



## FACILITY PERMIT TO OPERATE

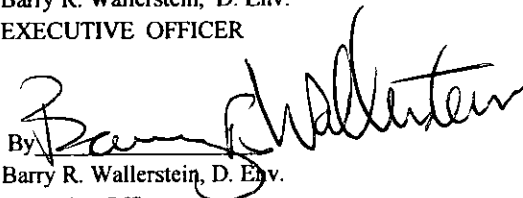
**PACIFIC L.A. MARINE TERMINAL LLC  
3000 NAVY WAY  
TERMINAL ISLAND, CA 90731**

### NOTICE

IN ACCORDANCE WITH RULE 206, THIS PERMIT TO OPERATE OR A COPY THEREOF MUST BE KEPT AT THE LOCATION FOR WHICH IT IS ISSUED.

THIS PERMIT DOES NOT AUTHORIZE THE EMISSION OF AIR CONTAMINANTS IN EXCESS OF THOSE ALLOWED BY DIVISION 26 OF THE HEALTH AND SAFETY CODE OF THE STATE OF CALIFORNIA OR THE RULES OF THE SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT. THIS PERMIT SHALL NOT BE CONSTRUED AS PERMISSION TO VIOLATE EXISTING LAWS, ORDINANCES, REGULATIONS OR STATUTES OF ANY OTHER FEDERAL, STATE OR LOCAL GOVERNMENTAL AGENCIES.

Barry R. Wallerstein, D. Env.  
EXECUTIVE OFFICER

By   
Barry R. Wallerstein, D. Env.  
Executive Officer



## FACILITY PERMIT TO OPERATE PACIFIC L.A. MARINE TERMINAL LLC

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**FACILITY PERMIT TO OPERATE  
PACIFIC L.A. MARINE TERMINAL LLC**

**SECTION A: FACILITY INFORMATION**

**LEGAL OWNER &/OR OPERATOR:** PACIFIC L.A. MARINE TERMINAL LLC

**LEGAL OPERATOR (if different than owner):**

**EQUIPMENT LOCATION:** 3000 NAVY WAY  
TERMINAL ISLAND, CA 90731-7547

**MAILING ADDRESS:** 5900 CHERRY AVE  
LONG BEACH, CA 90805

**RESPONSIBLE OFFICIAL:** TROY E. VALENZUELA

**TITLE:** VICE PRESIDENT, EH&S

**TELEPHONE NUMBER:** (713) 646-4310

**CONTACT PERSON:** THOMAS J. MCLANE

**TITLE:** DIRECTOR OF ENVIRONMENTAL&REG COMPLIANCE

**TELEPHONE NUMBER:** (562) 728-2064

**INITIAL TITLE V PERMIT ISSUED:** October 06, 2011

**TITLE V PERMIT EXPIRATION DATE:** October 05, 2016

<b>TITLE V</b>	<b>RECLAIM</b>
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<b>YES</b>	<b>NOx:</b>	<b>NO</b>
	<b>SOx:</b>	<b>NO</b>
	<b>CYCLE:</b>	<b>0</b>
	<b>ZONE:</b>	<b>COASTAL</b>



SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT  
21865 Copley Drive, Diamond Bar, CA 91765

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**FACILITY PERMIT TO OPERATE  
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**SECTION B: RECLAIM ANNUAL EMISSION ALLOCATION**

NOT APPLICABLE



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**FACILITY PERMIT TO OPERATE  
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**SECTION C: FACILITY PLOT PLAN**

(TO BE DEVELOPED)



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**FACILITY PERMIT TO OPERATE  
PACIFIC L.A. MARINE TERMINAL LLC**

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**SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS**

NONE



## FACILITY PERMIT TO OPERATE PACIFIC L.A. MARINE TERMINAL LLC

### SECTION E: ADMINISTRATIVE CONDITIONS

The operating conditions in this section shall apply to all permitted equipment at this facility unless superseded by condition(s) listed elsewhere in this permit.

1. The permit shall remain effective unless this permit is suspended, revoked, modified, reissued, denied, or it is expired for nonpayment of permit processing or annual operating fees. [201, 203, 209, 301]
  - a. The permit must be renewed annually by paying annual operating fees, and the permit shall expire if annual operating fees are not paid pursuant to requirements of Rule 301(d). [301(d)]
  - b. The Permit to Construct listed in Section H shall expire one year from the Permit to Construct issuance date, unless a Permit to Construct extension has been granted by the Executive Officer or unless the equipment has been constructed and the operator has notified the Executive Officer prior to the operation of the equipment, in which case the Permit to Construct serves as a temporary Permit to Operate. [202, 205]
  - c. The Title V permit shall expire as specified under Section K of the Title V permit. The permit expiration date of the Title V facility permit does not supercede the requirements of Rule 205. [205, 3004]
2. The operator shall maintain all equipment in such a manner that ensures proper operation of the equipment. [204]
3. This permit does not authorize the emissions of air contaminants in excess of those allowed by Division 26 of the Health and Safety Code of the State of California or the Rules and Regulations of the AQMD. This permit cannot be considered as permission to violate existing laws, ordinances, regulations, or statutes of other governmental agencies. [204]
4. The operator shall not use equipment identified in this facility permit as being connected to air pollution control equipment unless they are so vented to the identified air pollution control equipment which is in full use and which has been included in this permit. [204]



## FACILITY PERMIT TO OPERATE PACIFIC L.A. MARINE TERMINAL LLC

### SECTION E: ADMINISTRATIVE CONDITIONS

5. The operator shall not use any equipment having air pollution control device(s) incorporated within the equipment unless the air pollution control device is in full operation. [204]
6. The operator shall maintain records to demonstrate compliance with rules or permit conditions that limit equipment operating parameters, or the type or quantity of material processed. These records shall be made available to AQMD personnel upon request and be maintained for at least five years. [204]
7. The operator shall maintain and operate all equipment to ensure compliance with all emission limits as specified in this facility permit. Compliance with emission limits shall be determined according to the following specifications, unless otherwise specified by AQMD rules or permit conditions: [204]
  - a. For internal combustion engines and gas turbines, measured concentrations shall be corrected to 15 percent stack-gas oxygen content on a dry basis and be averaged over a period of 15 consecutive minutes; [1110.2, 1134]
  - b. For other combustion devices, measured concentrations shall be corrected to 3 percent stack-gas oxygen content on a dry basis and be averaged over a period of 15 consecutive minutes; [1146, 1146.1, 204]
  - c. For non-combustion sources, compliance with emission limits shall be determined and averaged over a period of 60 minutes; [204]
  - d. For the purpose of determining compliance with Rule 407, carbon monoxide (CO) shall be measured on a dry basis and be averaged over 15 consecutive minutes, and sulfur compounds which would exist as liquid or gas at standard conditions shall be calculated as sulfur dioxide (SO<sub>2</sub>) and be averaged over 15 consecutive minutes; [407]
  - e. For the purpose of determining compliance with Rule 409, combustion contaminant emission measurements shall be corrected to 12 percent of carbon dioxide (CO<sub>2</sub>) at standard conditions and averaged over a minimum of 15 consecutive minutes. [409]



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### SECTION E: ADMINISTRATIVE CONDITIONS

- f. For the purpose of determining compliance with Rule 475, combustion contaminant emission measurements shall be corrected to 3 percent of oxygen (O<sub>2</sub>) at standard conditions and averaged over 15 consecutive minutes or any other averaging time specified by the Executive Officer. [475]
8. The operator shall, when a source test is required by AQMD, provide a source test protocol to AQMD no later than 60 days before the proposed test date. The test shall not commence until the protocol is approved by AQMD. The test protocol shall contain the following information: [204, 304]
  - a. Brief description of the equipment tested.
  - b. Brief process description, including maximum and normal operating temperatures, pressures, throughput, etc.
  - c. Operating conditions under which the test will be performed.
  - d. Method of measuring operating parameters, such as fuel rate and process weight. Process schematic diagram showing the ports and sampling locations, including the dimensions of the ducts and stacks at the sampling locations, and distances of flow disturbances, (e.g. elbows, tees, fans, dampers) from the sampling locations (upstream and downstream).
  - e. Brief description of sampling and analytical methods used to measure each pollutant, temperature, flow rates, and moisture.
  - f. Description of calibration and quality assurance procedures.
  - g. Determination that the testing laboratory qualifies as an "independent testing laboratory" under Rule 304 (conflict of interest).
9. The operator shall submit a report no later than 60 days after conducting a source test, unless otherwise required by AQMD rules or equipment-specific conditions. The report shall contain the following information: [204]
  - a. The results of the source test.



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### SECTION E: ADMINISTRATIVE CONDITIONS

- b. Brief description of the equipment tested.
  - c. Operating conditions under which the test was performed.
  - d. Method of measuring operating parameters, such as fuel rate and process weight. Process schematic diagram showing the ports and sampling locations, including the dimensions of the ducts and stacks at the sampling locations, and distances of flow disturbances, (e.g. elbows, tees, fans, dampers) from the sampling locations (upstream and downstream).
  - e. Field and laboratory data forms, strip charts and analyses.
  - f. Calculations for volumetric flow rates, emission rates, control efficiency, and overall control efficiency.
10. The operator shall, when a source test is required, provide and maintain facilities for sampling and testing. These facilities shall comply with the requirements of AQMD Source Test Method 1.1 and 1.2. [217]
  11. Whenever required to submit a written report, notification or other submittal to the Executive Officer, AQMD, or the District, the operator shall mail or deliver the material to: Deputy Executive Officer, Engineering and Compliance, AQMD, 21865 E. Copley Drive, Diamond Bar, CA 91765-4182. [204]



SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT  
21865 Copley Drive, Diamond Bar, CA 91765

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**SECTION F: RECLAIM MONITORING AND SOURCE TESTING REQUIREMENTS**

NOT APPLICABLE



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**FACILITY PERMIT TO OPERATE  
PACIFIC L.A. MARINE TERMINAL LLC**

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**SECTION G: RECORDKEEPING AND REPORTING REQUIREMENTS FOR  
RECLAIM SOURCES**

The Facility shall comply with all applicable reporting and recordkeeping requirements in Regulation XX. These requirements may include but are not limited to the following:



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PACIFIC L.A. MARINE TERMINAL, LLC**

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**Permit to Construct and Temporary Permit to Operate  
(Section H)**

This section consists of a table listing all equipment with Permits to Construct and copies of all individual Permits to Construct issued to various equipment at the facility. Each permit will list operating conditions including periodic monitoring requirements and applicable emission limits and requirements that the equipment is subject to. Also included is the rule origin and authority of each emission limit and permit condition.



**FACILITY PERMIT TO OPERATE  
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**EQUIPMENT LIST**

THE FOLLOWING IS A LIST OF ALL PERMITS TO CONSTRUCT AND TEMPORARY PERMITS TO OPERATE AT THIS FACILITY:

<b>Application Number</b>	<b>Issuance Date</b>	<b>Equipment Description</b>	<b>Page No.</b>
451893	9/30/11	MARINE BULK UNLOADING SYSTEM	4
512041	10/04/11	EMERGENCY GENERATOR IC ENGINE	15
512791	10/03/11	IN-LINE AIR ELIMINATOR SYSTEM	17
513781	10/03/11	CONTACT/STORM WATER STORAGE TANK	19

**NOTE:** APPLICATIONS THAT ARE STILL BEING PROCESSED AND HAVE NOT BEEN ISSUED PERMITS TO CONSTRUCT OR PERMITS TO OPERATE WILL NOT BE FOUND IN THIS TITLE V PERMIT.



## FACILITY PERMIT TO OPERATE PACIFIC L.A. MARINE TERMINAL, LLC

### FACILITY WIDE CONDITION(S)

**Condition(s):**

1. CONSTRUCTION AND OPERATION OF THE PERMITTED EQUIPMENT AT THIS FACILITY SHALL BE CONDUCTED IN ACCORDANCE WITH ALL DATA AND SPECIFICATIONS SUBMITTED WITH THE APPLICATIONS UNDER WHICH THE FACILITY PERMIT IS ISSUED EXCEPT WHEN OTHERWISE SPECIFIED IN THIS PERMIT.

[RULE 204]

2. ALL EQUIPMENT UNDER THIS FACILITY PERMIT SHALL BE PROPERLY MAINTAINED AND KEPT IN GOOD OPERATING CONDITION AT ALL TIMES.

[RULE 204]

3. THE OPERATOR OF THIS FACILITY SHALL COMPLY WITH AIR-QUALITY-RELATED MITIGATION MEASURES STIPULATED IN THE "FINDINGS OF FACTS, STATEMENT OF OVERRIDING CONSIDERATIONS" AND "MITIGATION MONITORING AND REPORT PROGRAM (MMRP)" DOCUMENTS WHICH ARE PARTS OF FINAL SUPPLEMENTAL IMPACT STATEMENT/FINAL SUBSEQUENT ENVIRONMENTAL IMPACT REPORT (FINAL SEIS/SEIR) CERTIFIED BY THE BOARD OF HARBOR COMMISSIONER ON NOVEMBER 18, 2008.

[CA PRC CEQA, 11-23-1970]

4. EXCEPT FOR OPEN ABRASIVE BLASTING OPERATIONS, THE OPERATOR SHALL NOT DISCHARGE INTO THE ATMOSPHERE FROM ANY SINGLE SOURCE OF EMISSIONS WHATSOEVER ANY AIR CONTAMINANT FOR A PERIOD OR PERIODS AGGREGATING MORE THAN THREE MINUTES IN ANY ONE HOUR WHICH IS:

- A. AS DARK OR DARKER IN SHADE AS THAT DESIGNATED NO. 1 ON THE RINGLEMANN CHART, AS PUBLISHED BY THE UNITED STATES BUREAU OF MINES; OR
- B. OF SUCH OPACITY AS TO OBSCURE AN OBSERVER'S VIEW TO A DEGREE EQUAL TO OR GREATER THAN DOES SMOKE DESCRIBED IN SUBPARAGRAPH (A) OF THIS CONDITION.

[RULE 401]

5. THE OPERATOR SHALL NOT BURN OR PURCHASE ANY LIQUID FUEL FOR ANY STATIONARY SOURCE CONTAINING SULFUR COMPOUNDS IN EXCESS OF 0.05 PERCENT BY WEIGHT. ON OR AFTER JUNE 1, 2004, THE OPERATOR SHALL NOT PURCHASE ANY DIESEL FUEL FOR STATIONARY SOURCE CONTAINING SULFUR COMPOUNDS IN EXCESS 15 PPM BY WEIGHT AS SUPPLIED BY THE SUPPLIER.

[RULE 431.2]

6. THE OPERATOR SHALL NOT USE ANY FUEL IN STATIONARY COMPRESSION IGNITION ENGINE UNLESS THE FUEL IS CARB DIESEL FUEL OR AN ALTERNATIVE DIESEL FUEL SPECIFIED BY AQMD RULE 1470.

[RULE 1470]



**FACILITY PERMIT TO OPERATE  
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**PERMIT TO CONSTRUCT**

**A/N 451893  
Granted 9/30/11**

**Equipment Description:**

MARINE BULK UNLOADING SYSTEM CONSISTING OF:

1. FOUR UNLOADING ARMS, 16-INCH DIAMETER, CHICKSAN DCM TYPE, WITH FOUR 20-INCH MOTOR OPERATED VALVES
2. SURGE TANK T1000-S1, CRUDE OIL, PARTIALLY REFINED/INTERMEDIATE PETROLEUM FEEDSTOCKS, 124'-0" DIA. X 50'-0" H., 80,000 BBL. CAPACITY, INTERNAL FLOATING ROOF, WELDED SHELL, WITH METALLIC SHOE PRIMARY SEAL AND RIM-MOUNTED MULTIPLE WIPER TYPE SECONDARY SEAL
3. FOUR SHORESIDE OFFLOADING PUMPS, ELECTRIC, CENTRIFUGAL, WITH DUAL MECHANICAL SEAL, 3500 H.P. EACH

**Conditions:**

1. The operator shall limit emissions from marine tanker vessels making calls at this facility as follows:

Contaminant	Emission Limit, lbs per calendar month
NOx	16,450
SOx	3542
PM10	578
VOC	505

Emissions from the marine tanker vessels shall include: (a) emissions from boilers and the non-propulsion portion of auxiliary engines while operating in-transit within three nautical miles from the coastline of the South Coast basin, and (b) emissions from auxiliary engines and boilers while the vessels are at berth (including but not limiting to offloading cargo and hoteling).

The operator shall maintain records in a manner approved by the District, to demonstrate compliance with this condition.

[RULE 1301(b)(2)-Offset, 5-10-1996]

2. The operator shall calculate the emissions per visit from auxiliary engines (also called ship service auxiliary generator) on-board marine tanker vessels making calls at this facility using the following equations, emission factors and procedures:

**Equation #2-1:**  $AE, \text{ lbs/visit} = AE_{\text{in-transit}} + AE_{\text{hotel}}$

Where:

AE = auxiliary engine's visit emissions;

AE<sub>in-transit</sub> = auxiliary engine's visit in-transit emissions while a marine vessel is in-transit



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on arrival and on departure (within the three nautical miles District Coastal Waters boundary)  
 $AE_{\text{hotel}}$  = auxiliary engine's visit hoteling emissions;

**Equation #2-2:**  $AE_{\text{in-transit}}$ , lbs/visit =  $\frac{EF \times 350 \times t(\text{in-transit})}{453.6}$

$AE_{\text{in-transit}}$  = auxiliary engine's visit emissions while a marine vessel is in-transit on arrival and on departure (within the three nautical miles District Coastal Waters boundary); EF = emission factor in unit of g/kW-hr; 350 = total kilowatts of energy demand in auxiliary engines while a marine vessel is in-transit on arrival and on departure (within the three nautical miles District Coastal Waters boundary); t(in-transit) = time duration in transit (on arrival and on departure) firing on the fuel in hours; 453.6 = conversion factor from grams to pounds. The operator shall record the times and dates when the vessel enters the three nautical mile coastal water boundary, arrival at berth (all fast), departure (first line off) from berth and leaving the three nautical mile coastal water boundary.

**Equation #2-3:**  $AE_{\text{hotel}}$ , lbs/visit =  $\frac{EF \times E_{\text{hotel}}}{453.6}$

Where:  $AE_{\text{hotel}}$  = auxiliary engine's visit hoteling emissions; EF = emission factor in unit of g/kW-hr;  $E_{\text{hotel}}$  = total visit hoteling energy demand of auxiliary engines in unit of kW-hr per visit; 453.6 = conversion factor from grams to pounds.

The following emission factors (g/kW-hr) shall be used to compute the emissions:

NOx	SOx	PM10	VOC
13.9	4.2425*%S	0.25+0.3413x(%S-0.1)	0.4

The SOx and PM10 emission factors shall be calculated from actual percent sulfur by weight (%S) of the fuel using the formula shown above. The operator shall test the fuel(s) used in auxiliary engines for sulfur content using one of following methods: ASTM Method D4294, D2622, D5453, or any other equivalent test method approved in writing by the Executive Officer. SOx and PM10 emission factors shall be calculated using the highest sulfur content result. Whenever a test result for the sulfur content is not available, the operator shall assume the highest recorded sulfur content in the previous 12-month period.

The following methods for determining the energy demand factor,  $E_{\text{hotel}}$ , are listed in order of accuracy. Operator shall use the most accurate instrument available from the vessel in determining  $E_{\text{hotel}}$ .

**Method #1:** If a kW-hr meter is available for the auxiliary engines, the visit hoteling energy demand factor,  $E_{\text{hotel}}$ , for Equation #2-3 in Condition 2 shall be taken directly from the meter. The operator shall record the start and end kW-hr readings at arrival (all fast) and at departure (first line off) and calculate the total visit hoteling energy demand in kW-hr while the tanker vessel is at berth. In the event that a visit starts in one month and ends in the next month, the operator shall prorate the total visit hoteling energy demand kW-hr value using the hours of operation in each respective month.

**Method #2:** If the auxiliary engines are equipped with kW meter instead of kW-hr meter, the total visit hoteling energy demand factor,  $E_{\text{hotel}}$ , for Equation #2-3 in Condition 2 shall be calculated from the total kW energy demand multiplied by the total visit hours using Equation #2-4 below. The operator shall record the time and kW readings at arrival (all fast), at start of offloading pumps, one hour after pump start, at every four hours thereafter until shut down of offloading pumps and at departure (first line off). The operator shall



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calculate the total visit hoteling energy demand in kW-hr from the recorded data. In the event that a visit starts in one month and ends in the next month, the operator shall prorate the total visit hoteling energy demand kW-hr value using the hours of operation in each respective month.

**Equation #2-4:**  $E_{\text{hotel}} = \text{Area}(\text{kW vs. time})$

Where:  $E_{\text{hotel}}$  = total visit hoteling energy demand in unit of kW-hr; Area(kW vs. time) = area under the kW versus time graph.

**Method #3:** If the auxiliary engines are equipped with fuel meter instead of kW-hr meter or kW meter, the total visit hoteling energy demand factor,  $E_{\text{hotel}}$ , for Equation #2-3 in Condition 2 shall be calculated from the total visit hoteling fuel consumption of auxiliary engines using Equation #2-5 below. The operator shall record the start and end fuel readings at arrival (all fast) and at departure (first line off) and calculate the total visit hoteling fuel consumption in gallons while the tanker vessel is at berth. In the event that a visit starts in one month and ends in the next month, the operator shall prorate the total visit fuel consumption value using the hours of operation in each respective month.

**Equation #2-5:**  $E_{\text{hotel}} = \text{Vol}_{\text{fuel}} \times \text{HHV}_{\text{fuel}} \times \text{density}_{\text{fuel}} \times \frac{0.25}{3415} \times \frac{7.48 \text{ gal}}{\text{ft}^3}$

Where:  $E_{\text{hotel}}$  = total visit hoteling energy demand in unit of kW-hr;  $\text{Vol}_{\text{fuel}}$  = total visit hoteling fuel consumption of the auxiliary engines in cubic feet;  $\text{HHV}_{\text{fuel}}$  = higher heating value of fuel in unit of Btu/lb;  $\text{density}_{\text{fuel}}$  = density of the fuel in unit of pound per gallon;  $1/3415$  = conversion factor from Btu to kW-hr;  $0.25$  = assumed 25 percent thermal efficiency for the auxiliary engines. The operator shall test the fuel(s) used for higher heating value and density. The highest test results shall be used in Equation #2-5.

This method may also be used if the fuel usage of the auxiliary engines can be indirectly determined from fuel readings of a totalizing fuel meter minus the fuel meter serving the offloading boilers.

**Method #4:** If the auxiliary engines are not equipped with kW-hr meter, kW meter or fuel meter, the fuel consumed in auxiliary engines shall be measured by manually gauging the auxiliary engines' fuel tank. The total visit hoteling energy demand factor,  $E_{\text{hotel}}$ , for Equation #2-3 in Condition 2 shall be calculated from the total visit hoteling fuel consumption of auxiliary engines using Equation #2-5 and Method 3 above. The operator shall record the start and end fuel readings at arrival (all fast) and at departure (first line off) and calculate the total visit hoteling fuel consumption in cubic feet while the tanker vessel is at berth. In the event that a visit starts in one month and ends in the next month, the operator shall prorate the total visit fuel consumption value using the hours of operation in each respective month.

**Method #5:** If the tanker vessel has no instrument for determining  $E_{\text{hotel}}$ , then  $E_{\text{hotel}}$  for Equation #2-3 in Condition 2 shall be determined from the average of the last five usable vessel class recorded values normalized on a per 1000-barrel offloaded basis. "Vessel class recorded value" means the recorded value from the same class of vessel. Vessel classes are defined by dead-weight tonnage (DWT) rating as specified in Condition 3. Only vessel class recorded values with  $\pm 25$  percent of the average shall be deemed usable. If there are less than five usable recorded values from the same vessel class, then the highest recorded value for the vessel class normalized on a per 1000-barrel offloaded basis shall be used.

**Equation #2-6:**  $E_{\text{hotel}} = E_{\text{hotel(ave)}} \times V(\text{product})$



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Where:  $E_{\text{hotel}}$  = total visit hoteling energy demand in unit of kW-hr;  $E_{\text{hotel(ave)}}$  = average of total visit hoteling energy demand from the last five total visit hoteling energy demands from the same class marine vessels in unit of kW-hr per 1000 barrels offloaded;  $V(\text{product})$  = volume of product offloaded per visit in barrels. If there are less than five usable recorded  $E_{\text{hotel}}$  values, then  $E_{\text{hotel(ave)}} = E_{\text{hotel(high)}}$ ; where  $E_{\text{hotel(high)}}$  = highest total visit hoteling energy demand in auxiliary engines from past visits of the same class marine vessels in unit of kW-hr per 1000 barrels offloaded.

**Method #6:** If the tanker vessel has no instrument for determining  $E_{\text{hotel}}$ , and there are no historical data to calculate  $E_{\text{hotel}}$  using Method #5 above, then  $E_{\text{hotel}}$  for Equation #2-3 in Condition 2 shall be determined from the maximum continuous ratings (MCRs) of the auxiliary engines using Equation #2-7 below.

$$\text{Equation \#2-7: } E_{\text{hotel}} = \text{MCR} \times \text{LF} \times t_{\text{hotel}}$$

Where:  $E_{\text{hotel}}$  = total visit hoteling energy demand in unit of kW-hr; MCR = total maximum continuous ratings of the auxiliary engines in kilowatts (kW); LF = load factor of the auxiliary engines which shall equal to 0.834;  $t_{\text{hotel}}$  = total number of hoteling hours.

[RULE 1303(b)(2)-Offset, 5-10-1996]

3. The operator shall calculate the total visit emissions from offloading boilers on-board marine tanker vessels making calls at this facility using following equations, emission factors and methods:

$$\text{Equation \#3-1: } \text{BE, lbs/visit} = \text{BE}_{\text{non-offload}} + \text{BE}_{\text{offload}} \times [1 - f(\text{IGS})]$$

Where: BE = boiler's total visit emissions;  $\text{BE}_{\text{non-offload}}$  = boiler's total visit emissions from non-offloading operations;  $\text{BE}_{\text{offload}}$  = boiler's total visit emissions from offloading operations;  $f(\text{IGS})$  = fraction of boiler's flue gas being routed to cargo tanks by the inert gas system.

$$\text{Equation \#3-2: } \text{BE, lbs/visit} = \text{EF} \times C_B \times \text{density} \times \frac{\text{metric ton}}{1000 \text{ kg}} \times \frac{7.48 \text{ gal}}{\text{ft}^3}$$

Where: BE = boiler's total visit emissions from non-offloading or offloading operation; EF = emission factor for the ship boilers selected from the table below in unit of kilogram of pollutant per metric ton fuel consumed;  $C_B$  = total visit consumption of the fuel by the boilers from non-offloading or offloading operation in cubic feet; density = density of the fuel in unit of pounds per gallon.

$$\text{Equation \#3-3: } f(\text{IGS}) = \frac{V_{\text{product}}}{C_B} \times \frac{1}{\text{density}} \times \frac{\text{lb}}{200 \text{ ft}^3} \times \frac{42 \text{ gal}}{\text{bbl}} \times \frac{\text{ft}^3}{7.48 \text{ gal}} \times \frac{\text{ft}^3}{7.48 \text{ gal}}$$

Where:  $f(\text{IGS})$  = fraction of the boiler's flue gas being routed to cargo tanks by inert gas system;  $V_{\text{product}}$  = volume of product offloaded per visit in barrels;  $C_B$  = volume of the fuel consumed by the boilers per visit for offloading operations in cubic feet; density = density of the fuel in unit of pounds per gallon; 200 = cubic feet of flue gas produced from the combustion of one pound of fuel. If an inert gas generator is utilized instead of flue gas from the boilers or the inert gas system is not continuously operating during cargo offloading period, the  $f(\text{IGS})$  shall equal to zero.



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The following emission factors (kg pollutant per metric ton of fuel burned) shall be used with Equation #3-2:

Boiler Firing Rate	NOx	SOx	PM10	VOC
Equal or less than 100 MMBtu/hr	2.84	20*%S	0.33	0.04
Greater than 100 MMBtu/hr	3.40	20*%S	0.33	0.15

SOx emission factors shall be calculated from actual percent sulfur by weight (%S) of the fuel using above formula. The operator shall test the fuel(s) used in the boilers for sulfur content using one of following methods: ASTM Method D4294, D2622, D 5453, or any other equivalent method approved in writing by the Executive Officer. SOx emission factor shall be calculated using the highest sulfur content result. Whenever a test result for the sulfur content is not available, the operator shall assume the highest recorded sulfur content in the previous 12-month period.

The operator shall used emission factors of boilers less than and equal to 100 MMBtu/hr for Panamax and Aframax class vessels and emission factors of greater than 100 MMBtu/hr for Suezmax and VLCC class vessels in calculating emissions from the boilers. Vessel classes are defined by dead-weight tonnage (DWT) as shown below.

The following methods for determining the visit fuel consumption factor,  $C_B$ , are listed in order of accuracy. Operator shall use the most accurate instrument available from the vessel in determining  $C_B$ .

**Method #1:** If the boilers are equipped with fuel meter, the total visit fuel consumption factor,  $C_B$  for Equation #3-3 in Condition 3 shall be taken directly from the meter. The operator shall record the start and end fuel readings at the three nautical mile coastal waters boundary, at arrival (all fast), at the start of cargo offloading and at the end of cargo offloading. The operator shall calculate the total visit fuel consumptions,  $C_B$ , for non-offloading and offloading operations in cubic feet. In the event that a visit starts in one month and ends in the next month, the operator shall prorate the total visit fuel consumption value using the hours of operation in each respective month.

This method may also be used if the fuel usage of the boilers can be indirectly determined from fuel readings of a totalizing fuel meter minus the fuel meter serving the auxiliary engines.

**Method #2:** If the boilers are not equipped with fuel meter, the fuel consumed in the boilers shall be measured by manually gauging the boilers' fuel tank. The operator shall record the start and end fuel readings at the three nautical mile coastal waters boundary, at arrival (all fast), at the start of cargo offloading and at the end of cargo offloading. The operator shall calculate the total visit fuel consumptions,  $C_B$ , for non-offloading and offloading operations in cubic feet. In the event that a visit starts in one month and ends in the next month, the operator shall prorate the total visit fuel consumption value using the hours of operation in each respective month.

**Method #3:** Only if the tanker vessel has no instrument for determining  $C_B$ , then  $C_B$  for Equation #3-2 in Condition 3 shall be determined from the average of the last five usable vessel class recorded values normalized on a per 1000-barrel offloaded basis as shown in Equation #3-4. "Vessel class recorded value" means the recorded value from the same class of vessel. Vessel classes are defined by dead-weight tonnage (DWT) rating as shown below. Only vessel class recorded values with  $\pm 25$  percent of the average shall be deemed usable. If there are less than five usable recorded values from the same vessel class, then the highest recorded value for the vessel class normalized on a per 1000-barrel offloaded basis shall be used.



## FACILITY PERMIT TO OPERATE PACIFIC L.A. MARINE TERMINAL, LLC

**Equation #3-4:**  $C_B = C_B(\text{ave}) \times V(\text{product})$

Where:  $C_B$  = total visit fuel consumption of boiler from non-offloading or offloading operation in cubic feet;  $C_B(\text{ave})$  = average of total visit fuel consumptions of boiler from the last five total visit non-offloading or offloading operations for the same class marine vessels in unit of cubic feet per 1000 barrels offloaded;  $V(\text{product})$  = volume of product offloaded per visit in barrels. If there are less than five usable recorded  $C_B$  values, then  $C_B(\text{ave}) = C_B(\text{high})$ ; where  $C_B(\text{high})$  = highest total visit fuel consumption of boiler from past visits of the same class marine vessels in unit of cubic feet per 1000 barrels offloaded.

**Method #4:** If the tanker vessel has neither a fuel meter nor a totalizing fuel meter, and there are no historical data for determining  $C_B$  using Method #3, the total visit fuel consumption factor,  $C_B$  for Equation #3-2 in Condition 3 shall be determined from default values using Equations #3-5 and #3-6 below.

**Equation #3-5:**

$$C_B(\text{non-offload}) = [t_{\text{transit}} + t_{\text{hotel}} - t_{\text{pumpout}}] \times \left[ 0.3 \times \frac{SFC}{1000} \times \frac{V(\text{product})}{t_{\text{pumpout}}} \times \frac{1}{\text{density}} \right] \times \frac{\text{ft}^3}{7.48 \text{ gal}} \times P$$

Where:  $C_B$  = total visit fuel consumption of the boilers for non-offloading operations in cubic feet, which include in-transit and warm-up boiler operation;  $t_{\text{transit}/\text{hotel}/\text{pumpout}}$  = number of hours for these periods (in-transit time includes only on arrival time): vessel in-transit within the three nautical mile coastal water, vessel hoteling at berth and offloading cargo; 0.3 = assumed 30 percent of offload load; SFC = specific fuel consumption in pounds of fuel consumed by the boilers to offload 1000 barrels of product;  $V(\text{product})$  = visit volume of product offloaded in barrels; density = density of the fuel in unit of pounds per gallon;  $P = 1.25$  (25% margin of error included). For Equation #3-5, the operator shall use actual number of hours for in-transit, hoteling and offloading cargo periods,  $t_{\text{transit}/\text{hotel}/\text{pumpout}}$ , actual visit volume of product offloaded and actual density of the fuel.

**Equation #3-6:**  $C_B(\text{offload}) = \frac{SFC}{1000} \times V(\text{product}) \times \frac{1}{\text{density}} \times \frac{\text{ft}^3}{7.48 \text{ gal}} \times P$

Where:  $C_B(\text{offload})$  = total visit fuel consumed by the boilers for offloading operation in gallons; SFC(fuel) = specific fuel consumption in unit of pounds of fuel consumed per 1000 barrels of product offloaded;  $V(\text{product})$  = visit volume of product offloaded in unit of barrels; density = density of the fuel in unit of pounds per gallon;  $P = 1.25$  (25% margin of error included). For equation #3-6, the operator shall use actual visit volume of product offloaded and actual density of the fuel

The operator shall use the following default values for SFC factors (lbs fuel per 1000 barrels product offloaded) with Equations #3-5 and #3-6:

Tanker Class	Size Rating (DWT)	SFC (with shore side pumps)	SFC (without shore side pumps)
Panamax	Up to 70,000	63.5	185.8
Aframax	70,000 – 119,000	101.3	185.7
Suezmax	120,000 – 199,000	110.4	255.0
VLCC	200,000	113.9	358.3

[RULE 1303(b)(2)-Offset, 5-10-1996]



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4. Ship boilers shall not be in operation at the end of cargo offloading operation.

[RULE 1303(b)(2)-Offset, 5-10-1996]

5. The District shall be notified at least 10 days prior to arrival of a marine vessel which is not equipped with kW-hr meter, kW meter, fuel meter, totalizing fuel meter and thus requires gauging of fuel tanks or other less accurate methods for determining  $E_{\text{hotel}}$  or  $C_B$  factors specified by Conditions 2 and 3. If the facility receives notification of the arrival of such a vessel less than 10 days prior to arrival, the District shall be notified within 2 hours of the operator's confirmation that notification is required.

[RULE 1303(b)(2)-Offset, 5-10-1996]

6. Marine tanker vessels making calls at this facility shall not use heavy fuel oil (HFO) in their ship service auxiliary IC engines/generators or boilers.

[RULE 1303(b)(2)-Offset, 5-10-1996]

7. Marine tanker vessels making calls at this facility shall not bunker on fuels while at berth.

[RULE 1303(b)(2)-Offset, 5-10-1996]

8. The operator shall not offload finished petroleum products or carbon black oil (CBO) from marine tanker vessels at this facility.

[RULE 1401, 3-4-2005]

9. The operator shall limit the throughput of surge tank T1000-S1 to no more than 50 turnovers in any one calendar month:

The number of turnovers shall equal to  $L$  divided by  $h$ , where  $L$  is the total vertical one-way liquid surface level travel in feet per month and  $h$  is the height of the tank in feet. The tank height,  $h$ , shall be based the most recent strapping chart measurements. The one-way liquid surface level travel,  $L$ , shall be actual measurement taken by an automatic tank level gauge (ATLG) meeting the below requirements.

The operator shall install and maintain an automatic tank level gauge (ATLG) and recorder to record continuously the vertical movement of the tank level. For the purpose of this condition, continuous recording is defined as once per minute with no greater than 14 data point missing in any 24-hour period.

The operator shall calculate the total one-way liquid surface level movement, in feet, every day when cargo is being offloaded from a marine vessel and every calendar month.

The ATLG installed shall be verified once per quarter by comparing against a manual tank level measurement. If the ATLG differs from the manual tank level measurement by more than 1.0 inch or 0.8%, whichever is greater, the ATLG shall be repaired and put back into service within 10 days. While the ATLG is being repaired, throughput shall be determined by the surge tank's minute level data averaged for the five previous same vessel-size offloading operations, prior to the discovery of the discrepancy.

In the event of a failure or routine maintenance of the ATLG, the ATLG shall be repaired (if necessary) and put back into service within 10 days of the time that the ATLG failed or was removed from service for



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maintenance. While the ATLG is being repaired or maintained, the throughput shall be determined by the surge tank's minute level data averaged for the five previous same vessel-size offloading operations, prior to time that the ATLG went out of service.

[RULE 1303(b)(2)-Offset, 5-10-1996]

10. The operator shall not use surge tank T1000-S1 with crude oils having a true vapor pressure (TVP) of greater than 10 psia or partially refined petroleum/intermediate feedstock having a TVP of greater than 5 psia under actual storing conditions. To demonstrate compliance with this condition, the operator shall determine vapor pressures of the materials stored in the surge tank using one of the following methods:
- a. Sample and test the material stored
  - b. Use engineering method to calculate the vapor pressure of material stored
  - c. Provide material safety data sheet (MSDS) that show vapor pressure of material stored

[RULE 1303(b)(2)-Offset, 5-10-1996; Rule 1401, 3-5-2005]

11. Surge tank T1000-S1 shall not process or store finished petroleum products and carbon black oil (CBO).

[RULE 1401, 3-4-2005]

12. The operator shall limit the number of roof landings for surge tank T1000-S1 to no more than 15 times in any one calendar month.

[RULE 1303(b)(2)-Offset, 5-10-1996]

13. The operator shall not rest the floating roof of surge tank T1000-S1 upon its support legs after the tank has been emptied unless:

The tank is connected to an air pollution control system with a minimum VOC destruction efficiency of 99.0% by weight which is in full use and has been issued a valid permit by the District.

The tank shall vent to the air pollution control system while its floating roof is resting on leg support until the VOC concentration within the tank is reduced to less than 5,000 ppmv, measured as methane, for at least one hour after the shutdown of the air pollution control system.

The operator may elect not connecting surge tank T1000-S1 to the air pollution control device if the tank contained or last contained organic liquid with a Reid vapor pressure (RVP) of 0.5 psia or less under actual storage condition before being emptied. The operator shall maintain and make available to the Executive Officer upon request RVP data of the liquid stored in the tank before it is emptied.

[RULE 1149, 5-2-2008]

14. Surge tank T1000-S1 is subject to the applicable requirements of the following rules or regulations:

Contaminant	Rule	Rule/Subpart
VOC	District Rule	463



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Contaminant	Rule	Rule/Subpart
VOC	District Rule	1149
VOC	40 CFR60	Kb

[RULE 1149, 5-2-2008; RULE 463, 5-6-2005; 40CFR 60 SUBPART Kb, 10-15-2003]

15. The operator shall construct, operate, and maintain the surge tank as follows:

- a. All roof openings and fittings for the internal floating-type cover shall meet the requirements of Rule 1178 (d)(1)(A)(i) through (d)(1)(A)(xiv), as applicable.
- b. The rim seals for the internal floating-type cover shall meet the requirements of Rule 1178 (d)(1)(B)(i) through (d)(1)(B)(xi), as applicable.
- c. Complete gap measurements of the rim seal system shall be performed by District certified personnel if the tank is emptied and degassed for a continuous period of 10 days or more. Measurements shall be conducted by District certified personnel in accordance with Rule 1178 Attachment A – Inspection Procedures and Compliance Report Forms. However, such complete gap measurements, once completed, may not be required for five years; but it shall be conducted at least once every 10 years.
- d. The concentration of organic vapor in the vapor space above the internal floating-type cover shall not exceed 30% of its lower explosive limit (LEL). The LEL levels in the vapor space above the internal floating-type cover shall be measured by District certified personnel on a semiannual basis. Measurements shall be conducted by District certified personnel in accordance with Rule 463 Attachment B – Inspection Procedures and Compliance Report Form, Part E.

[RULE 1303(a)(1)-BACT, 5-10-1996; Rule 3004 (a)(4) – Periodic Monitoring, 12-12-1997]

16. The following BACT requirements shall apply to VOC service fugitive components associated with the marine bulk unloading facility covered by application number(s) 451893:

All sampling connections shall be closed-purge, closed loop, or closed-vent systems.

All valves in VOC service shall be leakless type, except those specifically exempted by Rule 1173 or approved by the District in the following applications: heavy liquid service, control valves, instrument piping/tubing, applications requiring torsional valve stem motion, applications where valve failure could pose safety hazard (e.g., drain valves with valve stems in horizontal position), retrofits/special applications with space limitations, and valves not commercially available.

For the purpose of this condition, leakless valve shall be defined as any valve equipped with sealed bellows or equivalent valve approved in writing by the District prior to installation.

All components in VOC service as defined by Rule 1173, except valves and flanges shall be inspected quarterly using EPA Reference Method 21. All valves and flanges in VOC service except those specifically exempted by Rule 1173 shall be inspected monthly using EPA Method 21. Components shall be defined as any valve, flange, fitting, pump, compressor, pressure relief device, diaphragm, hatch, sight-glass, and meter, which are not exempted by Rule 1173.

The following leaks shall be repaired within 7 calendar days -- all light liquid/gas/vapor components leaking at a rate of 500 to 10,000 ppm, and heavy liquid components leaking at a rate of 100 to 500 ppm and greater than 3 drops/minute, unless otherwise extended as allowed under Rule 1173.



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The following leaks shall be repaired within 2 calendar days -- any leak between 10,000 to 25,000 ppm, any atmospheric PRD leaking at a rate of 200 to 25,000 ppm, unless otherwise extended as allowed under Rule 1173.

The following leaks shall be repaired within 1 calendar day -- any leak greater than 25,000 ppm, heavy liquid leak greater than 500 ppm, or light liquid leak greater than 3 drops per minute.

If 98.0 percent or greater of the valve and flange population inspected is found to leak gaseous or liquid volatile organic compounds at a rate less than 500 ppmv for two consecutive months, then the operator may change inspection frequency to quarterly inspection with the written approval of the Executive Officer. Leakless valves may be excluded from the valve count.

The operator shall revert from quarterly to monthly inspection program if less than 98.0 percent of the valve and flange population inspected is found to leak gaseous or liquid volatile organic compounds at a rate less than 500 ppmv. Leakless valves may be excluded from the valve count.

The operator shall keep records of the quarterly and monthly inspections, subsequent repairs, and re-inspections, in a manner approved by the District.

The operator shall provide to the District, prior to initial startup, a list of all non-leakless type valves that were installed. The list shall include the tag numbers for the valves and reasons why leakless valves were not used. The operator shall not startup the equipment prior to the District's approval for the use of all non-leakless valves.

The operator shall provide to the District, no later than 90 days after initial startup, a recalculation of the fugitive emissions based on actual components installed and removed from service. The operator shall also submit a complete, as built, piping and instrumentation diagram(s) and copies of requisition data sheets for all non-leakless type valves with a listing of tag numbers and reasons why leakless valves were not used.

[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(b)(2)-Offset, 5-10-1996]

17. This equipment is subject to the applicable requirements of the following rules or regulations:

Contaminant	Rule	Rule/Subpart
VOC	District Rule	1173

[RULE 1173, 6-1-2007]

18. The operator shall keep records, in a manner approved by the District, for the following parameter(s) or item(s):

Total volume of product in barrels per day and type of product offloaded by this facility.

Characteristics of each marine tanker vessel making call at this facility including names, deadweight (DWT), maximum rated capacities and total units of ship service auxiliary engines/generators and ship boilers, cargo capacity, numbers of cargo offloading pumps.

Tanker activity information including date and time when the marine tanker vessel enters and leaves the coastal waters within the three nautical miles boundary; hoteling and offloading product.



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## FACILITY PERMIT TO OPERATE PACIFIC L.A. MARINE TERMINAL, LLC

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Characteristics of the fuel(s) fired on by the auxiliary engines and boilers including test results for weight percent of sulfur, density (lbs/gallon), and higher and lower heating values (MMBtu/lb) if being used in calculating emissions.

Identification/description of the source for inert gas utilized to prevent explosion in cargo tanks.

Data collected as required by Condition Nos. 2 and 3 for calculating emissions.

Material Safety Data Sheet (MSDS) of any products other than crude oil being offloaded by this process.

Surge Tank T1000-S1's throughput, vapor pressure of stored liquid, and other records required to demonstrate compliance with permit conditions.

The start and end dates and times when surge tank T1000-S1 has a roof-landing event including the numbers of degassing hours.

[RULE 1303(b)(2)-Offset, 5-10-1996]

19. The operator shall provide to the District the following items:

Final drawings and specifications of the equipment installed including but not limited to process flow diagrams (PFD), process and instrumentation diagrams (P&ID), final drawings and/or specifications of tank rim seals, deck fittings, floating roof and all other roof openings for surge tank T1000-S1. All items shall be submitted to the District within 60 days after installation.

[RULE 1303(b)(2)-Offset, 5-10-1996]



## FACILITY PERMIT TO OPERATE PACIFIC L.A. MARINE TERMINAL, LLC

### PERMIT TO CONSTRUCT

A/N 512041  
Granted 10/04/11

#### Equipment Description:

INTERNAL COMBUSTION ENGINE, CUMMINS, MODEL NO. 2000DQKA OR EQUIVALENT, DIESEL FUELED, FOUR CYCLES, TURBOCHARGED, AFTERCOOLED, RATED AT 2922 BHP, DRIVING AN EMERGENCY ELECTRICAL GENERATOR

#### Conditions:

1. For the purpose of this permit, an equivalent engine is an internal combustion engine that meets the same or lower emissions limits as Cummins engine, model 2000DQKA and meets the emission limits specified in Title 13 California Code of Regulations Section 2423.
2. The engine is subject to all applicable requirements of SCAQMD Rules 431.2, 1470 and 40CFR 60 Subpart IIII and 40CFR 63 Subpart ZZZZ.
3. This engine shall not operate more than 200 hours in any one year, which includes no more than (a) 50 hours in any one year for maintenance and testing purpose; and (b) No more than 4.2 hours in any one calendar month for maintenance and testing.
4. An operational non-resettable totalizing time meter shall be installed and maintained to indicate the engine elapsed operating time.
5. The operator shall restrict the operation of this equipment as follows:

In addition to maintenance and testing of this engine, this engine shall only be used to provide electrical power to either portable operations or emergency power to stationary sources.

Portable operations are those where it can be demonstrated that because of the nature of the operation, it is necessary to periodically move the equipment from one location to another.

Emergencies at stationary sources are those that result in an interruption of services of the primary power supply or during stage II or III electrical emergencies declared by the California Independent System Operator.
6. The operator shall keep a log of engine operations documenting the total time the engine is operated each month and the specific reason for operation as:
  - a. Emergency Use
  - b. Maintenance and testing
  - c. Other operating hours (describe the reason for the operation)

In addition, for each time the engine is manually started, the log shall include the date of engine operation, the specific reason for operation, and the totalizing hour meter readings (in hours and tenths of hours) at the beginning and the end of the operation.



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## FACILITY PERMIT TO OPERATE PACIFIC L.A. MARINE TERMINAL, LLC

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On or before January 15<sup>th</sup> of each year, the operator shall record in the engine operating log:

- a. The total hours of engine operation for the previous calendar year, and
  - b. The total hours of engine operation for maintenance and testing for the previous calendar year.
7. Engine operation log(s) shall be retained on site for a minimum of five calendar years and shall be made available to the Executive Officer or representative upon request.



## FACILITY PERMIT TO OPERATE PACIFIC L.A. MARINE TERMINAL, LLC

### PERMIT TO CONSTRUCT

A/N 512791  
Granted 10/03/11

#### Equipment Description:

##### IN-LINE AIR ELIMINATOR SYSTEM CONSISTING OF:

1. DRUM WITH A DETONATION ARRESTOR, 12'-0" DIA. X 24'-0" L., EQUIPPED WITH PRESSURE-CONTROL VALVE, CONNECTED TO AN ACTIVATED CARBON ADSORPTION SYSTEM.
2. KNOCK-OUT DRUM WITH FIBER MESH MIST ELIMINATOR
3. TWO ACTIVATED CARBON ADSORBERS, CALGON, MODEL HFVS-3000, 3000 LBS EACH, CONNECTED IN SERIES

#### Conditions:

1. The operator shall use this equipment to receive vapor accumulated in the lines prior to offloading of cargo from a marine tanker vessel.

[RULE 1401, 6-5-2009]

2. The operator shall limit the concentration of volatile organic compounds (VOCs) at the outlet of the last carbon adsorber to less than 50 ppmv.

[RULE 1303(a)(1)-BACT, 5-10-1996]

3. The operator shall periodically monitor the concentration of volatile organic compounds (VOCs) at the outlet of the primary carbon adsorber according to the following specifications

The operator shall monitor using EPA Reference Method 21 with a District approved hydrocarbon detection instrument calibrated in ppmv methane.

The operator shall monitor at the start of each cargo offloading event and not less than once every month. If no cargo offloading event is scheduled for the month, the VOC monitor may be conducted at anytime.

[RULE 1303(a)(1)-BACT, 5-10-1996]

4. The operator shall replace the spent carbon in the adsorber with fresh activated carbon within 24 hours whenever breakthrough occurs.

For the purpose of this condition, breakthrough occurs when the hydrocarbon monitor reading pursuant to Condition 3 indicates a concentration greater than 500 ppmv at the outlet of the primary carbon adsorber.

Carbon replacement shall be conducted as follows: the adsorber with fresh activated carbon shall become the new secondary adsorber, and the previous secondary adsorber shall take the place of the primary secondary adsorber.



## FACILITY PERMIT TO OPERATE PACIFIC L.A. MARINE TERMINAL, LLC

The operator shall keep all spent carbon in a tightly covered container , which shall remain closed except when it is being transferred into or out of the container.

[RULE 1303(a)(1)-BACT, 5-10-1996, RULE 1303(b)(2)-Offset, 5-10-1996]

5. This equipment is subject to the applicable requirements of the following rules or regulations:

Contaminant	Rule	Rule/Subpart
VOC	District Rule	1173

[RULE 1173, 2-6-2009]

6. The operator shall provide to the District the following items:

Final drawings and specifications of the in-line air eliminator system to the District within 60 calendar day after its installation. The drawing shall show the location of the air eliminator vessel and its air pollution control equipment within facility T1000.

[RULE 1303(b)(2)-Offset, 5-10-1996]



## FACILITY PERMIT TO OPERATE PACIFIC L.A. MARINE TERMINAL, LLC

### PERMIT TO CONSTRUCT

A/N 513781  
Granted 10/03/11

#### Equipment Description:

STORAGE TANK, CONTACT/STORM WATER, DIAMETER: 10.5 FT, LENGTH: 38.75 FT, 20,000 GALLON CAPACITY, TWO CARBON ADSORPTION CANISTERS IN SERIES, EACH 55 GALLON DRUM OF GRANULAR ACTIVATED CARBON

#### Conditions:

1. The storage tank shall be vented to the carbon adsorption canisters at all times.
2. The operator shall limit the throughput to no more than 26,000 barrel(s) in any one calendar month.

To comply with this condition, the operator shall keep records, in a manner approved by the District, for the following parameter(s) or item(s):

Tank throughput in barrels per month.  
Vacuum truck records

3. The operator shall monitor the concentration of volatile organic compounds (VOCs) at the outlet of the primary carbon adsorber whenever the tank is being filled. The operator shall monitor using EPA Reference Method 21 with a District approved hydrocarbon detection instrument calibrated in ppmv methane.
4. In the event the OVA analyzer reaches 500 ppmv, the carbon in the primary carbon canister shall be replaced with fresh activated carbon or, the secondary canister becomes the primary canister and the replenished canister becomes the secondary canister. The primary canister shall be replaced within 72 hours after the initial discovery of 500ppmv. A log shall be maintained to record the sequential position of each fresh carbon canister and the date each carbon canister is replenished and/or re-sequenced.
5. This equipment shall only be used to store storm water, and the liquid stored in this equipment shall not exceed VOC content of 10 percent by weight pursuant to Rule 1173(I)(1)(D)—amended February 6, 2009. Annual records shall be retained to show compliance with this condition and shall be made available to the Executive Officer.
6. The activated carbon used in the primary and secondary carbon canisters shall have a carbon tetrachloride activity number not less than 60% as measure by ASTM Method D3467-99 or a butane activity number of not less than 23.5% as measured by ASTM Method 5288-92.
7. Spent carbon removed from the carbon adsorption system shall be maintained or stored in closed containers prior to removal from this site.
8. This tank is subject to all applicable requirements of SCAQMD Rules 463.
9. The storage tank shall not be used to receive petroleum liquids as defined in 40 CFR60 Subpart Kb.



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**FACILITY PERMIT TO OPERATE  
PACIFIC L.A. MARINE TERMINAL, LLC**

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**RULE 219 EQUIPMENT**

**Equipment Description:**

RULE 219 EXEMPT EQUIPMENT, SUMP PUMP ENGINE, < 50 HP.

**Emissions and Requirements:**

1. THIS EQUIPMENT IS SUBJECT TO THE APPLICABLE REQUIREMENTS OF THE FOLLOWING RULES AND REGULATIONS:

PM: RULE 404, SEE APPENDIX B FOR EMISSION LIMITS



## FACILITY PERMIT TO OPERATE PACIFIC L.A. MARINE TERMINAL, LLC

### RULE 219 EQUIPMENT

**Equipment Description:**

RULE 219 EXEMPT EQUIPMENT, COATING EQUIPMENT, PORTABLE, ARCHITECTURAL COATINGS.

**Periodic Monitoring:**

1. THE OPERATOR SHALL KEEP RECORDS, IN A MANNER APPROVED BY THE DISTRICT, FOR THE FOLLOWING PARAMETER(S) OR ITEM(S):

FOR ARCHITECTURAL APPLICATIONS WHERE NO THINNERS, REDUCERS, OR OTHER VOC CONTAINING MATERIALS ARE ADDED, MAINTAIN SEMI-ANNUAL RECORDS OF ALL COATINGS CONSISTING OF (a) COATING TYPE, (b) VOC CONTENT AS SUPPLIED IN GRAMS PER LITER (g/l) OF MATERIALS FOR LOW-SOLIDS COATING, (c) VOC CONTENT AS SUPPLIED IN g/l OF COATING, LESS WATER AND EXEMPT SOLVENT, FOR OTHER COATING.

FOR OTHER ARCHITECTURAL APPLICATIONS WHERE THINNERS, REDUCERS, OR OTHER VOC CONTAINING MATERIALS ARE ADDED, MAINTAIN DAILY RECORDS OF ALL COATING CONSISTING OF (a) COATING TYPE, (b) VOC CONTENT AS APPLIED IN GRAMS PER LITER (g/l) OF MATERIALS USED FOR LOW-SOLIDS COATING, (c) VOC CONTENT AS APPLIED IN g/l OF COATING, LESS WATER AND EXEMPT SOLVENT, FOR OTHER COATING.

**Equipment and Requirements:**

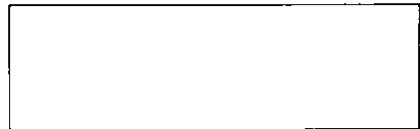
2. THIS EQUIPMENT IS SUBJECT TO THE APPLICABLE REQUIREMENTS OF THE FOLLOWING RULES AND REGULATIONS.

VOC: RULE 1113, SEE APPENDIX B FOR EMISSION LIMITS.

VOC: RULE 1171, SEE APPENDIX B FOR EMISSION LIMITS.



SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT  
21865 Copley Drive, Diamond Bar, CA 91765





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**FACILITY PERMIT TO OPERATE  
PACIFIC L.A. MARINE TERMINAL LLC**

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**SECTION I: PLANS AND SCHEDULES**

This section lists all plans approved by AQMD for the purposes of meeting the requirements of applicable AQMD rules.

NONE

NOTE: This section does not list compliance schedules pursuant to the requirements of Regulation XXX - Title V Permits; Rule 3004(a)(10)(C). For equipment subject to a variance, order for abatement, or alternative operating condition granted pursuant to Rule 518.2, equipment specific conditions are added to the equipment in Section D or H of the permit.



SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT  
21865 Copley Drive, Diamond Bar, CA 91765

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**FACILITY PERMIT TO OPERATE  
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SECTION J: AIR TOXICS

NOT APPLICABLE



## FACILITY PERMIT TO OPERATE PACIFIC L.A. MARINE TERMINAL LLC

### SECTION K: TITLE V Administration

#### GENERAL PROVISIONS

1. This permit may be revised, revoked, reopened and reissued, or terminated for cause, or for failure to comply with regulatory requirements, permit terms, or conditions. [3004(a)(7)(C)]
2. This permit does not convey any property rights of any sort or any exclusive privilege. [3004(a)(7)(E)]

#### Permit Renewal and Expiration

3. (A) Except for solid waste incineration facilities subject to standards under section 129(e) of the Clean Air Act, this permit shall expire five years from the date that this Title V permit is issued. The operator's right to operate under this permit terminates at midnight on this date, unless the facility is protected by an application shield in accordance with Rule 3002(b), due to the filing of a timely and complete application for a Title V permit renewal, consistent with Rule 3003. [3004(a)(2), 3004(f)]  
  
(B) A Title V permit for a solid waste incineration facility combusting municipal waste subject to standards under Section 129(e) of the Clean Air Act shall expire 12 years from the date of issuance unless such permit has been renewed pursuant to this regulation. These permits shall be reviewed by the Executive Officer at least every five years from the date of issuance. [3004(f)(2)]
4. To renew this permit, the operator shall submit to the Executive Officer an application for renewal at least 180 days, but not more than 545 days, prior to the expiration date of this permit. [3003(a)(6)]

#### Duty to Provide Information

5. The applicant for, or holder of, a Title V permit shall furnish, pursuant to Rule 3002(d) and (e), timely information and records to the Executive Officer or designee within a reasonable time as specified in writing by the Executive Officer or designee. [3004(a)(7)(F)]

#### Payment of Fees

6. The operator shall pay all required fees specified in Regulation III - Fees. [3004(a)(7)(G)]



## FACILITY PERMIT TO OPERATE PACIFIC L.A. MARINE TERMINAL LLC

### SECTION K: TITLE V Administration

#### Reopening for Cause

7. The Executive Officer will reopen and revise this permit if any of the following circumstances occur:
- (A) Additional regulatory requirements become applicable with a remaining permit term of three or more years. Reopening is not required if the effective date of the requirement is later than the expiration date of this permit, unless the permit or any of its terms and conditions has been extended pursuant to paragraph (f)(4) of Rule 3004.
  - (B) The Executive Officer or EPA Administrator determines that this permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of this permit.
  - (C) The Executive Officer or EPA Administrator determines that the permit must be revised or revoked to assure compliance with the applicable requirements. [3005(g)(1)]

#### COMPLIANCE PROVISIONS

8. The operator shall comply with all regulatory requirements, and all permit terms and conditions, except:
- (A) As provided for by the emergency provisions of condition no. 17 or condition no. 18, or
  - (B) As provided by an alternative operating condition granted pursuant to a federally approved (SIP-approved) Rule 518.2.

Any non-compliance with any federally enforceable permit condition constitutes a violation of the Federal Clean Air Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or revision; or denial of a permit renewal application. Non-compliance may also be grounds for civil or criminal penalties under the California State Health and Safety Code. [3004(a)(7)(A)]



## FACILITY PERMIT TO OPERATE PACIFIC L.A. MARINE TERMINAL LLC

### SECTION K: TITLE V Administration

9. The operator shall allow the Executive Officer or authorized representative, upon presentation of appropriate credentials to:
  - (A) Enter the operator's premises where emission-related activities are conducted, or records are kept under the conditions of this permit;
  - (B) Have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit;
  - (C) Inspect at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit; and
  - (D) Sample or monitor at reasonable times, substances or parameters for the purpose of assuring compliance with the facility permit or regulatory requirements. [3004(a)(10)(B)]
  
10. All terms and conditions in this permit, including any provisions designed to limit a facility's potential to emit, are enforceable by the EPA Administrator and citizens under the federal Clean Air Act, unless the term or condition is designated as not federally enforceable. Each day during any portion of which a violation occurs is a separate offense. [3004(g)]
  
11. A challenge to any permit condition or requirement raised by EPA, the operator, or any other person, shall not invalidate or otherwise affect the remaining portions of this permit. [3007(b)]
  
12. The filing of any application for a permit revision, revocation, or termination, or a notification of planned changes or anticipated non-compliance does not stay any permit condition. [3004(a)(7)(D)]
  
13. It shall not be a defense for a person in an enforcement action, including those listed in Rule 3002(c)(2), that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit, except as provided for in "Emergency Provisions" of this section. [3004(a)(7)(H)]



## FACILITY PERMIT TO OPERATE PACIFIC L.A. MARINE TERMINAL LLC

### SECTION K: TITLE V Administration

14. The operator shall not build, erect, install, or use any equipment, the use of which, without resulting in a reduction in the total release of air contaminants to atmosphere, reduces or conceals an emission which would otherwise constitute a violation of Chapter 3 (commencing with Section 41700) of Part 4, of Division 26 of the California Health and Safety Code or of AQMD rules. This rule shall not apply to cases in which the only violation involved is of Section 41700 of the California Health and Safety Code, or Rule 402 of AQMD Rules. [408]
15. Nothing in this permit or in any permit shield can alter or affect:
- (A) Under Section 303 of the federal Clean Air Act, the provisions for emergency orders;
  - (B) The liability of the operator for any violation of applicable requirements prior to or at the time of permit issuance;
  - (C) The applicable requirements of the Acid Rain Program, Regulation XXXI;
  - (D) The ability of EPA to obtain information from the operator pursuant to Section 114 of the federal Clean Air Act;
  - (E) The applicability of state or local requirements that are not "applicable requirements", as defined in Rule 3000, at the time of permit issuance but which do apply to the facility, such as toxics requirements unique to the State; and
  - (F) The applicability of regulatory requirements with compliance dates after the permit issuance date. [3004(c)(3)]
16. For any portable equipment that requires an AQMD or state permit or registration, excluding a) portable engines, b) military tactical support equipment and c) AQMD-permitted portable equipment that are not a major source, are not located at the facility for more than 12 consecutive months after commencing operation, and whose operation does not conflict with the terms or conditions of this Title V permit: 1) the facility operator shall keep a copy of the AQMD or state permit or registration; 2) the equipment operator shall comply with the conditions on the permit or registration and all other regulatory requirements; and 3) the facility operator shall treat the permit or registration as a part of its Title V permit, subject to recordkeeping, reporting and certification requirements. [3004(a)(1)]



## FACILITY PERMIT TO OPERATE PACIFIC L.A. MARINE TERMINAL LLC

### SECTION K: TITLE V Administration EMERGENCY PROVISIONS

17. An emergency<sup>1</sup> constitutes an affirmative defense to an action brought for noncompliance with a technology-based emission limit only if:
- (A) Properly signed, contemporaneous operating records or other credible evidence demonstrate that:
    - (1) An emergency occurred and the operator can identify the cause(s) of the emergency;
    - (2) The facility was operated properly (i.e. operated and maintained in accordance with the manufacturer's specifications, and in compliance with all regulatory requirements or a compliance plan), before the emergency occurred;
    - (3) The operator took all reasonable steps to minimize levels of emissions that exceeded emissions standard, or other requirements in the permit; and,
    - (4) The operator submitted a written notice of the emergency to the AQMD within two working days of the time when the emissions limitations were exceeded due to the emergency. The notice shall contain a description of the emergency, any steps taken to mitigate emissions, and corrective actions taken; and
  - (B) The operator complies with the breakdown provisions of Rule 430 – Breakdown Provisions, or subdivision (i) of Rule 2004 – Requirements, whichever is applicable. [3002(g), 430, 2004(i)]
18. The operator is excused from complying with any regulatory requirement that is suspended by the Executive Officer during a state of emergency or state of war emergency, in accordance with Rule 118 - Emergencies. [118]

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<sup>1</sup> "Emergency" means any situation arising from sudden and reasonably unforeseeable events beyond the control of the operator, including acts of God, which: (A) requires immediate corrective action to restore normal operation; and (B) causes the facility to exceed a technology-based emission limitation under the permit, due to unavoidable increases in emissions attributable to the emergency; and (C) is not caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.



## FACILITY PERMIT TO OPERATE PACIFIC L.A. MARINE TERMINAL LLC

### SECTION K: TITLE V Administration RECORDKEEPING PROVISIONS

19. In addition to any other recordkeeping requirements specified elsewhere in this permit, the operator shall keep records of required monitoring information, where applicable, that include:
- (A) The date, place as defined in the Title V permit, and time of sampling or measurements;
  - (B) The date(s) analyses were performed;
  - (C) The company or entity that performed the analyses;
  - (D) The analytical techniques or methods used;
  - (E) The results of such analyses; and
  - (F) The operating conditions as existing at the time of sampling or measurement. [3004(a)(4)(B)]
20. The operator shall maintain records pursuant to Rule 109 and any applicable material safety data sheet (MSDS) for any equipment claimed to be exempt from a written permit by Rule 219 based on the information in those records. [219(t)]
21. The operator shall keep all records of monitoring data required by this permit or by regulatory requirements for a period of at least five years from the date of the monitoring sample, measurement, report, or application. [3004(a)(4)(E)]

### REPORTING PROVISIONS

22. The operator shall comply with the following requirements for prompt reporting of deviations:
- (A) Breakdowns shall be reported as required by Rule 430 – Breakdown Provisions or subdivision (i) of Rule 2004 - Requirements, whichever is applicable.



## FACILITY PERMIT TO OPERATE PACIFIC L.A. MARINE TERMINAL LLC

### SECTION K: TITLE V Administration

- (B) Other deviations from permit or applicable rule emission limitations, equipment operating conditions, or work practice standards, determined by observation or by any monitoring or testing required by the permit or applicable rules that result in emissions greater than those allowed by the permit or applicable rules shall be reported within 72 hours (unless a shorter reporting period is specified in an applicable State or Federal Regulation) of discovery of the deviation by contacting AQMD enforcement personnel assigned to this facility or otherwise calling (800) CUT-SMOG.
- (C) A written report of such deviations reported pursuant to (B), and any corrective actions or preventative measures taken, shall be submitted to AQMD, in an AQMD approved format, within 14 days of discovery of the deviation.
- (D) All other deviations shall be reported with the monitoring report required by condition no. 23. [3004(a)(5)]
23. Unless more frequent reporting of monitoring results are specified in other permit conditions or in regulatory requirements, the operator shall submit reports of any required monitoring to the AQMD at least twice per year. The report shall include a) a statement whether all monitoring required by the permit was conducted; and b) identification of all instances of deviations from permit or regulatory requirements. A report for the first six calendar months of the year is due by August 31 and a report for the last six calendar months of the year is due by February 28. [3004(a)(4)(F)]
24. The operator shall submit to the Executive Officer and to the Environmental Protection Agency (EPA), an annual compliance certification. For RECLAIM facilities, the certification is due when the Annual Permit Emissions Program (APEP) report is due and shall cover the same reporting period. For other facilities, the certification is due on March 1 for the previous calendar year. The certification need not include the period preceding the date the initial Title V permit was issued. Each compliance certification shall include:
- (A) Identification of each permit term or condition that is the basis of the certification;



## FACILITY PERMIT TO OPERATE PACIFIC L.A. MARINE TERMINAL LLC

### SECTION K: TITLE V Administration

- (B) The compliance status during the reporting period;
- (C) Whether compliance was continuous or intermittent;
- (D) The method(s) used to determine compliance over the reporting period and currently, and
- (E) Any other facts specifically required by the Executive Officer to determine compliance.

The EPA copy of the certification shall be sent to: Director of the Air Division Attn:  
Air-3 USEPA, Region IX 75 Hawthorne St. San Francisco, CA 94105 [3004(a)(10)(E)]

25. All records, reports, and documents required to be submitted by a Title V operator to AQMD or EPA shall contain a certification of accuracy consistent with Rule 3003(c)(7) by a responsible official (as defined in Rule 3000). [3004(a)(12)]

### PERIODIC MONITORING

26. All periodic monitoring required by this permit pursuant to Rule 3004(a)(4)(c) is based on the requirements and justifications in the AQMD document "Periodic Monitoring Guidelines for Title V Facilities" or in case-by-case determinations documented in the TitleV application file. [3004(a)(4)]



## FACILITY PERMIT TO OPERATE PACIFIC L.A. MARINE TERMINAL LLC

### SECTION K: TITLE V Administration

#### FACILITY RULES

*This facility is subject to the following rules and regulations*

With the exception of Rule 402, 473, 477, 1118 and Rules 1401 through 1420, the following rules that are designated as non-federally enforceable are pending EPA approval as part of the state implementation plan. Upon the effective date of that approval, the approved rule(s) will become federally enforceable, and any earlier versions of those rules will no longer be federally enforceable.

<b>RULE SOURCE</b>	<b>Adopted/Amended Date</b>	<b>FEDERAL Enforceability</b>
RULE 109	5-2-2003	Federally enforceable
RULE 1113	11-8-1996	Federally enforceable
RULE 1113	6-3-2011	Non federally enforceable
RULE 1149	5-2-2008	Non federally enforceable
RULE 1149	7-14-1995	Federally enforceable
RULE 1171	11-7-2003	Federally enforceable
RULE 1171	5-1-2009	Non federally enforceable
RULE 1173	2-6-2009	Non federally enforceable
RULE 1173	5-13-1994	Federally enforceable
RULE 118	12-7-1995	Non federally enforceable
RULE 1303(a)(1)-BACT	5-10-1996	Federally enforceable
RULE 1303(b)(1)-Modeling	5-10-1996	Federally enforceable
RULE 1303(b)(2)-Offset	5-10-1996	Federally enforceable
RULE 1402	4-8-1994	Non federally enforceable
RULE 204	10-8-1993	Federally enforceable
RULE 217	1-5-1990	Federally enforceable
RULE 219	6-1-2007	Non federally enforceable
RULE 219	9-4-1981	Federally enforceable
RULE 3002	11-14-1997	Federally enforceable
RULE 3003	11-14-1997	Federally enforceable
RULE 3003	11-5-2010	Non federally enforceable
RULE 3004	12-12-1997	Federally enforceable

**FACILITY PERMIT TO OPERATE  
PACIFIC L.A. MARINE TERMINAL LLC**

**SECTION K: TITLE V Administration**

<b>RULE SOURCE</b>	<b>Adopted/Amended Date</b>	<b>FEDERAL Enforceability</b>
RULE 3004(a)(4)-Periodic Monitoring	12-12-1997	Federally enforceable
RULE 3005	11-14-1997	Federally enforceable
RULE 3005	11-5-2010	Non federally enforceable
RULE 3007	10-8-1993	Federally enforceable
RULE 301	5-6-2011	Non federally enforceable
RULE 304	5-7-2010	Non federally enforceable
RULE 401	11-9-2001	Non federally enforceable
RULE 401	3-2-1984	Federally enforceable
RULE 402	5-7-1976	Non federally enforceable
RULE 404	2-7-1986	Federally enforceable
RULE 405	2-7-1986	Federally enforceable
RULE 408	5-7-1976	Federally enforceable
RULE 430	7-12-1996	Non federally enforceable
RULE 431.2	5-4-1990	Federally enforceable
RULE 431.2	9-15-2000	Non federally enforceable
RULE 463	5-6-2005	Federally enforceable
RULE 481	11-17-2000	Federally enforceable
RULE 701	6-13-1997	Federally enforceable
40CFR 60 Subpart IIII	7-11-2006	Federally enforceable
40CFR 60 Subpart Kb	10-15-2003	Federally enforceable
40CFR 63 Subpart ZZZZ	1-18-2008	Federally enforceable



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**FACILITY PERMIT TO OPERATE  
PACIFIC L.A. MARINE TERMINAL LLC**

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**APPENDIX A: NOX AND SOX EMITTING EQUIPMENT EXEMPT FROM WRITTEN  
PERMIT PURSUANT TO RULE 219**

NONE



**FACILITY PERMIT TO OPERATE  
PACIFIC L.A. MARINE TERMINAL LLC**

**APPENDIX B: RULE EMISSION LIMITS  
[RULE 1113 11-08-1996]**

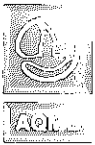
- (1) Except as provided in paragraphs (c)(2), (c)(3), and (c)(4) of Rule 1113, the operator shall not supply, sell, offer for sale, apply, or solicit the application of, any architectural coating which, at the time of sale or manufacture, contains more than 250 grams of VOC per liter of coating (2.08 pounds per gallon), less water, less exempt compounds, and less any colorant added to tint bases, or manufacture, blend, or repackage such a coating for use within the District.
- (2) Except as provided in paragraphs (c)(3) and (c)(4) of Rule 1113, the operator shall not supply, sell, offer for sale, apply, solicit the application of, manufacture, blend, or repackage, for use within the District, any architectural coating listed in the Table of Standards which contains VOC (excluding any colorant added to tint bases) in excess of the corresponding VOC limit specified in the table, after the effective date specified.

**TABLE OF STANDARDS**

**VOC LIMITS**

**Grams of VOC Per Liter of Coating,  
Less Water And Less Exempt Compounds**

COATING	Limit*	Effective Date of Adoption	Effective 1/1/1998	Effective 1/1/1999	Effective 7/1/2001	Effective 1/1/2005	Effective 7/1/2008
Bond Breakers	350						
Clear Wood Finishes							
Varnish	350						
Sanding Sealers	350						
Lacquer	680		550			275	
Concrete-Curing Compounds	350						
Dry-Fog Coatings	400						
Fire-proofing Exterior Coatings	350	450		350			
Fire-Retardant Coatings							
Clear	650						
Pigmented	350						
Flats	250				100		50
Graphic Arts (Sign) Coatings	500						



**FACILITY PERMIT TO OPERATE  
PACIFIC L.A. MARINE TERMINAL LLC**

**APPENDIX B: RULE EMISSION LIMITS  
[RULE 1113 11-08-1996]**

Industrial Maintenance						
Primers and Topcoats						
Alkyds	420					
Catalyzed Epoxy	420					
Bituminous Coatings	420					
Materials						
Inorganic Polymers	420					
Vinyl Chloride Polymers	420					
Chlorinated Rubber	420					
Acrylic Polymers	420					
Urethane Polymers	420					
Silicones	420					
Unique Vehicles	420					
Japans/Faux Finishing	350	700		350		
Coatings						
Magnesite Cement Coatings	600			450		
Mastic Coatings	300					
Metallic Pigmented Coatings	500					
Multi-Color Coatings	420		250			
Pigmented Lacquer	680		550		275	
Pre-Treatment Wash Primers	780					
Primers, Sealers, and	350					
Undercoaters						
Quick-Dry Enamels	400					
Roof Coatings	300					
Shellac						
Clear	730					
Pigmented	550					
Stains	350					
Swimming Pool Coatings						
Repair	650					
Other	340					
Traffic Coatings	250		150			
Waterproofing Sealers	400					
Wood Preservatives						
Below-Ground	350					
Other	350					

\* The specified limits remain in effect unless revised limits are listed in subsequent columns in the Table of Standards

**TABLE OF STANDARDS (cont.)**

**VOC LIMITS**

**Grams of VOC Per Liter of Material**

COATING	Limit
Low-Solids Coating	120



## **FACILITY PERMIT TO OPERATE PACIFIC L.A. MARINE TERMINAL LLC**

### **APPENDIX B: RULE EMISSION LIMITS [RULE 1113 06-03-2011]**

- (1) Except as provided in paragraphs (c)(3), (c)(4), and designated coatings averaged under (c)(6) of Rule 1113, no person shall supply, sell, offer for sale, market, manufacture, blend, repackage, apply, store at a worksite, or solicit the application of any architectural coating within the District:
  - (A) That is listed in the Table of Standards 1 and contains VOC (excluding any colorant added to tint bases) in excess of the corresponding VOC limit specified in the table, after the effective date specified; or
  - (B) That is not listed in the Table of Standards 1, and contains VOC (excluding any colorant added to tint bases) in excess of 250 grams of VOC per liter of coating (2.08 pounds per gallon), less water, less exempt compounds, until January 1, 2014, at which time the limit drops to 50 grams of VOC per liter of coating, less water, less exempt compounds (0.42 pounds per gallon).
- (2) No person within the District shall add colorant at the point of sale that is listed in the Table of Standards 2 and contains VOC in excess of the corresponding VOC limit specified in the Table of Standards 2, after the effective date specified.



## FACILITY PERMIT TO OPERATE PACIFIC L.A. MARINE TERMINAL LLC

### APPENDIX B: RULE EMISSION LIMITS [RULE 1113 06-03-2011]

#### TABLE OF STANDARDS 1 VOC LIMITS

**Grams of VOC Per Liter of Coating,  
Less Water and Less Exempt Compounds**

COATING CATEGORY	Ceiling Limit <sup>1</sup>	Current Limit <sup>2</sup>	Effective Date		
			7/1/08	1/1/12	1/1/14
Bond Breakers		350			
Clear Wood Finishes		275			
Varnish	350	275			
Sanding Sealers	350	275			
Lacquer		275			
Concrete-Curing Compounds		100			
Concrete-Curing Compounds For Roadways and Bridges <sup>3</sup>		350			
Concrete Surface Retarder		250			50
Driveway Sealer		100		50	
Dry-Fog Coatings		150			50
Faux Finishing Coatings					
Clear Topcoat		350		200	
Decorative Coatings		350			100
Glazes		350			
Japan		350			
Trowel Applied Coatings		350		150	50
Fire-Proofing Coatings		350			150
Flats	250	50	50		
Floor Coatings	100	50			
Form Release Compound		250			100
Graphic Arts (Sign) Coatings		500			150
Industrial Maintenance (IM) Coatings	420	100			
High Temperature IM Coatings		420			
Non-Sacrificial Anti-Graffiti Coatings		100			
Zinc-Rich IM Primers	340	100			
Magnesite Cement Coatings		450			
Mastic Coatings		300			100
Metallic Pigmented Coatings	500	500			150
Multi-Color Coatings		250			
Nonflat Coatings	150	50			
Pre-Treatment Wash Primers		420			
Primers, Sealers, and Undercoaters	200	100			
Reactive Penetrating Sealers		350			
Recycled Coatings		250			
Roof Coatings	250	50			
Roof Coatings, Aluminum		100			



## FACILITY PERMIT TO OPERATE PACIFIC L.A. MARINE TERMINAL LLC

### APPENDIX B: RULE EMISSION LIMITS [RULE 1113 06-03-2011]

Roof Primers, Bituminous	350	350		
Rust Preventative Coatings	400	100		
Stone Consolidant		450		
Sacrificial Anti-Graffiti Coatings		100	50	
Shellac				
Clear		730		
Pigmented		550		
Specialty Primers	350	100		
Stains		100		



## FACILITY PERMIT TO OPERATE PACIFIC L.A. MARINE TERMINAL LLC

### APPENDIX B: RULE EMISSION LIMITS [RULE 1113 06-03-2011]

COATING CATEGORY	Ceiling Limit <sup>1</sup>	Current Limit <sup>2</sup>	Effective Date		
			7/1/08	1/1/12	1/1/14
Stains, Interior	250	250			
Swimming Pool Coatings					
Repair		340			
Other		340			
Traffic Coatings		100			
Waterproofing Sealers	250	100			
Waterproofing Concrete/Masonry Sealers	400	100			
Wood Preservatives		350			

1. The specified ceiling limits are applicable to products sold under the Averaging Compliance Option.
2. The specified limits remain in effect unless revised limits are listed in subsequent columns in the Table of Standards.
3. Does not include compounds used for curbs and gutters, sidewalks, islands, driveways and other miscellaneous concrete areas.

#### TABLE OF STANDARDS 1 (cont.) VOC LIMITS

##### Grams of VOC Per Liter of Material

COATING	Limit
Low-Solids Coating	120

#### TABLE OF STANDARDS 2 VOC LIMITS FOR COLORANTS

##### Grams of VOC Per Liter of Colorant Less Water and Less Exempt Compounds

COLORANT	Limit <sup>4</sup>
Architectural Coatings, excluding IM Coatings	50
Solvent-Based IM	600
Waterborne IM	50

4. Effective January 1, 2014.



## FACILITY PERMIT TO OPERATE PACIFIC L.A. MARINE TERMINAL LLC

### APPENDIX B: RULE EMISSION LIMITS [RULE 1171 11-07-2003]

(1) Solvent Requirements

A person shall not use a solvent to perform solvent cleaning operations unless the solvent complies with the applicable requirements set forth below:

SOLVENT CLEANING ACTIVITY	CURRENT LIMITS
	VOC g/l (lb/gal)
(A) Product Cleaning During Manufacturing Process Or Surface Preparation For Coating, Adhesive, Or Ink Application	
(i) General	25 (0.21)
(ii) Electrical Apparatus Components & Electronic Components	500 (4.2)
(iii) Medical Devices & Pharmaceuticals	800 (6.7)
(B) Repair and Maintenance Cleaning	
(i) General	25 (0.21)
(ii) Electrical Apparatus Components & Electronic Components	900 (7.5)



## FACILITY PERMIT TO OPERATE PACIFIC L.A. MARINE TERMINAL LLC

### APPENDIX B: RULE EMISSION LIMITS [RULE 1171 11-07-2003]

SOLVENT CLEANING ACTIVITY	CURRENT LIMITS
	VOC g/l (lb/gal)
(iii) Medical Devices & Pharmaceuticals	
(A) Tools, Equipment, & Machinery	800 (6.7)
(B) General Work Surfaces	600 (5.0)
(C) Cleaning of Coatings or Adhesives Application Equipment	550 (4.6)
(D) Cleaning of Ink Application Equipment	
(i) General	25 (0.21)
(ii) Flexographic Printing	25 (0.21)
(iii) Gravure Printing	
(A) Publication	750 (6.3)
(B) Packaging	25 (0.21)
(iv) Lithographic or Letter Press Printing	



## FACILITY PERMIT TO OPERATE PACIFIC L.A. MARINE TERMINAL LLC

### APPENDIX B: RULE EMISSION LIMITS [RULE 1171 11-07-2003]

SOLVENT CLEANING ACTIVITY	CURRENT LIMITS
	VOC g/l (lb/gal)
(A) Roller Wash – Step 1	600 (5.0)
(B) Roller Wash-Step 2, Blanket Wash, & On-Press Components	800 (6.7)
(C) Removable Press Components	25 (0.21)
(v) Screen Printing	750 (6.3)
(vi) Ultraviolet Ink/ Electron Beam Ink Application Equipment (except screen printing)	800 (6.7)
(vii) Specialty Flexographic Printing	600 (5.0)
(E) Cleaning of Polyester Resin Application Equipment	25 (0.21)



## FACILITY PERMIT TO OPERATE PACIFIC L.A. MARINE TERMINAL LLC

### APPENDIX B: RULE EMISSION LIMITS [RULE 1171 05-01-2009]

(1) Solvent Requirements

A person shall not use a solvent to perform solvent cleaning operations unless the solvent complies with the applicable requirements set forth below:

	<b>CURRENT LIMITS*</b>	<b>EFFECTIVE 1/1/2010</b>
<b>SOLVENT CLEANING ACTIVITY</b>	<b>VOC g/l (lb/gal)</b>	<b>VOC g/l (lb/gal)</b>
(A) Product Cleaning During Manufacturing Process Or Surface Preparation For Coating, Adhesive, Or Ink Application		
(i) General	25 (0.21)	
(ii) Electrical Apparatus Components & Electronic Components	100 (0.83)	
(iii) Medical Devices & Pharmaceuticals	800 (6.7)	
(B) Repair and Maintenance Cleaning		
(i) General	25 (0.21)	
(ii) Electrical Apparatus Components & Electronic Components	100 (0.83)	



**FACILITY PERMIT TO OPERATE  
 PACIFIC L.A. MARINE TERMINAL LLC**

**APPENDIX B: RULE EMISSION LIMITS  
 [RULE 1171 05-01-2009]**

	<b>CURRENT LIMITS*</b>	<b>EFFECTIVE 1/1/2010</b>
<b>SOLVENT CLEANING ACTIVITY (cont.)</b>	<b>VOC g/l (lb/gal)</b>	<b>VOC g/l (lb/gal)</b>
(iii) Medical Devices & Pharmaceuticals		
(A) Tools, Equipment, & Machinery	800 (6.7)	
(B) General Work Surfaces	600 (5.0)	
(C) Cleaning of Coatings or Adhesives Application Equipment	25 (0.21)	
(D) Cleaning of Ink Application Equipment		
(i) General	25 (0.21)	
(ii) Flexographic Printing	25 (0.21)	
(iii) Gravure Printing		
(A) Publication	100 (0.83)	
(B) Packaging	25 (0.21)	
(iv) Lithographic (Offset) or Letter Press Printing		
(A) Roller Wash, Blanket Wash, & On-Press Components	100 (0.83)	



## FACILITY PERMIT TO OPERATE PACIFIC L.A. MARINE TERMINAL LLC

### APPENDIX B: RULE EMISSION LIMITS [RULE 1171 05-01-2009]

	<b>CURRENT LIMITS*</b>	<b>EFFECTIVE 1/1/2010</b>
<b>SOLVENT CLEANING ACTIVITY (cont.)</b>	<b>VOC g/l (lb/gal)</b>	<b>VOC g/l (lb/gal)</b>
(B) Removable Press Components	25 (0.21)	
(v) Screen Printing	100 (0.83)	
(vi) Ultraviolet Ink/ Electron Beam Ink Application Equipment (except screen printing)	650 (5.4)	100 (0.83)
(vii) Specialty Flexographic Printing	100 (0.83)	
(E) Cleaning of Polyester Resin Application Equipment	25 (0.21)	

\* The specified limits remain in effect unless revised limits are listed in subsequent columns.



## FACILITY PERMIT TO OPERATE PACIFIC L.A. MARINE TERMINAL LLC

### APPENDIX B: RULE EMISSION LIMITS [RULE 404 02-07-1986]

The operator shall not discharge into the atmosphere from this equipment, particulate matter in excess of the concentration at standard conditions, shown in Table 404(a). Where the volume discharged is between figures listed in the Table, the exact concentration permitted to be discharged shall be determined by linear interpolation.

For the purposes of this rule, emissions shall be averaged over one complete cycle of operation or one hour, whichever is the lesser time period.

**TABLE 404(a)**

Volume Discharged Calculated as Dry Gas At Standard Conditions		Maximum Concentration of Particulate Matter Allowed in Discharged Gas Calculated as Dry Gas at Standard Conditions		Volume Discharged Calculated as Dry Gas At Standard Conditions		Maximum Concentration of Particulate Matter Allowed in Discharged Gas Calculated as Dry Gas at Standard Conditions	
		Milligrams per Cubic Meter	Grains per Cubic Foot			Milligrams per Cubic Meter	Grains per Cubic Foot
Cubic meters Per Minute	Cubic feet Per Minute			Cubic meters Per Minute	Cubic feet Per Minute		
25 or less	883 or less	450	0.196	900	31780	118	0.0515
30	1059	420	.183	1000	35310	113	.0493
35	1236	397	.173	1100	38850	109	.0476
40	1413	377	.165	1200	42380	106	.0463
45	1589	361	.158	1300	45910	102	.0445



**FACILITY PERMIT TO OPERATE  
PACIFIC L.A. MARINE TERMINAL LLC**

**APPENDIX B: RULE EMISSION LIMITS  
[RULE 404 02-07-1986]**

Volume Discharged Calculated as Dry Gas At Standard Conditions		Maximum Concentration of Particulate Matter <sup>1</sup> Allowed in Discharged Gas Calculated as Dry Gas at Standard Conditions		Volume Discharged Calculated as Dry Gas At Standard Conditions		Maximum Concentration of Particulate Matter Allowed in Discharged Gas Calculated as Dry Gas at Standard Conditions	
Cubic meters Per Minute	Cubic feet Per Minute	Milligrams per Cubic Meter	Grains per Cubic Foot	Cubic meters Per Minute	Cubic feet Per Minute	Milligrams per Cubic Meter	Grains per Cubic Foot
50	1766	347	.152	1400	49440	100	.0437
60	2119	324	.141	1500	52970	97	.0424
70	2472	306	.134	1750	61800	92	.0402
80	2825	291	.127	2000	70630	87	.0380
90	3178	279	.122	2250	79460	83	.0362
100	3531	267	.117	2500	88290	80	.0349
125	4414	246	.107	3000	105900	75	.0327
150	5297	230	.100	4000	141300	67	.0293
175	6180	217	.0947	5000	176600	62	.0271
200	7063	206	.0900	6000	211900	58	.0253
250	8829	190	.0830	8000	282500	52	.0227
300	10590	177	.0773	10000	353100	48	.0210
350	12360	167	.0730	15000	529700	41	.0179
400	14130	159	.0694	20000	706300	37	.0162
450	15890	152	.0664	25000	882900	34	.0148



**FACILITY PERMIT TO OPERATE  
PACIFIC L.A. MARINE TERMINAL LLC**

**APPENDIX B: RULE EMISSION LIMITS  
[RULE 404 02-07-1986]**

Volume Discharged Calculated as Dry Gas At Standard Conditions		Maximum Concentration of Particulate Matter Allowed in Discharged Gas Calculated as Dry Gas at Standard Conditions		Volume Discharged Calculated as Dry Gas At Standard Conditions		Maximum Concentration of Particulate Matter Allowed in Discharged Gas Calculated as Dry Gas at Standard Conditions	
Cubic meters Per Minute	Cubic feet Per Minute	Milligrams per Cubic Meter	Grains per Cubic Foot	Cubic meters Per Minute	Cubic feet Per Minute	Milligrams per Cubic Meter	Grains per Cubic Foot
500	17660	146	.0637	30000	1059000	32	.0140
600	21190	137	.0598	40000	1413000	28	.0122
700	24720	129	.0563	50000	1766000	26	.0114
800	28250	123	.0537	70000 or more	2472000 or more	23	.0100



## FACILITY PERMIT TO OPERATE PACIFIC L.A. MARINE TERMINAL LLC

### APPENDIX B: RULE EMISSION LIMITS [RULE 405 02-07-1986]

The operator shall not discharge into the atmosphere from this equipment, solid particulate matter including lead and lead compounds in excess of the rate shown in Table 405(a).

Where the process weight per hour is between figures listed in the table, the exact weight of permitted discharge shall be determined by linear interpolation.

For the purposes of this rule, emissions shall be averaged over one complete cycle of operation or one hour, whichever is the lesser time period.

**TABLE 405(a)**

Process Weight Per Hour		Maximum Discharge Rate Allowed for Solid Particulate Matter (Aggregate Discharged From All Points of Process		Process Weight Per Hour		Maximum Discharge Rate Allowed for Solid Particulate Matter (Aggregate Discharged From All points of Process	
		Kilograms Per Hour	Pounds Per Hour			Kilograms Per Hour	Pounds Per Hour
100 or less	220 or less	0.450	0.99	9000	19840	5.308	11.7
150	331	0.585	1.29	10000	22050	5.440	12.0
200	441	0.703	1.55	12500	27560	5.732	12.6
250	551	0.804	1.77	15000	33070	5.982	13.2
300	661	0.897	1.98	17500	38580	6.202	13.7
350	772	0.983	2.17	20000	44090	6.399	14.1
400	882	1.063	2.34	25000	55120	6.743	14.9
450	992	1.138	2.51	30000	66140	7.037	15.5
500	1102	1.209	2.67	35000	77160	7.296	16.1
600	1323	1.340	2.95	40000	88180	7.527	16.6



## FACILITY PERMIT TO OPERATE PACIFIC L.A. MARINE TERMINAL LLC

### APPENDIX B: RULE EMISSION LIMITS [RULE 405 02-07-1986]

Process Weight Per Hour		Maximum Discharge Rate Allowed for Solid Particulate Matter (Aggregate Discharged From All Points of Process		Process Weight Per Hour		Maximum Discharge Rate Allowed for Solid Particulate Matter (Aggregate Discharged From All points of Process	
		Kilograms Per Hour	Pounds Per Hour			Kilograms Per Hour	Pounds Per Hour
700	1543	1.461	3.22	45000	99210	7.738	17.1
800	1764	1.573	3.47	50000	110200	7.931	17.5
900	1984	1.678	3.70	60000	132300	8.277	18.2
1000	2205	1.777	3.92	70000	154300	8.582	18.9
1250	2756	2.003	4.42	80000	176400	8.854	19.5
1500	3307	2.206	4.86	90000	198400	9.102	20.1
1750	3858	2.392	5.27	100000	220500	9.329	20.6
2000	4409	2.563	5.65	125000	275600	9.830	21.7
2250	4960	2.723	6.00	150000	330700	10.26	22.6
2500	5512	2.874	6.34	175000	385800	10.64	23.5
2750	6063	3.016	6.65	200000	440900	10.97	24.2
3000	6614	3.151	6.95	225000	496000	11.28	24.9
3250	7165	3.280	7.23	250000	551200	11.56	25.5
3600	7716	3.404	7.50	275000	606300	11.82	26.1
4000	8818	3.637	8.02	300000	661400	12.07	26.6
4500	9921	3.855	8.50	325000	716500	12.30	27.1
5000	11020	4.059	8.95	350000	771600	12.51	27.6
6000	13230	4.434	9.78	400000	881800	12.91	28.5
7000	15430	4.775	10.5	450000	992100	13.27	29.3
8000	17640	5.089	11.2	500000 or more	1102000 or more	13.60	30.0