		4,176.35
Gasoline (RVP 11.5)	261.56	269.62	168.37	0.00		699.55

TANKS 4.0.9d

Emissions Report - Detail Format

Tank Identification and Physical Characteristics

Identification

User Identification: MV-19 PTE
 City: San Diego
 State: California
 Company: SFPP, L.P.
 Type of Tank: Internal Floating Roof Tank
 Description:

Tank Dimensions

Diameter (ft): 123.00
 Volume (gallons): 3,557,274.00
 Turnovers: 530.48
 Self Supp. Roof? (y/n): N
 No. of Columns: 7.00
 Eff. Col. Diam. (ft): 1.00

Paint Characteristics

Internal Shell Condition: Light Rust
 Shell Color/Shade: White/White
 Shell Condition: Good
 Roof Color/Shade: White/White
 Roof Condition: Good

Rim-Seal System

Primary Seal: Mechanical Shoe
 Secondary Seal: Rim-mounted

Deck Characteristics

Deck Fitting Category: Detail
 Deck Type: Welded

Deck Fitting/Status

Access Hatch (24-in. Diam.)/Bolted Cover, Gasketed	Quantity
Automatic Gauge Float Well/Bolted Cover, Gasketed	1
Column Well (24-in. Diam.)/Built-Up Col.-Sliding Cover, Gask.	1
Ladder Well (36-in. Diam.)/Sliding Cover, Gasketed	7
Roof Leg or Hanger Well/Adjustable	1
Sample Pipe or Well (24-in. Diam.)/Slotted Pipe-Sliding Cover, Gask.	49
Vacuum Breaker (10-in. Diam.)/Weighted Mech. Actuation, Gask.	1
Slotted Guide-Pole/Sample Well/Gask. Sliding Cover, w. Float, Wiper	1
Gauge-Hatch/Sample Well (8-in. Diam.)/Weighted Mech. Actuation, Gask.	1

Meteorological Data used in Emissions Calculations: San Diego, California (Avg Atmospheric Pressure = 14.7 psia)

TANKS 4.0.9d Emissions Report - Detail Format Liquid Contents of Storage Tank

MV-19 PTE - Internal Floating Roof Tank San Diego, California

Mixture/Component	Month		Daily Liquid Surface Temperature (deg F)		Liquid Bulk Temp (deg F)	Vapor Pressure (psia)			Vapor Mol. Weight	Liquid Mass Fract.	Vapor Mass Fract.	Mol. Weight	Basis for Vapor Pressure Calculations
	Avg.	Min.	Avg.	Max.		Avg.	Min.	Max.					
Gasoline (RVP 13.5)	62.52	58.31	66.73	64.22	64.22	7.5910	N/A	N/A	62.0000			92.00	Option 4: RVP=13.5, ASTM Slope=3
Gasoline (RVP 13.5)	63.40	59.09	67.71	64.22	64.22	7.7148	N/A	N/A	62.0000			92.00	Option 4: RVP=13.5, ASTM Slope=3
Gasoline (RVP 6)	64.27	59.97	68.56	64.22	64.22	3.2045	N/A	N/A	69.0000			92.00	Option 4: RVP=6, ASTM Slope=3
Gasoline (RVP 6)	65.84	61.23	70.45	64.22	64.22	3.3091	N/A	N/A	69.0000			92.00	Option 4: RVP=6, ASTM Slope=3
Gasoline (RVP 6)	66.83	62.67	70.99	64.22	64.22	3.3760	N/A	N/A	69.0000			92.00	Option 4: RVP=6, ASTM Slope=3
Gasoline (RVP 6)	68.09	63.90	72.27	64.22	64.22	3.4629	N/A	N/A	69.0000			92.00	Option 4: RVP=6, ASTM Slope=3
Gasoline (RVP 6)	70.13	65.63	74.64	64.22	64.22	3.6082	N/A	N/A	69.0000			92.00	Option 4: RVP=6, ASTM Slope=3
Gasoline (RVP 6)	70.66	66.31	75.02	64.22	64.22	3.6465	N/A	N/A	69.0000			92.00	Option 4: RVP=6, ASTM Slope=3
Gasoline (RVP 6)	69.67	65.55	73.79	64.22	64.22	3.5749	N/A	N/A	69.0000			92.00	Option 4: RVP=6, ASTM Slope=3
Gasoline (RVP 6)	67.64	63.52	71.77	64.22	64.22	3.4321	N/A	N/A	69.0000			92.00	Option 4: RVP=6, ASTM Slope=3
Gasoline (RVP 11.5)	64.65	60.48	68.81	64.22	64.22	6.6146	N/A	N/A	65.0000			92.00	Option 4: RVP=11.5, ASTM Slope=3
Gasoline (RVP 13.5)	62.45	58.26	66.64	64.22	64.22	7.5818	N/A	N/A	62.0000			92.00	Option 4: RVP=13.5, ASTM Slope=3

TANKS 4.0.9d

Emissions Report - Detail Format

Detail Calculations (AP-42)

MV-19 PTE - Internal Floating Roof Tank

San Diego, California

Month:	January	February	March	April	May	June	July	August	September	October	November	December
Rim Seal Losses (lb):	68.4806	70.0990	26.0470	27.0132	27.6350	28.4486	29.8227	30.1878	29.5058	28.1593	59.2839	68.3616
Seal Factor A (lb-mole/ft-yr):	0.6000	0.6000	0.6000	0.6000	0.6000	0.6000	0.6000	0.6000	0.6000	0.6000	0.6000	0.6000
Seal Factor B (lb-mole/ft-yr (mph)):	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000
Value of Vapor Pressure Function:	0.1736	0.1838	0.0614	0.0637	0.0651	0.0670	0.0703	0.0711	0.0695	0.0664	0.1483	0.1793
Vapor Pressure at Daily Average Liquid												
Surface Temperature (psia):	7.5910	7.7148	3.2045	3.3091	3.3760	3.4629	3.6082	3.6465	3.5749	3.4321	6.6146	7.5818
Tank Diameter (ft):	123.0000	123.0000	123.0000	123.0000	123.0000	123.0000	123.0000	123.0000	123.0000	123.0000	123.0000	123.0000
Vapor Molecular Weight (lb/lb-mole):	62.0000	62.0000	69.0000	69.0000	69.0000	69.0000	69.0000	69.0000	69.0000	69.0000	65.0000	62.0000
Product Factor:	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Withdrawal Losses (lb):	254.8455	254.8455	254.8455	254.8455	254.8455	254.8455	254.8455	254.8455	254.8455	254.8455	254.8455	254.8455
Number of Columns:	7.0000	7.0000	7.0000	7.0000	7.0000	7.0000	7.0000	7.0000	7.0000	7.0000	7.0000	7.0000
Effective Column Diameter (ft):	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Net Throughput (gal/mo.):	157,254,166.6000	157,254,166.6000	157,254,166.6000	157,254,166.6000	157,254,166.6000	157,254,166.6000	157,254,166.6000	157,254,166.6000	157,254,166.6000	157,254,166.6000	157,254,166.6000	157,254,166.6000
Shel Clingage Factor (bbl/1000 sqft):	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015
Average Organic Liquid Density (lb/gal):	5.6000	5.6000	5.6000	5.6000	5.6000	5.6000	5.6000	5.6000	5.6000	5.6000	5.6000	5.6000
Tank Diameter (ft):	123.0000	123.0000	123.0000	123.0000	123.0000	123.0000	123.0000	123.0000	123.0000	123.0000	123.0000	123.0000
Deck Fitting Losses (lb):	695.1713	711.6000	264.4122	274.2209	280.5327	288.7920	302.7411	306.4469	299.5235	285.8552	601.8121	693.9633
Value of Vapor Pressure Function:	0.1736	0.1838	0.0614	0.0637	0.0651	0.0670	0.0703	0.0711	0.0695	0.0664	0.1483	0.1793
Vapor Molecular Weight (lb/lb-mole):	62.0000	62.0000	69.0000	69.0000	69.0000	69.0000	69.0000	69.0000	69.0000	69.0000	65.0000	62.0000
Product Factor:	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Tot. Roof Fitting Loss Fact. (lb-mole/yr):	749.1700	749.1700	749.1700	749.1700	749.1700	749.1700	749.1700	749.1700	749.1700	749.1700	749.1700	749.1700
Deck Seam Losses (lb):	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Deck Seam Length (ft):	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Deck Seam Loss per Unit Length Factor (lb-mole/ft-yr):	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Deck Seam Length Factor (ft/sqft):	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Tank Diameter (ft):	123.0000	123.0000	123.0000	123.0000	123.0000	123.0000	123.0000	123.0000	123.0000	123.0000	123.0000	123.0000
Vapor Molecular Weight (lb/lb-mole):	62.0000	62.0000	69.0000	69.0000	69.0000	69.0000	69.0000	69.0000	69.0000	69.0000	65.0000	62.0000
Product Factor:	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total Losses (lb):	1,018.4975	1,036.5446	545.3047	556.0796	563.0133	572.0861	587.4094	591.4802	583.8748	568.8600	915.9416	1,017.1705
Roof Fitting/Status	Roof Fitting Loss Factors											
Access Hatch (24-in. Diam./Bolted Cover, Gasketed	1						1.60	0.00		0.00	10.6416	
Automatic Gauge Float Well/Bolted Cover, Gasketed	1						2.80	0.00		0.00	18.6228	
Column Well (24-in. Diam./Built-Up Col.-Sliding Cover, Gask.	7						33.00	0.00		0.00	1,536.3814	
Ladder Well (36-in. Diam./Sliding Cover, Gasketed	1						56.00	0.00		0.00	372.4561	
Roof Leg or Hanger Well/Adjustable	49						7.90	0.00		0.00	2,574.6028	
Sample Pipe or Well (24-in. Diam./Slotted Pipe-Sliding Cover, Gask.	1						43.00	0.00		0.00	285.9931	
Vacuum Breaker (10-in. Diam./Weighted Mech. Actuation, Gask.	1						6.20	1.20		0.94	41.2362	
Slotted Guide-Pole/Sample Well/Gask. Sliding Cover, w. Float, Wiper	1						21.00	7.90		1.80	139.6710	
Gauge-Hatch/Sample Well (8-in. Diam./Weighted Mech. Actuation, Gask.	1						0.47	0.02		0.97	3.1260	

TANKS 4.0.9d
Emissions Report - Detail Format
Individual Tank Emission Totals

Emissions Report for: January, February, March, April, May, June, July, August, September, October, November, December

MV-19 PTE - Internal Floating Roof Tank
San Diego, California

Components	Losses(lbs)				Total Emissions
	Rim Seal Loss	Withdrawal Loss	Deck Fitting Loss	Deck Seam Loss	
Gasoline (RVP 13.5)	206.94	764.54	2,100.73	0.00	3,072.21
Gasoline (RVP 6)	226.82	2,038.76	2,302.52	0.00	4,568.11
Gasoline (RVP 11.5)	59.28	254.85	601.81	0.00	915.94

TANKS 4.0.9d

Emissions Report - Detail Format

Tank Identification and Physical Characteristics

Identification

User Identification: MV-21 PTE
 City: San Diego
 State: California
 Company: SFPP, L.P.
 Type of Tank: Internal Floating Roof Tank
 Description:

Tank Dimensions

Diameter (ft): 50.00
 Volume (gallons): 558,201.00
 Turnovers: 3,380.59
 Self Supp. Roof? (y/n): N
 No. of Columns: 1.00
 Eff. Col. Diam. (ft): 1.00

Paint Characteristics

Internal Shell Condition: Light Rust
 Shell Color/Shade: White/White
 Shell Condition: Good
 Roof Color/Shade: White/White
 Roof Condition: Good

Rim-Seal System

Primary Seal: Mechanical Shoe
 Secondary Seal: Rim-mounted

Deck Characteristics

Deck Fitting Category: Detail
 Deck Type: Welded

Deck Fitting/Status

Access Hatch (24-in. Diam.)/Bolted Cover, Gasketed
 Automatic Gauge Float Well/Bolted Cover, Gasketed
 Column Well (24-in. Diam.)/Built-Up Col.-Sliding Cover, Gask.
 Ladder Well (36-in. Diam.)/Sliding Cover, Gasketed
 Roof Leg or Hanger Well/Adjustable
 Vacuum Breaker (10-in. Diam.)/Weighted Mech. Actuation, Gask.
 Slotted Guide-Pole/Sample Well/Gask. Sliding Cover, w. Float, Wiper

Quantity
 1
 1
 1
 1
 11
 1
 1

Meteorological Data used in Emissions Calculations: San Diego, California (Avg Atmospheric Pressure = 14.7 psia)

TANKS 4.0.9d Emissions Report - Detail Format Liquid Contents of Storage Tank

MV-21 PTE - Internal Floating Roof Tank San Diego, California

Mixture/Component	Month	Daily Liquid Surf. Temperature (deg F)			Liquid Bulk Temp (deg F)	Vapor Pressure (psia)			Vapor Mol. Weight	Liquid Mass Fract.	Vapor Mass Fract.	Mol. Weight	Basis for Vapor Pressure Calculations
		Avg.	Min.	Max.		Avg.	Min.	Max.					
Gasoline (RVP 13.5)	Jan	62.62	58.31	66.73	64.22	7.5910	N/A	N/A	62.0000			92.00	Option 4: RVP=13.5, ASTM Slope=3
Gasoline (RVP 13.5)	Feb	63.40	59.09	67.71	64.22	7.7148	N/A	N/A	62.0000			92.00	Option 4: RVP=13.5, ASTM Slope=3
Gasoline (RVP 6)	Mar	64.27	59.97	68.56	64.22	3.2045	N/A	N/A	69.0000			92.00	Option 4: RVP=6, ASTM Slope=3
Gasoline (RVP 6)	Apr	65.84	61.23	70.45	64.22	3.3091	N/A	N/A	69.0000			92.00	Option 4: RVP=6, ASTM Slope=3
Gasoline (RVP 6)	May	66.83	62.67	70.99	64.22	3.3760	N/A	N/A	69.0000			92.00	Option 4: RVP=6, ASTM Slope=3
Gasoline (RVP 6)	Jun	68.09	63.90	72.27	64.22	3.4629	N/A	N/A	69.0000			92.00	Option 4: RVP=6, ASTM Slope=3
Gasoline (RVP 6)	Jul	70.13	65.63	74.64	64.22	3.6082	N/A	N/A	69.0000			92.00	Option 4: RVP=6, ASTM Slope=3
Gasoline (RVP 6)	Aug	70.66	66.31	75.02	64.22	3.6465	N/A	N/A	69.0000			92.00	Option 4: RVP=6, ASTM Slope=3
Gasoline (RVP 6)	Sep	69.67	65.55	73.79	64.22	3.5749	N/A	N/A	69.0000			92.00	Option 4: RVP=6, ASTM Slope=3
Gasoline (RVP 6)	Oct	67.64	63.52	71.77	64.22	3.4321	N/A	N/A	69.0000			92.00	Option 4: RVP=6, ASTM Slope=3
Gasoline (RVP 11.5)	Nov	64.65	60.48	68.81	64.22	6.6146	N/A	N/A	65.0000			92.00	Option 4: RVP=11.5, ASTM Slope=3
Gasoline (RVP 13.5)	Dec	62.45	58.26	66.64	64.22	7.5818	N/A	N/A	62.0000			92.00	Option 4: RVP=13.5, ASTM Slope=3

[illegible]

TANKS 4.0.9d
Emissions Report - Detail Format
Individual Tank Emission Totals

Emissions Report for: January, February, March, April, May, June, July, August, September, October, November, December

MV-21 PTE - Internal Floating Roof Tank
San Diego, California

Components	Losses(lbs)				Total Emissions
	Rim Seal Loss	Withdrawl Loss	Deck Fitting Loss	Deck Seam Loss	
Gasoline (RVP 6)	92.20	4,840.21	637.74	0.00	5,570.15
Gasoline (RVP 13.5)	84.12	1,815.08	581.85	0.00	2,481.05
Gasoline (RVP 11.5)	24.10	605.03	166.69	0.00	795.81

TANKS 4.0.9d

Emissions Report - Detail Format

Tank Identification and Physical Characteristics

Identification

User Identification: MV-22 PTE
 City: San Diego
 State: California
 Company: SFPP, L.P.
 Type of Tank: Internal Floating Roof Tank
 Description:

Tank Dimensions

Diameter (ft): 45.00
 Volume (gallons): 383,880.00
 Turnovers: 4,915.73
 Self Supp. Roof? (y/n): N
 No. of Columns: 1.00
 Eff. Col. Diam. (ft): 1.00

Paint Characteristics

Internal Shell Condition: Light Rust
 Shell Color/Shade: White/White
 Shell Condition: Good
 Roof Color/Shade: White/White
 Roof Condition: Good

Rim-Seal System

Primary Seal: Mechanical Shoe
 Secondary Seal: Rim-mounted

Deck Characteristics

Deck Fitting Category: Detail
 Deck Type: Welded

Deck Fitting/Status

	Quantity
Access Hatch (24-in. Diam.)/Bolted Cover, Gasketed	1
Automatic Gauge Float Well/Bolted Cover, Gasketed	1
Column Well (24-in. Diam.)/Built-Up Col.-Sliding Cover, Gask.	1
Ladder Well (36-in. Diam.)/Sliding Cover, Gasketed	1
Roof Leg or Hanger Well/Adjustable	12
Sample Pipe or Well (24-in. Diam.)/Slotted Pipe-Sliding Cover, Gask.	1
Vacuum Breaker (10-in. Diam.)/Weighted Mech. Actuation, Gask.	1
Slotted Guide-Pole/Sample Well/Gask. Sliding Cover, w. Float, Wiper	1

Meteorological Data used in Emissions Calculations: San Diego, California (Avg Atmospheric Pressure = 14.7 psia)

TANKS 4.0.9d Emissions Report - Detail Format Liquid Contents of Storage Tank

MV-22 PTE - Internal Floating Roof Tank
San Diego, California

Mixture/Component	Month	Daily Liquid Surface Temperature (deg F)		Liquid Bulk Temp (deg F)		Vapor Pressure (psia)			Vapor Mol. Weight	Liquid Mass Fract.	Vapor Mass Fract.	Mol. Weight	Basis for Vapor Pressure Calculations	
		Avg.	Min.	Max.		Avg.	Min.	Max.						
Gasoline (RVP 13.5)	Jan	52.52	58.31	66.73	64.22	7.5910	N/A	N/A	62.0000			92.00	Option 4: RVP=13.5, ASTM Slope=3	
Gasoline (RVP 13.5)	Feb	63.40	59.09	67.71	64.22	7.7148	N/A	N/A	62.0000			92.00	Option 4: RVP=13.5, ASTM Slope=3	
Gasoline (RVP 6)	Mar	64.27	59.97	68.56	64.22	3.2045	N/A	N/A	69.0000			92.00	Option 4: RVP=6, ASTM Slope=3	
Gasoline (RVP 6)	Apr	65.84	61.23	70.45	64.22	3.3091	N/A	N/A	69.0000			92.00	Option 4: RVP=6, ASTM Slope=3	
Gasoline (RVP 6)	May	66.83	62.67	70.99	64.22	3.3760	N/A	N/A	69.0000			92.00	Option 4: RVP=6, ASTM Slope=3	
Gasoline (RVP 6)	Jun	68.09	63.90	72.27	64.22	3.4629	N/A	N/A	69.0000			92.00	Option 4: RVP=6, ASTM Slope=3	
Gasoline (RVP 6)	Jul	70.13	65.63	74.64	64.22	3.6082	N/A	N/A	69.0000			92.00	Option 4: RVP=6, ASTM Slope=3	
Gasoline (RVP 6)	Aug	70.66	66.31	75.02	64.22	3.6465	N/A	N/A	69.0000			92.00	Option 4: RVP=6, ASTM Slope=3	
Gasoline (RVP 6)	Sep	69.67	65.55	73.79	64.22	3.5749	N/A	N/A	69.0000			92.00	Option 4: RVP=6, ASTM Slope=3	
Gasoline (RVP 6)	Oct	67.64	63.52	71.77	64.22	3.4321	N/A	N/A	69.0000			92.00	Option 4: RVP=6, ASTM Slope=3	
Gasoline (RVP 11.5)	Nov	64.65	60.48	68.81	64.22	6.6146	N/A	N/A	65.0000			92.00	Option 4: RVP=11.5, ASTM Slope=3	
Gasoline (RVP 13.5)	Dec	62.45	58.26	66.64	64.22	7.5818	N/A	N/A	62.0000			92.00	Option 4: RVP=13.5, ASTM Slope=3	

TANKS 4.0.9d

Emissions Report - Detail Format

Detail Calculations (AP-42)

MV-22 PTE - Internal Floating Roof Tank

San Diego, California

Month:	January	February	March	April	May	June	July	August	September	October	November	December
Rim Seal Losses (lb):	25.0539	25.6460	9.5284	9.8829	10.1104	10.4080	10.9108	11.0443	10.7948	10.3022	21.6892	25.0104
Seal Factor A (lb-mole/ft-yr):	0.6000	0.6000	0.6000	0.6000	0.4000	0.4000	0.4000	0.4000	0.6000	0.6000	0.6000	0.6000
Seal Factor B (lb-mole/ft-yr (mph):	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000
Λ _n :												
Value of Vapor Pressure	0.1796	0.1838	0.0614	0.0637	0.0651	0.0670	0.0703	0.0711	0.0695	0.0664	0.1483	0.1793
Function:												
Vapor Pressure at Daily Average												
Liquid												
Surface Temperature (psia):	7.5910	7.7148	3.2045	3.3091	3.3760	3.4629	3.6082	3.6465	3.5749	3.4321	6.6146	7.5818
Tank Diameter (ft):	45.0000	45.0000	45.0000	45.0000	45.0000	45.0000	45.0000	45.0000	45.0000	45.0000	45.0000	45.0000
Vapor Molecular Weight (lb/lb-mole):	62.0000	62.0000	69.0000	69.0000	69.0000	69.0000	69.0000	69.0000	69.0000	69.0000	65.0000	62.0000
Product Factor:	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Withdrawal Losses (lb):	673.7157	673.7157	673.7157	673.7157	673.7157	673.7157	673.7157	673.7157	673.7157	673.7157	673.7157	673.7157
Number of Columns:	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Effective Column Diameter (ft):	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Net Throughput (gal/mo.):	157,254,166.6000	157,254,166.6000	157,254,166.6000	157,254,166.6000	157,254,166.6000	157,254,166.6000	157,254,166.6000	157,254,166.6000	157,254,166.6000	157,254,166.6000	157,254,166.6000	157,254,166.6000
Shel Clingage Factor (bbl/1000	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015
seft):												
Average Organic Liquid Density	5.6000	5.6000	5.6000	5.6000	5.6000	5.6000	5.6000	5.6000	5.6000	5.6000	5.6000	5.6000
(lb/gal):												
Tank Diameter (ft):	45.0000	45.0000	45.0000	45.0000	45.0000	45.0000	45.0000	45.0000	45.0000	45.0000	45.0000	45.0000
Deck Fitting Losses (lb):	239.7751	245.4416	91.1997	94.5829	96.7600	99.6087	104.4200	105.6981	103.3102	98.5958	207.5741	239.3584
Value of Vapor Pressure	0.1796	0.1838	0.0614	0.0637	0.0651	0.0670	0.0703	0.0711	0.0695	0.0664	0.1483	0.1793
Function:												
Vapor Molecular Weight (lb/lb-mole):	62.0000	62.0000	69.0000	69.0000	69.0000	69.0000	69.0000	69.0000	69.0000	69.0000	65.0000	62.0000
Product Factor:	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Tot. Roof Fitting Loss Fact. (lb-mole/yr):	258.4000	258.4000	258.4000	258.4000	258.4000	258.4000	258.4000	258.4000	258.4000	258.4000	258.4000	258.4000
Deck Seam Losses (lb):	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Deck Seam Length (ft):	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Deck Seam Loss per Unit Length												
Factor (lb-mole/ft-yr):												
Deck Seam Length Factor												
(ft/sqft):												
Tank Diameter (ft):	45.0000	45.0000	45.0000	45.0000	45.0000	45.0000	45.0000	45.0000	45.0000	45.0000	45.0000	45.0000
Vapor Molecular Weight (lb/lb-mole):	62.0000	62.0000	69.0000	69.0000	69.0000	69.0000	69.0000	69.0000	69.0000	69.0000	65.0000	62.0000
Product Factor:	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total Losses (lb):	938.5446	944.8032	774.4448	778.1815	780.5860	783.7324	789.0464	790.4581	787.8206	782.6136	902.9790	938.0844
Roof Fitting/Status					Quantity	KFa (lb-mole/yr)	KFb (lb-mole/yr)	Roof Fitting Loss Factors		m	Losses (lb)	
Access Hatch (24-in. Diam./Bolted Cover, Gasketed					1	1.60	0.00	0.00		0.00	10.6416	
Automatic Gauge Float Well/Bolted Cover, Gasketed					1	2.80	0.00	0.00		0.00	18.6228	
Column Well (24-in. Diam./Built-Up Col.-Sliding Cover, Gask.					1	33.00	0.00	0.00		0.00	219.4831	
Ladder Well (36-in. Diam./Sliding Cover, Gasketed					1	55.00	0.00	0.00		0.00	372.4561	
Roof Leg or Hanger Well/Adjustable					12	7.90	0.00	0.00		0.00	630.5150	
Sample Pipe or Well (24-in. Diam./Slotted Pipe-Sliding Cover, Gask.					1	43.00	0.00	0.00		0.00	285.9931	
Vacuum Breaker (10-in. Diam./Weighted Mech. Actuation, Gask.					1	6.20	0.00	1.20		0.94	41.2362	
Slotted Guide-Pole/Sample Well/Gask. Sliding Cover, w. Float, Viper					1	21.00	7.90	7.90		1.80	139.6710	

TANKS 4.0.9d
Emissions Report - Detail Format
Individual Tank Emission Totals

Emissions Report for: January, February, March, April, May, June, July, August, September, October, November, December

MV-22 PTE - Internal Floating Roof Tank
San Diego, California

	Losses (lbs)				Total Emissions
	Rim Seal Loss	Withdrawal Loss	Deck Fitting Loss	Deck Seam Loss	
Components					
Gasoline (RVP 6)	82.98	5,389.73	794.18	0.00	6,266.88
Gasoline (RVP 13.5)	75.71	2,021.15	724.57	0.00	2,821.43
Gasoline (RVP 11.5)	21.69	673.72	207.57	0.00	902.98

TANKS 4.0.9d
Emissions Report - Detail Format
Tank Identification and Physical Characteristics

Identification

User Identification: MV-23 PTE
City: San Diego
State: California
Company: SFPP, L.P.
Type of Tank: Internal Floating Roof Tank
Description:

Tank Dimensions

Diameter (ft): 86.00
Volume (gallons): 1,943,088.00
Turnovers: 971.16
Self Supp. Roof? (y/n): N
No. of Columns: 1.00
Eff. Col. Diam. (ft): 1.00

Paint Characteristics

Internal Shell Condition: Light Rust
Shell Color/Shade: White/White
Shell Condition: Good
Roof Color/Shade: White/White
Roof Condition: Good

Rim-Seal System

Primary Seal: Mechanical Shoe
Secondary Seal: Rim-mounted

Deck Characteristics

Deck Fitting Category: Detail
Deck Type: Welded

Deck Fitting/Status

	Quantity
Access Hatch (24-in. Diam.)/Bolted Cover, Gasketed	1
Automatic Gauge Float Well/Bolted Cover, Gasketed	1
Column Well (24-in. Diam.)/Built-Up Col.-Sliding Cover, Gask.	1
Ladder Well (36-in. Diam.)/Sliding Cover, Gasketed	1
Roof Leg or Hanger Well/Adjustable	16
Sample Pipe or Well (24-in. Diam.)/Slotted Pipe-Sliding Cover, Gask.	1
Vacuum Breaker (10-in. Diam.)/Weighted Mech. Actuation, Gask.	1
Slotted Guide-Pole/Sample Well/Gask. Sliding Cover, w. Float, Wiper	1
Gauge-Hatch/Sample Well (8-in. Diam.)/Weighted Mech. Actuation, Gask.	1

Meteorological Data used in Emissions Calculations: San Diego, California (Avg Atmospheric Pressure = 14.7 psia)

TANKS 4.0.9d

Emissions Report - Detail Format

Liquid Contents of Storage Tank

MV-23 PTE - Internal Floating Roof Tank
San Diego, California

Mixture/Component	Month	Daily Liquid Surf. Temperature (deg F)			Liquid Bulk Temp (deg F)	Vapor Pressure (psia)			Vapor Mol. Weight	Liquid Mass Fract.	Vapor Mass Fract.	Mol. Weight	Basis for Vapor Pressure Calculations
		Avg.	Min.	Max.		Avg.	Min.	Max.					
Gasoline (RVP 13.5)	Jan	62.52	58.31	66.73	64.22	7.5910	N/A	N/A	62.0000			92.00	Option 4: RVP=13.5, ASTM Slope=3
Gasoline (RVP 13.5)	Feb	63.40	59.09	67.71	64.22	7.7148	N/A	N/A	62.0000			92.00	Option 4: RVP=13.5, ASTM Slope=3
Gasoline (RVP 6)	Mar	64.27	59.97	68.56	64.22	3.2045	N/A	N/A	69.0000			92.00	Option 4: RVP=6, ASTM Slope=3
Gasoline (RVP 6)	Apr	65.84	61.23	70.45	64.22	3.3091	N/A	N/A	69.0000			92.00	Option 4: RVP=6, ASTM Slope=3
Gasoline (RVP 6)	May	66.83	62.67	70.99	64.22	3.3760	N/A	N/A	69.0000			92.00	Option 4: RVP=6, ASTM Slope=3
Gasoline (RVP 6)	Jun	68.09	63.90	72.27	64.22	3.4629	N/A	N/A	69.0000			92.00	Option 4: RVP=6, ASTM Slope=3
Gasoline (RVP 6)	Jul	70.13	65.63	74.64	64.22	3.6082	N/A	N/A	69.0000			92.00	Option 4: RVP=6, ASTM Slope=3
Gasoline (RVP 6)	Aug	70.66	66.31	75.02	64.22	3.6465	N/A	N/A	69.0000			92.00	Option 4: RVP=6, ASTM Slope=3
Gasoline (RVP 6)	Sep	69.67	65.55	73.79	64.22	3.5749	N/A	N/A	69.0000			92.00	Option 4: RVP=6, ASTM Slope=3
Gasoline (RVP 6)	Oct	67.64	63.52	71.77	64.22	3.4321	N/A	N/A	69.0000			92.00	Option 4: RVP=6, ASTM Slope=3
Gasoline (RVP 6)	Nov	64.65	60.48	68.81	64.22	6.6146	N/A	N/A	65.0000			92.00	Option 4: RVP=11.5, ASTM Slope=3
Gasoline (RVP 13.5)	Dec	62.45	58.26	66.64	64.22	7.5818	N/A	N/A	62.0000			92.00	Option 4: RVP=13.5, ASTM Slope=3

TANKS 4.0.9d
Emissions Report - Detail Format
Detail Calculations (AP-42)

**MV-23 PTE - Internal Floating Roof Tank
San Diego, California**

Month:	January	February	March	April	May	June	July	August	September	October	November	December
Rim Seal Losses (lb):	47.8808	48.0123	18.2117	18.8873	19.8909	19.3220	20.8517	21.1069	20.6300	19.6866	41.4505	47.7976
Seal Factor A (lb-mole/ft-yr):	0.6000	0.6000	0.6000	0.6000	0.6000	0.6000	0.6000	0.6000	0.6000	0.6000	0.4000	0.6000
Seal Factor B (lb-mole/ft-yr (mph)	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000
^n):											0.1483	
Value of Vapor Pressure	0.1796	0.1838	0.0614	0.0637	0.0651	0.0670	0.0703	0.0711	0.0695	0.0664	0.1483	0.1793
Function:												
Vapor Pressure at Daily Average												
Liquid												
Surface Temperature (psia):	7.5910	7.7148	3.2045	3.3091	3.3760	3.4529	3.6082	3.6465	3.5749	3.4321	6.6146	7.5818
Tank Diameter (ft):	86.0000	86.0000	86.0000	86.0000	86.0000	86.0000	86.0000	86.0000	86.0000	86.0000	86.0000	86.0000
Vapor Molecular Weight (lb/lb-mole):	62.0000	62.0000	69.0000	69.0000	69.0000	69.0000	69.0000	69.0000	69.0000	69.0000	65.0000	62.0000
Product Factor:	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Withdrawal Losses (lb):	348.8721	348.8721	348.8721	348.8721	348.8721	348.8721	348.8721	348.8721	348.8721	348.8721	348.8721	348.8721
Number of Columns:	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Effective Column Diameter (ft):	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Net Throughput (gal/mo.):	157,254.166	166,600.0157	254.166	166,600.0157	254.166	600.0157	254.166	600.0157	254.166	600.0157	254.166	600.0157
Shell Chlengage Factor (bbl/1000	0.0015	0.0015	0.0016	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015
sdqt):												
Average Organic Liquid Density (lb/gal):	5.6000	5.6000	5.6000	5.6000	5.6000	5.6000	5.6000	5.6000	5.6000	5.6000	5.6000	5.6000
Tank Diameter (ft):	86.0000	86.0000	86.0000	86.0000	86.0000	86.0000	86.0000	86.0000	86.0000	86.0000	86.0000	86.0000
Deck Fitting Losses (lb):	269.5335	275.9033	102.5185	106.3216	108.7688	111.9711	117.3795	118.8163	116.1320	110.8325	233.3361	269.0651
Value of Vapor Pressure	0.1796	0.1838	0.0614	0.0637	0.0651	0.0670	0.0703	0.0711	0.0695	0.0664	0.1483	0.1793
Function:												
Vapor Molecular Weight (lb/lb-mole):	62.0000	62.0000	69.0000	69.0000	69.0000	69.0000	69.0000	69.0000	69.0000	69.0000	65.0000	62.0000
Product Factor:	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Tot. Roof Fitting Loss Fact.(lb-mole/yr):	290.4700	290.4700	290.4700	290.4700	290.4700	290.4700	290.4700	290.4700	290.4700	290.4700	290.4700	290.4700
Deck Seam Losses (lb):	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Deck Seam Length (ft):	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Deck Seam Loss per Unit Length Factor (lb-mole-ft-yr):	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Deck Seam Length Factor (ft/sdqt):	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Tank Diameter (ft):	86.0000	86.0000	86.0000	86.0000	86.0000	86.0000	86.0000	86.0000	86.0000	86.0000	86.0000	86.0000
Vapor Molecular Weight (lb/lb-mole):	62.0000	62.0000	69.0000	69.0000	69.0000	69.0000	69.0000	69.0000	69.0000	69.0000	65.0000	62.0000
Product Factor:	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total Losses (lb):	666.2864	673.7877	469.6023	474.0809	476.9629	480.7341	487.1033	488.7953	485.6341	479.3932	623.6587	665.7348
Roof Fitting/Status					Quantity	K/Fa(lb-mole/yr)	Roof Fitting Loss Factors	K/Fa(lb-mole/(yr mph^n))		m	Losses(lb)	
Access Hatch (24-in. Diam.)/Bolted Cover, Gasketed					1	1.60	0.00	0.00		0.00	10.6416	
Automatic Gauge Float Well/Bolted Cover, Gasketed					1	2.80	0.00	0.00		0.00	18.6228	
Column Well (24-in. Diam.)/Built-Up Col.-Sliding Cover, Gask.					1	33.00	0.00	0.00		0.00	219.4831	
Ladder Well (36-in. Diam.)/Sliding Cover, Gasketed					16	56.00	0.00	0.00		0.00	372.4561	
Roof Leg or Hanger Well/Adjustable					1	7.90	0.00	0.00		0.00	840.6866	
Sample Pipe or Well (24-in. Diam.)/Slotted Pipe-Sliding Cover, Gask.					1	43.00	0.00	0.00		0.00	285.9931	
Vacuum Breaker (10-in. Diam.)/Weighted Mech. Actuation, Gask.					1	6.20	1.20	1.20		0.94	41.2362	
Slotted Guide-Pole/Sample Well/Gask. Sliding Cover, w. Float, Wiper					1	21.00	7.90	1.80		0.97	139.6710	
Unrated Sample Well (6-in. Diam.)/Weighted Mech. Actuation, Gask.					1	0.47	0.02	0.02			3.1260	

TANKS 4.0.9d
Emissions Report - Detail Format
Individual Tank Emission Totals

Emissions Report for: January, February, March, April, May, June, July, August, September, October, November, December

MV-23 PTE - Internal Floating Roof Tank
San Diego, California

Components	Losses(lbs)				Total Emissions
	Rim Seal Loss	Withdrawal Loss	Deck Fitting Loss	Deck Seam Loss	
Components					3,842.31
Gasoline (RVP 6)	158.59	2,790.98	892.74	0.00	
Gasoline (RVP 13.5)	144.69	1,046.62	814.50	0.00	2,005.81
Gasoline (RVP 11.5)	41.45	348.87	233.34	0.00	623.66

TANKS 4.0.9d

Emissions Report - Detail Format

Tank Identification and Physical Characteristics

Identification
User Identification: MV-25 PTE
City: San Diego
State: California
Company: SFPP, L.P.
Type of Tank: Internal Floating Roof Tank
Description:

Tank Dimensions
Diameter (ft): 85.00
Volume (gallons): 2,410,800.00
Turnovers: 782.75
Self Supp. Roof? (y/n): N
No. of Columns: 1.00
Eff. Col. Diam. (ft): 1.00

Paint Characteristics
Internal Shell Condition: Light Rust
Shell Color/Shade: White/White
Shell Condition: Good
Roof Color/Shade: White/White
Roof Condition: Good

Rim-Seal System
Primary Seal: Mechanical Shoe
Secondary Seal: Rim-mounted

Deck Characteristics
Deck Fitting Category: Detail
Deck Type: Welded

Deck Fitting/Status	Quantity
Access Hatch (24-in. Diam.)/Bolted Cover, Gasketed	1
Automatic Gauge Float Well/Bolted Cover, Gasketed	1
Column Well (24-in. Diam.)/Built-Up Col.-Sliding Cover, Gask.	1
Ladder Well (36-in. Diam.)/Sliding Cover, Gasketed	1
Roof Leg or Hanger Well/Adjustable	22
Sample Pipe or Well (24-in. Diam.)/Slotted Pipe-Sliding Cover, Gask.	1
Vacuum Breaker (10-in. Diam.)/Weighted Mech. Actuation, Gask.	1
Slotted Guide-Pole/Sample Well/Gask. Sliding Cover, w. Float, Wiper	1

Meteorological Data used in Emissions Calculations: San Diego, California (Avg Atmospheric Pressure = 14.7 psia)

TANKS 4.0.9d

Emissions Report - Detail Format

Liquid Contents of Storage Tank

MV-25 PTE - Internal Floating Roof Tank

San Diego, California

Mixture/Component	Month	Daily Liquid Surf. Temperature (deg F)			Liquid Bulk Temp (deg F)	Vapor Pressure (psia)			Vapor Mol. Weight	Liquid Mass Fract.	Vapor Mass Fract.	Mol. Weight	Basis for Vapor Pressure Calculations
		Avg.	Min.	Max.		Avg.	Min.	Max.					
Gasoline (RVP 13.5)	Jan	62.52	58.31	66.73	64.22	7.5910	N/A	N/A	62.0000			92.00	Option 4: RVP=13.5, ASTM Slope=3
Gasoline (RVP 13.5)	Feb	63.40	59.09	67.71	64.22	7.7148	N/A	N/A	62.0000			92.00	Option 4: RVP=13.5, ASTM Slope=3
Gasoline (RVP 6)	Mar	64.27	59.97	68.56	64.22	3.2045	N/A	N/A	69.0000			92.00	Option 4: RVP=6, ASTM Slope=3
Gasoline (RVP 6)	Apr	65.84	61.23	70.45	64.22	3.3091	N/A	N/A	69.0000			92.00	Option 4: RVP=6, ASTM Slope=3
Gasoline (RVP 6)	May	66.83	62.67	70.99	64.22	3.3760	N/A	N/A	69.0000			92.00	Option 4: RVP=6, ASTM Slope=3
Gasoline (RVP 6)	Jun	68.09	63.90	72.27	64.22	3.4629	N/A	N/A	69.0000			92.00	Option 4: RVP=6, ASTM Slope=3
Gasoline (RVP 6)	Jul	70.13	65.63	74.64	64.22	3.6082	N/A	N/A	69.0000			92.00	Option 4: RVP=6, ASTM Slope=3
Gasoline (RVP 6)	Aug	70.66	66.31	75.02	64.22	3.6465	N/A	N/A	69.0000			92.00	Option 4: RVP=6, ASTM Slope=3
Gasoline (RVP 6)	Sep	69.67	65.55	73.79	64.22	3.5749	N/A	N/A	69.0000			92.00	Option 4: RVP=6, ASTM Slope=3
Gasoline (RVP 6)	Oct	67.64	63.52	71.77	64.22	3.4321	N/A	N/A	69.0000			92.00	Option 4: RVP=6, ASTM Slope=3
Gasoline (RVP 11.5)	Nov	64.65	60.48	68.81	64.22	6.6146	N/A	N/A	65.0000			92.00	Option 4: RVP=11.5, ASTM Slope=3
Gasoline (RVP 13.5)	Dec	62.45	58.26	66.64	64.22	7.5818	N/A	N/A	62.0000			92.00	Option 4: RVP=13.5, ASTM Slope=3

TANKS 4.0.9d
Emissions Report - Detail Format
Detail Calculations (AP-42)

**MV-25 PTE - Internal Floating Roof Tank
San Diego, California**

Month	January	February	March	April	May	June	July	August	September	October	November	December
Rim Seal Losses (lb):	47.3240	48.4424	18.0000	18.6677	19.0974	19.6596	20.6092	20.9815	20.3902	19.4597	40.9686	47.2418
Seal Factor A (lb-mole/ft-yr):	0.6000	0.6000	0.6000	0.6000	0.6000	0.6000	0.6000	0.6000	0.6000	0.6000	0.6000	0.6000
Seal Factor B (lb-mole/ft-yr (mph)	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000
ΔP												
Value of Vapor Pressure Function:	0.1796	0.1838	0.0614	0.0637	0.0651	0.0670	0.0703	0.0711	0.0695	0.0664	0.1483	0.1793
Vapor Pressure at Daily Average Liquid												
Surface Temperature (psia):	7.5910	7.7148	3.2045	3.3091	3.3760	3.4629	3.6082	3.6465	3.5749	3.4321	6.6146	7.5818
Tank Diameter (ft):	85.0000	85.0000	85.0000	85.0000	85.0000	85.0000	85.0000	85.0000	85.0000	85.0000	85.0000	85.0000
Vapor Molecular Weight (lb/lb-mole):	62.0000	62.0000	69.0000	69.0000	69.0000	69.0000	69.0000	69.0000	69.0000	69.0000	65.0000	62.0000
Product Factor:	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Withdrawal Losses (lb):	353.0242	353.0242	353.0242	353.0242	353.0242	353.0242	353.0242	353.0242	353.0242	353.0242	353.0242	353.0242
Number of Columns:	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Effective Column Diameter (ft):	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Net Throughput (gal/mo.):	157.254,166.6000	157.254,166.6000	157.254,166.6000	157.254,166.6000	157.254,166.6000	157.254,166.6000	157.254,166.6000	157.254,166.6000	157.254,166.6000	157.254,166.6000	157.254,166.6000	157.254,166.6000
Shell Clingage Factor (lbi/1000 sqft):	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015
Average Organic Liquid Density (lb/gal):	5.6000	5.6000	5.6000	5.6000	5.6000	5.6000	5.6000	5.6000	5.6000	5.6000	5.6000	5.6000
Tank Diameter (ft):	85.0000	85.0000	85.0000	85.0000	85.0000	85.0000	85.0000	85.0000	85.0000	85.0000	85.0000	85.0000
Deck Fitting Losses (lb):	313.0809	320.4798	119.0820	123.4995	126.3421	130.0618	136.3440	138.0130	134.8949	128.7392	271.0352	312.5368
Value of Vapor Pressure Function:	0.1796	0.1838	0.0614	0.0637	0.0651	0.0670	0.0703	0.0711	0.0695	0.0664	0.1483	0.1793
Vapor Molecular Weight (lb/lb-mole):	62.0000	62.0000	69.0000	69.0000	69.0000	69.0000	69.0000	69.0000	69.0000	69.0000	65.0000	62.0000
Product Factor:	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Tot. Roof Fitting Loss Fact.(lb-mole/yr):	337.4000	337.4000	337.4000	337.4000	337.4000	337.4000	337.4000	337.4000	337.4000	337.4000	337.4000	337.4000
Deck Seam Losses (lb):	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Deck Seam Length (ft):	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Deck Seam Loss per Unit Length Factor (lb-mole/ft-yr):	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Deck Seam Length Factor (ft/sqft):	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Tank Diameter (ft):	85.0000	85.0000	85.0000	85.0000	85.0000	85.0000	85.0000	85.0000	85.0000	85.0000	85.0000	85.0000
Vapor Molecular Weight (lb/lb-mole):	62.0000	62.0000	69.0000	69.0000	69.0000	69.0000	69.0000	69.0000	69.0000	69.0000	65.0000	62.0000
Product Factor:	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total Losses (lb):	713.4291	721.9464	490.1062	495.1913	498.4637	502.7456	509.9774	511.8986	508.3093	501.2231	665.0279	712.8028
Roof Fitting/Status					Quantity	KFa(lb-mole/yr)	KFB(lb-mole/(yr mph^n))			m		Losses(lb)
Access Hatch (24-in. Diam.)/Bolted Cover, Gasketed					1	1.60	0.00			0.00		10.6416
Automatic Gauge Float Well/Bolted Cover, Gasketed					1	2.80	0.00			0.00		18.6228
Column Well (36-in. Diam.)/Built-Up Col.-Sliding Cover, Gask.					1	33.00	0.00			0.00		219.4831
Ladder Well (36-in. Diam.)/Sliding Cover, Gasketed					1	56.00	0.00			0.00		372.4561
Roof Leg or Hanger Well/Adjustable					22	7.90	0.00			0.00		1,155.9441
Sample Pipe or Well (24-in. Diam.)/Slotted Pipe-Sliding Cover, Gask.					1	43.00	0.00			0.00		285.9931
Vacuum Breaker (10-in. Diam.)/Weighted Mech. Actuation, Gask.					1	6.20	0.94			0.94		41.2362
Slotted Guide-Pole/Sample Well/Gask. Sliding Cover, w. Float, Wiper					1	21.00	1.80			1.80		139.6710

TANKS 4.0.9d
Emissions Report - Detail Format
Individual Tank Emission Totals

Emissions Report for: January, February, March, April, May, June, July, August, September, October, November, December

MV-25 PTE - Internal Floating Roof Tank
San Diego, California

		Losses(lbs)				Total Emissions
Components		Rim Seal Loss	Withdrawal Loss	Deck Fitting Loss	Deck Seam Loss	
Gasoline (RVP 11.5)		40.97	353.02	271.04	0.00	665.03
Gasoline (RVP 13.5)		143.01	1,059.07	946.10	0.00	2,148.18
Gasoline (RVP 6)		156.75	2,824.19	1,036.98	0.00	4,017.92

TANKS 4.0.9d

Emissions Report - Detail Format

Tank Identification and Physical Characteristics

Identification

User Identification: MV-26 PTE
 City: San Diego
 State: California
 Company: SFPP, L.P.
 Type of Tank: Internal Floating Roof Tank
 Description:

Tank Dimensions

Diameter (ft): 70.00
 Volume (gallons): 1,381,800.00
 Turnovers: 1,365.65
 Self Supp. Roof? (y/n): N
 No. of Columns: 1.00
 Eff. Col. Diam. (ft): 1.00

Paint Characteristics

Internal Shell Condition: Light Rust
 Shell Color/Shade: White/White
 Shell Condition: Good
 Roof Color/Shade: White/White
 Roof Condition: Good

Rim-Seal System

Primary Seal: Mechanical Shoe
 Secondary Seal: Rim-mounted

Deck Characteristics

Deck Fitting Category: Detail
 Deck Type: Welded

Deck Fitting/Status

Access Hatch (24-in. Diam.)/Bolted Cover, Gasketed	1
Automatic Gauge Float Well/Bolted Cover, Gasketed	1
Column Well (24-in. Diam.)/Built-Up Col.-Sliding Cover, Gask.	1
Ladder Well (36-in. Diam.)/Sliding Cover, Gasketed	1
Roof Leg or Hanger Well/Adjustable	22
Vacuum Breaker (10-in. Diam.)/Weighted Mech. Actuation, Gask.	1
Slotted Guide-Pole/Sample Well/Gask. Sliding Cover, w. Float, Wiper	1

Meteorological Data used in Emissions Calculations: San Diego, California (Avg Atmospheric Pressure = 14.7 psia)

TANKS 4.0.9d

Emissions Report - Detail Format

Liquid Contents of Storage Tank

MV-26 PTE - Internal Floating Roof Tank

San Diego, California

Mixture/Component	Month	Daily Liquid Surf. Temperature (deg F)			Liquid Bulk Temp (deg F)	Vapor Pressure (psia)			Vapor Mol. Weight	Liquid Mass Fract.	Vapor Mass Fract.	Mol. Weight	Basis for Vapor Pressure Calculations
		Avg.	Min.	Max.		Avg.	Min.	Max.					
Gasoline (RVP 13.5)	Jan	62.52	58.31	66.73	64.22	7.5910	N/A	N/A	62.0000			92.00	Option 4: RVP=13.5, ASTM Slope=3
Gasoline (RVP 13.5)	Feb	63.40	59.09	67.71	64.22	7.7148	N/A	N/A	62.0000			92.00	Option 4: RVP=13.5, ASTM Slope=3
Gasoline (RVP 6)	Mar	64.27	59.97	68.56	64.22	3.2045	N/A	N/A	69.0000			92.00	Option 4: RVP=6, ASTM Slope=3
Gasoline (RVP 6)	Apr	65.84	61.23	70.45	64.22	3.3091	N/A	N/A	69.0000			92.00	Option 4: RVP=6, ASTM Slope=3
Gasoline (RVP 6)	May	66.83	62.67	70.99	64.22	3.3760	N/A	N/A	69.0000			92.00	Option 4: RVP=6, ASTM Slope=3
Gasoline (RVP 6)	Jun	68.09	63.90	72.27	64.22	3.4629	N/A	N/A	69.0000			92.00	Option 4: RVP=6, ASTM Slope=3
Gasoline (RVP 6)	Jul	70.13	65.63	74.64	64.22	3.6082	N/A	N/A	69.0000			92.00	Option 4: RVP=6, ASTM Slope=3
Gasoline (RVP 6)	Aug	70.66	66.31	75.02	64.22	3.6465	N/A	N/A	69.0000			92.00	Option 4: RVP=6, ASTM Slope=3
Gasoline (RVP 6)	Sep	69.67	65.55	73.79	64.22	3.5749	N/A	N/A	69.0000			92.00	Option 4: RVP=6, ASTM Slope=3
Gasoline (RVP 6)	Oct	67.64	63.52	71.77	64.22	3.4321	N/A	N/A	69.0000			92.00	Option 4: RVP=6, ASTM Slope=3
Gasoline (RVP 11.5)	Nov	64.65	60.48	68.81	64.22	6.6146	N/A	N/A	65.0000			92.00	Option 4: RVP=11.5, ASTM Slope=3
Gasoline (RVP 13.5)	Dec	62.45	58.26	66.64	64.22	7.5818	N/A	N/A	62.0000			92.00	Option 4: RVP=13.5, ASTM Slope=3

TANKS 4.0.9d

Emissions Report - Detail Format

Detail Calculations (AP-42)

MV-26 PTE - Internal Floating Roof Tank

San Diego, California

Month:	January	February	March	April	May	June	July	August	September	October	November	December
Rim Seal Losses (lb):	38.9727	39.8938	14.8235	15.3734	15.7272	16.1903	16.9723	17.1800	16.7919	16.0256	33.7388	38.9050
Seal Factor A (lb-mole/ft-yr):	0.6000	0.6000	0.6000	0.6000	0.6000	0.6000	0.6000	0.6000	0.6000	0.6000	0.6000	0.6000
Seal Factor B (lb-mole/ft-yr (mph)):	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000
Value of Vapor Pressure:	0.1796	0.1838	0.0614	0.0637	0.0651	0.0670	0.0703	0.0711	0.0695	0.0664	0.1483	0.1793
Function:												
Vapor Pressure at Daily Average:												
Liquid:												
Surface Temperature (psia):	7.5910	7.7148	3.2045	3.3091	3.3760	3.4629	3.6082	3.6465	3.5749	3.4321	6.6146	7.5818
Tank Diameter (ft):	70.0000	70.0000	70.0000	70.0000	70.0000	70.0000	70.0000	70.0000	70.0000	70.0000	70.0000	70.0000
Vapor Molecular Weight (lb/lb-mole):	62.0000	62.0000	69.0000	69.0000	69.0000	69.0000	69.0000	69.0000	69.0000	69.0000	65.0000	62.0000
Product Factor:	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Withdrawal Losses (lb):	429.7403	429.7403	429.7403	429.7403	429.7403	429.7403	429.7403	429.7403	429.7403	429.7403	429.7403	429.7403
Number of Columns:	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Effective Column Diameter (ft):	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Net Throughput (gal/mo.):	157,254,166.6000	157,254,166.6000	157,254,166.6000	157,254,166.6000	157,254,166.6000	157,254,166.6000	157,254,166.6000	157,254,166.6000	157,254,166.6000	157,254,166.6000	157,254,166.6000	157,254,166.6000
Shell Clingage Factor (bbl/1000 sqft):	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015
Average Organic Liquid Density (lb/gal):	5.6000	5.6000	5.6000	5.6000	5.6000	5.6000	5.6000	5.6000	5.6000	5.6000	5.6000	5.6000
Tank Diameter (ft):	70.0000	70.0000	70.0000	70.0000	70.0000	70.0000	70.0000	70.0000	70.0000	70.0000	70.0000	70.0000
Deck Fitting Losses (lb):	273.1802	279.6362	103.9056	107.7601	110.2405	113.4861	118.9676	120.4239	117.7032	112.3320	236.4930	272.7055
Value of Vapor Pressure:	0.1796	0.1838	0.0614	0.0637	0.0651	0.0670	0.0703	0.0711	0.0695	0.0664	0.1483	0.1793
Function:												
Vapor Molecular Weight (lb/lb-mole):	62.0000	62.0000	69.0000	69.0000	69.0000	69.0000	69.0000	69.0000	69.0000	69.0000	65.0000	62.0000
Product Factor:	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Tot. Roof Fitting Loss Fact (lb-mole/yr):	294.4000	294.4000	294.4000	294.4000	294.4000	294.4000	294.4000	294.4000	294.4000	294.4000	294.4000	294.4000
Deck Seam Losses (lb):	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Deck Seam Length (ft):	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Deck Seam Loss per Unit Length Factor (lb-mole/ft-yr):	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Deck Seam Length Factor (ft/sqft):	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Tank Diameter (ft):	70.0000	70.0000	70.0000	70.0000	70.0000	70.0000	70.0000	70.0000	70.0000	70.0000	70.0000	70.0000
Vapor Molecular Weight (lb/lb-mole):	62.0000	62.0000	69.0000	69.0000	69.0000	69.0000	69.0000	69.0000	69.0000	69.0000	65.0000	62.0000
Product Factor:	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total Losses (lb):	741.8933	749.2703	548.4694	552.8738	555.7080	559.4167	565.8803	567.3443	564.2355	558.0980	699.9722	741.3509
Roof Fitting/Status:												
Access Hatch (24-in. Diam.)/Bolted Cover, Gasketed					1		1.50	0.00	0.00	0.00	10.6416	
Automatic Gauge Float Well/Bolted Cover, Gasketed					1		2.80	0.00	0.00	0.00	18.6228	
Column Well (24-in. Diam.)/Built-Up Coil-Sliding Cover, Gask.					1		33.00	0.00	0.00	0.00	219.4831	
Ladder Well (36-in. Diam.)/Sliding Cover, Gasketed					22		56.00	0.00	0.00	0.00	372.4561	
Roof Leg or Hanger Well/Adjustable					1		7.90	0.00	0.00	0.00	1,155.9441	
Vacuum Breaker (10-in. Diam.)/Weighted Mech. Actuation, Gask.					1		6.20	1.20	0.94	41.2362		
Slotted Guide-Pole/Sample Well/Gask. Sliding Cover, w. Float, Wiper					1		21.00	7.90	1.80	139.6710		

TANKS 4.0.9d
Emissions Report - Detail Format
Individual Tank Emission Totals

Emissions Report for: January, February, March, April, May, June, July, August, September, October, November, December

MV-26 PTE - Internal Floating Roof Tank
San Diego, California

Components	Losses(lbs)				Total Emissions
	Rim Seal Loss	Withdrawal Loss	Deck Fitting Loss	Deck Seam Loss	
Gasoline (RVP 6)	129.08	3,437.92	904.82	0.00	4,471.83
Gasoline (RVP 11.5)	33.74	429.74	236.49	0.00	699.97
Gasoline (RVP 13.5)	117.77	1,289.22	825.52	0.00	2,232.51

TANKS 4.0.9d

Emissions Report - Detail Format

Tank Identification and Physical Characteristics

Identification

User Identification: MV-27 PTE
 City: San Diego
 State: California
 Company: SFPP, L.P.
 Type of Tank: Internal Floating Roof Tank
 Description:

Tank Dimensions

Diameter (ft): 60.00
 Volume (gallons): 1,015,140.00
 Turnovers: 1,858.91
 Self Supp. Roof? (y/n): N
 No. of Columns: 1.00
 Eff. Col. Diam. (ft): 1.00

Paint Characteristics

Internal Shell Condition: Light Rust
 Shell Color/Shade: White/White
 Shell Condition: Good
 Roof Color/Shade: White/White
 Roof Condition: Good

Rim-Seal System

Primary Seal: Mechanical Shoe
 Secondary Seal: Rim-mounted

Deck Characteristics

Deck Fitting Category: Detail
 Deck Type: Welded

Deck Fitting/Status

	Quantity
Access Hatch (24-in. Diam.)/Bolted Cover, Gasketed	1
Automatic Gauge Float Well/Bolted Cover, Gasketed	1
Column Well (24-in. Diam.)/Built-Up Col.-Sliding Cover, Gask.	1
Ladder Well (36-in. Diam.)/Sliding Cover, Gasketed	1
Roof Leg or Hanger Well/Adjustable	11
Vacuum Breaker (10-in. Diam.)/Weighted Mech. Actuation, Gask.	1
Slotted Guide-Pole/Sample Well/Gask. Sliding Cover, w. Float, Wiper	1

Meteorological Data used in Emissions Calculations: San Diego, California (Avg Atmospheric Pressure = 14.7 psia)

TANKS 4.0.9d

Emissions Report - Detail Format

Liquid Contents of Storage Tank

MV-27 PTE - Internal Floating Roof Tank San Diego, California

Mixture/Component	Month	Daily Liquid Surf. Temperature (deg F)		Liquid Bulk Temp (deg F)	Vapor Pressure (psia)		Vapor Mol. Weight	Liquid Mass Fract.	Vapor Mass Fract.	Mol. Weight	Basis for Vapor Pressure Calculations
		Avg.	Min.		Avg.	Min.					
Gasoline (RVP 13.5)	Jan	62.52	58.31	64.22	7.5910	N/A	62.0000	N/A	N/A	92.00	Option 4: RVP=13.5, ASTM Slope=3
Gasoline (RVP 13.5)	Feb	63.40	59.09	64.22	7.7148	N/A	62.0000	N/A	N/A	92.00	Option 4: RVP=13.5, ASTM Slope=3
Gasoline (RVP 6)	Mar	64.27	59.97	64.22	3.2045	N/A	69.0000	N/A	N/A	92.00	Option 4: RVP=6, ASTM Slope=3
Gasoline (RVP 6)	Apr	65.84	61.23	70.45	3.3091	N/A	69.0000	N/A	N/A	92.00	Option 4: RVP=6, ASTM Slope=3
Gasoline (RVP 6)	May	66.83	62.67	70.99	3.3760	N/A	69.0000	N/A	N/A	92.00	Option 4: RVP=6, ASTM Slope=3
Gasoline (RVP 6)	Jun	68.09	63.90	72.27	3.4629	N/A	69.0000	N/A	N/A	92.00	Option 4: RVP=6, ASTM Slope=3
Gasoline (RVP 6)	Jul	70.13	65.63	74.64	3.6082	N/A	69.0000	N/A	N/A	92.00	Option 4: RVP=6, ASTM Slope=3
Gasoline (RVP 6)	Aug	70.66	66.31	75.02	3.6465	N/A	69.0000	N/A	N/A	92.00	Option 4: RVP=6, ASTM Slope=3
Gasoline (RVP 6)	Sep	69.67	65.55	73.79	3.5749	N/A	69.0000	N/A	N/A	92.00	Option 4: RVP=6, ASTM Slope=3
Gasoline (RVP 6)	Oct	67.64	63.52	71.77	3.4321	N/A	69.0000	N/A	N/A	92.00	Option 4: RVP=6, ASTM Slope=3
Gasoline (RVP 11.5)	Nov	64.65	60.48	66.81	6.6146	N/A	65.0000	N/A	N/A	92.00	Option 4: RVP=11.5, ASTM Slope=3
Gasoline (RVP 13.5)	Dec	62.45	58.26	64.22	7.5918	N/A	62.0000	N/A	N/A	92.00	Option 4: RVP=13.5, ASTM Slope=3

TANKS 4.0.9d

Emissions Report - Detail Format

Detail Calculations (AP-42)

MV-27 PTE - Internal Floating Roof Tank

San Diego, California

Month	January	February	March	April	May	June	July	August	September	October	November	December
Rim Seal Losses (lb):	33.4052	34.1946	12.7058	13.1772	13.4805	13.8774	14.5477	14.7257	14.3931	13.7363	28.9190	33.3471
Seal Factor A (lb-mole/ft-yr):	0.6000	0.6000	0.6000	0.6000	0.6000	0.6000	0.6000	0.6000	0.6000	0.6000	0.6000	0.6000
Seal Factor B (lb-mole/ft-yr (mph)):	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000
Value of Vapor Pressure Function:	0.1796	0.1838	0.0614	0.0637	0.0651	0.0670	0.0703	0.0711	0.0695	0.0664	0.1483	0.1793
Vapor Pressure at Daily Average Liquid Surface Temperature (psia):	7.5910	7.7148	3.2045	3.3091	3.3760	3.4629	3.6082	3.6465	3.5749	3.4321	6.6146	7.5818
Tank Diameter (ft):	60.0000	60.0000	60.0000	60.0000	60.0000	60.0000	60.0000	60.0000	60.0000	60.0000	60.0000	60.0000
Vapor Molecular Weight (lb/lb-mole):	62.0000	62.0000	69.0000	69.0000	69.0000	69.0000	69.0000	69.0000	69.0000	69.0000	65.0000	62.0000
Product Factor:	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Withdrawal Losses (lb):	502.5406	502.5406	502.5406	502.5406	502.5406	502.5406	502.5406	502.5406	502.5406	502.5406	502.5406	502.5406
Number of Columns:	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Effective Column Diameter (ft):	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Net Throughput (gal/mo.):	157,254.166.6000	157,254.166.6000	157,254.166.6000	157,254.166.6000	157,254.166.6000	157,254.166.6000	157,254.166.6000	157,254.166.6000	157,254.166.6000	157,254.166.6000	157,254.166.6000	157,254.166.6000
Shell Clingage Factor (lb/1000 sqft):	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015
Average Organic Liquid Density (lb/gal):	5.6000	5.6000	5.6000	5.6000	5.6000	5.6000	5.6000	5.6000	5.6000	5.6000	5.6000	5.6000
Tank Diameter (ft):	60.0000	60.0000	60.0000	60.0000	60.0000	60.0000	60.0000	60.0000	60.0000	60.0000	60.0000	60.0000
Deck Fitting Losses (lb):	192.5438	197.0941	73.2351	75.9518	77.7000	79.9876	83.8512	84.8776	82.9600	79.1742	166.6858	192.2092
Value of Vapor Pressure Function:	0.1796	0.1838	0.0614	0.0637	0.0651	0.0670	0.0703	0.0711	0.0695	0.0664	0.1483	0.1793
Vapor Molecular Weight (lb/lb-mole):	62.0000	62.0000	69.0000	69.0000	69.0000	69.0000	69.0000	69.0000	69.0000	69.0000	65.0000	62.0000
Product Factor:	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Tot. Roof Fitting Loss Fact. (lb-mole/yr):	207.5000	207.5000	207.5000	207.5000	207.5000	207.5000	207.5000	207.5000	207.5000	207.5000	207.5000	207.5000
Deck Seam Losses (lb):	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Deck Seam Length (ft):	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Deck Seam Loss per Unit Length Factor (lb-mole/ft-yr):	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Deck Seam Length Factor (ft/sqft):	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Tank Diameter (ft):	60.0000	60.0000	60.0000	60.0000	60.0000	60.0000	60.0000	60.0000	60.0000	60.0000	60.0000	60.0000
Vapor Molecular Weight (lb/lb-mole):	62.0000	62.0000	69.0000	69.0000	69.0000	69.0000	69.0000	69.0000	69.0000	69.0000	65.0000	62.0000
Product Factor:	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total Losses (lb):	728.4896	733.8294	588.4816	591.6696	593.7212	596.4057	600.9395	602.1440	599.8937	595.4511	698.1454	728.0970
Roof Fitting/Status	Access Hatch (24-in. Diam./Bolted Cover, Gasketed											
Automatic Gauge Float Well/Bolted Cover, Gasketed												
Column Well (24-in. Diam./Built-Up Coil Sliding Cover, Gask.												
Ladder Well (36-in. Diam./Sliding Cover, Gasketed												
Roof Leg or Hanger Well/Adjustable												
Vacuum Breaker (10-in. Diam./Weighted Mech. Actuation, Gask.												
Slotted Guide-Pole/Sample Well/Gask. Sliding Cover, w. Float, Wiper												
Roof Fitting Loss Factors												
Quantity	1	1	1	1	1	1	1	1	1	1	1	1
KF-ft(lb-mole/yr)	1.60	2.80	33.00	56.00	7.90	6.20	21.00	0.00	0.00	0.00	0.00	0.00
KF-ft(lb-mole/yr mph^n)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Losses(lb)	10.6416	18.6228	219.4831	372.4561	577.9720	41.2362	139.6710	0.00	0.00	0.00	0.00	0.00

TANKS 4.0.9d
Emissions Report - Detail Format
Individual Tank Emission Totals

Emissions Report for: January, February, March, April, May, June, July, August, September, October, November, December

MV-27 PTE - Internal Floating Roof Tank
San Diego, California

Components	Losses (lbs)				Total Emissions
	Rim Seal Loss	Withdrawal Loss	Deck Fitting Loss	Deck Seam Loss	
Gasoline (RVP 6)	110.64	4,020.33	637.74	0.00	4,768.71
Gasoline (RVP 11.5)	28.92	502.54	166.69	0.00	698.15
Gasoline (RVP 13.5)	100.95	1,507.62	581.85	0.00	2,190.42

TANKS 4.0.9d
Emissions Report - Detail Format
Tank Identification and Physical Characteristics

Identification

User Identification: MV-28 PTE
City: San Diego
State: California
Company: SFPP, L.P.
Type of Tank: Internal Floating Roof Tank
Description:

Tank Dimensions

Diameter (ft): 60.00
Volume (gallons): 1,015,140.00
Turnovers: 1,858.91
Self Supp. Roof? (y/n): N
No. of Columns: 1.00
Eff. Col. Diam. (ft): 1.00

Paint Characteristics

Internal Shell Condition: Light Rust
Shell Color/Shade: White/White
Shell Condition: Good
Roof Color/Shade: White/White
Roof Condition: Good

Rim-Seal System

Primary Seal: Mechanical Shoe
Secondary Seal: Rim-mounted

Deck Characteristics

Deck Fitting Category: Detail
Deck Type: Welded

Deck Fitting/Status

	Quantity
Access Hatch (24-in. Diam.)/Bolted Cover, Gasketed	1
Automatic Gauge Float Well/Bolted Cover, Gasketed	1
Column Well (24-in. Diam.)/Built-Up Col.-Sliding Cover, Gask.	1
Ladder Well (36-in. Diam.)/Sliding Cover, Gasketed	1
Roof Leg or Hanger Well/Adjustable	15
Sample Pipe or Well (24-in. Diam.)/Slotted Pipe-Sliding Cover, Gask.	1
Vacuum Breaker (10-in. Diam.)/Weighted Mech. Actuation, Gask.	1
Slotted Guide-Pole/Sample Well/Gask. Sliding Cover, w. Float, Wiper	1

Meteorological Data used in Emissions Calculations: San Diego, California (Avg Atmospheric Pressure = 14.7 psia)

TANKS 4.0.9d Emissions Report - Detail Format Liquid Contents of Storage Tank

MV-28 PTE - Internal Floating Roof Tank San Diego, California

Mixture/Component	Month	Daily Liquid Surf. Temperature (deg F)			Liquid Bulk Temp (deg F)	Vapor Pressure (psia)			Vapor Mol. Weight	Liquid Mass Fract.	Vapor Mass Fract.	Mol. Weight	Basis for Vapor Pressure Calculations
		Avg.	Min.	Max.		Avg.	Min.	Max.					
Gasoline (RVP 13.5)	Jan	62.52	58.31	66.73	64.22	7.5910	N/A	N/A	62.0000			92.00	Option 4: RVP=13.5, ASTM Slope=3
Gasoline (RVP 13.5)	Feb	63.40	59.09	67.71	64.22	7.7148	N/A	N/A	62.0000			92.00	Option 4: RVP=13.5, ASTM Slope=3
Gasoline (RVP 6)	Mar	64.27	59.97	68.56	64.22	3.2045	N/A	N/A	69.0000			92.00	Option 4: RVP=6, ASTM Slope=3
Gasoline (RVP 6)	Apr	65.84	61.23	70.45	64.22	3.3091	N/A	N/A	69.0000			92.00	Option 4: RVP=6, ASTM Slope=3
Gasoline (RVP 6)	May	66.83	62.67	70.99	64.22	3.3760	N/A	N/A	69.0000			92.00	Option 4: RVP=6, ASTM Slope=3
Gasoline (RVP 6)	Jun	68.09	63.90	72.27	64.22	3.4629	N/A	N/A	69.0000			92.00	Option 4: RVP=6, ASTM Slope=3
Gasoline (RVP 6)	Jul	70.13	65.63	74.64	64.22	3.6082	N/A	N/A	69.0000			92.00	Option 4: RVP=6, ASTM Slope=3
Gasoline (RVP 6)	Aug	70.66	66.31	75.02	64.22	3.6465	N/A	N/A	69.0000			92.00	Option 4: RVP=6, ASTM Slope=3
Gasoline (RVP 6)	Sep	69.67	65.55	73.79	64.22	3.5749	N/A	N/A	69.0000			92.00	Option 4: RVP=6, ASTM Slope=3
Gasoline (RVP 6)	Oct	67.64	63.52	71.77	64.22	3.4321	N/A	N/A	69.0000			92.00	Option 4: RVP=6, ASTM Slope=3
Gasoline (RVP 11.5)	Nov	64.65	60.48	68.81	64.22	6.6146	N/A	N/A	65.0000			92.00	Option 4: RVP=11.5, ASTM Slope=3
Gasoline (RVP 13.5)	Dec	62.45	58.26	66.64	64.22	7.5818	N/A	N/A	62.0000			92.00	Option 4: RVP=13.5, ASTM Slope=3

TANKS 4.0.9d

Emissions Report - Detail Format

Detail Calculations (AP-42)

MV-28 PTE - Internal Floating Roof Tank San Diego, California

Month:	January	February	March	April	May	June	July	August	September	October	November	December
Rim Seal Losses (lb):	33.4052	34.1946	12.7058	13.1772	13.4805	13.8774	14.5477	14.7257	14.3931	13.7363	28.9190	33.3471
Seal Factor A (lb-mole/ft-yr):	0.6000	0.6000	0.6000	0.6000	0.6000	0.6000	0.6000	0.6000	0.6000	0.6000	0.6000	0.6000
Seal Factor B (lb-mole/ft-yr (mph)):	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000
n:												
Value of Vapor Pressure Function:	0.1796	0.1838	0.0614	0.0637	0.0651	0.0670	0.0703	0.0711	0.0695	0.0664	0.1483	0.1793
Vapor Pressure at Daily Average Liquid Surface Temperature (psia):	7.5910	7.7148	3.2045	3.3091	3.3760	3.4629	3.6082	3.6465	3.5749	3.4321	6.6146	7.5818
Tank Diameter (ft):	60.0000	60.0000	60.0000	60.0000	60.0000	60.0000	60.0000	60.0000	60.0000	60.0000	60.0000	60.0000
Vapor Molecular Weight (lb/lb-mole):	62.0000	62.0000	69.0000	69.0000	69.0000	69.0000	69.0000	69.0000	69.0000	69.0000	65.0000	62.0000
Product Factor:	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Withdrawal Losses (lb):	502.5406	502.5406	502.5406	502.5406	502.5406	502.5406	502.5406	502.5406	502.5406	502.5406	502.5406	502.5406
Number of Columns:	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Effective Column Diameter (ft):	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Net Throughput (gal/min):	157,254,166.6000	157,254,166.6000	157,254,166.6000	157,254,166.6000	157,254,166.6000	157,254,166.6000	157,254,166.6000	157,254,166.6000	157,254,166.6000	157,254,166.6000	157,254,166.6000	157,254,166.6000
Shell Clingage Factor (bbl/1000 sqft):	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015
Average Organic Liquid Density (lb/gal):	5.6000	5.6000	5.6000	5.6000	5.6000	5.6000	5.6000	5.6000	5.6000	5.6000	5.6000	5.6000
Tank Diameter (ft):	60.0000	60.0000	60.0000	60.0000	60.0000	60.0000	60.0000	60.0000	60.0000	60.0000	60.0000	60.0000
Deck Fitting Losses (lb):	261.7668	267.9530	98.5644	103.2579	105.6346	108.7447	113.9972	115.3926	112.7856	107.6388	226.6124	261.3119
Value of Vapor Pressure Function:	0.1796	0.1838	0.0614	0.0637	0.0651	0.0670	0.0703	0.0711	0.0695	0.0664	0.1483	0.1793
Vapor Molecular Weight (lb/lb-mole):	62.0000	62.0000	69.0000	69.0000	69.0000	69.0000	69.0000	69.0000	69.0000	69.0000	65.0000	62.0000
Product Factor:	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Tot. Roof Fitting Loss Fact. (lb-mole/yr):	282.1000	282.1000	282.1000	282.1000	282.1000	282.1000	282.1000	282.1000	282.1000	282.1000	282.1000	282.1000
Deck Seam Losses (lb):	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Deck Seam Length (ft):	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Deck Seam Loss per Unit Length Factor (lb-mole/ft-yr):	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Deck Seam Length Factor (ft/sqft):	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Tank Diameter (ft):	60.0000	60.0000	60.0000	60.0000	60.0000	60.0000	60.0000	60.0000	60.0000	60.0000	60.0000	60.0000
Vapor Molecular Weight (lb/lb-mole):	62.0000	62.0000	69.0000	69.0000	69.0000	69.0000	69.0000	69.0000	69.0000	69.0000	65.0000	62.0000
Product Factor:	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total Losses (lb):	797.7126	804.6883	614.8109	618.9757	621.6557	625.1627	631.0855	632.6590	629.7193	623.9157	758.0720	797.1997
Roof Fitting/Status	Access Hatch (24-in. Diam.)/Bolted Cover, Gasketed	Access Hatch (24-in. Diam.)/Bolted Cover, Gasketed	Access Hatch (24-in. Diam.)/Bolted Cover, Gasketed	Access Hatch (24-in. Diam.)/Bolted Cover, Gasketed	Access Hatch (24-in. Diam.)/Bolted Cover, Gasketed	Access Hatch (24-in. Diam.)/Bolted Cover, Gasketed	Access Hatch (24-in. Diam.)/Bolted Cover, Gasketed	Access Hatch (24-in. Diam.)/Bolted Cover, Gasketed	Access Hatch (24-in. Diam.)/Bolted Cover, Gasketed	Access Hatch (24-in. Diam.)/Bolted Cover, Gasketed	Access Hatch (24-in. Diam.)/Bolted Cover, Gasketed	Access Hatch (24-in. Diam.)/Bolted Cover, Gasketed
Automatic Gauge Float/Bolted Cover, Gasketed	Automatic Gauge Float/Bolted Cover, Gasketed	Automatic Gauge Float/Bolted Cover, Gasketed	Automatic Gauge Float/Bolted Cover, Gasketed	Automatic Gauge Float/Bolted Cover, Gasketed	Automatic Gauge Float/Bolted Cover, Gasketed	Automatic Gauge Float/Bolted Cover, Gasketed	Automatic Gauge Float/Bolted Cover, Gasketed	Automatic Gauge Float/Bolted Cover, Gasketed	Automatic Gauge Float/Bolted Cover, Gasketed	Automatic Gauge Float/Bolted Cover, Gasketed	Automatic Gauge Float/Bolted Cover, Gasketed	Automatic Gauge Float/Bolted Cover, Gasketed
Column Well (24-in. Diam.)/Built-Up Coll-Sliding Cover, Gask.	Column Well (24-in. Diam.)/Built-Up Coll-Sliding Cover, Gask.	Column Well (24-in. Diam.)/Built-Up Coll-Sliding Cover, Gask.	Column Well (24-in. Diam.)/Built-Up Coll-Sliding Cover, Gask.	Column Well (24-in. Diam.)/Built-Up Coll-Sliding Cover, Gask.	Column Well (24-in. Diam.)/Built-Up Coll-Sliding Cover, Gask.	Column Well (24-in. Diam.)/Built-Up Coll-Sliding Cover, Gask.	Column Well (24-in. Diam.)/Built-Up Coll-Sliding Cover, Gask.	Column Well (24-in. Diam.)/Built-Up Coll-Sliding Cover, Gask.	Column Well (24-in. Diam.)/Built-Up Coll-Sliding Cover, Gask.	Column Well (24-in. Diam.)/Built-Up Coll-Sliding Cover, Gask.	Column Well (24-in. Diam.)/Built-Up Coll-Sliding Cover, Gask.	Column Well (24-in. Diam.)/Built-Up Coll-Sliding Cover, Gask.
Ladder Well (36-in. Diam.)/Sliding Cover, Gasketed	Ladder Well (36-in. Diam.)/Sliding Cover, Gasketed	Ladder Well (36-in. Diam.)/Sliding Cover, Gasketed	Ladder Well (36-in. Diam.)/Sliding Cover, Gasketed	Ladder Well (36-in. Diam.)/Sliding Cover, Gasketed	Ladder Well (36-in. Diam.)/Sliding Cover, Gasketed	Ladder Well (36-in. Diam.)/Sliding Cover, Gasketed	Ladder Well (36-in. Diam.)/Sliding Cover, Gasketed	Ladder Well (36-in. Diam.)/Sliding Cover, Gasketed	Ladder Well (36-in. Diam.)/Sliding Cover, Gasketed	Ladder Well (36-in. Diam.)/Sliding Cover, Gasketed	Ladder Well (36-in. Diam.)/Sliding Cover, Gasketed	Ladder Well (36-in. Diam.)/Sliding Cover, Gasketed
Roof Leg or Hanger Well/Adjustable	Roof Leg or Hanger Well/Adjustable	Roof Leg or Hanger Well/Adjustable	Roof Leg or Hanger Well/Adjustable	Roof Leg or Hanger Well/Adjustable	Roof Leg or Hanger Well/Adjustable	Roof Leg or Hanger Well/Adjustable	Roof Leg or Hanger Well/Adjustable	Roof Leg or Hanger Well/Adjustable	Roof Leg or Hanger Well/Adjustable	Roof Leg or Hanger Well/Adjustable	Roof Leg or Hanger Well/Adjustable	Roof Leg or Hanger Well/Adjustable
Sample Pipe or Well (24-in. Diam.)/Slotted Pipe-Sliding Cover, Gask.	Sample Pipe or Well (24-in. Diam.)/Slotted Pipe-Sliding Cover, Gask.	Sample Pipe or Well (24-in. Diam.)/Slotted Pipe-Sliding Cover, Gask.	Sample Pipe or Well (24-in. Diam.)/Slotted Pipe-Sliding Cover, Gask.	Sample Pipe or Well (24-in. Diam.)/Slotted Pipe-Sliding Cover, Gask.	Sample Pipe or Well (24-in. Diam.)/Slotted Pipe-Sliding Cover, Gask.	Sample Pipe or Well (24-in. Diam.)/Slotted Pipe-Sliding Cover, Gask.	Sample Pipe or Well (24-in. Diam.)/Slotted Pipe-Sliding Cover, Gask.	Sample Pipe or Well (24-in. Diam.)/Slotted Pipe-Sliding Cover, Gask.	Sample Pipe or Well (24-in. Diam.)/Slotted Pipe-Sliding Cover, Gask.	Sample Pipe or Well (24-in. Diam.)/Slotted Pipe-Sliding Cover, Gask.	Sample Pipe or Well (24-in. Diam.)/Slotted Pipe-Sliding Cover, Gask.	Sample Pipe or Well (24-in. Diam.)/Slotted Pipe-Sliding Cover, Gask.
Vacuum Breaker (10-in. Diam.)/Weighted Mech. Actuation, Gask.	Vacuum Breaker (10-in. Diam.)/Weighted Mech. Actuation, Gask.	Vacuum Breaker (10-in. Diam.)/Weighted Mech. Actuation, Gask.	Vacuum Breaker (10-in. Diam.)/Weighted Mech. Actuation, Gask.	Vacuum Breaker (10-in. Diam.)/Weighted Mech. Actuation, Gask.	Vacuum Breaker (10-in. Diam.)/Weighted Mech. Actuation, Gask.	Vacuum Breaker (10-in. Diam.)/Weighted Mech. Actuation, Gask.	Vacuum Breaker (10-in. Diam.)/Weighted Mech. Actuation, Gask.	Vacuum Breaker (10-in. Diam.)/Weighted Mech. Actuation, Gask.	Vacuum Breaker (10-in. Diam.)/Weighted Mech. Actuation, Gask.	Vacuum Breaker (10-in. Diam.)/Weighted Mech. Actuation, Gask.	Vacuum Breaker (10-in. Diam.)/Weighted Mech. Actuation, Gask.	Vacuum Breaker (10-in. Diam.)/Weighted Mech. Actuation, Gask.
Slotted Guide-Pole/Sample Well/Gask, Sliding Cover, w. Float, Wiper	Slotted Guide-Pole/Sample Well/Gask, Sliding Cover, w. Float, Wiper	Slotted Guide-Pole/Sample Well/Gask, Sliding Cover, w. Float, Wiper	Slotted Guide-Pole/Sample Well/Gask, Sliding Cover, w. Float, Wiper	Slotted Guide-Pole/Sample Well/Gask, Sliding Cover, w. Float, Wiper	Slotted Guide-Pole/Sample Well/Gask, Sliding Cover, w. Float, Wiper	Slotted Guide-Pole/Sample Well/Gask, Sliding Cover, w. Float, Wiper	Slotted Guide-Pole/Sample Well/Gask, Sliding Cover, w. Float, Wiper	Slotted Guide-Pole/Sample Well/Gask, Sliding Cover, w. Float, Wiper	Slotted Guide-Pole/Sample Well/Gask, Sliding Cover, w. Float, Wiper	Slotted Guide-Pole/Sample Well/Gask, Sliding Cover, w. Float, Wiper	Slotted Guide-Pole/Sample Well/Gask, Sliding Cover, w. Float, Wiper	Slotted Guide-Pole/Sample Well/Gask, Sliding Cover, w. Float, Wiper
Roof Fitting Loss Factors	Quantity	Quantity	Quantity	Quantity	Quantity	Quantity	Quantity	Quantity	Quantity	Quantity	Quantity	Quantity
KFa (lb-mole/yr)	1.60	2.80	33.00	33.00	33.00	33.00	33.00	33.00	33.00	33.00	33.00	33.00
KFb (lb-mole/yr mph^n)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Losses (lb)	10.6416	18.6228	219.4831	219.4831	219.4831	219.4831	219.4831	219.4831	219.4831	219.4831	219.4831	219.4831
m	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

TANKS 4.0.9d
Emissions Report - Detail Format
Individual Tank Emission Totals

Emissions Report for: January, February, March, April, May, June, July, August, September, October, November, December

MV-28 PTE - Internal Floating Roof Tank
San Diego, California

	Losses(lbs)				Total Emissions
	Rim Seal Loss	Withdrawal Loss	Deck Fitting Loss	Deck Seam Loss	
Components					
Gasoline (RVP 6)	110.64	4,020.33	867.02	0.00	4,997.98
Gasoline (RVP 11.5)	28.92	502.54	226.61	0.00	758.07
Gasoline (RVP 13.5)	100.95	1,507.62	791.03	0.00	2,399.60

TANKS 4.0.9d
Emissions Report - Detail Format
Tank Identification and Physical Characteristics

Identification
User Identification: MV-29 PTE
City: San Diego
State: California
Company: SFPP, L.P.
Type of Tank: Internal Floating Roof Tank
Description:

Tank Dimensions
Diameter (ft): 48.00
Volume (gallons): 659,400.00
Turnovers: 2,861.77
Self Supp. Roof? (y/n): N
No. of Columns: 1.00
Eff. Col. Diam. (ft): 1.00

Paint Characteristics
Internal Shell Condition: Light Rust
Shell Color/Shade: White/White
Shell Condition: Good
Roof Color/Shade: White/White
Roof Condition: Good

Rim-Seal System
Primary Seal: Mechanical Shoe
Secondary Seal: Rim-mounted

Deck Characteristics
Deck Fitting Category: Detail
Deck Type: Welded

Deck Fitting/Status	Quantity
Access Hatch (24-in. Diam.)/Bolted Cover, Gasketed	1
Automatic Gauge Float Well/Bolted Cover, Gasketed	1
Column Well (24-in. Diam.)/Built-Up Col.-Sliding Cover, Gask.	1
Ladder Well (36-in. Diam.)/Sliding Cover, Gasketed	1
Roof Leg or Hanger Well/Adjustable	1
Sample Pipe or Well (24-in. Diam.)/Slotted Pipe-Sliding Cover, Gask.	1
Vacuum Breaker (10-in. Diam.)/Weighted Mech. Actuation, Gask.	1
Slotted Guide-Pole/Sample Well/Gask. Sliding Cover, w. Float, Wiper	1

Meteorological Data used in Emissions Calculations: San Diego, California (Avg Atmospheric Pressure = 14.7 psia)

TANKS 4.0.9d

Emissions Report - Detail Format

Liquid Contents of Storage Tank

MV-29 PTE - Internal Floating Roof Tank

San Diego, California

Mixture/Component	Month	Daily Liquid Surf. Temperature (deg F)		Liquid Bulk Temp (deg F)	Vapor Pressure (psia)		Vapor Mol. Weight	Liquid Mass Fract.	Vapor Mass Fract.	Mol. Weight	Basis for Vapor Pressure Calculations
		Avg.	Min.		Avg.	Min.					
Gasoline (RVP 13.5)	Jan	62.52	58.31	64.22	7.5910	N/A	62.0000	N/A	N/A	92.00	Option 4: RVP=13.5, ASTM Slope=3
Gasoline (RVP 13.5)	Feb	63.40	59.09	64.22	7.7148	N/A	62.0000	N/A	N/A	92.00	Option 4: RVP=13.5, ASTM Slope=3
Gasoline (RVP 6)	Mar	64.27	59.97	64.22	3.2045	N/A	69.0000	N/A	N/A	92.00	Option 4: RVP=6, ASTM Slope=3
Gasoline (RVP 6)	Apr	65.84	61.23	70.45	3.3091	N/A	69.0000	N/A	N/A	92.00	Option 4: RVP=6, ASTM Slope=3
Gasoline (RVP 6)	May	66.83	62.67	70.99	3.3760	N/A	69.0000	N/A	N/A	92.00	Option 4: RVP=6, ASTM Slope=3
Gasoline (RVP 6)	Jun	68.09	63.90	72.27	3.4629	N/A	69.0000	N/A	N/A	92.00	Option 4: RVP=6, ASTM Slope=3
Gasoline (RVP 6)	Jul	70.13	65.63	74.64	3.6082	N/A	69.0000	N/A	N/A	92.00	Option 4: RVP=6, ASTM Slope=3
Gasoline (RVP 6)	Aug	70.66	66.31	75.02	3.6465	N/A	69.0000	N/A	N/A	92.00	Option 4: RVP=6, ASTM Slope=3
Gasoline (RVP 6)	Sep	69.67	65.55	73.79	3.5749	N/A	69.0000	N/A	N/A	92.00	Option 4: RVP=6, ASTM Slope=3
Gasoline (RVP 6)	Oct	67.64	63.52	71.77	3.4321	N/A	69.0000	N/A	N/A	92.00	Option 4: RVP=6, ASTM Slope=3
Gasoline (RVP 11.5)	Nov	64.65	60.48	66.81	6.6146	N/A	65.0000	N/A	N/A	92.00	Option 4: RVP=11.5, ASTM Slope=3
Gasoline (RVP 13.5)	Dec	62.45	58.26	66.64	7.5918	N/A	62.0000	N/A	N/A	92.00	Option 4: RVP=13.5, ASTM Slope=3

TANKS 4.0.9d

Emissions Report - Detail Format

Detail Calculations (AP-42)

MV-29 PTE - Internal Floating Roof Tank

San Diego, California

Month:	January	February	March	April	May	June	July	August	September	October	November	December
Rim Seal Losses (lb):	26.7242	27.3557	10.1647	10.5417	10.7844	11.1019	11.6381	11.7806	11.5144	10.9890	23.1352	26.6777
Seal Factor A (lb-mole/ft-yr):	0.6000	0.6000	0.6000	0.6000	0.6000	0.6000	0.6000	0.6000	0.6000	0.6000	0.6000	0.6000
Seal Factor B (lb-mole/ft-yr (mph	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000
^n):												
Value of Vapor Pressure	0.1796	0.1838	0.0614	0.0637	0.0651	0.0670	0.0703	0.0711	0.0695	0.0664	0.1483	0.1793
Function:												
Vapor Pressure at Daily Average												
Liquid												
Surface Temperature (psia):	7.5910	7.7148	3.2045	3.3091	3.3750	3.4628	3.6082	3.6465	3.5749	3.4321	6.6146	7.5818
Tank Diameter (ft):	48.0000	48.0000	48.0000	48.0000	48.0000	48.0000	48.0000	48.0000	48.0000	48.0000	48.0000	48.0000
Vapor Molecular Weight (lb/lb-	62.0000	62.0000	69.0000	69.0000	69.0000	69.0000	69.0000	69.0000	69.0000	69.0000	65.0000	62.0000
mole):												
Product Factor:	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Withdrawal Losses (lb):	630.7503	630.7503	630.7503	630.7503	630.7503	630.7503	630.7503	630.7503	630.7503	630.7503	630.7503	630.7503
Number of Columns:	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Effective Column Diameter (ft):	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Net Throughput (gal/mo.):	157,254,166.6000	157,254,166.6000	157,254,166.6000	157,254,166.6000	157,254,166.6000	157,254,166.6000	157,254,166.6000	157,254,166.6000	157,254,166.6000	157,254,166.6000	157,254,166.6000	157,254,166.6000
Shell Clingage Factor (bbl/1000	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015
sqft):												
Average Organic Liquid Density	5.6000	5.6000	5.6000	5.6000	5.6000	5.6000	5.6000	5.6000	5.6000	5.6000	5.6000	5.6000
(lb/gal):												
Tank Diameter (ft):	48.0000	48.0000	48.0000	48.0000	48.0000	48.0000	48.0000	48.0000	48.0000	48.0000	48.0000	48.0000
Deck Fitting Losses (lb):	232.4445	237.9377	88.4115	91.5912	93.8017	96.5634	101.2276	102.4667	100.1517	95.5814	201.2279	232.0405
Value of Vapor Pressure	0.1796	0.1838	0.0614	0.0637	0.0651	0.0670	0.0703	0.0711	0.0695	0.0664	0.1483	0.1793
Function:												
Vapor Molecular Weight (lb/lb-	62.0000	62.0000	69.0000	69.0000	69.0000	69.0000	69.0000	69.0000	69.0000	69.0000	65.0000	62.0000
mole):												
Product Factor:	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Tot. Roof Fitting Loss Fact, (lb-	250.5000	250.5000	250.5000	250.5000	250.5000	250.5000	250.5000	250.5000	250.5000	250.5000	250.5000	250.5000
mole/yr):												
Deck Seam Losses (lb)	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Deck Seam Length (ft):	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Deck Seam Loss per Unit Length												
Factor (lb-mole/ft-yr):	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Deck Seam Length Factor												
(ft/sqft):	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Tank Diameter (ft):	48.0000	48.0000	48.0000	48.0000	48.0000	48.0000	48.0000	48.0000	48.0000	48.0000	48.0000	48.0000
Vapor Molecular Weight (lb/lb-	62.0000	62.0000	69.0000	69.0000	69.0000	69.0000	69.0000	69.0000	69.0000	69.0000	65.0000	62.0000
mole):												
Product Factor:	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total Losses (lb):	889.9189	896.0437	729.3265	732.9833	735.3354	738.4156	743.6160	744.9975	742.4184	737.3207	855.1134	889.4685
Roof Fitting/Status					Quantity	kFa(lb-mole/yr	kFb(lb-mole/yr mph^n)	Roof Fitting Loss Factors				
Access Hatch (24-in. Diam./Bolted Cover, Gasketed					1	1.60	0.00	0.00	0.00	0.00	10.6416	0.0000
Automatic Gauge Float Well/Bolted Cover, Gasketed					1	2.80	0.00	0.00	0.00	0.00	18.6228	0.0000
Column Well (24-in. Diam./Built-Up Col.-Sliding Cover, Gask.					1	33.00	0.00	0.00	0.00	0.00	219.4831	0.0000
Ladder Well (36-in. Diam./Sliding Cover, Gasketed					11	56.00	0.00	0.00	0.00	0.00	372.4561	0.0000
Roof Leg or Hanger Well/Adjustable					1	7.90	0.00	0.00	0.00	0.00	577.9720	0.0000
Sample Pipe or Well (24-in. Diam./Slotted Pipe-Sliding Cover, Gask.					1	43.00	0.00	0.00	0.00	0.00	285.9831	0.0000
Vacuum Breaker (10-in. Diam./Weighted Mech. Actuation, Gask.					1	6.20	1.20	1.20	0.94	0.94	41.2362	0.0000
Slotted Guide-Pole/Sample Well/Gask. Sliding Cover, w. Float, Wiper					1	21.00	7.90	7.90	1.80	1.80	139.6710	0.0000

TANKS 4.0.9d
Emissions Report - Detail Format
Individual Tank Emission Totals

Emissions Report for: January, February, March, April, May, June, July, August, September, October, November, December

MV-29 PTE - Internal Floating Roof Tank
San Diego, California

Components	Losses(lbs)				Total Emissions
	Rim Seal Loss	Withdrawal Loss	Deck Fitting Loss	Deck Seam Loss	
Gasoline (RVP 6)	88.51	5,046.00	769.90	0.00	5,904.41
Gasoline (RVP 13.5)	80.76	1,892.25	702.42	0.00	2,675.43
Gasoline (RVP 11.5)	23.14	630.75	201.23	0.00	855.11

TANKS 4.0.9d
Emissions Report - Detail Format
Tank Identification and Physical Characteristics

Identification

User Identification: MV-30 PTE
City: San Diego
State: California
Company: SFPP, L.P.
Type of Tank: Internal Floating Roof Tank
Description:

Tank Dimensions

Diameter (ft): 40.00
Volume (gallons): 659,400.00
Turnovers: 2,861.77
Self Supp. Roof? (y/n): N
No. of Columns: 1.00
Eff. Col. Diam. (ft): 1.00

Paint Characteristics

Internal Shell Condition: Light Rust
Shell Color/Shade: White/White
Shell Condition: Good
Roof Color/Shade: White/White
Roof Condition: Good

Rim-Seal System

Primary Seal: Mechanical Shoe
Secondary Seal: Rim-mounted

Deck Characteristics

Deck Fitting Category: Detail
Deck Type: Welded

Deck Fitting/Status

Access Hatch (24-in. Diam.)/Bolted Cover, Gasketed	Quantity
Automatic Gauge Float Well/Bolted Cover, Gasketed	1
Ladder Well (36-in. Diam.)/Sliding Cover, Gasketed	1
Roof Leg or Hanger Well/Adjustable	1
Sample Pipe or Well (24-in. Diam.)/Slotted Pipe-Sliding Cover, Gask.	9
Vacuum Breaker (10-in. Diam.)/Weighted Mech. Actuation, Gask.	1
Slotted Guide-Pole/Sample Well/Gask. Sliding Cover, w. Float, Wiper	1

Meteorological Data used in Emissions Calculations: San Diego, California (Avg Atmospheric Pressure = 14.7 psia)

TANKS 4.0.9d Emissions Report - Detail Format Liquid Contents of Storage Tank

MV-30 PTE - Internal Floating Roof Tank San Diego, California

Mixture/Component	Month	Daily Liquid Surf. Temperature (deg F)		Liquid Bulk Temp (deg F)	Vapor Pressure (psia)			Vapor Mol. Weight	Liquid Mass Fract.	Vapor Mass Fract.	Mol. Weight	Basis for Vapor Pressure Calculations
		Avg.	Min.	Max.	Avg.	Min.	Max.					
Gasoline (RVP 13.5)	Jan	62.52	58.31	66.73	7.5910	N/A	N/A	62.0000			92.00	Option 4: RVP=13.5, ASTM Slope=3
Gasoline (RVP 13.5)	Feb	63.40	59.09	67.71	7.7148	N/A	N/A	62.0000			92.00	Option 4: RVP=13.5, ASTM Slope=3
Gasoline (RVP 6)	Mar	64.27	59.97	68.56	3.2045	N/A	N/A	69.0000			92.00	Option 4: RVP=6, ASTM Slope=3
Gasoline (RVP 6)	Apr	65.84	61.23	70.45	3.3091	N/A	N/A	69.0000			92.00	Option 4: RVP=6, ASTM Slope=3
Gasoline (RVP 6)	May	66.83	62.67	70.99	3.3760	N/A	N/A	69.0000			92.00	Option 4: RVP=6, ASTM Slope=3
Gasoline (RVP 6)	Jun	68.09	63.90	72.27	3.4629	N/A	N/A	69.0000			92.00	Option 4: RVP=6, ASTM Slope=3
Gasoline (RVP 6)	Jul	70.13	65.63	74.64	3.6082	N/A	N/A	69.0000			92.00	Option 4: RVP=6, ASTM Slope=3
Gasoline (RVP 6)	Aug	70.66	66.31	75.02	3.6465	N/A	N/A	69.0000			92.00	Option 4: RVP=6, ASTM Slope=3
Gasoline (RVP 6)	Sep	69.67	65.55	73.79	3.5749	N/A	N/A	69.0000			92.00	Option 4: RVP=6, ASTM Slope=3
Gasoline (RVP 6)	Oct	67.64	63.52	71.77	3.4321	N/A	N/A	69.0000			92.00	Option 4: RVP=6, ASTM Slope=3
Gasoline (RVP 11.5)	Nov	64.65	60.48	68.81	6.6146	N/A	N/A	65.0000			92.00	Option 4: RVP=11.5, ASTM Slope=3
Gasoline (RVP 13.5)	Dec	62.45	58.26	66.64	7.5818	N/A	N/A	62.0000			92.00	Option 4: RVP=13.5, ASTM Slope=3

TANKS 4.0.9d

Emissions Report - Detail Format

Detail Calculations (AP-42)

MV-30 PTE - Internal Floating Roof Tank

San Diego, California

Month:	January	February	March	April	May	June	July	August	September	October	November	December
Rim Seal Losses (lb):	22,2701	22,7964	8,4706	8,7848	8,9870	9,2516	9,6984	9,8172	9,5954	9,1575	19,2793	22,2314
Seal Factor A (lb-mole/ft-yr):	0.4000	0.6000	0.6000	0.6000	0.6000	0.6000	0.6000	0.6000	0.6000	0.6000	0.6000	0.6000
Seal Factor B (lb-mole/ft-yr (mph):	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000
n ₀ :	0.1796	0.1838	0.0614	0.0637	0.0651	0.0670	0.0703	0.0711	0.0695	0.0664	0.1483	0.1793
Function:												
Vapor Pressure at Daily Average												
Liquid												
Surface Temperature (psia):	7.5910	7.7148	3.2045	3.3091	3.3760	3.4629	3.6082	3.6465	3.5749	3.4321	6.6146	7.5818
Tank Diameter (ft):	40.0000	40.0000	40.0000	40.0000	40.0000	40.0000	40.0000	40.0000	40.0000	40.0000	40.0000	40.0000
Vapor Molecular Weight (lb/lb-mole):	62.0000	62.0000	69.0000	69.0000	69.0000	69.0000	69.0000	69.0000	69.0000	69.0000	65.0000	62.0000
Product Factor:	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Withdrawal Losses (lb):	759.9897	759.9897	759.9897	759.9897	759.9897	759.9897	759.9897	759.9897	759.9897	759.9897	759.9897	759.9897
Number of Columns:	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Effective Column Diameter (ft):	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Net Throughput (gal/mo.):	157,254,166.6000	157,254,166.6000	157,254,166.6000	157,254,166.6000	157,254,166.6000	157,254,166.6000	157,254,166.6000	157,254,166.6000	157,254,166.6000	157,254,166.6000	157,254,166.6000	157,254,166.6000
Shell Clingage Factor (bbl/1000 sqft):	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015
Average Organic Liquid Density (lb/gal):	5.6000	5.6000	5.6000	5.6000	5.6000	5.6000	5.6000	5.6000	5.6000	5.6000	5.6000	5.6000
Tank Diameter (ft):	40.0000	40.0000	40.0000	40.0000	40.0000	40.0000	40.0000	40.0000	40.0000	40.0000	40.0000	40.0000
Deck Fitting Losses (lb):	187.1619	191.5850	71.1880	73.8288	75.5282	77.7518	81.5074	82.5051	80.6411	76.9612	162.0267	186.8365
Value of Vapor Pressure Function:	0.1796	0.1838	0.0614	0.0637	0.0651	0.0670	0.0703	0.0711	0.0695	0.0664	0.1483	0.1793
Vapor Molecular Weight (lb/lb-mole):	62.0000	62.0000	69.0000	69.0000	69.0000	69.0000	69.0000	69.0000	69.0000	69.0000	65.0000	62.0000
Product Factor:	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Tot. Roof Fitting Loss Fact. (lb-mole/yr):	201.7000	201.7000	201.7000	201.7000	201.7000	201.7000	201.7000	201.7000	201.7000	201.7000	201.7000	201.7000
Deck Seam Losses (lb):	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Deck Seam Length (ft):	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Deck Seam Loss per Unit Length Factor (lb-mole/ft-yr):	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Deck Seam Length Factor (ft/sqft):	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Tank Diameter (ft):	40.0000	40.0000	40.0000	40.0000	40.0000	40.0000	40.0000	40.0000	40.0000	40.0000	40.0000	40.0000
Vapor Molecular Weight (lb/lb-mole):	62.0000	62.0000	69.0000	69.0000	69.0000	69.0000	69.0000	69.0000	69.0000	69.0000	65.0000	62.0000
Product Factor:	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total Losses (lb):	969.4217	974.3711	839.5483	842.6034	844.5049	846.9932	851.1956	852.3120	850.2262	846.1084	941.2957	969.0578
Roof Fitting/Status					Quantity	KFa (lb-mole/yr)	KFb (lb-mole/yr mph^n)	Roof Fitting Loss Factors				
Access Hatch (24-in. Diam./Bolted Cover, Gasketed)					1	1.60	0.00	0.00	0.00	0.00	10.6416	
Automatic Gauge Float Well/Bolted Cover, Gasketed					1	2.80	0.00	0.00	0.00	0.00	18.6228	
Ladder Well (36-in. Diam./Sliding Cover, Gasketed)					9	56.00	0.00	0.00	0.00	0.00	372.4561	
Roof Leg or Hanger Well/Adjustable					1	7.90	0.00	0.00	0.00	0.00	472.8862	
Sample Pipe or Well (24-in. Diam./Slotted Pipe-Sliding Cover, Gask.					1	43.00	0.00	0.00	0.00	0.00	285.9931	
Vacuum Breaker (10-in. Diam./Weighted Mech. Actuation, Gask.					1	6.20	1.20	0.94	1.20	0.94	41.2362	
Slotted Guide-Pole/Sample Well/Gask. Sliding Cover, w. Float, Viper					1	21.00	7.90	1.80	1.80	1.80	139.6710	

TANKS 4.0.9d
Emissions Report - Detail Format
Individual Tank Emission Totals

Emissions Report for: January, February, March, April, May, June, July, August, September, October, November, December

MV-30 PTE - Internal Floating Roof Tank
San Diego, California

Components	Losses(lbs)				Total Emissions
	Rim Seal Loss	Withdrawal Loss	Deck Fitting Loss	Deck Seam Loss	
Gasoline (RVP 6)	73.76	6,079.92	619.91	0.00	6,773.59
Gasoline (RVP 13.5)	67.30	2,279.97	565.58	0.00	2,912.85
Gasoline (RVP 11.5)	19.28	759.99	162.03	0.00	941.30

TANKS 4.0.9d
Emissions Report - Detail Format
Tank Identification and Physical Characteristics

Identification

User Identification: MV-31 PTE
City: San Diego
State: California
Company: SFPP, L.P.
Type of Tank: Internal Floating Roof Tank
Description:

Tank Dimensions

Diameter (ft): 30.00
Volume (gallons): 86,226.00
Turnovers: 21,884.93
Self Supp. Roof? (y/n): N
No. of Columns: 1.00
Eff. Col. Diam. (ft): 1.00

Paint Characteristics

Internal Shell Condition: Light Rust
Shell Color/Shade: White/White
Shell Condition: Good
Roof Color/Shade: White/White
Roof Condition: Good

Rim-Seal System

Primary Seal: Mechanical Shoe
Secondary Seal: Rim-mounted

Deck Characteristics

Deck Fitting Category: Detail
Deck Type: Welded

Deck Fitting/Status

Access Hatch (24-in. Diam.)/Bolted Cover, Gasketed	Quantity
Automatic Gauge Float Well/Bolted Cover, Gasketed	1
Column Well (24-in. Diam.)/Built-Up Col.-Sliding Cover, Gask.	1
Ladder Well (36-in. Diam.)/Sliding Cover, Gasketed	1
Roof Leg or Hanger Well/Adjustable	13
Sample Pipe or Well (24-in. Diam.)/Slotted Pipe-Sliding Cover, Gask.	1
Vacuum Breaker (10-in. Diam.)/Weighted Mech. Actuation, Gask.	1
Slotted Guide-Pole/Sample Well/Gask. Sliding Cover, w. Float, Wiper	1
Gauge-Hatch/Sample Well (8-in. Diam.)/Weighted Mech. Actuation, Gask.	1

Meteorological Data used in Emissions Calculations: San Diego, California (Avg Atmospheric Pressure = 14.7 psia)

TANKS 4.0.9d Emissions Report - Detail Format Liquid Contents of Storage Tank

MV-31 PTE - Internal Floating Roof Tank
San Diego, California

Mixture/Component	Month	Daily Liquid Surface Temperature (deg F)			Liquid Bulk Temp (deg F)	Vapor Pressure (psia)			Vapor Mol. Weight	Liquid Mass Fract.	Vapor Mass Fract.	Mol. Weight	Basis for Vapor Pressure Calculations
		Avg.	Min.	Max.		Avg.	Min.	Max.					
Gasoline (RVP 13.5)	Jan	62.52	58.31	66.73	64.22	7.5910	N/A	N/A	62.0000			92.00	Option 4: RVP=13.5, ASTM Slope=3
Gasoline (RVP 13.5)	Feb	63.40	59.09	67.71	64.22	7.7148	N/A	N/A	62.0000			92.00	Option 4: RVP=13.5, ASTM Slope=3
Gasoline (RVP 6)	Mar	64.27	59.97	68.56	64.22	3.2045	N/A	N/A	69.0000			92.00	Option 4: RVP=6, ASTM Slope=3
Gasoline (RVP 6)	Apr	65.84	61.23	70.45	64.22	3.3091	N/A	N/A	69.0000			92.00	Option 4: RVP=6, ASTM Slope=3
Gasoline (RVP 6)	May	66.83	62.67	70.99	64.22	3.3760	N/A	N/A	69.0000			92.00	Option 4: RVP=6, ASTM Slope=3
Gasoline (RVP 6)	Jun	68.09	63.90	72.27	64.22	3.4629	N/A	N/A	69.0000			92.00	Option 4: RVP=6, ASTM Slope=3
Gasoline (RVP 6)	Jul	70.13	65.63	74.84	64.22	3.6082	N/A	N/A	69.0000			92.00	Option 4: RVP=6, ASTM Slope=3
Gasoline (RVP 6)	Aug	70.66	66.31	75.02	64.22	3.6465	N/A	N/A	69.0000			92.00	Option 4: RVP=6, ASTM Slope=3
Gasoline (RVP 6)	Sep	69.67	65.55	73.79	64.22	3.5749	N/A	N/A	69.0000			92.00	Option 4: RVP=6, ASTM Slope=3
Gasoline (RVP 6)	Oct	67.64	63.52	71.77	64.22	3.4321	N/A	N/A	69.0000			92.00	Option 4: RVP=6, ASTM Slope=3
Gasoline (RVP 11.5)	Nov	64.65	60.48	68.81	64.22	6.6146	N/A	N/A	65.0000			92.00	Option 4: RVP=11.5, ASTM Slope=3
Gasoline (RVP 13.5)	Dec	62.45	58.26	66.64	64.22	7.5818	N/A	N/A	62.0000			92.00	Option 4: RVP=13.5, ASTM Slope=3

TANKS 4.0.9d
Emissions Report - Detail Format
Detail Calculations (AP-42)

**MV-31 PTE - Internal Floating Roof Tank
San Diego, California**

Month:	January	February	March	April	May	June	July	August	September	October	November	December
Rim Seal Losses (lb):	16.7026	17.0973	6.3529	6.5886	6.7402	6.9387	7.2738	7.3629	7.1965	6.8681	14.4595	16.6736
Seal Factor A (lb-mole/ft-yr):	0.6000	0.6000	0.6000	0.6000	0.4000	0.4000	0.6000	0.6000	0.6000	0.6000	0.6000	0.6000
Seal Factor B (lb-mole/ft-yr (mph	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000
^n):												
Value of Vapor Pressure	0.1796	0.1838	0.0614	0.0637	0.0651	0.0670	0.0703	0.0711	0.0695	0.0664	0.1483	0.1793
Function:												
Vapor Pressure at Daily Average												
Liquid												
Surface Temperature (psia):	7.5910	7.7148	3.2045	3.3091	3.3760	3.4629	3.6082	3.6465	3.5749	3.4321	6.6146	7.5818
Tank Diameter (ft):	30.0000	30.0000	30.0000	30.0000	30.0000	30.0000	30.0000	30.0000	30.0000	30.0000	30.0000	30.0000
Vapor Molecular Weight (lb/lb-	62.0000	62.0000	69.0000	69.0000	69.0000	69.0000	69.0000	69.0000	69.0000	69.0000	65.0000	62.0000
mole):												
Product Factor:	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Withdrawal Losses (lb):	1,021.5580	1,021.5580	1,021.5580	1,021.5580	1,021.5580	1,021.5580	1,021.5580	1,021.5580	1,021.5580	1,021.5580	1,021.5580	1,021.5580
Number of Columns:	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Effective Column Diameter (ft):	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Net Throughput (gal/mo.):	157,254.166.6000	157,254.166.6000	157,254.166.6000	157,254.166.6000	157,254.166.6000	157,254.166.6000	157,254.166.6000	157,254.166.6000	157,254.166.6000	157,254.166.6000	157,254.166.6000	157,254.166.6000
Shell Clingage Factor (bbl/1000	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015
scft):												
Average Organic Liquid Density	5.6000	5.6000	5.6000	5.6000	5.6000	5.6000	5.6000	5.6000	5.6000	5.6000	5.6000	5.6000
(lb/gal):												
Tank Diameter (ft):	30.0000	30.0000	30.0000	30.0000	30.0000	30.0000	30.0000	30.0000	30.0000	30.0000	30.0000	30.0000
Deck Fitting Losses (lb):	247.5418	253.3918	94.1539	97.6466	99.8942	102.8352	107.8023	109.1219	106.6566	101.7894	214.2977	247.1116
Value of Vapor Pressure	0.1796	0.1838	0.0614	0.0637	0.0651	0.0670	0.0703	0.0711	0.0695	0.0664	0.1483	0.1793
Function:												
Vapor Molecular Weight (lb/lb-	62.0000	62.0000	69.0000	69.0000	69.0000	69.0000	69.0000	69.0000	69.0000	69.0000	65.0000	62.0000
mole):												
Product Factor:	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Tot. Roof Filling Loss Fac. (lb-	266.7700	266.7700	266.7700	266.7700	266.7700	266.7700	266.7700	266.7700	266.7700	266.7700	266.7700	266.7700
mole/yr):												
Deck Seam Losses (lb):	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Deck Seam Length (ft):	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Deck Seam Loss per Unit Length												
Factor (lb-mole/ft-yr):												
Deck Seam Length Factor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
(ft/sqft):												
Tank Diameter (ft):	30.0000	30.0000	30.0000	30.0000	30.0000	30.0000	30.0000	30.0000	30.0000	30.0000	30.0000	30.0000
Vapor Molecular Weight (lb/lb-	62.0000	62.0000	69.0000	69.0000	69.0000	69.0000	69.0000	69.0000	69.0000	69.0000	65.0000	62.0000
mole):												
Product Factor:	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total Losses (lb):	1,285.8024	1,292.0471	1,122.0648	1,125.7932	1,128.1924	1,131.3319	1,136.6342	1,138.0428	1,135.4111	1,130.2156	1,250.3152	1,285.3430
Roof Fitting/Status					Quantity	KFa(lb-mole/yr)	Roof Filling Loss Factors	KFb(lb-mole/yr mph^n)	m		Losses(lb)	
Access Hatch (24-in. Diam.)/Boiled Cover, Gasketed					1	1.60	2.80	0.00	0.00	0.00	10.6416	
Automatic Gauge Float Well/Boiled Cover, Gasketed					1	2.60	1.80	0.00	0.00	0.00	18.6228	
Column Well (24-in. Diam.)/Built-Up Col.-Sliding Cover, Gask.					1	33.00	33.00	0.00	0.00	0.00	219.4631	
Ladder Well (36-in. Diam.)/Sliding Cover, Gasketed					1	56.00	56.00	0.00	0.00	0.00	372.4561	
Roof Leg or Hanger Well/Adjustable					13	7.90	7.90	0.00	0.00	0.00	683.0579	
Sample Pipe or Well (24-in. Diam.)/Slotted Pipe-Actuation Cover, Gask.					1	43.00	43.00	0.00	0.00	0.00	285.9931	
Vacuum Breaker (70-in. Diam.)/Weighted Mech. Actuation, Gask.					1	6.20	6.20	0.00	0.00	0.00	41.2362	
Slotted Guide-Pole/Sample Well/Gask. Sliding Cover, w. Float, Wiper					1	21.00	21.00	0.94	0.94	0.94	139.6710	
Gauge-Hatch/Sample Well (8-in. Diam.)/Weighted Mech. Actuation, Gask.					1	0.47	0.47	0.02	0.02	0.02	3.1260	

TANKS 4.0.9d
Emissions Report - Detail Format
Individual Tank Emission Totals

Emissions Report for: January, February, March, April, May, June, July, August, September, October, November, December

MV-31 PTE - Internal Floating Roof Tank
San Diego, California

	Losses (lbs)				Total Emissions
	Rim Seal Loss	Withdrawal Loss	Deck Fitting Loss	Deck Seam Loss	
Components					9,047.69
Gasoline (RVP 6)	55.32	8,172.46	819.90	0.00	
Gasoline (RVP 13.5)	50.47	3,064.67	748.05	0.00	3,863.19
Gasoline (RVP 11.5)	14.46	1,021.56	214.30	0.00	1,250.32

TANKS 4.0.9d
Emissions Report - Detail Format
Tank Identification and Physical Characteristics

Identification

User Identification: MV-32 PTE
City: San Diego
State: California
Company: SFPP, L.P.
Type of Tank: Internal Floating Roof Tank
Description:

Tank Dimensions

Diameter (ft): 30.00
Volume (gallons): 126,000.00
Turnovers: 14,976.59
Self Supp. Roof? (y/n): N
No. of Columns: 1.00
Eff. Col. Diam. (ft): 1.00

Paint Characteristics

Internal Shell Condition: Light Rust
Shell Color/Shade: White/White
Shell Condition: Good
Roof Color/Shade: White/White
Roof Condition: Good

Rim-Seal System

Primary Seal: Mechanical Shoe
Secondary Seal: Rim-mounted

Deck Characteristics

Deck Fitting Category: Detail
Deck Type: Welded

Deck Fitting/Status

	Quantity
Access Hatch (24-in. Diam.)/Bolted Cover, Gasketed	1
Automatic Gauge Float Well/Bolted Cover, Gasketed	1
Column Well (24-in. Diam.)/Built-Up Col.-Sliding Cover, Gask.	1
Ladder Well (36-in. Diam.)/Sliding Cover, Gasketed	1
Roof Leg or Hanger Well/Adjustable	6
Sample Pipe or Well (24-in. Diam.)/Slotted Pipe-Sliding Cover, Gask.	1
Vacuum Breaker (10-in. Diam.)/Weighted Mech. Actuation, Gask.	1
Slotted Guide-Pole/Sample Well/Gask. Sliding Cover, w. Float, Wiper	1
Gauge-Hatch/Sample Well (8-in. Diam.)/Weighted Mech. Actuation, Gask.	1

Meteorological Data used in Emissions Calculations: San Diego, California (Avg Atmospheric Pressure = 14.7 psia)

TANKS 4.0.9d Emissions Report - Detail Format Liquid Contents of Storage Tank

MV-32 PTE - Internal Floating Roof Tank San Diego, California

Mixture/Component	Month	Daily Liquid Surf Temperature (deg F)			Liquid Bulk Temp (deg F)	Vapor Pressure (psia)			Vapor Mol. Weight	Liquid Mass Fract.	Vapor Mass Fract.	Mol. Weight	Basis for Vapor Pressure Calculations
		Avg.	Min.	Max.		Avg.	Min.	Max.					
Gasoline (RVP 13.5)	Jan	62.52	58.31	66.73	64.22	7.5810	N/A	N/A	62.0000			92.00	Option 4: RVP=13.5, ASTM Slope=3
Gasoline (RVP 13.5)	Feb	63.40	59.09	67.71	64.22	7.7148	N/A	N/A	62.0000			92.00	Option 4: RVP=13.5, ASTM Slope=3
Gasoline (RVP 6)	Mar	64.27	59.97	68.56	64.22	3.2045	N/A	N/A	69.0000			92.00	Option 4: RVP=6, ASTM Slope=3
Gasoline (RVP 6)	Apr	65.84	61.23	70.45	64.22	3.3091	N/A	N/A	69.0000			92.00	Option 4: RVP=6, ASTM Slope=3
Gasoline (RVP 6)	May	66.83	62.67	70.99	64.22	3.3760	N/A	N/A	69.0000			92.00	Option 4: RVP=6, ASTM Slope=3
Gasoline (RVP 6)	Jun	68.09	63.90	72.27	64.22	3.4629	N/A	N/A	69.0000			92.00	Option 4: RVP=6, ASTM Slope=3
Gasoline (RVP 6)	Jul	70.13	65.63	74.84	64.22	3.6082	N/A	N/A	69.0000			92.00	Option 4: RVP=6, ASTM Slope=3
Gasoline (RVP 6)	Aug	70.66	66.31	75.02	64.22	3.6465	N/A	N/A	69.0000			92.00	Option 4: RVP=6, ASTM Slope=3
Gasoline (RVP 6)	Sep	69.67	65.55	73.79	64.22	3.5749	N/A	N/A	69.0000			92.00	Option 4: RVP=6, ASTM Slope=3
Gasoline (RVP 6)	Oct	67.64	63.52	71.77	64.22	3.4321	N/A	N/A	69.0000			92.00	Option 4: RVP=6, ASTM Slope=3
Gasoline (RVP 11.5)	Nov	64.65	60.48	68.81	64.22	6.6146	N/A	N/A	65.0000			92.00	Option 4: RVP=11.5, ASTM Slope=3
Gasoline (RVP 13.5)	Dec	62.45	58.26	66.64	64.22	7.5818	N/A	N/A	62.0000			92.00	Option 4: RVP=13.5, ASTM Slope=3

TANKS 4.0.9d

Emissions Report - Detail Format

Detail Calculations (AP-42)

MV-32 PTE - Internal Floating Roof Tank

San Diego, California

Month:	January	February	March	April	May	June	July	August	September	October	November	December
Rim Seal Losses (lb):	16,7026	17,0973	6,3529	6,5886	6,7402	6,9387	7,2738	7,3629	7,1965	6,8681	14,4595	16,6736
Seal Factor A (lb-mole/ft-yr):	0.6000	0.6000	0.6000	0.6000	0.6000	0.6000	0.6000	0.6000	0.6000	0.6000	0.6000	0.6000
Seal Factor B (lb-mole/ft-yr (mph)	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000	0.4000
Value of Vapor Pressure Function:	0.1796	0.1838	0.0614	0.0637	0.0651	0.0670	0.0703	0.0711	0.0695	0.0664	0.1483	0.1793
Vapor Pressure at Daily Average Liquid												
Surface Temperature (psia):	7.5910	7.7148	3.2045	3.3091	3.3760	3.4629	3.6082	3.6465	3.5749	3.4321	6.6146	7.5818
Tank Diameter (ft):	30.0000	30.0000	30.0000	30.0000	30.0000	30.0000	30.0000	30.0000	30.0000	30.0000	30.0000	30.0000
Vapor Molecular Weight (lb/lb-mole):	62.0000	62.0000	69.0000	69.0000	69.0000	69.0000	69.0000	69.0000	69.0000	69.0000	65.0000	62.0000
Product Factor:	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Withdrawal Losses (lb):	1,021.5580	1,021.5580	1,021.5580	1,021.5580	1,021.5580	1,021.5580	1,021.5580	1,021.5580	1,021.5580	1,021.5580	1,021.5580	1,021.5580
Number of Columns:	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Effective Column Diameter (ft):	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Net Throughput (gal/mo.):	157,254,166.6000	157,254,166.6000	157,254,166.6000	157,254,166.6000	157,254,166.6000	157,254,166.6000	157,254,166.6000	157,254,166.6000	157,254,166.6000	157,254,166.6000	157,254,166.6000	157,254,166.6000
Shell Clingage Factor (lb/1000 sqft):	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015	0.0015
Average Organic Liquid Density (lb/gal):	5.6000	5.6000	5.6000	5.6000	5.6000	5.6000	5.6000	5.6000	5.6000	5.6000	5.6000	5.6000
Tank Diameter (ft):	30.0000	30.0000	30.0000	30.0000	30.0000	30.0000	30.0000	30.0000	30.0000	30.0000	30.0000	30.0000
Deck Fitting Losses (lb):	196.2277	200.8650	74.6363	77.4050	79.1866	81.5180	85.4556	86.5015	84.5472	80.6890	169.8749	195.8867
Value of Vapor Pressure Function:	0.1796	0.1838	0.0614	0.0637	0.0651	0.0670	0.0703	0.0711	0.0695	0.0664	0.1483	0.1793
Vapor Molecular Weight (lb/lb-mole):	62.0000	62.0000	69.0000	69.0000	69.0000	69.0000	69.0000	69.0000	69.0000	69.0000	65.0000	62.0000
Product Factor:	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Tot. Roof Fitting Loss Fact. (lb-mole/yr):	211.4700	211.4700	211.4700	211.4700	211.4700	211.4700	211.4700	211.4700	211.4700	211.4700	211.4700	211.4700
Deck Seam Losses (lb):	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Deck Seam Length (ft):	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Deck Seam Loss per Unit Length Factor (lb-mole/ft-yr):	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Deck Seam Length Factor (ft/sqft):	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Tank Diameter (ft):	30.0000	30.0000	30.0000	30.0000	30.0000	30.0000	30.0000	30.0000	30.0000	30.0000	30.0000	30.0000
Vapor Molecular Weight (lb/lb-mole):	62.0000	62.0000	69.0000	69.0000	69.0000	69.0000	69.0000	69.0000	69.0000	69.0000	65.0000	62.0000
Product Factor:	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total Losses (lb):	1,234.4883	1,239.5204	1,102.5472	1,105.5516	1,107.4849	1,110.0147	1,114.2873	1,115.4224	1,113.3018	1,108.1152	1,205.8924	1,234.1183
Roof Fitting/Status												
Access Hatch (24-in. Diam./Bolted Cover, Gasketed												
Automatic Gauge Float Well/Bolted Cover, Gasketed												
Column Well (24-in. Diam./Built-Up Col.-Sliding Cover, Gask.												
Ladder Well (36-in. Diam./Sliding Cover, Gasketed												
Roof Leg or Hanger Well/Adjustable												
Sample Pipe or Well (24-in. Diam./Slotted Pipe-Sliding Cover, Gask.												
Vacuum Breaker (10-in. Diam./Weighted Mech. Actuation, Gask.												
Slotted Guide-Pole/Sample Well/Gask. Sliding Cover, w. Float, Wiper												
Gauge-Hatch/Sample Well (6-in. Diam./Weighted Mech. Actuation, Gask.												
Roof Fitting Loss Factors												
Quantity												
KFa (lb-mole/yr)												
KFb (lb-mole/yr mph ^{0.75})												
Losses (lb)												
m												
10.6416												
18.6228												
219.4831												
372.4561												
315.2575												
285.9931												
41.2362												
139.6710												
3.1260												

TANKS 4.0.9d
Emissions Report - Detail Format
Individual Tank Emission Totals

Emissions Report for: January, February, March, April, May, June, July, August, September, October, November, December

MV-32 PTE - Internal Floating Roof Tank
San Diego, California

	Losses (lbs)				Total Emissions
	Rim Seal Loss	Withdrawal Loss	Deck Fitting Loss	Deck Seam Loss	
Components					8,877.73
Gasoline (RVP 6)	55.32	8,172.46	649.94	0.00	
Gasoline (RVP 13.5)	50.47	3,064.67	592.98	0.00	3,708.13
Gasoline (RVP 11.5)	14.46	1,021.56	169.87	0.00	1,205.89

TANKS 4.0.9d
Emissions Report - Detail Format
Total Emissions Summaries - All Tanks in Report

Emissions Report for: January, February, March, April, May, June, July, August, September, October, November, December

Tank Identification		Losses (lbs)
MV-01 PTE	SFPP, L.P.	8,706.45
MV-02 PTE	SFPP, L.P.	9,684.41
MV-03 PTE	SFPP, L.P.	6,449.30
MV-04 PTE	SFPP, L.P.	7,006.07
MV-05 PTE	SFPP, L.P.	8,096.61
MV-06 PTE	SFPP, L.P.	7,809.33
MV-07 PTE	SFPP, L.P.	8,716.59
MV-08 PTE	SFPP, L.P.	8,429.32
MV-09 PTE	SFPP, L.P.	8,147.44
MV-10 PTE	SFPP, L.P.	7,857.02
MV-11 PTE	SFPP, L.P.	8,175.29
MV-12 PTE	SFPP, L.P.	7,174.83
MV-13 PTE	SFPP, L.P.	7,712.48
MV-14 PTE	SFPP, L.P.	8,015.37
MV-15 PTE	SFPP, L.P.	8,000.46
MV-16 PTE	SFPP, L.P.	8,211.58
MV-17 PTE	SFPP, L.P.	8,518.52
MV-18 PTE	SFPP, L.P.	7,223.18
MV-19 PTE	SFPP, L.P.	8,556.26
MV-21 PTE	SFPP, L.P.	8,847.01
MV-22 PTE	SFPP, L.P.	9,991.29
MV-23 PTE	SFPP, L.P.	6,471.77
MV-25 PTE	SFPP, L.P.	6,831.12
MV-26 PTE	SFPP, L.P.	7,404.31
MV-27 PTE	SFPP, L.P.	7,657.27
MV-28 PTE	SFPP, L.P.	8,155.66
MV-29 PTE	SFPP, L.P.	9,434.96
MV-30 PTE	SFPP, L.P.	10,627.74
MV-31 PTE	SFPP, L.P.	14,161.19
MV-32 PTE	SFPP, L.P.	13,791.74
Total Emissions for all Tanks:		255,864.58

APPENDIX D – TITLE V APPLICATION FORMS

1401-A1, A2 - Stationary Source Summary

1401-G - Insignificant Activity List

1401-H1 - Applicable Requirements Summary Checklist

1401-H2 –List of Permits by Equipment Category

1401-I –Certification Statement

1401-K –Compliance Certification Schedule

1401-L –Schedule of Compliance

1401-M –Abatement Devices

1401-N –Alternative Operating Scenarios

1401-Q – Permit Shield

San Diego County Air Pollution Control District
10124 Old Grove Road San Diego CA 92131-1649
(858) 586-2600 FAX (858) 586-2601

TITLE V APPLICATION
Stationary Source Summary (FORM 1401-A1)

Company Name SFPP L.P.	District Use Only NEDS # SITE ID # 1979-00623
----------------------------------	--

I. FACILITY IDENTIFICATION

- Facility Name (if different than company name): SFPP, L.P.
- Four digit SIC Code: 4226
- Parent Company (if different than Company Name):
- Mailing Address: 1100 Town and Country Road
City Orange State CA Zip 92868
- Street Address or Source Location: 9950 San Diego Mission Road
City San Diego State CA Zip 92108
- UTM Coordinates: 489350 E 3627825 N
- Source Located within 50 miles of a state line: ☒ Yes ☐ No (All sources are within 50 miles)
- Source Located within 1000 feet of a school: ☐ Yes ☒ No
- Type of Organization: ☐ Corporation ☐ Sole Ownership ☐ Government
☒ Partnership ☐ Utility Company
- Legal Owner's Name: SFPP, L. P.
- Owner's Agent name (if any): Paul Liao, Yorke Engineering, LLC
- Responsible Official: Philip L. Vasquez
- Plant Site Manager/Contact: Frank Luera Phone #: 619-281-4052 FAX #:
- Application Contact: Ms. Yijin Wang
- Type of Facility: Terminal for Hire
- General description of processes/products: See attached for details. Refined petroleum products are received via pipeline (ethanol is received via tanker trucks) and stored in above ground storage tanks and then transferred from the storage tanks to trucks via loading racks.
- Is a Federal Risk Management Plan (RMP) pursuant to Section 112(r) required? ☐ Yes ☒ No
(If application is submitted after RMP due date, attach verification that plan is registered with the appropriate agency.)

II. TYPE OF PERMIT ACTION (check)	CURRENT PERMIT (permit number)	EXPIRATION (date)
☐ Initial Title V Application	N/A	N/A
☒ Permit Renewal	APCD2011-TVP-31	January 31, 2017
☐ Significant Permit Modification		
☐ Minor Permit Modification		
☐ Administrative Amendment		

III. DESCRIPTION OF PERMIT ACTION

- Does the permit action requested involve:
☐ Acid Rain Source ☐ Alternative Operating Scenarios ☒ Abatement Devices
☐ CEMs ☐ Permit Shield
☐ Outdated SIP Requirement Streamlining ☐ Multiple Applicable Requirement Streamlining
☐ Source Subject to MACT Requirements [Section 112]
☒ Source Subject to Enhanced Monitoring (40CFR64) [Compliance Assurance Monitoring]
- Is source operating under a Compliance Schedule? ☐ Yes ☒ No ☐ Proposed
- Is source operating under a Variance ☐ Yes ☒ No (If Yes, please attach variance information)
- For permit modification, provide a general description of the proposed permit modification:
N/A

IV. SUPPLEMENTAL ATTACHMENTS*: See attached permit application narrative

* Means all attachments to the complete application.

San Diego County Air Pollution Control District
10124 Old Grove Road San Diego CA 92131-1649
(858) 586-2600 FAX (858) 586-2601

TITLE V APPLICATION
Stationary Source Summary (FORM 1401-A2)

Company Name <u>SFPP, L.P.</u>	District Use Only NEDS # SITE ID # <u>1979-00623</u>
--	---

I. MAJOR SOURCE APPLICABILITY

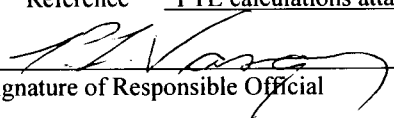
Check appropriate pollutant(s) for which you are a Major Source under Title V. Applicability is based on potential to emit.
If more space is necessary, use additional forms. Please type or print legibly.

POLLUTANT	MAJOR SOURCE THRESHOLD TOTAL EMISSIONS, TPY	(check if appropriate)
VOC	100	☒
PM ₁₀	100	☐
SO ₂	100	☐
NO _x	100	☐
CO	100	☐
ODC	100	☐
LEAD COMPOUNDS	10	☐
HAZARDOUS AIR POLLUTANTS		
SINGLE HAP	10	☐
		☐
		☐
COMBINATION HAP	25	☐
		☐
		☐
		☐

Attach all necessary calculations to this form as applicable. NOTE: Calculations are only needed if no Emission Inventory is on file with the District

Reference PTE calculations attached in Appendix B

Inventory Year _____


Signature of Responsible Official

11/18/15
Date

Philip L. Vasquez
Print Name of Responsible Official

(909) 873-5123
Telephone No. of Responsible Official

Director of Operations
Title of Responsible Official

II. EMISSIONS CALCULATIONS ATTACHED (as needed)

☒ Yes ☐ No

DISTRICT USE ONLY

Date Application Received: 11/25/15

Application # 2015-APP-004291

Application Filing Fee: \$9173

District Received Stamp: 11/25/15

Receipt #: _____

Fee Code: TTU Tdm=89078

San Diego County Air Pollution Control District
10124 Old Grove Road San Diego CA 92131-1649
(858) 586-2600 FAX (858) 586-2601

TITLE V APPLICATION
Stationary Source Summary (FORM 1401-A2)

Company Name <u>SFPP, L.P.</u>	District Use Only NEDS # SITE ID # <u>1974-00623</u>
--	---

I. MAJOR SOURCE APPLICABILITY

Check appropriate pollutant(s) for which you are a Major Source under Title V. Applicability is based on potential to emit. If more space is necessary, use additional forms. Please type or print legibly.

POLLUTANT	MAJOR SOURCE THRESHOLD TOTAL EMISSIONS, TPY	(check if appropriate)
VOC	100	☒
PM ₁₀	100	☐
SO ₂	100	☐
NO _x	100	☐
CO	100	☐
ODC	100	☐
LEAD COMPOUNDS	10	☐
HAZARDOUS AIR POLLUTANTS		
SINGLE HAP	10	☐
		☐
		☐
COMBINATION HAP	25	☐
		☐
		☐
		☐

Attach all necessary calculations to this form as applicable. NOTE: Calculations are only needed if no Emission Inventory is on file with the District

Reference PTE calculations attached in Appendix B

Inventory Year _____

Signature of Responsible Official _____

Date _____

Philip L. Vasquez
Print Name of Responsible Official

(909) 873-5123
Telephone No. of Responsible Official

Director of Operations
Title of Responsible Official

II. EMISSIONS CALCULATIONS ATTACHED (as needed)

☒ Yes ☐ No

DISTRICT USE ONLY

Date Application Received: 11/25/15

Application # 2015-APP-004291

Application Filing Fee: \$9173

District Received Stamp: 11/25/15

Receipt #: _____

Fee Code: JEN Tam

San Diego County Air Pollution Control District
10124 Old Grove Rd., San Diego, CA 92131
(858) 586-2600 FAX (858) 586-2601

TITLE V APPLICATION
Insignificant Activity List (FORM 1401-G)

Company Name SFPP L.P.	District Use Only NEDS # _____ SITE ID # <u>1479-00623</u>
Facility Address: <u>9950 San Diego Mission Road, San Diego, CA 92108</u>	

LIST OF EQUIPMENT – INSIGNIFICANT ACTIVITIES

Place a check mark in the appropriate box for equipment that is considered an insignificant activity based on throughput or equipment capacity.

Exemptions based on Size (Capacity)

<u>(Condensed Language of Rule)</u>	<u>Appendix A Citation</u>
☒ Stationary & portable internal combustion engines with ≤ 50 bhp output rating	(d)(1)(iii)
☐ Stationary gas turbines with a power rating of < 0.3 megawatt (MW) or a maximum gross heat input rating of 1 million BTUs per hour	(d)(1)(iv)
☐ Water cooling towers & ponds with a capacity $< 10,000$ gal/min not used for evaporative cooling of process water or not used for evaporative cooling of water, contaminated water or industrial waste water from barometric jets or from barometric condensers.	(d)(2)
☐ Fuel-burning equipment with a maximum gross heat input rate of < 1 million Btu/hour when not part of a process, process line, line, equipment, article, machine or other contrivance for which a permit to operate is required by these Rules and Regulations	(d)(4)(i)
☒ Fuel burning equipment with a maximum gross heat input of < 20 million Btu/hour, and fired exclusively with natural gas and/or liquefied petroleum gas – Propane fired small burner used as an assist gas on VDU.	(d)(4)(ii)
☐ Steam boilers, process heaters, and steam generators with a maximum gross heat input of < 5 million Btu/hour	(d)(4)(iii)
☐ Crucible-type or pot-type furnaces with a brimful capacity of < 450 in ³ of any molten metal	(d)(12)
☐ Crucible, pot or induction furnaces with a capacity of ≤ 2500 in ³ , in which no sweating or distilling is conducted and from which only non-ferrous metals except yellow brass, are poured or non-ferrous metals are held in a molten state	(d)(13)
☐ Dry batch mixers with ≤ 0.5 cubic yards rated working capacity	(d)(27)
☐ Batch mixers (wet) with ≤ 1 cubic yard capacity where no organic solvents, diluents or thinners are used.	(d)(28)
☐ Roofing kettles (used to heat asphalt) with a capacity of ≤ 85 gallons	(d)(33)
☒ Abrasive blasting equipment with a manufacturer's-rated sand capacity of < 100 lbs or < 1 ft ³	(d)(34)
☐ Paper shredders and paper disintegrators that have a capacity of 600 pounds per hour or less, and the associated conveying systems and baling equipment.	(d)(41)
☐ Ovens having an internal volume of ≤ 27 ft ³ in which organic solvents or materials containing organic solvents are charged	(d)(59)
☒ Cold solvent cleaning tanks, vapor degreasers, and paint stripping tanks with a liquid surface area of ≤ 1.0 ft ²	(d)(61)(i)
☒ Cold solvent cleaning tanks, vapor degreasers, and paint stripping tanks which have a maximum capacity of ≤ 1 gallon	(d)(61)(ii)

TITLE V APPLICATION
Insignificant Activity List (FORM 1401-G)

Continued - Exemptions based on Size (Capacity)

<u>(Condensed Language of Rule)</u>	<u>Appendix A Citation</u>
☒ Stationary organic compound storage tanks with a capacity of ≤ 250	(e)(1)
☒ Liquid surface coating application operations using hand-held brushes for application of a primer coating from containers of $\leq$ eight (8) ounces in size, to fasteners to be installed on aerospace parts	(h)(5)
☒ Liquid surface coating application operations using air brushes with a coating capacity of ≤ 2 ounces for the application of a stencil coating	(h)(6)
☐ Metal inspection tanks that: a) do not utilize a suspension of magnetic or fluorescent dye particles in volatile organic solvent, and b) have a liquid surface area $< 5 \text{ ft}^2$ and c) are not equipped with spray type flow or a means of solvent agitation	(o)(5)
☐ Bakery ovens used for baking yeast leavened products where the combined rated heat input capacity is < 2 million Btu/hr	(o)(37)

Exemptions based on Production Rates (Emission Limits)

☐ Printing or graphic arts presses located at a stationary source which emits a total of < 15 lbs/day of VOC's subject to Rule 67.16, on each day of operation	(d)(7)
☐ Solder levelers, hydrosqueegees, wave solder machines, and drag solder machines which use < 10 lbs/day of any material containing VOCs	(d)(23)
☒ Fire extinguishing equipment, using halons with a charge of < 50 lbs. of a Class I or Class II ozone depleting compound.	(d)(31)
☐ Coffee roasting equipment with a manufacturer's rating of ≤ 15 lbs/hr	(d)(45)
Equipment used to manufacture bio-agricultural products for exclusive use in field testing required to obtain FDA, EPA, USDA and/or Cal-EPA approval, provided the uncontrolled emissions of VOCs from all such operations < 5 ton/yr.	(d)(49)(iii)
☐ Oil quenching tanks which use < 20 gal/yr of make-up oil	(d)(56)
☒ Equipment that is used to conduct research and develop new or improved processes/products, and is operated by technically trained personnel under the supervision of a research director, and is not used in the manufacture of products for sale or exchange for commercial profit, and all emissions are < 15 lbs/day.	(d)(48)
☐ Powder coating operations, except metalizing gun operations, where surface preparation or cleaning solvent usage is < 0.5 gal/day	(d)(62)
☐ Equipment used to transfer fuel to & from amphibious ships for maintenance purposes, provided total annual transfers $< 60,000$ gal/yr.	(f)(2)
☐ Stationary storage tanks (excluding tanks subject to Rule 61.9) used exclusively for the storage of liquid organic solvents used as dissolvers, viscosity reducers, reactants, extractants, cleaning agents or thinners provided that emissions < 15 lbs/day.	(c)(3)
☒ Liquid surface coating or adhesive application operations (portable or stationary) where not more than 20 gallons per year of material containing organic compounds are applied – This activity is very infrequently conducted at the facility. It is safe to assume that total VOC containing material is less than 20 gallons.	(h)(1)
☒ Liquid surface coating application operations exclusively using materials with a VOC content of < 20 g/L where < 30 gal/day of such materials are applied.	(h)(2)
☐ Foam manufacturing or application operations which emit < 5 lbs/day of VOCs	(i)(1)
☐ Reinforced plastic fabrication operations using resins such as epoxy and/or polyester which emit < 5 lbs/day of VOCs	(i)(2)
☐ Plastics manufacturing or fabrication operations which emit < 5 lbs/day of VOCs	(i)(3)
☐ Cold solvent degreasers used for educational purpose and which emit < 5 lbs/day of VOCs	(i)(4)

TITLE V APPLICATION
Insignificant Activity List (FORM 1401-G)

- | | | |
|-------------------------------------|---|-------------|
| ☐ | Golf grip application stations which exclusively use liquid materials with an initial boiling point of 450°F (232°C), or greater and which emit < 5 lbs/day of VOCs. | (i)(5) |
| ☐ | Batch-type waste-solvent recovery stills with batch capacity of ≤ 7.5 gallons for onsite recovery provided the still is equipped with a safety device & VOC emissions are < 5 lbs/day | (i)(6) |
| ☐ | Peptide and DNA synthesis operations which emit < 5 lbs/day of VOCs | (i)(7) |
| ☐ | Equipment used for washing or drying articles fabricated from metal, cloth, fabric or glass, provided that no organic solvent is employed in the process and that no oil or solid fuel is burned and none of the products being cleaned has residues of organic solvent and VOC emissions are < 5 lbs/day | (i)(8) |
| ☐ | Hot wire cutting of expanded polystyrene foam which emit < 5 lbs/day of VOCs. | (i)(9) |
| ☐ | Any coating and/or ink manufacturing operations located at a stationary source, which emit < 15 lbs/day of VOCs. | (o)(9) |
| ☐ | Any operation producing materials for use in cosmetic or pharmaceutical products and/or manufacturing cosmetic or pharmaceutical products by chemical processes, which emit < 15 lbs/day of VOCs | (o)(12) |
| ☒ | Refrigeration units except those used as, or with, air pollution control equipment with a charge of < 50 lbs of a Class I or II ozone depleting compound. | (o)(18) |
| ☐ | Atmospheric organic gas sterilizer cabinets where ethylene oxide emissions are < 5 lbs/yr | (o)(28) |
| ☐ | Aerosol can puncturing/crushing operations which vents all emissions through a properly operated/maintained carbon canister, provided < 500 cans/day are processed. | (o)(29)(ii) |
| ☒ | Solvent wipe cleaning operations using a container applicator that minimizes emissions to the air where the uncontrolled emissions of VOCs < 5 ton/yr, or the total purchase of solvents < 1,500 gal/yr, or the total purchase of solvents containing a single HAP < 350 gal/yr. - Wipe cleaning is very rarely done. Gal/yr limit specified in this condition can easily be met. | (o)(32) |
| ☒ | Equipment approved for use by the EPA for recovering and/or recycling CFCs provided such equipment is charged with < 50 lbs. of a Class I or II ozone depleting compound. | (o)(33) |
| ☐ | Stationary IC engines rated at ≤ 200 bhp installed and operated before November 15, 2000, which operate < 200 hr/yr. | (o)(34)(ii) |

San Diego County Air Pollution Control District
10124 OLD GROVE ROAD SAN DIEGO CA 92131-1649
(858) 586-2600 FAX (858) 586-2601

TITLE V APPLICATION
Applicable Requirements Summary Checklist (Form 1401-H1)

SFPP, L.P.	Company Name	District Use Only	
		NEDS #	SITE ID #
			7974 - 00623

APPLICABLE REQUIREMENTS: Applicable requirements which apply to an entire facility are listed first. The applicant should check appropriate boxes on the form and attach emission unit specific permit number lists where necessary. Where streamlining is employed, note on this form. If information does not fit in the space allotted, attach documentation and reference it on this form. **Type or print legibly.**

RULE	RULE DESCRIPTION	Test Method or Rule Section	Monitoring, Records, Reports, Rule Section	Facility	Emission Ctrl	Tanks	Tanks (Ka)	Tanks (Kb)	Loading Racks	EUS	Off Spec FUS	OWS	UST	Em ICE	Future Effective Date
Facility Applicable Requirement Description															
10(a)	Permits Required – (a) Authority to Construct			X											
10(b)	Permits Required – (b) Permit to Operate			X											
19	Provision of Sampling & Testing Facilities			X											
19.2	Continuous Emission Monitoring Requirements														N/A
19.3	Emission Information			X											
NSR	New Source Review			X											
PSD	Prevention of Significant Deterioration			X											
21	Permit Conditions			X											
50	Visible Emissions			X											
51	Nuisance			X											
60	Circumvention			X											
67.0	Architectural Coatings	(g)		X											
67.17	Storage of Materials Containing VOC	(e)		X											
71	Abrasive Blasting			X											
98	Breakdown Conditions: Emergency Variance			X											
101	Burning Control			X											
131	Stationary Source Curtailment Plan			X											
132	Traffic Abatement Plan														N/A

TITLE V APPLICATION
Applicable Requirements Summary Checklist (FORM 1401-H1) - continued

RULE	RULE DESCRIPTION	Test Method or Rule Section	Monitoring, Records, Reports, Rule Section	Facility	Emission Ctrl	Tanks	Tanks (Ka)	Tanks (Kb)	Loading Racks	EUS	Off Spec. FUS	OWS	UST	Em. ICE			Future Effective Date
Equipment Specific Applicable Requirement Description																	
50	Visible Emissions			X	X	X	X	X	X	X	X	X	X				
51	Nuisance			X	X	X	X	X	X	X	X	X	X				
52	Particulate Matter	Method 5		X	X												
53	Specific Contaminants	Method 5			X												N/A
53.1	Scavenger Plants			X													N/A
54	Dust and Fumes	Method 5															
58	Incinerator Burning																
59	Control of Waste Disposal – Site Emissions	(e)	(e) & (f)	X													
60	Circumvention			X													
61.1	Receiving & Storing VOCs at Bulk Plants & Terminals	(d)	(c)(7)			X	X	X		X	X	X	X				
61.2	Transfer of VOCs into Mobil Transport Tanks	(c)(10)							X			X					N/A
61.3	Transfer of VOCs into Stationary Storage Tanks		(c)(2)(iii)														N/A
61.3.1	Transfer Of Gasoline Into Stationary Underground Storage Tanks (not in the SIP)	(h)	(g)														N/A
61.4	Transfer of VOCs into Vehicle Fuel Tanks																N/A
61.4.1	Transfer Of Gasoline From Stationary Underground Storage Tanks Into Vehicle Fuel Tanks (not in the SIP)	(g)	(f)														N/A
61.5	Visible Emissions Standards for Vapor Control Equip.		VE	X	X	X	X	X	X	X	X	X	X				
61.7	Spillage & Leakage of VOCs				X												
61.8	Certification Requirements for Vapor Control Equip.			X	X												N/A
62	Sulfur Content of Fuels																
64	Reduction of Animal Matter																N/A
66	Organic Solvents	(p)	(o)	X	X												N/A
66.1	Misc. Surface Coating Operations & other Processes Emitting VOC (not in SIP)	(h)	(f)														N/A
67.1	Alternative Emission Control Plans (AIECP)	(c)	(d)														N/A
67.2	Dry Cleaning - Petroleum Solvent	(f)	(e)														N/A
67.3	Metal Parts Coating	(g)	(f)														N/A
67.4	Can & Coil Coating	(g)	(f)														N/A
67.5	Paper, Film and Fabric Coating	(f)	(e)														N/A
67.6	Solvent Cleaning Operation	(f)															N/A

TITLE V APPLICATION
Applicable Requirements Summary Checklist (FORM 1401-H1) - continued

RULE	RULE DESCRIPTION	Test Method or Rule Section	Monitoring, Records, Reports, Rule Section	Facility	Emission Ctrl	Tanks	Tanks (Ka)	Tanks (Kb)	Loading Racks	EUS	Off Spec. FUS	OWS	UST	Em. ICE	Future Effective Date
67.6.1	Cold Solvent Cleaning and Stripping Operations	(g)	(f)												N/A
67.7	Cutback & Emulsified Asphalt	(f)	(e)												N/A
67.9	Aerospace Coating Operations	(g)	(f)												N/A
67.10	Kelp Processing and Bio-Polymer Mfg.	(f)	(e)												N/A
67.11	Wood Products Coating Operations (not in SIP)														N/A
67.12	Polyester Resin Operations	(g)	(f)												N/A
67.15	Pharmaceutical & Cosmetic Manufacturing	(e)													N/A
67.16	Graphic Arts Operations	(g)	(f)												N/A
67.17	Open VOC Containers	(e)				X	X	X	X	X	X	X	X		N/A
67.18	Marine Coating Operations	(g)	(f)												N/A
67.19	Coating and Printing Inks Mfg. Operations	(g)	(f)												N/A
67.20	Motor Vehicle & Mobile Equipment Refinishing Operations														N/A
67.21	Adhesive Material Application Operations														N/A
67.22	Expandable Polystyrene Foam Products Manufacturing Operations (not in SIP)														N/A
67.24	Bakery Ovens	(f)	(e)												N/A
68	Fuel Burning Equipment - NOx														N/A
69.2	Boilers	(f)	(e) & (g)												N/A
69.3	Stationary Gas Turbine Engines - RACT	(f)	(e) & (g)												N/A
69.3.1	Stationary Gas Turbine Engines - BARCT (not in SIP)	(f)	(e) & (g)												N/A
69.4	Stationary Internal Combustion Engines - RACT	(f)	(e)												N/A
69.4.1	Stationary Internal Combustion Engines - BARCT (not in SIP)	(f)	(e)											X	N/A
70	Orchard Heaters														N/A
71	Abrasive Blasting			X											
	Applicability, Definitions, Emission Calculations, Emission Offsets and Banking, Exemptions, and Other Requirements (SIP Version 7/5/79)			X											
20.1	NSR - General Provisions (Version 11/4/98) (not in SIP)														N/A
20.1	Standards for Authority to Construct Best Available Control Technology (SIP Version 7/5/79)														
20.2				X											

TITLE V APPLICATION
Applicable Requirements Summary Checklist (FORM 1401-H1) - continued

RULE	RULE DESCRIPTION	Test Method or Rule Section	Monitoring, Records, Reports, Rule Section	Facility	Emission Ctrl	Tanks	Tanks (Ka)	Tanks (Kb)	Loading Racks	EUS	Off Spec. FUS	OWS	UST	Em. ICE	Future Effective Date
20.2	NSR – Non-major Stationary Sources (Version 11/4/98) (not in SIP)														N/A
20.3	Standards for Authority to Construct - Air Quality Analysis (SIP Version 7/5/79)			X											
20.3	NSR – Major Stationary Source and PSD Stationary Source (Version 11/4/98) (not in SIP)			X											
20.4	Standards for Authority to Construct - Major Sources (SIP Version 7/5/79)			X											
20.4	NSR – Portable Emission Units (Version 11/4/98) (not in SIP)			X											
20.5	Power Plants (SIP Version 7/5/79)														N/A
20.6	Standards for Permit to Operate Air Quality Analysis (SIP Version 7/5/79)			X											

Regulation X - Standards of Performance for New Stationary Sources (NSPS)

SUBPART		Rule #	Rule #
A	General Provisions	260.7	X
	Standards of Performance for Fossil-Fuel Fired Steam Generators	260.13	
D		260.46	
	Standards of Performance for Electric Utility Steam Generating Units Constructed After September 18, 1978	260.45	
		260.47a	
		260.48a	
		260.49a	
Da		260.47b	
	Standards of Performance for Industrial-Commercial-Institutional Steam Generating	260.45b	
		260.48b	
Db		260.46b	
	Standards of Performance for Incinerators	260.54	
E		260.53	
I	Standards of Performance for Asphalt Concrete Plants	260.93	
	Standards of Performance for Storage Vessels for Petroleum Liquids Constructed after June 11, 1973 and Prior to May 19, 1978		
K		260.113	
Ka	Standards of Performance for Storage Vessels for Petroleum Liquids Constructed after May 18, 1978	260.113a	
			X
Kb	Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for which Construction, Reconstruction, or Modification Commenced after July 23, 1984	260.115a	
		260.115b	
		260.116b	
L	Standards of Performance for Secondary Lead Smelters	260.123	
	Standards of Performance for Secondary Brass and Bronze Ingot Production Plants	260.133	
M			

TITLE V APPLICATION
Applicable Requirements Summary Checklist (FORM 1401-H1) - continued

RULE	RULE DESCRIPTION	Test Method or Rule Section	Monitoring, Records, Reports, Rule Section	Facility	Emission Ctrl	Tanks	Tanks (Ka)	Tanks (Kb)	Loading Racks	EUS	Off Spec. FUS	OWS	UST	Em. ICE	Future Effective Date
O	Standards of Performance for Sewage Treatment Plants	260.154	260.153												N/A
DD	Standards of Performance for Grain Elevators	260.303													N/A
EE	Standards of Performance for Surface Coating Metal Furniture	260.313	260.314												N/A
		260.316	260.315												N/A
GG	Standards of Performance for Stationary Gas Turbines	260.335	260.334												N/A
QQ	Standards of Performance for the Graphic Arts Industry: Publication Rotogravure Printing	260.433	260.434												N/A
		260.435													N/A
RR	Standards of Performance for the Pressure Sensitive Tape and Label Surface Coating Operations	260.444	260.445												N/A
		260.446	260.447												N/A
SS	Standard of Performance for the Industrial Surface Coating Large Appliances	260.453	260.454												N/A
		260.456	260.455												N/A
TT	Standards of Performance for Metal Coil Surface Coating	260.463	260.464												N/A
		260.466	260.465												N/A
BBB	Standards of Performance for the Rubber Tire Manufacturing Industry	260.543	260.544												N/A
		260.547	260.546												N/A
FFF	Standards of Performance for Flexible Vinyl and Urethane Coating and Printing		260.584												N/A
JJJ	Standards of Performance for Petroleum Dry Cleaners	260.583	260.585												N/A

SUBPART New Source Performance Standards (40 CFR 60)

Cb, F	Portland Cement Plants														N/A
Dc	Small Industrial -Commercial -Institutional Steam Generators >10 MM Btu but <100 MM Btu.														N/A
Ea	Municipal Waste Combustors														N/A
G	Nitric Acid Plants														N/A
H & Cb	Sulfuric Acid Plants														N/A
N	Oxygen Process Furnaces														N/A
Na	Oxygen Process Steelmaking Facilities														N/A
P	Primary Copper Smelters														N/A
Q	Primary Zinc Smelters														N/A
R	Primary Lead Smelters														N/A
S	Primary Aluminum Reduction Plants														N/A
T & U	Phosphate Fertilizer Industry														N/A
V,W,X	Phosphate Fertilizer Industry														N/A

TITLE V APPLICATION
Applicable Requirements Summary Checklist (FORM 1401-H1) - continued

RULE	RULE DESCRIPTION	Test Method or Rule Section	Monitoring, Records, Reports, Rule Section	Facility	Emission Ctrl	Tanks	Tanks (Ka)	Tanks (Kb)	Loading Racks	EUS	Off Spec. FUS	OWS	UST	Em. ICE	Future Effective Date
Y	Coal Preparation Plants														N/A
Z	Ferroalloy Production Facilities														N/A
AA, AAa	Steel Plants														N/A
BB	Kraft Pulp Mills														N/A
CC	Glass Manufacturing Plants														N/A
HH	Lime Manufacturing Plants														N/A
KK	Lead-Acid Battery Manufacturing Plants														N/A
LL	Metallic Mineral Processing Plants														N/A
MM	Automobile and Light-Duty Truck Surface Coating Operations														N/A
NN	Phosphate Rock Plants														N/A
PP	Ammonium Sulfate Manufacture														N/A
UU	Asphalt Processing and Asphalt Roofing Manufacture														N/A
VV	Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry.														N/A
WW	Beverage Can Surface Coating Industry														N/A
XX	Bulk Gasoline Terminals				X				X						N/A
AAA	New Residential Wood Heaters														N/A
DDD	VOC Emissions from the Polymer Mfg. Ind.														N/A
GGG	Equipment Leaks of VOC in Petroleum Refineries.														N/A
HHH	Synthetic Fiber Production Facilities														N/A
KKK, LLL	Onshore Natural Gas Processing: VOC Equipment Leaks and SO ₂ Emissions.														N/A
HHH	Synthetic Fiber Production Facilities														N/A
KKK, LLL	Onshore Natural Gas Processing: VOC Equipment Leaks and SO ₂ Emissions.														N/A
NNN	VOC Emissions from Synthetic Organic Chemical Manufacturing Industry Distillation Operations.														N/A
OOO	Standard of Performance for Nonmetallic Mineral Processing Plants														N/A
PPP	Wool Fiberglass Insulation Mfg. Plants														N/A
QQQ	VOC Emissions from Petroleum Refinery Wastewater Systems.														N/A

TITLE V APPLICATION
Applicable Requirements Summary Checklist (FORM 1401-H1) - continued

RULE	RULE DESCRIPTION	Test Method or Rule Section	Monitoring, Records, Reports, Rule Section	Facility	Emission Ctrl	Tanks	Tanks (Ka)	Tanks (Kb)	Loading Racks	EUS	Off Spec. FUS	OWS	UST	Em. ICE	Future Effective Date
RRR	VOC Emissions from the Synthetic Organic Chemical Manufacturing Industry (SOCMI) Reactor Processes.														N/A
SSS	Magnetic Tape Coating Facilities														N/A
TTT	Industrial Surface Coating Surface, Surface Coating of Plastic Parts for Business Machines.														N/A
UUU	Calciners and Dryers in Mineral Industries.														N/A
VVV	Polymetric Coating of Supporting Substances Facilities.														N/A
WWW	Standards of Performance for Municipal Solid Waste Facilities														N/A
IIII	Stationary Compression Ignition Internal Combustion Engines NSPS														N/A
JJJJ	Stationary Spark Ignition Internal Combustion Engines NSPS														N/A

REGULATION XI - NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS

SUBPART (NESHAPS)																
A	General Provisions															N/A
C, D	Beryllium Extraction Plants; Ceramic Plants, Foundries, Incinerators, Propellant Plants, and Machine Shops that Process Beryllium Containing Material; and Rocket Motor Firing Test Sites.															N/A
E	Mercury Ore Processing; Manufacturing Processes Using Mercury Chloralkali Cells; and Sludge Incinerators.															N/A
F	Ethylene Dichloride Mfg. Via Oxygen, HCl and Ethylene; Vinyl Chloride Mfg.; and Polyvinyl Chloride Mfg.															N/A
M	Asbestos Mills; Roadway Surfacing with Asbestos Tailings; Manufacture of Products Containing Asbestos; Demolition; Renovation; and Spraying and Disposal of Asbestos Waste.															N/A

SUBPART	NESHAPS (40 CFR 61)															
B,Q,R, T,W,	Underground Uranium Mines; Dept. of Energy Facilities; Phosphorus Fertilizer Plants; & Facilities Processing or Disposing of Uranium Ore & Tailings.															N/A
H,I,K	Dept. of Energy; Nuclear Regulatory Commission Licensed Facilities; Other Federal Facilities; and Elemental Phosphorus Plants. (Radionuclide)															N/A
J,L,Y, BB,FF	Fugitive Process, Storage, and Transfer Equipment Leaks; Coke By-Product Recovery Plants; Benzene Storage Vessels; Benzene Transfer Operations; and Benzene Waste Operations.															N/A
N,O,P	Glass Manufacturer; Primary Copper Smelter; Arsenic Trioxide and Metallic Arsenic Production Facilities.															N/A

TITLE V APPLICATION
Applicable Requirements Summary Checklist (FORM 1401-H1) - continued

RULE	RULE DESCRIPTION	Test Method or Rule Section	Monitoring, Records, Reports, Rule Section	Facility	Emission Ctrl	Tanks	Tanks (Ka)	Tanks (Kb)	Loading Racks	EUS	Off Spec. FUS	OWS	UST	Em. ICE	Future Effective Date
V	Pumps, Compressors, Pressure Relief Devices, Connections, Valves, Lines, Flanges, Product Accumulator Vessels, etc. in VHAP Service.														N/A

SUBPART MACT Standards (40 CFR 63)

F,G,H,I	Amendment: Reopening, Averaging Issue														N/A
L	Coke Ovens														N/A
O	Ethylene Oxide Sterilizers														N/A
Q	Industrial Process Cooling Towers														N/A
R	Gasoline Distribution Facilities														N/A
T	Halogenated Solvent Cleaning Degreasing														N/A
X	Secondary Lead Smelters														N/A
Y	Marine Tank Loading/Unloading														N/A
CC	Petroleum Refineries														N/A
DD	Off-Site Waste and Recovery Operations														N/A
EE	Magnetic Tape														N/A
GG	Aerospace (Coatings)														N/A
II	Shipbuilding for Ship Repair (Surface Coating)														N/A
JJ	Wood Furniture Industry (Coatings)														N/A
KK	Printing and Publishing														N/A
AAAA	Municipal Solid Waste Landfills														N/A
DDDDD	Industrial, Commercial and Institutional Boilers and Process Heaters														N/A
MMMM	Surface Coating of Miscellaneous Metal Parts and Products														N/A
PPPP	Surface Coating of Plastic Parts														N/A
ZZZZ	Reciprocating Internal Combustion Engines														N/A
YYYY	Stationary Combustion Turbines														N/A

California Requirements Under 17 CCR Including Airborne Toxic Control Measures (ATCM)

§93102	Hexavalent Chromium from Chrome Plating and Chromic Acid Anodizing Operations (equivalency under CAA given at 40 CFR 63.99)														N/A
--------	---	--	--	--	--	--	--	--	--	--	--	--	--	--	-----

TITLE V APPLICATION
Applicable Requirements Summary Checklist (FORM 1401-H1) - continued

RULE	RULE DESCRIPTION	Test Method or Rule Section	Monitoring, Records, Reports, Rule Section	Facility	Emission Ctrl	Tanks	Tanks (Ka)	Tanks (Kb)	Loading Racks	EUS	Off Spec. FUS	OWS	UST	Em. ICE	Future Effective Date
§93109	Perchloroethylene from Dry Cleaning Operations (equivalency under CAA given at 40 CFR 63.99)														N/A
§93115	Stationary Compression Ignition Engines													X	N/A
§93116	Diesel Particulate Matter from Portable Engines Rated ≥ 50 Horsepower														N/A
§§95460 – 95476 and Appx I	Methane Emissions from Municipal Solid Waste Landfills														N/A
	40 CFR Part 64 - Compliance Assurance Monitoring								X						N/A
	40 CFR Part 68 Chemical Accident Prevention														N/A
	Title IV - Acid Rain (40 CFR 72 through 78)														N/A

Title VI-Ozone Depleting Compounds (40 CFR 82)

B	Servicing of Motor Vehicle Air Conditioners	B													N/A
F	Servicing of Other Air Conditioners	F		X											

San Diego County Air Pollution Control District
 10124 Old Grove Road San Diego CA 92131-1649
 (858) 586-2600 FAX (858) 586-2601

TITLE V APPLICATION
LIST OF PERMITS BY EQUIPMENT CATEGORY (FORM 1401-H2)

Company Name	District Use Only
<u>SFPP, L.P.</u> Facility Address: <u>9950 San Diego Mission Road</u> <u>San Diego, CA 92108</u>	NEDS # _____ SITE ID # <u>1979-60623</u>

PERMITTED EMISSION UNITS BY EQUIPMENT CATEGORY

In the emission unit (equipment) category order entered on Form 1401-H1, Applicable Requirements Summary Checklist, list emission units by permit number for the specific emission unit (equipment) category. Under the column labeled status place an "O" if operational, "N" if non-operational, or "S" if the equipment is new and currently operating under a startup authorization. **If more space is required, use additional forms. Please type or print legibly.**

Emission Unit Category	Application/ Permit No.	Status of Emission Unit
Emission Controls - Vapor Combustion Unit	860515	O
Emission Ctrl- Soil Vapor Extraction	974060	O
MV UST - 4,000 gals (Station Sump)	000885	O
MVS UST - 10,000 gals (Rack Sump)	000884	O
Tank MV-1	002772	O
Tank MV-2	002773	O
Tank MV-3	002779	O
Tank MV-4	005504	O
Tank MV-5	002777	O
Tank MV-6	002778	O
Tank MV-7	002774	O
Tank MV-8	002784	O
Tank MV-9	030271	O
Tank MV-10	890939	O
Tank MV-12	002775	O
Tank MV-13	002776	O
Tank MV-14	002783	O
Tank MV-15	002780	O
Tank MV-16	002781	O
Tank MV-18	002782	O
Tank MV-19, (CFR40-60 Subpart Kb)	972647	O
Tank MV-21	976948	O

(858) 586-2600 FAX (858) 586-2601

[illegible]

UST = Underground Storage Tank

San Diego County Air Pollution Control District
10124 Old Grove Road San Diego CA 92131-1649
(858) 586-2600 FAX (858) 586-2601

TITLE V APPLICATION
Certification Statement (FORM 1401-I)

Company Name	District Use Only
SFPP, L.P.	NEDS # _____
Facility Address: 9950 San Diego Mission Road	SITE ID # <u>1974-06623</u>
San Diego, CA 92108	

Under penalty of perjury, identify the following: (Read each statement carefully and check each box for confirmation.)

Applicable Not
 Applicable



Based on information and belief formed after reasonable inquiry, the source(s) identified in this application will continue to comply with the applicable requirement with which the source is in compliance. The applicable requirement(s) with which the source(s) is/are not in compliance is/are identified in Form 1401-L, Schedule of Compliance.



Based on information and belief formed after reasonable inquiry, the source(s) identified in this application will comply with the future-effective applicable requirement(s) on a timely basis.



Based on information and belief formed after reasonable inquiry, the source(s) identified in the Schedule of Compliance application form that is/are not in compliance with the applicable requirement(s), will comply in accordance with the attached compliance plan schedule.



Based on information and belief formed after reasonable inquiry, information on application forms, referenced documents, all accompanying reports, and other required certifications are true, accurate, and complete.



All fees required by Regulation III, Rule 40 have been paid.

Philip L. Vasquez
Signature of Responsible Official

Philip L. Vasquez
Print Name of Responsible Official

Director of Operations
Title of Responsible Official

11/18/15
Date

(909) 873-5123
Telephone No. of Responsible Official

TITLE V APPLICATION
Compliance Certification Schedule (FORM 1401-K)

In numerical order, list all sources that have federally enforceable requirements for compliance certification on a more frequent basis than once per year. **If more space is required, use additional forms. Please type or print legibly.**

Page 1 of 1

TITLE V APPLICATION
Schedule of Compliance (FORM 1401-L)

SOURCES NOT IN COMPLIANCE

[illegible]

San Diego County Air Pollution Control District
10124 Old Grove Road San Diego CA 92131-1649
(858) 586-2600 FAX (858) 586-2601

TITLE V APPLICATION
Abatement Devices (FORM 1401-M)

Company Name <u>SFPP L.P.</u>	District Use Only NEDS # _____ SITE ID # <u>1079-00623</u>
Facility Address: <u>9950 San Diego Mission Road, San Diego, CA 92108</u>	

LIST OF ABATEMENT DEVICES

In numerical order, list all abatement devices, the abatement device, name or description, and the emission unit or operation abated. **If more space is required, use additional forms. Please type or print legibly.**

Permit No(s)	Abatement Device Name or Description	Emission Unit(s) or Operation(s) Abated
860515	Vapor Combustion Unit	Loading Racks (PTO #5135 through 5140) and, MV UST Application (PTO# 885

San Diego County Air Pollution Control District
10124 Old Grove Road San Diego CA 92131-1649
(858) 586-2600 FAX (858) 586-2601

TITLE V APPLICATION
Alternative Operating Scenario (FORM 1401-N)

Company Name	District Use Only
SFPP, L.P.	NEDS #
Facility Address: 9950 San Diego Mission Rd., San Diego, CA 92108	SITE ID # 1979-00623

SCENARIO WITH EMISSION CHANGES

Give a title, a brief description, and an emission change. Attach calculations and detailed descriptions of each scenario to this form, using one form for each scenario. **Please type or print legibly.**

Operating Scenario # 1

TITLE	Direct Mode
DESCRIPTION	In accordance with CARB Executive Order, the Vapor Processing Unit may operate in Direct Mode which is the processing of vapors from the collection system (loading racks) and rounted directly to the John Zink Incinerator Unit.
EMISSION CHANGE	N/A

Attach all necessary calculations, detailed descriptions, and proposed terms and conditions to this form.

San Diego County Air Pollution Control District
10124 Old Grove Road San Diego CA 92131-1649
(858) 586-2600 FAX (858) 586-2601

TITLE V APPLICATION
Alternative Operating Scenario (FORM 1401-N)

Company Name SFPP L.P.	District Use Only NEDS # SITE ID # 1979-00623
Facility Address: 9950 San Diego Mission Rd., San Diego, CA 92108	

SCENARIO WITH EMISSION CHANGES

Give a title, a brief description, and an emission change. Attach calculations and detailed descriptions of each scenario to this form, using one form for each scenario. **Please type or print legibly.**

Operating Scenario # 2

TITLE	By-Pass Mode
DESCRIPTION	In accordance with CARB Exective Order, the Vapor Processing Unit may operate in By-Pass Mode which is the processing of vapors from the collection system (loading racks) through the Vapor Holder Tank and finally through the John Zink Incineration Unit.
EMISSION CHANGE	N/A

Attach all necessary calculations, detailed descriptions, and proposed terms and conditions to this form.

San Diego County Air Pollution Control District
10124 Old Grove Road San Diego CA 92131-1649
(858) 586-2600 FAX (858) 586-2601

TITLE V APPLICATION
Permit Shield (FORM 1401-Q)

Company Name <u>SFPP, L.P.</u> Facility Address: <u>9950 San Diego Mission Rd., San Diego, CA 92108</u>	District Use Only NEDS # _____ SITE ID # <u>1979-00623</u>
--	---

REQUEST FOR PERMIT SHIELD

If more space is required, use additional forms. Please type or print legibly.

Application No(s) Permit No(s)	Requirements to be Shielded	Basis	Attachment Number
	Facility	40 CFR Part 63, Subpart R-National Emission Standards for Gasoline Distribution Facilities (Bulk Gasoline Terminals and Pipeline Breakout Stations)	SFPP, L.P. Mission Valley Terminal is not a major source of HAP; therefore, it is not subjected to this subpart [Per 40 CFR Part 63, Subpart R: 63.420 (a) (2)]
	Facility	40 CFR Part 63, Subpart EEEE-National Emission Standards for Hazardous Air Pollutants: Organic Liquids Distribution (Non-Gasoline)	SFPP, L.P. Mission Valley Terminal is not a major source of HAP; therefore, it is not subjected to this subpart [Per 40 CFR Part 63, Subpart EEEE: 63.2334 (a)]
	Facility	40 CFR Part 63, Subpart GGGGG-National Emission Standards for Hazardous Air Pollutants: Site Remediation	SFPP, L.P. Mission Valley Terminal is not a major source of HAP; therefore, it is not subjected to this subpart [Per 40 CFR Part 63, Subpart GGGGG: 63.7881(a) (3)]
PTO#: 002772 to 85, 004074 to 76, 004508, 004509, 004851, 005504, 008103, 030271, 890939, 972647, 976948, 977156, 977195	All the Storage Tanks in the Facility [Total of 28 Tanks]	"40 CFR Part 60, Subpart K- Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After June 11, 1973, and Prior to May 19, 1978	This rule seems to apply to all of the tanks in this facility since their volumes are above 40,000 gal [Per 40 CFR Part 60, Subpart K: 60.110 (a)]. However, since construction, reconstruction, or modification of these tanks were not commenced after June 11, 1973, and prior to May 19, 1978, these tanks are exempted from this regulation [Per 40 CFR Part 60, Subpart K: 60.110 (b)] . In case of any modification in any of these tanks, the modified tank may be subjected to 40 CFR Par 60, Subpart Kb.

San Diego County Air Pollution Control District
10124 Old Grove Road San Diego CA 92131-1649
(858) 586-2600 FAX (858) 586-2601

Application No(s) Permit No(s)	Requirements to be Shielded	Basis	Attachment Number
PTO#: 002772 to 85, 004074 to 76, 004508, 004509, 004851, 005504, 030271, 890939, 972647, 976948, 977156, 977195	All the Storage Tanks at the Facility, except MV-23, that hold air permit [Total of 27 Tanks]	40 CFR Part 60, Subpart Ka- Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After May 18, 1978, and Prior to July 23, 1984	This rule seems to apply to all of the tanks in this facility since their volumes are above 40,000 gal. However, since only construction of Tank MV-23 (PTO# 008103) commenced in 1979, which is after May 18, 1978, and prior to July 23, 1984, all the tanks except MV-23 are exempted from this regulation [Per 40 CFR Part 60, Subpart Ka: 60.110a (a)]. In case of any modification in any of these tanks, the modified tank may be subjected to 40 CFR Part 60, Subpart Kb.
PTO#: 72 to 85, 004074 to 76, 004508, 004509, 004851, 005504, 008103, 030271, 890939, 976948, 977156, 977196	All the Storage Tanks at the Facility, except MV-19, that hold air permit [Total of 27 Tanks]	40 CFR Part 60, Subpart Kb- Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984	This rule seems to apply to all of the tanks in this facility since all of these tanks' volumes are greater than 151 m ³ . However, since only construction of Tank MV-19 and 29 (PTO# 972647 and 004851 respectively) commenced after July 23, 1984 (1999 and 2002 respectively), all the tanks in the facility except MV-19 and 29 are exempted from this regulation [Per 40 CFR Part 60, Subpart Kb: 60.110b (a)]. Tank MV-29 is also exempted since it is containing ULSD whose maximum vapor pressure is below 3.5 kPa [Per 40 CFR Part 60, Subpart Kb: 60.110b (b)]. In case of any modification in any of the tanks that are exempted and containing volatile organic liquids with maximum vapor pressure of 3.5kPa and higher, the modified tank will be subjected to 40 CFR Part 60, Subpart Kb [Per 40 CFR Part 60, Subpart Kb: 60.110b (b)]. Also, in case of new tank construction the constructed tank may be subjected to this regulation.

Mission Valley Terminal Title V Permit Renewal Application

KINDERMORGAN
UPP LP

APPENDIX E – CAM PLAN

SFPP L.P., Mission Valley Terminal
Compliance Assurance Monitoring (CAM) Plan for Thermal Oxidizer Abating Volatile
Organic Compound (VOC) Emissions from Racks #1 To #5 and Rack #8

I. Background

A. Emissions Unit

Description:

Six bulk petroleum products truck loading racks and one underground storage tank

Emission Unit Identification: Name (Permit to Operate)

- MV Rack #1 (005135)
- MV Rack #2 (005136)
- MV Rack #3 (005137)
- MV Rack #4 (005138)
- MV Rack #4 (870364)
- MV Rack #5 (005139)
- MV Rack #8 (005140)
- MV Underground Storage Tank (000885)

Facility Address:

SFPP, LP
9950 San Diego Mission Road
San Diego, CA

B. Applicable Regulation, Emission Limit, and Pre-CAM Monitoring Requirements

Regulation: 40 CFR 60, SDAPCD Rule 61.2 (c)(1), and PTO# 860515 conditions #12 and 14.

CAM Emission limits:

- 0.0835 lbs VOC/1,000 gallons of product loaded (PTO# 860515 Condition 12)
- 0.0334 lbs NO_x/1,000 gallons of product loaded (PTO# 860515 Condition 14)

C. Control Technology Description

Control: The control device in this facility is a John Zink vapor combustion unit (VCU) equipped with a 10-foot diameter and 50-foot high combustion stack, temperature control, 2 tube axial 2 horsepower air blowers, 1 John Zink combustion control package, a 1,250 scfm New York vapor blower Model 1406, and essential piping designed to control the emission of hydrocarbon vapor from the loading of transport trucks from loading racks permitted under PTO# 5135 through 5140 and an underground storage tank. This incineration unit is used in conjunction with a 30,000 ft³ vapor holder except as otherwise is allowed by the permit.

Potential amount of vapors to the John Zink VCU (before controls): 8,274 tpy
Potential to Emit of the John Zink VCU (after controls): 78.78 tpy
VOC destruction efficiency of John Zink VCU: 99.05 %

II. Monitoring Approach

The primary monitored indicator of thermal oxidizer performance is the combustion chamber temperature. This control device uses a supplemental fuel stream to maintain the combustion chamber at a temperature sufficient to oxidize the hydrocarbon vapor conveyed from the loading racks. To verify proper operation, an annual inspection of the burner unit is conducted, following manufacturer-recommended practices.

A. General Criteria

1. Performance indicator(s): Combustion chamber temperature monitoring, and annual inspection of key components (e.g., pilot gas train and ignition sequence, combustor, temperature controller, air dampers, and air blower).
2. Indicator range(s) or designated conditions(s): combustion chamber temperature not less than 1,000 F (PTO# 860515 Condition # 7)

B. Performance Criteria

1. Data Representativeness
 - a. Detector Location: Temperature controller sensor at a base on combustion stack.
 - b. Installation Requirements: protective enclosure or probe, shielded from direct contact with flame.
 - c. Minimum Acceptable Accuracy: thermocouple sensor with a minimum accuracy of ± 20 F or ± 1.0 percent of full scale, whichever is greater
2. Verification of operational status (new or modified equipment): The verification procedures for operational status, including installation, calibration and operation of the monitoring equipment should be done in accordance with the equipment manufacturer's recommendations and specifications.
3. QA/QC practices: Calibrate, maintain and operate temperature sensor/controller instrumentation using procedures that take into account manufacturer's specifications. To consist, in part, of instrument accuracy check on annual basis.
4. Monitoring frequency and data collection procedures: Continuous sensing, recording of periodic averaged data points
 - a. Frequency of measurement: Recorded continuously on strip chart or digital data acquisition system.
 - b. Reporting units: Degrees Fahrenheit or Celsius (F, C)
 - c. Recording process: Data recorded automatically on strip chart or digital data acquisition system.

III. Justification

A. Monitoring approach and indicator:

1. Combustion stack temperature: Essentially complete oxidation of VOC can be related to maintenance of proper temperature range, particularly for hydrocarbon compounds encountered in petroleum products. Measurement at base of combustion stack chamber exit indicates that sufficient combustion temperature is achieved for oxidation reactions to be driven essentially to completion.
2. Annual combustor and key component inspection: The facility will perform inspection of the combustor, air blower, control dampers, pilot and combustor gas train controls, and other functional aspects as recommended by manufacturer to maintain proper oxidizer operation and efficiency. The oxidizer combustor, controls, blower, and gas trains are proven technology with high reliability, so inspections on annual basis are sufficient to ensure proper operation.

B. Indicator range(s):

A combustion stack temperature minimum set point of 1,000 F is sufficient to maintain high efficiency destruction of hydrocarbon vapor in a properly sized oxidizer. The rate at which VOC compounds are oxidized is affected by temperature; the higher the temperature the faster the oxidation reaction proceeds. Because inlet gas concentrations are well below the lower explosive limit (LEL) to prevent pre-ignition explosions, the gas must be heated with auxiliary fuel above the auto-ignition temperature. Therefore, the continuous combustion is supported by introduction of supplemental propane fuel. Thermal destruction of the hydrocarbon vapors in petroleum products is effectively complete at the set point temperature, or lower, given sufficient residence time in the combustion zone. The oxidizer is sized to provide sufficient residence time and accommodate the level of gas traffic introduced. Residence time is equal to the incinerator chamber volume divided by the total flow of flue gases (waste gas flow, added air, and products of combustion). The John Zink unit is designed to operate within accepted ranges, with a residence time of 0.2 to 2.0 seconds, a length-to-diameter ratio of 2 to 4 for the chamber dimensions, and an average gas velocity of 10 to 50 feet per second.

IV. References

- 1) 40 CFR 64 (CAM)
- 2) US EPA Office (Air Quality Planning and Standards Emissions Measurements Center), Technical Guidance Document, Compliance Assurance Monitoring (Appendix B.6 Thermal Oxidizers)

Monitoring Approach
CAM Plan for MV Racks #1 to #5 and MVS Rack #8 Thermal Oxidizer

		Indicator No. 1	Indicator No. 2
I. Indication		Combustion chamber temperature	Annual combustor and key component inspection.
A. Measurement Approach		Continuous Parameter Measuring System (CPMS) capable of measuring temperature	Records are maintained to record inspections, findings, and repairs.
B. Indicator Range		> 1,000 F	An excursion is defined as failure to perform annual inspections (Within 10 – 14 months of the previous inspection), or failure to implement corrective measures if a combustor, blower, control damper, gas train component, monitoring instrument functional problem is detected during inspection.
II. Performance Criteria		--	--
A. Data Representativeness		Detector Location: Base of combustion stack. Installation Requirements: Housed in a protective probe housing, shielded from flame Minimum Acceptable Accuracy: Thermocouple sensor with a minimum accuracy of +20F or +1.0 percent, whichever is greater	--
B. Verification of Operational Status		The verification procedures for operational status, including installation, calibration and operation of the temperature indicator/controller are to be done in accordance with the equipment manufacturer's recommendations and specifications.	--
III. QA/QC Practices and Criteria		Calibrate, maintain and operate temperature controller and related instrumentation using procedures that take into account manufacturer's specifications. To consist, in part, of instrument accuracy check on annual basis.	Annual inspections are conducted in accordance with manufacturer's recommended procedures. Inspection records will note results of inspections, deficiencies found (if any) and corrective/preventative measures.
IV. Monitoring Frequency		Continuous	Not less than annual
A. Data Collection Procedures		Data recorded automatically on strip chart or digital data acquisition system. Periodic average data stored electronically as part of DCS database.	Inspection findings and repairs noted in logbook.
B. Averaging Period		Not greater than 15 minutes	--

