

# D.2

**DISPERSION MODELING – DIESEL  
PARTICULATE MATTER (DPM) FROM VEHICLES**



**Dispersion Modeling of Criteria Pollutants  
for the Port of Los Angeles San Pedro  
Waterfront Project**

August 2008

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# D2

## DISPERSION MODELING OF CRITERIA POLLUTANTS FOR THE PORT OF LOS ANGELES SAN PEDRO WATERFRONT PROJECT

### **D2.1 Introduction**

This document describes the methods and results of air dispersion modeling to predict the ground-level concentrations of criteria pollutants resulting from construction and operation of the Port of Los Angeles (Port) San Pedro Waterfront Project (proposed Project).

The air dispersion modeling was performed using the U.S. Environmental Protection Agency's (EPA) AERMOD Modeling System (2004), version 07026, based on the Guideline on Air Quality Models (40 Code of Federal Regulations [CFR], Part 51, Appendix W, November 2005). Criteria pollutants, including nitrogen dioxide (NO<sub>2</sub>), carbon monoxide (CO), particulate matter equal to or less than 10 microns in diameter (PM<sub>10</sub>), and particulate matter equal to or less than 2.5 microns in diameter (PM<sub>2.5</sub>) were modeled for California Environmental Quality Act (CEQA) and National Environmental Policy Act (NEPA) baselines and for project alternatives. The predicted ground-level concentrations were compared to the relevant South Coast Air Quality Management District (SCAQMD) air quality significance thresholds to determine the air quality impacts of the proposed Project.

## D2.2 Development of Emission Scenarios

### D2.2.1 Construction Emission Sources

Project construction activities would involve the use of:

- off-road construction equipment
- on-road trucks
- dredging equipment
- tugboats and barge

In accordance with SCAQMD guidance, only onsite construction emission sources (sources in which the activity takes place in the proposed Project's boundary) were modeled for criteria pollutant impacts (SCAQMD 2005a). Onsite emission sources included fugitive dust; onsite construction equipment; onsite haul trucks, dredge, cranes, barge and tugboats (while docked on site). Offsite truck hauling (trucks after leaving the proposed project site) and offsite tugboat/barge activity (tugs after leaving the proposed project site) are considered offsite and were not modeled for construction.

### D2.2.2 Construction Emissions

**Maximum 24-hour Emissions:** For construction equipment, maximum daily emissions were determined by summing emissions from overlapping construction activities as indicated in the proposed construction schedule (Table 2-6 of the EIS/EIR). The combination of construction activities producing the highest daily emissions was selected.

**Maximum 1-hour and 8-hour Emissions.** Construction activities were assumed to be constant throughout the 8-hour workday. Therefore, the hourly emission rate for the 8-hour period was the same rate as the maximum hourly emission rate.

A summary of the construction emissions used in the AERMOD modeling for the proposed Project is provided in Table D2.2-1. The emissions used in this AERMOD modeling differ from the construction emissions summarized in Section 3.2.4.1.1, "Methodology for Determining Construction Emissions," of the *San Pedro Waterfront Project Environmental Impact Statement (EIS) / Environmental Impact Report (EIR)* because the offsite emissions (emissions that occur outside the proposed project site) during construction were not included in the AERMOD dispersion modeling.

1 **Table D2.2-1. Peak Construction Emissions Associated with the Proposed Project**

<i>Proposed Project Type</i>	<i>Construction Sources</i>	<i>NO<sub>x</sub> 1-hour average (lb/hr)</i>	<i>CO 1-hour average (lb/hr)</i>	<i>CO 8-hour average (lb/hr)</i>	<i>PM10 24-hour peak daily (lb/day)</i>	<i>PM2.5 24-hour peak daily (lb/day)</i>
With mitigation	Equipment and Vehicle Exhaust	670	243	1,945	181	167
	Fugitive Dust	—	—	—	392	81
	Dredge	0	0	0	0	0
	Tugboat	353	180	1,442	311	287
Without mitigation	Equipment and Vehicle Exhaust	721	280	2,242	364	318
	Fugitive Dust	—	—	—	3,843	797
	Dredge	31	10	79	11	10
	Tugboat	476	40	317	311	287
Notes: Construction emissions are assumed to be 8 hours per day for all construction equipment and vehicles. In accordance with SCAQMD guidance, ship transit emissions, tugboat transit emissions, and offsite haul-truck transport emissions are considered offsite emissions and were not included in the modeling (SCAQMD 2005b). However, onsite truck, dredging, and onsite tugboat emissions were included in the modeling. Mitigated tugboat emissions increase for CO due to allowances under the Tier II marine engine emission standards. Mitigation measures for construction are described in Section 3.2.4.3, “Impacts and Mitigation” of the EIS/EIR.						

2

3 **D2.2.3 Operational Emission Sources**

4 As requested by SCAQMD, both onsite and offsite emission sources were included in  
 5 the modeling of operational emissions. The following operational emission sources  
 6 were included in the air dispersion modeling for NO<sub>2</sub>, CO, PM<sub>10</sub>, and PM<sub>2.5</sub>. Detailed  
 7 descriptions of the sources and their emissions are discussed in Section 2 of  
 8 Appendix D3, *Health Risk Assessment Report*, and Section 3.2.4.1.7, “Methodology  
 9 for Determining Operational Emission Sources,” of the EIS/EIR.

- 10 ■ **Ship transit** includes cruise ship activity both to and from the berth. Cruise ship  
 11 transit in SCAQMD waters consists of fairway transit, Precautionary Area transit,  
 12 and docking. The ship emission sources include the main propulsion engine,  
 13 auxiliary engines, and boiler.
- 14 ■ **Ship hoteling** while at berth. Hoteling emission sources include the ship  
 15 auxiliary engines and boiler; the main propulsion engine is turned off during  
 16 hoteling.
- 17 ■ **Motor vehicle and truck** emissions from offsite and onsite driving and idling at  
 18 Berths 87–93 (Inner Harbor) and Berths 45–50 (Outer Harbor). Because the trip  
 19 length (e.g., travel distance) for the proposed project-related motor vehicles was

1 not known, the vehicle emissions were calculated assuming the default urban trip  
2 length of 13.3 miles used in the URBEMIS2007 model for the SCAB region. For  
3 the air dispersion modeling, onsite vehicle emissions (i.e., vehicles entering and  
4 exiting from the onsite roads, driveways, and parking lots) were assumed to  
5 represent 5% of total vehicle emissions, and 45% of total vehicle emissions were  
6 apportioned to offsite roadways in the vicinity of the project site (i.e., vehicles  
7 traveling along freeway off-ramps/on-ramps, John S. Gibson Boulevard, Front  
8 Street, Harbor Boulevard, 22<sup>nd</sup> Street, and other local streets). The remaining  
9 50% of the vehicle trip length is well beyond (> 5 miles) the project vicinity and  
10 becomes widely dispersed such that the emissions are diluted over a large area  
11 and therefore do not contribute to the maximum modeled pollutant  
12 concentrations.

- 13 ■ **Harbor craft** include assist tugboats while in transit to and from the arriving and  
14 departing ships, assist tug hoteling, ferry vessels, commercial fishing fleet, trip  
15 excursion boats, crew boats, and government boats (e.g., police and fire boats).
- 16 ■ **Terminal equipment** includes forklifts and fuel trucks.

## 17 D2.2.4 Operational Emissions

18 To evaluate the air quality impacts of project operations, peak operational emissions  
19 were calculated for the project analysis years of baseline (2006), 2015, 2022, and  
20 2037. The highest emission rate for each source category for the matching milestone  
21 year was modeled separately to determine the maximum impact. The source  
22 categories included cruise ships in transit, cruise ships hoteling, harbor craft in transit  
23 and hoteling, onsite and offsite motor vehicles, stationary sources (marine vessel  
24 fueling stations and bulk storage terminals), and terminal equipment.

25 Operational emissions for the various modeled averaging times were derived as  
26 described below.

### 27 D2.2.4.1 Marine Vessels (Cruise Ships)

28 **Annual Emissions.** Annual emission rates of marine vessels were estimated based on  
29 the projected number of ship calls during each year. The cruise ships were assigned  
30 to three size classes to reflect the varying sizes and power needs for these marine  
31 vessels. Type 1 ships were the smallest with a length of 260 meters and a maximum  
32 width of 40 meters. Type 2 ships have a length of 290 meters and a maximum width  
33 of 45 meters. Type 3 was the largest ship with a length of 320 meters and a  
34 maximum width of 50 meters. Further details on the emission calculation methods  
35 are described in Section 3.2.4.1.7, “Methodology for Determining Operational  
36 Emissions” of the EIS/EIR

37 Fuel usage for the annual ship emissions assumes residual fuel with a 2.7% sulfur  
38 content, which represents the worldwide average sulfur content used by ships  
39 (Entec 2002).

1           **Maximum 24-Hour Emissions.** Emission rates of marine vessels during a 24-hour  
2 period were calculated based on worst-case activity that could occur during a day.  
3 The worst-case assumes 12 hours of continuous hoteling at each berth, plus two ship  
4 arrivals and two ship departures at both the inner and outer terminal. For those  
5 alternatives where only one berth would be active (such as the Outer Harbor in  
6 Alternatives 1 and 3), the worst case 24-hour emissions conservatively assumed 12  
7 hours of continuous hoteling at one berth, plus one ship arrival and departure during  
8 the same day.

9           Without mitigation, each ship was conservatively assumed to use residual fuel with a  
10 4.5% sulfur content. A 4.5% sulfur content represents the sulfur cap set by the  
11 International Maritime Organization (IMO) for marine fuel.

12           **Maximum 1-Hour and 8-Hour Emissions.** Maximum 1-hour and 8-hour emission  
13 rate calculations assumed that worst-case activities could occur simultaneously  
14 during a single hour and at the same rate over an 8-hour period. The analysis  
15 assumed the worst-case activity for the available berths. These worst-case activities  
16 vary depending upon the project alternative. These activities can be summarized as  
17 follows for the project and alternatives:

- 18           1. 2006 (Baseline Year): three type 1 cruise ships in the Inner Harbor
- 19           2. 2015, 2022, and 2037: one type 2 cruise ship and one type 3 cruise ship at Inner  
20 Harbor and two type 3 cruise ships at Outer Harbor—proposed Project and  
21 Alternative 2
- 22           3. 2015, 2022, and 2037: one type 2 cruise ship and one type 3 cruise ship at Inner  
23 Harbor and one type 3 cruise ship at Outer Harbor—Alternatives 1 and 3]
- 24           4. 2015, 2022, and 2037: three type 2 cruise ships at Inner Harbor and no ships at  
25 Outer Harbor—Alternatives 4, 5, and 6

26           As a very conservative measure, each ship was assumed to use residual fuel with a  
27 4.5% sulfur content during the unmitigated worst-case 1-hour and 8-hour periods.

## 28   **D2.2.4.2 Harbor Craft**

29           **Annual Emissions.** Annual emissions for harbor craft were estimated following the  
30 methodologies described in Section 3.2.4.1.7, “Methodology for Determining  
31 Operational Emissions,” of the EIS/EIR, and are based on annual activity levels  
32 projected by the Los Angeles Harbor Department (LAHD). The analysis assumes  
33 that all harbor craft operate using ultra low diesel fuel with a sulfur content no greater  
34 than 15 parts per million (ppm).

35           **Maximum 1-Hour, 8-Hour and 24-Hour Emissions Rates.** The short-term harbor  
36 craft emissions were based on activity levels provided by LAHD, which assume that  
37 8% of emissions occur between midnight and 5 a.m., 80% between 5 a.m. and 5 p.m.,  
38 and 12% between 5 p.m. and midnight. These temporally varying emissions rates  
39 were used in the short-term modeling to determine the maximum 1-hour, 8-hour, and  
40 24-hour average concentrations.

### D2.2.4.3 Stationary Sources

**Annual Emissions.** Annual emissions for the stationary sources (marine vessel fueling stations and the bulk storage terminal) were obtained from the 2005 SCAQMD annual emission inventory.

**Maximum 1-Hour, 8-Hour and 24-Hour Emissions Rates.** The stationary sources were assumed to operate continuously. Thus, a constant hourly emission rate was used for all hours.

### D2.2.4.4 Motor Vehicles: Passenger Vehicles, Buses, and Trucks

Emissions were included from passenger vehicles, buses, and trucks driving to and from the proposed project area.

**Annual Emissions.** Annual emissions from motor vehicles were estimated using the methodologies described in Section 3.2.4.1.7, “Methodology for Determining Operational Emissions,” of the EIS/EIR, based on the projected annual truck, bus, and passenger vehicle trips and emission factors for each analysis year.

**Maximum 1-Hour, 8-Hour and 24-Hour Emissions Rates.** These rates were based on a representative diurnal emission profile using information developed from the traffic study (Fehrs & Peers 2008). Specifically, for passenger vehicles, buses, and trucks, it was estimated that 51% of emissions activity occurs between 8 a.m. and 5 p.m., 37% between 5 p.m. and 3 a.m., and 12% between 3 a.m. and 8 a.m. These temporally varying emissions rates were used in the short-term modeling analysis to determine maximum 1-hour, 8-hour, and 24-hour-average concentrations.

### D2.2.4.5 Terminal Equipment

**Annual Emissions.** Annual emissions from terminal equipment were estimated using the methodologies described in Section 3.2.4.1.7, “Methodology for Determining Operational Emissions,” of the EIS/EIR, based on the projected annual usage and emission factors for each analysis year.

**Maximum 1-Hour, 8-Hour, and 24-Hour Emissions Rates.** These rates were based on a representative diurnal emission profile based on Port cruise ship arrival and departure information. Specifically, for terminal equipment it was estimated that 12.5% of activity occurs between 9 a.m. and 10 a.m., 75% between 11 a.m. and 2 p.m., and 12.5% between 2 p.m. to 3p.m. These temporally varying emission rates were used in the short-term modeling to determine the maximum 1-hour, 8-hour, and 24-hour average concentrations.

## D2.2.4.6 Summary of Operational Emissions

Tables D2.2-2 through D2.2-6 present operational emissions by source category under Proposed Project, Mitigated Project, No Project (Alternative 6), NEPA baseline, and CEQA baseline, respectively.

**Table D2.2-2. Peak NO<sub>x</sub>, CO, PM<sub>10</sub>, and PM<sub>2.5</sub> Operational Emissions by Source—Proposed Project**

<i>Emission Source</i>	<i>1-hour NO<sub>x</sub> (lb/hr)</i>	<i>Annual NO<sub>x</sub> (ton/yr)</i>	<i>1-hour CO (lb/hr)</i>	<i>8-hour CO (lb/8-hr)</i>	<i>24-hour PM10 (lb/day)</i>	<i>Annual PM10 (ton/yr)</i>	<i>24-hour PM2.5 (lb/day)</i>
Cruise Ships—Transit	909.80	332.74	71.51	143.02	1562.75	37.58	1250.17
Cruise Ships—Hoteling	66.85	27.00	5.27	42.19	126.52	3.17	101.23
Harbor Craft	120.47	329.77	88.49	707.90	81.05	14.79	74.53
Terminal Equipment	0.85	0.46	1.21	6.37	0.20	0.02	0.18
Stationary	0.02	0.07	0.01	0.08	0.03	<0.01	0.03
Motor Vehicle—Off Site	0.84	2.20	5.20	40.89	1.37	0.25	0.91
Motor Vehicle—On Site	0.09	0.23	0.58	4.54	0.15	0.03	0.10
Total—All Sources	1098.92	692.47	172.27	944.99	1772.07	55.84	1427.15

**Table D2.2-3. Peak NO<sub>x</sub>, CO, PM<sub>10</sub>, and PM<sub>2.5</sub> Operational Emissions by Source—Mitigated Project**

<i>Emission Source</i>	<i>1-hour NO<sub>x</sub> (lb/hr)</i>	<i>Annual NO<sub>x</sub> (ton/yr)</i>	<i>1-hour CO (lb/hr)</i>	<i>8-hour CO (lb/8-hr)</i>	<i>24-hour PM10 (lb/day)</i>	<i>Annual PM10 (ton/yr)</i>	<i>24-hour PM2.5 (lb/day)</i>
Cruise Ships—Transit	643.12	204.34	52.02	104.03	895.32	10.85	716.19
Cruise Ships—Hoteling	36.50	5.05	2.91	23.31	66.12	0.33	52.91
Harbor Craft	120.36	329.47	88.49	707.94	80.90	14.76	74.41
Terminal Equipment	0.10	0.06	0.03	0.17	0.02	<0.01	0.02
Stationary	0.02	0.07	0.01	0.08	0.03	<0.01	0.03
Motor Vehicle—Off Site	0.84	2.20	5.20	40.89	1.37	0.25	0.91
Motor Vehicle—On Site	0.09	0.23	0.58	4.54	0.15	0.03	0.10
Total—All Sources	801.04	541.41	149.25	880.97	1043.90	26.23	844.56

1 **Table D2.2-4.** Peak NO<sub>x</sub>, CO, PM<sub>10</sub>, and PM<sub>2.5</sub> Operational Emissions by Source—Alternative 6  
 2 (No Project)

<i>Emission Source</i>	<i>1-hour NO<sub>x</sub> (lb/hr)</i>	<i>Annual NO<sub>x</sub> (ton/yr)</i>	<i>1-hour CO (lb/hr)</i>	<i>8-hour CO (lb/8-hr)</i>	<i>24-hour PM<sub>10</sub> (lb/day)</i>	<i>Annual PM<sub>10</sub> (ton/yr)</i>	<i>24-hour PM<sub>2.5</sub> (lb/day)</i>
Cruise Ships—Transit	628.69	332.51	49.42	98.84	1081.74	37.26	865.35
Cruise Ships—Hoteling	53.43	29.14	4.22	33.74	101.55	3.46	81.24
Harbor Craft	121.39	332.29	89.11	712.90	81.75	14.92	75.20
Terminal Equipment	0.75	0.39	1.01	5.31	0.17	0.02	0.16
Stationary	0.02	0.07	0.01	0.08	0.03	0.00	0.03
Motor Vehicle—Off Site	0.42	1.10	2.50	19.64	0.67	0.12	0.45
Motor Vehicle—On Site	0.04	0.11	0.28	2.18	0.07	0.01	0.05
Total—All Sources	804.74	695.60	146.55	872.69	1266.00	55.80	1022.47

3 **Table D2.2-5.** Peak NO<sub>x</sub>, CO, PM<sub>10</sub>, and PM<sub>2.5</sub> Operational Emissions by Source—NEPA Baseline

<i>Emission Source</i>	<i>1-hour NO<sub>x</sub> (lb/hr)</i>	<i>Annual NO<sub>x</sub> (ton/yr)</i>	<i>1-hour CO (lb/hr)</i>	<i>8-hour CO (lb/8-hr)</i>	<i>24-hour PM<sub>10</sub> (lb/day)</i>	<i>Annual PM<sub>10</sub> (ton/yr)</i>	<i>24-hour PM<sub>2.5</sub> (lb/day)</i>
Cruise Ships—Transit	450.51	196.33	36.47	72.94	623.42	10.32	498.77
Cruise Ships—Hoteling	29.20	7.55	2.33	18.67	53.14	0.46	42.51
Harbor Craft	120.36	329.47	88.49	707.94	80.90	14.76	74.41
Terminal Equipment	0.11	0.06	0.03	0.18	0.02	0.00	0.02
Stationary	0.02	0.07	0.01	0.08	0.03	0.00	0.03
Motor Vehicle—Off Site	0.74	1.92	4.59	36.10	1.46	0.27	1.00
Motor Vehicle—On Site	0.08	0.20	0.51	4.01	0.13	0.02	0.09
Total—All Sources	601.01	535.59	132.44	839.91	759.10	25.84	616.82

4 **Table D2.2-6.** Peak NO<sub>x</sub>, CO, PM<sub>10</sub>, and PM<sub>2.5</sub> Operational Emissions by Source—CEQA Baseline

<i>Emission Source</i>	<i>1-hour NO<sub>x</sub> (lb/hr)</i>	<i>Annual NO<sub>x</sub> (ton/yr)</i>	<i>1-hour CO (lb/hr)</i>	<i>8-hour CO (lb/8-hr)</i>	<i>24-hour PM<sub>10</sub> (lb/day)</i>	<i>Annual PM<sub>10</sub> (ton/yr)</i>	<i>24-hour PM<sub>2.5</sub> (lb/day)</i>
Cruise Ships—Transit	458.53	224.67	36.05	72.10	791.29	25.04	633.01
Cruise Ships—Hoteling	51.24	26.82	4.04	32.35	97.68	3.13	78.15
Harbor Craft	232.45	636.30	69.85	558.79	118.43	21.61	108.93
Terminal Equipment	3.21	0.78	1.48	7.81	0.85	0.04	0.78
Stationary	0.02	0.07	0.01	0.08	0.03	0.00	0.03



<i>Emission Source</i>	<i>1-hour NO<sub>x</sub> (lb/hr)</i>	<i>Annual NO<sub>x</sub> (ton/yr)</i>	<i>1-hour CO (lb/hr)</i>	<i>8-hour CO (lb/8-hr)</i>	<i>24-hour PM<sub>10</sub> (lb/day)</i>	<i>Annual PM<sub>10</sub> (ton/yr)</i>	<i>24-hour PM<sub>2.5</sub> (lb/day)</i>
Motor Vehicle—Off Site	0.79	2.05	5.78	45.45	0.69	0.13	0.47
Motor Vehicle—On Site	0.05	0.14	0.65	5.09	0.08	0.01	0.05
Total—All Sources	746.29	890.83	117.87	721.67	1009.03	49.96	821.42

1

## 2 **D2.3 Dispersion Model Selection and Inputs**

3 The air dispersion modeling was performed using the EPA AERMOD dispersion  
4 model, version 07026, based on the *Guideline on Air Quality Models* (40 CFR, Part  
5 51, Appendix W; November, 2005). The AERMOD model is a steady-state,  
6 multiple-source, Gaussian dispersion model designed for use with emission sources  
7 situated in terrain where ground elevations can exceed the stack heights of the  
8 emission sources. The AERMOD model uses hourly surface meteorological data  
9 consisting of wind direction, wind speed, temperature, cloud cover, and upper-air  
10 meteorological temperature data. The AERMOD model allows input of multiple  
11 sources and source groupings, eliminating the need for multiple model runs. The  
12 selection of the AERMOD model is well suited based on (1) the general acceptance  
13 by the modeling community and regulatory agencies of its ability to provide  
14 reasonable results for large industrial complexes with multiple emission sources, (2)  
15 a consideration of the availability of an annual set of hourly meteorological data for  
16 use by AERMOD, and (3) the ability of the model to handle the various physical  
17 characteristics of project emission sources, including “point,” “area,” and “volume”  
18 source types. AERMOD is an EPA-approved dispersion model; SCAQMD approves  
19 of its use for mobile source analyses.

### 20 **D2.3.1 Emission Source Representation**

#### 21 **D2.3.1.1 Construction Emission Sources**

22 The construction emission sources in AERMOD were determined based on the size  
23 of the construction areas. All construction equipment and vehicle emission sources  
24 associated with construction as well as onsite tugboat activity were modeled as  
25 areapolygon sources and their emissions were distributed uniformly throughout these  
26 construction areas. Fugitive dust was released at a height of 1.2 meters (4 feet),<sup>1</sup>  
27 while a 4.5-meter (15 feet) release height was used for trucks and construction  
28 equipment.

<sup>1</sup> The release height of 4 feet reflects the height from which crustal material is resuspended as a result of truck tire movement activity.

1                   The source release parameters used in AERMOD for construction emissions are  
2                   shown in Table D2.3-1.

1 **Table D2.3-1. AERMOD Source Release Parameters—Construction Emissions**

<i>Source Description</i>	<i>Source ID</i>	<i>AERMOD Source Type</i>	<i>No. of Sources</i>	<i>Release Height<sup>a</sup> (m)</i>	<i>Source Width(m)</i>	<i>Initial Sigma-z (m)</i>	<i>Area Size (m<sup>2</sup>)</i>	<i>Exit Velocity (m/s)</i>	<i>Exit Temp Deg (K)</i>	<i>Stack Diam. (m)</i>
Catalina Express and Island Express terminal	C01 <sup>b</sup>	Areapolygon	1	1.2 and 4.6	–	–	30,825	–	–	–
Cruise ship terminal Berths 91–93	C02	Areapolygon	1	1.2 and 4.6	–	–	188,400	–	–	–
Cruise ship terminal parking facilities	C03	Areapolygon	1	1.2 and 4.6	–	–	71,375	–	–	–
North Harbor	C05 <sup>b</sup>	Areapolygon	1	1.2 and 4.6	–	–	57,146	–	–	–
Maritime Office Building—Millennium Maritime	C06	Areapolygon	1	1.2 and 4.6	–	–	501	–	–	–
Maritime Office Building—Crowley	C07	Areapolygon	1	1.2 and 4.6	–	–	425	–	–	–
Maritime Office Building—Lane Victory	C08	Areapolygon	1	1.2 and 4.6	–	–	861	–	–	–
Downtown Harbor	C09 <sup>b</sup>	Areapolygon	1	1.2 and 4.6	–	–	22,518	–	–	–
Ralph J. Scott Fireboat Museum	C10 <sup>b</sup>	Areapolygon	1	1.2 and 4.6	–	–	1,006	–	–	–
John S. Gibson Park	C11	Areapolygon	1	1.2 and 4.6	–	–	842	–	–	–
Maritime Office Building	C12	Areapolygon	1	1.2 and 4.6	–	–	8,883	–	–	–
Maritime Office Building—L.A. Maritime Institute	C13	Areapolygon	1	1.2 and 4.6	–	–	1,828	–	–	–

<i>Source Description</i>	<i>Source ID</i>	<i>AERMOD Source Type</i>	<i>No. of Sources</i>	<i>Release Height<sup>a</sup> (m)</i>	<i>Source Width(m)</i>	<i>Initial Sigma-z (m)</i>	<i>Area Size (m<sup>2</sup>)</i>	<i>Exit Velocity (m/s)</i>	<i>Exit Temp Deg (K)</i>	<i>Stack Diam. (m)</i>
City Dock No. 1 Promenade	C14 <sup>b</sup>	Areapolygon	1	1.2 and 4.6	–	–	205	–	–	–
7 <sup>th</sup> Street Harbor	C15 <sup>b</sup>	Areapolygon	1	1.2 and 4.6	–	–	14,249	–	–	–
Downtown Square	C16	Areapolygon	1	1.2 and 4.6	–	–	1,197	–	–	–
7 <sup>th</sup> Street Pier	C17 <sup>b</sup>	Areapolygon	1	1.2 and 4.6	–	–	1,121	–	–	–
Ports O'Call Promenade—Phase 2	C18 <sup>b</sup>	Areapolygon	1	1.2 and 4.6	–	–	85,028	–	–	–
Downtown water feature	C19	Areapolygon	1	1.2 and 4.6	–	–	174	–	–	–
Ports O'Call Redevelopment—Phase 1	C20	Areapolygon	1	1.2 and 4.6	–	–	149,370	–	–	–
Ports O'Call Redevelopment—Phase 2	C21	Areapolygon	1	1.2 and 4.6	–	–	20,572	–	–	–
Waterfront Red Car Maintenance Facility	C22	Areapolygon	1	1.2 and 4.6	–	–	1551	–	–	–
Ports O'Call Promenade—Phase 1	C23 <sup>b</sup>	Areapolygon	1	1.2 and 4.6	–	–	46,152	–	–	–
Fishermen's Park	C24	Areapolygon	1	1.2 and 4.6	–	–	3,526	–	–	–
Demolish Jankovich & Son fueling station	C25	Areapolygon	1	1.2 and 4.6	–	–	1,793	–	–	–
Sampson Way roadway improvements	C26	Areapolygon	1	1.2 and 4.6	–	–	178,030	–	–	–
Berth 240 fueling station	C27	Areapolygon	1	1.2 and 4.6	–	–	58,805	–	–	–

<i>Source Description</i>	<i>Source ID</i>	<i>AERMOD Source Type</i>	<i>No. of Sources</i>	<i>Release Height<sup>a</sup> (m)</i>	<i>Source Width(m)</i>	<i>Initial Sigma-z (m)</i>	<i>Area Size (m<sup>2</sup>)</i>	<i>Exit Velocity (m/s)</i>	<i>Exit Temp Deg (K)</i>	<i>Stack Diam. (m)</i>
Westway Terminal demolition	C28	Areapolygon	1	1.2 and 4.6	–	–	94,890	–	–	–
Outer Harbor Cruise Ship Terminal—Berths 45–50	C29 <sup>b</sup>	Areapolygon	1	1.2 and 4.6	–	–	169,204	–	–	–
Outer Harbor Park and Promenade	C30	Areapolygon	1	1.2 and 4.6	–	–	48,324	–	–	–
Outer Harbor parking lot	C31	Areapolygon	1	1.2 and 4.6	–	–	13,374	–	–	–
Salinas De San Pedro Park/Youth Camp Promenade	C32 <sup>b</sup>	Areapolygon	1	1.2 and 4.6	–	–	25,124	–	–	–
Ports O'Call Promenade—Phase 3	C33 <sup>b</sup>	Areapolygon	1	1.2 and 4.6	–	–	4,259	–	–	–
Maritime Museum Renovation	C34	Areapolygon	1	1.2 and 4.6	–	–	600	–	–	–
Waterfront Red Car Line Extension (Swinford to 22 <sup>nd</sup> Street)	T01–T11	Areapolygon	11	4.6	–	–	vary from 2,101 to 29,195	–	–	–
Waterfront Red Car Line Extension (22 <sup>nd</sup> Street to Cabrillo Beach)	T12–T20	Areapolygon	9	4.6	–	–	vary from 5,869 to 44,745	–	–	–
Red Car Line Extension (22 <sup>nd</sup> Street to Cruise Terminal)	T21–T23	Areapolygon	3	4.6	–	–	vary from 2,101 to 29,195	–	–	–

a. The 1.2-meter release height was used for fugitive dust release, while a 4.6-meter height was used for truck and equipment exhaust.

b. The portion of the emissions associated with tugboats was modeled as a set of 80 volume sources with a 15.2 meter release height and sigma-z of 3.54 meters.

## D2.3.1.2 Operational Emission Sources

The AERMOD modeling analysis evaluated project-related operational emission sources, including activity from tugboats; other harbor craft; cruise ships; terminal equipment; and on-road passenger vehicles, trucks, and buses. The analysis realistically simulated project-related emission sources, taking into consideration physical characteristics, activity levels, and operational locations of the sources. Emissions from the movement of vessels in the shipping lanes and harbor craft (i.e., tugboats, ferry, commercial fishing, crew, excursion, and government boats) were simulated and modeled as a series of volume sources lined up along the travel routes. Mobile source operations confined within specific geographic locations, such as the Outer Harbor Cruise Terminal or the Inner Harbor Cruise Terminal were modeled as areapolygons covering the areas over where the activity would occur. Volume source emissions are simulated by AERMOD as being released and mixed vertically and horizontally within a volume of air prior to being dispersed downwind. Area sources were simulated by AERMOD with a release height characteristic of the dominant equipment activity within each area source. Finally, stationary emissions from hoteling ships (both in the Inner Harbor and Outer Harbor) were modeled as point (stack) sources with upward plume velocity and buoyancy. Three sizes of ships were considered in the analysis, as shown in Table D2.3-2. Also, included in the AERMOD modeling were the effects of building downwash on plume dispersion from point sources.

The operational characteristics of each source type in terms of area of operation and vertical stack height or source height determined the release parameters of each area, volume, or point source. A total of 673 operational emission sources were simulated in AERMOD. The specific methodology for defining the sources is discussed below.

1. **Ship transit lanes (fairway and open sea, precautionary area, and harbor transit).** Emissions from marine vessels that transit between the offshore ship transit lanes and the berth were simulated as a series of volume sources starting at the SCAQMD overwater boundary (about 50 nm from the Outer Harbor Berth) and extending to either terminal at the Outer Harbor (Berths 45–50) or to the Inner Harbor (Berths 87–93). Total transit emissions were calculated and divided equally among the volume sources for each Inner and Outer Harbor bound ship along the fairway and open sea, the precautionary area, and the harbor transit segments.

Vessel transit sources were modeled as occurring from elevated-release volume sources separated by a distance not more than twice the width of each volume source, as recommended for the simulation of line sources in the *ISCST User's Guide* (EPA 1995). For the fairway and precautionary area segments, the volume source width was set to 1,000 meters, reflecting the variability in the transit lane path. Hence, the center-to-center spacing of the fairway and precautionary area transit sources was 1,000 meters. For harbor transit sources, the volume source width was set to 100 meters, because the narrower shipping lane and proximity to receptors require a smaller source width and closer source spacing. The center-to-center spacing of the harbor transit sources was 200 meters.

1 Based on a series of visual observations of oceangoing exhaust plumes at the  
2 Port, the plume height for ship transit sources was conservatively assumed to be  
3 25% above stack height for fairway and open sea as well as in the precautionary  
4 zone, and 50% above stack height for harbor transit (SAIC 2006). The lower  
5 apparent wind speeds at slower ship speeds result in a higher plume rise.

6 The transit sources were positioned along the centerline of the vessel  
7 inbound/outbound traffic lanes through the fairway and precautionary area, along  
8 a line from the edge of the precautionary area to Angels Gate, and then up the  
9 center of the Main Channel to either the Outer Harbor or Inner Harbor Berths.

10 2. **Vessel Berth Maneuvering Area (Turning and Docking).** Ship turning and  
11 docking represent activities with concentrated emissions that occur in designated  
12 locations near the berth. As a result, dedicated volume sources were created to  
13 simulate these activities. For the Inner Harbor, a turning basin volume source  
14 was located in the center of the turning basin nearest the wharf at Berths 87–93.  
15 The volume-source width was set to 228 meters, which is the approximate size of  
16 the turning basin. For the Outer Harbor, a slightly larger turning basin volume  
17 source was used, set to a width of 274 meters to accommodate the larger ships  
18 docking in the Outer Harbor. Based on a series of visual observations of  
19 container ship exhaust plumes at the Port, the plume height was assumed to be  
20 100% above stack height (i.e., twice the stack height) for ship turning and  
21 docking (SAIC 2006).

22 3. **Vessel Hoteling Locations.** Because hoteling ships are stationary, their  
23 emissions were modeled as stack-type point sources located adjacent to Berths  
24 87–93 in the Inner Harbor and adjacent to Berths 45–50 in the Outer Harbor.  
25 Three sets of stack parameters for hoteling auxiliary engines were developed  
26 reflective of the three categories of ship sizes. This was based on information for  
27 Voyage-class ships from the Norwegian Star chief engineer (Malmstrom pers.  
28 comm.). The larger ships have higher exit velocities and higher flow rates. In  
29 addition, each of the three ship types included adjustments for building  
30 downwash effects because of the relatively short stacks. Building downwash was  
31 performed using EPA’s Building Profile Input Program (BPIP) model. The BPIP  
32 model calculates direction-specific structure widths and heights for use with the  
33 AERMOD model in downwash analyses for the three ship types, which had  
34 structure heights ranging from 32 to 37 meters, lengths from 260 to 320 meters,  
35 and width from 40 to 50 meters.

36 4. **Terminal Equipment.** Each berth operates equipment for the loading and  
37 unloading of supplies from the ships as well as refueling trucks. This equipment  
38 mainly consists of forklifts and was modeled as an area polygon located at the  
39 terminal with a release height of 15 feet. Fuel delivery trucks were also modeled  
40 for the same area with a 15-foot release height, which approximates average  
41 height of exhaust port plus a nominal amount of plume rise.

42 5. **Roadways.** Truck movements were modeled as a series of area polygons.  
43 Roadways were divided into links over which emissions were uniform.  
44 Therefore, the emission density (i.e., emissions per unit) is identical for all area  
45 polygons along a given roadway.

1 Emissions were modeled separately for heavy-duty class vehicles (trucks) with a  
2 release height of 15 feet, which is the approximate average height of the exhaust  
3 port plus a nominal amount of plume rise. Light-duty vehicles were modeled  
4 with a 4-foot release height.

- 5 6. **Harbor Craft.** A variety of harbor craft operate at the proposed Project area.  
6 Because some of the harbor craft locations are changed under the proposed  
7 Project and alternatives, harbor craft are included in this analysis. The harbor  
8 craft were modeled as a unique set of volume sources for each craft type: assist  
9 tugs (both in transit and hoteling), ferry vessels, commercial fishing boats, crew  
10 boats, excursion boats, and government boats (e.g., police and fire). The  
11 tugboats were modeled with a 50-foot source height, which accounts for the stack  
12 plus a nominal amount of plume rise, and a 100-meter volume source width  
13 consistent with the spacing used for the passenger ships within the harbor.  
14 Outside the harbor, a volume source width of 1,000 meters was used consistent  
15 with the passenger ship modeling.

16 Emission sources were positioned by using the Universal Transverse Mercator  
17 (UTM) coordinate system, North American Datum 1983 (NAD83) referenced to  
18 topographic data obtained from the U.S. Geological Survey (USGS). The source  
19 release parameters used in the AERMOD are presented in Table D2.3-2.

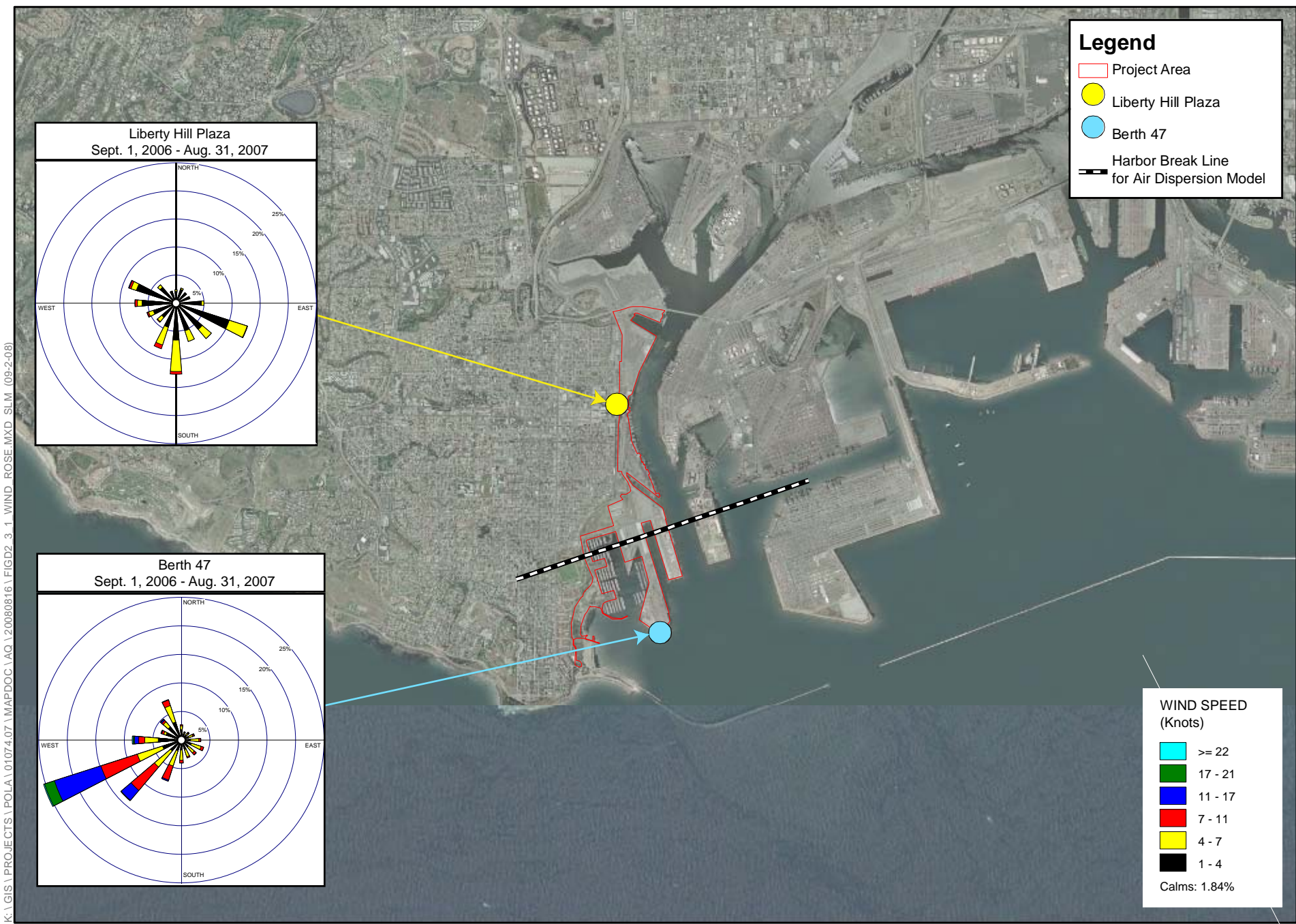
## 20 D2.3.2 Meteorological Data

21 Due to the blocking effect of the Palos Verdes Hills, wide variations in wind  
22 conditions often occur within the Port. For example, during typical sea-breeze  
23 conditions, the hills can create a relatively light wind zone in the Inner Harbor, while  
24 the Outer Harbor experiences stronger winds in a different direction. The monthly  
25 and hourly streamlines developed for the South Coast Air Basin in *California South*  
26 *Coast Air Basin Hourly Wind Flow Patterns* show a clear difference in wind speed  
27 and direction between the Inner and Outer Harbor regions (SCAQMD 1977).

28 LAHD is currently operating a monitoring program that includes the collection of  
29 meteorological data from several locations within Port boundaries (LAHD 2004).  
30 Recently, meteorological data sets containing a full year of consecutive hourly  
31 observations, from September 1, 2006, through August 31, 2007, became available.  
32 The data sets contain 8,760 hourly observations of wind speed, wind direction,  
33 temperature, atmospheric stability, and mixing height recorded at each of the  
34 monitoring stations in the network.

35 The two most representative meteorological data sets selected for this analysis were  
36 collected at the Liberty Hill Plaza (LH) station in San Pedro—located at the Liberty  
37 Hill Plaza Building adjacent to the Port Administrative Property on Palos Verdes  
38 Street—and the Berth 47 station—located within the proposed project area (near the  
39 Outer Harbor Cruise Terminal), shown in Figure D2.3-1. The LH station is near the  
40 western edge of the proposed Project Area and adjacent to residential areas in San  
41 Pedro and is representative of Inner Harbor wind patterns; the Berth 47 station is  
42 representative of Outer Harbor wind patterns.





K:\GIS\PROJECTS\POLA\01074.07\MAPDOC\AQ\20060816\FIGD2\_3\_1\_WIND\_ROSE.MXD.SLM (09-2-08)

SOURCE: USA Imagery (05-15-06; 0.5m)



**Figure D2.3-1**  
**POLA Berth 47 and Liberty Hill**  
**Monitoring Stations Wind Roses**  
**San Pedro Waterfront Project**

1 **Table D2.3-2.** AERMOD Source Release Parameters—Operational Emissions

Source Type	Source Description	Source ID	AERMOD Source Type	No. of Sources	Release Height (m)	Source Width <sup>a</sup> (m)	Initial Sigma-z (m)	Area Size (m <sup>2</sup> )	Exit Velocity (m/s)	Exit Temp Deg (K)	Stack Diam. (m)
Ships	Hoteling auxiliary diesel engines—Type 1	B87, B91, B93	Point	1–3	45.7	–	–	–	3.1	473	1.12
	Hoteling auxiliary diesel engines —Type 2	B87, B91, B93	Point	1–3	53.4	–	–	–	3.2	473	1.12
	Hoteling auxiliary diesel engines—Type 3	B45, B47, B87, B91, B93	Point	1–2	61.0	–	–	–	5.7	473	1.12
	Inner Harbor docking	IH01	Volume	1	91.4–121.9 <sup>b</sup>	228	42.5–56.7 <sup>c</sup>	–	–	–	–
	Inner Harbor transit (Liberty Hill Met)	IH02–IH11	Volume	10	68.6–91.4 <sup>b</sup>	200	21.3–28.4 <sup>c</sup>	–	–	–	–
	Inner Harbor bound (Berth 47 Met)	IH12–IH28	Volume	17	68.6–91.4 <sup>b</sup>	200	21.3–28.4 <sup>c</sup>	–	–	–	–
	Inner Harbor bound (precautionary)	IH29–IH42	Volume	14	57.2–76.2 <sup>b</sup>	1000	10.6–14.2 <sup>c</sup>	–	–	–	–
	Inner Harbor bound (fairway and open sea)	IH43–IH108	Volume	66	57.2–76.2 <sup>b</sup>	1000	10.6–14.2 <sup>c</sup>	–	–	–	–
	Outer Harbor docking (Berth 47 Met)	OH01	Volume	1	91.4–121.9 <sup>b</sup>	274	42.5–56.7 <sup>c</sup>	–	–	–	–
	Outer Harbor bound (Berth 47 Met)	OH02–OH13	Volume	12	68.6–91.4 <sup>b</sup>	200	21.3–28.4 <sup>c</sup>	–	–	–	–
Outer Harbor bound	OH14–	Volume	14	57.2–	1000	10.6–	–	–	–	–	

Source Type	Source Description	Source ID	AERMOD Source Type	No. of Sources	Release Height (m)	Source Width <sup>a</sup> (m)	Initial Sigma-z (m)	Area Size (m <sup>2</sup> )	Exit Velocity (m/s)	Exit Temp Deg (K)	Stack Diam. (m)
	(precautionary)	OH27			76.2 <sup>b</sup>		14.2 <sup>c</sup>				
	Outer Harbor bound (fairway and open sea)	OH28–OH93		66	57.2–76.2 <sup>b</sup>	1000	10.6–14.2 <sup>c</sup>	–	–	–	–
Stationary Sources	Mike’s fueling station	IHSS1	Volume	1	3.0	1.2	1.5 <sup>c</sup>	–	–	–	–
	Jankovich & Son fueling station	IHSS2	Volume	1	3.0	1.2	1.5 <sup>c</sup>	–	–	–	–
	Westway terminal	WBT	Areapolygon	1	10.0	–	–	–	–	–	–
Terminal Equipment	Terminal equipment—forklift	TE	Areapolygon	1	1.2	–	–	208,041 (outer) 236,798 (inner)	–	–	–
	Terminal equipment—trucks	TETRU CK	Areapolygon	1	4.6	–	–	208,041 (outer) 236,798 (inner)	–	–	–
On-Road Mobile (non-heavy duty trucks)	Outer Harbor Cruise Terminal	R01–R02	Areapolygon	2	1.2	–	–	10,762 8,209	–	–	–
	Harbor Boulevard	R03–R08, R26	Areapolygon	7	1.2	–	–	vary from 2,225 to 17,245	–	–	–
	Freeway ramps	R09–R21	Areapolygon	13	1.2	–	–	vary from 722 to 4,369	–	–	–
	Terminal entrance	R22–R23	Areapolygon	2	1.2	–	–	4,201 3,445	–	–	–

Source Type	Source Description	Source ID	AERMOD Source Type	No. of Sources	Release Height (m)	Source Width <sup>a</sup> (m)	Initial Sigma-z (m)	Area Size (m <sup>2</sup> )	Exit Velocity (m/s)	Exit Temp Deg (K)	Stack Diam. (m)
	Bridge	R24–R25	Areapolygon	2	1.2	–	–	7,399 15,917	–	–	–
Operation (non-heavy duty trucks)	S.S. Lane Victory (non trucks)	O01	Areapolygon	1	1.2	–	–	31433	–	–	–
	Cruise ship terminal, Berths 91–92 and 93 A–B	O02	Areapolygon	1	1.2	–	–	189,039	–	–	–
	Downtown Harbor docking slips	O03	Areapolygon	1	1.2	–	–	57,977	–	–	–
	Crowley Tugboats office	O04	Areapolygon	1	1.2	–	–	425	–	–	–
	Los Angeles Maritime Institute	O05	Areapolygon	1	1.2	–	–	861	–	–	–
	Waterfront Promenade and Town Square	O06	Areapolygon	1	1.2	–	–	1,197	–	–	–
	Ports O’Call Promenade—Phase 2	O07	Areapolygon	1	1.2	–	–	81,292	–	–	–
	Ports O’Call restaurant development	O08	Areapolygon	1	1.2	–	–	142,671	–	–	–
	Ports O’Call Redevelopment Phase 2	O09	Areapolygon	1	1.2	–	–	20,572	–	–	–
	Waterfront Red Car Maintenance Facility	O10	Areapolygon	1	1.2	–	–	1,551	–	–	–
	Fishermen's Park	O11	Areapolygon	1	1.2	–	–	3,526	–	–	–
	San Pedro Park	O12	Areapolygon	1	1.2	–	–	177,544	–	–	–
Research and Development Campus	O14	Areapolygon	1	1.2	–	–	96,912	–	–	–	

Source Type	Source Description	Source ID	AERMOD Source Type	No. of Sources	Release Height (m)	Source Width <sup>a</sup> (m)	Initial Sigma-z (m)	Area Size (m <sup>2</sup> )	Exit Velocity (m/s)	Exit Temp Deg (K)	Stack Diam. (m)
	at Westway										
	Cruise ship terminal—Berths 45–50	O15	Areapolygon	1	1.2	–	–	170,941	–	–	–
	Outer Harbor parking lot	O16	Areapolygon	1	1.2	–	–	13,374	–	–	–
	Warehouses 9 & 10	O17	Areapolygon	1	1.2	–	–	220,98	–	–	–
	Ports O'Call retail development	O19	Areapolygon	1	1.2	–	–	3526	–	–	–
Onroad Mobile (heavy duty trucks)	Outer Harbor cruise terminal	R01–R02	Areapolygon	2	4.6	–	–	10,762 8,209	–	–	–
	Harbor Boulevard	R03–R08, R26	Areapolygon	7	4.6	–	–	vary from 2,225 to 17,245	–	–	–
	Freeway ramps	R09–R21	Areapolygon	13	4.6	–	–	vary from 722 to 4,369	–	–	–
	Terminal entrance	R22–R23	Areapolygon	2	4.6	–	–	4,201 3,445	–	–	–
	Bridge	R24–R25	Areapolygon	2	4.6	–	–	7,399 15,917	–	–	–
Operation (heavy duty trucks)	S.S. Lane Victory (non trucks)	O01	Areapolygon	1	4.6	–	–	31,433	–	–	–
	Cruise ship terminal, Berths 91–92 and 93 A–B	O02	Areapolygon	1	4.6	–	–	189,039	–	–	–

Source Type	Source Description	Source ID	AERMOD Source Type	No. of Sources	Release Height (m)	Source Width <sup>a</sup> (m)	Initial Sigma-z (m)	Area Size (m <sup>2</sup> )	Exit Velocity (m/s)	Exit Temp Deg (K)	Stack Diam. (m)
	Downtown Harbor docking slips	O03	Areapolygon	1	4.6	–	–	57,977	–	–	–
	Crowley Tugboats office	O04	Areapolygon	1	4.6	–	–	425	–	–	–
	Los Angeles Maritime Institute	O05	Areapolygon	1	4.6	–	–	861	–	–	–
	Waterfront Promenade and Town Square	O06	Areapolygon	1	4.6	–	–	1,197	–	–	–
	Ports O'Call Promenade—Phase 2	O07	Areapolygon	1	4.6	–	–	81,292	–	–	–
	Ports O'Call restaurant development	O08	Areapolygon	1	4.6	–	–	142,671	–	–	–
	Ports O'Call Redevelopment—Phase 2	O09	Areapolygon	1	4.6	–	–	20,572	–	–	–
	Waterfront Red Car Maintenance Facility	O10	Areapolygon	1	4.6	–	–	1,551	–	–	–
	Fishermen's Park	O11	Areapolygon	1	4.6	–	–	3,526	–	–	–
	San Pedro Park	O12	Areapolygon	1	4.6	–	–	177,544	–	–	–
	Research and Development Campus at Westway	O14	Areapolygon	1	4.6	–	–	96,912	–	–	–
	Cruise ship terminal—Berths 45–50	O15	Areapolygon	1	4.6	–	–	170,941	–	–	–
	Outer Harbor parking lot	O16	Areapolygon	1	4.6	–	–	13,374	–	–	–
	Warehouses 9 & 10	O17	Areapolygon	1	4.6	–	–	22,098	–	–	–

Source Type	Source Description	Source ID	AERMOD Source Type	No. of Sources	Release Height (m)	Source Width <sup>a</sup> (m)	Initial Sigma-z (m)	Area Size (m <sup>2</sup> )	Exit Velocity (m/s)	Exit Temp Deg (K)	Stack Diam. (m)
	Ports O'Call retail development	O19	Areapolygon	1	4.6	–	–	3,526	–	–	–
Operation Harbor Craft	Assist tugs (hoteling)	ATBH, ATPH	Volume	1–2	15.2	200.0	3.54	–	–	–	–
	Assist tugs (transit)	ATB, ATP	Volume	25–42	15.2	200; 1000	3.54	–	–	–	–
	Catalina ferry vessels	FB, FP	Volume	71–72	6.0	200; 1000	2.79	–	–	–	–
	Commercial fishing	FC	Volume	99	6.0	200; 1000	2.79	–	–	–	–
	Crew boats	CB	Volume	37	6.0	200; 1000	2.79	–	–	–	–
	Excursion boats	FE	Volume	51	6.0	200; 1000	2.79	–	–	–	–
	Government boats	G	Volume	90	6.0	200; 1000	2.79	–	–	–	–
<p>a. Source width is converted to a sigma-y value for AERMOD by dividing by 2.15 for line or contiguous area sources (all volume sources).</p> <p>b. The volume source release height varied depending upon the passenger ship type (1–3); based on visual observations of ocean-going ships exhaust plumes at the Port of Los Angeles, the plume height was observed to be 25% above stack height for fairway and precautionary area transit, 50% above stack height for harbor transit, and 100% above stack height for docking. The lower apparent wind speeds at slower ship speeds result in a higher plume rise.</p> <p>c. Sigma-z values were determined for AERMOD using twice the plume rise increment and then dividing by 2.15 for elevated releases on a platform (ships) as well as for ground-based releases (terminal equipment).</p>											

1 To account for the unique wind patterns in the proposed project area, the modeling  
 2 domain for this analysis was split into Inner Harbor and Outer Harbor regions. The  
 3 division between the Inner Harbor (to the north) and the Outer Harbor (to the south)  
 4 is roughly a line extending east and west of the 22<sup>nd</sup> Street landing at the Port.  
 5 Emission sources located in the Inner Harbor region, which includes most  
 6 construction sources and Inner Harbor operational sources, were modeled with the  
 7 LH station data. Emission sources located in the Outer Harbor region, which  
 8 includes the passenger ships in the Outer Harbor plus transit tugboats and other  
 9 harbor craft, were modeled with the Berth 47 station data. The modeling results were  
 10 then summed at each common receptor point.

11 The meteorological data were processed using EPA-approved AERMET (version  
 12 06341) meteorological data preprocessor for the AERMOD dispersion model.  
 13 AERMET uses three steps to preprocess and combine the surface and upper-air  
 14 soundings to output the data in a format that is compatible with the AERMOD model.  
 15 The first step extracts the data and performs a brief quality assurance check of the  
 16 data. The second step merges the meteorological data sets. The third step outputs the  
 17 data in the AERMOD compatible format while also incorporating surface  
 18 characteristics surrounding the collection or application site.

19 The output from the AERMET model consists of two separate files: the surface  
 20 conditions file and a vertical profile dataset. AERMOD utilizes these two files in the  
 21 dispersion modeling algorithm to predict pollutant concentrations resulting from a  
 22 source's emissions.

### 23 **D2.3.3 Model Options**

24 Technical options selected for the AERMOD model were regulatory default. Use of  
 25 these options follows the EPA modeling guidance (40 CFR, Appendix W; April 15,  
 26 2003). Sources within the Inner Harbor region were modeled as urban sources, while  
 27 sources over the Outer Harbor region and open water were not considered urban.

28 The following temporal distribution of emissions was modeled to determine short-  
 29 term (<24 hours) and annual average concentrations:

Terminal equipment	12.5% of emissions 9 a.m.–10 a.m. 75% of emissions 11 a.m.–2 p.m. 12.5% of emissions 2 p.m.–3 p.m.
Fueling stations (Mike's and Jankovich)	Uniform distribution 24 hours/day
Crew boats, commercial fishing, excursion boats, ferry, government boats	8.3% of emissions midnight–5 a.m. 80% of emissions 5 a.m.–5 p.m. 11.7% of emissions 5 p.m.–midnight



On-road motor vehicles	51% of emissions 8 a.m.–5 p.m. 37% of emissions 5 p.m.–3 a.m. 12 % of emissions 3 a.m.–8 a.m.
Construction motor vehicle activity	Uniform distribution of emissions 8 hours/day; 7 a.m.–3 p.m.
Ships in transit	50% 5 a.m.–6 a.m.; 50% 6 p.m.–7p.m.
Hoteling ships	Uniform distribution of emissions 12 hours/day; 6 a.m.–6 p.m.

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2 These temporal distributions are based on estimates of current and anticipated future  
3 ship operations.

#### 4 **D2.3.4 Receptor Locations Used in AERMOD**

5 Receptor and source base elevations were determined from USGS Digital Elevation  
6 Model (DEM) data using the 7.5-minute format (i.e., 30-meter spacing between grid  
7 nodes). All coordinates were referenced to UTM NAD83, zone 11.

8 Cartesian coordinate receptor grids were used to provide adequate spatial coverage  
9 surrounding the proposed project area to assess ground-level pollution  
10 concentrations, identify the extent of significant impacts, and identify maximum  
11 impact locations.

12 The analysis utilized a regular coarse grid of 1,189 receptor points spaced every  
13 250 meters, centered around Berths 87–93. The regular receptor grid extended  
14 roughly 7 kilometers east-west by 10 kilometers north-south centered around the  
15 terminal area. In addition, 72 discrete receptors were placed at sensitive receptor  
16 locations of special concern, such as schools, day care centers, convalescent homes,  
17 and hospitals within a 5-kilometer radius of Berths 87–93. Following this initial  
18 coarse grid modeling, five additional sets of fine receptor grids were modeled, adding  
19 an additional 740 receptors. The fine grids consisted of high-density receptors  
20 surrounding the maximum impact locations with receptors spaced every 50 meters.  
21 The coarse and fine receptor grids used in the AERMOD modeling analysis are  
22 shown in Figures D3.3-1 and D3.3-2 of the HRA for the proposed Project (Appendix  
23 D3). Receptors on water were not included in the dispersion analysis.

24 AERMAP, version 06341, was used to calculate source elevations, receptor  
25 elevations, and the controlling hill height for each receptor.

## D2.4 Significance Criteria for Air Quality Impacts

SCAQMD has established thresholds to determine the significance of ambient air quality impacts from proposed land use development projects (SCAQMD 2006). The criteria for project construction and operation are listed in Tables D2.4-1 and D2.4-2, respectively.

**Table D2.4-1.** SCAQMD Thresholds for Ambient Air Quality Concentrations Associated with Project Construction

<i>Air Pollutant</i>	<i>Ambient Concentration Threshold</i>
Nitrogen Dioxide (NO <sub>2</sub> ) <sup>a</sup>	
1-hour average	0.18 ppm (338 µg/m <sup>3</sup> )
Particulates (PM <sub>10</sub> ) <sup>b</sup>	
24-hour average	10.4 µg/m <sup>3</sup>
Particulates (PM <sub>2.5</sub> )	
24-hour average	10.4 µg/m <sup>3</sup>
Carbon Monoxide (CO) <sup>a</sup>	
1-hour average	20 ppm (23,000 µg/m <sup>3</sup> )
8-hour average	9.0 ppm (10,000 µg/m <sup>3</sup> )
Notes:	
a. The NO <sub>2</sub> and CO thresholds are absolute thresholds; the maximum predicted impact from proposed project operations is added to the background concentration for the Project vicinity and compared to the threshold.	
b. The PM <sub>10</sub> and PM <sub>2.5</sub> thresholds are incremental thresholds. The maximum predicted impact from construction activities (without adding the background concentration) is compared to the threshold.	
c. The SCAQMD has also established thresholds for sulfates and annual PM <sub>10</sub> , but is currently not requiring a quantitative comparison to these thresholds for construction (SCAQMD 2005b).	
µg/m <sup>3</sup> = micrograms per cubic meter; ppm = parts per million.	
Source: SCAQMD 2006.	

**Table D2.4-2.** SCAQMD Thresholds for Ambient Air Quality Concentrations Associated with Project Operation

<i>Air Pollutant</i>	<i>Ambient Concentration Threshold</i>
Nitrogen Dioxide (NO <sub>2</sub> ) <sup>a</sup>	
1-hour average	0.18 ppm (338 µg/m <sup>3</sup> )
annual average	0.033 ppm (56 µg/m <sup>3</sup> )
Particulates (PM <sub>10</sub> ) <sup>b</sup>	
24-hour average	2.5 µg/m <sup>3</sup>
annual average	1.0 µg/m <sup>3</sup>

<i>Air Pollutant</i>	<i>Ambient Concentration Threshold</i>
Particulates (PM <sub>2.5</sub> )	
24-hour average	2.5 µg/m <sup>3</sup>
Carbon Monoxide (CO) <sup>a</sup>	
1-hour average	20 ppm (23,000 µg/m <sup>3</sup> )
8-hour average	9 ppm (10,000 µg/m <sup>3</sup> )
Notes:	
<p>a. The NO<sub>2</sub> and CO thresholds are absolute thresholds; the maximum predicted impact from proposed project operations is added to the background concentration for the proposed project vicinity and compared to the threshold.</p> <p>b. The PM<sub>10</sub> and PM<sub>2.5</sub> thresholds are incremental thresholds. For CEQA significance, the maximum increase in concentration relative to the CEQA baseline (i.e., proposed project impact minus CEQA baseline impact) is compared to each threshold. For NEPA significance, the maximum increase in concentration relative to the NEPA baseline (i.e., Project impact minus NEPA baseline impact) is compared to the threshold.</p> <p>c. The SCAQMD has also established a threshold for sulfates, but is currently not requiring a quantitative comparison to this threshold (SCAQMD 2005b).</p> <p>µg/m<sup>3</sup> = micrograms per cubic meter; ppm = parts per million.                      Source: SCAQMD 2006.</p>	

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For construction emissions, NO<sub>2</sub> and CO ground-level concentrations that were predicted by AERMOD for construction were added to the background concentrations of each pollutant and the total concentrations were compared to the SCAQMD thresholds. The AERMOD modeling results for PM<sub>10</sub> and PM<sub>2.5</sub> represent the incremental increase due to construction of the proposed Project and was directly compared to the SCAQMD thresholds without adding a background concentration.

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For operational emissions, NO<sub>2</sub> and CO ground-level concentrations that were predicted by AERMOD for each project alternative were added to the background concentrations of each pollutant and the total concentrations were compared to the SCAQMD thresholds. To assess the significance of operational PM<sub>10</sub> and PM<sub>2.5</sub> impacts under CEQA and NEPA, the incremental increase in PM<sub>10</sub> and PM<sub>2.5</sub> concentrations relative to CEQA and NEPA baseline concentrations were determined. Both PM<sub>10</sub> and PM<sub>2.5</sub> incremental concentration increases (proposed Project minus CEQA baseline and proposed Project minus NEPA baseline) were compared to the SCAQMD PM<sub>10</sub> and PM<sub>2.5</sub> incremental thresholds.

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## **D2.5 Predicted Air Quality Impacts**

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### **D2.5.1 Construction Impacts**

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Construction impacts were evaluated both with and without mitigation. Annual concentrations were not considered for NO<sub>2</sub>, PM<sub>10</sub>, or PM<sub>2.5</sub> based on direction from SCAQMD (SCAQMD 2005b).

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1 NO<sub>2</sub> concentrations were calculated using the ozone limiting method that uses ozone  
 2 data from the North Long Beach monitoring station. The conversion of NO<sub>x</sub> to NO<sub>2</sub>  
 3 is dependent on the hourly ozone concentration and hourly NO<sub>x</sub> emission rates.

#### 4 **D2.5.1.1 Without Mitigation**

5 Table D2.5-1 summarizes the AERMOD modeling results of unmitigated emissions.  
 6 The emissions used in the modeling were the worst-case hourly, 8-hour, and 24-hour  
 7 emission rates.

8 The NO<sub>2</sub> and CO concentrations due to construction were added to the maximum  
 9 background concentrations monitored at North Long Beach Station during the last  
 10 4 years (2004–2007) and compared to the SCAQMD thresholds. The AERMOD  
 11 modeling result for PM<sub>10</sub> and PM<sub>2.5</sub> represents the incremental increase due to the  
 12 project and was compared directly to the SCAQMD thresholds without adding a  
 13 background concentration.

14 Locations of the maximum NO<sub>2</sub> and CO concentrations and the locations of the  
 15 maximum PM<sub>10</sub> and PM<sub>2.5</sub> of the proposed Project are shown in Figure D2.5-1.

16 Table D2.5-1 shows that the maximum 1-hour NO<sub>2</sub> concentration associated with  
 17 construction is 2,943 µg/m<sup>3</sup>, which exceeds the SCAQMD threshold of 338 µg/m<sup>3</sup>.

18 **Table D2.5-1. Maximum NO<sub>2</sub>, CO, PM<sub>10</sub> and PM<sub>2.5</sub> Impacts—Construction without Mitigation**

<i>Pollutant</i>	<i>Averaging Time</i>	<i>Background Concentration (µg/m<sup>3</sup>)</i>	<i>Maximum Concentration (without background) (µg/m<sup>3</sup>)</i>	<i>Total Ground-Level Concentration (µg/m<sup>3</sup>)</i>	<i>SCAQMD Threshold (µg/m<sup>3</sup>)</i>
NO <sub>2</sub>	1-hour	263	2,680	<b>2,943</b>	338
CO	1-hour	4,809	10,797	15,606	23,000
	8-hour	4,008	2,083	6,091	10,000
PM <sub>10</sub>	24-hour	—	<b>198.8</b>	—	10.4
PM <sub>2.5</sub>	24-hour	—	<b>92.0</b>	—	10.4

Notes:

Exceedances of the thresholds are indicated in bold. The thresholds for PM10 and PM2.5 are incremental thresholds; therefore, the concentrations without background are compared to the thresholds. The thresholds for NO<sub>2</sub> and CO are absolute thresholds; therefore, the total concentrations (with background) are compared to the thresholds. NO<sub>2</sub> thresholds represent the 2007 adopted CAAQS values.

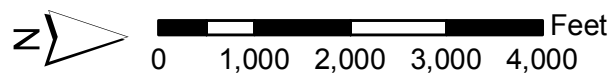
In accordance with SCAQMD guidance (SCAQMD 2005), ship transit emissions, offsite tugboat emissions, and offsite haul truck transport emissions are considered offsite emissions and were not included in the modeling.

NO<sub>2</sub> concentrations were calculated using the ozone limiting method that uses ozone data from the North Long Beach monitoring station.

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SOURCE: USA Imagery (02-15-07; 0.3m)



**Figure D2.5-1**  
**Maximum Air Quality Concentration Locations**  
**Construction (without Mitigation)**  
**San Pedro Waterfront Project**

<i>Pollutant</i>	<i>Averaging Time</i>	<i>Background Concentration</i> ( $\mu\text{g}/\text{m}^3$ )	<i>Maximum Concentration</i> (without background) ( $\mu\text{g}/\text{m}^3$ )	<i>Total Ground-Level Concentration</i> ( $\mu\text{g}/\text{m}^3$ )	<i>SCAQMD Threshold</i> ( $\mu\text{g}/\text{m}^3$ )
$\mu\text{g}/\text{m}^3$ micrograms per cubic meter					

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Both 1-hour and 8-hour CO concentrations are below the SCAQMD thresholds.

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The maximum 24-hour  $\text{PM}_{10}$  increment due to construction is  $198.8 \mu\text{g}/\text{m}^3$  and the maximum  $\text{PM}_{2.5}$  increment is  $92.0 \mu\text{g}/\text{m}^3$ . Both are above the SCAQMD  $\text{PM}_{10}$  and  $\text{PM}_{2.5}$  increment thresholds of  $10.4 \mu\text{g}/\text{m}^3$  for construction.

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### D2.5.1.2 Mitigated Emissions

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Table D2.5-2 summarizes the AERMOD modeling results of mitigated emissions. The  $\text{NO}_2$  and CO concentrations due to construction were added to the maximum background concentrations monitored at North Long Beach Station during the last 4 years (2004–2007). The total ground-level concentrations were compared with the SCAQMD thresholds. The AERMOD modeling results for  $\text{PM}_{10}$  and  $\text{PM}_{2.5}$ , which represent the incremental increases due to the construction project were compared directly to the  $\text{PM}_{10}$  and  $\text{PM}_{2.5}$  thresholds without adding a background concentration.

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Locations of the maximum  $\text{NO}_2$  and CO concentrations and maximum  $\text{PM}_{10}$  and  $\text{PM}_{2.5}$  increments for construction are shown in Figure D2.5-2

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Table D2.5-2 shows that the maximum 1-hour  $\text{NO}_2$  concentration of 2,848 micrograms per cubic meter ( $\mu\text{g}/\text{m}^3$ ) exceeds the SCAQMD threshold for construction. Both 1-hour and 8-hour CO concentrations are below the SCAQMD thresholds.

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The maximum 24-hour  $\text{PM}_{10}$  and  $\text{PM}_{2.5}$  concentration increments due to construction are  $58.0 \mu\text{g}/\text{m}^3$  and  $48.3 \mu\text{g}/\text{m}^3$  respectively. The  $\text{PM}_{10}$  concentration increment exceeds the SCAQMD threshold of  $10.4 \mu\text{g}/\text{m}^3$ . The  $\text{PM}_{2.5}$  increment concentration also exceeds the SCAQMD threshold of  $10.4 \mu\text{g}/\text{m}^3$ .

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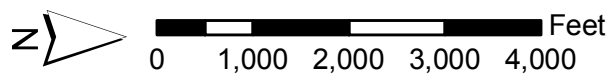
**Table D2.5-2.** Maximum  $\text{NO}_2$ , CO,  $\text{PM}_{10}$  and  $\text{PM}_{2.5}$  Impacts—Construction with Mitigation

<i>Pollutant</i>	<i>Averaging Time</i>	<i>Background Concentration</i> ( $\mu\text{g}/\text{m}^3$ )	<i>Maximum Concentration</i> (without background) ( $\mu\text{g}/\text{m}^3$ )	<i>Total Ground-Level Concentration</i> ( $\mu\text{g}/\text{m}^3$ )	<i>SCAQMD Threshold<sup>a</sup></i> ( $\mu\text{g}/\text{m}^3$ )
$\text{NO}_2$	1-hour	263	2,585	<b>2,848</b>	338
CO	1-hour	4,809	10,231	15,040	23,000



K:\GIS\PROJECTS\POLA\0107407\MAPDOC\AQ\20080816\FIGD2\_5\_2\_MAX\_RECEIPT\_LOCS\_MTG.MXD SLM (09-12-08)

SOURCE: USA Imagery (02-15-07; 0.3m)



**Figure D2.5-2**  
**Maximum Air Quality Concentration Locations**  
**Construction (with Mitigation)**  
**San Pedro Waterfront Project**

<i>Pollutant</i>	<i>Averaging Time</i>	<i>Background Concentration (µg/m<sup>3</sup>)</i>	<i>Maximum Concentration (without background) (µg/m<sup>3</sup>)</i>	<i>Total Ground-Level Concentration (µg/m<sup>3</sup>)</i>	<i>SCAQMD Threshold<sup>a</sup> (µg/m<sup>3</sup>)</i>
	8-hour	4,008	1,994	6,002	10,000
PM <sub>10</sub>	24-hour	—	<b>58.0</b>	—	10.4
PM <sub>2.5</sub>	24-hour	—	<b>48.3</b>	—	10.4

Notes:  
 Exceedances of the thresholds are indicated in **bold**.  
 Construction schedules are assumed to be 8 hours per day for all construction equipments and vehicles.  
 In accordance with SCAQMD guidance, ship transit emissions, tugboat emissions after leaving the construction area, and offsite haul-truck transport emissions are considered offsite emissions and were not included in the modeling (SCAQMD 2005a). However, onsite truck emissions and tugboat hoteling are considered onsite emissions and, therefore, were included in the modeling.  
 The threshold for PM<sub>10</sub> and PM<sub>2.5</sub> are incremental threshold; therefore, the concentration without background is compared to the threshold.  
 The background concentrations represent the maximum concentrations monitored at the Long Beach Monitoring Station during 2004 through 2007.  
 NO<sub>2</sub> concentrations were calculated using the ozone-limiting method that uses ozone data from the North Long Beach monitoring station.  
 µg/m<sup>3</sup> = micrograms per cubic meter

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2 **D2.5.2 Operational Impacts**

3 **D2.5.2.1 CEQA and NEPA Baselines**

4 Table D2.5-3 summarizes NO<sub>2</sub>, CO, PM<sub>10</sub>, and PM<sub>2.5</sub> concentrations for CEQA  
 5 baseline and NEPA baseline operations. The maximum modeled concentrations for  
 6 NO<sub>2</sub> and CO were added to background concentrations for the total ground-level  
 7 concentrations. The maximum concentration locations are shown in Figures D2.5-3  
 8 and D2.5-4.

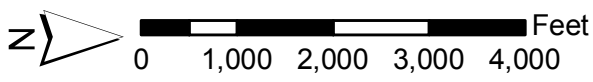
9 The CEQA baseline and NEPA baseline concentrations serve as the baseline levels  
 10 against which the PM<sub>10</sub> and PM<sub>2.5</sub> incremental concentrations are determined for the  
 11 proposed Project, Mitigated Project, and other project alternatives. The PM<sub>10</sub> and  
 12 PM<sub>2.5</sub> increment relative to CEQA baseline concentrations is used to determine  
 13 impacts under CEQA, and the PM<sub>10</sub> increment relative to NEPA baseline  
 14 concentrations is used to determine impacts under NEPA.



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SOURCE: USA Imagery (02-15-07; 0.3m)

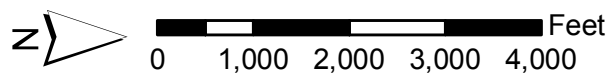


**Figure D2.5-3**  
**Maximum Concentration Locations of**  
**CEQA Baseline Operation**  
**San Pedro Waterfront Project**

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SOURCE: USA Imagery (02-15-07; 0.3m)



**Figure D2.5-4**  
**Maximum Concentration Locations of**  
**NEPA Baseline Operation**  
**San Pedro Waterfront Project**

1 **Table D2.5-3. CEQA Baseline and NEPA Baseline Concentrations during Operation**

<i>Pollutant</i>	<i>Averaging Time</i>	<i>Maximum Modeled Concentration of CEQA Baseline (<math>\mu\text{g}/\text{m}^3</math>)</i>	<i>Maximum Modeled Concentration of NEPA Baseline (<math>\mu\text{g}/\text{m}^3</math>)</i>	<i>Background Concentration<sup>a</sup> (<math>\mu\text{g}/\text{m}^3</math>)</i>	<i>Total Ground-Level Concentration – CEQA Baseline (<math>\mu\text{g}/\text{m}^3</math>)</i>	<i>Total Ground-Level Concentration – NEPA Baseline (<math>\mu\text{g}/\text{m}^3</math>)</i>
NO <sub>2</sub>	1-hour	1,716	836	263	1,979	1,099
	Annual	93	45	50	143	95
CO	1-hour	8,062	5,528	4,809	12,871	10,337
	8-hour	3,076	2,099	4,008	5,175	6,107
PM <sub>10</sub>	24-hour	32.3	22.8	—	—	—
	Annual	4.3	6.5	—	—	—
PM <sub>2.5</sub>	24-hour	25.8	17.1	—	—	—

a. The background concentrations were obtained from the North Long Beach Monitoring Station. The maximum data were used for 2004, 2005, and 2006.

2

3 **D2.5.2.2 Proposed Project without Mitigation**

4 Table D2.5-4 presents a summary of NO<sub>2</sub> and CO concentrations associated with  
5 proposed Project operations without mitigation. Maximum modeled NO<sub>2</sub> and CO  
6 concentrations were added to background concentrations for total ground-level  
7 concentrations, which were then compared with SCAQMD thresholds.

8 Maximum modeled PM<sub>10</sub> and PM<sub>2.5</sub> concentrations associated with proposed Project,  
9 CEQA baseline, and NEPA baseline operations, as well as the CEQA Increment  
10 (proposed Project minus CEQA baseline) and NEPA Increment (proposed Project  
11 minus NEPA baseline) are shown in Table D2.5-5. Worst-case increments of PM<sub>10</sub>  
12 and PM<sub>2.5</sub> concentrations were obtained by subtracting the CEQA or NEPA baseline  
13 concentrations from the proposed Project concentrations at each common receptor,  
14 and then selecting the receptor with the highest difference. The maximum  
15 increments among all receptors were compared to the SCAQMD thresholds. The  
16 example provided in the discussion of Impact AQ-7 for the proposed Project in  
17 Section 3.2.4.3, “Impacts and Mitigation,” of the EIS/EIR further illustrates how the  
18 increments are calculated.

19 The results in Tables D2.5-4 and D2.5-5 represent the maximum impacts predicted  
20 for the proposed Project at the maximum impact locations. The impacts at all other  
21 receptors would be less than these values.

22 The locations of maximum NO<sub>2</sub> and CO concentrations and PM<sub>10</sub> and PM<sub>2.5</sub>  
23 increments for proposed Project operations are shown in Figure D2.5-5. The  
24 locations of maximum incremental increases of PM<sub>10</sub> and PM<sub>2.5</sub> concentrations are  
25 not necessarily at the same locations as the maximum concentrations associated with  
26 proposed Project, CEQA baseline, or NEPA baseline operations alone.

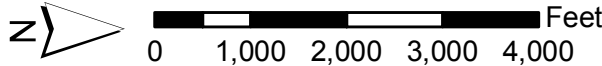
K:\GIS\PROJECTS\POLA\0107407\MAPDOC\AQ\20080816\FIGD2\_5\_MAX\_RECEIPT\_LOCS\_PP.MXD\_SLM (09-12-08)



**Legend**

- Project Area
- Maximum Concentration Location

SOURCE: USA Imagery (02-15-07; 0.3m)



**Figure D2.5-5**  
**Maximum Air Quality Concentration Locations**  
**Proposed Project Operation Without Mitigation**  
**San Pedro Waterfront Project**

1 **Table D2.5-4.** Maximum NO<sub>2</sub> and CO Concentrations Proposed Project Operation

<i>Pollutant</i>	<i>Averaging Time</i>	<i>Maximum Modeled Concentration of Proposed Project (µg/m<sup>3</sup>)</i>	<i>Background Concentration (µg/m<sup>3</sup>)</i>	<i>Total Ground-Level Concentration (µg/m<sup>3</sup>)</i>	<i>SCAQMD Threshold (µg/m<sup>3</sup>)</i>
NO <sub>2</sub>	1-hour	1,559	263	<b>2,006</b>	338
	Annual	74	53	<b>127</b>	56.4
CO	1-hour	6,229	4,809	11,038	23,000
	8-hour	2,362	4,008	6,370	10,000

Notes:

Exceedances of the thresholds are indicated in **bold**.

The background concentrations were obtained from the North Long Beach monitoring station. The maximum concentrations were used for 2004, 2005, 2006, and 2007.

NO<sub>2</sub> concentrations were calculated using the ozone limiting method that uses ozone data from the North Long Beach monitoring station. The conversion of NO<sub>x</sub> to NO<sub>2</sub> is dependent on the hourly ozone concentration and hourly NO<sub>x</sub> emission rates.

2 **Table D2.5-5.** Maximum PM<sub>10</sub> and PM<sub>2.5</sub> Impacts—Proposed Project Operations

	<i>Maximum Modeled Concentration of Proposed Project (µg/m<sup>3</sup>)</i>	<i>Maximum Modeled Concentration of CEQA Baseline (µg/m<sup>3</sup>)</i>	<i>Maximum Modeled Concentration of NEPA Baseline (µg/m<sup>3</sup>)</i>	<i>CEQA Increment (µg/m<sup>3</sup>)</i>	<i>NEPA Increment (µg/m<sup>3</sup>)</i>	<i>SCAQMD Threshold (µg/m<sup>3</sup>)</i>
PM <sub>10</sub> 24-hour	26.9	32.3	22.8	<b>15.5</b>	<b>15.4</b>	2.5
PM <sub>10</sub> Annual	7.3	4.3	6.5	<b>3.0</b>	<b>1.8</b>	1.0
PM <sub>2.5</sub> 24-hour	20.0	25.8	17.1	<b>12.3</b>	<b>12.3</b>	2.5

Notes:

Exceedances of the threshold are indicated in **bold**. The thresholds for PM<sub>10</sub> and PM<sub>2.5</sub> are incremental thresholds; therefore, the incremental concentration without background is compared to the threshold.

The maximum concentrations and increments presented in this table do not necessarily occur at the same receptor location. This means that the increments cannot necessarily be determined by simply subtracting the baseline concentrations from the proposed project concentration. [Table 3.2-35](#) in the discussion of Impact AQ-7 describes how the increments are calculated.

The CEQA increment represents the proposed Project minus the CEQA baseline. The NEPA increment represents the proposed Project minus the NEPA baseline.

3

4 Tables D2.5-4 and D2.5-5 show that the maximum 1-hour and annual concentrations  
5 of NO<sub>2</sub> associated with proposed Project operations are 2,006 and 127 µg/m<sup>3</sup>,  
6 respectively. The 1-hour and annual concentrations exceed the SCAQMD  
7 significance thresholds.

1 The maximum 1-hour and 8-hour CO concentrations associated with proposed  
2 project operations are well below the SCAQMD significance thresholds.

3 The CEQA and NEPA 24-hour PM<sub>10</sub> increments associated with proposed Project  
4 operations are predicted to be 15.5 and 15.4 µg/m<sup>3</sup>, respectively. The CEQA and  
5 NEPA 24-hour PM<sub>2.5</sub> increments associated with proposed Project operations are  
6 predicted to be 12.3 and 12.3 µg/m<sup>3</sup>, respectively. The increments exceed the  
7 SCAQMD threshold of 2.5 µg/m<sup>3</sup>. Finally, the CEQA and NEPA annual PM<sub>10</sub>  
8 increments associated with proposed Project operations are predicted to be 3.0 and  
9 1.8 µg/m<sup>3</sup>, respectively, exceeding the SCAQMD threshold of 1.0 µg/m<sup>3</sup>.

### 10 D2.5.2.3 Mitigated Project

11 Tables D2.5-6 and D2.5-7 present a summary of the maximum ground-level  
12 concentrations of NO<sub>2</sub> and CO and the PM<sub>10</sub> and PM<sub>2.5</sub> concentration increments  
13 associated with Mitigated Project operations. The mitigation measures for proposed  
14 Project operations are discussed in Section 3.2.4.3, “Impacts and Mitigation,” of the  
15 EIS/EIR. The NO<sub>2</sub> and CO concentrations, as well as the CEQA and NEPA PM<sub>10</sub>  
16 and PM<sub>2.5</sub> concentration increments, were evaluated using the same methodologies  
17 that were used for the proposed Project without mitigation.

18 Locations of the maximum NO<sub>2</sub> and CO concentrations and the PM<sub>10</sub> and PM<sub>2.5</sub>  
19 increments for Mitigated Project operations are shown in Figure D2.5-6.

20 **Table D2.5-6.** Maximum NO<sub>2</sub> and CO Impacts—Mitigated Project Operations

<i>Pollutant</i>	<i>Averaging Time</i>	<i>Maximum Modeled Concentration of Mitigated Project (µg/m<sup>3</sup>)</i>	<i>Background Concentration (µg/m<sup>3</sup>)</i>	<i>Total Ground-Level Concentration (µg/m<sup>3</sup>)</i>	<i>SCAQMD Threshold (µg/m<sup>3</sup>)</i>
NO <sub>2</sub>	1-hour	772	263	<b>1,035</b>	338
	Annual	55	53	<b>108</b>	56.4
CO	1-hour	6,182	4,809	10,991	23,000
	8-hour	2,355	4,008	6,363	10,000

Notes:

Exceedances of the thresholds are indicated in bold.

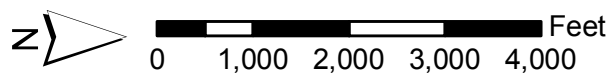
The background concentrations were obtained from the North Long Beach monitoring station. The maximum concentrations were used for 2004, 2005, 2006, and 2007.

NO<sub>2</sub> concentrations were calculated using the ozone limiting method that uses ozone data from the North Long Beach monitoring station. The conversion of NO<sub>x</sub> to NO<sub>2</sub> is dependent on the hourly ozone concentration and hourly NO<sub>x</sub> emission rates.

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SOURCE: USA Imagery (02-15-07; 0.3m)



**Figure D2.5-6**  
**Maximum Air Quality Concentration Locations**  
**Mitigated Project Operation**  
**San Pedro Waterfront Project**

1 **Table D2.5-7. Maximum PM<sub>10</sub> and PM<sub>2.5</sub> Impacts—Mitigated Project Operations**

	<i>Maximum Modeled Concentration of Mitigated Project (µg/m<sup>3</sup>)</i>	<i>Maximum Modeled Concentration of CEQA Baseline (µg/m<sup>3</sup>)</i>	<i>Maximum Modeled Concentration of NEPA Baseline (µg/m<sup>3</sup>)</i>	<i>CEQA Increment (µg/m<sup>3</sup>)</i>	<i>NEPA Increment (µg/m<sup>3</sup>)</i>	<i>SCAQMD Threshold (µg/m<sup>3</sup>)</i>
PM <sub>10</sub> 24-hour	18.9	32.3	22.8	<b>8.3</b>	<b>8.2</b>	2.5
PM <sub>10</sub> Annual	6.6	4.3	6.5	<b>2.4</b>	<b>1.1</b>	1.0
PM <sub>2.5</sub> 24-hour	13.5	25.8	17.1	<b>6.5</b>	<b>6.5</b>	2.5

Notes:

Exceedances of the threshold are indicated in **bold**. The thresholds for PM<sub>10</sub> and PM<sub>2.5</sub> are incremental thresholds; therefore, the incremental concentration without background is compared to the threshold.

The maximum concentrations and increments presented in this table do not necessarily occur at the same receptor location. This means that the increments cannot necessarily be determined by simply subtracting the baseline concentrations from the proposed project concentration. [Table 3.2-35](#) in the discussion of Impact AQ-7 describes how the increments are calculated.

The CEQA increment represents the mitigated proposed Project minus the CEQA baseline. The NEPA increment represents the mitigated proposed Project minus the NEPA baseline

2

3 Tables D2.5-6 and D2.5-7 show that the maximum 1-hour and annual concentrations  
 4 of NO<sub>2</sub> associated with Mitigated Project operations are 1,035 and 108 µg/m<sup>3</sup>,  
 5 respectively, exceeding the SCAQMD significance thresholds. The maximum 1-hour  
 6 and 8-hour CO concentrations are below the SCAQMD significance thresholds.

7 The CEQA and NEPA 24-hour PM<sub>10</sub> increments associated with Mitigated Project  
 8 operations are predicted to be 8.3 and 8.2 µg/m<sup>3</sup>, respectively; the 24-hour PM<sub>2.5</sub>  
 9 increments are predicted to be 6.5 and 6.5 µg/m<sup>3</sup>, respectively. The CEQA and  
 10 NEPA annual PM<sub>10</sub> increments associated with Mitigated Project operations are  
 11 predicted to be 2.4 and 1.1 µg/m<sup>3</sup>, respectively. These increments are lower than  
 12 those predicted for the proposed Project; however, they still exceed the SCAQMD  
 13 significance thresholds.

14 **D2.5.2.4 Alternative 6 (No Project)**

15 Tables D2.5-8 and D2.5-9 present summaries of the maximum ground-level NO<sub>2</sub> and  
 16 CO concentrations and PM<sub>10</sub> and PM<sub>2.5</sub> increments associated with No-Project  
 17 operations. The NO<sub>2</sub> and CO concentrations, as well as the CEQA and NEPA PM<sub>10</sub>  
 18 and PM<sub>2.5</sub> concentration increments, were evaluated using the same methodologies  
 19 used for the proposed Project.

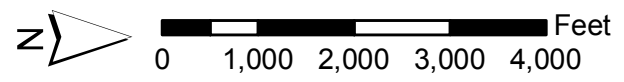
20 Locations of the maximum NO<sub>2</sub> and CO concentrations and the PM<sub>10</sub> and PM<sub>2.5</sub>  
 21 increments for the No-Project operations are shown in Figure D2.5-7.



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SOURCE: USA Imagery (02-15-07; 0.3m)



**Figure D2.5-7**  
**Maximum Air Quality Concentration Locations**  
**No Project Operation**  
**San Pedro Waterfront Project**

1 **Table D2.5-8. Maximum NO<sub>2</sub> and CO Impacts—Alternative 6 (No Project) Operations**

<i>Pollutant</i>	<i>Averaging Time</i>	<i>Maximum Modeled Concentration of No Project (µg/m<sup>3</sup>)</i>	<i>Background Concentration (µg/m<sup>3</sup>)</i>	<i>Total Ground-Level Concentration (µg/m<sup>3</sup>)</i>	<i>SCAQMD Threshold (µg/m<sup>3</sup>)</i>
NO <sub>2</sub>	1-hour	1,129	263	<b>1,392</b>	338
	Annual	56	53	<b>109</b>	56.4
CO	1-hour	3,634	4,809	8,443	23,000
	8-hour	1,361	4,008	5,369	10,000

Notes:

Exceedances of the thresholds are indicated in **bold**.

The background concentrations were obtained from the North Long Beach Monitoring Station. The maximum concentrations were used for 2004, 2005, 2006, and 2007.

NO<sub>2</sub> concentrations were calculated using the ozone limiting method using ozone data from the North Long Beach monitor. The conversion of NO<sub>x</sub> to NO<sub>2</sub> is dependent upon the hourly ozone concentration and hourly NO<sub>x</sub> emission rates.

2 **Table D2.5-9. Maximum PM<sub>10</sub> and PM<sub>2.5</sub> Impacts—Alternative 6 (No Project) Operation**

	<i>Maximum Modeled Concentration of No Project (µg/m<sup>3</sup>)</i>	<i>Maximum Modeled Concentration of CEQA Baseline (µg/m<sup>3</sup>)</i>	<i>CEQA Increment (µg/m<sup>3</sup>)</i>	<i>SCAQMD Threshold (µg/m<sup>3</sup>)</i>
PM <sub>10</sub> 24-hour	33.2	32.3	<b>7.7</b>	2.5
PM <sub>10</sub> Annual	5.1	4.3	0.8	1.0
PM <sub>2.5</sub> 24-hour	26.2	25.8	<b>6.0</b>	2.5

Notes:

Exceedances of the threshold are indicated in **bold**. The thresholds for PM<sub>10</sub> and PM<sub>2.5</sub> are incremental thresholds; therefore, the incremental concentration without background is compared to the threshold.

The maximum concentrations and increments presented in this table do not necessarily occur at the same receptor location. This means that the increments cannot necessarily be determined by simply subtracting the baseline concentrations from the proposed project concentration. **Table 3.2-45** in the discussion of Impact AQ-7 for the proposed Project describes how the increments are calculated.

The CEQA increment represents Alternative 6 minus baseline.

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Tables D2.5-8 and D2.5-9 show that the maximum 1-hour concentration of NO<sub>2</sub> for No-Project operations is 1,392 µg/m<sup>3</sup>, which exceeds the SCAQMD threshold. The maximum annual NO<sub>2</sub> concentration of 109 µg/m<sup>3</sup> also exceeds the SCAQMD threshold.

8

9

The maximum 1-hour and 8-hour CO concentrations are below the SCAQMD significance thresholds.

1 The 24-hour PM<sub>10</sub> CEQA increment associated with No-Project operations is  
 2 predicted to be 7.7 µg/m<sup>3</sup>, which would exceed the SCAQMD significance threshold;  
 3 the 24-hour PM<sub>2.5</sub> increment is predicted to be 6.0 µg/m<sup>3</sup>, also exceeding the  
 4 SCAQMD threshold. The annual PM<sub>10</sub> CEQA increment is predicted to be 0.8  
 5 µg/m<sup>3</sup>, which would not exceed the SCAQMD significance threshold.

## 6 D2.5.2.5 Operational Impacts for Other Project Alternatives

7 Maximum offsite ground-level concentrations of criteria pollutants estimated for the  
 8 operation of Project Alternatives 1 through 5 without and with mitigation are  
 9 presented in Tables D2.5-10 through D2.5-27. These data were developed by  
 10 modeling the operation emissions from each alternative.

11 **Table D2.5-10.** Maximum Offsite NO<sub>2</sub> and CO Concentrations—Alternative 1 Operations without  
 12 Mitigation

<i>Pollutant</i>	<i>Averaging Time</i>	<i>Maximum Modeled Concentration of Alternative 1 (µg/m<sup>3</sup>)</i>	<i>Background Concentration (µg/m<sup>3</sup>)</i>	<i>Total Ground-Level Concentration (µg/m<sup>3</sup>)</i>	<i>SCAQMD Threshold (µg/m<sup>3</sup>)</i>
NO <sub>2</sub>	1-hour	1,150	263	<b>1,413</b>	338
	Annual	56	53	<b>109</b>	56
CO	1-hour	5,633	4,809	10,442	23,000
	8-hour	2,134	4,008	6,142	10,000

Notes:

Exceedances of the thresholds are indicated in **bold**.

The background concentrations were obtained from the North Long Beach monitoring station. The maximum concentrations were used for 2004, 2005, 2006, and 2007.

NO<sub>2</sub> concentrations were calculated using the ozone limiting method that uses ozone data from the North Long Beach monitoring station. The conversion of NO<sub>x</sub> to NO<sub>2</sub> is dependent on the hourly ozone concentration and hourly NO<sub>x</sub> emission rates.

1 **Table D2.5-11. Maximum Offsite PM Concentrations—Alternative 1 Operations without Mitigation**

	<i>Maximum Modeled Concentration of Alternative 1 (µg/m<sup>3</sup>)</i>	<i>Maximum Modeled Concentration of CEQA Baseline (µg/m<sup>3</sup>)</i>	<i>Maximum Modeled Concentration of NEPA Baseline (µg/m<sup>3</sup>)</i>	<i>Ground-Level Concentration CEQA Increment (µg/m<sup>3</sup>)</i>	<i>Ground-Level Concentration NEPA Increment (µg/m<sup>3</sup>)</i>	<i>SCAQMD Threshold (µg/m<sup>3</sup>)</i>
PM <sub>10</sub> 24-hour	25.5	32.3	22.8	<b>7.8</b>	<b>7.7</b>	2.5
PM <sub>10</sub> Annual	6.6	4.3	6.5	<b>2.3</b>	1.0	1.0
PM <sub>2.5</sub> 24-hour	19.5	25.8	17.1	<b>6.2</b>	<b>6.2</b>	2.5

Notes:

Exceedances of the threshold are indicated in **bold**. The thresholds for PM<sub>10</sub> and PM<sub>2.5</sub> are incremental thresholds; therefore, the incremental concentration without background is compared to the threshold.

The maximum concentrations and increments presented in this table do not necessarily occur at the same receptor location. This means that the increments cannot necessarily be determined by simply subtracting the baseline concentrations from the Alternative 1 concentration. **Table 3.2-35** in the discussion of Impact AQ-7 for the proposed Project describes how the increments are calculated.

The CEQA increment represents Alternative 1 minus the CEQA baseline. The NEPA increment represents the Alternative 1 minus the NEPA baseline.

2 **Table D2.5-12. Maximum Offsite NO<sub>2</sub> and CO Concentrations—Alternative 1 Operations with Mitigation**

<i>Pollutant</i>	<i>Averaging Time</i>	<i>Maximum Modeled Concentration of Alternative 1 (µg/m<sup>3</sup>)</i>	<i>Background Concentration (µg/m<sup>3</sup>)</i>	<i>Total Ground-Level Concentration (µg/m<sup>3</sup>)</i>	<i>SCAQMD Threshold (µg/m<sup>3</sup>)</i>
NO <sub>2</sub>	1-hour	770	263	<b>1,033</b>	338
	Annual	41	53	<b>94</b>	56
CO	1-hour	5,591	4,809	10,400	23,000
	8-hour	2,128	4,008	6,136	10,000

Notes:

Exceedances of the thresholds are indicated in **bold**.

The background concentrations were obtained from the North Long Beach monitoring station. The maximum concentrations were used for 2004, 2005, 2006, and 2007.

NO<sub>2</sub> concentrations were calculated using the ozone limiting method that uses ozone data from the North Long Beach monitoring station. The conversion of NO<sub>x</sub> to NO<sub>2</sub> is dependent on the hourly ozone concentration and hourly NO<sub>x</sub> emission rates.

1 **Table D2.5-13.** Maximum Offsite PM Concentrations—Alternative 1 Operations with Mitigation

	<i>Maximum Modeled Concentration of Alternative 1 (<math>\mu\text{g}/\text{m}^3</math>)</i>	<i>Maximum Modeled Concentration of CEQA Baseline (<math>\mu\text{g}/\text{m}^3</math>)</i>	<i>Maximum Modeled Concentration of NEPA Baseline (<math>\mu\text{g}/\text{m}^3</math>)</i>	<i>Ground-Level Concentration CEQA Increment (<math>\mu\text{g}/\text{m}^3</math>)</i>	<i>Ground-Level Concentration NEPA Increment (<math>\mu\text{g}/\text{m}^3</math>)</i>	<i>SCAQMD Threshold (<math>\mu\text{g}/\text{m}^3</math>)</i>
PM <sub>10</sub> 24-hour	17.6	32.3	22.8	<b>4.4</b>	<b>4.1</b>	2.5
PM <sub>10</sub> Annual	5.8	4.3	6.5	<b>1.6</b>	0.3	1.0
PM <sub>2.5</sub> 24-hour	12.7	25.8	17.1	<b>3.3</b>	<b>3.2</b>	2.5

Notes:

Exceedances of the threshold are indicated in **bold**. The thresholds for PM<sub>10</sub> and PM<sub>2.5</sub> are incremental thresholds; therefore, the incremental concentration without background is compared to the threshold.

The maximum concentrations and increments presented in this table do not necessarily occur at the same receptor location. This means that the increments cannot necessarily be determined by simply subtracting the baseline concentrations from the Alternative 1 concentration. [Table 3.2-35](#) in the discussion of Impact AQ-7 for the proposed Project describes how the increments are calculated.

The CEQA increment represents Alternative 1 minus the CEQA baseline. The NEPA increment represents the Alternative 1 minus the NEPA baseline.

2 **Table D2.5-14.** Maximum Offsite NO<sub>2</sub> and CO Concentrations—Alternative 2 Operations without  
3 Mitigation

<i>Pollutant</i>	<i>Averaging Time</i>	<i>Maximum Modeled Concentration of Alternative 2 (<math>\mu\text{g}/\text{m}^3</math>)</i>	<i>Background Concentration (<math>\mu\text{g}/\text{m}^3</math>)</i>	<i>Total Ground-Level Concentration (<math>\mu\text{g}/\text{m}^3</math>)</i>	<i>SCAQMD Threshold (<math>\mu\text{g}/\text{m}^3</math>)</i>
NO <sub>2</sub>	1-hour	1,559	263	<b>1,822</b>	338
	Annual	62	53	<b>115</b>	56
CO	1-hour	6,205	4,809	11,014	23,000
	8-hour	2,353	4,008	6,361	10,000

Notes:

Exceedances of the thresholds are indicated in **bold**.

The background concentrations were obtained from the North Long Beach monitoring station. The maximum concentrations were used for 2004, 2005, 2006, and 2007.

NO<sub>2</sub> concentrations were calculated using the ozone limiting method that uses ozone data from the North Long Beach monitoring station. The conversion of NO<sub>x</sub> to NO<sub>2</sub> is dependent on the hourly ozone concentration and hourly NO<sub>x</sub> emission rates.

1 **Table D2.5-15.** Maximum Offsite PM Concentrations—Alternative 2 Operations without Mitigation

	<i>Maximum Modeled Concentration of Alternative 2 (<math>\mu\text{g}/\text{m}^3</math>)</i>	<i>Maximum Modeled Concentration of CEQA Baseline (<math>\mu\text{g}/\text{m}^3</math>)</i>	<i>Maximum Modeled Concentration of NEPA Baseline (<math>\mu\text{g}/\text{m}^3</math>)</i>	<i>Ground-Level Concentration CEQA Increment (<math>\mu\text{g}/\text{m}^3</math>)</i>	<i>Ground-Level Concentration NEPA Increment (<math>\mu\text{g}/\text{m}^3</math>)</i>	<i>SCAQMD Threshold (<math>\mu\text{g}/\text{m}^3</math>)</i>
PM <sub>10</sub> 24-hour	26.9	32.3	22.8	<b>15.5</b>	<b>15.4</b>	2.5
PM <sub>10</sub> Annual	7.3	4.3	6.5	<b>3.0</b>	<b>1.7</b>	1.0
PM <sub>2.5</sub> 24-hour	20.0	25.8	17.1	<b>12.3</b>	<b>12.3</b>	2.5

Notes:

Exceedances of the threshold are indicated in **bold**. The thresholds for PM<sub>10</sub> and PM<sub>2.5</sub> are incremental thresholds; therefore, the incremental concentration without background is compared to the threshold.

The maximum concentrations and increments presented in this table do not necessarily occur at the same receptor location. This means that the increments cannot necessarily be determined by simply subtracting the baseline concentrations from the proposed project concentration. **Table 3.2-35** in the discussion of Impact AQ-7 for the proposed Project describes how the increments are calculated.

The CEQA increment represents Alternative 2 minus the CEQA baseline. The NEPA increment represents Alternative 2 minus the NEPA baseline.

2 **Table D2.5-16.** Maximum Offsite NO<sub>2</sub> and CO Concentrations—Alternative 2 Operations with Mitigation

<i>Pollutant</i>	<i>Averaging Time</i>	<i>Maximum Modeled Concentration of Alternative 2 (<math>\mu\text{g}/\text{m}^3</math>)</i>	<i>Background Concentration (<math>\mu\text{g}/\text{m}^3</math>)</i>	<i>Total Ground-Level Concentration (<math>\mu\text{g}/\text{m}^3</math>)</i>	<i>SCAQMD Threshold (<math>\mu\text{g}/\text{m}^3</math>)</i>
NO <sub>2</sub>	1-hour	771	263	<b>1,034</b>	338
	Annual	44	53	<b>97</b>	56
CO	1-hour	6,159	4,809	10,968	23,000
	8-hour	2,346	4,008	6,354	10,000

Notes:

Exceedances of the thresholds are indicated in **bold**.

The background concentrations were obtained from the North Long Beach monitoring station. The maximum concentrations were used for 2004, 2005, 2006, and 2007.

NO<sub>2</sub> concentrations were calculated using the ozone limiting method that uses ozone data from the North Long Beach monitoring station. The conversion of NO<sub>x</sub> to NO<sub>2</sub> is dependent on the hourly ozone concentration and hourly NO<sub>x</sub> emission rates.

1 **Table D2.5-17. Maximum Offsite PM Concentrations—Alternative 2 Operations with Mitigation**

	<i>Maximum Modeled Concentration of Alternative 2 (<math>\mu\text{g}/\text{m}^3</math>)</i>	<i>Maximum Modeled Concentration of CEQA Baseline (<math>\mu\text{g}/\text{m}^3</math>)</i>	<i>Maximum Modeled Concentration of NEPA Baseline (<math>\mu\text{g}/\text{m}^3</math>)</i>	<i>Ground-Level Concentration CEQA Increment (<math>\mu\text{g}/\text{m}^3</math>)</i>	<i>Ground-Level Concentration NEPA Increment (<math>\mu\text{g}/\text{m}^3</math>)</i>	<i>SCAQMD Threshold (<math>\mu\text{g}/\text{m}^3</math>)</i>
PM <sub>10</sub> 24-hour	18.9	32.3	22.8	<b>8.3</b>	<b>8.2</b>	2.5
PM <sub>10</sub> Annual	6.6	4.3	6.5	<b>2.4</b>	<b>1.1</b>	1.0
PM <sub>2.5</sub> 24-hour	13.5	25.8	17.1	<b>6.5</b>	<b>6.5</b>	2.5

Notes:

Exceedances of the threshold are indicated in **bold**. The thresholds for PM<sub>10</sub> and PM<sub>2.5</sub> are incremental thresholds; therefore, the incremental concentration without background is compared to the threshold.

The maximum concentrations and increments presented in this table do not necessarily occur at the same receptor location. This means that the increments cannot necessarily be determined by simply subtracting the baseline concentrations from the proposed project concentration. [Table 3.2-35](#) in the discussion of Impact AQ-7 for the proposed Project describes how the increments are calculated.

The CEQA increment represents Alternative 2 minus the CEQA baseline. The NEPA increment represents Alternative 2 minus the NEPA baseline.

2 **Table D2.5-18. Maximum Offsite NO<sub>2</sub> and CO Concentrations—Alternative 3 Operations without**  
3 **Mitigation**

<i>Pollutant</i>	<i>Averaging Time</i>	<i>Maximum Modeled Concentration of Alternative 3 (<math>\mu\text{g}/\text{m}^3</math>)</i>	<i>Background Concentration (<math>\mu\text{g}/\text{m}^3</math>)</i>	<i>Total Ground-Level Concentration (<math>\mu\text{g}/\text{m}^3</math>)</i>	<i>SCAQMD Threshold (<math>\mu\text{g}/\text{m}^3</math>)</i>
NO <sub>2</sub>	1-hour	1,150	263	<b>1,413</b>	338
	Annual	54	53	<b>107</b>	56
CO	1-hour	4,471	4,809	9,280	23,000
	8-hour	1,685	4,008	5,693	10,000

Notes:

Exceedances of the thresholds are indicated in **bold**.

The background concentrations were obtained from the North Long Beach monitoring station. The maximum concentrations were used for 2004, 2005, 2006, and 2007.

NO<sub>2</sub> concentrations were calculated using the ozone limiting method that uses ozone data from the North Long Beach monitoring station. The conversion of NO<sub>x</sub> to NO<sub>2</sub> is dependent on the hourly ozone concentration and hourly NO<sub>x</sub> emission rates.

1 **Table D2.5-19.** Maximum Offsite PM Concentrations—Alternative 3 Operations without Mitigation

	<i>Maximum Modeled Concentration of Alternative 3 (µg/m<sup>3</sup>)</i>	<i>Maximum Modeled Concentration of CEQA Baseline (µg/m<sup>3</sup>)</i>	<i>Maximum Modeled Concentration of NEPA Baseline (µg/m<sup>3</sup>)</i>	<i>Ground-Level Concentration CEQA Increment (µg/m<sup>3</sup>)</i>	<i>Ground-Level Concentration NEPA Increment (µg/m<sup>3</sup>)</i>	<i>SCAQMD Threshold (µg/m<sup>3</sup>)</i>
PM <sub>10</sub> 24-hour	24.4	32.3	22.8	<b>7.7</b>	<b>7.7</b>	2.5
PM <sub>10</sub> Annual	5.5	4.3	6.5	<b>1.2</b>	0.5	1.0
PM <sub>2.5</sub> 24-hour	19.0	25.8	17.1	<b>6.1</b>	<b>6.1</b>	2.5

Notes:

Exceedances of the threshold are indicated in **bold**. The thresholds for PM<sub>10</sub> and PM<sub>2.5</sub> are incremental thresholds; therefore, the incremental concentration without background is compared to the threshold.

The maximum concentrations and increments presented in this table do not necessarily occur at the same receptor location. This means that the increments cannot necessarily be determined by simply subtracting the baseline concentrations from the proposed project concentration. [Table 3.2-35](#) in the discussion of Impact AQ-7 for the proposed Project describes how the increments are calculated. The CEQA increment represents Alternative 2 minus the CEQA baseline. The NEPA increment represents Alternative 2 minus the NEPA baseline.

2 **Table D2.5-20.** Maximum Offsite NO<sub>2</sub> and CO Concentrations—Alternative 3 Operations with Mitigation

<i>Pollutant</i>	<i>Averaging Time</i>	<i>Maximum Modeled Concentration of Alternative 3 (µg/m<sup>3</sup>)</i>	<i>Background Concentration (µg/m<sup>3</sup>)</i>	<i>Total Ground-Level Concentration (µg/m<sup>3</sup>)</i>	<i>SCAQMD Threshold (µg/m<sup>3</sup>)</i>
NO <sub>2</sub>	1-hour	769	263	<b>1,032</b>	338
	Annual	36	53	<b>89</b>	56
CO	1-hour	4,429	4,809	9,238	23,000
	8-hour	1,679	4,008	5,687	10,000

Notes:

Exceedances of the thresholds are indicated in **bold**.

The background concentrations were obtained from the North Long Beach monitoring station. The maximum concentrations were used for 2004, 2005, 2006, and 2007.

NO<sub>2</sub> concentrations were calculated using the ozone limiting method that uses ozone data from the North Long Beach monitoring station. The conversion of NO<sub>x</sub> to NO<sub>2</sub> is dependent on the hourly ozone concentration and hourly NO<sub>x</sub> emission rates.



1 **Table D2.5-21. Maximum Offsite PM Concentrations—Alternative 3 Operations with Mitigation**

	<i>Maximum Modeled Concentration of Alternative 3 (µg/m<sup>3</sup>)</i>	<i>Maximum Modeled Concentration of CEQA Baseline (µg/m<sup>3</sup>)</i>	<i>Maximum Modeled Concentration of NEPA Baseline (µg/m<sup>3</sup>)</i>	<i>Ground-Level Concentration CEQA Increment (µg/m<sup>3</sup>)</i>	<i>Ground-Level Concentration NEPA Increment (µg/m<sup>3</sup>)</i>	<i>SCAQMD Threshold (µg/m<sup>3</sup>)</i>
PM <sub>10</sub> 24-hour	16.0	32.3	22.8	<b>4.2</b>	<b>4.0</b>	2.5
PM <sub>10</sub> Annual	4.8	4.3	6.5	0.6	0.1	1.0
PM <sub>2.5</sub> 24-hour	11.7	25.8	17.1	<b>3.2</b>	<b>3.2</b>	2.5

Notes:

Exceedances of the threshold are indicated in **bold**. The thresholds for PM<sub>10</sub> and PM<sub>2.5</sub> are incremental thresholds; therefore, the incremental concentration without background is compared to the threshold.

The maximum concentrations and increments presented in this table do not necessarily occur at the same receptor location. This means that the increments cannot necessarily be determined by simply subtracting the baseline concentrations from the proposed project concentration. [Table 3.2-35](#) in the discussion of Impact AQ-7 for the proposed Project describes how the increments are calculated.

The CEQA increment represents Alternative 2 minus the CEQA baseline. The NEPA increment represents Alternative 2 minus the NEPA baseline.

2 **Table D2.5-22. Maximum Offsite NO<sub>2</sub> and CO Concentrations—Alternative 4 Operations without**  
 3 **Mitigation**

<i>Pollutant</i>	<i>Averaging Time</i>	<i>Maximum Modeled Concentration of Alternative 4 (µg/m<sup>3</sup>)</i>	<i>Background Concentration (µg/m<sup>3</sup>)</i>	<i>Total Ground-Level Concentration (µg/m<sup>3</sup>)</i>	<i>SCAQMD Threshold (µg/m<sup>3</sup>)</i>
NO <sub>2</sub>	1-hour	1,131	263	<b>1,394</b>	338
	Annual	63	53	<b>116</b>	56
CO	1-hour	5,645	4,809	10,454	23,000
	8-hour	2,133	4,008	6,141	10,000

Notes:

Exceedances of the thresholds are indicated in **bold**.

The background concentrations were obtained from the North Long Beach monitoring station. The maximum concentrations were used for 2004, 2005, 2006, and 2007.

NO<sub>2</sub> concentrations were calculated using the ozone limiting method that uses ozone data from the North Long Beach monitoring station. The conversion of NO<sub>x</sub> to NO<sub>2</sub> is dependent on the hourly ozone concentration and hourly NO<sub>x</sub> emission rates

1 **Table D2.5-23.** Maximum Offsite PM Concentrations—Alternative 4 Operations without Mitigation

	<i>Maximum Modeled Concentration of Alternative 4 (<math>\mu\text{g}/\text{m}^3</math>)</i>	<i>Maximum Modeled Concentration of CEQA Baseline (<math>\mu\text{g}/\text{m}^3</math>)</i>	<i>Maximum Modeled Concentration of NEPA Baseline (<math>\mu\text{g}/\text{m}^3</math>)</i>	<i>Ground-Level Concentration CEQA Increment (<math>\mu\text{g}/\text{m}^3</math>)</i>	<i>Ground-Level Concentration NEPA Increment (<math>\mu\text{g}/\text{m}^3</math>)</i>	<i>SCAQMD Threshold (<math>\mu\text{g}/\text{m}^3</math>)</i>
PM <sub>10</sub> 24-hour	34.3	32.3	22.8	<b>9.4</b>	<b>14.7</b>	2.5
PM <sub>10</sub> Annual	6.8	4.3	6.5	<b>2.5</b>	<b>1.3</b>	1.0
PM <sub>2.5</sub> 24-hour	26.9	25.8	17.1	<b>7.0</b>	<b>11.8</b>	2.5

Notes:

Exceedances of the threshold are indicated in **bold**. The thresholds for PM<sub>10</sub> and PM<sub>2.5</sub> are incremental thresholds; therefore, the incremental concentration without background is compared to the threshold.

The maximum concentrations and increments presented in this table do not necessarily occur at the same receptor location. This means that the increments cannot necessarily be determined by simply subtracting the baseline concentrations from the proposed project concentration. [Table 3.2-35](#) in the discussion of Impact AQ-7 for the proposed Project describes how the increments are calculated.

The CEQA increment represents Alternative 4 minus the CEQA baseline. The NEPA increment represents Alternative 4 minus the NEPA baseline.

2 **Table D2.5-24.** Maximum Offsite NO<sub>2</sub> and CO Concentrations—Alternative 4 Operations with Mitigation

<i>Pollutant</i>	<i>Averaging Time</i>	<i>Maximum Modeled Concentration of Alternative 4 (<math>\mu\text{g}/\text{m}^3</math>)</i>	<i>Background Concentration (<math>\mu\text{g}/\text{m}^3</math>)</i>	<i>Total Ground-Level Concentration (<math>\mu\text{g}/\text{m}^3</math>)</i>	<i>SCAQMD Threshold (<math>\mu\text{g}/\text{m}^3</math>)</i>
NO <sub>2</sub>	1-hour	836	263	<b>1,099</b>	338
	Annual	45	53	<b>98</b>	56
CO	1-hour	5,580	4,809	10,389	23,000
	8-hour	2,120	4,008	6,128	10,000

Notes:

Exceedances of the thresholds are indicated in **bold**.

The background concentrations were obtained from the North Long Beach monitoring station. The maximum concentrations were used for 2004, 2005, 2006, and 2007.

NO<sub>2</sub> concentrations were calculated using the ozone limiting method that uses ozone data from the North Long Beach monitoring station. The conversion of NO<sub>x</sub> to NO<sub>2</sub> is dependent on the hourly ozone concentration and hourly NO<sub>x</sub> emission rates.

1 **Table D2.5-25.** Maximum Offsite PM Concentrations—Alternative 4 Operations with Mitigation

	<i>Maximum Modeled Concentration of Alternative 4 (<math>\mu\text{g}/\text{m}^3</math>)</i>	<i>Maximum Modeled Concentration of CEQA Baseline (<math>\mu\text{g}/\text{m}^3</math>)</i>	<i>Maximum Modeled Concentration of NEPA Baseline (<math>\mu\text{g}/\text{m}^3</math>)</i>	<i>Ground-Level Concentration CEQA Increment (<math>\mu\text{g}/\text{m}^3</math>)</i>	<i>Ground-Level Concentration NEPA Increment (<math>\mu\text{g}/\text{m}^3</math>)</i>	<i>SCAQMD Threshold (<math>\mu\text{g}/\text{m}^3</math>)</i>
PM <sub>10</sub> 24-hour	21.4	32.3	22.8	<b>3.5</b>	0.1	2.5
PM <sub>10</sub> Annual	5.6	4.3	6.5	<b>1.4</b>	<0.1	1.0
PM <sub>2.5</sub> 24-hour	15.8	25.8	17.1	<b>2.1</b>	0.1	2.5

Notes:

Exceedances of the threshold are indicated in **bold**. The thresholds for PM<sub>10</sub> and PM<sub>2.5</sub> are incremental thresholds; therefore, the incremental concentration without background is compared to the threshold.

The maximum concentrations and increments presented in this table do not necessarily occur at the same receptor location. This means that the increments cannot necessarily be determined by simply subtracting the baseline concentrations from the proposed project concentration. [Table 3.2-35](#) in the discussion of Impact AQ-7 for the proposed Project describes how the increments are calculated.

The CEQA increment represents Alternative 4 minus the CEQA baseline. The NEPA increment represents Alternative 4 minus the NEPA baseline.

2 **Table D2.5-26.** Maximum Offsite NO<sub>2</sub> and CO Concentrations—Alternative 5 Operations without  
3 Mitigation

<i>Pollutant</i>	<i>Averaging Time</i>	<i>Maximum Modeled Concentration of Alternative 5 (<math>\mu\text{g}/\text{m}^3</math>)</i>	<i>Background Concentration (<math>\mu\text{g}/\text{m}^3</math>)</i>	<i>Total Ground-Level Concentration (<math>\mu\text{g}/\text{m}^3</math>)</i>	<i>SCAQMD Threshold (<math>\mu\text{g}/\text{m}^3</math>)</i>
NO <sub>2</sub>	1-hour	1,131	263	<b>1,394</b>	338
	Annual	63	53	<b>116</b>	56
CO	1-hour	5,592	4,809	10,401	23,000
	8-hour	2,113	4,008	6,121	10,000

Notes:

Exceedances of the thresholds are indicated in **bold**.

The background concentrations were obtained from the North Long Beach monitoring station. The maximum concentrations were used for 2004, 2005, 2006, and 2007.

NO<sub>2</sub> concentrations were calculated using the ozone limiting method that uses ozone data from the North Long Beach monitoring station. The conversion of NO<sub>x</sub> to NO<sub>2</sub> is dependent on the hourly ozone concentration and hourly NO<sub>x</sub> emission rates.

1 **Table D2.5-27.** Maximum Offsite PM Concentrations—Alternative 5 Operations without Mitigation

	<i>Maximum Modeled Concentration of Alternative 5 (<math>\mu\text{g}/\text{m}^3</math>)</i>	<i>Maximum Modeled Concentration of CEQA Baseline (<math>\mu\text{g}/\text{m}^3</math>)</i>	<i>Ground-Level Concentration CEQA Increment (<math>\mu\text{g}/\text{m}^3</math>)</i>	<i>SCAQMD Threshold (<math>\mu\text{g}/\text{m}^3</math>)</i>
PM <sub>10</sub> 24-hour	35.2	32.3	<b>10.3</b>	2.5
PM <sub>10</sub> Annual	7.8	4.3	<b>3.5</b>	1.0
PM <sub>2.5</sub> 24-hour	27.4	25.8	<b>7.9</b>	2.5

Notes:

Exceedances of the threshold are indicated in **bold**. The thresholds for PM<sub>10</sub> and PM<sub>2.5</sub> are incremental thresholds; therefore, the incremental concentration without background is compared to the threshold.

The maximum concentrations and increments presented in this table do not necessarily occur at the same receptor location. This means that the increments cannot necessarily be determined by simply subtracting the baseline concentrations from the proposed project concentration. [Table 3.2-45](#) in the discussion of Impact AQ-7 for the proposed Project describes how the increments are calculated.

The CEQA increment represents Alternative 5 minus the CEQA baseline. The NEPA increment represents Alternative 5 minus the NEPA baseline.

2

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Urbemis 2007 Version 9.2.4

## Combined Annual Emissions Reports (Tons/Year)

File Name: C:\Documents and Settings\mslavick\Application Data\Urbemis\Version9a\Projects\SPW\_Existing\_2006\_wkdy\_z.urb924

Project Name: San Pedro Waterfront Existing 2006 Weekday Daily Diesel PM

Project Location: South Coast AQMD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

## Summary Report:

## OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (tons/year, unmitigated)	55.05	889.40	309.73	8.96	41.34	36.23	106,978.90

## SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (tons/year, unmitigated)	55.05	889.40	309.73	8.96	41.34	36.23	106,978.90

## Operational Unmitigated Detail Report:

## OPERATIONAL EMISSION ESTIMATES Annual Tons Per Year, Unmitigated

<u>Source</u>	ROG	NOX	CO	SO2	PM10	PM25	CO2
Port of Call Resturant Development	16.20	261.82	91.18	2.63	12.17	10.67	31,492.42
Port of Call Retail Development	5.26	85.00	29.60	0.86	3.95	3.46	10,223.67
Downtown Harbor Docking Slips	0.11	1.73	0.60	0.02	0.08	0.07	207.56
Port of Call Docking Slips	1.11	17.88	6.23	0.18	0.83	0.73	2,150.36
Temporary Red Car Maint Facility	0.12	1.87	0.65	0.02	0.09	0.08	224.68

Westways Liquid Bulk Terminal	2.81	45.41	15.81	0.46	2.11	1.85	5,462.18
Warehouses 9 & 10 Operations	0.20	3.30	1.15	0.03	0.15	0.13	396.68
S.S. Lane Victory	0.11	1.70	0.59	0.02	0.08	0.07	205.06
Cruise Ship Terminal Berth 87-93	28.89	466.75	162.55	4.70	21.69	19.01	56,143.23
Los Angeles Maritime Institute	0.14	2.32	0.81	0.02	0.11	0.09	278.62
Crowley Tugboat Office	0.10	1.62	0.56	0.02	0.08	0.07	194.44
<b>TOTALS (tons/year, unmitigated)</b>	<b>55.05</b>	<b>889.40</b>	<b>309.73</b>	<b>8.96</b>	<b>41.34</b>	<b>36.23</b>	<b>106,978.90</b>

Operational Settings:

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2006 Season: Annual

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
Port of Call Resturant Development		89.95	1000 sq ft	60.00	5,397.00	49,609.22
Port of Call Retail Development		44.33	1000 sq ft	40.00	1,773.20	16,105.09
Downtown Harbor Docking Slips		3.00	rooms	12.00	36.00	326.97
Port of Call Docking Slips		2.96	rooms	126.00	372.96	3,387.41
Temporary Red Car Maint Facility		3.00	employees	11.00	33.00	353.93
Westways Liquid Bulk Terminal		51.77	acres	13.00	673.01	8,604.43
Warehouses 9 & 10 Operations		3.00	employees	20.00	60.00	624.88
S.S. Lane Victory		3.60	1000 sq ft	10.00	36.00	323.03
Cruise Ship Terminal Berth 87-93		1.47	unknown	6,705.00	9,856.35	88,441.03
Los Angeles Maritime Institute		3.30	unknown	10.00	33.00	438.90
Crowley Tugboat Office		3.29	unknown	7.00	23.03	306.30
					18,293.55	168,521.19

Vehicle Fleet Mix



Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	4.2	0.0	0.0	100.0
Light Truck < 3750 lbs	7.0	0.0	0.0	100.0
Light Truck 3751-5750 lbs	1.8	0.0	0.0	100.0
Med Truck 5751-8500 lbs	0.0	0.0	0.0	100.0
Lite-Heavy Truck 8501-10,000 lbs	0.0	0.0	0.0	100.0
Lite-Heavy Truck 10,001-14,000 lbs	0.0	0.0	0.0	100.0
Med-Heavy Truck 14,001-33,000 lbs	0.0	0.0	0.0	100.0
Heavy-Heavy Truck 33,001-60,000 lbs	53.4	0.0	0.0	100.0
Other Bus	31.6	0.0	0.0	100.0
Urban Bus	0.0	0.0	0.0	100.0
Motorcycle	0.0	0.0	0.0	100.0
School Bus	0.0	0.0	0.0	100.0
Motor Home	2.0	0.0	0.0	100.0

Travel Conditions

	Residential			Commuter	Commercial	
	Home-Work	Home-Shop	Home-Other		Non-Work	Customer
Urban Trip Length (miles)	12.7	7.0	9.5	13.3	7.4	8.9
Rural Trip Length (miles)	17.6	12.1	14.9	15.4	9.6	12.6
Trip speeds (mph)	30.0	30.0	30.0	30.0	30.0	30.0
% of Trips - Residential	32.9	18.0	49.1			
% of Trips - Commercial (by land use)						
Port of Call Resturant Development				8.0	4.0	88.0
Port of Call Retail Development				5.0	2.5	92.5
Downtown Harbor Docking Slips				5.0	2.5	92.5
Port of Call Docking Slips				5.0	2.5	92.5
Temporary Red Car Maint Facility				50.0	25.0	25.0

Westways Liquid Bulk Terminal	90.0	5.0	5.0
Warehouses 9 & 10 Operations	41.5	20.8	37.8
S.S. Lane Victory	2.0	1.0	97.0
Cruise Ship Terminal Berth 87-93	2.0	1.0	97.0
Los Angeles Maritime Institute	100.0	0.0	0.0
Crowley Tugboat Office	100.0	0.0	0.0

Urbemis 2007 Version 9.2.4

## Combined Summer Emissions Reports (Pounds/Day)

File Name: C:\Documents and Settings\mslavick\Application Data\Urbemis\Version9a\Projects\SPW\_Existing\_2006\_wkdy\_z.urb924

Project Name: San Pedro Waterfront Existing 2006 Weekday Daily Diesel PM

Project Location: South Coast AQMD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

## Summary Report:

## OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (lbs/day, unmitigated)	301.62	4,708.66	1,697.16	49.05	226.52	198.54	586,185.72

## SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (lbs/day, unmitigated)	301.62	4,708.66	1,697.16	49.05	226.52	198.54	586,185.72

## Operational Unmitigated Detail Report:

## OPERATIONAL EMISSION ESTIMATES Summer Pounds Per Day, Unmitigated

<u>Source</u>	ROG	NOX	CO	SO2	PM10	PM25	CO2
Port of Call Resturant Development	88.79	1,386.13	499.62	14.44	66.68	58.44	172,561.19
Port of Call Retail Development	28.82	449.99	162.19	4.69	21.65	18.97	56,020.10
Downtown Harbor Docking Slips	0.59	9.14	3.29	0.10	0.44	0.39	1,137.34
Port of Call Docking Slips	6.06	94.65	34.11	0.99	4.55	3.99	11,782.80
Temporary Red Car Maint Facility	0.63	9.89	3.56	0.10	0.48	0.42	1,231.10

Westways Liquid Bulk Terminal	15.40	240.42	86.66	2.50	11.57	10.14	29,929.74
Warehouses 9 & 10 Operations	1.12	17.46	6.29	0.18	0.84	0.74	2,173.61
S.S. Lane Victory	0.58	9.03	3.25	0.09	0.43	0.38	1,123.62
Cruise Ship Terminal Berth 87-93	158.29	2,471.13	890.69	25.74	118.88	104.19	307,634.12
Los Angeles Maritime Institute	0.79	12.26	4.42	0.13	0.59	0.52	1,526.67
Crowley Tugboat Office	0.55	8.56	3.08	0.09	0.41	0.36	1,065.43
<b>TOTALS (lbs/day, unmitigated)</b>	<b>301.62</b>	<b>4,708.66</b>	<b>1,697.16</b>	<b>49.05</b>	<b>226.52</b>	<b>198.54</b>	<b>586,185.72</b>

Operational Settings:

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2006 Temperature (F): 80 Season: Summer

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
Port of Call Resturant Development		89.95	1000 sq ft	60.00	5,397.00	49,609.22
Port of Call Retail Development		44.33	1000 sq ft	40.00	1,773.20	16,105.09
Downtown Harbor Docking Slips		3.00	rooms	12.00	36.00	326.97
Port of Call Docking Slips		2.96	rooms	126.00	372.96	3,387.41
Temporary Red Car Maint Facility		3.00	employees	11.00	33.00	353.93
Westways Liquid Bulk Terminal		51.77	acres	13.00	673.01	8,604.43
Warehouses 9 & 10 Operations		3.00	employees	20.00	60.00	624.88
S.S. Lane Victory		3.60	1000 sq ft	10.00	36.00	323.03
Cruise Ship Terminal Berth 87-93		1.47	unknown	6,705.00	9,856.35	88,441.03
Los Angeles Maritime Institute		3.30	unknown	10.00	33.00	438.90
Crowley Tugboat Office		3.29	unknown	7.00	23.03	306.30
					<b>18,293.55</b>	<b>168,521.19</b>

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	4.2	0.0	0.0	100.0
Light Truck < 3750 lbs	7.0	0.0	0.0	100.0
Light Truck 3751-5750 lbs	1.8	0.0	0.0	100.0
Med Truck 5751-8500 lbs	0.0	0.0	0.0	100.0
Lite-Heavy Truck 8501-10,000 lbs	0.0	0.0	0.0	100.0
Lite-Heavy Truck 10,001-14,000 lbs	0.0	0.0	0.0	100.0
Med-Heavy Truck 14,001-33,000 lbs	0.0	0.0	0.0	100.0
Heavy-Heavy Truck 33,001-60,000 lbs	53.4	0.0	0.0	100.0
Other Bus	31.6	0.0	0.0	100.0
Urban Bus	0.0	0.0	0.0	100.0
Motorcycle	0.0	0.0	0.0	100.0
School Bus	0.0	0.0	0.0	100.0
Motor Home	2.0	0.0	0.0	100.0

Travel Conditions

	Residential			Commuter	Commercial	
	Home-Work	Home-Shop	Home-Other		Non-Work	Customer
Urban Trip Length (miles)	12.7	7.0	9.5	13.3	7.4	8.9
Rural Trip Length (miles)	17.6	12.1	14.9	15.4	9.6	12.6
Trip speeds (mph)	30.0	30.0	30.0	30.0	30.0	30.0
% of Trips - Residential	32.9	18.0	49.1			

% of Trips - Commercial (by land use)

Port of Call Resturant Development	8.0	4.0	88.0
Port of Call Retail Development	5.0	2.5	92.5
Downtown Harbor Docking Slips	5.0	2.5	92.5
Port of Call Docking Slips	5.0	2.5	92.5

Temporary Red Car Maint Facility	50.0	25.0	25.0
Westways Liquid Bulk Terminal	90.0	5.0	5.0
Warehouses 9 & 10 Operations	41.5	20.8	37.8
S.S. Lane Victory	2.0	1.0	97.0
Cruise Ship Terminal Berth 87-93	2.0	1.0	97.0
Los Angeles Maritime Institute	100.0	0.0	0.0
Crowley Tugboat Office	100.0	0.0	0.0

Urbemis 2007 Version 9.2.4

## Combined Annual Emissions Reports (Tons/Year)

File Name: C:\Documents and Settings\mslavick\Application Data\Urbemis\Version9a\Projects\SPW\_Proposed\_Project\_2015\_wkdy\_z.urb924

Project Name: San Pedro Waterfront Proposed Project 2015 Weekday Diesel PM

Project Location: South Coast AQMD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

## Summary Report:

## OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (tons/year, unmitigated)	44.23	637.82	250.49	2.16	32.58	26.69	231,031.54

## SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (tons/year, unmitigated)	44.23	637.82	250.49	2.16	32.58	26.69	231,031.54

## Operational Unmitigated Detail Report:

## OPERATIONAL EMISSION ESTIMATES Annual Tons Per Year, Unmitigated

<u>Source</u>	<u>ROG</u>	<u>NOX</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM25</u>	<u>CO2</u>
Cruise Parking Shuttle Outer Harbor	0.17	2.50	0.98	0.01	0.13	0.10	905.20
Cruise Ship Terminal Berth 91-93	9.09	131.06	51.47	0.44	6.69	5.49	47,471.82
Los Angeles Maritime Institute	0.04	0.57	0.22	0.00	0.03	0.02	204.77
Conference Facilities at POC	0.87	12.60	4.95	0.04	0.64	0.53	4,564.84
Cruise Ship Terminal Berth 45-50	8.57	123.61	48.54	0.42	6.31	5.18	44,772.88

San Pedro Park at 22nd & Miner St	0.60	8.68	3.41	0.03	0.44	0.36	3,142.36
Port of Call Restaurant Development	12.75	183.86	72.20	0.62	9.39	7.70	66,595.76
Port of Call Retail Development	8.79	126.82	49.81	0.43	6.48	5.31	45,938.12
S.S. Lane Victory	0.04	0.57	0.23	0.00	0.03	0.02	208.14
Ralph J Scott Fireboat Museum	0.04	0.57	0.23	0.00	0.03	0.02	208.14
Mercardo Warehouse 9 & 10 Reuse	0.89	12.79	5.02	0.04	0.65	0.54	4,632.38
Warehouse 9 & 10 Reuse	0.20	2.87	1.13	0.01	0.15	0.12	1,038.47
Red Car Maintenance Facility	0.18	2.64	1.04	0.01	0.14	0.11	957.60
Millennium Tugboat Office	0.14	1.96	0.77	0.01	0.10	0.08	711.30
Waterfront Promenade Town Sq	0.34	4.88	1.92	0.02	0.25	0.20	1,769.23
Fisherman Park	0.13	1.92	0.75	0.01	0.10	0.08	693.82
Research & Dev at Westways	1.15	16.52	6.49	0.06	0.84	0.69	5,984.51
Crowley Tugboat	0.04	0.54	0.21	0.00	0.03	0.02	197.37
Outer Harbor Park	0.20	2.86	1.12	0.01	0.15	0.12	1,034.83
<b>TOTALS (tons/year, unmitigated)</b>	<b>44.23</b>	<b>637.82</b>	<b>250.49</b>	<b>2.16</b>	<b>32.58</b>	<b>26.69</b>	<b>231,031.54</b>

Operational Settings:

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2015 Season: Annual

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
Cruise Parking Shuttle Outer Harbor		0.10	passengers	1,572.00	157.20	1,404.82
Cruise Ship Terminal Berth 91-93		1.46	passengers	5,240.00	7,650.40	73,673.35
Los Angeles Maritime Institute		3.30	employees	10.00	33.00	317.79
Conference Facilities at POC		2.60	attendees	300.00	780.00	7,084.35
Cruise Ship Terminal Berth 45-50		1.46	passengers	5,240.00	7,650.40	69,484.76
San Pedro Park at 22nd & Miner St		29.83	acres	18.00	536.94	4,876.76



Port of Call Restaurant Development	89.95	1000 sq ft	125.00	11,243.75	103,352.54
Port of Call Retail Development	44.32	1000 sq ft	175.00	7,756.00	71,293.15
S.S. Lane Victory	3.60	1000 sq ft	10.00	36.00	323.03
Ralph J Scott Fireboat Museum	3.60	1000 sq ft	10.00	36.00	323.03
Mercardo Warehouse 9 & 10 Reuse	22.17	1000 sq ft	35.00	775.95	7,189.18
Warehouse 9 & 10 Reuse	4.97	1000 sq ft	35.00	173.95	1,611.65
Red Car Maintenance Facility	3.02	employees	37.00	111.74	1,486.14
Millennium Tugboat Office	3.32	employees	25.00	83.00	1,103.90
Waterfront Promenade Town Sq	20.00	acres	15.30	306.00	2,745.74
Fisherman Park	20.00	acres	6.00	120.00	1,076.76
Research & Dev at Westways	79.62	acres	13.00	1,035.06	9,287.59
Crowley Tugboat	3.29	employees	7.00	23.03	306.30
Outer Harbor Park	29.83	acres	6.00	178.98	1,605.99
				38,687.40	358,546.83

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	1.5	0.0	0.0	100.0
Light Truck < 3750 lbs	2.8	0.0	0.0	100.0
Light Truck 3751-5750 lbs	0.0	0.0	0.0	100.0
Med Truck 5751-8500 lbs	0.0	0.0	0.0	100.0
Lite-Heavy Truck 8501-10,000 lbs	0.0	0.0	0.0	100.0
Lite-Heavy Truck 10,001-14,000 lbs	0.0	0.0	0.0	100.0
Med-Heavy Truck 14,001-33,000 lbs	0.0	0.0	0.0	100.0
Heavy-Heavy Truck 33,001-60,000 lbs	35.2	0.0	0.0	100.0
Other Bus	59.2	0.0	0.0	100.0
Urban Bus	0.0	0.0	0.0	100.0
Motorcycle	0.0	0.0	0.0	100.0
School Bus	0.0	0.0	0.0	100.0
Motor Home	1.3	0.0	0.0	100.0

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	12.7	7.0	9.5	13.3	7.4	8.9
Rural Trip Length (miles)	17.6	12.1	14.9	15.4	9.6	12.6
Trip speeds (mph)	30.0	30.0	30.0	30.0	30.0	30.0
% of Trips - Residential	32.9	18.0	49.1			
% of Trips - Commercial (by land use)						
Cruise Parking Shuttle Outer Harbor				1.0	0.5	98.5
Cruise Ship Terminal Berth 91-93				20.0	10.0	70.0
Los Angeles Maritime Institute				20.0	10.0	70.0
Conference Facilities at POC				5.0	2.5	92.5
Cruise Ship Terminal Berth 45-50				5.0	2.5	92.5
San Pedro Park at 22nd & Miner St				5.0	2.5	92.5
Port of Call Restaurant Development				8.0	4.0	88.0
Port of Call Retail Development				8.0	4.0	88.0
S.S. Lane Victory				2.0	1.0	97.0
Ralph J Scott Fireboat Museum				2.0	1.0	97.0
Mercardo Warehouse 9 & 10 Reuse				10.0	5.0	85.0
Warehouse 9 & 10 Reuse				10.0	5.0	85.0
Red Car Maintenance Facility				100.0	0.0	0.0
Millennium Tugboat Office				100.0	0.0	0.0
Waterfront Promenade Town Sq				2.0	1.0	97.0
Fisherman Park				2.0	1.0	97.0
Research & Dev at Westways				2.0	1.0	97.0
Crowley Tugboat				100.0	0.0	0.0
Outer Harbor Park				2.0	1.0	97.0

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Urbemis 2007 Version 9.2.4

## Combined Annual Emissions Reports (Tons/Year)

File Name: C:\Documents and Settings\mslavick\Application Data\Urbemis\Version9a\Projects\SPW\_Proposed\_Project\_2015\_wkend.urb924

Project Name: San Pedro Waterfront Proposed Project 2015 Weekend Diesel PM

Project Location: South Coast AQMD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

## Summary Report:

## OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (tons/year, unmitigated)	43.87	629.52	250.97	2.14	32.03	26.22	228,793.02

## SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (tons/year, unmitigated)	43.87	629.52	250.97	2.14	32.03	26.22	228,793.02

## Operational Unmitigated Detail Report:

## OPERATIONAL EMISSION ESTIMATES Annual Tons Per Year, Unmitigated

<u>Source</u>	ROG	NOX	CO	SO2	PM10	PM25	CO2
Cruise Parking Shuttle Outer Harbor	0.19	2.49	0.99	0.01	0.13	0.10	905.33
Cruise Ship Terminal Berth 91-93	9.14	130.64	52.09	0.44	6.65	5.45	47,479.08
Los Angeles Maritime Institute	0.01	0.09	0.03	0.00	0.00	0.00	31.03
Conference Facilities at POC	0.44	6.28	2.50	0.02	0.32	0.26	2,282.75
Cruise Ship Terminal Berth 45-50	8.62	123.21	49.12	0.42	6.27	5.14	44,779.38

San Pedro Park at 22nd & Miner St	1.34	19.26	7.68	0.07	0.98	0.80	6,999.97
Port of Call Restaurant Development	13.35	192.25	76.65	0.65	9.78	8.01	69,871.04
Port of Call Retail Development	8.33	119.91	47.81	0.41	6.10	5.00	43,581.28
S.S. Lane Victory	0.06	0.86	0.34	0.00	0.04	0.04	312.26
Ralph J Scott Fireboat Museum	0.06	0.86	0.34	0.00	0.04	0.04	312.26
Mercardo Warehouse 9 & 10 Reuse	0.84	12.09	4.82	0.04	0.62	0.50	4,394.83
Warehouse 9 & 10 Reuse	0.05	0.74	0.30	0.00	0.04	0.03	269.58
Red Car Maintenance Facility	0.18	2.64	1.05	0.01	0.13	0.11	960.94
Millennium Tugboat Office	0.02	0.33	0.13	0.00	0.02	0.01	120.00
Waterfront Promenade Town Sq	0.34	4.87	1.94	0.02	0.25	0.20	1,769.49
Fisherman Park	0.13	1.91	0.76	0.01	0.10	0.08	693.92
Research & Dev at Westways	0.32	4.65	1.85	0.02	0.24	0.19	1,688.41
Crowley Tugboat	0.01	0.09	0.04	0.00	0.00	0.00	34.20
Outer Harbor Park	0.44	6.35	2.53	0.02	0.32	0.26	2,307.27
<b>TOTALS (tons/year, unmitigated)</b>	<b>43.87</b>	<b>629.52</b>	<b>250.97</b>	<b>2.14</b>	<b>32.03</b>	<b>26.22</b>	<b>228,793.02</b>

Operational Settings:

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2015 Season: Annual

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
Cruise Parking Shuttle Outer Harbor		0.10	passengers	1,572.00	157.20	1,404.82
Cruise Ship Terminal Berth 91-93		1.46	passengers	5,240.00	7,650.40	73,673.35
Los Angeles Maritime Institute		0.50	employees	10.00	5.00	48.15
Conference Facilities at POC		1.30	attendees	300.00	390.00	3,542.17
Cruise Ship Terminal Berth 45-50		1.46	passengers	5,240.00	7,650.40	69,484.76

San Pedro Park at 22nd & Miner St	66.44	acres	18.00	1,195.92	10,861.94
Port of Call Restaurant Development	94.36	1000 sq ft	125.00	11,795.00	108,419.64
Port of Call Retail Development	42.04	1000 sq ft	175.00	7,357.00	67,625.54
S.S. Lane Victory	5.40	1000 sq ft	10.00	54.00	484.54
Ralph J Scott Fireboat Museum	5.40	1000 sq ft	10.00	54.00	484.54
Mercardo Warehouse 9 & 10 Reuse	21.03	1000 sq ft	35.00	736.05	6,819.50
Warehouse 9 & 10 Reuse	1.29	1000 sq ft	35.00	45.15	418.31
Red Car Maintenance Facility	3.03	employees	37.00	112.11	1,491.06
Millennium Tugboat Office	0.56	employees	25.00	14.00	186.20
Waterfront Promenade Town Sq	20.00	acres	15.30	306.00	2,745.74
Fisherman Park	20.00	acres	6.00	120.00	1,076.76
Research & Dev at Westways	22.46	acres	13.00	291.98	2,619.94
Crowley Tugboat	0.57	employees	7.00	3.99	53.07
Outer Harbor Park	66.50	acres	6.00	399.00	3,580.23
				38,337.20	355,020.26

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	1.5	0.2	99.6	0.2
Light Truck < 3750 lbs	2.8	0.0	0.0	100.0
Light Truck 3751-5750 lbs	0.0	0.0	0.0	100.0
Med Truck 5751-8500 lbs	0.0	0.0	0.0	100.0
Lite-Heavy Truck 8501-10,000 lbs	0.0	0.0	0.0	100.0
Lite-Heavy Truck 10,001-14,000 lbs	0.0	0.0	0.0	100.0
Med-Heavy Truck 14,001-33,000 lbs	0.0	0.0	0.0	100.0
Heavy-Heavy Truck 33,001-60,000 lbs	35.2	0.0	0.0	100.0
Other Bus	59.2	0.0	0.0	100.0
Urban Bus	0.0	0.0	0.0	100.0
Motorcycle	0.0	0.0	0.0	100.0
School Bus	0.0	0.0	0.0	100.0

Motor Home	1.3	0.0	0.0	100.0
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Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	12.7	7.0	9.5	13.3	7.4	8.9
Rural Trip Length (miles)	17.6	12.1	14.9	15.4	9.6	12.6
Trip speeds (mph)	30.0	30.0	30.0	30.0	30.0	30.0
% of Trips - Residential	32.9	18.0	49.1			
% of Trips - Commercial (by land use)						
Cruise Parking Shuttle Outer Harbor				1.0	0.5	98.5
Cruise Ship Terminal Berth 91-93				20.0	10.0	70.0
Los Angeles Maritime Institute				20.0	10.0	70.0
Conference Facilities at POC				5.0	2.5	92.5
Cruise Ship Terminal Berth 45-50				5.0	2.5	92.5
San Pedro Park at 22nd & Miner St				5.0	2.5	92.5
Port of Call Restaurant Development				8.0	4.0	88.0
Port of Call Retail Development				8.0	4.0	88.0
S.S. Lane Victory				2.0	1.0	97.0
Ralph J Scott Fireboat Museum				2.0	1.0	97.0
Mercardo Warehouse 9 & 10 Reuse				10.0	5.0	85.0
Warehouse 9 & 10 Reuse				10.0	5.0	85.0
Red Car Maintenance Facility				100.0	0.0	0.0
Millennium Tugboat Office				100.0	0.0	0.0
Waterfront Promenade Town Sq				2.0	1.0	97.0
Fisherman Park				2.0	1.0	97.0
Research & Dev at Westways				2.0	1.0	97.0
Crowley Tugboat				100.0	0.0	0.0
Outer Harbor Park				2.0	1.0	97.0

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Urbemis 2007 Version 9.2.4

## Combined Summer Emissions Reports (Pounds/Day)

File Name: C:\Documents and Settings\mslavick\Application  
 Data\Urbemis\Version9a\Projects\SPW\_Proposed\_Project\_2015\_wkdy\_z.urb924  
 Project Name: San Pedro Waterfront Proposed Project 2015 Weekday Diesel PM  
 Project Location: South Coast AQMD  
 On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006  
 Off-Road Vehicle Emissions Based on: OFFROAD2007

## Summary Report:

## OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (lbs/day, unmitigated)	242.32	3,376.90	1,372.53	11.81	178.50	146.40	1,265,926.36

## SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (lbs/day, unmitigated)	242.32	3,376.90	1,372.53	11.81	178.50	146.40	1,265,926.36

## Operational Unmitigated Detail Report:

## OPERATIONAL EMISSION ESTIMATES Summer Pounds Per Day, Unmitigated

<u>Source</u>	<u>ROG</u>	<u>NOX</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM25</u>	<u>CO2</u>
Cruise Parking Shuttle Outer Harbor	0.95	13.23	5.38	0.05	0.70	0.57	4,960.01
Cruise Ship Terminal Berth 91-93	49.79	693.88	282.02	2.42	36.68	30.08	260,119.56
Los Angeles Maritime Institute	0.21	2.99	1.22	0.01	0.16	0.13	1,122.03
Conference Facilities at POC	4.79	66.72	27.12	0.23	3.53	2.89	25,012.81
Cruise Ship Terminal Berth 45-50	46.95	654.43	265.99	2.29	34.59	28.37	245,330.82

San Pedro Park at 22nd & Miner St	3.30	45.93	18.67	0.16	2.43	1.99	17,218.44
Port of Call Restaurant Development	69.84	973.41	395.63	3.40	51.45	42.20	364,908.30
Port of Call Retail Development	48.18	671.46	272.91	2.35	35.49	29.11	251,715.74
S.S. Lane Victory	0.22	3.04	1.24	0.01	0.16	0.13	1,140.52
Ralph J Scott Fireboat Museum	0.22	3.04	1.24	0.01	0.16	0.13	1,140.52
Mercardo Warehouse 9 & 10 Reuse	4.86	67.71	27.52	0.24	3.58	2.94	25,382.93
Warehouse 9 & 10 Reuse	1.09	15.18	6.17	0.05	0.80	0.66	5,690.26
Red Car Maintenance Facility	1.00	14.00	5.69	0.05	0.74	0.61	5,247.14
Millennium Tugboat Office	0.75	10.40	4.23	0.04	0.55	0.45	3,897.56
Waterfront Promenade Town Sq	1.86	25.86	10.51	0.09	1.37	1.12	9,694.42
Fisherman Park	0.73	10.14	4.12	0.04	0.54	0.44	3,801.73
Research & Dev at Westways	6.28	87.47	35.55	0.31	4.62	3.79	32,791.84
Crowley Tugboat	0.21	2.88	1.17	0.01	0.15	0.13	1,081.45
Outer Harbor Park	1.09	15.13	6.15	0.05	0.80	0.66	5,670.28
<b>TOTALS (lbs/day, unmitigated)</b>	<b>242.32</b>	<b>3,376.90</b>	<b>1,372.53</b>	<b>11.81</b>	<b>178.50</b>	<b>146.40</b>	<b>1,265,926.36</b>

Operational Settings:

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2015 Temperature (F): 80 Season: Summer

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
Cruise Parking Shuttle Outer Harbor		0.10	passengers	1,572.00	157.20	1,404.82
Cruise Ship Terminal Berth 91-93		1.46	passengers	5,240.00	7,650.40	73,673.35
Los Angeles Maritime Institute		3.30	employees	10.00	33.00	317.79
Conference Facilities at POC		2.60	attendees	300.00	780.00	7,084.35
Cruise Ship Terminal Berth 45-50		1.46	passengers	5,240.00	7,650.40	69,484.76
San Pedro Park at 22nd & Miner St		29.83	acres	18.00	536.94	4,876.76
Port of Call Restaurant Development		89.95	1000 sq ft	125.00	11,243.75	103,352.54



Port of Call Retail Development	44.32	1000 sq ft	175.00	7,756.00	71,293.15
S.S. Lane Victory	3.60	1000 sq ft	10.00	36.00	323.03
Ralph J Scott Fireboat Museum	3.60	1000 sq ft	10.00	36.00	323.03
Mercardo Warehouse 9 & 10 Reuse	22.17	1000 sq ft	35.00	775.95	7,189.18
Warehouse 9 & 10 Reuse	4.97	1000 sq ft	35.00	173.95	1,611.65
Red Car Maintenance Facility	3.02	employees	37.00	111.74	1,486.14
Millennium Tugboat Office	3.32	employees	25.00	83.00	1,103.90
Waterfront Promenade Town Sq	20.00	acres	15.30	306.00	2,745.74
Fisherman Park	20.00	acres	6.00	120.00	1,076.76
Research & Dev at Westways	79.62	acres	13.00	1,035.06	9,287.59
Crowley Tugboat	3.29	employees	7.00	23.03	306.30
Outer Harbor Park	29.83	acres	6.00	178.98	1,605.99
				38,687.40	358,546.83

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	1.5	0.0	0.0	100.0
Light Truck < 3750 lbs	2.8	0.0	0.0	100.0
Light Truck 3751-5750 lbs	0.0	0.0	0.0	100.0
Med Truck 5751-8500 lbs	0.0	0.0	0.0	100.0
Lite-Heavy Truck 8501-10,000 lbs	0.0	0.0	0.0	100.0
Lite-Heavy Truck 10,001-14,000 lbs	0.0	0.0	0.0	100.0
Med-Heavy Truck 14,001-33,000 lbs	0.0	0.0	0.0	100.0
Heavy-Heavy Truck 33,001-60,000 lbs	35.2	0.0	0.0	100.0
Other Bus	59.2	0.0	0.0	100.0
Urban Bus	0.0	0.0	0.0	100.0
Motorcycle	0.0	0.0	0.0	100.0
School Bus	0.0	0.0	0.0	100.0
Motor Home	1.3	0.0	0.0	100.0

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	12.7	7.0	9.5	13.3	7.4	8.9
Rural Trip Length (miles)	17.6	12.1	14.9	15.4	9.6	12.6
Trip speeds (mph)	30.0	30.0	30.0	30.0	30.0	30.0
% of Trips - Residential	32.9	18.0	49.1			
% of Trips - Commercial (by land use)						
Cruise Parking Shuttle Outer Harbor				1.0	0.5	98.5
Cruise Ship Terminal Berth 91-93				20.0	10.0	70.0
Los Angeles Maritime Institute				20.0	10.0	70.0
Conference Facilities at POC				5.0	2.5	92.5
Cruise Ship Terminal Berth 45-50				5.0	2.5	92.5
San Pedro Park at 22nd & Miner St				5.0	2.5	92.5
Port of Call Restaurant Development				8.0	4.0	88.0
Port of Call Retail Development				8.0	4.0	88.0
S.S. Lane Victory				2.0	1.0	97.0
Ralph J Scott Fireboat Museum				2.0	1.0	97.0
Mercardo Warehouse 9 & 10 Reuse				10.0	5.0	85.0
Warehouse 9 & 10 Reuse				10.0	5.0	85.0
Red Car Maintenance Facility				100.0	0.0	0.0
Millennium Tugboat Office				100.0	0.0	0.0
Waterfront Promenade Town Sq				2.0	1.0	97.0
Fisherman Park				2.0	1.0	97.0
Research & Dev at Westways				2.0	1.0	97.0
Crowley Tugboat				100.0	0.0	0.0
Outer Harbor Park				2.0	1.0	97.0

Urbemis 2007 Version 9.2.4

## Combined Summer Emissions Reports (Pounds/Day)

File Name: C:\Documents and Settings\mslavick\Application Data\Urbemis\Version9a\Projects\SPW\_Proposed\_Project\_2015\_wkend.urb924

Project Name: San Pedro Waterfront Proposed Project 2015 Weekend Diesel PM

Project Location: South Coast AQMD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

## Summary Report:

## OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (lbs/day, unmitigated)	240.54	3,332.89	1,376.13	11.72	175.45	143.79	1,253,826.48

## SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (lbs/day, unmitigated)	240.54	3,332.89	1,376.13	11.72	175.45	143.79	1,253,826.48

## Operational Unmitigated Detail Report:

## OPERATIONAL EMISSION ESTIMATES Summer Pounds Per Day, Unmitigated

<u>Source</u>	<u>ROG</u>	<u>NOX</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM25</u>	<u>CO2</u>
Cruise Parking Shuttle Outer Harbor	1.08	13.19	5.44	0.05	0.69	0.57	4,961.38
Cruise Ship Terminal Berth 91-93	50.12	691.63	285.61	2.43	36.41	29.84	260,193.81
Los Angeles Maritime Institute	0.03	0.45	0.19	0.00	0.02	0.02	170.05
Conference Facilities at POC	2.41	33.25	13.73	0.12	1.75	1.43	12,509.88
Cruise Ship Terminal Berth 45-50	47.30	652.31	269.32	2.29	34.34	28.14	245,398.98
San Pedro Park at 22nd & Miner St	7.33	101.97	42.10	0.36	5.37	4.40	38,361.07

Port of Call Restaurant Development	73.14	1,017.83	420.25	3.57	53.58	43.91	382,905.73
Port of Call Retail Development	45.63	634.86	262.13	2.23	33.42	27.39	238,833.19
S.S. Lane Victory	0.33	4.55	1.88	0.02	0.24	0.20	1,711.25
Ralph J Scott Fireboat Museum	0.33	4.55	1.88	0.02	0.24	0.20	1,711.25
Mercardo Warehouse 9 & 10 Reuse	4.60	64.02	26.43	0.22	3.37	2.76	24,084.47
Warehouse 9 & 10 Reuse	0.29	3.93	1.62	0.01	0.21	0.17	1,477.36
Red Car Maintenance Facility	1.01	14.00	5.78	0.05	0.74	0.60	5,266.10
Millennium Tugboat Office	0.13	1.75	0.72	0.01	0.09	0.08	657.62
Waterfront Promenade Town Sq	1.85	25.78	10.64	0.09	1.36	1.11	9,697.09
Fisherman Park	0.73	10.11	4.17	0.04	0.53	0.44	3,802.78
Research & Dev at Westways	1.77	24.60	10.15	0.09	1.29	1.06	9,252.80
Crowley Tugboat	0.04	0.50	0.21	0.00	0.03	0.02	187.42
Outer Harbor Park	2.42	33.61	13.88	0.12	1.77	1.45	12,644.25
<b>TOTALS (lbs/day, unmitigated)</b>	<b>240.54</b>	<b>3,332.89</b>	<b>1,376.13</b>	<b>11.72</b>	<b>175.45</b>	<b>143.79</b>	<b>1,253,826.48</b>

Operational Settings:

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2015 Temperature (F): 80 Season: Summer

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
Cruise Parking Shuttle Outer Harbor		0.10	passengers	1,572.00	157.20	1,404.82
Cruise Ship Terminal Berth 91-93		1.46	passengers	5,240.00	7,650.40	73,673.35
Los Angeles Maritime Institute		0.50	employees	10.00	5.00	48.15
Conference Facilities at POC		1.30	attendees	300.00	390.00	3,542.17
Cruise Ship Terminal Berth 45-50		1.46	passengers	5,240.00	7,650.40	69,484.76
San Pedro Park at 22nd & Miner St		66.44	acres	18.00	1,195.92	10,861.94
Port of Call Restaurant Development		94.36	1000 sq ft	125.00	11,795.00	108,419.64

Port of Call Retail Development	42.04	1000 sq ft	175.00	7,357.00	67,625.54
S.S. Lane Victory	5.40	1000 sq ft	10.00	54.00	484.54
Ralph J Scott Fireboat Museum	5.40	1000 sq ft	10.00	54.00	484.54
Mercardo Warehouse 9 & 10 Reuse	21.03	1000 sq ft	35.00	736.05	6,819.50
Warehouse 9 & 10 Reuse	1.29	1000 sq ft	35.00	45.15	418.31
Red Car Maintenance Facility	3.03	employees	37.00	112.11	1,491.06
Millennium Tugboat Office	0.56	employees	25.00	14.00	186.20
Waterfront Promenade Town Sq	20.00	acres	15.30	306.00	2,745.74
Fisherman Park	20.00	acres	6.00	120.00	1,076.76
Research & Dev at Westways	22.46	acres	13.00	291.98	2,619.94
Crowley Tugboat	0.57	employees	7.00	3.99	53.07
Outer Harbor Park	66.50	acres	6.00	399.00	3,580.23
				38,337.20	355,020.26

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	1.5	0.2	99.6	0.2
Light Truck < 3750 lbs	2.8	0.0	0.0	100.0
Light Truck 3751-5750 lbs	0.0	0.0	0.0	100.0
Med Truck 5751-8500 lbs	0.0	0.0	0.0	100.0
Lite-Heavy Truck 8501-10,000 lbs	0.0	0.0	0.0	100.0
Lite-Heavy Truck 10,001-14,000 lbs	0.0	0.0	0.0	100.0
Med-Heavy Truck 14,001-33,000 lbs	0.0	0.0	0.0	100.0
Heavy-Heavy Truck 33,001-60,000 lbs	35.2	0.0	0.0	100.0
Other Bus	59.2	0.0	0.0	100.0
Urban Bus	0.0	0.0	0.0	100.0
Motorcycle	0.0	0.0	0.0	100.0
School Bus	0.0	0.0	0.0	100.0
Motor Home	1.3	0.0	0.0	100.0

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	12.7	7.0	9.5	13.3	7.4	8.9
Rural Trip Length (miles)	17.6	12.1	14.9	15.4	9.6	12.6
Trip speeds (mph)	30.0	30.0	30.0	30.0	30.0	30.0
% of Trips - Residential	32.9	18.0	49.1			
% of Trips - Commercial (by land use)						
Cruise Parking Shuttle Outer Harbor				1.0	0.5	98.5
Cruise Ship Terminal Berth 91-93				20.0	10.0	70.0
Los Angeles Maritime Institute				20.0	10.0	70.0
Conference Facilities at POC				5.0	2.5	92.5
Cruise Ship Terminal Berth 45-50				5.0	2.5	92.5
San Pedro Park at 22nd & Miner St				5.0	2.5	92.5
Port of Call Restaurant Development				8.0	4.0	88.0
Port of Call Retail Development				8.0	4.0	88.0
S.S. Lane Victory				2.0	1.0	97.0
Ralph J Scott Fireboat Museum				2.0	1.0	97.0
Mercardo Warehouse 9 & 10 Reuse				10.0	5.0	85.0
Warehouse 9 & 10 Reuse				10.0	5.0	85.0
Red Car Maintenance Facility				100.0	0.0	0.0
Millennium Tugboat Office				100.0	0.0	0.0
Waterfront Promenade Town Sq				2.0	1.0	97.0
Fisherman Park				2.0	1.0	97.0
Research & Dev at Westways				2.0	1.0	97.0
Crowley Tugboat				100.0	0.0	0.0
Outer Harbor Park				2.0	1.0	97.0

Urbemis 2007 Version 9.2.4

## Combined Annual Emissions Reports (Tons/Year)

File Name: C:\Documents and Settings\mslavick\Application Data\Urbemis\Version9a\Projects\SPW\_Proposed\_Project\_2022\_wkdy.urb924

Project Name: San Pedro Waterfront Proposed Project 2022 Weekday Diesel PM

Project Location: South Coast AQMD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

## Summary Report:

## OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (tons/year, unmitigated)	33.54	404.84	198.96	2.29	25.62	20.16	244,480.95

## SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (tons/year, unmitigated)	33.54	404.84	198.96	2.29	25.62	20.16	244,480.95

## Operational Unmitigated Detail Report:

## OPERATIONAL EMISSION ESTIMATES Annual Tons Per Year, Unmitigated

<u>Source</u>	ROG	NOX	CO	SO2	PM10	PM25	CO2
Cruise Parking Shuttle Outer Harbor	0.14	1.72	0.84	0.01	0.11	0.09	1,035.88
Cruise Ship Terminal Berth 91-93	7.45	89.96	44.21	0.51	5.69	4.47	54,328.20
Los Angeles Maritime Institute	0.03	0.34	0.17	0.00	0.02	0.02	204.76
Conference Facilities at POC	0.63	7.56	3.71	0.04	0.48	0.38	4,564.70
Cruise Ship Terminal Berth 45-50	7.03	84.85	41.70	0.48	5.37	4.22	51,239.45

San Pedro Park at 22nd & Miner St	0.43	5.20	2.56	0.03	0.33	0.26	3,142.27
Port of Call Restaurant Development	9.13	110.27	54.20	0.62	6.98	5.48	66,593.72
Port of Call Retail Development	6.30	76.07	37.38	0.43	4.81	3.78	45,936.71
S.S. Lane Victory	0.03	0.34	0.17	0.00	0.02	0.02	208.14
Ralph J Scott Fireboat Museum	0.03	0.34	0.17	0.00	0.02	0.02	208.14
Mercardo Warehouse 9 & 10 Reuse	0.64	7.67	3.77	0.04	0.49	0.38	4,632.24
Warehouse 9 & 10 Reuse	0.14	1.72	0.85	0.01	0.11	0.09	1,038.44
Red Car Maintenance Facility	0.13	1.59	0.78	0.01	0.10	0.08	957.57
Millennium Tugboat Office	0.10	1.18	0.58	0.01	0.07	0.06	711.28
Waterfront Promenade Town Sq	0.24	2.93	1.44	0.02	0.19	0.15	1,769.18
Fisherman Park	0.10	1.15	0.56	0.01	0.07	0.06	693.79
Research & Dev at Westways	0.82	9.91	4.87	0.06	0.63	0.49	5,984.33
Crowley Tugboat	0.03	0.33	0.16	0.00	0.02	0.02	197.36
Outer Harbor Park	0.14	1.71	0.84	0.01	0.11	0.09	1,034.79
<b>TOTALS (tons/year, unmitigated)</b>	<b>33.54</b>	<b>404.84</b>	<b>198.96</b>	<b>2.29</b>	<b>25.62</b>	<b>20.16</b>	<b>244,480.95</b>

Operational Settings:

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2020 Season: Annual

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
Cruise Parking Shuttle Outer Harbor		0.10	passengers	1,799.00	179.90	1,607.68
Cruise Ship Terminal Berth 91-93		1.46	passengers	5,997.00	8,755.62	84,316.62
Los Angeles Maritime Institute		3.30	employees	10.00	33.00	317.79
Conference Facilities at POC		2.60	attendees	300.00	780.00	7,084.35
Cruise Ship Terminal Berth 45-50		1.46	passengers	5,997.00	8,755.62	79,522.92
San Pedro Park at 22nd & Miner St		29.83	acres	18.00	536.94	4,876.76



Port of Call Restaurant Development	89.95	1000 sq ft	125.00	11,243.75	103,352.54
Port of Call Retail Development	44.32	1000 sq ft	175.00	7,756.00	71,293.15
S.S. Lane Victory	3.60	1000 sq ft	10.00	36.00	323.03
Ralph J Scott Fireboat Museum	3.60	1000 sq ft	10.00	36.00	323.03
Mercardo Warehouse 9 & 10 Reuse	22.17	1000 sq ft	35.00	775.95	7,189.18
Warehouse 9 & 10 Reuse	4.97	1000 sq ft	35.00	173.95	1,611.65
Red Car Maintenance Facility	3.02	employees	37.00	111.74	1,486.14
Millennium Tugboat Office	3.32	employees	25.00	83.00	1,103.90
Waterfront Promenade Town Sq	20.00	acres	15.30	306.00	2,745.74
Fisherman Park	20.00	acres	6.00	120.00	1,076.76
Research & Dev at Westways	79.62	acres	13.00	1,035.06	9,287.59
Crowley Tugboat	3.29	employees	7.00	23.03	306.30
Outer Harbor Park	29.83	acres	6.00	178.98	1,605.99
				40,920.54	379,431.12

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	1.5	0.0	0.0	100.0
Light Truck < 3750 lbs	2.8	0.0	0.0	100.0
Light Truck 3751-5750 lbs	0.0	0.0	0.0	100.0
Med Truck 5751-8500 lbs	0.0	0.0	0.0	100.0
Lite-Heavy Truck 8501-10,000 lbs	0.0	0.0	0.0	100.0
Lite-Heavy Truck 10,001-14,000 lbs	0.0	0.0	0.0	100.0
Med-Heavy Truck 14,001-33,000 lbs	0.0	0.0	0.0	100.0
Heavy-Heavy Truck 33,001-60,000 lbs	35.2	0.0	0.0	100.0
Other Bus	59.2	0.0	0.0	100.0
Urban Bus	0.0	0.0	0.0	100.0
Motorcycle	0.0	0.0	0.0	100.0
School Bus	0.0	0.0	0.0	100.0
Motor Home	1.3	0.0	0.0	100.0

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	12.7	7.0	9.5	13.3	7.4	8.9
Rural Trip Length (miles)	17.6	12.1	14.9	15.4	9.6	12.6
Trip speeds (mph)	30.0	30.0	30.0	30.0	30.0	30.0
% of Trips - Residential	32.9	18.0	49.1			
% of Trips - Commercial (by land use)						
Cruise Parking Shuttle Outer Harbor				1.0	0.5	98.5
Cruise Ship Terminal Berth 91-93				20.0	10.0	70.0
Los Angeles Maritime Institute				20.0	10.0	70.0
Conference Facilities at POC				5.0	2.5	92.5
Cruise Ship Terminal Berth 45-50				5.0	2.5	92.5
San Pedro Park at 22nd & Miner St				5.0	2.5	92.5
Port of Call Restaurant Development				8.0	4.0	88.0
Port of Call Retail Development				8.0	4.0	88.0
S.S. Lane Victory				2.0	1.0	97.0
Ralph J Scott Fireboat Museum				2.0	1.0	97.0
Mercardo Warehouse 9 & 10 Reuse				10.0	5.0	85.0
Warehouse 9 & 10 Reuse				10.0	5.0	85.0
Red Car Maintenance Facility				100.0	0.0	0.0
Millennium Tugboat Office				100.0	0.0	0.0
Waterfront Promenade Town Sq				2.0	1.0	97.0
Fisherman Park				2.0	1.0	97.0
Research & Dev at Westways				2.0	1.0	97.0
Crowley Tugboat				100.0	0.0	0.0
Outer Harbor Park				2.0	1.0	97.0

Urbemis 2007 Version 9.2.4

## Combined Annual Emissions Reports (Tons/Year)

File Name: C:\Documents and Settings\mslavick\Application Data\Urbemis\Version9a\Projects\SPW\_Proposed\_Project\_2022\_wkend.urb924

Project Name: San Pedro Waterfront Proposed Project 2022 Weekend Diesel PM

Project Location: South Coast AQMD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

## Summary Report:

## OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (tons/year, unmitigated)	33.21	401.10	197.11	2.27	25.36	19.96	242,208.69

## SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (tons/year, unmitigated)	33.21	401.10	197.11	2.27	25.36	19.96	242,208.69

## Operational Unmitigated Detail Report:

## OPERATIONAL EMISSION ESTIMATES Annual Tons Per Year, Unmitigated

<u>Source</u>	ROG	NOX	CO	SO2	PM10	PM25	CO2
Cruise Parking Shuttle Outer Harbor	0.14	1.72	0.84	0.01	0.11	0.09	1,035.88
Cruise Ship Terminal Berth 91-93	7.45	89.96	44.21	0.51	5.69	4.47	54,328.20
Los Angeles Maritime Institute	0.00	0.05	0.03	0.00	0.00	0.00	31.02
Conference Facilities at POC	0.31	3.78	1.86	0.02	0.24	0.19	2,282.35
Cruise Ship Terminal Berth 45-50	7.03	84.85	41.70	0.48	5.37	4.22	51,239.45

San Pedro Park at 22nd & Miner St	0.96	11.59	5.70	0.07	0.73	0.58	6,998.74
Port of Call Restaurant Development	9.58	115.68	56.85	0.65	7.32	5.75	69,858.63
Port of Call Retail Development	5.98	72.15	35.46	0.41	4.56	3.59	43,573.54
S.S. Lane Victory	0.04	0.52	0.25	0.00	0.03	0.03	312.21
Ralph J Scott Fireboat Museum	0.04	0.52	0.25	0.00	0.03	0.03	312.21
Mercardo Warehouse 9 & 10 Reuse	0.60	7.28	3.58	0.04	0.46	0.36	4,394.05
Warehouse 9 & 10 Reuse	0.04	0.45	0.22	0.00	0.03	0.02	269.54
Red Car Maintenance Facility	0.13	1.59	0.78	0.01	0.10	0.08	960.74
Millennium Tugboat Office	0.02	0.20	0.10	0.00	0.01	0.01	119.98
Waterfront Promenade Town Sq	0.24	2.93	1.44	0.02	0.19	0.15	1,769.18
Fisherman Park	0.10	1.15	0.56	0.01	0.07	0.06	693.79
Research & Dev at Westways	0.23	2.80	1.37	0.02	0.18	0.14	1,688.12
Crowley Tugboat	0.00	0.06	0.03	0.00	0.00	0.00	34.19
Outer Harbor Park	0.32	3.82	1.88	0.02	0.24	0.19	2,306.87
<b>TOTALS (tons/year, unmitigated)</b>	<b>33.21</b>	<b>401.10</b>	<b>197.11</b>	<b>2.27</b>	<b>25.36</b>	<b>19.96</b>	<b>242,208.69</b>

Operational Settings:

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2020 Season: Annual

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
Cruise Parking Shuttle Outer Harbor		0.10	passengers	1,799.00	179.90	1,607.68
Cruise Ship Terminal Berth 91-93		1.46	passengers	5,997.00	8,755.62	84,316.62
Los Angeles Maritime Institute		0.50	employees	10.00	5.00	48.15
Conference Facilities at POC		1.30	attendees	300.00	390.00	3,542.17
Cruise Ship Terminal Berth 45-50		1.46	passengers	5,997.00	8,755.62	79,522.92

San Pedro Park at 22nd & Miner St	66.44	acres	18.00	1,195.92	10,861.94
Port of Call Restaurant Development	94.36	1000 sq ft	125.00	11,795.00	108,419.64
Port of Call Retail Development	42.04	1000 sq ft	175.00	7,357.00	67,625.54
S.S. Lane Victory	5.40	1000 sq ft	10.00	54.00	484.54
Ralph J Scott Fireboat Museum	5.40	1000 sq ft	10.00	54.00	484.54
Mercardo Warehouse 9 & 10 Reuse	21.03	1000 sq ft	35.00	736.05	6,819.50
Warehouse 9 & 10 Reuse	1.29	1000 sq ft	35.00	45.15	418.31
Red Car Maintenance Facility	3.03	employees	37.00	112.11	1,491.06
Millennium Tugboat Office	0.56	employees	25.00	14.00	186.20
Waterfront Promenade Town Sq	20.00	acres	15.30	306.00	2,745.74
Fisherman Park	20.00	acres	6.00	120.00	1,076.76
Research & Dev at Westways	22.46	acres	13.00	291.98	2,619.94
Crowley Tugboat	0.57	employees	7.00	3.99	53.07
Outer Harbor Park	66.50	acres	6.00	399.00	3,580.23
				40,570.34	375,904.55

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto			0.0	100.0
				100.0
Light Truck 3751-5750 lbs	0.0	0.0	0.0	100.0
Med Truck 5751-8500 lbs	0.0	0.0	0.0	100.0
Lite-Heavy Truck 8501-10,000 lbs	0.0	0.0	0.0	100.0
Lite-Heavy Truck 10,001-14,000 lbs	0.0	0.0	0.0	100.0
Med-Heavy Truck 14,001-33,000 lbs	0.0	0.0	0.0	100.0
Heavy-Heavy Truck 33,001-60,000 lbs	35.2	0.0	0.0	100.0
Other Bus	59.2	0.0	0.0	100.0
Urban Bus	0.0	0.0	0.0	100.0
Motorcycle	0.0	0.0	0.0	100.0
School Bus	0.0	0.0	0.0	100.0

Urbemis 2007 Version 9.2.4

## Combined Summer Emissions Reports (Pounds/Day)

File Name: C:\Documents and Settings\mslavick\Application Data\Urbemis\Version9a\Projects\SPW\_Proposed\_Project\_2022\_wkdy.urb924

Project Name: San Pedro Waterfront Proposed Project 2022 Weekday Diesel PM

Project Location: South Coast AQMD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

## Summary Report:

## OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (lbs/day, unmitigated)	183.76	2,143.28	1,090.22	12.49	140.32	110.26	1,339,621.73

## SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (lbs/day, unmitigated)	183.76	2,143.28	1,090.22	12.49	140.32	110.26	1,339,621.73

## Operational Unmitigated Detail Report:

## OPERATIONAL EMISSION ESTIMATES Summer Pounds Per Day, Unmitigated

<u>Source</u>	<u>ROG</u>	<u>NOX</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM25</u>	<u>CO2</u>
Cruise Parking Shuttle Outer Harbor	0.78	9.08	4.62	0.05	0.59	0.47	5,676.07
Cruise Ship Terminal Berth 91-93	40.84	476.28	242.27	2.77	31.18	24.50	297,688.77
Los Angeles Maritime Institute	0.15	1.80	0.91	0.01	0.12	0.09	1,121.99
Conference Facilities at POC	3.43	40.02	20.36	0.23	2.62	2.06	25,012.05
Cruise Ship Terminal Berth 45-50	38.51	449.20	228.49	2.62	29.41	23.11	280,764.09

San Pedro Park at 22nd & Miner St	2.36	27.55	14.01	0.16	1.80	1.42	17,217.91
Port of Call Restaurant Development	50.05	583.81	296.96	3.40	38.22	30.03	364,897.11
Port of Call Retail Development	34.53	402.71	204.85	2.35	26.37	20.72	251,708.02
S.S. Lane Victory	0.16	1.82	0.93	0.01	0.12	0.09	1,140.48
Ralph J Scott Fireboat Museum	0.16	1.82	0.93	0.01	0.12	0.09	1,140.48
Mercardo Warehouse 9 & 10 Reuse	3.48	40.61	20.66	0.24	2.66	2.09	25,382.15
Warehouse 9 & 10 Reuse	0.78	9.10	4.63	0.05	0.60	0.47	5,690.09
Red Car Maintenance Facility	0.72	8.39	4.27	0.05	0.55	0.43	5,246.98
Millennium Tugboat Office	0.53	6.24	3.17	0.04	0.41	0.32	3,897.44
Waterfront Promenade Town Sq	1.33	15.51	7.89	0.09	1.02	0.80	9,694.12
Fisherman Park	0.52	6.08	3.09	0.04	0.40	0.31	3,801.62
Research & Dev at Westways	4.50	52.46	26.69	0.31	3.43	2.70	32,790.83
Crowley Tugboat	0.15	1.73	0.88	0.01	0.11	0.09	1,081.42
Outer Harbor Park	0.78	9.07	4.61	0.05	0.59	0.47	5,670.11
<b>TOTALS (lbs/day, unmitigated)</b>	<b>183.76</b>	<b>2,143.28</b>	<b>1,090.22</b>	<b>12.49</b>	<b>140.32</b>	<b>110.26</b>	<b>1,339,621.73</b>

Operational Settings:

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2020 Temperature (F): 80 Season: Summer

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
Cruise Parking Shuttle Outer Harbor		0.10	passengers	1,799.00	179.90	1,607.68
Cruise Ship Terminal Berth 91-93		1.46	passengers	5,997.00	8,755.62	84,316.62
Los Angeles Maritime Institute		3.30	employees	10.00	33.00	317.79
Conference Facilities at POC		2.60	attendees	300.00	780.00	7,084.35
Cruise Ship Terminal Berth 45-50		1.46	passengers	5,997.00	8,755.62	79,522.92
San Pedro Park at 22nd & Miner St		29.83	acres	18.00	536.94	4,876.76

Port of Call Restaurant Development	89.95	1000 sq ft	125.00	11,243.75	103,352.54
Port of Call Retail Development	44.32	1000 sq ft	175.00	7,756.00	71,293.15
S.S. Lane Victory	3.60	1000 sq ft	10.00	36.00	323.03
Ralph J Scott Fireboat Museum	3.60	1000 sq ft	10.00	36.00	323.03
Mercardo Warehouse 9 & 10 Reuse	22.17	1000 sq ft	35.00	775.95	7,189.18
Warehouse 9 & 10 Reuse	4.97	1000 sq ft	35.00	173.95	1,611.65
Red Car Maintenance Facility	3.02	employees	37.00	111.74	1,486.14
Millennium Tugboat Office	3.32	employees	25.00	83.00	1,103.90
Waterfront Promenade Town Sq	20.00	acres	15.30	306.00	2,745.74
Fisherman Park	20.00	acres	6.00	120.00	1,076.76
Research & Dev at Westways	79.62	acres	13.00	1,035.06	9,287.59
Crowley Tugboat	3.29	employees	7.00	23.03	306.30
Outer Harbor Park	29.83	acres	6.00	178.98	1,605.99
				40,920.54	379,431.12

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	1.5	0.0	0.0	100.0
Light Truck < 3750 lbs	2.8	0.0	0.0	100.0
Light Truck 3751-5750 lbs	0.0	0.0	0.0	100.0
Med Truck 5751-8500 lbs	0.0	0.0	0.0	100.0
Lite-Heavy Truck 8501-10,000 lbs	0.0	0.0	0.0	100.0
Lite-Heavy Truck 10,001-14,000 lbs	0.0	0.0	0.0	100.0
Med-Heavy Truck 14,001-33,000 lbs	0.0	0.0	0.0	100.0
Heavy-Heavy Truck 33,001-60,000 lbs	35.2	0.0	0.0	100.0
Other Bus	59.2	0.0	0.0	100.0
Urban Bus	0.0	0.0	0.0	100.0
Motorcycle	0.0	0.0	0.0	100.0
School Bus	0.0	0.0	0.0	100.0
Motor Home	1.3	0.0	0.0	100.0



Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	12.7	7.0	9.5	13.3	7.4	8.9
Rural Trip Length (miles)	17.6	12.1	14.9	15.4	9.6	12.6
Trip speeds (mph)	30.0	30.0	30.0	30.0	30.0	30.0
% of Trips - Residential	32.9	18.0	49.1			
% of Trips - Commercial (by land use)						
Cruise Parking Shuttle Outer Harbor				1.0	0.5	98.5
Cruise Ship Terminal Berth 91-93				20.0	10.0	70.0
Los Angeles Maritime Institute				20.0	10.0	70.0
Conference Facilities at POC				5.0	2.5	92.5
Cruise Ship Terminal Berth 45-50				5.0	2.5	92.5
San Pedro Park at 22nd & Miner St				5.0	2.5	92.5
Port of Call Restaurant Development				8.0	4.0	88.0
Port of Call Retail Development				8.0	4.0	88.0
S.S. Lane Victory				2.0	1.0	97.0
Ralph J Scott Fireboat Museum				2.0	1.0	97.0
Mercardo Warehouse 9 & 10 Reuse				10.0	5.0	85.0
Warehouse 9 & 10 Reuse				10.0	5.0	85.0
Red Car Maintenance Facility				100.0	0.0	0.0
Millennium Tugboat Office				100.0	0.0	0.0
Waterfront Promenade Town Sq				2.0	1.0	97.0
Fisherman Park				2.0	1.0	97.0
Research & Dev at Westways				2.0	1.0	97.0
Crowley Tugboat				100.0	0.0	0.0
Outer Harbor Park				2.0	1.0	97.0

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Urbemis 2007 Version 9.2.4

## Combined Summer Emissions Reports (Pounds/Day)

File Name: C:\Documents and Settings\mslavick\Application Data\Urbemis\Version9a\Projects\SPW\_Proposed\_Project\_2022\_wkend.urb924

Project Name: San Pedro Waterfront Proposed Project 2022 Weekend Diesel PM

Project Location: South Coast AQMD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

## Summary Report:

## OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (lbs/day, unmitigated)	182.04	2,123.37	1,080.08	12.38	139.02	109.22	1,327,170.89

## SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (lbs/day, unmitigated)	182.04	2,123.37	1,080.08	12.38	139.02	109.22	1,327,170.89

## Operational Unmitigated Detail Report:

## OPERATIONAL EMISSION ESTIMATES Summer Pounds Per Day, Unmitigated

<u>Source</u>	ROG	NOX	CO	SO2	PM10	PM25	CO2
Cruise Parking Shuttle Outer Harbor	0.78	9.08	4.62	0.05	0.59	0.47	5,676.07
Cruise Ship Terminal Berth 91-93	40.84	476.28	242.27	2.77	31.18	24.50	297,688.77
Los Angeles Maritime Institute	0.02	0.27	0.14	0.00	0.02	0.01	170.00
Conference Facilities at POC	1.72	20.01	10.18	0.12	1.31	1.03	12,506.02
Cruise Ship Terminal Berth 45-50	38.51	449.20	228.49	2.62	29.41	23.11	280,764.09

San Pedro Park at 22nd & Miner St	5.26	61.36	31.21	0.36	4.02	3.16	38,349.24
Port of Call Restaurant Development	52.51	612.43	311.52	3.57	40.10	31.50	382,787.02
Port of Call Retail Development	32.75	382.00	194.31	2.22	25.01	19.65	238,759.15
S.S. Lane Victory	0.23	2.74	1.39	0.02	0.18	0.14	1,710.73
Ralph J Scott Fireboat Museum	0.23	2.74	1.39	0.02	0.18	0.14	1,710.73
Mercardo Warehouse 9 & 10 Reuse	3.30	38.52	19.59	0.22	2.52	1.98	24,076.98
Warehouse 9 & 10 Reuse	0.20	2.36	1.20	0.01	0.15	0.12	1,476.90
Red Car Maintenance Facility	0.72	8.42	4.28	0.05	0.55	0.43	5,264.36
Millennium Tugboat Office	0.09	1.05	0.54	0.01	0.07	0.05	657.40
Waterfront Promenade Town Sq	1.33	15.51	7.89	0.09	1.02	0.80	9,694.12
Fisherman Park	0.52	6.08	3.09	0.04	0.40	0.31	3,801.62
Research & Dev at Westways	1.27	14.80	7.53	0.09	0.97	0.76	9,249.96
Crowley Tugboat	0.03	0.30	0.15	0.00	0.02	0.02	187.36
Outer Harbor Park	1.73	20.22	10.29	0.12	1.32	1.04	12,640.37
<b>TOTALS (lbs/day, unmitigated)</b>	<b>182.04</b>	<b>2,123.37</b>	<b>1,080.08</b>	<b>12.38</b>	<b>139.02</b>	<b>109.22</b>	<b>1,327,170.89</b>

Operational Settings:

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2020 Temperature (F): 80 Season: Summer

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
Cruise Parking Shuttle Outer Harbor		0.10	passengers	1,799.00	179.90	1,607.68
Cruise Ship Terminal Berth 91-93		1.46	passengers	5,997.00	8,755.62	84,316.62
Los Angeles Maritime Institute		0.50	employees	10.00	5.00	48.15
Conference Facilities at POC		1.30	attendees	300.00	390.00	3,542.17
Cruise Ship Terminal Berth 45-50		1.46	passengers	5,997.00	8,755.62	79,522.92

San Pedro Park at 22nd & Miner St	66.44	acres	18.00	1,195.92	10,861.94
Port of Call Restaurant Development	94.36	1000 sq ft	125.00	11,795.00	108,419.64
Port of Call Retail Development	42.04	1000 sq ft	175.00	7,357.00	67,625.54
S.S. Lane Victory	5.40	1000 sq ft	10.00	54.00	484.54
Ralph J Scott Fireboat Museum	5.40	1000 sq ft	10.00	54.00	484.54
Mercardo Warehouse 9 & 10 Reuse	21.03	1000 sq ft	35.00	736.05	6,819.50
Warehouse 9 & 10 Reuse	1.29	1000 sq ft	35.00	45.15	418.31
Red Car Maintenance Facility	3.03	employees	37.00	112.11	1,491.06
Millennium Tugboat Office	0.56	employees	25.00	14.00	186.20
Waterfront Promenade Town Sq	20.00	acres	15.30	306.00	2,745.74
Fisherman Park	20.00	acres	6.00	120.00	1,076.76
Research & Dev at Westways	22.46	acres	13.00	291.98	2,619.94
Crowley Tugboat	0.57	employees	7.00	3.99	53.07
Outer Harbor Park	66.50	acres	6.00	399.00	3,580.23
				40,570.34	375,904.55

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	1.5	0.0	0.0	100.0
Light Truck < 3750 lbs	2.8	0.0	0.0	100.0
Light Truck 3751-5750 lbs	0.0	0.0	0.0	100.0
Med Truck 5751-8500 lbs	0.0	0.0	0.0	100.0
Lite-Heavy Truck 8501-10,000 lbs	0.0	0.0	0.0	100.0
Lite-Heavy Truck 10,001-14,000 lbs	0.0	0.0	0.0	100.0
Med-Heavy Truck 14,001-33,000 lbs	0.0	0.0	0.0	100.0
Heavy-Heavy Truck 33,001-60,000 lbs	35.2	0.0	0.0	100.0
Other Bus	59.2	0.0	0.0	100.0
Urban Bus	0.0	0.0	0.0	100.0
Motorcycle	0.0	0.0	0.0	100.0
School Bus	0.0	0.0	0.0	100.0

Motor Home	1.3	0.0	0.0	100.0
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Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	12.7	7.0	9.5	13.3	7.4	8.9
Rural Trip Length (miles)	17.6	12.1	14.9	15.4	9.6	12.6
Trip speeds (mph)	30.0	30.0	30.0	30.0	30.0	30.0
% of Trips - Residential	32.9	18.0	49.1			
% of Trips - Commercial (by land use)						
Cruise Parking Shuttle Outer Harbor				1.0	0.5	98.5
Cruise Ship Terminal Berth 91-93				20.0	10.0	70.0
Los Angeles Maritime Institute				20.0	10.0	70.0
Conference Facilities at POC				5.0	2.5	92.5
Cruise Ship Terminal Berth 45-50				5.0	2.5	92.5
San Pedro Park at 22nd & Miner St				5.0	2.5	92.5
Port of Call Restaurant Development				8.0	4.0	88.0
Port of Call Retail Development				8.0	4.0	88.0
S.S. Lane Victory				2.0	1.0	97.0
Ralph J Scott Fireboat Museum				2.0	1.0	97.0
Mercardo Warehouse 9 & 10 Reuse				10.0	5.0	85.0
Warehouse 9 & 10 Reuse				10.0	5.0	85.0
Red Car Maintenance Facility				100.0	0.0	0.0
Millennium Tugboat Office				100.0	0.0	0.0
Waterfront Promenade Town Sq				2.0	1.0	97.0
Fisherman Park				2.0	1.0	97.0
Research & Dev at Westways				2.0	1.0	97.0
Crowley Tugboat				100.0	0.0	0.0
Outer Harbor Park				2.0	1.0	97.0

Urbemis 2007 Version 9.2.4

## Combined Annual Emissions Reports (Tons/Year)

File Name: C:\Documents and Settings\mslavick\Application Data\Urbemis\Version9a\Projects\SPW\_Proposed\_Project\_2037\_wkdy.urb924

Project Name: San Pedro Waterfront Proposed Project 2037 Weekday Diesel PM

Project Location: South Coast AQMD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

## Summary Report:

## OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (tons/year, unmitigated)	26.78	244.04	172.74	2.59	22.16	16.45	277,709.86

## SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (tons/year, unmitigated)	26.78	244.04	172.74	2.59	22.16	16.45	277,709.86

## Operational Unmitigated Detail Report:

## OPERATIONAL EMISSION ESTIMATES Annual Tons Per Year, Unmitigated

<u>Source</u>	ROG	NOX	CO	SO2	PM10	PM25	CO2
Cruise Parking Shuttle Outer Harbor	0.13	1.19	0.85	0.01	0.11	0.08	1,358.77
Cruise Ship Terminal Berth 91-93	6.87	62.63	44.33	0.66	5.68	4.23	71,270.29
Los Angeles Maritime Institute	0.02	0.18	0.13	0.00	0.02	0.01	204.74
Conference Facilities at POC	0.44	4.01	2.84	0.04	0.36	0.27	4,564.20
Cruise Ship Terminal Berth 45-50	6.48	59.07	41.81	0.63	5.36	3.99	67,218.32

San Pedro Park at 22nd & Miner St	0.30	2.76	1.95	0.03	0.25	0.19	3,141.93
Port of Call Restaurant Development	6.42	58.52	41.42	0.62	5.31	3.95	66,586.50
Port of Call Retail Development	4.43	40.37	28.57	0.43	3.66	2.72	45,931.73
S.S. Lane Victory	0.02	0.18	0.13	0.00	0.02	0.01	208.12
Ralph J Scott Fireboat Museum	0.02	0.18	0.13	0.00	0.02	0.01	208.12
Mercardo Warehouse 9 & 10 Reuse	0.45	4.07	2.88	0.04	0.37	0.27	4,631.74
Warehouse 9 & 10 Reuse	0.10	0.91	0.65	0.01	0.08	0.06	1,038.33
Red Car Maintenance Facility	0.09	0.84	0.60	0.01	0.08	0.06	957.47
Millennium Tugboat Office	0.07	0.63	0.44	0.01	0.06	0.04	711.20
Waterfront Promenade Town Sq	0.17	1.55	1.10	0.02	0.14	0.10	1,768.98
Fisherman Park	0.07	0.61	0.43	0.01	0.06	0.04	693.72
Research & Dev at Westways	0.58	5.26	3.72	0.06	0.48	0.35	5,983.68
Crowley Tugboat	0.02	0.17	0.12	0.00	0.02	0.01	197.34
Outer Harbor Park	0.10	0.91	0.64	0.01	0.08	0.06	1,034.68
<b>TOTALS (tons/year, unmitigated)</b>	<b>26.78</b>	<b>244.04</b>	<b>172.74</b>	<b>2.59</b>	<b>22.16</b>	<b>16.45</b>	<b>277,709.86</b>

Operational Settings:

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2035 Season: Annual

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
Cruise Parking Shuttle Outer Harbor		0.10	passengers	2,360.00	236.00	2,109.01
Cruise Ship Terminal Berth 91-93		1.46	passengers	7,868.00	11,487.28	110,622.51
Los Angeles Maritime Institute		3.30	employees	10.00	33.00	317.79
Conference Facilities at POC		2.60	attendees	300.00	780.00	7,084.35
Cruise Ship Terminal Berth 45-50		1.46	passengers	7,868.00	11,487.28	104,333.22

San Pedro Park at 22nd & Miner St	29.83	acres	18.00	536.94	4,876.76
Port of Call Restaurant Development	89.95	1000 sq ft	125.00	11,243.75	103,352.54
Port of Call Retail Development	44.32	1000 sq ft	175.00	7,756.00	71,293.15
S.S. Lane Victory	3.60	1000 sq ft	10.00	36.00	323.03
Ralph J Scott Fireboat Museum	3.60	1000 sq ft	10.00	36.00	323.03
Mercardo Warehouse 9 & 10 Reuse	22.17	1000 sq ft	35.00	775.95	7,189.18
Warehouse 9 & 10 Reuse	4.97	1000 sq ft	35.00	173.95	1,611.65
Red Car Maintenance Facility	3.02	employees	37.00	111.74	1,486.14
Millennium Tugboat Office	3.32	employees	25.00	83.00	1,103.90
Waterfront Promenade Town Sq	20.00	acres	15.30	306.00	2,745.74
Fisherman Park	20.00	acres	6.00	120.00	1,076.76
Research & Dev at Westways	79.62	acres	13.00	1,035.06	9,287.59
Crowley Tugboat	3.29	employees	7.00	23.03	306.30
Outer Harbor Park	29.83	acres	6.00	178.98	1,605.99
				46,439.96	431,048.64

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	1.5	0.0	0.0	100.0
Light Truck < 3750 lbs	2.8	0.0	0.0	100.0
Light Truck 3751-5750 lbs	0.0	0.0	0.0	100.0
Med Truck 5751-8500 lbs	0.0	0.0	0.0	100.0
Lite-Heavy Truck 8501-10,000 lbs	0.0	0.0	0.0	100.0
Lite-Heavy Truck 10,001-14,000 lbs	0.0	0.0	0.0	100.0
Med-Heavy Truck 14,001-33,000 lbs	0.0	0.0	0.0	100.0
Heavy-Heavy Truck 33,001-60,000 lbs	35.2	0.0	0.0	100.0
Other Bus	59.2	0.0	0.0	100.0
Urban Bus	0.0	0.0	0.0	100.0
Motorcycle	0.0	0.0	0.0	100.0
School Bus	0.0	0.0	0.0	100.0



Motor Home	1.3	0.0	0.0	100.0
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Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	12.7	7.0	9.5	13.3	7.4	8.9
Rural Trip Length (miles)	17.6	12.1	14.9	15.4	9.6	12.6
Trip speeds (mph)	30.0	30.0	30.0	30.0	30.0	30.0
% of Trips - Residential	32.9	18.0	49.1			
% of Trips - Commercial (by land use)						
Cruise Parking Shuttle Outer Harbor				1.0	0.5	98.5
Cruise Ship Terminal Berth 91-93				20.0	10.0	70.0
Los Angeles Maritime Institute				20.0	10.0	70.0
Conference Facilities at POC				5.0	2.5	92.5
Cruise Ship Terminal Berth 45-50				5.0	2.5	92.5
San Pedro Park at 22nd & Miner St				5.0	2.5	92.5
Port of Call Restaurant Development				8.0	4.0	88.0
Port of Call Retail Development				8.0	4.0	88.0
S.S. Lane Victory				2.0	1.0	97.0
Ralph J Scott Fireboat Museum				2.0	1.0	97.0
Mercardo Warehouse 9 & 10 Reuse				10.0	5.0	85.0
Warehouse 9 & 10 Reuse				10.0	5.0	85.0
Red Car Maintenance Facility				100.0	0.0	0.0
Millennium Tugboat Office				100.0	0.0	0.0
Waterfront Promenade Town Sq				2.0	1.0	97.0
Fisherman Park				2.0	1.0	97.0
Research & Dev at Westways				2.0	1.0	97.0
Crowley Tugboat				100.0	0.0	0.0
Outer Harbor Park				2.0	1.0	97.0

Urbemis 2007 Version 9.2.4

## Combined Annual Emissions Reports (Tons/Year)

File Name: C:\Documents and Settings\mslavick\Application Data\Urbemis\Version9a\Projects\SPW\_Proposed\_Project\_2037\_wkend.urb924

Project Name: San Pedro Waterfront Proposed Project 2037 Weekend Diesel PM

Project Location: South Coast AQMD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

## Summary Report:

## OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (tons/year, unmitigated)	26.54	242.05	171.31	2.57	21.94	16.34	275,437.83

## SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (tons/year, unmitigated)	26.54	242.05	171.31	2.57	21.94	16.34	275,437.83

## Operational Unmitigated Detail Report:

## OPERATIONAL EMISSION ESTIMATES Annual Tons Per Year, Unmitigated

<u>Source</u>	ROG	NOX	CO	SO2	PM10	PM25	CO2
Cruise Parking Shuttle Outer Harbor	0.13	1.19	0.85	0.01	0.11	0.08	1,358.77
Cruise Ship Terminal Berth 91-93	6.87	62.63	44.33	0.66	5.68	4.23	71,270.29
Los Angeles Maritime Institute	0.00	0.03	0.02	0.00	0.00	0.00	31.02
Conference Facilities at POC	0.22	2.01	1.42	0.02	0.18	0.14	2,282.10
Cruise Ship Terminal Berth 45-50	6.48	59.07	41.81	0.63	5.36	3.99	67,218.32

San Pedro Park at 22nd & Miner St	0.67	6.15	4.35	0.07	0.56	0.41	6,997.98
Port of Call Restaurant Development	6.74	61.39	43.45	0.65	5.57	4.14	69,851.06
Port of Call Retail Development	4.20	38.29	27.10	0.41	3.47	2.58	43,568.82
S.S. Lane Victory	0.03	0.27	0.19	0.00	0.02	0.02	312.17
Ralph J Scott Fireboat Museum	0.03	0.27	0.19	0.00	0.02	0.02	312.17
Mercardo Warehouse 9 & 10 Reuse	0.42	3.86	2.73	0.04	0.35	0.26	4,393.57
Warehouse 9 & 10 Reuse	0.03	0.24	0.17	0.00	0.02	0.02	269.51
Red Car Maintenance Facility	0.09	0.84	0.60	0.01	0.08	0.06	960.64
Millennium Tugboat Office	0.01	0.11	0.07	0.00	0.01	0.01	119.96
Waterfront Promenade Town Sq	0.17	1.55	1.10	0.02	0.14	0.10	1,768.98
Fisherman Park	0.07	0.61	0.43	0.01	0.06	0.04	693.72
Research & Dev at Westways	0.16	1.48	1.05	0.02	0.13	0.10	1,687.94
Crowley Tugboat	0.00	0.03	0.02	0.00	0.00	0.00	34.19
Outer Harbor Park	0.22	2.03	1.43	0.02	0.18	0.14	2,306.62
<b>TOTALS (tons/year, unmitigated)</b>	<b>26.54</b>	<b>242.05</b>	<b>171.31</b>	<b>2.57</b>	<b>21.94</b>	<b>16.34</b>	<b>275,437.83</b>

Operational Settings:

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2035 Season: Annual

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
Cruise Parking Shuttle Outer Harbor		0.10	passengers	2,360.00	236.00	2,109.01
Cruise Ship Terminal Berth 91-93		1.46	passengers	7,868.00	11,487.28	110,622.51
Los Angeles Maritime Institute		0.50	employees	10.00	5.00	48.15
Conference Facilities at POC		1.30	attendees	300.00	390.00	3,542.17
Cruise Ship Terminal Berth 45-50		1.46	passengers	7,868.00	11,487.28	104,333.22

San Pedro Park at 22nd & Miner St	66.44	acres	18.00	1,195.92	10,861.94
Port of Call Restaurant Development	94.36	1000 sq ft	125.00	11,795.00	108,419.64
Port of Call Retail Development	42.04	1000 sq ft	175.00	7,357.00	67,625.54
S.S. Lane Victory	5.40	1000 sq ft	10.00	54.00	484.54
Ralph J Scott Fireboat Museum	5.40	1000 sq ft	10.00	54.00	484.54
Mercardo Warehouse 9 & 10 Reuse	21.03	1000 sq ft	35.00	736.05	6,819.50
Warehouse 9 & 10 Reuse	1.29	1000 sq ft	35.00	45.15	418.31
Red Car Maintenance Facility	3.03	employees	37.00	112.11	1,491.06
Millennium Tugboat Office	0.56	employees	25.00	14.00	186.20
Waterfront Promenade Town Sq	20.00	acres	15.30	306.00	2,745.74
Fisherman Park	20.00	acres	6.00	120.00	1,076.76
Research & Dev at Westways	22.46	acres	13.00	291.98	2,619.94
Crowley Tugboat	0.57	employees	7.00	3.99	53.07
Outer Harbor Park	66.50	acres	6.00	399.00	3,580.23
				46,089.76	427,522.07

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	1.5	0.0	0.0	100.0
Light Truck < 3750 lbs	2.8	0.0	0.0	100.0
Light Truck 3751-5750 lbs	0.0	0.0	0.0	100.0
Med Truck 5751-8500 lbs	0.0	0.0	0.0	100.0
Lite-Heavy Truck 8501-10,000 lbs	0.0	0.0	0.0	100.0
Lite-Heavy Truck 10,001-14,000 lbs	0.0	0.0	0.0	100.0
Med-Heavy Truck 14,001-33,000 lbs	0.0	0.0	0.0	100.0
Heavy-Heavy Truck 33,001-60,000 lbs	35.2	0.0	0.0	100.0
Other Bus	59.2	0.0	0.0	100.0
Urban Bus	0.0	0.0	0.0	100.0
Motorcycle	0.0	0.0	0.0	100.0
School Bus	0.0	0.0	0.0	100.0

Motor Home	1.3	0.0	0.0	100.0
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Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	12.7	7.0	9.5	13.3	7.4	8.9
Rural Trip Length (miles)	17.6	12.1	14.9	15.4	9.6	12.6
Trip speeds (mph)	30.0	30.0	30.0	30.0	30.0	30.0
% of Trips - Residential	32.9	18.0	49.1			
% of Trips - Commercial (by land use)						
Cruise Parking Shuttle Outer Harbor				1.0	0.5	98.5
Cruise Ship Terminal Berth 91-93				20.0	10.0	70.0
Los Angeles Maritime Institute				20.0	10.0	70.0
Conference Facilities at POC				5.0	2.5	92.5
Cruise Ship Terminal Berth 45-50				5.0	2.5	92.5
San Pedro Park at 22nd & Miner St				5.0	2.5	92.5
Port of Call Restaurant Development				8.0	4.0	88.0
Port of Call Retail Development				8.0	4.0	88.0
S.S. Lane Victory				2.0	1.0	97.0
Ralph J Scott Fireboat Museum				2.0	1.0	97.0
Mercardo Warehouse 9 & 10 Reuse				10.0	5.0	85.0
Warehouse 9 & 10 Reuse				10.0	5.0	85.0
Red Car Maintenance Facility				100.0	0.0	0.0
Millennium Tugboat Office				100.0	0.0	0.0
Waterfront Promenade Town Sq				2.0	1.0	97.0
Fisherman Park				2.0	1.0	97.0
Research & Dev at Westways				2.0	1.0	97.0
Crowley Tugboat				100.0	0.0	0.0
Outer Harbor Park				2.0	1.0	97.0

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Urbemis 2007 Version 9.2.4

## Combined Summer Emissions Reports (Pounds/Day)

File Name: C:\Documents and Settings\mslavick\Application Data\Urbemis\Version9a\Projects\SPW\_Proposed\_Project\_2037\_wkdy.urb924

Project Name: San Pedro Waterfront Proposed Project 2037 Weekday Diesel PM

Project Location: South Coast AQMD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

## Summary Report:

## OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (lbs/day, unmitigated)	146.76	1,292.06	946.51	14.19	121.32	90.22	1,521,697.87

## SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (lbs/day, unmitigated)	146.76	1,292.06	946.51	14.19	121.32	90.22	1,521,697.87

## Operational Unmitigated Detail Report:

## OPERATIONAL EMISSION ESTIMATES Summer Pounds Per Day, Unmitigated

<u>Source</u>	ROG	NOX	CO	SO2	PM10	PM25	CO2
Cruise Parking Shuttle Outer Harbor	0.72	6.32	4.63	0.07	0.59	0.44	7,445.29
Cruise Ship Terminal Berth 91-93	37.66	331.59	242.91	3.64	31.14	23.16	390,522.14
Los Angeles Maritime Institute	0.11	0.95	0.70	0.01	0.09	0.07	1,121.87
Conference Facilities at POC	2.41	21.24	15.56	0.23	1.99	1.48	25,009.34
Cruise Ship Terminal Berth 45-50	35.52	312.73	229.10	3.43	29.37	21.84	368,319.56

San Pedro Park at 22nd & Miner St	1.66	14.62	10.71	0.16	1.37	1.02	17,216.04
Port of Call Restaurant Development	35.19	309.80	226.94	3.40	29.10	21.63	364,857.55
Port of Call Retail Development	24.27	213.70	156.55	2.35	20.07	14.92	251,680.73
S.S. Lane Victory	0.11	0.97	0.71	0.01	0.09	0.07	1,140.36
Ralph J Scott Fireboat Museum	0.11	0.97	0.71	0.01	0.09	0.07	1,140.36
Mercardo Warehouse 9 & 10 Reuse	2.45	21.55	15.79	0.24	2.02	1.50	25,379.40
Warehouse 9 & 10 Reuse	0.55	4.83	3.54	0.05	0.45	0.34	5,689.47
Red Car Maintenance Facility	0.51	4.45	3.26	0.05	0.42	0.31	5,246.41
Millennium Tugboat Office	0.38	3.31	2.42	0.04	0.31	0.23	3,897.01
Waterfront Promenade Town Sq	0.93	8.23	6.03	0.09	0.77	0.57	9,693.07
Fisherman Park	0.37	3.23	2.36	0.04	0.30	0.23	3,801.20
Research & Dev at Westways	3.16	27.84	20.39	0.31	2.61	1.94	32,787.28
Crowley Tugboat	0.10	0.92	0.67	0.01	0.09	0.06	1,081.30
Outer Harbor Park	0.55	4.81	3.53	0.05	0.45	0.34	5,669.49
<b>TOTALS (lbs/day, unmitigated)</b>	<b>146.76</b>	<b>1,292.06</b>	<b>946.51</b>	<b>14.19</b>	<b>121.32</b>	<b>90.22</b>	<b>1,521,697.87</b>

Operational Settings:

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2035 Temperature (F): 80 Season: Summer

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
Cruise Parking Shuttle Outer Harbor		0.10	passengers	2,360.00	236.00	2,109.01
Cruise Ship Terminal Berth 91-93		1.46	passengers	7,868.00	11,487.28	110,622.51
Los Angeles Maritime Institute		3.30	employees	10.00	33.00	317.79
Conference Facilities at POC		2.60	attendees	300.00	780.00	7,084.35
Cruise Ship Terminal Berth 45-50		1.46	passengers	7,868.00	11,487.28	104,333.22

San Pedro Park at 22nd & Miner St	29.83	acres	18.00	536.94	4,876.76
Port of Call Restaurant Development	89.95	1000 sq ft	125.00	11,243.75	103,352.54
Port of Call Retail Development	44.32	1000 sq ft	175.00	7,756.00	71,293.15
S.S. Lane Victory	3.60	1000 sq ft	10.00	36.00	323.03
Ralph J Scott Fireboat Museum	3.60	1000 sq ft	10.00	36.00	323.03
Mercardo Warehouse 9 & 10 Reuse	22.17	1000 sq ft	35.00	775.95	7,189.18
Warehouse 9 & 10 Reuse	4.97	1000 sq ft	35.00	173.95	1,611.65
Red Car Maintenance Facility	3.02	employees	37.00	111.74	1,486.14
Millennium Tugboat Office	3.32	employees	25.00	83.00	1,103.90
Waterfront Promenade Town Sq	20.00	acres	15.30	306.00	2,745.74
Fisherman Park	20.00	acres	6.00	120.00	1,076.76
Research & Dev at Westways	79.62	acres	13.00	1,035.06	9,287.59
Crowley Tugboat	3.29	employees	7.00	23.03	306.30
Outer Harbor Park	29.83	acres	6.00	178.98	1,605.99
				46,439.96	431,048.64

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	1.5	0.0	0.0	100.0
Light Truck < 3750 lbs	2.8	0.0	0.0	100.0
Light Truck 3751-5750 lbs	0.0	0.0	0.0	100.0
Med Truck 5751-8500 lbs	0.0	0.0	0.0	100.0
Lite-Heavy Truck 8501-10,000 lbs	0.0	0.0	0.0	100.0
Lite-Heavy Truck 10,001-14,000 lbs	0.0	0.0	0.0	100.0
Med-Heavy Truck 14,001-33,000 lbs	0.0	0.0	0.0	100.0
Heavy-Heavy Truck 33,001-60,000 lbs	35.2	0.0	0.0	100.0
Other Bus	59.2	0.0	0.0	100.0
Urban Bus	0.0	0.0	0.0	100.0
Motorcycle	0.0	0.0	0.0	100.0
School Bus	0.0	0.0	0.0	100.0



Motor Home	1.3	0.0	0.0	100.0
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Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	12.7	7.0	9.5	13.3	7.4	8.9
Rural Trip Length (miles)	17.6	12.1	14.9	15.4	9.6	12.6
Trip speeds (mph)	30.0	30.0	30.0	30.0	30.0	30.0
% of Trips - Residential	32.9	18.0	49.1			
% of Trips - Commercial (by land use)						
Cruise Parking Shuttle Outer Harbor				1.0	0.5	98.5
Cruise Ship Terminal Berth 91-93				20.0	10.0	70.0
Los Angeles Maritime Institute				20.0	10.0	70.0
Conference Facilities at POC				5.0	2.5	92.5
Cruise Ship Terminal Berth 45-50				5.0	2.5	92.5
San Pedro Park at 22nd & Miner St				5.0	2.5	92.5
Port of Call Restaurant Development				8.0	4.0	88.0
Port of Call Retail Development				8.0	4.0	88.0
S.S. Lane Victory				2.0	1.0	97.0
Ralph J Scott Fireboat Museum				2.0	1.0	97.0
Mercardo Warehouse 9 & 10 Reuse				10.0	5.0	85.0
Warehouse 9 & 10 Reuse				10.0	5.0	85.0
Red Car Maintenance Facility				100.0	0.0	0.0
Millennium Tugboat Office				100.0	0.0	0.0
Waterfront Promenade Town Sq				2.0	1.0	97.0
Fisherman Park				2.0	1.0	97.0
Research & Dev at Westways				2.0	1.0	97.0
Crowley Tugboat				100.0	0.0	0.0
Outer Harbor Park				2.0	1.0	97.0

Urbemis 2007 Version 9.2.4

## Combined Summer Emissions Reports (Pounds/Day)

File Name: C:\Documents and Settings\mslavick\Application Data\Urbemis\Version9a\Projects\SPW\_Proposed\_Project\_2037\_wkend.urb924

Project Name: San Pedro Waterfront Proposed Project 2037 Weekend Diesel PM

Project Location: South Coast AQMD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

## Summary Report:

## OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (lbs/day, unmitigated)	145.54	1,281.46	938.75	14.08	120.35	89.50	1,509,248.39

## SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (lbs/day, unmitigated)	145.54	1,281.46	938.75	14.08	120.35	89.50	1,509,248.39

## Operational Unmitigated Detail Report:

## OPERATIONAL EMISSION ESTIMATES Summer Pounds Per Day, Unmitigated

<u>Source</u>	ROG	NOX	CO	SO2	PM10	PM25	CO2
Cruise Parking Shuttle Outer Harbor	0.72	6.32	4.63	0.07	0.59	0.44	7,445.29
Cruise Ship Terminal Berth 91-93	37.66	331.59	242.91	3.64	31.14	23.16	390,522.14
Los Angeles Maritime Institute	0.02	0.14	0.11	0.00	0.01	0.01	169.98
Conference Facilities at POC	1.21	10.62	7.78	0.12	1.00	0.74	12,504.67
Cruise Ship Terminal Berth 45-50	35.52	312.73	229.10	3.43	29.37	21.84	368,319.56

San Pedro Park at 22nd & Miner St	3.70	32.56	23.85	0.36	3.06	2.27	38,345.09
Port of Call Restaurant Development	36.91	324.98	238.07	3.57	30.52	22.70	382,745.52
Port of Call Retail Development	23.02	202.70	148.49	2.22	19.04	14.16	238,733.26
S.S. Lane Victory	0.16	1.45	1.06	0.02	0.14	0.10	1,710.54
Ralph J Scott Fireboat Museum	0.16	1.45	1.06	0.02	0.14	0.10	1,710.54
Mercardo Warehouse 9 & 10 Reuse	2.32	20.44	14.97	0.22	1.92	1.43	24,074.37
Warehouse 9 & 10 Reuse	0.14	1.25	0.92	0.01	0.12	0.09	1,476.74
Red Car Maintenance Facility	0.51	4.47	3.27	0.05	0.42	0.31	5,263.79
Millennium Tugboat Office	0.06	0.56	0.41	0.01	0.05	0.04	657.33
Waterfront Promenade Town Sq	0.93	8.23	6.03	0.09	0.77	0.57	9,693.07
Fisherman Park	0.37	3.23	2.36	0.04	0.30	0.23	3,801.20
Research & Dev at Westways	0.89	7.85	5.75	0.09	0.74	0.55	9,248.96
Crowley Tugboat	0.02	0.16	0.12	0.00	0.01	0.01	187.34
Outer Harbor Park	1.22	10.73	7.86	0.12	1.01	0.75	12,639.00
<b>TOTALS (lbs/day, unmitigated)</b>	<b>145.54</b>	<b>1,281.46</b>	<b>938.75</b>	<b>14.08</b>	<b>120.35</b>	<b>89.50</b>	<b>1,509,248.39</b>

Operational Settings:

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2035 Temperature (F): 80 Season: Summer

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
Cruise Parking Shuttle Outer Harbor		0.10	passengers	2,360.00	236.00	2,109.01
Cruise Ship Terminal Berth 91-93		1.46	passengers	7,868.00	11,487.28	110,622.51
Los Angeles Maritime Institute		0.50	employees	10.00	5.00	48.15
Conference Facilities at POC		1.30	attendees	300.00	390.00	3,542.17
Cruise Ship Terminal Berth 45-50		1.46	passengers	7,868.00	11,487.28	104,333.22

San Pedro Park at 22nd & Miner St	66.44	acres	18.00	1,195.92	10,861.94
Port of Call Restaurant Development	94.36	1000 sq ft	125.00	11,795.00	108,419.64
Port of Call Retail Development	42.04	1000 sq ft	175.00	7,357.00	67,625.54
S.S. Lane Victory	5.40	1000 sq ft	10.00	54.00	484.54
Ralph J Scott Fireboat Museum	5.40	1000 sq ft	10.00	54.00	484.54
Mercardo Warehouse 9 & 10 Reuse	21.03	1000 sq ft	35.00	736.05	6,819.50
Warehouse 9 & 10 Reuse	1.29	1000 sq ft	35.00	45.15	418.31
Red Car Maintenance Facility	3.03	employees	37.00	112.11	1,491.06
Millennium Tugboat Office	0.56	employees	25.00	14.00	186.20
Waterfront Promenade Town Sq	20.00	acres	15.30	306.00	2,745.74
Fisherman Park	20.00	acres	6.00	120.00	1,076.76
Research & Dev at Westways	22.46	acres	13.00	291.98	2,619.94
Crowley Tugboat	0.57	employees	7.00	3.99	53.07
Outer Harbor Park	66.50	acres	6.00	399.00	3,580.23
				46,089.76	427,522.07

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	1.5	0.0	0.0	100.0
Light Truck < 3750 lbs	2.8	0.0	0.0	100.0
Light Truck 3751-5750 lbs	0.0	0.0	0.0	100.0
Med Truck 5751-8500 lbs	0.0	0.0	0.0	100.0
Lite-Heavy Truck 8501-10,000 lbs	0.0	0.0	0.0	100.0
Lite-Heavy Truck 10,001-14,000 lbs	0.0	0.0	0.0	100.0
Med-Heavy Truck 14,001-33,000 lbs	0.0	0.0	0.0	100.0
Heavy-Heavy Truck 33,001-60,000 lbs	35.2	0.0	0.0	100.0
Other Bus	59.2	0.0	0.0	100.0
Urban Bus	0.0	0.0	0.0	100.0
Motorcycle	0.0	0.0	0.0	100.0
School Bus	0.0	0.0	0.0	100.0

Motor Home	1.3	0.0	0.0	100.0		
<u>Travel Conditions</u>						
	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	12.7	7.0	9.5	13.3	7.4	8.9
Rural Trip Length (miles)	17.6	12.1	14.9	15.4	9.6	12.6
Trip speeds (mph)	30.0	30.0	30.0	30.0	30.0	30.0
% of Trips - Residential	32.9	18.0	49.1			
% of Trips - Commercial (by land use)						
Cruise Parking Shuttle Outer Harbor				1.0	0.5	98.5
Cruise Ship Terminal Berth 91-93				20.0	10.0	70.0
Los Angeles Maritime Institute				20.0	10.0	70.0
Conference Facilities at POC				5.0	2.5	92.5
Cruise Ship Terminal Berth 45-50				5.0	2.5	92.5
San Pedro Park at 22nd & Miner St				5.0	2.5	92.5
Port of Call Restaurant Development				8.0	4.0	88.0
Port of Call Retail Development				8.0	4.0	88.0
S.S. Lane Victory				2.0	1.0	97.0
Ralph J Scott Fireboat Museum				2.0	1.0	97.0
Mercardo Warehouse 9 & 10 Reuse				10.0	5.0	85.0
Warehouse 9 & 10 Reuse				10.0	5.0	85.0
Red Car Maintenance Facility				100.0	0.0	0.0
Millennium Tugboat Office				100.0	0.0	0.0
Waterfront Promenade Town Sq				2.0	1.0	97.0
Fisherman Park				2.0	1.0	97.0
Research & Dev at Westways				2.0	1.0	97.0
Crowley Tugboat				100.0	0.0	0.0
Outer Harbor Park				2.0	1.0	97.0

Urbemis 2007 Version 9.2.4

## Combined Annual Emissions Reports (Tons/Year)

File Name: C:\Documents and Settings\mslavick\Application Data\Urbemis\Version9a\Projects\SPW\_Alternative\_1\_2015\_wkdy.urb924

Project Name: San Pedro Waterfront Alternative 1 2015 Weekday Diesel PM

Project Location: South Coast AQMD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

## Summary Report:

## OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (tons/year, unmitigated)	39.96	573.53	228.67	1.94	29.18	23.89	208,435.77

## SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (tons/year, unmitigated)	39.96	573.53	228.67	1.94	29.18	23.89	208,435.77

## Operational Unmitigated Detail Report:

## OPERATIONAL EMISSION ESTIMATES Annual Tons Per Year, Unmitigated

<u>Source</u>	<u>ROG</u>	<u>NOX</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM25</u>	<u>CO2</u>
Cruise Parking Shuttle Outer Harbor	0.10	1.25	0.50	0.00	0.06	0.05	452.67
Cruise Ship Terminal Berth 91-93	9.14	130.64	52.09	0.44	6.65	5.45	47,479.08
Los Angeles Maritime Institute	0.04	0.56	0.22	0.00	0.03	0.02	204.80
Conference Facilities at POC	0.88	12.56	5.01	0.04	0.64	0.52	4,565.50
Cruise Ship Terminal Berth 45-50	4.31	61.61	24.56	0.21	3.13	2.57	22,389.69
San Pedro Park at 22nd & Miner St	0.60	8.65	3.45	0.03	0.44	0.36	3,142.82

Port of Call Restaurant Development	12.73	183.27	73.07	0.62	9.32	7.64	66,605.55
Port of Call Retail Development	8.78	126.42	50.40	0.43	6.43	5.27	45,944.87
S.S. Lane Victory	0.04	0.57	0.23	0.00	0.03	0.02	208.17
Ralph J Scott Fireboat Museum	0.04	0.57	0.23	0.00	0.03	0.02	208.17
Mercardo Warehouse 9 & 10 Reuse	0.89	12.75	5.08	0.04	0.65	0.53	4,633.07
Warehouse 9 & 10 Reuse	0.20	2.86	1.14	0.01	0.15	0.12	1,038.63
Red Car Museum	0.04	0.58	0.23	0.00	0.03	0.02	212.41
Red Car Maintenance Facility	0.18	2.64	1.05	0.01	0.13	0.11	957.76
Millennium Tugboat Office	0.14	1.96	0.78	0.01	0.10	0.08	711.42
Waterfront Promenade Town Sq	0.34	4.87	1.94	0.02	0.25	0.20	1,769.49
Fisherman Park	0.13	1.91	0.76	0.01	0.10	0.08	693.92
Research & Dev at Westways	1.14	16.47	6.57	0.06	0.84	0.69	5,985.37
Crowley Tugboat	0.04	0.54	0.22	0.00	0.03	0.02	197.40
Outer Harbor Park	0.20	2.85	1.14	0.01	0.14	0.12	1,034.98
<b>TOTALS (tons/year, unmitigated)</b>	<b>39.96</b>	<b>573.53</b>	<b>228.67</b>	<b>1.94</b>	<b>29.18</b>	<b>23.89</b>	<b>208,435.77</b>

Operational Settings:

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2015 Season: Annual

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
Cruise Parking Shuttle Outer Harbor		0.10	students	786.00	78.60	702.41
Cruise Ship Terminal Berth 91-93		1.46	students	5,240.00	7,650.40	73,673.35
Los Angeles Maritime Institute		3.30	students	10.00	33.00	317.79
Conference Facilities at POC		2.60	students	300.00	780.00	7,084.35
Cruise Ship Terminal Berth 45-50		1.46	students	2,620.00	3,825.20	34,742.38
San Pedro Park at 22nd & Miner St		29.83	acres	18.00	536.94	4,876.76

Port of Call Restaurant Development	89.95	1000 sq ft	125.00	11,243.75	103,352.54
Port of Call Retail Development	44.32	1000 sq ft	175.00	7,756.00	71,293.15
S.S. Lane Victory	3.60	1000 sq ft	10.00	36.00	323.03
Ralph J Scott Fireboat Museum	3.60	1000 sq ft	10.00	36.00	323.03
Mercardo Warehouse 9 & 10 Reuse	22.17	1000 sq ft	35.00	775.95	7,189.18
Warehouse 9 & 10 Reuse	4.97	1000 sq ft	35.00	173.95	1,611.65
Red Car Museum	3.60	1000 sq ft	10.00	36.00	329.60
Red Car Maintenance Facility	3.02	employees	37.00	111.74	1,486.14
Millennium Tugboat Office	3.32	employees	25.00	83.00	1,103.90
Waterfront Promenade Town Sq	20.00	acres	15.30	306.00	2,745.74
Fisherman Park	20.00	acres	6.00	120.00	1,076.76
Research & Dev at Westways	79.62	acres	13.00	1,035.06	9,287.59
Crowley Tugboat	3.29	unknown	7.00	23.03	306.30
Outer Harbor Park	29.83	acres	6.00	178.98	1,605.99
				34,819.60	323,431.64

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	1.5	0.2	99.6	0.2
Light Truck < 3750 lbs	2.8	0.0	0.0	100.0
Light Truck 3751-5750 lbs	0.0	0.0	0.0	100.0
Med Truck 5751-8500 lbs	0.0	0.0	0.0	100.0
Lite-Heavy Truck 8501-10,000 lbs	0.0	0.0	0.0	100.0
Lite-Heavy Truck 10,001-14,000 lbs	0.0	0.0	0.0	100.0
Med-Heavy Truck 14,001-33,000 lbs	0.0	0.0	0.0	100.0
Heavy-Heavy Truck 33,001-60,000 lbs	35.2	0.0	0.0	100.0
Other Bus	59.2	0.0	0.0	100.0
Urban Bus	0.0	0.0	0.0	100.0
Motorcycle	0.0	0.0	0.0	100.0
School Bus	0.0	0.0	0.0	100.0
Motor Home	1.3	0.0	0.0	100.0



Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	12.7	7.0	9.5	13.3	7.4	8.9
Rural Trip Length (miles)	17.6	12.1	14.9	15.4	9.6	12.6
Trip speeds (mph)	30.0	30.0	30.0	30.0	30.0	30.0
% of Trips - Residential	32.9	18.0	49.1			
% of Trips - Commercial (by land use)						
Cruise Parking Shuttle Outer Harbor				1.0	0.5	98.5
Cruise Ship Terminal Berth 91-93				20.0	10.0	70.0
Los Angeles Maritime Institute				20.0	10.0	70.0
Conference Facilities at POC				5.0	2.5	92.5
Cruise Ship Terminal Berth 45-50				5.0	2.5	92.5
San Pedro Park at 22nd & Miner St				5.0	2.5	92.5
Port of Call Restaurant Development				8.0	4.0	88.0
Port of Call Retail Development				8.0	4.0	88.0
S.S. Lane Victory				2.0	1.0	97.0
Ralph J Scott Fireboat Museum				2.0	1.0	97.0
Mercardo Warehouse 9 & 10 Reuse				10.0	5.0	85.0
Warehouse 9 & 10 Reuse				10.0	5.0	85.0
Red Car Museum				7.0	3.5	89.5
Red Car Maintenance Facility				100.0	0.0	0.0
Millennium Tugboat Office				100.0	0.0	0.0
Waterfront Promenade Town Sq				2.0	1.0	97.0
Fisherman Park				2.0	1.0	97.0
Research & Dev at Westways				2.0	1.0	97.0
Crowley Tugboat				100.0	0.0	0.0
Outer Harbor Park				2.0	1.0	97.0

Urbemis 2007 Version 9.2.4

## Combined Annual Emissions Reports (Tons/Year)

File Name: C:\Documents and Settings\mslavick\Application Data\Urbemis\Version9a\Projects\SPW\_Alternative\_1\_2015\_wkend.urb924

Project Name: San Pedro Waterfront Alternative 1 2015 Weekend Diesel PM

Project Location: South Coast AQMD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

## Summary Report:

## OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (tons/year, unmitigated)	39.47	569.36	223.59	1.92	29.07	23.85	206,238.74

## SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (tons/year, unmitigated)	39.47	569.36	223.59	1.92	29.07	23.85	206,238.74

## Operational Unmitigated Detail Report:

## OPERATIONAL EMISSION ESTIMATES Annual Tons Per Year, Unmitigated

<u>Source</u>	<u>ROG</u>	<u>NOX</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM25</u>	<u>CO2</u>
Cruise Parking Shuttle Outer Harbor	0.09	1.25	0.49	0.00	0.06	0.05	452.60
Cruise Ship Terminal Berth 91-93	9.09	131.06	51.47	0.44	6.69	5.49	47,471.82
Los Angeles Maritime Institute	0.01	0.09	0.03	0.00	0.00	0.00	31.03
Conference Facilities at POC	0.44	6.30	2.47	0.02	0.32	0.26	2,282.42
Cruise Ship Terminal Berth 45-50	4.28	61.80	24.27	0.21	3.16	2.59	22,386.44
San Pedro Park at 22nd & Miner St	1.34	19.32	7.59	0.07	0.99	0.81	6,998.95

Port of Call Restaurant Development	13.37	192.87	75.74	0.65	9.85	8.08	69,860.77
Port of Call Retail Development	8.34	120.30	47.24	0.41	6.14	5.04	43,574.88
S.S. Lane Victory	0.06	0.86	0.34	0.00	0.04	0.04	312.22
Ralph J Scott Fireboat Museum	0.06	0.86	0.34	0.00	0.04	0.04	312.22
Mercardo Warehouse 9 & 10 Reuse	0.84	12.13	4.76	0.04	0.62	0.51	4,394.18
Warehouse 9 & 10 Reuse	0.05	0.74	0.29	0.00	0.04	0.03	269.54
Red Car Museum	0.06	0.88	0.35	0.00	0.04	0.04	318.57
Red Car Maintenance Facility	0.18	2.65	1.04	0.01	0.14	0.11	960.77
Millennium Tugboat Office	0.02	0.33	0.13	0.00	0.02	0.01	119.98
Waterfront Promenade Town Sq	0.34	4.88	1.92	0.02	0.25	0.20	1,769.23
Fisherman Park	0.13	1.92	0.75	0.01	0.10	0.08	693.82
Research & Dev at Westways	0.32	4.66	1.83	0.02	0.24	0.20	1,688.17
Crowley Tugboat	0.01	0.09	0.04	0.00	0.00	0.00	34.19
Outer Harbor Park	0.44	6.37	2.50	0.02	0.33	0.27	2,306.94
<b>TOTALS (tons/year, unmitigated)</b>	<b>39.47</b>	<b>569.36</b>	<b>223.59</b>	<b>1.92</b>	<b>29.07</b>	<b>23.85</b>	<b>206,238.74</b>

Operational Settings:

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2015 Season: Annual

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
Cruise Parking Shuttle Outer Harbor		0.10	students	786.00	78.60	702.41
Cruise Ship Terminal Berth 91-93		1.46	students	5,240.00	7,650.40	73,673.35
Los Angeles Maritime Institute		0.50	students	10.00	5.00	48.15
Conference Facilities at POC		1.30	students	300.00	390.00	3,542.17
Cruise Ship Terminal Berth 45-50		1.46	students	2,620.00	3,825.20	34,742.38
San Pedro Park at 22nd & Miner St		66.44	acres	18.00	1,195.92	10,861.94

Port of Call Restaurant Development	94.36	1000 sq ft	125.00	11,795.00	108,419.64
Port of Call Retail Development	42.04	1000 sq ft	175.00	7,357.00	67,625.54
S.S. Lane Victory	5.40	1000 sq ft	10.00	54.00	484.54
Ralph J Scott Fireboat Museum	5.40	1000 sq ft	10.00	54.00	484.54
Mercardo Warehouse 9 & 10 Reuse	21.03	1000 sq ft	35.00	736.05	6,819.50
Warehouse 9 & 10 Reuse	1.29	1000 sq ft	35.00	45.15	418.31
Red Car Museum	5.40	1000 sq ft	10.00	54.00	494.40
Red Car Maintenance Facility	3.03	employees	37.00	112.11	1,491.06
Millennium Tugboat Office	0.56	employees	25.00	14.00	186.20
Waterfront Promenade Town Sq	20.00	acres	15.30	306.00	2,745.74
Fisherman Park	20.00	acres	6.00	120.00	1,076.76
Research & Dev at Westways	22.46	acres	13.00	291.98	2,619.94
Crowley Tugboat	0.57	unknown	7.00	3.99	53.07
Outer Harbor Park	66.50	acres	6.00	399.00	3,580.23
				34,487.40	320,069.87

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	1.5	0.0	0.0	100.0
Light Truck < 3750 lbs	2.8	0.0	0.0	100.0
Light Truck 3751-5750 lbs	0.0	0.0	0.0	100.0
Med Truck 5751-8500 lbs	0.0	0.0	0.0	100.0
Lite-Heavy Truck 8501-10,000 lbs	0.0	0.0	0.0	100.0
Lite-Heavy Truck 10,001-14,000 lbs	0.0	0.0	0.0	100.0
Med-Heavy Truck 14,001-33,000 lbs	0.0	0.0	0.0	100.0
Heavy-Heavy Truck 33,001-60,000 lbs	35.2	0.0	0.0	100.0
Other Bus	59.2	0.0	0.0	100.0
Urban Bus	0.0	0.0	0.0	100.0
Motorcycle	0.0	0.0	0.0	100.0
School Bus	0.0	0.0	0.0	100.0

Motor Home	1.3	0.0	0.0	100.0
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Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	12.7	7.0	9.5	13.3	7.4	8.9
Rural Trip Length (miles)	17.6	12.1	14.9	15.4	9.6	12.6
Trip speeds (mph)	30.0	30.0	30.0	30.0	30.0	30.0
% of Trips - Residential	32.9	18.0	49.1			
% of Trips - Commercial (by land use)						
Cruise Parking Shuttle Outer Harbor				1.0	0.5	98.5
Cruise Ship Terminal Berth 91-93				20.0	10.0	70.0
Los Angeles Maritime Institute				20.0	10.0	70.0
Conference Facilities at POC				5.0	2.5	92.5
Cruise Ship Terminal Berth 45-50				5.0	2.5	92.5
San Pedro Park at 22nd & Miner St				5.0	2.5	92.5
Port of Call Restaurant Development				8.0	4.0	88.0
Port of Call Retail Development				8.0	4.0	88.0
S.S. Lane Victory				2.0	1.0	97.0
Ralph J Scott Fireboat Museum				2.0	1.0	97.0
Mercardo Warehouse 9 & 10 Reuse				10.0	5.0	85.0
Warehouse 9 & 10 Reuse				10.0	5.0	85.0
Red Car Museum				7.0	3.5	89.5
Red Car Maintenance Facility				100.0	0.0	0.0
Millennium Tugboat Office				100.0	0.0	0.0
Waterfront Promenade Town Sq				2.0	1.0	97.0
Fisherman Park				2.0	1.0	97.0
Research & Dev at Westways				2.0	1.0	97.0
Crowley Tugboat				100.0	0.0	0.0
Outer Harbor Park				2.0	1.0	97.0

Urbemis 2007 Version 9.2.4

## Combined Summer Emissions Reports (Pounds/Day)

File Name: C:\Documents and Settings\mslavick\Application Data\Urbemis\Version9a\Projects\SPW\_Alternative\_1\_2015\_wkdy.urb924

Project Name: San Pedro Waterfront Alternative 1 2015 Weekday Diesel PM

Project Location: South Coast AQMD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

## Summary Report:

## OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (lbs/day, unmitigated)	218.94	3,036.32	1,253.69	10.65	159.85	130.98	1,142,265.12

## SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (lbs/day, unmitigated)	218.94	3,036.32	1,253.69	10.65	159.85	130.98	1,142,265.12

## Operational Unmitigated Detail Report:

## OPERATIONAL EMISSION ESTIMATES Summer Pounds Per Day, Unmitigated

<u>Source</u>	<u>ROG</u>	<u>NOX</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM25</u>	<u>CO2</u>
Cruise Parking Shuttle Outer Harbor	0.54	6.59	2.72	0.02	0.35	0.28	2,480.69
Cruise Ship Terminal Berth 91-93	50.12	691.63	285.61	2.43	36.41	29.84	260,193.81
Los Angeles Maritime Institute	0.22	2.98	1.23	0.01	0.16	0.13	1,122.35
Conference Facilities at POC	4.80	66.51	27.46	0.23	3.50	2.87	25,019.76
Cruise Ship Terminal Berth 45-50	23.65	326.16	134.66	1.14	17.17	14.07	122,699.49
San Pedro Park at 22nd & Miner St	3.29	45.78	18.90	0.16	2.41	1.98	17,223.22

Port of Call Restaurant Development	69.72	970.26	400.61	3.40	51.08	41.86	365,010.26
Port of Call Retail Development	48.10	669.29	276.34	2.35	35.24	28.87	251,786.08
S.S. Lane Victory	0.22	3.03	1.25	0.01	0.16	0.13	1,140.83
Ralph J Scott Fireboat Museum	0.22	3.03	1.25	0.01	0.16	0.13	1,140.83
Mercardo Warehouse 9 & 10 Reuse	4.85	67.49	27.87	0.24	3.55	2.91	25,390.05
Warehouse 9 & 10 Reuse	1.09	15.13	6.25	0.05	0.80	0.65	5,691.86
Red Car Museum	0.22	3.09	1.28	0.01	0.16	0.13	1,164.04
Red Car Maintenance Facility	1.01	13.95	5.76	0.05	0.73	0.60	5,248.72
Millennium Tugboat Office	0.75	10.36	4.28	0.04	0.55	0.45	3,898.73
Waterfront Promenade Town Sq	1.85	25.78	10.64	0.09	1.36	1.11	9,697.09
Fisherman Park	0.73	10.11	4.17	0.04	0.53	0.44	3,802.78
Research & Dev at Westways	6.27	87.19	36.00	0.31	4.59	3.76	32,800.90
Crowley Tugboat	0.21	2.88	1.19	0.01	0.15	0.12	1,081.78
Outer Harbor Park	1.08	15.08	6.22	0.05	0.79	0.65	5,671.85
<b>TOTALS (lbs/day, unmitigated)</b>	<b>218.94</b>	<b>3,036.32</b>	<b>1,253.69</b>	<b>10.65</b>	<b>159.85</b>	<b>130.98</b>	<b>1,142,265.12</b>

Operational Settings:

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2015 Temperature (F): 80 Season: Summer

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
Cruise Parking Shuttle Outer Harbor		0.10	students	786.00	78.60	702.41
Cruise Ship Terminal Berth 91-93		1.46	students	5,240.00	7,650.40	73,673.35
Los Angeles Maritime Institute		3.30	students	10.00	33.00	317.79
Conference Facilities at POC		2.60	students	300.00	780.00	7,084.35
Cruise Ship Terminal Berth 45-50		1.46	students	2,620.00	3,825.20	34,742.38
San Pedro Park at 22nd & Miner St		29.83	acres	18.00	536.94	4,876.76

Port of Call Restaurant Development	89.95	1000 sq ft	125.00	11,243.75	103,352.54
Port of Call Retail Development	44.32	1000 sq ft	175.00	7,756.00	71,293.15
S.S. Lane Victory	3.60	1000 sq ft	10.00	36.00	323.03
Ralph J Scott Fireboat Museum	3.60	1000 sq ft	10.00	36.00	323.03
Mercardo Warehouse 9 & 10 Reuse	22.17	1000 sq ft	35.00	775.95	7,189.18
Warehouse 9 & 10 Reuse	4.97	1000 sq ft	35.00	173.95	1,611.65
Red Car Museum	3.60	1000 sq ft	10.00	36.00	329.60
Red Car Maintenance Facility	3.02	employees	37.00	111.74	1,486.14
Millennium Tugboat Office	3.32	employees	25.00	83.00	1,103.90
Waterfront Promenade Town Sq	20.00	acres	15.30	306.00	2,745.74
Fisherman Park	20.00	acres	6.00	120.00	1,076.76
Research & Dev at Westways	79.62	acres	13.00	1,035.06	9,287.59
Crowley Tugboat	3.29	unknown	7.00	23.03	306.30
Outer Harbor Park	29.83	acres	6.00	178.98	1,605.99
				34,819.60	323,431.64

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	1.5	0.2	99.6	0.2
Light Truck < 3750 lbs	2.8	0.0	0.0	100.0
Light Truck 3751-5750 lbs	0.0	0.0	0.0	100.0
Med Truck 5751-8500 lbs	0.0	0.0	0.0	100.0
Lite-Heavy Truck 8501-10,000 lbs	0.0	0.0	0.0	100.0
Lite-Heavy Truck 10,001-14,000 lbs	0.0	0.0	0.0	100.0
Med-Heavy Truck 14,001-33,000 lbs	0.0	0.0	0.0	100.0
Heavy-Heavy Truck 33,001-60,000 lbs	35.2	0.0	0.0	100.0
Other Bus	59.2	0.0	0.0	100.0
Urban Bus	0.0	0.0	0.0	100.0
Motorcycle	0.0	0.0	0.0	100.0
School Bus	0.0	0.0	0.0	100.0
Motor Home	1.3	0.0	0.0	100.0



Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	12.7	7.0	9.5	13.3	7.4	8.9
Rural Trip Length (miles)	17.6	12.1	14.9	15.4	9.6	12.6
Trip speeds (mph)	30.0	30.0	30.0	30.0	30.0	30.0
% of Trips - Residential	32.9	18.0	49.1			
% of Trips - Commercial (by land use)						
Cruise Parking Shuttle Outer Harbor				1.0	0.5	98.5
Cruise Ship Terminal Berth 91-93				20.0	10.0	70.0
Los Angeles Maritime Institute				20.0	10.0	70.0
Conference Facilities at POC				5.0	2.5	92.5
Cruise Ship Terminal Berth 45-50				5.0	2.5	92.5
San Pedro Park at 22nd & Miner St				5.0	2.5	92.5
Port of Call Restaurant Development				8.0	4.0	88.0
Port of Call Retail Development				8.0	4.0	88.0
S.S. Lane Victory				2.0	1.0	97.0
Ralph J Scott Fireboat Museum				2.0	1.0	97.0
Mercardo Warehouse 9 & 10 Reuse				10.0	5.0	85.0
Warehouse 9 & 10 Reuse				10.0	5.0	85.0
Red Car Museum				7.0	3.5	89.5
Red Car Maintenance Facility				100.0	0.0	0.0
Millennium Tugboat Office				100.0	0.0	0.0
Waterfront Promenade Town Sq				2.0	1.0	97.0
Fisherman Park				2.0	1.0	97.0
Research & Dev at Westways				2.0	1.0	97.0
Crowley Tugboat				100.0	0.0	0.0
Outer Harbor Park				2.0	1.0	97.0

Urbemis 2007 Version 9.2.4

## Combined Summer Emissions Reports (Pounds/Day)

File Name: C:\Documents and Settings\mslavick\Application Data\Urbemis\Version9a\Projects\SPW\_Alternative\_1\_2015\_wkend.urb924

Project Name: San Pedro Waterfront Alternative 1 2015 Weekend Diesel PM

Project Location: South Coast AQMD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

## Summary Report:

## OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (lbs/day, unmitigated)	216.31	3,014.51	1,225.21	10.54	159.36	130.70	1,130,075.30

## SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (lbs/day, unmitigated)	216.31	3,014.51	1,225.21	10.54	159.36	130.70	1,130,075.30

## Operational Unmitigated Detail Report:

## OPERATIONAL EMISSION ESTIMATES Summer Pounds Per Day, Unmitigated

<u>Source</u>	<u>ROG</u>	<u>NOX</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM25</u>	<u>CO2</u>
Cruise Parking Shuttle Outer Harbor	0.47	6.62	2.69	0.02	0.35	0.29	2,480.01
Cruise Ship Terminal Berth 91-93	49.79	693.88	282.02	2.42	36.68	30.08	260,119.56
Los Angeles Maritime Institute	0.03	0.45	0.18	0.00	0.02	0.02	170.00
Conference Facilities at POC	2.39	33.36	13.56	0.12	1.76	1.45	12,506.41
Cruise Ship Terminal Berth 45-50	23.48	327.21	132.99	1.14	17.30	14.19	122,665.41
San Pedro Park at 22nd & Miner St	7.34	102.30	41.58	0.36	5.41	4.44	38,350.42

Port of Call Restaurant Development	73.27	1,021.13	415.03	3.57	53.98	44.27	382,798.76
Port of Call Retail Development	45.70	636.92	258.87	2.22	33.67	27.61	238,766.47
S.S. Lane Victory	0.33	4.56	1.85	0.02	0.24	0.20	1,710.78
Ralph J Scott Fireboat Museum	0.33	4.56	1.85	0.02	0.24	0.20	1,710.78
Mercardo Warehouse 9 & 10 Reuse	4.61	64.23	26.11	0.22	3.40	2.78	24,077.72
Warehouse 9 & 10 Reuse	0.28	3.94	1.60	0.01	0.21	0.17	1,476.95
Red Car Museum	0.33	4.66	1.89	0.02	0.25	0.20	1,745.57
Red Car Maintenance Facility	1.01	14.04	5.71	0.05	0.74	0.61	5,264.52
Millennium Tugboat Office	0.13	1.75	0.71	0.01	0.09	0.08	657.42
Waterfront Promenade Town Sq	1.86	25.86	10.51	0.09	1.37	1.12	9,694.42
Fisherman Park	0.73	10.14	4.12	0.04	0.54	0.44	3,801.73
Research & Dev at Westways	1.77	24.68	10.03	0.09	1.30	1.07	9,250.25
Crowley Tugboat	0.04	0.50	0.20	0.00	0.03	0.02	187.36
Outer Harbor Park	2.42	33.72	13.71	0.12	1.78	1.46	12,640.76
<b>TOTALS (lbs/day, unmitigated)</b>	<b>216.31</b>	<b>3,014.51</b>	<b>1,225.21</b>	<b>10.54</b>	<b>159.36</b>	<b>130.70</b>	<b>1,130,075.30</b>

Operational Settings:

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2015 Temperature (F): 80 Season: Summer

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
Cruise Parking Shuttle Outer Harbor		0.10	students	786.00	78.60	702.41
Cruise Ship Terminal Berth 91-93		1.46	students	5,240.00	7,650.40	73,673.35
Los Angeles Maritime Institute		0.50	students	10.00	5.00	48.15
Conference Facilities at POC		1.30	students	300.00	390.00	3,542.17
Cruise Ship Terminal Berth 45-50		1.46	students	2,620.00	3,825.20	34,742.38
San Pedro Park at 22nd & Miner St		66.44	acres	18.00	1,195.92	10,861.94

Port of Call Restaurant Development	94.36	1000 sq ft	125.00	11,795.00	108,419.64
Port of Call Retail Development	42.04	1000 sq ft	175.00	7,357.00	67,625.54
S.S. Lane Victory	5.40	1000 sq ft	10.00	54.00	484.54
Ralph J Scott Fireboat Museum	5.40	1000 sq ft	10.00	54.00	484.54
Mercardo Warehouse 9 & 10 Reuse	21.03	1000 sq ft	35.00	736.05	6,819.50
Warehouse 9 & 10 Reuse	1.29	1000 sq ft	35.00	45.15	418.31
Red Car Museum	5.40	1000 sq ft	10.00	54.00	494.40
Red Car Maintenance Facility	3.03	employees	37.00	112.11	1,491.06
Millennium Tugboat Office	0.56	employees	25.00	14.00	186.20
Waterfront Promenade Town Sq	20.00	acres	15.30	306.00	2,745.74
Fisherman Park	20.00	acres	6.00	120.00	1,076.76
Research & Dev at Westways	22.46	acres	13.00	291.98	2,619.94
Crowley Tugboat	0.57	unknown	7.00	3.99	53.07
Outer Harbor Park	66.50	acres	6.00	399.00	3,580.23
				34,487.40	320,069.87

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	1.5	0.0	0.0	100.0
Light Truck < 3750 lbs	2.8	0.0	0.0	100.0
Light Truck 3751-5750 lbs	0.0	0.0	0.0	100.0
Med Truck 5751-8500 lbs	0.0	0.0	0.0	100.0
Lite-Heavy Truck 8501-10,000 lbs	0.0	0.0	0.0	100.0
Lite-Heavy Truck 10,001-14,000 lbs	0.0	0.0	0.0	100.0
Med-Heavy Truck 14,001-33,000 lbs	0.0	0.0	0.0	100.0
Heavy-Heavy Truck 33,001-60,000 lbs	35.2	0.0	0.0	100.0
Other Bus	59.2	0.0	0.0	100.0
Urban Bus	0.0	0.0	0.0	100.0
Motorcycle	0.0	0.0	0.0	100.0
School Bus	0.0	0.0	0.0	100.0

Motor Home	1.3	0.0	0.0	100.0
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Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	12.7	7.0	9.5	13.3	7.4	8.9
Rural Trip Length (miles)	17.6	12.1	14.9	15.4	9.6	12.6
Trip speeds (mph)	30.0	30.0	30.0	30.0	30.0	30.0
% of Trips - Residential	32.9	18.0	49.1			
% of Trips - Commercial (by land use)						
Cruise Parking Shuttle Outer Harbor				1.0	0.5	98.5
Cruise Ship Terminal Berth 91-93				20.0	10.0	70.0
Los Angeles Maritime Institute				20.0	10.0	70.0
Conference Facilities at POC				5.0	2.5	92.5
Cruise Ship Terminal Berth 45-50				5.0	2.5	92.5
San Pedro Park at 22nd & Miner St				5.0	2.5	92.5
Port of Call Restaurant Development				8.0	4.0	88.0
Port of Call Retail Development				8.0	4.0	88.0
S.S. Lane Victory				2.0	1.0	97.0
Ralph J Scott Fireboat Museum				2.0	1.0	97.0
Mercardo Warehouse 9 & 10 Reuse				10.0	5.0	85.0
Warehouse 9 & 10 Reuse				10.0	5.0	85.0
Red Car Museum				7.0	3.5	89.5
Red Car Maintenance Facility				100.0	0.0	0.0
Millennium Tugboat Office				100.0	0.0	0.0
Waterfront Promenade Town Sq				2.0	1.0	97.0
Fisherman Park				2.0	1.0	97.0
Research & Dev at Westways				2.0	1.0	97.0
Crowley Tugboat				100.0	0.0	0.0
Outer Harbor Park				2.0	1.0	97.0

Urbemis 2007 Version 9.2.4

## Combined Annual Emissions Reports (Tons/Year)

File Name: C:\Documents and Settings\mslavick\Application Data\Urbemis\Version9a\Projects\SPW\_Alternative\_1\_2022\_wkdy.urb924

Project Name: San Pedro Waterfront Alternative 1 2022 Weekday Diesel PM

Project Location: South Coast AQMD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

## Summary Report:

## OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (tons/year, unmitigated)	29.98	361.91	177.86	2.04	22.89	18.02	218,560.22

## SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (tons/year, unmitigated)	29.98	361.91	177.86	2.04	22.89	18.02	218,560.22

## Operational Unmitigated Detail Report:

## OPERATIONAL EMISSION ESTIMATES Annual Tons Per Year, Unmitigated

<u>Source</u>	ROG	NOX	CO	SO2	PM10	PM25	CO2
Cruise Parking Shuttle Outer Harbor	0.07	0.86	0.42	0.00	0.05	0.04	518.23
Cruise Ship Terminal Berth 91-93	7.45	89.96	44.21	0.51	5.69	4.47	54,328.20
Los Angeles Maritime Institute	0.03	0.34	0.17	0.00	0.02	0.02	204.76
Conference Facilities at POC	0.63	7.56	3.71	0.04	0.48	0.38	4,564.70
Cruise Ship Terminal Berth 45-50	3.51	42.43	20.85	0.24	2.68	2.11	25,624.00
San Pedro Park at 22nd & Miner St	0.43	5.20	2.56	0.03	0.33	0.26	3,142.27

Port of Call Restaurant Development	9.13	110.27	54.20	0.62	6.98	5.48	66,593.72
Port of Call Retail Development	6.30	76.07	37.38	0.43	4.81	3.78	45,936.71
S.S. Lane Victory	0.03	0.34	0.17	0.00	0.02	0.02	208.14
Ralph J Scott Fireboat Museum	0.03	0.34	0.17	0.00	0.02	0.02	208.14
Mercardo Warehouse 9 & 10 Reuse	0.64	7.67	3.77	0.04	0.49	0.38	4,632.24
Warehouse 9 & 10 Reuse	0.14	1.72	0.85	0.01	0.11	0.09	1,038.44
Red Car Museum	0.03	0.35	0.17	0.00	0.02	0.02	212.37
Red Car Maintenance Facility	0.13	1.59	0.78	0.01	0.10	0.08	957.57
Millennium Tugboat Office	0.10	1.18	0.58	0.01	0.07	0.06	711.28
Waterfront Promenade Town Sq	0.24	2.93	1.44	0.02	0.19	0.15	1,769.18
Fisherman Park	0.10	1.15	0.56	0.01	0.07	0.06	693.79
Research & Dev at Westways	0.82	9.91	4.87	0.06	0.63	0.49	5,984.33
Crowley Tugboat	0.03	0.33	0.16	0.00	0.02	0.02	197.36
Outer Harbor Park	0.14	1.71	0.84	0.01	0.11	0.09	1,034.79
<b>TOTALS (tons/year, unmitigated)</b>	<b>29.98</b>	<b>361.91</b>	<b>177.86</b>	<b>2.04</b>	<b>22.89</b>	<b>18.02</b>	<b>218,560.22</b>

Operational Settings:

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2020 Season: Annual

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
Cruise Parking Shuttle Outer Harbor		0.10	students	900.00	90.00	804.28
Cruise Ship Terminal Berth 91-93		1.46	students	5,997.00	8,755.62	84,316.62
Los Angeles Maritime Institute		3.30	students	10.00	33.00	317.79
Conference Facilities at POC		2.60	students	300.00	780.00	7,084.35
Cruise Ship Terminal Berth 45-50		1.46	students	2,999.00	4,378.54	39,768.09
San Pedro Park at 22nd & Miner St		29.83	acres	18.00	536.94	4,876.76

Port of Call Restaurant Development	89.95	1000 sq ft	125.00	11,243.75	103,352.54
Port of Call Retail Development	44.32	1000 sq ft	175.00	7,756.00	71,293.15
S.S. Lane Victory	3.60	1000 sq ft	10.00	36.00	323.03
Ralph J Scott Fireboat Museum	3.60	1000 sq ft	10.00	36.00	323.03
Mercardo Warehouse 9 & 10 Reuse	22.17	1000 sq ft	35.00	775.95	7,189.18
Warehouse 9 & 10 Reuse	4.97	1000 sq ft	35.00	173.95	1,611.65
Red Car Museum	3.60	1000 sq ft	10.00	36.00	329.60
Red Car Maintenance Facility	3.02	employees	37.00	111.74	1,486.14
Millennium Tugboat Office	3.32	employees	25.00	83.00	1,103.90
Waterfront Promenade Town Sq	20.00	acres	15.30	306.00	2,745.74
Fisherman Park	20.00	acres	6.00	120.00	1,076.76
Research & Dev at Westways	79.62	acres	13.00	1,035.06	9,287.59
Crowley Tugboat	3.29	unknown	7.00	23.03	306.30
Outer Harbor Park	29.83	acres	6.00	178.98	1,605.99
				36,489.56	339,202.49

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	1.5	0.0	0.0	100.0
Light Truck < 3750 lbs	2.8	0.0	0.0	100.0
Light Truck 3751-5750 lbs	0.0	0.0	0.0	100.0
Med Truck 5751-8500 lbs	0.0	0.0	0.0	100.0
Lite-Heavy Truck 8501-10,000 lbs	0.0	0.0	0.0	100.0
Lite-Heavy Truck 10,001-14,000 lbs	0.0	0.0	0.0	100.0
Med-Heavy Truck 14,001-33,000 lbs	0.0	0.0	0.0	100.0
Heavy-Heavy Truck 33,001-60,000 lbs	35.2	0.0	0.0	100.0
Other Bus	59.2	0.0	0.0	100.0
Urban Bus	0.0	0.0	0.0	100.0
Motorcycle	0.0	0.0	0.0	100.0
School Bus	0.0	0.0	0.0	100.0
Motor Home	1.3	0.0	0.0	100.0



Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	12.7	7.0	9.5	13.3	7.4	8.9
Rural Trip Length (miles)	17.6	12.1	14.9	15.4	9.6	12.6
Trip speeds (mph)	30.0	30.0	30.0	30.0	30.0	30.0
% of Trips - Residential	32.9	18.0	49.1			
% of Trips - Commercial (by land use)						
Cruise Parking Shuttle Outer Harbor				1.0	0.5	98.5
Cruise Ship Terminal Berth 91-93				20.0	10.0	70.0
Los Angeles Maritime Institute				20.0	10.0	70.0
Conference Facilities at POC				5.0	2.5	92.5
Cruise Ship Terminal Berth 45-50				5.0	2.5	92.5
San Pedro Park at 22nd & Miner St				5.0	2.5	92.5
Port of Call Restaurant Development				8.0	4.0	88.0
Port of Call Retail Development				8.0	4.0	88.0
S.S. Lane Victory				2.0	1.0	97.0
Ralph J Scott Fireboat Museum				2.0	1.0	97.0
Mercardo Warehouse 9 & 10 Reuse				10.0	5.0	85.0
Warehouse 9 & 10 Reuse				10.0	5.0	85.0
Red Car Museum				7.0	3.5	89.5
Red Car Maintenance Facility				100.0	0.0	0.0
Millennium Tugboat Office				100.0	0.0	0.0
Waterfront Promenade Town Sq				2.0	1.0	97.0
Fisherman Park				2.0	1.0	97.0
Research & Dev at Westways				2.0	1.0	97.0
Crowley Tugboat				100.0	0.0	0.0
Outer Harbor Park				2.0	1.0	97.0

Urbemis 2007 Version 9.2.4

## Combined Annual Emissions Reports (Tons/Year)

File Name: C:\Documents and Settings\mslavick\Application Data\Urbemis\Version9a\Projects\SPW\_Alternative\_1\_2022\_wkend.urb924

Project Name: San Pedro Waterfront Alternative 1 2022 Weekend Diesel PM

Project Location: South Coast AQMD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

## Summary Report:

## OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (tons/year, unmitigated)	29.66	358.35	176.10	2.02	22.64	17.83	216,394.15

## SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (tons/year, unmitigated)	29.66	358.35	176.10	2.02	22.64	17.83	216,394.15

## Operational Unmitigated Detail Report:

## OPERATIONAL EMISSION ESTIMATES Annual Tons Per Year, Unmitigated

<u>Source</u>	ROG	NOX	CO	SO2	PM10	PM25	CO2
Cruise Parking Shuttle Outer Harbor	0.07	0.86	0.42	0.00	0.05	0.04	518.23
Cruise Ship Terminal Berth 91-93	7.45	89.96	44.21	0.51	5.69	4.47	54,328.20
Los Angeles Maritime Institute	0.00	0.05	0.03	0.00	0.00	0.00	31.02
Conference Facilities at POC	0.31	3.78	1.86	0.02	0.24	0.19	2,282.35
Cruise Ship Terminal Berth 45-50	3.51	42.43	20.85	0.24	2.68	2.11	25,624.00
San Pedro Park at 22nd & Miner St	0.96	11.59	5.70	0.07	0.73	0.58	6,998.74

Port of Call Restaurant Development	9.58	115.68	56.85	0.65	7.32	5.75	69,858.63
Port of Call Retail Development	5.98	72.15	35.46	0.41	4.56	3.59	43,573.54
S.S. Lane Victory	0.04	0.52	0.25	0.00	0.03	0.03	312.21
Ralph J Scott Fireboat Museum	0.04	0.52	0.25	0.00	0.03	0.03	312.21
Mercardo Warehouse 9 & 10 Reuse	0.60	7.28	3.58	0.04	0.46	0.36	4,394.05
Warehouse 9 & 10 Reuse	0.04	0.45	0.22	0.00	0.03	0.02	269.54
Red Car Museum	0.04	0.53	0.26	0.00	0.03	0.03	318.56
Red Car Maintenance Facility	0.13	1.59	0.78	0.01	0.10	0.08	960.74
Millennium Tugboat Office	0.02	0.20	0.10	0.00	0.01	0.01	119.98
Waterfront Promenade Town Sq	0.24	2.93	1.44	0.02	0.19	0.15	1,769.18
Fisherman Park	0.10	1.15	0.56	0.01	0.07	0.06	693.79
Research & Dev at Westways	0.23	2.80	1.37	0.02	0.18	0.14	1,688.12
Crowley Tugboat	0.00	0.06	0.03	0.00	0.00	0.00	34.19
Outer Harbor Park	0.32	3.82	1.88	0.02	0.24	0.19	2,306.87
<b>TOTALS (tons/year, unmitigated)</b>	<b>29.66</b>	<b>358.35</b>	<b>176.10</b>	<b>2.02</b>	<b>22.64</b>	<b>17.83</b>	<b>216,394.15</b>

Operational Settings:

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2020 Season: Annual

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
Cruise Parking Shuttle Outer Harbor		0.10	students	900.00	90.00	804.28
Cruise Ship Terminal Berth 91-93		1.46	students	5,997.00	8,755.62	84,316.62
Los Angeles Maritime Institute		0.50	students	10.00	5.00	48.15
Conference Facilities at POC		1.30	students	300.00	390.00	3,542.17
Cruise Ship Terminal Berth 45-50		1.46	students	2,999.00	4,378.54	39,768.09
San Pedro Park at 22nd & Miner St		66.44	acres	18.00	1,195.92	10,861.94

Port of Call Restaurant Development	94.36	1000 sq ft	125.00	11,795.00	108,419.64
Port of Call Retail Development	42.04	1000 sq ft	175.00	7,357.00	67,625.54
S.S. Lane Victory	5.40	1000 sq ft	10.00	54.00	484.54
Ralph J Scott Fireboat Museum	5.40	1000 sq ft	10.00	54.00	484.54
Mercardo Warehouse 9 & 10 Reuse	21.03	1000 sq ft	35.00	736.05	6,819.50
Warehouse 9 & 10 Reuse	1.29	1000 sq ft	35.00	45.15	418.31
Red Car Museum	5.40	1000 sq ft	10.00	54.00	494.40
Red Car Maintenance Facility	3.03	employees	37.00	112.11	1,491.06
Millennium Tugboat Office	0.56	employees	25.00	14.00	186.20
Waterfront Promenade Town Sq	20.00	acres	15.30	306.00	2,745.74
Fisherman Park	20.00	acres	6.00	120.00	1,076.76
Research & Dev at Westways	22.46	acres	13.00	291.98	2,619.94
Crowley Tugboat	0.57	unknown	7.00	3.99	53.07
Outer Harbor Park	66.50	acres	6.00	399.00	3,580.23
				36,157.36	335,840.72

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	1.5	0.0	0.0	100.0
Light Truck < 3750 lbs	2.8	0.0	0.0	100.0
Light Truck 3751-5750 lbs	0.0	0.0	0.0	100.0
Med Truck 5751-8500 lbs	0.0	0.0	0.0	100.0
Lite-Heavy Truck 8501-10,000 lbs	0.0	0.0	0.0	100.0
Lite-Heavy Truck 10,001-14,000 lbs	0.0	0.0	0.0	100.0
Med-Heavy Truck 14,001-33,000 lbs	0.0	0.0	0.0	100.0
Heavy-Heavy Truck 33,001-60,000 lbs	35.2	0.0	0.0	100.0
Other Bus	59.2	0.0	0.0	100.0
Urban Bus	0.0	0.0	0.0	100.0
Motorcycle	0.0	0.0	0.0	100.0
School Bus	0.0	0.0	0.0	100.0
Motor Home	1.3	0.0	0.0	100.0

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	12.7	7.0	9.5	13.3	7.4	8.9
Rural Trip Length (miles)	17.6	12.1	14.9	15.4	9.6	12.6
Trip speeds (mph)	30.0	30.0	30.0	30.0	30.0	30.0
% of Trips - Residential	32.9	18.0	49.1			
% of Trips - Commercial (by land use)						
Cruise Parking Shuttle Outer Harbor				1.0	0.5	98.5
Cruise Ship Terminal Berth 91-93				20.0	10.0	70.0
Los Angeles Maritime Institute				20.0	10.0	70.0
Conference Facilities at POC				5.0	2.5	92.5
Cruise Ship Terminal Berth 45-50				5.0	2.5	92.5
San Pedro Park at 22nd & Miner St				5.0	2.5	92.5
Port of Call Restaurant Development				8.0	4.0	88.0
Port of Call Retail Development				8.0	4.0	88.0
S.S. Lane Victory				2.0	1.0	97.0
Ralph J Scott Fireboat Museum				2.0	1.0	97.0
Mercardo Warehouse 9 & 10 Reuse				10.0	5.0	85.0
Warehouse 9 & 10 Reuse				10.0	5.0	85.0
Red Car Museum				7.0	3.5	89.5
Red Car Maintenance Facility				100.0	0.0	0.0
Millennium Tugboat Office				100.0	0.0	0.0
Waterfront Promenade Town Sq				2.0	1.0	97.0
Fisherman Park				2.0	1.0	97.0
Research & Dev at Westways				2.0	1.0	97.0
Crowley Tugboat				100.0	0.0	0.0
Outer Harbor Park				2.0	1.0	97.0

## Combined Summer Emissions Reports (Pounds/Day)

File Name: C:\Documents and Settings\mslavick\Application Data\Urbemis\Version9a\Projects\SPW\_Alternative\_1\_2022\_wkdy.urb924

Project Name: San Pedro Waterfront Alternative 1 2022 Weekday Diesel PM

Project Location: South Coast AQMD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

## Summary Report:

## OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (lbs/day, unmitigated)	164.28	1,916.04	974.64	11.17	125.45	98.57	1,197,590.31

## SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (lbs/day, unmitigated)	164.28	1,916.04	974.64	11.17	125.45	98.57	1,197,590.31

## Operational Unmitigated Detail Report:

## OPERATIONAL EMISSION ESTIMATES Summer Pounds Per Day, Unmitigated

<u>Source</u>	ROG	NOX	CO	SO2	PM10	PM25	CO2
Cruise Parking Shuttle Outer Harbor	0.39	4.54	2.31	0.03	0.30	0.23	2,839.61
Cruise Ship Terminal Berth 91-93	40.84	476.28	242.27	2.77	31.18	24.50	297,688.77
Los Angeles Maritime Institute	0.15	1.80	0.91	0.01	0.12	0.09	1,121.99
Conference Facilities at POC	3.43	40.02	20.36	0.23	2.62	2.06	25,012.05
Cruise Ship Terminal Berth 45-50	19.26	224.64	114.27	1.31	14.71	11.56	140,405.45
San Pedro Park at 22nd & Miner St	2.36	27.55	14.01	0.16	1.80	1.42	17,217.91

Port of Call Restaurant Development	50.05	583.81	296.96	3.40	38.22	30.03	364,897.11
Port of Call Retail Development	34.53	402.71	204.85	2.35	26.37	20.72	251,708.02
S.S. Lane Victory	0.16	1.82	0.93	0.01	0.12	0.09	1,140.48
Ralph J Scott Fireboat Museum	0.16	1.82	0.93	0.01	0.12	0.09	1,140.48
Mercardo Warehouse 9 & 10 Reuse	3.48	40.61	20.66	0.24	2.66	2.09	25,382.15
Warehouse 9 & 10 Reuse	0.78	9.10	4.63	0.05	0.60	0.47	5,690.09
Red Car Museum	0.16	1.86	0.95	0.01	0.12	0.10	1,163.68
Red Car Maintenance Facility	0.72	8.39	4.27	0.05	0.55	0.43	5,246.98
Millennium Tugboat Office	0.53	6.24	3.17	0.04	0.41	0.32	3,897.44
Waterfront Promenade Town Sq	1.33	15.51	7.89	0.09	1.02	0.80	9,694.12
Fisherman Park	0.52	6.08	3.09	0.04	0.40	0.31	3,801.62
Research & Dev at Westways	4.50	52.46	26.69	0.31	3.43	2.70	32,790.83
Crowley Tugboat	0.15	1.73	0.88	0.01	0.11	0.09	1,081.42
Outer Harbor Park	0.78	9.07	4.61	0.05	0.59	0.47	5,670.11
<b>TOTALS (lbs/day, unmitigated)</b>	<b>164.28</b>	<b>1,916.04</b>	<b>974.64</b>	<b>11.17</b>	<b>125.45</b>	<b>98.57</b>	<b>1,197,590.31</b>

Operational Settings:

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2020 Temperature (F): 80 Season: Summer

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
Cruise Parking Shuttle Outer Harbor		0.10	students	900.00	90.00	804.28
Cruise Ship Terminal Berth 91-93		1.46	students	5,997.00	8,755.62	84,316.62
Los Angeles Maritime Institute		3.30	students	10.00	33.00	317.79
Conference Facilities at POC		2.60	students	300.00	780.00	7,084.35
Cruise Ship Terminal Berth 45-50		1.46	students	2,999.00	4,378.54	39,768.09
San Pedro Park at 22nd & Miner St		29.83	acres	18.00	536.94	4,876.76

Port of Call Restaurant Development	89.95	1000 sq ft	125.00	11,243.75	103,352.54
Port of Call Retail Development	44.32	1000 sq ft	175.00	7,756.00	71,293.15
S.S. Lane Victory	3.60	1000 sq ft	10.00	36.00	323.03
Ralph J Scott Fireboat Museum	3.60	1000 sq ft	10.00	36.00	323.03
Mercardo Warehouse 9 & 10 Reuse	22.17	1000 sq ft	35.00	775.95	7,189.18
Warehouse 9 & 10 Reuse	4.97	1000 sq ft	35.00	173.95	1,611.65
Red Car Museum	3.60	1000 sq ft	10.00	36.00	329.60
Red Car Maintenance Facility	3.02	employees	37.00	111.74	1,486.14
Millennium Tugboat Office	3.32	employees	25.00	83.00	1,103.90
Waterfront Promenade Town Sq	20.00	acres	15.30	306.00	2,745.74
Fisherman Park	20.00	acres	6.00	120.00	1,076.76
Research & Dev at Westways	79.62	acres	13.00	1,035.06	9,287.59
Crowley Tugboat	3.29	unknown	7.00	23.03	306.30
Outer Harbor Park	29.83	acres	6.00	178.98	1,605.99
				36,489.56	339,202.49

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	1.5	0.0	0.0	100.0
Light Truck < 3750 lbs	2.8	0.0	0.0	100.0
Light Truck 3751-5750 lbs	0.0	0.0	0.0	100.0
Med Truck 5751-8500 lbs	0.0	0.0	0.0	100.0
Lite-Heavy Truck 8501-10,000 lbs	0.0	0.0	0.0	100.0
Lite-Heavy Truck 10,001-14,000 lbs	0.0	0.0	0.0	100.0
Med-Heavy Truck 14,001-33,000 lbs	0.0	0.0	0.0	100.0
Heavy-Heavy Truck 33,001-60,000 lbs	35.2	0.0	0.0	100.0
Other Bus	59.2	0.0	0.0	100.0
Urban Bus	0.0	0.0	0.0	100.0
Motorcycle	0.0	0.0	0.0	100.0
School Bus	0.0	0.0	0.0	100.0
Motor Home	1.3	0.0	0.0	100.0



Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	12.7	7.0	9.5	13.3	7.4	8.9
Rural Trip Length (miles)	17.6	12.1	14.9	15.4	9.6	12.6
Trip speeds (mph)	30.0	30.0	30.0	30.0	30.0	30.0
% of Trips - Residential	32.9	18.0	49.1			
% of Trips - Commercial (by land use)						
Cruise Parking Shuttle Outer Harbor				1.0	0.5	98.5
Cruise Ship Terminal Berth 91-93				20.0	10.0	70.0
Los Angeles Maritime Institute				20.0	10.0	70.0
Conference Facilities at POC				5.0	2.5	92.5
Cruise Ship Terminal Berth 45-50				5.0	2.5	92.5
San Pedro Park at 22nd & Miner St				5.0	2.5	92.5
Port of Call Restaurant Development				8.0	4.0	88.0
Port of Call Retail Development				8.0	4.0	88.0
S.S. Lane Victory				2.0	1.0	97.0
Ralph J Scott Fireboat Museum				2.0	1.0	97.0
Mercardo Warehouse 9 & 10 Reuse				10.0	5.0	85.0
Warehouse 9 & 10 Reuse				10.0	5.0	85.0
Red Car Museum				7.0	3.5	89.5
Red Car Maintenance Facility				100.0	0.0	0.0
Millennium Tugboat Office				100.0	0.0	0.0
Waterfront Promenade Town Sq				2.0	1.0	97.0
Fisherman Park				2.0	1.0	97.0
Research & Dev at Westways				2.0	1.0	97.0
Crowley Tugboat				100.0	0.0	0.0
Outer Harbor Park				2.0	1.0	97.0

Urbemis 2007 Version 9.2.4

## Combined Summer Emissions Reports (Pounds/Day)

File Name: C:\Documents and Settings\mslavick\Application Data\Urbemis\Version9a\Projects\SPW\_Alternative\_1\_2022\_wkend.urb924

Project Name: San Pedro Waterfront Alternative 1 2022 Weekend Diesel PM

Project Location: South Coast AQMD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

## Summary Report:

## OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (lbs/day, unmitigated)	162.64	1,897.06	964.97	11.07	124.21	97.57	1,185,721.31

## SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (lbs/day, unmitigated)	162.64	1,897.06	964.97	11.07	124.21	97.57	1,185,721.31

## Operational Unmitigated Detail Report:

## OPERATIONAL EMISSION ESTIMATES Summer Pounds Per Day, Unmitigated

<u>Source</u>	<u>ROG</u>	<u>NOX</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM25</u>	<u>CO2</u>
Cruise Parking Shuttle Outer Harbor	0.39	4.54	2.31	0.03	0.30	0.23	2,839.61
Cruise Ship Terminal Berth 91-93	40.84	476.28	242.27	2.77	31.18	24.50	297,688.77
Los Angeles Maritime Institute	0.02	0.27	0.14	0.00	0.02	0.01	170.00
Conference Facilities at POC	1.72	20.01	10.18	0.12	1.31	1.03	12,506.02
Cruise Ship Terminal Berth 45-50	19.26	224.64	114.27	1.31	14.71	11.56	140,405.45
San Pedro Park at 22nd & Miner St	5.26	61.36	31.21	0.36	4.02	3.16	38,349.24

Port of Call Restaurant Development	52.51	612.43	311.52	3.57	40.10	31.50	382,787.02
Port of Call Retail Development	32.75	382.00	194.31	2.22	25.01	19.65	238,759.15
S.S. Lane Victory	0.23	2.74	1.39	0.02	0.18	0.14	1,710.73
Ralph J Scott Fireboat Museum	0.23	2.74	1.39	0.02	0.18	0.14	1,710.73
Mercardo Warehouse 9 & 10 Reuse	3.30	38.52	19.59	0.22	2.52	1.98	24,076.98
Warehouse 9 & 10 Reuse	0.20	2.36	1.20	0.01	0.15	0.12	1,476.90
Red Car Museum	0.24	2.79	1.42	0.02	0.18	0.14	1,745.52
Red Car Maintenance Facility	0.72	8.42	4.28	0.05	0.55	0.43	5,264.36
Millennium Tugboat Office	0.09	1.05	0.54	0.01	0.07	0.05	657.40
Waterfront Promenade Town Sq	1.33	15.51	7.89	0.09	1.02	0.80	9,694.12
Fisherman Park	0.52	6.08	3.09	0.04	0.40	0.31	3,801.62
Research & Dev at Westways	1.27	14.80	7.53	0.09	0.97	0.76	9,249.96
Crowley Tugboat	0.03	0.30	0.15	0.00	0.02	0.02	187.36
Outer Harbor Park	1.73	20.22	10.29	0.12	1.32	1.04	12,640.37
<b>TOTALS (lbs/day, unmitigated)</b>	<b>162.64</b>	<b>1,897.06</b>	<b>964.97</b>	<b>11.07</b>	<b>124.21</b>	<b>97.57</b>	<b>1,185,721.31</b>

Operational Settings:

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2020 Temperature (F): 80 Season: Summer

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
Cruise Parking Shuttle Outer Harbor		0.10	students	900.00	90.00	804.28
Cruise Ship Terminal Berth 91-93		1.46	students	5,997.00	8,755.62	84,316.62
Los Angeles Maritime Institute		0.50	students	10.00	5.00	48.15
Conference Facilities at POC		1.30	students	300.00	390.00	3,542.17
Cruise Ship Terminal Berth 45-50		1.46	students	2,999.00	4,378.54	39,768.09
San Pedro Park at 22nd & Miner St		66.44	acres	18.00	1,195.92	10,861.94

Port of Call Restaurant Development	94.36	1000 sq ft	125.00	11,795.00	108,419.64
Port of Call Retail Development	42.04	1000 sq ft	175.00	7,357.00	67,625.54
S.S. Lane Victory	5.40	1000 sq ft	10.00	54.00	484.54
Ralph J Scott Fireboat Museum	5.40	1000 sq ft	10.00	54.00	484.54
Mercardo Warehouse 9 & 10 Reuse	21.03	1000 sq ft	35.00	736.05	6,819.50
Warehouse 9 & 10 Reuse	1.29	1000 sq ft	35.00	45.15	418.31
Red Car Museum	5.40	1000 sq ft	10.00	54.00	494.40
Red Car Maintenance Facility	3.03	employees	37.00	112.11	1,491.06
Millennium Tugboat Office	0.56	employees	25.00	14.00	186.20
Waterfront Promenade Town Sq	20.00	acres	15.30	306.00	2,745.74
Fisherman Park	20.00	acres	6.00	120.00	1,076.76
Research & Dev at Westways	22.46	acres	13.00	291.98	2,619.94
Crowley Tugboat	0.57	unknown	7.00	3.99	53.07
Outer Harbor Park	66.50	acres	6.00	399.00	3,580.23
				36,157.36	335,840.72

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	1.5	0.0	0.0	100.0
Light Truck < 3750 lbs	2.8	0.0	0.0	100.0
Light Truck 3751-5750 lbs	0.0	0.0	0.0	100.0
Med Truck 5751-8500 lbs	0.0	0.0	0.0	100.0
Lite-Heavy Truck 8501-10,000 lbs	0.0	0.0	0.0	100.0
Lite-Heavy Truck 10,001-14,000 lbs	0.0	0.0	0.0	100.0
Med-Heavy Truck 14,001-33,000 lbs	0.0	0.0	0.0	100.0
Heavy-Heavy Truck 33,001-60,000 lbs	35.2	0.0	0.0	100.0
Other Bus	59.2	0.0	0.0	100.0
Urban Bus	0.0	0.0	0.0	100.0
Motorcycle	0.0	0.0	0.0	100.0
School Bus	0.0	0.0	0.0	100.0

Motor Home	1.3	0.0	0.0	100.0
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Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	12.7	7.0	9.5	13.3	7.4	8.9
Rural Trip Length (miles)	17.6	12.1	14.9	15.4	9.6	12.6
Trip speeds (mph)	30.0	30.0	30.0	30.0	30.0	30.0
% of Trips - Residential	32.9	18.0	49.1			
% of Trips - Commercial (by land use)						
Cruise Parking Shuttle Outer Harbor				1.0	0.5	98.5
Cruise Ship Terminal Berth 91-93				20.0	10.0	70.0
Los Angeles Maritime Institute				20.0	10.0	70.0
Conference Facilities at POC				5.0	2.5	92.5
Cruise Ship Terminal Berth 45-50				5.0	2.5	92.5
San Pedro Park at 22nd & Miner St				5.0	2.5	92.5
Port of Call Restaurant Development				8.0	4.0	88.0
Port of Call Retail Development				8.0	4.0	88.0
S.S. Lane Victory				2.0	1.0	97.0
Ralph J Scott Fireboat Museum				2.0	1.0	97.0
Mercardo Warehouse 9 & 10 Reuse				10.0	5.0	85.0
Warehouse 9 & 10 Reuse				10.0	5.0	85.0
Red Car Museum				7.0	3.5	89.5
Red Car Maintenance Facility				100.0	0.0	0.0
Millennium Tugboat Office				100.0	0.0	0.0
Waterfront Promenade Town Sq				2.0	1.0	97.0
Fisherman Park				2.0	1.0	97.0
Research & Dev at Westways				2.0	1.0	97.0
Crowley Tugboat				100.0	0.0	0.0
Outer Harbor Park				2.0	1.0	97.0

Urbemis 2007 Version 9.2.4

## Combined Annual Emissions Reports (Tons/Year)

File Name: C:\Documents and Settings\mslavick\Application Data\Urbemis\Version9a\Projects\SPW\_Alternative\_1\_2037\_wkdy.urb924

Project Name: San Pedro Waterfront Alternative 1 2037 Weekday Diesel PM

Project Location: South Coast AQMD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

## Summary Report:

## OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (tons/year, unmitigated)	23.50	214.11	151.54	2.27	19.44	14.42	243,633.66

## SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (tons/year, unmitigated)	23.50	214.11	151.54	2.27	19.44	14.42	243,633.66

## Operational Unmitigated Detail Report:

## OPERATIONAL EMISSION ESTIMATES Annual Tons Per Year, Unmitigated

<u>Source</u>	ROG	NOX	CO	SO2	PM10	PM25	CO2
Cruise Parking Shuttle Outer Harbor	0.07	0.60	0.42	0.01	0.05	0.04	679.38
Cruise Ship Terminal Berth 91-93	6.87	62.63	44.33	0.66	5.68	4.23	71,270.29
Los Angeles Maritime Institute	0.02	0.18	0.13	0.00	0.02	0.01	204.74
Conference Facilities at POC	0.44	4.01	2.84	0.04	0.36	0.27	4,564.20
Cruise Ship Terminal Berth 45-50	3.24	29.54	20.91	0.31	2.68	1.99	33,609.16
San Pedro Park at 22nd & Miner St	0.30	2.76	1.95	0.03	0.25	0.19	3,141.93

Port of Call Restaurant Development	6.42	58.52	41.42	0.62	5.31	3.95	66,586.50
Port of Call Retail Development	4.43	40.37	28.57	0.43	3.66	2.72	45,931.73
S.S. Lane Victory	0.02	0.18	0.13	0.00	0.02	0.01	208.12
Ralph J Scott Fireboat Museum	0.02	0.18	0.13	0.00	0.02	0.01	208.12
Mercardo Warehouse 9 & 10 Reuse	0.45	4.07	2.88	0.04	0.37	0.27	4,631.74
Warehouse 9 & 10 Reuse	0.10	0.91	0.65	0.01	0.08	0.06	1,038.33
Red Car Museum	0.02	0.19	0.13	0.00	0.02	0.01	212.35
Red Car Maintenance Facility	0.09	0.84	0.60	0.01	0.08	0.06	957.47
Millennium Tugboat Office	0.07	0.63	0.44	0.01	0.06	0.04	711.20
Waterfront Promenade Town Sq	0.17	1.55	1.10	0.02	0.14	0.10	1,768.98
Fisherman Park	0.07	0.61	0.43	0.01	0.06	0.04	693.72
Research & Dev at Westways	0.58	5.26	3.72	0.06	0.48	0.35	5,983.68
Crowley Tugboat	0.02	0.17	0.12	0.00	0.02	0.01	197.34
Outer Harbor Park	0.10	0.91	0.64	0.01	0.08	0.06	1,034.68
<b>TOTALS (tons/year, unmitigated)</b>	<b>23.50</b>	<b>214.11</b>	<b>151.54</b>	<b>2.27</b>	<b>19.44</b>	<b>14.42</b>	<b>243,633.66</b>

Operational Settings:

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2035 Season: Annual

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
Cruise Parking Shuttle Outer Harbor		0.10	students	1,180.00	118.00	1,054.51
Cruise Ship Terminal Berth 91-93		1.46	students	7,868.00	11,487.28	110,622.51
Los Angeles Maritime Institute		3.30	students	10.00	33.00	317.79
Conference Facilities at POC		2.60	students	300.00	780.00	7,084.35
Cruise Ship Terminal Berth 45-50		1.46	students	3,934.00	5,743.64	52,166.61
San Pedro Park at 22nd & Miner St		29.83	acres	18.00	536.94	4,876.76

Port of Call Restaurant Development	89.95	1000 sq ft	125.00	11,243.75	103,352.54
Port of Call Retail Development	44.32	1000 sq ft	175.00	7,756.00	71,293.15
S.S. Lane Victory	3.60	1000 sq ft	10.00	36.00	323.03
Ralph J Scott Fireboat Museum	3.60	1000 sq ft	10.00	36.00	323.03
Mercardo Warehouse 9 & 10 Reuse	22.17	1000 sq ft	35.00	775.95	7,189.18
Warehouse 9 & 10 Reuse	4.97	1000 sq ft	35.00	173.95	1,611.65
Red Car Museum	3.60	1000 sq ft	10.00	36.00	329.60
Red Car Maintenance Facility	3.02	employees	37.00	111.74	1,486.14
Millennium Tugboat Office	3.32	employees	25.00	83.00	1,103.90
Waterfront Promenade Town Sq	20.00	acres	15.30	306.00	2,745.74
Fisherman Park	20.00	acres	6.00	120.00	1,076.76
Research & Dev at Westways	79.62	acres	13.00	1,035.06	9,287.59
Crowley Tugboat	3.29	unknown	7.00	23.03	306.30
Outer Harbor Park	29.83	acres	6.00	178.98	1,605.99
				40,614.32	378,157.13

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	1.5	0.0	0.0	100.0
Light Truck < 3750 lbs	2.8	0.0	0.0	100.0
Light Truck 3751-5750 lbs	0.0	0.0	0.0	100.0
Med Truck 5751-8500 lbs	0.0	0.0	0.0	100.0
Lite-Heavy Truck 8501-10,000 lbs	0.0	0.0	0.0	100.0
Lite-Heavy Truck 10,001-14,000 lbs	0.0	0.0	0.0	100.0
Med-Heavy Truck 14,001-33,000 lbs	0.0	0.0	0.0	100.0
Heavy-Heavy Truck 33,001-60,000 lbs	35.2	0.0	0.0	100.0
Other Bus	59.2	0.0	0.0	100.0
Urban Bus	0.0	0.0	0.0	100.0
Motorcycle	0.0	0.0	0.0	100.0
School Bus	0.0	0.0	0.0	100.0
Motor Home	1.3	0.0	0.0	100.0



Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	12.7	7.0	9.5	13.3	7.4	8.9
Rural Trip Length (miles)	17.6	12.1	14.9	15.4	9.6	12.6
Trip speeds (mph)	30.0	30.0	30.0	30.0	30.0	30.0
% of Trips - Residential	32.9	18.0	49.1			
% of Trips - Commercial (by land use)						
Cruise Parking Shuttle Outer Harbor				1.0	0.5	98.5
Cruise Ship Terminal Berth 91-93				20.0	10.0	70.0
Los Angeles Maritime Institute				20.0	10.0	70.0
Conference Facilities at POC				5.0	2.5	92.5
Cruise Ship Terminal Berth 45-50				5.0	2.5	92.5
San Pedro Park at 22nd & Miner St				5.0	2.5	92.5
Port of Call Restaurant Development				8.0	4.0	88.0
Port of Call Retail Development				8.0	4.0	88.0
S.S. Lane Victory				2.0	1.0	97.0
Ralph J Scott Fireboat Museum				2.0	1.0	97.0
Mercardo Warehouse 9 & 10 Reuse				10.0	5.0	85.0
Warehouse 9 & 10 Reuse				10.0	5.0	85.0
Red Car Museum				7.0	3.5	89.5
Red Car Maintenance Facility				100.0	0.0	0.0
Millennium Tugboat Office				100.0	0.0	0.0
Waterfront Promenade Town Sq				2.0	1.0	97.0
Fisherman Park				2.0	1.0	97.0
Research & Dev at Westways				2.0	1.0	97.0
Crowley Tugboat				100.0	0.0	0.0
Outer Harbor Park				2.0	1.0	97.0

Urbemis 2007 Version 9.2.4

## Combined Annual Emissions Reports (Tons/Year)

File Name: C:\Documents and Settings\mslavick\Application Data\Urbemis\Version9a\Projects\SPW\_Alternative\_1\_2037\_wkend.urb924

Project Name: San Pedro Waterfront Alternative 1 2037 Weekend Diesel PM

Project Location: South Coast AQMD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

## Summary Report:

## OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (tons/year, unmitigated)	23.27	212.21	150.18	2.25	19.23	14.32	241,467.80

## SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (tons/year, unmitigated)	23.27	212.21	150.18	2.25	19.23	14.32	241,467.80

## Operational Unmitigated Detail Report:

## OPERATIONAL EMISSION ESTIMATES Annual Tons Per Year, Unmitigated

<u>Source</u>	ROG	NOX	CO	SO2	PM10	PM25	CO2
Cruise Parking Shuttle Outer Harbor	0.07	0.60	0.42	0.01	0.05	0.04	679.38
Cruise Ship Terminal Berth 91-93	6.87	62.63	44.33	0.66	5.68	4.23	71,270.29
Los Angeles Maritime Institute	0.00	0.03	0.02	0.00	0.00	0.00	31.02
Conference Facilities at POC	0.22	2.01	1.42	0.02	0.18	0.14	2,282.10
Cruise Ship Terminal Berth 45-50	3.24	29.54	20.91	0.31	2.68	1.99	33,609.16
San Pedro Park at 22nd & Miner St	0.67	6.15	4.35	0.07	0.56	0.41	6,997.98

Port of Call Restaurant Development	6.74	61.39	43.45	0.65	5.57	4.14	69,851.06
Port of Call Retail Development	4.20	38.29	27.10	0.41	3.47	2.58	43,568.82
S.S. Lane Victory	0.03	0.27	0.19	0.00	0.02	0.02	312.17
Ralph J Scott Fireboat Museum	0.03	0.27	0.19	0.00	0.02	0.02	312.17
Mercardo Warehouse 9 & 10 Reuse	0.42	3.86	2.73	0.04	0.35	0.26	4,393.57
Warehouse 9 & 10 Reuse	0.03	0.24	0.17	0.00	0.02	0.02	269.51
Red Car Museum	0.03	0.28	0.20	0.00	0.03	0.02	318.52
Red Car Maintenance Facility	0.09	0.84	0.60	0.01	0.08	0.06	960.64
Millennium Tugboat Office	0.01	0.11	0.07	0.00	0.01	0.01	119.96
Waterfront Promenade Town Sq	0.17	1.55	1.10	0.02	0.14	0.10	1,768.98
Fisherman Park	0.07	0.61	0.43	0.01	0.06	0.04	693.72
Research & Dev at Westways	0.16	1.48	1.05	0.02	0.13	0.10	1,687.94
Crowley Tugboat	0.00	0.03	0.02	0.00	0.00	0.00	34.19
Outer Harbor Park	0.22	2.03	1.43	0.02	0.18	0.14	2,306.62
<b>TOTALS (tons/year, unmitigated)</b>	<b>23.27</b>	<b>212.21</b>	<b>150.18</b>	<b>2.25</b>	<b>19.23</b>	<b>14.32</b>	<b>241,467.80</b>

Operational Settings:

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2035 Season: Annual

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
Cruise Parking Shuttle Outer Harbor		0.10	students	1,180.00	118.00	1,054.51
Cruise Ship Terminal Berth 91-93		1.46	students	7,868.00	11,487.28	110,622.51
Los Angeles Maritime Institute		0.50	students	10.00	5.00	48.15
Conference Facilities at POC		1.30	students	300.00	390.00	3,542.17
Cruise Ship Terminal Berth 45-50		1.46	students	3,934.00	5,743.64	52,166.61
San Pedro Park at 22nd & Miner St		66.44	acres	18.00	1,195.92	10,861.94

Port of Call Restaurant Development	94.36	1000 sq ft	125.00	11,795.00	108,419.64
Port of Call Retail Development	42.04	1000 sq ft	175.00	7,357.00	67,625.54
S.S. Lane Victory	5.40	1000 sq ft	10.00	54.00	484.54
Ralph J Scott Fireboat Museum	5.40	1000 sq ft	10.00	54.00	484.54
Mercardo Warehouse 9 & 10 Reuse	21.03	1000 sq ft	35.00	736.05	6,819.50
Warehouse 9 & 10 Reuse	1.29	1000 sq ft	35.00	45.15	418.31
Red Car Museum	5.40	1000 sq ft	10.00	54.00	494.40
Red Car Maintenance Facility	3.03	employees	37.00	112.11	1,491.06
Millennium Tugboat Office	0.56	employees	25.00	14.00	186.20
Waterfront Promenade Town Sq	20.00	acres	15.30	306.00	2,745.74
Fisherman Park	20.00	acres	6.00	120.00	1,076.76
Research & Dev at Westways	22.46	acres	13.00	291.98	2,619.94
Crowley Tugboat	0.57	unknown	7.00	3.99	53.07
Outer Harbor Park	66.50	acres	6.00	399.00	3,580.23
				40,282.12	374,795.36

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	1.5	0.0	0.0	100.0
Light Truck < 3750 lbs	2.8	0.0	0.0	100.0
Light Truck 3751-5750 lbs	0.0	0.0	0.0	100.0
Med Truck 5751-8500 lbs	0.0	0.0	0.0	100.0
Lite-Heavy Truck 8501-10,000 lbs	0.0	0.0	0.0	100.0
Lite-Heavy Truck 10,001-14,000 lbs	0.0	0.0	0.0	100.0
Med-Heavy Truck 14,001-33,000 lbs	0.0	0.0	0.0	100.0
Heavy-Heavy Truck 33,001-60,000 lbs	35.2	0.0	0.0	100.0
Other Bus	59.2	0.0	0.0	100.0
Urban Bus	0.0	0.0	0.0	100.0
Motorcycle	0.0	0.0	0.0	100.0
School Bus	0.0	0.0	0.0	100.0
Motor Home	1.3	0.0	0.0	100.0

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	12.7	7.0	9.5	13.3	7.4	8.9
Rural Trip Length (miles)	17.6	12.1	14.9	15.4	9.6	12.6
Trip speeds (mph)	30.0	30.0	30.0	30.0	30.0	30.0
% of Trips - Residential	32.9	18.0	49.1			
% of Trips - Commercial (by land use)						
Cruise Parking Shuttle Outer Harbor				1.0	0.5	98.5
Cruise Ship Terminal Berth 91-93				20.0	10.0	70.0
Los Angeles Maritime Institute				20.0	10.0	70.0
Conference Facilities at POC				5.0	2.5	92.5
Cruise Ship Terminal Berth 45-50				5.0	2.5	92.5
San Pedro Park at 22nd & Miner St				5.0	2.5	92.5
Port of Call Restaurant Development				8.0	4.0	88.0
Port of Call Retail Development				8.0	4.0	88.0
S.S. Lane Victory				2.0	1.0	97.0
Ralph J Scott Fireboat Museum				2.0	1.0	97.0
Mercardo Warehouse 9 & 10 Reuse				10.0	5.0	85.0
Warehouse 9 & 10 Reuse				10.0	5.0	85.0
Red Car Museum				7.0	3.5	89.5
Red Car Maintenance Facility				100.0	0.0	0.0
Millennium Tugboat Office				100.0	0.0	0.0
Waterfront Promenade Town Sq				2.0	1.0	97.0
Fisherman Park				2.0	1.0	97.0
Research & Dev at Westways				2.0	1.0	97.0
Crowley Tugboat				100.0	0.0	0.0
Outer Harbor Park				2.0	1.0	97.0

Urbemis 2007 Version 9.2.4

## Combined Summer Emissions Reports (Pounds/Day)

File Name: C:\Documents and Settings\mslavick\Application Data\Urbemis\Version9a\Projects\SPW\_Alternative\_1\_2037\_wkdy.urb924

Project Name: San Pedro Waterfront Alternative 1 2037 Weekday Diesel PM

Project Location: South Coast AQMD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

## Summary Report:

## OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (lbs/day, unmitigated)	128.75	1,133.53	830.37	12.45	106.44	79.15	1,334,979.00

## SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (lbs/day, unmitigated)	128.75	1,133.53	830.37	12.45	106.44	79.15	1,334,979.00

## Operational Unmitigated Detail Report:

## OPERATIONAL EMISSION ESTIMATES Summer Pounds Per Day, Unmitigated

<u>Source</u>	<u>ROG</u>	<u>NOX</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM25</u>	<u>CO2</u>
Cruise Parking Shuttle Outer Harbor	0.36	3.16	2.32	0.03	0.30	0.22	3,722.65
Cruise Ship Terminal Berth 91-93	37.66	331.59	242.91	3.64	31.14	23.16	390,522.14
Los Angeles Maritime Institute	0.11	0.95	0.70	0.01	0.09	0.07	1,121.87
Conference Facilities at POC	2.41	21.24	15.56	0.23	1.99	1.48	25,009.34
Cruise Ship Terminal Berth 45-50	17.76	156.37	114.55	1.72	14.69	10.92	184,159.78
San Pedro Park at 22nd & Miner St	1.66	14.62	10.71	0.16	1.37	1.02	17,216.04

Port of Call Restaurant Development	35.19	309.80	226.94	3.40	29.10	21.63	364,857.55
Port of Call Retail Development	24.27	213.70	156.55	2.35	20.07	14.92	251,680.73
S.S. Lane Victory	0.11	0.97	0.71	0.01	0.09	0.07	1,140.36
Ralph J Scott Fireboat Museum	0.11	0.97	0.71	0.01	0.09	0.07	1,140.36
Mercardo Warehouse 9 & 10 Reuse	2.45	21.55	15.79	0.24	2.02	1.50	25,379.40
Warehouse 9 & 10 Reuse	0.55	4.83	3.54	0.05	0.45	0.34	5,689.47
Red Car Museum	0.11	0.99	0.72	0.01	0.09	0.07	1,163.55
Red Car Maintenance Facility	0.51	4.45	3.26	0.05	0.42	0.31	5,246.41
Millennium Tugboat Office	0.38	3.31	2.42	0.04	0.31	0.23	3,897.01
Waterfront Promenade Town Sq	0.93	8.23	6.03	0.09	0.77	0.57	9,693.07
Fisherman Park	0.37	3.23	2.36	0.04	0.30	0.23	3,801.20
Research & Dev at Westways	3.16	27.84	20.39	0.31	2.61	1.94	32,787.28
Crowley Tugboat	0.10	0.92	0.67	0.01	0.09	0.06	1,081.30
Outer Harbor Park	0.55	4.81	3.53	0.05	0.45	0.34	5,669.49
<b>TOTALS (lbs/day, unmitigated)</b>	<b>128.75</b>	<b>1,133.53</b>	<b>830.37</b>	<b>12.45</b>	<b>106.44</b>	<b>79.15</b>	<b>1,334,979.00</b>

Operational Settings:

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2035 Temperature (F): 80 Season: Summer

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
Cruise Parking Shuttle Outer Harbor		0.10	students	1,180.00	118.00	1,054.51
Cruise Ship Terminal Berth 91-93		1.46	students	7,868.00	11,487.28	110,622.51
Los Angeles Maritime Institute		3.30	students	10.00	33.00	317.79
Conference Facilities at POC		2.60	students	300.00	780.00	7,084.35
Cruise Ship Terminal Berth 45-50		1.46	students	3,934.00	5,743.64	52,166.61
San Pedro Park at 22nd & Miner St		29.83	acres	18.00	536.94	4,876.76

Port of Call Restaurant Development	89.95	1000 sq ft	125.00	11,243.75	103,352.54
Port of Call Retail Development	44.32	1000 sq ft	175.00	7,756.00	71,293.15
S.S. Lane Victory	3.60	1000 sq ft	10.00	36.00	323.03
Ralph J Scott Fireboat Museum	3.60	1000 sq ft	10.00	36.00	323.03
Mercardo Warehouse 9 & 10 Reuse	22.17	1000 sq ft	35.00	775.95	7,189.18
Warehouse 9 & 10 Reuse	4.97	1000 sq ft	35.00	173.95	1,611.65
Red Car Museum	3.60	1000 sq ft	10.00	36.00	329.60
Red Car Maintenance Facility	3.02	employees	37.00	111.74	1,486.14
Millennium Tugboat Office	3.32	employees	25.00	83.00	1,103.90
Waterfront Promenade Town Sq	20.00	acres	15.30	306.00	2,745.74
Fisherman Park	20.00	acres	6.00	120.00	1,076.76
Research & Dev at Westways	79.62	acres	13.00	1,035.06	9,287.59
Crowley Tugboat	3.29	unknown	7.00	23.03	306.30
Outer Harbor Park	29.83	acres	6.00	178.98	1,605.99
				40,614.32	378,157.13

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	1.5	0.0	0.0	100.0
Light Truck < 3750 lbs	2.8	0.0	0.0	100.0
Light Truck 3751-5750 lbs	0.0	0.0	0.0	100.0
Med Truck 5751-8500 lbs	0.0	0.0	0.0	100.0
Lite-Heavy Truck 8501-10,000 lbs	0.0	0.0	0.0	100.0
Lite-Heavy Truck 10,001-14,000 lbs	0.0	0.0	0.0	100.0
Med-Heavy Truck 14,001-33,000 lbs	0.0	0.0	0.0	100.0
Heavy-Heavy Truck 33,001-60,000 lbs	35.2	0.0	0.0	100.0
Other Bus	59.2	0.0	0.0	100.0
Urban Bus	0.0	0.0	0.0	100.0
Motorcycle	0.0	0.0	0.0	100.0
School Bus	0.0	0.0	0.0	100.0



Motor Home	1.3	0.0	0.0	100.0
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Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	12.7	7.0	9.5	13.3	7.4	8.9
Rural Trip Length (miles)	17.6	12.1	14.9	15.4	9.6	12.6
Trip speeds (mph)	30.0	30.0	30.0	30.0	30.0	30.0
% of Trips - Residential	32.9	18.0	49.1			
% of Trips - Commercial (by land use)						
Cruise Parking Shuttle Outer Harbor				1.0	0.5	98.5
Cruise Ship Terminal Berth 91-93				20.0	10.0	70.0
Los Angeles Maritime Institute				20.0	10.0	70.0
Conference Facilities at POC				5.0	2.5	92.5
Cruise Ship Terminal Berth 45-50				5.0	2.5	92.5
San Pedro Park at 22nd & Miner St				5.0	2.5	92.5
Port of Call Restaurant Development				8.0	4.0	88.0
Port of Call Retail Development				8.0	4.0	88.0
S.S. Lane Victory				2.0	1.0	97.0
Ralph J Scott Fireboat Museum				2.0	1.0	97.0
Mercardo Warehouse 9 & 10 Reuse				10.0	5.0	85.0
Warehouse 9 & 10 Reuse				10.0	5.0	85.0
Red Car Museum				7.0	3.5	89.5
Red Car Maintenance Facility				100.0	0.0	0.0
Millennium Tugboat Office				100.0	0.0	0.0
Waterfront Promenade Town Sq				2.0	1.0	97.0
Fisherman Park				2.0	1.0	97.0
Research & Dev at Westways				2.0	1.0	97.0
Crowley Tugboat				100.0	0.0	0.0
Outer Harbor Park				2.0	1.0	97.0

Urbemis 2007 Version 9.2.4

## Combined Summer Emissions Reports (Pounds/Day)

File Name: C:\Documents and Settings\mslavick\Application Data\Urbemis\Version9a\Projects\SPW\_Alternative\_1\_2037\_wkend.urb924

Project Name: San Pedro Waterfront Alternative 1 2037 Weekend Diesel PM

Project Location: South Coast AQMD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

## Summary Report:

## OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (lbs/day, unmitigated)	127.59	1,123.42	822.98	12.35	105.52	78.46	1,323,111.30

## SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (lbs/day, unmitigated)	127.59	1,123.42	822.98	12.35	105.52	78.46	1,323,111.30

## Operational Unmitigated Detail Report:

## OPERATIONAL EMISSION ESTIMATES Summer Pounds Per Day, Unmitigated

<u>Source</u>	<u>ROG</u>	<u>NOX</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM25</u>	<u>CO2</u>
Cruise Parking Shuttle Outer Harbor	0.36	3.16	2.32	0.03	0.30	0.22	3,722.65
Cruise Ship Terminal Berth 91-93	37.66	331.59	242.91	3.64	31.14	23.16	390,522.14
Los Angeles Maritime Institute	0.02	0.14	0.11	0.00	0.01	0.01	169.98
Conference Facilities at POC	1.21	10.62	7.78	0.12	1.00	0.74	12,504.67
Cruise Ship Terminal Berth 45-50	17.76	156.37	114.55	1.72	14.69	10.92	184,159.78
San Pedro Park at 22nd & Miner St	3.70	32.56	23.85	0.36	3.06	2.27	38,345.09

Port of Call Restaurant Development	36.91	324.98	238.07	3.57	30.52	22.70	382,745.52
Port of Call Retail Development	23.02	202.70	148.49	2.22	19.04	14.16	238,733.26
S.S. Lane Victory	0.16	1.45	1.06	0.02	0.14	0.10	1,710.54
Ralph J Scott Fireboat Museum	0.16	1.45	1.06	0.02	0.14	0.10	1,710.54
Mercardo Warehouse 9 & 10 Reuse	2.32	20.44	14.97	0.22	1.92	1.43	24,074.37
Warehouse 9 & 10 Reuse	0.14	1.25	0.92	0.01	0.12	0.09	1,476.74
Red Car Museum	0.17	1.48	1.09	0.02	0.14	0.10	1,745.33
Red Car Maintenance Facility	0.51	4.47	3.27	0.05	0.42	0.31	5,263.79
Millennium Tugboat Office	0.06	0.56	0.41	0.01	0.05	0.04	657.33
Waterfront Promenade Town Sq	0.93	8.23	6.03	0.09	0.77	0.57	9,693.07
Fisherman Park	0.37	3.23	2.36	0.04	0.30	0.23	3,801.20
Research & Dev at Westways	0.89	7.85	5.75	0.09	0.74	0.55	9,248.96
Crowley Tugboat	0.02	0.16	0.12	0.00	0.01	0.01	187.34
Outer Harbor Park	1.22	10.73	7.86	0.12	1.01	0.75	12,639.00
<b>TOTALS (lbs/day, unmitigated)</b>	<b>127.59</b>	<b>1,123.42</b>	<b>822.98</b>	<b>12.35</b>	<b>105.52</b>	<b>78.46</b>	<b>1,323,111.30</b>

Operational Settings:

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2035 Temperature (F): 80 Season: Summer

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
Cruise Parking Shuttle Outer Harbor		0.10	students	1,180.00	118.00	1,054.51
Cruise Ship Terminal Berth 91-93		1.46	students	7,868.00	11,487.28	110,622.51
Los Angeles Maritime Institute		0.50	students	10.00	5.00	48.15
Conference Facilities at POC		1.30	students	300.00	390.00	3,542.17
Cruise Ship Terminal Berth 45-50		1.46	students	3,934.00	5,743.64	52,166.61
San Pedro Park at 22nd & Miner St		66.44	acres	18.00	1,195.92	10,861.94

Port of Call Restaurant Development	94.36	1000 sq ft	125.00	11,795.00	108,419.64
Port of Call Retail Development	42.04	1000 sq ft	175.00	7,357.00	67,625.54
S.S. Lane Victory	5.40	1000 sq ft	10.00	54.00	484.54
Ralph J Scott Fireboat Museum	5.40	1000 sq ft	10.00	54.00	484.54
Mercardo Warehouse 9 & 10 Reuse	21.03	1000 sq ft	35.00	736.05	6,819.50
Warehouse 9 & 10 Reuse	1.29	1000 sq ft	35.00	45.15	418.31
Red Car Museum	5.40	1000 sq ft	10.00	54.00	494.40
Red Car Maintenance Facility	3.03	employees	37.00	112.11	1,491.06
Millennium Tugboat Office	0.56	employees	25.00	14.00	186.20
Waterfront Promenade Town Sq	20.00	acres	15.30	306.00	2,745.74
Fisherman Park	20.00	acres	6.00	120.00	1,076.76
Research & Dev at Westways	22.46	acres	13.00	291.98	2,619.94
Crowley Tugboat	0.57	unknown	7.00	3.99	53.07
Outer Harbor Park	66.50	acres	6.00	399.00	3,580.23
				40,282.12	374,795.36

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	1.5	0.0	0.0	100.0
Light Truck < 3750 lbs	2.8	0.0	0.0	100.0
Light Truck 3751-5750 lbs	0.0	0.0	0.0	100.0
Med Truck 5751-8500 lbs	0.0	0.0	0.0	100.0
Lite-Heavy Truck 8501-10,000 lbs	0.0	0.0	0.0	100.0
Lite-Heavy Truck 10,001-14,000 lbs	0.0	0.0	0.0	100.0
Med-Heavy Truck 14,001-33,000 lbs	0.0	0.0	0.0	100.0
Heavy-Heavy Truck 33,001-60,000 lbs	35.2	0.0	0.0	100.0
Other Bus	59.2	0.0	0.0	100.0
Urban Bus	0.0	0.0	0.0	100.0
Motorcycle	0.0	0.0	0.0	100.0
School Bus	0.0	0.0	0.0	100.0

Motor Home	1.3	0.0	0.0	100.0
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Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	12.7	7.0	9.5	13.3	7.4	8.9
Rural Trip Length (miles)	17.6	12.1	14.9	15.4	9.6	12.6
Trip speeds (mph)	30.0	30.0	30.0	30.0	30.0	30.0
% of Trips - Residential	32.9	18.0	49.1			
% of Trips - Commercial (by land use)						
Cruise Parking Shuttle Outer Harbor				1.0	0.5	98.5
Cruise Ship Terminal Berth 91-93				20.0	10.0	70.0
Los Angeles Maritime Institute				20.0	10.0	70.0
Conference Facilities at POC				5.0	2.5	92.5
Cruise Ship Terminal Berth 45-50				5.0	2.5	92.5
San Pedro Park at 22nd & Miner St				5.0	2.5	92.5
Port of Call Restaurant Development				8.0	4.0	88.0
Port of Call Retail Development				8.0	4.0	88.0
S.S. Lane Victory				2.0	1.0	97.0
Ralph J Scott Fireboat Museum				2.0	1.0	97.0
Mercardo Warehouse 9 & 10 Reuse				10.0	5.0	85.0
Warehouse 9 & 10 Reuse				10.0	5.0	85.0
Red Car Museum				7.0	3.5	89.5
Red Car Maintenance Facility				100.0	0.0	0.0
Millennium Tugboat Office				100.0	0.0	0.0
Waterfront Promenade Town Sq				2.0	1.0	97.0
Fisherman Park				2.0	1.0	97.0
Research & Dev at Westways				2.0	1.0	97.0
Crowley Tugboat				100.0	0.0	0.0
Outer Harbor Park				2.0	1.0	97.0

Urbemis 2007 Version 9.2.4

## Combined Annual Emissions Reports (Tons/Year)

File Name: C:\Documents and Settings\mslavick\Application Data\Urbemis\Version9a\Projects\SPW\_Alternative\_2\_2015\_wkdy.urb924

Project Name: San Pedro Waterfront Alternative 2 2015 Weekday Diesel PM

Project Location: South Coast AQMD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

## Summary Report:

## OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (tons/year, unmitigated)	44.06	635.32	249.51	2.15	32.45	26.59	230,126.34

## SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (tons/year, unmitigated)	44.06	635.32	249.51	2.15	32.45	26.59	230,126.34

## Operational Unmitigated Detail Report:

## OPERATIONAL EMISSION ESTIMATES Annual Tons Per Year, Unmitigated

<u>Source</u>	ROG	NOX	CO	SO2	PM10	PM25	CO2
Cruise Ship Terminal Berth 91-93	9.09	131.06	51.47	0.44	6.69	5.49	47,471.82
Los Angeles Maritime Institute	0.04	0.57	0.22	0.00	0.03	0.02	204.77
Conference Facilities at POC	0.87	12.60	4.95	0.04	0.64	0.53	4,564.84
Cruise Ship Terminal Berth 45-50	8.57	123.61	48.54	0.42	6.31	5.18	44,772.88
San Pedro Park at 22nd & Miner St	0.60	8.68	3.41	0.03	0.44	0.36	3,142.36

Port of Call Restaurant Development	12.75	183.86	72.20	0.62	9.39	7.70	66,595.76
Port of Call Retail Development	8.79	126.82	49.81	0.43	6.48	5.31	45,938.12
S.S. Lane Victory	0.04	0.57	0.23	0.00	0.03	0.02	208.14
Ralph J Scott Fireboat Museum	0.04	0.57	0.23	0.00	0.03	0.02	208.14
Mercardo Warehouse 9 & 10 Reuse	0.89	12.79	5.02	0.04	0.65	0.54	4,632.38
Warehouse 9 & 10 Reuse	0.20	2.87	1.13	0.01	0.15	0.12	1,038.47
Red Car Maintenance Facility	0.18	2.64	1.04	0.01	0.14	0.11	957.60
Millennium Tugboat Office	0.14	1.96	0.77	0.01	0.10	0.08	711.30
Waterfront Promenade Town Sq	0.34	4.88	1.92	0.02	0.25	0.20	1,769.23
Fisherman Park	0.13	1.92	0.75	0.01	0.10	0.08	693.82
Research & Dev at Westways	1.15	16.52	6.49	0.06	0.84	0.69	5,984.51
Crowley Tugboat	0.04	0.54	0.21	0.00	0.03	0.02	197.37
Outer Harbor Park	0.20	2.86	1.12	0.01	0.15	0.12	1,034.83
<b>TOTALS (tons/year, unmitigated)</b>	<b>44.06</b>	<b>635.32</b>	<b>249.51</b>	<b>2.15</b>	<b>32.45</b>	<b>26.59</b>	<b>230,126.34</b>

Operational Settings:

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2015 Season: Annual

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
Cruise Ship Terminal Berth 91-93		1.46	passengers	5,240.00	7,650.40	73,673.35
Los Angeles Maritime Institute		3.30	employees	10.00	33.00	317.79
Conference Facilities at POC		2.60	attendees	300.00	780.00	7,084.35
Cruise Ship Terminal Berth 45-50		1.46	passengers	5,240.00	7,650.40	69,484.76
San Pedro Park at 22nd & Miner St		29.83	acres	18.00	536.94	4,876.76
Port of Call Restaurant Development		89.95	1000 sq ft	125.00	11,243.75	103,352.54

Port of Call Retail Development	44.32	1000 sq ft	175.00	7,756.00	71,293.15
S.S. Lane Victory	3.60	1000 sq ft	10.00	36.00	323.03
Ralph J Scott Fireboat Museum	3.60	1000 sq ft	10.00	36.00	323.03
Mercardo Warehouse 9 & 10 Reuse	22.17	1000 sq ft	35.00	775.95	7,189.18
Warehouse 9 & 10 Reuse	4.97	1000 sq ft	35.00	173.95	1,611.65
Red Car Maintenance Facility	3.02	employees	37.00	111.74	1,486.14
Millennium Tugboat Office	3.32	employees	25.00	83.00	1,103.90
Waterfront Promenade Town Sq	20.00	acres	15.30	306.00	2,745.74
Fisherman Park	20.00	acres	6.00	120.00	1,076.76
Research & Dev at Westways	79.62	acres	13.00	1,035.06	9,287.59
Crowley Tugboat	3.29	employees	7.00	23.03	306.30
Outer Harbor Park	29.83	acres	6.00	178.98	1,605.99
				38,530.20	357,142.01

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	1.5	0.0	0.0	100.0
Light Truck < 3750 lbs	2.8	0.0	0.0	100.0
Light Truck 3751-5750 lbs	0.0	0.0	0.0	0.0
Med Truck 5751-8500 lbs	0.0	0.0	0.0	0.0
Lite-Heavy Truck 8501-10,000 lbs	0.0	0.0	0.0	100.0
Lite-Heavy Truck 10,001-14,000 lbs	0.0	0.0	0.0	100.0
Med-Heavy Truck 14,001-33,000 lbs	0.0	0.0	0.0	100.0
Heavy-Heavy Truck 33,001-60,000 lbs	35.2	0.0	0.0	100.0
Other Bus	59.2	0.0	0.0	100.0
Urban Bus	0.0	0.0	0.0	100.0
Motorcycle	0.0	0.0	0.0	100.0
School Bus	0.0	0.0	0.0	100.0
Motor Home	1.3	0.0	0.0	100.0

Travel Conditions



	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	12.7	7.0	9.5	13.3	7.4	8.9
Rural Trip Length (miles)	17.6	12.1	14.9	15.4	9.6	12.6
Trip speeds (mph)	30.0	30.0	30.0	30.0	30.0	30.0
% of Trips - Residential	32.9	18.0	49.1			
% of Trips - Commercial (by land use)						
Cruise Ship Terminal Berth 91-93				20.0	10.0	70.0
Los Angeles Maritime Institute				20.0	10.0	70.0
Conference Facilities at POC				5.0	2.5	92.5
Cruise Ship Terminal Berth 45-50				5.0	2.5	92.5
San Pedro Park at 22nd & Miner St				5.0	2.5	92.5
Port of Call Restaurant Development				8.0	4.0	88.0
Port of Call Retail Development				8.0	4.0	88.0
S.S. Lane Victory				2.0	1.0	97.0
Ralph J Scott Fireboat Museum				2.0	1.0	97.0
Mercardo Warehouse 9 & 10 Reuse				10.0	5.0	85.0
Warehouse 9 & 10 Reuse				10.0	5.0	85.0
Red Car Maintenance Facility				100.0	0.0	0.0
Millennium Tugboat Office				100.0	0.0	0.0
Waterfront Promenade Town Sq				2.0	1.0	97.0
Fisherman Park				2.0	1.0	97.0
Research & Dev at Westways				2.0	1.0	97.0
Crowley Tugboat				100.0	0.0	0.0
Outer Harbor Park				2.0	1.0	97.0

Urbemis 2007 Version 9.2.4

## Combined Annual Emissions Reports (Tons/Year)

File Name: C:\Documents and Settings\mslavick\Application Data\Urbemis\Version9a\Projects\SPW\_Alternative\_2\_2015\_wkend.urb924

Project Name: San Pedro Waterfront Alternative 2 2015 Weekend Diesel PM

Project Location: South Coast AQMD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

## Summary Report:

## OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (tons/year, unmitigated)	43.61	629.04	247.02	2.13	32.12	26.35	227,854.01

## SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (tons/year, unmitigated)	43.61	629.04	247.02	2.13	32.12	26.35	227,854.01

## Operational Unmitigated Detail Report:

## OPERATIONAL EMISSION ESTIMATES Annual Tons Per Year, Unmitigated

<u>Source</u>	ROG	NOX	CO	SO2	PM10	PM25	CO2
Cruise Ship Terminal Berth 91-93	9.09	131.06	51.47	0.44	6.69	5.49	47,471.82
Los Angeles Maritime Institute	0.01	0.09	0.03	0.00	0.00	0.00	31.03
Conference Facilities at POC	0.44	6.30	2.47	0.02	0.32	0.26	2,282.42
Cruise Ship Terminal Berth 45-50	8.57	123.61	48.54	0.42	6.31	5.18	44,772.88
San Pedro Park at 22nd & Miner St	1.34	19.32	7.59	0.07	0.99	0.81	6,998.95

Port of Call Restaurant Development	13.37	192.87	75.74	0.65	9.85	8.08	69,860.77
Port of Call Retail Development	8.34	120.30	47.24	0.41	6.14	5.04	43,574.88
S.S. Lane Victory	0.06	0.86	0.34	0.00	0.04	0.04	312.22
Ralph J Scott Fireboat Museum	0.06	0.86	0.34	0.00	0.04	0.04	312.22
Mercardo Warehouse 9 & 10 Reuse	0.84	12.13	4.76	0.04	0.62	0.51	4,394.18
Warehouse 9 & 10 Reuse	0.05	0.74	0.29	0.00	0.04	0.03	269.54
Red Car Maintenance Facility	0.18	2.65	1.04	0.01	0.14	0.11	960.77
Millennium Tugboat Office	0.02	0.33	0.13	0.00	0.02	0.01	119.98
Waterfront Promenade Town Sq	0.34	4.88	1.92	0.02	0.25	0.20	1,769.23
Fisherman Park	0.13	1.92	0.75	0.01	0.10	0.08	693.82
Research & Dev at Westways	0.32	4.66	1.83	0.02	0.24	0.20	1,688.17
Crowley Tugboat	0.01	0.09	0.04	0.00	0.00	0.00	34.19
Outer Harbor Park	0.44	6.37	2.50	0.02	0.33	0.27	2,306.94
<b>TOTALS (tons/year, unmitigated)</b>	<b>43.61</b>	<b>629.04</b>	<b>247.02</b>	<b>2.13</b>	<b>32.12</b>	<b>26.35</b>	<b>227,854.01</b>

Operational Settings:

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2015 Season: Annual

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
Cruise Ship Terminal Berth 91-93		1.46	passengers	5,240.00	7,650.40	73,673.35
Los Angeles Maritime Institute		3.30	employees	10.00	5.00	48.15
Conference Facilities at POC		2.60	attendees	300.00	390.00	3,542.17
Cruise Ship Terminal Berth 45-50		1.46	passengers	5,240.00	7,650.40	69,484.76
San Pedro Park at 22nd & Miner St		29.83	acres	18.00	1,195.92	10,861.94
Port of Call Restaurant Development		89.95	1000 sq ft	125.00	11,795.00	108,419.64

Port of Call Retail Development	44.32	1000 sq ft	175.00	7,357.00	67,625.54
S.S. Lane Victory	3.60	1000 sq ft	10.00	54.00	484.54
Ralph J Scott Fireboat Museum	3.60	1000 sq ft	10.00	54.00	484.54
Mercardo Warehouse 9 & 10 Reuse	22.17	1000 sq ft	35.00	736.05	6,819.50
Warehouse 9 & 10 Reuse	4.97	1000 sq ft	35.00	45.15	418.31
Red Car Maintenance Facility	3.02	employees	37.00	112.11	1,491.06
Millennium Tugboat Office	3.32	employees	25.00	14.00	186.20
Waterfront Promenade Town Sq	20.00	acres	15.30	306.00	2,745.74
Fisherman Park	20.00	acres	6.00	120.00	1,076.76
Research & Dev at Westways	79.62	acres	13.00	291.98	2,619.94
Crowley Tugboat	3.29	employees	7.00	3.99	53.07
Outer Harbor Park	29.83	acres	6.00	399.00	3,580.23
				38,180.00	353,615.44

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	1.5	0.0	0.0	100.0
Light Truck < 3750 lbs	2.8	0.0	0.0	100.0
Light Truck 3751-5750 lbs	0.0	0.0	0.0	100.0
Med Truck 5751-8500 lbs	0.0	0.0	0.0	100.0
Lite-Heavy Truck 8501-10,000 lbs	0.0	0.0	0.0	100.0
Lite-Heavy Truck 10,001-14,000 lbs	0.0	0.0	0.0	100.0
Med-Heavy Truck 14,001-33,000 lbs	0.0	0.0	0.0	100.0
Heavy-Heavy Truck 33,001-60,000 lbs	35.2	0.0	0.0	100.0
Other Bus	59.2	0.0	0.0	100.0
Urban Bus	0.0	0.0	0.0	100.0
Motorcycle	0.0	0.0	0.0	100.0
School Bus	0.0	0.0	0.0	100.0
Motor Home	1.3	0.0	0.0	100.0

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	12.7	7.0	9.5	13.3	7.4	8.9
Rural Trip Length (miles)	17.6	12.1	14.9	15.4	9.6	12.6
Trip speeds (mph)	30.0	30.0	30.0	30.0	30.0	30.0
% of Trips - Residential	32.9	18.0	49.1			
% of Trips - Commercial (by land use)						
Cruise Ship Terminal Berth 91-93				20.0	10.0	70.0
Los Angeles Maritime Institute				20.0	10.0	70.0
Conference Facilities at POC				5.0	2.5	92.5
Cruise Ship Terminal Berth 45-50				5.0	2.5	92.5
San Pedro Park at 22nd & Miner St				5.0	2.5	92.5
Port of Call Restaurant Development				8.0	4.0	88.0
Port of Call Retail Development				8.0	4.0	88.0
S.S. Lane Victory				2.0	1.0	97.0
Ralph J Scott Fireboat Museum				2.0	1.0	97.0
Mercardo Warehouse 9 & 10 Reuse				10.0	5.0	85.0
Warehouse 9 & 10 Reuse				10.0	5.0	85.0
Red Car Maintenance Facility				100.0	0.0	0.0
Millennium Tugboat Office				100.0	0.0	0.0
Waterfront Promenade Town Sq				2.0	1.0	97.0
Fisherman Park				2.0	1.0	97.0
Research & Dev at Westways				2.0	1.0	97.0
Crowley Tugboat				100.0	0.0	0.0
Outer Harbor Park				2.0	1.0	97.0

Urbemis 2007 Version 9.2.4

## Combined Summer Emissions Reports (Pounds/Day)

File Name: C:\Documents and Settings\mslavick\Application Data\Urbemis\Version9a\Projects\SPW\_Alternative\_2\_2015\_wkdy.urb924

Project Name: San Pedro Waterfront Alternative 2 2015 Weekday Diesel PM

Project Location: South Coast AQMD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

## Summary Report:

## OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (lbs/day, unmitigated)	241.37	3,363.67	1,367.15	11.76	177.80	145.83	1,260,966.35

## SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (lbs/day, unmitigated)	241.37	3,363.67	1,367.15	11.76	177.80	145.83	1,260,966.35

## Operational Unmitigated Detail Report:

## OPERATIONAL EMISSION ESTIMATES Summer Pounds Per Day, Unmitigated

<u>Source</u>	ROG	NOX	CO	SO2	PM10	PM25	CO2
Cruise Ship Terminal Berth 91-93	49.79	693.88	282.02	2.42	36.68	30.08	260,119.56
Los Angeles Maritime Institute	0.21	2.99	1.22	0.01	0.16	0.13	1,122.03
Conference Facilities at POC	4.79	66.72	27.12	0.23	3.53	2.89	25,012.81
Cruise Ship Terminal Berth 45-50	46.95	654.43	265.99	2.29	34.59	28.37	245,330.82
San Pedro Park at 22nd & Miner St	3.30	45.93	18.67	0.16	2.43	1.99	17,218.44

Port of Call Restaurant Development	69.84	973.41	395.63	3.40	51.45	42.20	364,908.30
Port of Call Retail Development	48.18	671.46	272.91	2.35	35.49	29.11	251,715.74
S.S. Lane Victory	0.22	3.04	1.24	0.01	0.16	0.13	1,140.52
Ralph J Scott Fireboat Museum	0.22	3.04	1.24	0.01	0.16	0.13	1,140.52
Mercardo Warehouse 9 & 10 Reuse	4.86	67.71	27.52	0.24	3.58	2.94	25,382.93
Warehouse 9 & 10 Reuse	1.09	15.18	6.17	0.05	0.80	0.66	5,690.26
Red Car Maintenance Facility	1.00	14.00	5.69	0.05	0.74	0.61	5,247.14
Millennium Tugboat Office	0.75	10.40	4.23	0.04	0.55	0.45	3,897.56
Waterfront Promenade Town Sq	1.86	25.86	10.51	0.09	1.37	1.12	9,694.42
Fisherman Park	0.73	10.14	4.12	0.04	0.54	0.44	3,801.73
Research & Dev at Westways	6.28	87.47	35.55	0.31	4.62	3.79	32,791.84
Crowley Tugboat	0.21	2.88	1.17	0.01	0.15	0.13	1,081.45
Outer Harbor Park	1.09	15.13	6.15	0.05	0.80	0.66	5,670.28
<b>TOTALS (lbs/day, unmitigated)</b>	<b>241.37</b>	<b>3,363.67</b>	<b>1,367.15</b>	<b>11.76</b>	<b>177.80</b>	<b>145.83</b>	<b>1,260,966.35</b>

Operational Settings:

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2015 Temperature (F): 80 Season: Summer

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
Cruise Ship Terminal Berth 91-93		1.46	passengers	5,240.00	7,650.40	73,673.35
Los Angeles Maritime Institute		3.30	employees	10.00	33.00	317.79
Conference Facilities at POC		2.60	attendees	300.00	780.00	7,084.35
Cruise Ship Terminal Berth 45-50		1.46	passengers	5,240.00	7,650.40	69,484.76
San Pedro Park at 22nd & Miner St		29.83	acres	18.00	536.94	4,876.76
Port of Call Restaurant Development		89.95	1000 sq ft	125.00	11,243.75	103,352.54

Port of Call Retail Development	44.32	1000 sq ft	175.00	7,756.00	71,293.15
S.S. Lane Victory	3.60	1000 sq ft	10.00	36.00	323.03
Ralph J Scott Fireboat Museum	3.60	1000 sq ft	10.00	36.00	323.03
Mercardo Warehouse 9 & 10 Reuse	22.17	1000 sq ft	35.00	775.95	7,189.18
Warehouse 9 & 10 Reuse	4.97	1000 sq ft	35.00	173.95	1,611.65
Red Car Maintenance Facility	3.02	employees	37.00	111.74	1,486.14
Millennium Tugboat Office	3.32	employees	25.00	83.00	1,103.90
Waterfront Promenade Town Sq	20.00	acres	15.30	306.00	2,745.74
Fisherman Park	20.00	acres	6.00	120.00	1,076.76
Research & Dev at Westways	79.62	acres	13.00	1,035.06	9,287.59
Crowley Tugboat	3.29	employees	7.00	23.03	306.30
Outer Harbor Park	29.83	acres	6.00	178.98	1,605.99
				38,530.20	357,142.01

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	1.5	0.0	0.0	100.0
Light Truck < 3750 lbs	2.8	0.0	0.0	100.0
Light Truck 3751-5750 lbs	0.0	0.0	0.0	0.0
Med Truck 5751-8500 lbs	0.0	0.0	0.0	0.0
Lite-Heavy Truck 8501-10,000 lbs	0.0	0.0	0.0	100.0
Lite-Heavy Truck 10,001-14,000 lbs	0.0	0.0	0.0	100.0
Med-Heavy Truck 14,001-33,000 lbs	0.0	0.0	0.0	100.0
Heavy-Heavy Truck 33,001-60,000 lbs	35.2	0.0	0.0	100.0
Other Bus	59.2	0.0	0.0	100.0
Urban Bus	0.0	0.0	0.0	100.0
Motorcycle	0.0	0.0	0.0	100.0
School Bus	0.0	0.0	0.0	100.0
Motor Home	1.3	0.0	0.0	100.0

Travel Conditions



	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	12.7	7.0	9.5	13.3	7.4	8.9
Rural Trip Length (miles)	17.6	12.1	14.9	15.4	9.6	12.6
Trip speeds (mph)	30.0	30.0	30.0	30.0	30.0	30.0
% of Trips - Residential	32.9	18.0	49.1			
% of Trips - Commercial (by land use)						
Cruise Ship Terminal Berth 91-93				20.0	10.0	70.0
Los Angeles Maritime Institute				20.0	10.0	70.0
Conference Facilities at POC				5.0	2.5	92.5
Cruise Ship Terminal Berth 45-50				5.0	2.5	92.5
San Pedro Park at 22nd & Miner St				5.0	2.5	92.5
Port of Call Restaurant Development				8.0	4.0	88.0
Port of Call Retail Development				8.0	4.0	88.0
S.S. Lane Victory				2.0	1.0	97.0
Ralph J Scott Fireboat Museum				2.0	1.0	97.0
Mercardo Warehouse 9 & 10 Reuse				10.0	5.0	85.0
Warehouse 9 & 10 Reuse				10.0	5.0	85.0
Red Car Maintenance Facility				100.0	0.0	0.0
Millennium Tugboat Office				100.0	0.0	0.0
Waterfront Promenade Town Sq				2.0	1.0	97.0
Fisherman Park				2.0	1.0	97.0
Research & Dev at Westways				2.0	1.0	97.0
Crowley Tugboat				100.0	0.0	0.0
Outer Harbor Park				2.0	1.0	97.0

Urbemis 2007 Version 9.2.4

## Combined Summer Emissions Reports (Pounds/Day)

File Name: C:\Documents and Settings\mslavick\Application Data\Urbemis\Version9a\Projects\SPW\_Alternative\_2\_2015\_wkend.urb924

Project Name: San Pedro Waterfront Alternative 2 2015 Weekend Diesel PM

Project Location: South Coast AQMD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

## Summary Report:

## OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (lbs/day, unmitigated)	238.98	3,330.45	1,353.63	11.65	176.05	144.39	1,248,515.13

## SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (lbs/day, unmitigated)	238.98	3,330.45	1,353.63	11.65	176.05	144.39	1,248,515.13

## Operational Unmitigated Detail Report:

## OPERATIONAL EMISSION ESTIMATES Summer Pounds Per Day, Unmitigated

<u>Source</u>	ROG	NOX	CO	SO2	PM10	PM25	CO2
Cruise Ship Terminal Berth 91-93	49.79	693.88	282.02	2.42	36.68	30.08	260,119.56
Los Angeles Maritime Institute	0.03	0.45	0.18	0.00	0.02	0.02	170.00
Conference Facilities at POC	2.39	33.36	13.56	0.12	1.76	1.45	12,506.41
Cruise Ship Terminal Berth 45-50	46.95	654.43	265.99	2.29	34.59	28.37	245,330.82
San Pedro Park at 22nd & Miner St	7.34	102.30	41.58	0.36	5.41	4.44	38,350.42

Port of Call Restaurant Development	73.27	1,021.13	415.03	3.57	53.98	44.27	382,798.76
Port of Call Retail Development	45.70	636.92	258.87	2.22	33.67	27.61	238,766.47
S.S. Lane Victory	0.33	4.56	1.85	0.02	0.24	0.20	1,710.78
Ralph J Scott Fireboat Museum	0.33	4.56	1.85	0.02	0.24	0.20	1,710.78
Mercardo Warehouse 9 & 10 Reuse	4.61	64.23	26.11	0.22	3.40	2.78	24,077.72
Warehouse 9 & 10 Reuse	0.28	3.94	1.60	0.01	0.21	0.17	1,476.95
Red Car Maintenance Facility	1.01	14.04	5.71	0.05	0.74	0.61	5,264.52
Millennium Tugboat Office	0.13	1.75	0.71	0.01	0.09	0.08	657.42
Waterfront Promenade Town Sq	1.86	25.86	10.51	0.09	1.37	1.12	9,694.42
Fisherman Park	0.73	10.14	4.12	0.04	0.54	0.44	3,801.73
Research & Dev at Westways	1.77	24.68	10.03	0.09	1.30	1.07	9,250.25
Crowley Tugboat	0.04	0.50	0.20	0.00	0.03	0.02	187.36
Outer Harbor Park	2.42	33.72	13.71	0.12	1.78	1.46	12,640.76
<b>TOTALS (lbs/day, unmitigated)</b>	<b>238.98</b>	<b>3,330.45</b>	<b>1,353.63</b>	<b>11.65</b>	<b>176.05</b>	<b>144.39</b>	<b>1,248,515.13</b>

Operational Settings:

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2015 Temperature (F): 80 Season: Summer

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
Cruise Ship Terminal Berth 91-93		1.46	passengers	5,240.00	7,650.40	73,673.35
Los Angeles Maritime Institute		3.30	employees	10.00	5.00	48.15
Conference Facilities at POC		2.60	attendees	300.00	390.00	3,542.17
Cruise Ship Terminal Berth 45-50		1.46	passengers	5,240.00	7,650.40	69,484.76
San Pedro Park at 22nd & Miner St		29.83	acres	18.00	1,195.92	10,861.94
Port of Call Restaurant Development		89.95	1000 sq ft	125.00	11,795.00	108,419.64

Port of Call Retail Development	44.32	1000 sq ft	175.00	7,357.00	67,625.54
S.S. Lane Victory	3.60	1000 sq ft	10.00	54.00	484.54
Ralph J Scott Fireboat Museum	3.60	1000 sq ft	10.00	54.00	484.54
Mercardo Warehouse 9 & 10 Reuse	22.17	1000 sq ft	35.00	736.05	6,819.50
Warehouse 9 & 10 Reuse	4.97	1000 sq ft	35.00	45.15	418.31
Red Car Maintenance Facility	3.02	employees	37.00	112.11	1,491.06
Millennium Tugboat Office	3.32	employees	25.00	14.00	186.20
Waterfront Promenade Town Sq	20.00	acres	15.30	306.00	2,745.74
Fisherman Park	20.00	acres	6.00	120.00	1,076.76
Research & Dev at Westways	79.62	acres	13.00	291.98	2,619.94
Crowley Tugboat	3.29	employees	7.00	3.99	53.07
Outer Harbor Park	29.83	acres	6.00	399.00	3,580.23
				38,180.00	353,615.44

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	1.5	0.0	0.0	100.0
Light Truck < 3750 lbs	2.8	0.0	0.0	100.0
Light Truck 3751-5750 lbs	0.0	0.0	0.0	100.0
Med Truck 5751-8500 lbs	0.0	0.0	0.0	100.0
Lite-Heavy Truck 8501-10,000 lbs	0.0	0.0	0.0	100.0
Lite-Heavy Truck 10,001-14,000 lbs	0.0	0.0	0.0	100.0
Med-Heavy Truck 14,001-33,000 lbs	0.0	0.0	0.0	100.0
Heavy-Heavy Truck 33,001-60,000 lbs	35.2	0.0	0.0	100.0
Other Bus	59.2	0.0	0.0	100.0
Urban Bus	0.0	0.0	0.0	100.0
Motorcycle	0.0	0.0	0.0	100.0
School Bus	0.0	0.0	0.0	100.0
Motor Home	1.3	0.0	0.0	100.0

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	12.7	7.0	9.5	13.3	7.4	8.9
Rural Trip Length (miles)	17.6	12.1	14.9	15.4	9.6	12.6
Trip speeds (mph)	30.0	30.0	30.0	30.0	30.0	30.0
% of Trips - Residential	32.9	18.0	49.1			
% of Trips - Commercial (by land use)						
Cruise Ship Terminal Berth 91-93				20.0	10.0	70.0
Los Angeles Maritime Institute				20.0	10.0	70.0
Conference Facilities at POC				5.0	2.5	92.5
Cruise Ship Terminal Berth 45-50				5.0	2.5	92.5
San Pedro Park at 22nd & Miner St				5.0	2.5	92.5
Port of Call Restaurant Development				8.0	4.0	88.0
Port of Call Retail Development				8.0	4.0	88.0
S.S. Lane Victory				2.0	1.0	97.0
Ralph J Scott Fireboat Museum				2.0	1.0	97.0
Mercardo Warehouse 9 & 10 Reuse				10.0	5.0	85.0
Warehouse 9 & 10 Reuse				10.0	5.0	85.0
Red Car Maintenance Facility				100.0	0.0	0.0
Millennium Tugboat Office				100.0	0.0	0.0
Waterfront Promenade Town Sq				2.0	1.0	97.0
Fisherman Park				2.0	1.0	97.0
Research & Dev at Westways				2.0	1.0	97.0
Crowley Tugboat				100.0	0.0	0.0
Outer Harbor Park				2.0	1.0	97.0

Urbemis 2007 Version 9.2.4

## Combined Annual Emissions Reports (Tons/Year)

File Name: C:\Documents and Settings\mslavick\Application Data\Urbemis\Version9a\Projects\SPW\_Alternative\_2\_2022\_wkdy.urb924

Project Name: San Pedro Waterfront Alternative 2 2022 Weekday Diesel PM

Project Location: South Coast AQMD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

## Summary Report:

## OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (tons/year, unmitigated)	33.40	403.12	198.12	2.28	25.51	20.07	243,445.07

## SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (tons/year, unmitigated)	33.40	403.12	198.12	2.28	25.51	20.07	243,445.07

## Operational Unmitigated Detail Report:

## OPERATIONAL EMISSION ESTIMATES Annual Tons Per Year, Unmitigated

<u>Source</u>	ROG	NOX	CO	SO2	PM10	PM25	CO2
Cruise Ship Terminal Berth 91-93	7.45	89.96	44.21	0.51	5.69	4.47	54,328.20
Los Angeles Maritime Institute	0.03	0.34	0.17	0.00	0.02	0.02	204.76
Conference Facilities at POC	0.63	7.56	3.71	0.04	0.48	0.38	4,564.70
Cruise Ship Terminal Berth 45-50	7.03	84.85	41.70	0.48	5.37	4.22	51,239.45
San Pedro Park at 22nd & Miner St	0.43	5.20	2.56	0.03	0.33	0.26	3,142.27

Port of Call Restaurant Development	9.13	110.27	54.20	0.62	6.98	5.48	66,593.72
Port of Call Retail Development	6.30	76.07	37.38	0.43	4.81	3.78	45,936.71
S.S. Lane Victory	0.03	0.34	0.17	0.00	0.02	0.02	208.14
Ralph J Scott Fireboat Museum	0.03	0.34	0.17	0.00	0.02	0.02	208.14
Mercardo Warehouse 9 & 10 Reuse	0.64	7.67	3.77	0.04	0.49	0.38	4,632.24
Warehouse 9 & 10 Reuse	0.14	1.72	0.85	0.01	0.11	0.09	1,038.44
Red Car Maintenance Facility	0.13	1.59	0.78	0.01	0.10	0.08	957.57
Millennium Tugboat Office	0.10	1.18	0.58	0.01	0.07	0.06	711.28
Waterfront Promenade Town Sq	0.24	2.93	1.44	0.02	0.19	0.15	1,769.18
Fisherman Park	0.10	1.15	0.56	0.01	0.07	0.06	693.79
Research & Dev at Westways	0.82	9.91	4.87	0.06	0.63	0.49	5,984.33
Crowley Tugboat	0.03	0.33	0.16	0.00	0.02	0.02	197.36
Outer Harbor Park	0.14	1.71	0.84	0.01	0.11	0.09	1,034.79
<b>TOTALS (tons/year, unmitigated)</b>	<b>33.40</b>	<b>403.12</b>	<b>198.12</b>	<b>2.28</b>	<b>25.51</b>	<b>20.07</b>	<b>243,445.07</b>

Operational Settings:

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2020 Season: Annual

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
Cruise Ship Terminal Berth 91-93		1.46	passengers	5,997.00	8,755.62	84,316.62
Los Angeles Maritime Institute		3.30	employees	10.00	33.00	317.79
Conference Facilities at POC		2.60	attendees	300.00	780.00	7,084.35
Cruise Ship Terminal Berth 45-50		1.46	passengers	5,997.00	8,755.62	79,522.92
San Pedro Park at 22nd & Miner St		29.83	acres	18.00	536.94	4,876.76
Port of Call Restaurant Development		89.95	1000 sq ft	125.00	11,243.75	103,352.54

Port of Call Retail Development	44.32	1000 sq ft	175.00	7,756.00	71,293.15
S.S. Lane Victory	3.60	1000 sq ft	10.00	36.00	323.03
Ralph J Scott Fireboat Museum	3.60	1000 sq ft	10.00	36.00	323.03
Mercardo Warehouse 9 & 10 Reuse	22.17	1000 sq ft	35.00	775.95	7,189.18
Warehouse 9 & 10 Reuse	4.97	1000 sq ft	35.00	173.95	1,611.65
Red Car Maintenance Facility	3.02	employees	37.00	111.74	1,486.14
Millennium Tugboat Office	3.32	employees	25.00	83.00	1,103.90
Waterfront Promenade Town Sq	20.00	acres	15.30	306.00	2,745.74
Fisherman Park	20.00	acres	6.00	120.00	1,076.76
Research & Dev at Westways	79.62	acres	13.00	1,035.06	9,287.59
Crowley Tugboat	3.29	employees	7.00	23.03	306.30
Outer Harbor Park	29.83	acres	6.00	178.98	1,605.99
				40,740.64	377,823.44

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	1.5	0.0	0.0	100.0
Light Truck < 3750 lbs	2.8	0.0	0.0	100.0
Light Truck 3751-5750 lbs	0.0	0.0	0.0	100.0
Med Truck 5751-8500 lbs	0.0	0.0	0.0	100.0
Lite-Heavy Truck 8501-10,000 lbs	0.0	0.0	0.0	100.0
Lite-Heavy Truck 10,001-14,000 lbs	0.0	0.0	0.0	100.0
Med-Heavy Truck 14,001-33,000 lbs	0.0	0.0	0.0	100.0
Heavy-Heavy Truck 33,001-60,000 lbs	35.2	0.0	0.0	100.0
Other Bus	59.2	0.0	0.0	100.0
Urban Bus	0.0	0.0	0.0	100.0
Motorcycle	0.0	0.0	0.0	100.0
School Bus	0.0	0.0	0.0	100.0
Motor Home	1.3	0.0	0.0	100.0

Travel Conditions



	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	12.7	7.0	9.5	13.3	7.4	8.9
Rural Trip Length (miles)	17.6	12.1	14.9	15.4	9.6	12.6
Trip speeds (mph)	30.0	30.0	30.0	30.0	30.0	30.0
% of Trips - Residential	32.9	18.0	49.1			
% of Trips - Commercial (by land use)						
Cruise Ship Terminal Berth 91-93				20.0	10.0	70.0
Los Angeles Maritime Institute				20.0	10.0	70.0
Conference Facilities at POC				5.0	2.5	92.5
Cruise Ship Terminal Berth 45-50				5.0	2.5	92.5
San Pedro Park at 22nd & Miner St				5.0	2.5	92.5
Port of Call Restaurant Development				8.0	4.0	88.0
Port of Call Retail Development				8.0	4.0	88.0
S.S. Lane Victory				2.0	1.0	97.0
Ralph J Scott Fireboat Museum				2.0	1.0	97.0
Mercardo Warehouse 9 & 10 Reuse				10.0	5.0	85.0
Warehouse 9 & 10 Reuse				10.0	5.0	85.0
Red Car Maintenance Facility				100.0	0.0	0.0
Millennium Tugboat Office				100.0	0.0	0.0
Waterfront Promenade Town Sq				2.0	1.0	97.0
Fisherman Park				2.0	1.0	97.0
Research & Dev at Westways				2.0	1.0	97.0
Crowley Tugboat				100.0	0.0	0.0
Outer Harbor Park				2.0	1.0	97.0

Urbemis 2007 Version 9.2.4

## Combined Annual Emissions Reports (Tons/Year)

File Name: C:\Documents and Settings\mslavick\Application Data\Urbemis\Version9a\Projects\SPW\_Alternative\_2\_2022\_wkend.urb924

Project Name: San Pedro Waterfront Alternative 2 2022 Weekend Diesel PM

Project Location: South Coast AQMD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

## Summary Report:

## OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (tons/year, unmitigated)	33.07	399.38	196.27	2.26	25.25	19.87	241,172.81

## SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (tons/year, unmitigated)	33.07	399.38	196.27	2.26	25.25	19.87	241,172.81

## Operational Unmitigated Detail Report:

## OPERATIONAL EMISSION ESTIMATES Annual Tons Per Year, Unmitigated

<u>Source</u>	ROG	NOX	CO	SO2	PM10	PM25	CO2
Cruise Ship Terminal Berth 91-93	7.45	89.96	44.21	0.51	5.69	4.47	54,328.20
Los Angeles Maritime Institute	0.00	0.05	0.03	0.00	0.00	0.00	31.02
Conference Facilities at POC	0.31	3.78	1.86	0.02	0.24	0.19	2,282.35
Cruise Ship Terminal Berth 45-50	7.03	84.85	41.70	0.48	5.37	4.22	51,239.45
San Pedro Park at 22nd & Miner St	0.96	11.59	5.70	0.07	0.73	0.58	6,998.74

Port of Call Restaurant Development	9.58	115.68	56.85	0.65	7.32	5.75	69,858.63
Port of Call Retail Development	5.98	72.15	35.46	0.41	4.56	3.59	43,573.54
S.S. Lane Victory	0.04	0.52	0.25	0.00	0.03	0.03	312.21
Ralph J Scott Fireboat Museum	0.04	0.52	0.25	0.00	0.03	0.03	312.21
Mercardo Warehouse 9 & 10 Reuse	0.60	7.28	3.58	0.04	0.46	0.36	4,394.05
Warehouse 9 & 10 Reuse	0.04	0.45	0.22	0.00	0.03	0.02	269.54
Red Car Maintenance Facility	0.13	1.59	0.78	0.01	0.10	0.08	960.74
Millennium Tugboat Office	0.02	0.20	0.10	0.00	0.01	0.01	119.98
Waterfront Promenade Town Sq	0.24	2.93	1.44	0.02	0.19	0.15	1,769.18
Fisherman Park	0.10	1.15	0.56	0.01	0.07	0.06	693.79
Research & Dev at Westways	0.23	2.80	1.37	0.02	0.18	0.14	1,688.12
Crowley Tugboat	0.00	0.06	0.03	0.00	0.00	0.00	34.19
Outer Harbor Park	0.32	3.82	1.88	0.02	0.24	0.19	2,306.87
<b>TOTALS (tons/year, unmitigated)</b>	<b>33.07</b>	<b>399.38</b>	<b>196.27</b>	<b>2.26</b>	<b>25.25</b>	<b>19.87</b>	<b>241,172.81</b>

Operational Settings:

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2020 Season: Annual

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
Cruise Ship Terminal Berth 91-93		1.46	passengers	5,997.00	8,755.62	84,316.62
Los Angeles Maritime Institute		3.30	employees	10.00	5.00	48.15
Conference Facilities at POC		2.60	attendees	300.00	390.00	3,542.17
Cruise Ship Terminal Berth 45-50		1.46	passengers	5,997.00	8,755.62	79,522.92
San Pedro Park at 22nd & Miner St		29.83	acres	18.00	1,195.92	10,861.94
Port of Call Restaurant Development		89.95	1000 sq ft	125.00	11,795.00	108,419.64

Port of Call Retail Development	44.32	1000 sq ft	175.00	7,357.00	67,625.54
S.S. Lane Victory	3.60	1000 sq ft	10.00	54.00	484.54
Ralph J Scott Fireboat Museum	3.60	1000 sq ft	10.00	54.00	484.54
Mercardo Warehouse 9 & 10 Reuse	22.17	1000 sq ft	35.00	736.05	6,819.50
Warehouse 9 & 10 Reuse	4.97	1000 sq ft	35.00	45.15	418.31
Red Car Maintenance Facility	3.02	employees	37.00	112.11	1,491.06
Millennium Tugboat Office	3.32	employees	25.00	14.00	186.20
Waterfront Promenade Town Sq	20.00	acres	15.30	306.00	2,745.74
Fisherman Park	20.00	acres	6.00	120.00	1,076.76
Research & Dev at Westways	79.62	acres	13.00	291.98	2,619.94
Crowley Tugboat	3.29	employees	7.00	3.99	53.07
Outer Harbor Park	29.83	acres	6.00	399.00	3,580.23
				40,390.44	374,296.87

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	1.5	0.0	0.0	100.0
Light Truck < 3750 lbs	2.8	0.0	0.0	100.0
Light Truck 3751-5750 lbs	0.0	0.0	0.0	100.0
Med Truck 5751-8500 lbs	0.0	0.0	0.0	100.0
Lite-Heavy Truck 8501-10,000 lbs	0.0	0.0	0.0	100.0
Lite-Heavy Truck 10,001-14,000 lbs	0.0	0.0	0.0	100.0
Med-Heavy Truck 14,001-33,000 lbs	0.0	0.0	0.0	100.0
Heavy-Heavy Truck 33,001-60,000 lbs	35.2	0.0	0.0	100.0
Other Bus	59.2	0.0	0.0	100.0
Urban Bus	0.0	0.0	0.0	100.0
Motorcycle	0.0	0.0	0.0	100.0
School Bus	0.0	0.0	0.0	100.0
Motor Home	1.3	0.0	0.0	100.0

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	12.7	7.0	9.5	13.3	7.4	8.9
Rural Trip Length (miles)	17.6	12.1	14.9	15.4	9.6	12.6
Trip speeds (mph)	30.0	30.0	30.0	30.0	30.0	30.0
% of Trips - Residential	32.9	18.0	49.1			
% of Trips - Commercial (by land use)						
Cruise Ship Terminal Berth 91-93				20.0	10.0	70.0
Los Angeles Maritime Institute				20.0	10.0	70.0
Conference Facilities at POC				5.0	2.5	92.5
Cruise Ship Terminal Berth 45-50				5.0	2.5	92.5
San Pedro Park at 22nd & Miner St				5.0	2.5	92.5
Port of Call Restaurant Development				8.0	4.0	88.0
Port of Call Retail Development				8.0	4.0	88.0
S.S. Lane Victory				2.0	1.0	97.0
Ralph J Scott Fireboat Museum				2.0	1.0	97.0
Mercardo Warehouse 9 & 10 Reuse				10.0	5.0	85.0
Warehouse 9 & 10 Reuse				10.0	5.0	85.0
Red Car Maintenance Facility				100.0	0.0	0.0
Millennium Tugboat Office				100.0	0.0	0.0
Waterfront Promenade Town Sq				2.0	1.0	97.0
Fisherman Park				2.0	1.0	97.0
Research & Dev at Westways				2.0	1.0	97.0
Crowley Tugboat				100.0	0.0	0.0
Outer Harbor Park				2.0	1.0	97.0

Urbemis 2007 Version 9.2.4

## Combined Summer Emissions Reports (Pounds/Day)

File Name: C:\Documents and Settings\mslavick\Application Data\Urbemis\Version9a\Projects\SPW\_Alternative\_2\_2022\_wkdy.urb924

Project Name: San Pedro Waterfront Alternative 2 2022 Weekday Diesel PM

Project Location: South Coast AQMD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

## Summary Report:

## OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (lbs/day, unmitigated)	182.98	2,134.20	1,085.60	12.44	139.73	109.79	1,333,945.66

## SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (lbs/day, unmitigated)	182.98	2,134.20	1,085.60	12.44	139.73	109.79	1,333,945.66

## Operational Unmitigated Detail Report:

## OPERATIONAL EMISSION ESTIMATES Summer Pounds Per Day, Unmitigated

<u>Source</u>	<u>ROG</u>	<u>NOX</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM25</u>	<u>CO2</u>
Cruise Ship Terminal Berth 91-93	40.84	476.28	242.27	2.77	31.18	24.50	297,688.77
Los Angeles Maritime Institute	0.15	1.80	0.91	0.01	0.12	0.09	1,121.99
Conference Facilities at POC	3.43	40.02	20.36	0.23	2.62	2.06	25,012.05
Cruise Ship Terminal Berth 45-50	38.51	449.20	228.49	2.62	29.41	23.11	280,764.09
San Pedro Park at 22nd & Miner St	2.36	27.55	14.01	0.16	1.80	1.42	17,217.91

Port of Call Restaurant Development	50.05	583.81	296.96	3.40	38.22	30.03	364,897.11
Port of Call Retail Development	34.53	402.71	204.85	2.35	26.37	20.72	251,708.02
S.S. Lane Victory	0.16	1.82	0.93	0.01	0.12	0.09	1,140.48
Ralph J Scott Fireboat Museum	0.16	1.82	0.93	0.01	0.12	0.09	1,140.48
Mercardo Warehouse 9 & 10 Reuse	3.48	40.61	20.66	0.24	2.66	2.09	25,382.15
Warehouse 9 & 10 Reuse	0.78	9.10	4.63	0.05	0.60	0.47	5,690.09
Red Car Maintenance Facility	0.72	8.39	4.27	0.05	0.55	0.43	5,246.98
Millennium Tugboat Office	0.53	6.24	3.17	0.04	0.41	0.32	3,897.44
Waterfront Promenade Town Sq	1.33	15.51	7.89	0.09	1.02	0.80	9,694.12
Fisherman Park	0.52	6.08	3.09	0.04	0.40	0.31	3,801.62
Research & Dev at Westways	4.50	52.46	26.69	0.31	3.43	2.70	32,790.83
Crowley Tugboat	0.15	1.73	0.88	0.01	0.11	0.09	1,081.42
Outer Harbor Park	0.78	9.07	4.61	0.05	0.59	0.47	5,670.11
<b>TOTALS (lbs/day, unmitigated)</b>	<b>182.98</b>	<b>2,134.20</b>	<b>1,085.60</b>	<b>12.44</b>	<b>139.73</b>	<b>109.79</b>	<b>1,333,945.66</b>

Operational Settings:

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2020 Temperature (F): 80 Season: Summer

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
Cruise Ship Terminal Berth 91-93		1.46	passengers	5,997.00	8,755.62	84,316.62
Los Angeles Maritime Institute		3.30	employees	10.00	33.00	317.79
Conference Facilities at POC		2.60	attendees	300.00	780.00	7,084.35
Cruise Ship Terminal Berth 45-50		1.46	passengers	5,997.00	8,755.62	79,522.92
San Pedro Park at 22nd & Miner St		29.83	acres	18.00	536.94	4,876.76
Port of Call Restaurant Development		89.95	1000 sq ft	125.00	11,243.75	103,352.54

Port of Call Retail Development	44.32	1000 sq ft	175.00	7,756.00	71,293.15
S.S. Lane Victory	3.60	1000 sq ft	10.00	36.00	323.03
Ralph J Scott Fireboat Museum	3.60	1000 sq ft	10.00	36.00	323.03
Mercardo Warehouse 9 & 10 Reuse	22.17	1000 sq ft	35.00	775.95	7,189.18
Warehouse 9 & 10 Reuse	4.97	1000 sq ft	35.00	173.95	1,611.65
Red Car Maintenance Facility	3.02	employees	37.00	111.74	1,486.14
Millennium Tugboat Office	3.32	employees	25.00	83.00	1,103.90
Waterfront Promenade Town Sq	20.00	acres	15.30	306.00	2,745.74
Fisherman Park	20.00	acres	6.00	120.00	1,076.76
Research & Dev at Westways	79.62	acres	13.00	1,035.06	9,287.59
Crowley Tugboat	3.29	employees	7.00	23.03	306.30
Outer Harbor Park	29.83	acres	6.00	178.98	1,605.99
				40,740.64	377,823.44

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	1.5	0.0	0.0	100.0
Light Truck < 3750 lbs	2.8	0.0	0.0	100.0
Light Truck 3751-5750 lbs	0.0	0.0	0.0	100.0
Med Truck 5751-8500 lbs	0.0	0.0	0.0	100.0
Lite-Heavy Truck 8501-10,000 lbs	0.0	0.0	0.0	100.0
Lite-Heavy Truck 10,001-14,000 lbs	0.0	0.0	0.0	100.0
Med-Heavy Truck 14,001-33,000 lbs	0.0	0.0	0.0	100.0
Heavy-Heavy Truck 33,001-60,000 lbs	35.2	0.0	0.0	100.0
Other Bus	59.2	0.0	0.0	100.0
Urban Bus	0.0	0.0	0.0	100.0
Motorcycle	0.0	0.0	0.0	100.0
School Bus	0.0	0.0	0.0	100.0
Motor Home	1.3	0.0	0.0	100.0

Travel Conditions



	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	12.7	7.0	9.5	13.3	7.4	8.9
Rural Trip Length (miles)	17.6	12.1	14.9	15.4	9.6	12.6
Trip speeds (mph)	30.0	30.0	30.0	30.0	30.0	30.0
% of Trips - Residential	32.9	18.0	49.1			
% of Trips - Commercial (by land use)						
Cruise Ship Terminal Berth 91-93				20.0	10.0	70.0
Los Angeles Maritime Institute				20.0	10.0	70.0
Conference Facilities at POC				5.0	2.5	92.5
Cruise Ship Terminal Berth 45-50				5.0	2.5	92.5
San Pedro Park at 22nd & Miner St				5.0	2.5	92.5
Port of Call Restaurant Development				8.0	4.0	88.0
Port of Call Retail Development				8.0	4.0	88.0
S.S. Lane Victory				2.0	1.0	97.0
Ralph J Scott Fireboat Museum				2.0	1.0	97.0
Mercardo Warehouse 9 & 10 Reuse				10.0	5.0	85.0
Warehouse 9 & 10 Reuse				10.0	5.0	85.0
Red Car Maintenance Facility				100.0	0.0	0.0
Millennium Tugboat Office				100.0	0.0	0.0
Waterfront Promenade Town Sq				2.0	1.0	97.0
Fisherman Park				2.0	1.0	97.0
Research & Dev at Westways				2.0	1.0	97.0
Crowley Tugboat				100.0	0.0	0.0
Outer Harbor Park				2.0	1.0	97.0

Urbemis 2007 Version 9.2.4

## Combined Summer Emissions Reports (Pounds/Day)

File Name: C:\Documents and Settings\mslavick\Application Data\Urbemis\Version9a\Projects\SPW\_Alternative\_2\_2022\_wkend.urb924

Project Name: San Pedro Waterfront Alternative 2 2022 Weekend Diesel PM

Project Location: South Coast AQMD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

## Summary Report:

## OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (lbs/day, unmitigated)	181.26	2,114.29	1,075.46	12.33	138.43	108.75	1,321,494.82

## SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (lbs/day, unmitigated)	181.26	2,114.29	1,075.46	12.33	138.43	108.75	1,321,494.82

## Operational Unmitigated Detail Report:

## OPERATIONAL EMISSION ESTIMATES Summer Pounds Per Day, Unmitigated

<u>Source</u>	<u>ROG</u>	<u>NOX</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM25</u>	<u>CO2</u>
Cruise Ship Terminal Berth 91-93	40.84	476.28	242.27	2.77	31.18	24.50	297,688.77
Los Angeles Maritime Institute	0.02	0.27	0.14	0.00	0.02	0.01	170.00
Conference Facilities at POC	1.72	20.01	10.18	0.12	1.31	1.03	12,506.02
Cruise Ship Terminal Berth 45-50	38.51	449.20	228.49	2.62	29.41	23.11	280,764.09
San Pedro Park at 22nd & Miner St	5.26	61.36	31.21	0.36	4.02	3.16	38,349.24

Port of Call Restaurant Development	52.51	612.43	311.52	3.57	40.10	31.50	382,787.02
Port of Call Retail Development	32.75	382.00	194.31	2.22	25.01	19.65	238,759.15
S.S. Lane Victory	0.23	2.74	1.39	0.02	0.18	0.14	1,710.73
Ralph J Scott Fireboat Museum	0.23	2.74	1.39	0.02	0.18	0.14	1,710.73
Mercardo Warehouse 9 & 10 Reuse	3.30	38.52	19.59	0.22	2.52	1.98	24,076.98
Warehouse 9 & 10 Reuse	0.20	2.36	1.20	0.01	0.15	0.12	1,476.90
Red Car Maintenance Facility	0.72	8.42	4.28	0.05	0.55	0.43	5,264.36
Millennium Tugboat Office	0.09	1.05	0.54	0.01	0.07	0.05	657.40
Waterfront Promenade Town Sq	1.33	15.51	7.89	0.09	1.02	0.80	9,694.12
Fisherman Park	0.52	6.08	3.09	0.04	0.40	0.31	3,801.62
Research & Dev at Westways	1.27	14.80	7.53	0.09	0.97	0.76	9,249.96
Crowley Tugboat	0.03	0.30	0.15	0.00	0.02	0.02	187.36
Outer Harbor Park	1.73	20.22	10.29	0.12	1.32	1.04	12,640.37
<b>TOTALS (lbs/day, unmitigated)</b>	<b>181.26</b>	<b>2,114.29</b>	<b>1,075.46</b>	<b>12.33</b>	<b>138.43</b>	<b>108.75</b>	<b>1,321,494.82</b>

Operational Settings:

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2020 Temperature (F): 80 Season: Summer

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
Cruise Ship Terminal Berth 91-93		1.46	passengers	5,997.00	8,755.62	84,316.62
Los Angeles Maritime Institute		3.30	employees	10.00	5.00	48.15
Conference Facilities at POC		2.60	attendees	300.00	390.00	3,542.17
Cruise Ship Terminal Berth 45-50		1.46	passengers	5,997.00	8,755.62	79,522.92
San Pedro Park at 22nd & Miner St		29.83	acres	18.00	1,195.92	10,861.94
Port of Call Restaurant Development		89.95	1000 sq ft	125.00	11,795.00	108,419.64

Port of Call Retail Development	44.32	1000 sq ft	175.00	7,357.00	67,625.54
S.S. Lane Victory	3.60	1000 sq ft	10.00	54.00	484.54
Ralph J Scott Fireboat Museum	3.60	1000 sq ft	10.00	54.00	484.54
Mercardo Warehouse 9 & 10 Reuse	22.17	1000 sq ft	35.00	736.05	6,819.50
Warehouse 9 & 10 Reuse	4.97	1000 sq ft	35.00	45.15	418.31
Red Car Maintenance Facility	3.02	employees	37.00	112.11	1,491.06
Millennium Tugboat Office	3.32	employees	25.00	14.00	186.20
Waterfront Promenade Town Sq	20.00	acres	15.30	306.00	2,745.74
Fisherman Park	20.00	acres	6.00	120.00	1,076.76
Research & Dev at Westways	79.62	acres	13.00	291.98	2,619.94
Crowley Tugboat	3.29	employees	7.00	3.99	53.07
Outer Harbor Park	29.83	acres	6.00	399.00	3,580.23
				40,390.44	374,296.87

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	1.5	0.0	0.0	100.0
Light Truck < 3750 lbs	2.8	0.0	0.0	100.0
Light Truck 3751-5750 lbs	0.0	0.0	0.0	100.0
Med Truck 5751-8500 lbs	0.0	0.0	0.0	100.0
Lite-Heavy Truck 8501-10,000 lbs	0.0	0.0	0.0	100.0
Lite-Heavy Truck 10,001-14,000 lbs	0.0	0.0	0.0	100.0
Med-Heavy Truck 14,001-33,000 lbs	0.0	0.0	0.0	100.0
Heavy-Heavy Truck 33,001-60,000 lbs	35.2	0.0	0.0	100.0
Other Bus	59.2	0.0	0.0	100.0
Urban Bus	0.0	0.0	0.0	100.0
Motorcycle	0.0	0.0	0.0	100.0
School Bus	0.0	0.0	0.0	100.0
Motor Home	1.3	0.0	0.0	100.0

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	12.7	7.0	9.5	13.3	7.4	8.9
Rural Trip Length (miles)	17.6	12.1	14.9	15.4	9.6	12.6
Trip speeds (mph)	30.0	30.0	30.0	30.0	30.0	30.0
% of Trips - Residential	32.9	18.0	49.1			
% of Trips - Commercial (by land use)						
Cruise Ship Terminal Berth 91-93				20.0	10.0	70.0
Los Angeles Maritime Institute				20.0	10.0	70.0
Conference Facilities at POC				5.0	2.5	92.5
Cruise Ship Terminal Berth 45-50				5.0	2.5	92.5
San Pedro Park at 22nd & Miner St				5.0	2.5	92.5
Port of Call Restaurant Development				8.0	4.0	88.0
Port of Call Retail Development				8.0	4.0	88.0
S.S. Lane Victory				2.0	1.0	97.0
Ralph J Scott Fireboat Museum				2.0	1.0	97.0
Mercardo Warehouse 9 & 10 Reuse				10.0	5.0	85.0
Warehouse 9 & 10 Reuse				10.0	5.0	85.0
Red Car Maintenance Facility				100.0	0.0	0.0
Millennium Tugboat Office				100.0	0.0	0.0
Waterfront Promenade Town Sq				2.0	1.0	97.0
Fisherman Park				2.0	1.0	97.0
Research & Dev at Westways				2.0	1.0	97.0
Crowley Tugboat				100.0	0.0	0.0
Outer Harbor Park				2.0	1.0	97.0

Urbemis 2007 Version 9.2.4

## Combined Annual Emissions Reports (Tons/Year)

File Name: C:\Documents and Settings\mslavick\Application Data\Urbemis\Version9a\Projects\SPW\_Alternative\_2\_2037\_wkdy.urb924

Project Name: San Pedro Waterfront Alternative 2 2037 Weekday Diesel PM

Project Location: South Coast AQMD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

## Summary Report:

## OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (tons/year, unmitigated)	26.65	242.85	171.89	2.58	22.05	16.37	276,351.09

## SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (tons/year, unmitigated)	26.65	242.85	171.89	2.58	22.05	16.37	276,351.09

## Operational Unmitigated Detail Report:

## OPERATIONAL EMISSION ESTIMATES Annual Tons Per Year, Unmitigated

<u>Source</u>	ROG	NOX	CO	SO2	PM10	PM25	CO2
Cruise Ship Terminal Berth 91-93	6.87	62.63	44.33	0.66	5.68	4.23	71,270.29
Los Angeles Maritime Institute	0.02	0.18	0.13	0.00	0.02	0.01	204.74
Conference Facilities at POC	0.44	4.01	2.84	0.04	0.36	0.27	4,564.20
Cruise Ship Terminal Berth 45-50	6.48	59.07	41.81	0.63	5.36	3.99	67,218.32
San Pedro Park at 22nd & Miner St	0.30	2.76	1.95	0.03	0.25	0.19	3,141.93

Port of Call Restaurant Development	6.42	58.52	41.42	0.62	5.31	3.95	66,586.50
Port of Call Retail Development	4.43	40.37	28.57	0.43	3.66	2.72	45,931.73
S.S. Lane Victory	0.02	0.18	0.13	0.00	0.02	0.01	208.12
Ralph J Scott Fireboat Museum	0.02	0.18	0.13	0.00	0.02	0.01	208.12
Mercardo Warehouse 9 & 10 Reuse	0.45	4.07	2.88	0.04	0.37	0.27	4,631.74
Warehouse 9 & 10 Reuse	0.10	0.91	0.65	0.01	0.08	0.06	1,038.33
Red Car Maintenance Facility	0.09	0.84	0.60	0.01	0.08	0.06	957.47
Millennium Tugboat Office	0.07	0.63	0.44	0.01	0.06	0.04	711.20
Waterfront Promenade Town Sq	0.17	1.55	1.10	0.02	0.14	0.10	1,768.98
Fisherman Park	0.07	0.61	0.43	0.01	0.06	0.04	693.72
Research & Dev at Westways	0.58	5.26	3.72	0.06	0.48	0.35	5,983.68
Crowley Tugboat	0.02	0.17	0.12	0.00	0.02	0.01	197.34
Outer Harbor Park	0.10	0.91	0.64	0.01	0.08	0.06	1,034.68
<b>TOTALS (tons/year, unmitigated)</b>	<b>26.65</b>	<b>242.85</b>	<b>171.89</b>	<b>2.58</b>	<b>22.05</b>	<b>16.37</b>	<b>276,351.09</b>

Operational Settings:

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2035 Season: Annual

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
Cruise Ship Terminal Berth 91-93		1.46	passengers	7,868.00	11,487.28	110,622.51
Los Angeles Maritime Institute		3.30	employees	10.00	33.00	317.79
Conference Facilities at POC		2.60	attendees	300.00	780.00	7,084.35
Cruise Ship Terminal Berth 45-50		1.46	passengers	7,868.00	11,487.28	104,333.22
San Pedro Park at 22nd & Miner St		29.83	acres	18.00	536.94	4,876.76
Port of Call Restaurant Development		89.95	1000 sq ft	125.00	11,243.75	103,352.54

Port of Call Retail Development	44.32	1000 sq ft	175.00	7,756.00	71,293.15
S.S. Lane Victory	3.60	1000 sq ft	10.00	36.00	323.03
Ralph J Scott Fireboat Museum	3.60	1000 sq ft	10.00	36.00	323.03
Mercardo Warehouse 9 & 10 Reuse	22.17	1000 sq ft	35.00	775.95	7,189.18
Warehouse 9 & 10 Reuse	4.97	1000 sq ft	35.00	173.95	1,611.65
Red Car Maintenance Facility	3.02	employees	37.00	111.74	1,486.14
Millennium Tugboat Office	3.32	employees	25.00	83.00	1,103.90
Waterfront Promenade Town Sq	20.00	acres	15.30	306.00	2,745.74
Fisherman Park	20.00	acres	6.00	120.00	1,076.76
Research & Dev at Westways	79.62	acres	13.00	1,035.06	9,287.59
Crowley Tugboat	3.29	employees	7.00	23.03	306.30
Outer Harbor Park	29.83	acres	6.00	178.98	1,605.99
				46,203.96	428,939.63

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	1.5	0.0	0.0	100.0
Light Truck < 3750 lbs	2.8	0.0	0.0	100.0
Light Truck 3751-5750 lbs	0.0	0.0	0.0	100.0
Med Truck 5751-8500 lbs	0.0	0.0	0.0	100.0
Lite-Heavy Truck 8501-10,000 lbs	0.0	0.0	0.0	100.0
Lite-Heavy Truck 10,001-14,000 lbs	0.0	0.0	0.0	100.0
Med-Heavy Truck 14,001-33,000 lbs	0.0	0.0	0.0	100.0
Heavy-Heavy Truck 33,001-60,000 lbs	35.2	0.0	0.0	100.0
Other Bus	59.2	0.0	0.0	100.0
Urban Bus	0.0	0.0	0.0	100.0
Motorcycle	0.0	0.0	0.0	100.0
School Bus	0.0	0.0	0.0	100.0
Motor Home	1.3	0.0	0.0	100.0

Travel Conditions



	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	12.7	7.0	9.5	13.3	7.4	8.9
Rural Trip Length (miles)	17.6	12.1	14.9	15.4	9.6	12.6
Trip speeds (mph)	30.0	30.0	30.0	30.0	30.0	30.0
% of Trips - Residential	32.9	18.0	49.1			
% of Trips - Commercial (by land use)						
Cruise Ship Terminal Berth 91-93				20.0	10.0	70.0
Los Angeles Maritime Institute				20.0	10.0	70.0
Conference Facilities at POC				5.0	2.5	92.5
Cruise Ship Terminal Berth 45-50				5.0	2.5	92.5
San Pedro Park at 22nd & Miner St				5.0	2.5	92.5
Port of Call Restaurant Development				8.0	4.0	88.0
Port of Call Retail Development				8.0	4.0	88.0
S.S. Lane Victory				2.0	1.0	97.0
Ralph J Scott Fireboat Museum				2.0	1.0	97.0
Mercardo Warehouse 9 & 10 Reuse				10.0	5.0	85.0
Warehouse 9 & 10 Reuse				10.0	5.0	85.0
Red Car Maintenance Facility				100.0	0.0	0.0
Millennium Tugboat Office				100.0	0.0	0.0
Waterfront Promenade Town Sq				2.0	1.0	97.0
Fisherman Park				2.0	1.0	97.0
Research & Dev at Westways				2.0	1.0	97.0
Crowley Tugboat				100.0	0.0	0.0
Outer Harbor Park				2.0	1.0	97.0

Urbemis 2007 Version 9.2.4

## Combined Annual Emissions Reports (Tons/Year)

File Name: C:\Documents and Settings\mslavick\Application Data\Urbemis\Version9a\Projects\SPW\_Alternative\_2\_2037\_wkend.urb924

Project Name: San Pedro Waterfront Alternative 2 2037 Weekend Diesel PM

Project Location: South Coast AQMD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

## Summary Report:

## OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (tons/year, unmitigated)	26.41	240.86	170.46	2.56	21.83	16.26	274,079.06

## SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (tons/year, unmitigated)	26.41	240.86	170.46	2.56	21.83	16.26	274,079.06

## Operational Unmitigated Detail Report:

## OPERATIONAL EMISSION ESTIMATES Annual Tons Per Year, Unmitigated

<u>Source</u>	ROG	NOX	CO	SO2	PM10	PM25	CO2
Cruise Ship Terminal Berth 91-93	6.87	62.63	44.33	0.66	5.68	4.23	71,270.29
Los Angeles Maritime Institute	0.00	0.03	0.02	0.00	0.00	0.00	31.02
Conference Facilities at POC	0.22	2.01	1.42	0.02	0.18	0.14	2,282.10
Cruise Ship Terminal Berth 45-50	6.48	59.07	41.81	0.63	5.36	3.99	67,218.32
San Pedro Park at 22nd & Miner St	0.67	6.15	4.35	0.07	0.56	0.41	6,997.98

Port of Call Restaurant Development	6.74	61.39	43.45	0.65	5.57	4.14	69,851.06
Port of Call Retail Development	4.20	38.29	27.10	0.41	3.47	2.58	43,568.82
S.S. Lane Victory	0.03	0.27	0.19	0.00	0.02	0.02	312.17
Ralph J Scott Fireboat Museum	0.03	0.27	0.19	0.00	0.02	0.02	312.17
Mercardo Warehouse 9 & 10 Reuse	0.42	3.86	2.73	0.04	0.35	0.26	4,393.57
Warehouse 9 & 10 Reuse	0.03	0.24	0.17	0.00	0.02	0.02	269.51
Red Car Maintenance Facility	0.09	0.84	0.60	0.01	0.08	0.06	960.64
Millennium Tugboat Office	0.01	0.11	0.07	0.00	0.01	0.01	119.96
Waterfront Promenade Town Sq	0.17	1.55	1.10	0.02	0.14	0.10	1,768.98
Fisherman Park	0.07	0.61	0.43	0.01	0.06	0.04	693.72
Research & Dev at Westways	0.16	1.48	1.05	0.02	0.13	0.10	1,687.94
Crowley Tugboat	0.00	0.03	0.02	0.00	0.00	0.00	34.19
Outer Harbor Park	0.22	2.03	1.43	0.02	0.18	0.14	2,306.62
<b>TOTALS (tons/year, unmitigated)</b>	<b>26.41</b>	<b>240.86</b>	<b>170.46</b>	<b>2.56</b>	<b>21.83</b>	<b>16.26</b>	<b>274,079.06</b>

Operational Settings:

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2035 Season: Annual

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
Cruise Ship Terminal Berth 91-93		1.46	passengers	7,868.00	11,487.28	110,622.51
Los Angeles Maritime Institute		3.30	employees	10.00	5.00	48.15
Conference Facilities at POC		2.60	attendees	300.00	390.00	3,542.17
Cruise Ship Terminal Berth 45-50		1.46	passengers	7,868.00	11,487.28	104,333.22
San Pedro Park at 22nd & Miner St		29.83	acres	18.00	1,195.92	10,861.94
Port of Call Restaurant Development		89.95	1000 sq ft	125.00	11,795.00	108,419.64

Port of Call Retail Development	44.32	1000 sq ft	175.00	7,357.00	67,625.54
S.S. Lane Victory	3.60	1000 sq ft	10.00	54.00	484.54
Ralph J Scott Fireboat Museum	3.60	1000 sq ft	10.00	54.00	484.54
Mercardo Warehouse 9 & 10 Reuse	22.17	1000 sq ft	35.00	736.05	6,819.50
Warehouse 9 & 10 Reuse	4.97	1000 sq ft	35.00	45.15	418.31
Red Car Maintenance Facility	3.02	employees	37.00	112.11	1,491.06
Millennium Tugboat Office	3.32	employees	25.00	14.00	186.20
Waterfront Promenade Town Sq	20.00	acres	15.30	306.00	2,745.74
Fisherman Park	20.00	acres	6.00	120.00	1,076.76
Research & Dev at Westways	79.62	acres	13.00	291.98	2,619.94
Crowley Tugboat	3.29	employees	7.00	3.99	53.07
Outer Harbor Park	29.83	acres	6.00	399.00	3,580.23
				45,853.76	425,413.06

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	1.5	0.0	0.0	100.0
Light Truck < 3750 lbs	2.8	0.0	0.0	100.0
Light Truck 3751-5750 lbs	0.0	0.0	0.0	100.0
Med Truck 5751-8500 lbs	0.0	0.0	0.0	100.0
Lite-Heavy Truck 8501-10,000 lbs	0.0	0.0	0.0	100.0
Lite-Heavy Truck 10,001-14,000 lbs	0.0	0.0	0.0	100.0
Med-Heavy Truck 14,001-33,000 lbs	0.0	0.0	0.0	100.0
Heavy-Heavy Truck 33,001-60,000 lbs	35.2	0.0	0.0	100.0
Other Bus	59.2	0.0	0.0	100.0
Urban Bus	0.0	0.0	0.0	100.0
Motorcycle	0.0	0.0	0.0	100.0
School Bus	0.0	0.0	0.0	100.0
Motor Home	1.3	0.0	0.0	100.0

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	12.7	7.0	9.5	13.3	7.4	8.9
Rural Trip Length (miles)	17.6	12.1	14.9	15.4	9.6	12.6
Trip speeds (mph)	30.0	30.0	30.0	30.0	30.0	30.0
% of Trips - Residential	32.9	18.0	49.1			
% of Trips - Commercial (by land use)						
Cruise Ship Terminal Berth 91-93				20.0	10.0	70.0
Los Angeles Maritime Institute				20.0	10.0	70.0
Conference Facilities at POC				5.0	2.5	92.5
Cruise Ship Terminal Berth 45-50				5.0	2.5	92.5
San Pedro Park at 22nd & Miner St				5.0	2.5	92.5
Port of Call Restaurant Development				8.0	4.0	88.0
Port of Call Retail Development				8.0	4.0	88.0
S.S. Lane Victory				2.0	1.0	97.0
Ralph J Scott Fireboat Museum				2.0	1.0	97.0
Mercardo Warehouse 9 & 10 Reuse				10.0	5.0	85.0
Warehouse 9 & 10 Reuse				10.0	5.0	85.0
Red Car Maintenance Facility				100.0	0.0	0.0
Millennium Tugboat Office				100.0	0.0	0.0
Waterfront Promenade Town Sq				2.0	1.0	97.0
Fisherman Park				2.0	1.0	97.0
Research & Dev at Westways				2.0	1.0	97.0
Crowley Tugboat				100.0	0.0	0.0
Outer Harbor Park				2.0	1.0	97.0

Urbemis 2007 Version 9.2.4

## Combined Summer Emissions Reports (Pounds/Day)

File Name: C:\Documents and Settings\mslavick\Application Data\Urbemis\Version9a\Projects\SPW\_Alternative\_2\_2037\_wkdy.urb924

Project Name: San Pedro Waterfront Alternative 2 2037 Weekday Diesel PM

Project Location: South Coast AQMD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

## Summary Report:

## OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (lbs/day, unmitigated)	146.04	1,285.74	941.88	14.12	120.73	89.78	1,514,252.58

## SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (lbs/day, unmitigated)	146.04	1,285.74	941.88	14.12	120.73	89.78	1,514,252.58

## Operational Unmitigated Detail Report:

## OPERATIONAL EMISSION ESTIMATES Summer Pounds Per Day, Unmitigated

<u>Source</u>	ROG	NOX	CO	SO2	PM10	PM25	CO2
Cruise Ship Terminal Berth 91-93	37.66	331.59	242.91	3.64	31.14	23.16	390,522.14
Los Angeles Maritime Institute	0.11	0.95	0.70	0.01	0.09	0.07	1,121.87
Conference Facilities at POC	2.41	21.24	15.56	0.23	1.99	1.48	25,009.34
Cruise Ship Terminal Berth 45-50	35.52	312.73	229.10	3.43	29.37	21.84	368,319.56
San Pedro Park at 22nd & Miner St	1.66	14.62	10.71	0.16	1.37	1.02	17,216.04

Port of Call Restaurant Development	35.19	309.80	226.94	3.40	29.10	21.63	364,857.55
Port of Call Retail Development	24.27	213.70	156.55	2.35	20.07	14.92	251,680.73
S.S. Lane Victory	0.11	0.97	0.71	0.01	0.09	0.07	1,140.36
Ralph J Scott Fireboat Museum	0.11	0.97	0.71	0.01	0.09	0.07	1,140.36
Mercardo Warehouse 9 & 10 Reuse	2.45	21.55	15.79	0.24	2.02	1.50	25,379.40
Warehouse 9 & 10 Reuse	0.55	4.83	3.54	0.05	0.45	0.34	5,689.47
Red Car Maintenance Facility	0.51	4.45	3.26	0.05	0.42	0.31	5,246.41
Millennium Tugboat Office	0.38	3.31	2.42	0.04	0.31	0.23	3,897.01
Waterfront Promenade Town Sq	0.93	8.23	6.03	0.09	0.77	0.57	9,693.07
Fisherman Park	0.37	3.23	2.36	0.04	0.30	0.23	3,801.20
Research & Dev at Westways	3.16	27.84	20.39	0.31	2.61	1.94	32,787.28
Crowley Tugboat	0.10	0.92	0.67	0.01	0.09	0.06	1,081.30
Outer Harbor Park	0.55	4.81	3.53	0.05	0.45	0.34	5,669.49
<b>TOTALS (lbs/day, unmitigated)</b>	<b>146.04</b>	<b>1,285.74</b>	<b>941.88</b>	<b>14.12</b>	<b>120.73</b>	<b>89.78</b>	<b>1,514,252.58</b>

Operational Settings:

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2035 Temperature (F): 80 Season: Summer

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
Cruise Ship Terminal Berth 91-93		1.46	passengers	7,868.00	11,487.28	110,622.51
Los Angeles Maritime Institute		3.30	employees	10.00	33.00	317.79
Conference Facilities at POC		2.60	attendees	300.00	780.00	7,084.35
Cruise Ship Terminal Berth 45-50		1.46	passengers	7,868.00	11,487.28	104,333.22
San Pedro Park at 22nd & Miner St		29.83	acres	18.00	536.94	4,876.76
Port of Call Restaurant Development		89.95	1000 sq ft	125.00	11,243.75	103,352.54

Port of Call Retail Development	44.32	1000 sq ft	175.00	7,756.00	71,293.15
S.S. Lane Victory	3.60	1000 sq ft	10.00	36.00	323.03
Ralph J Scott Fireboat Museum	3.60	1000 sq ft	10.00	36.00	323.03
Mercardo Warehouse 9 & 10 Reuse	22.17	1000 sq ft	35.00	775.95	7,189.18
Warehouse 9 & 10 Reuse	4.97	1000 sq ft	35.00	173.95	1,611.65
Red Car Maintenance Facility	3.02	employees	37.00	111.74	1,486.14
Millennium Tugboat Office	3.32	employees	25.00	83.00	1,103.90
Waterfront Promenade Town Sq	20.00	acres	15.30	306.00	2,745.74
Fisherman Park	20.00	acres	6.00	120.00	1,076.76
Research & Dev at Westways	79.62	acres	13.00	1,035.06	9,287.59
Crowley Tugboat	3.29	employees	7.00	23.03	306.30
Outer Harbor Park	29.83	acres	6.00	178.98	1,605.99
				46,203.96	428,939.63

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	1.5	0.0	0.0	100.0
Light Truck < 3750 lbs	2.8	0.0	0.0	100.0
Light Truck 3751-5750 lbs	0.0	0.0	0.0	100.0
Med Truck 5751-8500 lbs	0.0	0.0	0.0	100.0
Lite-Heavy Truck 8501-10,000 lbs	0.0	0.0	0.0	100.0
Lite-Heavy Truck 10,001-14,000 lbs	0.0	0.0	0.0	100.0
Med-Heavy Truck 14,001-33,000 lbs	0.0	0.0	0.0	100.0
Heavy-Heavy Truck 33,001-60,000 lbs	35.2	0.0	0.0	100.0
Other Bus	59.2	0.0	0.0	100.0
Urban Bus	0.0	0.0	0.0	100.0
Motorcycle	0.0	0.0	0.0	100.0
School Bus	0.0	0.0	0.0	100.0
Motor Home	1.3	0.0	0.0	100.0

Travel Conditions



	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	12.7	7.0	9.5	13.3	7.4	8.9
Rural Trip Length (miles)	17.6	12.1	14.9	15.4	9.6	12.6
Trip speeds (mph)	30.0	30.0	30.0	30.0	30.0	30.0
% of Trips - Residential	32.9	18.0	49.1			
% of Trips - Commercial (by land use)						
Cruise Ship Terminal Berth 91-93				20.0	10.0	70.0
Los Angeles Maritime Institute				20.0	10.0	70.0
Conference Facilities at POC				5.0	2.5	92.5
Cruise Ship Terminal Berth 45-50				5.0	2.5	92.5
San Pedro Park at 22nd & Miner St				5.0	2.5	92.5
Port of Call Restaurant Development				8.0	4.0	88.0
Port of Call Retail Development				8.0	4.0	88.0
S.S. Lane Victory				2.0	1.0	97.0
Ralph J Scott Fireboat Museum				2.0	1.0	97.0
Mercardo Warehouse 9 & 10 Reuse				10.0	5.0	85.0
Warehouse 9 & 10 Reuse				10.0	5.0	85.0
Red Car Maintenance Facility				100.0	0.0	0.0
Millennium Tugboat Office				100.0	0.0	0.0
Waterfront Promenade Town Sq				2.0	1.0	97.0
Fisherman Park				2.0	1.0	97.0
Research & Dev at Westways				2.0	1.0	97.0
Crowley Tugboat				100.0	0.0	0.0
Outer Harbor Park				2.0	1.0	97.0

Urbemis 2007 Version 9.2.4

## Combined Summer Emissions Reports (Pounds/Day)

File Name: C:\Documents and Settings\mslavick\Application Data\Urbemis\Version9a\Projects\SPW\_Alternative\_2\_2037\_wkend.urb924

Project Name: San Pedro Waterfront Alternative 2 2037 Weekend Diesel PM

Project Location: South Coast AQMD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

## Summary Report:

## OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (lbs/day, unmitigated)	144.82	1,275.14	934.12	14.01	119.76	89.06	1,501,803.10

## SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (lbs/day, unmitigated)	144.82	1,275.14	934.12	14.01	119.76	89.06	1,501,803.10

## Operational Unmitigated Detail Report:

## OPERATIONAL EMISSION ESTIMATES Summer Pounds Per Day, Unmitigated

<u>Source</u>	ROG	NOX	CO	SO2	PM10	PM25	CO2
Cruise Ship Terminal Berth 91-93	37.66	331.59	242.91	3.64	31.14	23.16	390,522.14
Los Angeles Maritime Institute	0.02	0.14	0.11	0.00	0.01	0.01	169.98
Conference Facilities at POC	1.21	10.62	7.78	0.12	1.00	0.74	12,504.67
Cruise Ship Terminal Berth 45-50	35.52	312.73	229.10	3.43	29.37	21.84	368,319.56
San Pedro Park at 22nd & Miner St	3.70	32.56	23.85	0.36	3.06	2.27	38,345.09

Port of Call Restaurant Development	36.91	324.98	238.07	3.57	30.52	22.70	382,745.52
Port of Call Retail Development	23.02	202.70	148.49	2.22	19.04	14.16	238,733.26
S.S. Lane Victory	0.16	1.45	1.06	0.02	0.14	0.10	1,710.54
Ralph J Scott Fireboat Museum	0.16	1.45	1.06	0.02	0.14	0.10	1,710.54
Mercardo Warehouse 9 & 10 Reuse	2.32	20.44	14.97	0.22	1.92	1.43	24,074.37
Warehouse 9 & 10 Reuse	0.14	1.25	0.92	0.01	0.12	0.09	1,476.74
Red Car Maintenance Facility	0.51	4.47	3.27	0.05	0.42	0.31	5,263.79
Millennium Tugboat Office	0.06	0.56	0.41	0.01	0.05	0.04	657.33
Waterfront Promenade Town Sq	0.93	8.23	6.03	0.09	0.77	0.57	9,693.07
Fisherman Park	0.37	3.23	2.36	0.04	0.30	0.23	3,801.20
Research & Dev at Westways	0.89	7.85	5.75	0.09	0.74	0.55	9,248.96
Crowley Tugboat	0.02	0.16	0.12	0.00	0.01	0.01	187.34
Outer Harbor Park	1.22	10.73	7.86	0.12	1.01	0.75	12,639.00
<b>TOTALS (lbs/day, unmitigated)</b>	<b>144.82</b>	<b>1,275.14</b>	<b>934.12</b>	<b>14.01</b>	<b>119.76</b>	<b>89.06</b>	<b>1,501,803.10</b>

Operational Settings:

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2035 Temperature (F): 80 Season: Summer

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
Cruise Ship Terminal Berth 91-93		1.46	passengers	7,868.00	11,487.28	110,622.51
Los Angeles Maritime Institute		3.30	employees	10.00	5.00	48.15
Conference Facilities at POC		2.60	attendees	300.00	390.00	3,542.17
Cruise Ship Terminal Berth 45-50		1.46	passengers	7,868.00	11,487.28	104,333.22
San Pedro Park at 22nd & Miner St		29.83	acres	18.00	1,195.92	10,861.94
Port of Call Restaurant Development		89.95	1000 sq ft	125.00	11,795.00	108,419.64

Port of Call Retail Development	44.32	1000 sq ft	175.00	7,357.00	67,625.54
S.S. Lane Victory	3.60	1000 sq ft	10.00	54.00	484.54
Ralph J Scott Fireboat Museum	3.60	1000 sq ft	10.00	54.00	484.54
Mercardo Warehouse 9 & 10 Reuse	22.17	1000 sq ft	35.00	736.05	6,819.50
Warehouse 9 & 10 Reuse	4.97	1000 sq ft	35.00	45.15	418.31
Red Car Maintenance Facility	3.02	employees	37.00	112.11	1,491.06
Millennium Tugboat Office	3.32	employees	25.00	14.00	186.20
Waterfront Promenade Town Sq	20.00	acres	15.30	306.00	2,745.74
Fisherman Park	20.00	acres	6.00	120.00	1,076.76
Research & Dev at Westways	79.62	acres	13.00	291.98	2,619.94
Crowley Tugboat	3.29	employees	7.00	3.99	53.07
Outer Harbor Park	29.83	acres	6.00	399.00	3,580.23
				45,853.76	425,413.06

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	1.5	0.0	0.0	100.0
Light Truck < 3750 lbs	2.8	0.0	0.0	100.0
Light Truck 3751-5750 lbs	0.0	0.0	0.0	100.0
Med Truck 5751-8500 lbs	0.0	0.0	0.0	100.0
Lite-Heavy Truck 8501-10,000 lbs	0.0	0.0	0.0	100.0
Lite-Heavy Truck 10,001-14,000 lbs	0.0	0.0	0.0	100.0
Med-Heavy Truck 14,001-33,000 lbs	0.0	0.0	0.0	100.0
Heavy-Heavy Truck 33,001-60,000 lbs	35.2	0.0	0.0	100.0
Other Bus	59.2	0.0	0.0	100.0
Urban Bus	0.0	0.0	0.0	100.0
Motorcycle	0.0	0.0	0.0	100.0
School Bus	0.0	0.0	0.0	100.0
Motor Home	1.3	0.0	0.0	100.0

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	12.7	7.0	9.5	13.3	7.4	8.9
Rural Trip Length (miles)	17.6	12.1	14.9	15.4	9.6	12.6
Trip speeds (mph)	30.0	30.0	30.0	30.0	30.0	30.0
% of Trips - Residential	32.9	18.0	49.1			
% of Trips - Commercial (by land use)						
Cruise Ship Terminal Berth 91-93				20.0	10.0	70.0
Los Angeles Maritime Institute				20.0	10.0	70.0
Conference Facilities at POC				5.0	2.5	92.5
Cruise Ship Terminal Berth 45-50				5.0	2.5	92.5
San Pedro Park at 22nd & Miner St				5.0	2.5	92.5
Port of Call Restaurant Development				8.0	4.0	88.0
Port of Call Retail Development				8.0	4.0	88.0
S.S. Lane Victory				2.0	1.0	97.0
Ralph J Scott Fireboat Museum				2.0	1.0	97.0
Mercardo Warehouse 9 & 10 Reuse				10.0	5.0	85.0
Warehouse 9 & 10 Reuse				10.0	5.0	85.0
Red Car Maintenance Facility				100.0	0.0	0.0
Millennium Tugboat Office				100.0	0.0	0.0
Waterfront Promenade Town Sq				2.0	1.0	97.0
Fisherman Park				2.0	1.0	97.0
Research & Dev at Westways				2.0	1.0	97.0
Crowley Tugboat				100.0	0.0	0.0
Outer Harbor Park				2.0	1.0	97.0

Urbemis 2007 Version 9.2.4

## Combined Annual Emissions Reports (Tons/Year)

File Name: C:\Documents and Settings\mslavick\Application Data\Urbemis\Version9a\Projects\SPW\_Alternative\_3\_2015\_wkdy.urb924

Project Name: San Pedro Waterfront Alternative 3 2015 Weekday Diesel PM

Project Location: South Coast AQMD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

## Summary Report:

## OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (tons/year, unmitigated)	30.95	446.30	175.28	1.51	22.80	18.67	161,660.11

## SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (tons/year, unmitigated)	30.95	446.30	175.28	1.51	22.80	18.67	161,660.11

## Operational Unmitigated Detail Report:

## OPERATIONAL EMISSION ESTIMATES Annual Tons Per Year, Unmitigated

<u>Source</u>	ROG	NOX	CO	SO2	PM10	PM25	CO2
Cruise Parking Shuttle Outer Harbor	0.09	1.25	0.49	0.00	0.06	0.05	452.60
Cruise Ship Terminal Berth 91-93	9.09	131.06	51.47	0.44	6.69	5.49	47,471.82
Los Angeles Maritime Institute	0.04	0.57	0.22	0.00	0.03	0.02	204.77
Cruise Ship Terminal Berth 45-50	4.28	61.80	24.27	0.21	3.16	2.59	22,386.44
San Pedro Park at 22nd & Miner St	0.60	8.68	3.41	0.03	0.44	0.36	3,142.36

Port of Call Restaurant Development	7.97	115.02	45.17	0.39	5.87	4.82	41,662.31
Port of Call Retail Development	5.49	79.21	31.11	0.27	4.05	3.32	28,691.64
S.S. Lane Victory	0.04	0.57	0.23	0.00	0.03	0.02	208.14
Ralph J Scott Fireboat Museum	0.04	0.57	0.23	0.00	0.03	0.02	208.14
Mercardo Warehouse 9 & 10 Reuse	0.89	12.79	5.02	0.04	0.65	0.54	4,632.38
Warehouse 9 & 10 Reuse	0.20	2.87	1.13	0.01	0.15	0.12	1,038.47
Red Car Museum	0.04	0.59	0.23	0.00	0.03	0.02	212.38
Red Car Maintenance Facility	0.18	2.64	1.04	0.01	0.14	0.11	957.60
Millennium Tugboat Office	0.14	1.96	0.77	0.01	0.10	0.08	711.30
Waterfront Promenade Town Sq	0.34	4.88	1.92	0.02	0.25	0.20	1,769.23
Fisherman Park	0.13	1.92	0.75	0.01	0.10	0.08	693.82
Research & Dev at Westways	1.15	16.52	6.49	0.06	0.84	0.69	5,984.51
Crowley Tugboat	0.04	0.54	0.21	0.00	0.03	0.02	197.37
Outer Harbor Park	0.20	2.86	1.12	0.01	0.15	0.12	1,034.83
<b>TOTALS (tons/year, unmitigated)</b>	<b>30.95</b>	<b>446.30</b>	<b>175.28</b>	<b>1.51</b>	<b>22.80</b>	<b>18.67</b>	<b>161,660.11</b>

Operational Settings:

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2015 Season: Annual

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
Cruise Parking Shuttle Outer Harbor		0.10	students	786.00	78.60	702.41
Cruise Ship Terminal Berth 91-93		1.46	students	5,240.00	7,650.40	73,673.35
Los Angeles Maritime Institute		3.30	students	10.00	33.00	317.79
Cruise Ship Terminal Berth 45-50		1.46	students	2,620.00	3,825.20	34,742.38
San Pedro Park at 22nd & Miner St		29.83	acres	18.00	536.94	4,876.76

Port of Call Restaurant Development	89.95	1000 sq ft	78.20	7,034.09	64,657.35
Port of Call Retail Development	44.32	1000 sq ft	109.30	4,844.18	44,527.67
S.S. Lane Victory	3.60	1000 sq ft	10.00	36.00	323.03
Ralph J Scott Fireboat Museum	3.60	1000 sq ft	10.00	36.00	323.03
Mercardo Warehouse 9 & 10 Reuse	22.17	1000 sq ft	35.00	775.95	7,189.18
Warehouse 9 & 10 Reuse	4.97	1000 sq ft	35.00	173.95	1,611.65
Red Car Museum	3.60	1000 sq ft	10.00	36.00	329.60
Red Car Maintenance Facility	3.02	employees	37.00	111.74	1,486.14
Millennium Tugboat Office	3.32	employees	25.00	83.00	1,103.90
Waterfront Promenade Town Sq	20.00	acres	15.30	306.00	2,745.74
Fisherman Park	20.00	acres	6.00	120.00	1,076.76
Research & Dev at Westways	79.62	acres	13.00	1,035.06	9,287.59
Crowley Tugboat	3.29	unknown	7.00	23.03	306.30
Outer Harbor Park	29.83	acres	6.00	178.98	1,605.99
				26,918.12	250,886.62

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	1.5	0.0	0.0	100.0
Light Truck < 3750 lbs	2.8	0.0	0.0	100.0
Light Truck 3751-5750 lbs	0.0	0.0	0.0	100.0
Med Truck 5751-8500 lbs	0.0	0.0	0.0	100.0
Lite-Heavy Truck 8501-10,000 lbs	0.0	0.0	0.0	100.0
Lite-Heavy Truck 10,001-14,000 lbs	0.0	0.0	0.0	100.0
Med-Heavy Truck 14,001-33,000 lbs	0.0	0.0	0.0	100.0
Heavy-Heavy Truck 33,001-60,000 lbs	35.2	0.0	0.0	100.0
Other Bus	59.2	0.0	0.0	100.0
Urban Bus	0.0	0.0	0.0	100.0
Motorcycle	0.0	0.0	0.0	100.0
School Bus	0.0	0.0	0.0	100.0



Motor Home	1.3	0.0	0.0	100.0
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Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	12.7	7.0	9.5	13.3	7.4	8.9
Rural Trip Length (miles)	17.6	12.1	14.9	15.4	9.6	12.6
Trip speeds (mph)	30.0	30.0	30.0	30.0	30.0	30.0
% of Trips - Residential	32.9	18.0	49.1			
% of Trips - Commercial (by land use)						
Cruise Parking Shuttle Outer Harbor				1.0	0.5	98.5
Cruise Ship Terminal Berth 91-93				20.0	10.0	70.0
Los Angeles Maritime Institute				20.0	10.0	70.0
Cruise Ship Terminal Berth 45-50				5.0	2.5	92.5
San Pedro Park at 22nd & Miner St				5.0	2.5	92.5
Port of Call Restaurant Development				8.0	4.0	88.0
Port of Call Retail Development				8.0	4.0	88.0
S.S. Lane Victory				2.0	1.0	97.0
Ralph J Scott Fireboat Museum				2.0	1.0	97.0
Mercardo Warehouse 9 & 10 Reuse				10.0	5.0	85.0
Warehouse 9 & 10 Reuse				10.0	5.0	85.0
Red Car Museum				7.0	3.5	89.5
Red Car Maintenance Facility				100.0	0.0	0.0
Millennium Tugboat Office				100.0	0.0	0.0
Waterfront Promenade Town Sq				2.0	1.0	97.0
Fisherman Park				2.0	1.0	97.0
Research & Dev at Westways				2.0	1.0	97.0
Crowley Tugboat				100.0	0.0	0.0
Outer Harbor Park				2.0	1.0	97.0

Urbemis 2007 Version 9.2.4

## Combined Annual Emissions Reports (Tons/Year)

File Name: C:\Documents and Settings\mslavick\Application Data\Urbemis\Version9a\Projects\SPW\_Alternative\_3\_2015\_wkend.urb924

Project Name: San Pedro Waterfront Alternative 3 2015 Weekend Diesel PM

Project Location: South Coast AQMD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

## Summary Report:

## OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (tons/year, unmitigated)	30.89	445.64	175.01	1.50	22.76	18.67	161,422.67

## SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (tons/year, unmitigated)	30.89	445.64	175.01	1.50	22.76	18.67	161,422.67

## Operational Unmitigated Detail Report:

## OPERATIONAL EMISSION ESTIMATES Annual Tons Per Year, Unmitigated

<u>Source</u>	ROG	NOX	CO	SO2	PM10	PM25	CO2
Cruise Parking Shuttle Outer Harbor	0.09	1.25	0.49	0.00	0.06	0.05	452.60
Cruise Ship Terminal Berth 91-93	9.09	131.06	51.47	0.44	6.69	5.49	47,471.82
Los Angeles Maritime Institute	0.01	0.09	0.03	0.00	0.00	0.00	31.03
Cruise Ship Terminal Berth 45-50	4.28	61.80	24.27	0.21	3.16	2.59	22,386.44
San Pedro Park at 22nd & Miner St	1.34	19.32	7.59	0.07	0.99	0.81	6,998.95

Port of Call Restaurant Development	8.36	120.61	47.36	0.41	6.16	5.05	43,686.37
Port of Call Retail Development	5.21	75.14	29.51	0.25	3.84	3.15	27,215.63
S.S. Lane Victory	0.06	0.86	0.34	0.00	0.04	0.04	312.22
Ralph J Scott Fireboat Museum	0.06	0.86	0.34	0.00	0.04	0.04	312.22
Mercardo Warehouse 9 & 10 Reuse	0.84	12.13	4.76	0.04	0.62	0.51	4,394.18
Warehouse 9 & 10 Reuse	0.05	0.74	0.29	0.00	0.04	0.03	269.54
Red Car Museum	0.06	0.88	0.35	0.00	0.04	0.04	318.57
Red Car Maintenance Facility	0.18	2.65	1.04	0.01	0.14	0.11	960.77
Millennium Tugboat Office	0.02	0.33	0.13	0.00	0.02	0.01	119.98
Waterfront Promenade Town Sq	0.34	4.88	1.92	0.02	0.25	0.20	1,769.23
Fisherman Park	0.13	1.92	0.75	0.01	0.10	0.08	693.82
Research & Dev at Westways	0.32	4.66	1.83	0.02	0.24	0.20	1,688.17
Crowley Tugboat	0.01	0.09	0.04	0.00	0.00	0.00	34.19
Outer Harbor Park	0.44	6.37	2.50	0.02	0.33	0.27	2,306.94
<b>TOTALS (tons/year, unmitigated)</b>	<b>30.89</b>	<b>445.64</b>	<b>175.01</b>	<b>1.50</b>	<b>22.76</b>	<b>18.67</b>	<b>161,422.67</b>

Operational Settings:

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2015 Season: Annual

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
Cruise Parking Shuttle Outer Harbor		0.10	students	786.00	78.60	702.41
Cruise Ship Terminal Berth 91-93		1.46	students	5,240.00	7,650.40	73,673.35
Los Angeles Maritime Institute		0.50	students	10.00	5.00	48.15
Cruise Ship Terminal Berth 45-50		1.46	students	2,620.00	3,825.20	34,742.38
San Pedro Park at 22nd & Miner St		66.44	acres	18.00	1,195.92	10,861.94

Port of Call Restaurant Development	94.32	1000 sq ft	78.20	7,375.82	67,798.57
Port of Call Retail Development	42.04	1000 sq ft	109.30	4,594.97	42,236.98
S.S. Lane Victory	5.40	1000 sq ft	10.00	54.00	484.54
Ralph J Scott Fireboat Museum	5.40	1000 sq ft	10.00	54.00	484.54
Mercardo Warehouse 9 & 10 Reuse	21.03	1000 sq ft	35.00	736.05	6,819.50
Warehouse 9 & 10 Reuse	1.29	1000 sq ft	35.00	45.15	418.31
Red Car Museum	5.40	1000 sq ft	10.00	54.00	494.40
Red Car Maintenance Facility	3.03	employees	37.00	112.11	1,491.06
Millennium Tugboat Office	0.56	employees	25.00	14.00	186.20
Waterfront Promenade Town Sq	20.00	acres	15.30	306.00	2,745.74
Fisherman Park	20.00	acres	6.00	120.00	1,076.76
Research & Dev at Westways	22.46	acres	13.00	291.98	2,619.94
Crowley Tugboat	0.57	unknown	7.00	3.99	53.07
Outer Harbor Park	66.50	acres	6.00	399.00	3,580.23
				26,916.19	250,518.07

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	1.5	0.0	0.0	100.0
Light Truck < 3750 lbs	2.8	0.0	0.0	100.0
Light Truck 3751-5750 lbs	0.0	0.0	0.0	100.0
Med Truck 5751-8500 lbs	0.0	0.0	0.0	100.0
Lite-Heavy Truck 8501-10,000 lbs	0.0	0.0	0.0	100.0
Lite-Heavy Truck 10,001-14,000 lbs	0.0	0.0	0.0	100.0
Med-Heavy Truck 14,001-33,000 lbs	0.0	0.0	0.0	100.0
Heavy-Heavy Truck 33,001-60,000 lbs	35.2	0.0	0.0	100.0
Other Bus	59.2	0.0	0.0	100.0
Urban Bus	0.0	0.0	0.0	100.0
Motorcycle	0.0	0.0	0.0	100.0
School Bus	0.0	0.0	0.0	100.0

Motor Home	1.3	0.0	0.0	100.0
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Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	12.7	7.0	9.5	13.3	7.4	8.9
Rural Trip Length (miles)	17.6	12.1	14.9	15.4	9.6	12.6
Trip speeds (mph)	30.0	30.0	30.0	30.0	30.0	30.0
% of Trips - Residential	32.9	18.0	49.1			
% of Trips - Commercial (by land use)						
Cruise Parking Shuttle Outer Harbor				1.0	0.5	98.5
Cruise Ship Terminal Berth 91-93				20.0	10.0	70.0
Los Angeles Maritime Institute				20.0	10.0	70.0
Cruise Ship Terminal Berth 45-50				5.0	2.5	92.5
San Pedro Park at 22nd & Miner St				5.0	2.5	92.5
Port of Call Restaurant Development				8.0	4.0	88.0
Port of Call Retail Development				8.0	4.0	88.0
S.S. Lane Victory				2.0	1.0	97.0
Ralph J Scott Fireboat Museum				2.0	1.0	97.0
Mercardo Warehouse 9 & 10 Reuse				10.0	5.0	85.0
Warehouse 9 & 10 Reuse				10.0	5.0	85.0
Red Car Museum				7.0	3.5	89.5
Red Car Maintenance Facility				100.0	0.0	0.0
Millennium Tugboat Office				100.0	0.0	0.0
Waterfront Promenade Town Sq				2.0	1.0	97.0
Fisherman Park				2.0	1.0	97.0
Research & Dev at Westways				2.0	1.0	97.0
Crowley Tugboat				100.0	0.0	0.0
Outer Harbor Park				2.0	1.0	97.0

Urbemis 2007 Version 9.2.4

## Combined Summer Emissions Reports (Pounds/Day)

File Name: C:\Documents and Settings\mslavick\Application Data\Urbemis\Version9a\Projects\SPW\_Alternative\_3\_2015\_wkdy.urb924

Project Name: San Pedro Waterfront Alternative 3 2015 Weekday Diesel PM

Project Location: South Coast AQMD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

## Summary Report:

## OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (lbs/day, unmitigated)	169.56	2,362.92	960.40	8.25	124.91	102.45	885,808.90

## SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (lbs/day, unmitigated)	169.56	2,362.92	960.40	8.25	124.91	102.45	885,808.90

## Operational Unmitigated Detail Report:

## OPERATIONAL EMISSION ESTIMATES Summer Pounds Per Day, Unmitigated

<u>Source</u>	ROG	NOX	CO	SO2	PM10	PM25	CO2
Cruise Parking Shuttle Outer Harbor	0.47	6.62	2.69	0.02	0.35	0.29	2,480.01
Cruise Ship Terminal Berth 91-93	49.79	693.88	282.02	2.42	36.68	30.08	260,119.56
Los Angeles Maritime Institute	0.21	2.99	1.22	0.01	0.16	0.13	1,122.03
Cruise Ship Terminal Berth 45-50	23.48	327.21	132.99	1.14	17.30	14.19	122,665.41
San Pedro Park at 22nd & Miner St	3.30	45.93	18.67	0.16	2.43	1.99	17,218.44

Port of Call Restaurant Development	43.69	608.96	247.51	2.13	32.19	26.40	228,286.62
Port of Call Retail Development	30.09	419.38	170.45	1.46	22.17	18.18	157,214.46
S.S. Lane Victory	0.22	3.04	1.24	0.01	0.16	0.13	1,140.52
Ralph J Scott Fireboat Museum	0.22	3.04	1.24	0.01	0.16	0.13	1,140.52
Mercardo Warehouse 9 & 10 Reuse	4.86	67.71	27.52	0.24	3.58	2.94	25,382.93
Warehouse 9 & 10 Reuse	1.09	15.18	6.17	0.05	0.80	0.66	5,690.26
Red Car Museum	0.22	3.10	1.26	0.01	0.16	0.13	1,163.72
Red Car Maintenance Facility	1.00	14.00	5.69	0.05	0.74	0.61	5,247.14
Millennium Tugboat Office	0.75	10.40	4.23	0.04	0.55	0.45	3,897.56
Waterfront Promenade Town Sq	1.86	25.86	10.51	0.09	1.37	1.12	9,694.42
Fisherman Park	0.73	10.14	4.12	0.04	0.54	0.44	3,801.73
Research & Dev at Westways	6.28	87.47	35.55	0.31	4.62	3.79	32,791.84
Crowley Tugboat	0.21	2.88	1.17	0.01	0.15	0.13	1,081.45
Outer Harbor Park	1.09	15.13	6.15	0.05	0.80	0.66	5,670.28
<b>TOTALS (lbs/day, unmitigated)</b>	<b>169.56</b>	<b>2,362.92</b>	<b>960.40</b>	<b>8.25</b>	<b>124.91</b>	<b>102.45</b>	<b>885,808.90</b>

Operational Settings:

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2015 Temperature (F): 80 Season: Summer

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
Cruise Parking Shuttle Outer Harbor		0.10	students	786.00	78.60	702.41
Cruise Ship Terminal Berth 91-93		1.46	students	5,240.00	7,650.40	73,673.35
Los Angeles Maritime Institute		3.30	students	10.00	33.00	317.79
Cruise Ship Terminal Berth 45-50		1.46	students	2,620.00	3,825.20	34,742.38
San Pedro Park at 22nd & Miner St		29.83	acres	18.00	536.94	4,876.76

Port of Call Restaurant Development	89.95	1000 sq ft	78.20	7,034.09	64,657.35
Port of Call Retail Development	44.32	1000 sq ft	109.30	4,844.18	44,527.67
S.S. Lane Victory	3.60	1000 sq ft	10.00	36.00	323.03
Ralph J Scott Fireboat Museum	3.60	1000 sq ft	10.00	36.00	323.03
Mercardo Warehouse 9 & 10 Reuse	22.17	1000 sq ft	35.00	775.95	7,189.18
Warehouse 9 & 10 Reuse	4.97	1000 sq ft	35.00	173.95	1,611.65
Red Car Museum	3.60	1000 sq ft	10.00	36.00	329.60
Red Car Maintenance Facility	3.02	employees	37.00	111.74	1,486.14
Millennium Tugboat Office	3.32	employees	25.00	83.00	1,103.90
Waterfront Promenade Town Sq	20.00	acres	15.30	306.00	2,745.74
Fisherman Park	20.00	acres	6.00	120.00	1,076.76
Research & Dev at Westways	79.62	acres	13.00	1,035.06	9,287.59
Crowley Tugboat	3.29	unknown	7.00	23.03	306.30
Outer Harbor Park	29.83	acres	6.00	178.98	1,605.99
				26,918.12	250,886.62

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	1.5	0.0	0.0	100.0
Light Truck < 3750 lbs	2.8	0.0	0.0	100.0
Light Truck 3751-5750 lbs	0.0	0.0	0.0	100.0
Med Truck 5751-8500 lbs	0.0	0.0	0.0	100.0
Lite-Heavy Truck 8501-10,000 lbs	0.0	0.0	0.0	100.0
Lite-Heavy Truck 10,001-14,000 lbs	0.0	0.0	0.0	100.0
Med-Heavy Truck 14,001-33,000 lbs	0.0	0.0	0.0	100.0
Heavy-Heavy Truck 33,001-60,000 lbs	35.2	0.0	0.0	100.0
Other Bus	59.2	0.0	0.0	100.0
Urban Bus	0.0	0.0	0.0	100.0
Motorcycle	0.0	0.0	0.0	100.0
School Bus	0.0	0.0	0.0	100.0



Motor Home	1.3	0.0	0.0	100.0
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Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	12.7	7.0	9.5	13.3	7.4	8.9
Rural Trip Length (miles)	17.6	12.1	14.9	15.4	9.6	12.6
Trip speeds (mph)	30.0	30.0	30.0	30.0	30.0	30.0
% of Trips - Residential	32.9	18.0	49.1			
% of Trips - Commercial (by land use)						
Cruise Parking Shuttle Outer Harbor				1.0	0.5	98.5
Cruise Ship Terminal Berth 91-93				20.0	10.0	70.0
Los Angeles Maritime Institute				20.0	10.0	70.0
Cruise Ship Terminal Berth 45-50				5.0	2.5	92.5
San Pedro Park at 22nd & Miner St				5.0	2.5	92.5
Port of Call Restaurant Development				8.0	4.0	88.0
Port of Call Retail Development				8.0	4.0	88.0
S.S. Lane Victory				2.0	1.0	97.0
Ralph J Scott Fireboat Museum				2.0	1.0	97.0
Mercardo Warehouse 9 & 10 Reuse				10.0	5.0	85.0
Warehouse 9 & 10 Reuse				10.0	5.0	85.0
Red Car Museum				7.0	3.5	89.5
Red Car Maintenance Facility				100.0	0.0	0.0
Millennium Tugboat Office				100.0	0.0	0.0
Waterfront Promenade Town Sq				2.0	1.0	97.0
Fisherman Park				2.0	1.0	97.0
Research & Dev at Westways				2.0	1.0	97.0
Crowley Tugboat				100.0	0.0	0.0
Outer Harbor Park				2.0	1.0	97.0

Urbemis 2007 Version 9.2.4

## Combined Summer Emissions Reports (Pounds/Day)

File Name: C:\Documents and Settings\mslavick\Application Data\Urbemis\Version9a\Projects\SPW\_Alternative\_3\_2015\_wkend.urb924

Project Name: San Pedro Waterfront Alternative 3 2015 Weekend Diesel PM

Project Location: South Coast AQMD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

## Summary Report:

## OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (lbs/day, unmitigated)	169.31	2,359.45	958.96	8.25	124.73	102.30	884,507.76

## SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (lbs/day, unmitigated)	169.31	2,359.45	958.96	8.25	124.73	102.30	884,507.76

## Operational Unmitigated Detail Report:

## OPERATIONAL EMISSION ESTIMATES Summer Pounds Per Day, Unmitigated

<u>Source</u>	ROG	NOX	CO	SO2	PM10	PM25	CO2
Cruise Parking Shuttle Outer Harbor	0.47	6.62	2.69	0.02	0.35	0.29	2,480.01
Cruise Ship Terminal Berth 91-93	49.79	693.88	282.02	2.42	36.68	30.08	260,119.56
Los Angeles Maritime Institute	0.03	0.45	0.18	0.00	0.02	0.02	170.00
Cruise Ship Terminal Berth 45-50	23.48	327.21	132.99	1.14	17.30	14.19	122,665.41
San Pedro Park at 22nd & Miner St	7.34	102.30	41.58	0.36	5.41	4.44	38,350.42

Port of Call Restaurant Development	45.82	638.55	259.53	2.23	33.75	27.68	239,377.38
Port of Call Retail Development	28.54	397.80	161.68	1.39	21.03	17.25	149,126.72
S.S. Lane Victory	0.33	4.56	1.85	0.02	0.24	0.20	1,710.78
Ralph J Scott Fireboat Museum	0.33	4.56	1.85	0.02	0.24	0.20	1,710.78
Mercardo Warehouse 9 & 10 Reuse	4.61	64.23	26.11	0.22	3.40	2.78	24,077.72
Warehouse 9 & 10 Reuse	0.28	3.94	1.60	0.01	0.21	0.17	1,476.95
Red Car Museum	0.33	4.66	1.89	0.02	0.25	0.20	1,745.57
Red Car Maintenance Facility	1.01	14.04	5.71	0.05	0.74	0.61	5,264.52
Millennium Tugboat Office	0.13	1.75	0.71	0.01	0.09	0.08	657.42
Waterfront Promenade Town Sq	1.86	25.86	10.51	0.09	1.37	1.12	9,694.42
Fisherman Park	0.73	10.14	4.12	0.04	0.54	0.44	3,801.73
Research & Dev at Westways	1.77	24.68	10.03	0.09	1.30	1.07	9,250.25
Crowley Tugboat	0.04	0.50	0.20	0.00	0.03	0.02	187.36
Outer Harbor Park	2.42	33.72	13.71	0.12	1.78	1.46	12,640.76
<b>TOTALS (lbs/day, unmitigated)</b>	<b>169.31</b>	<b>2,359.45</b>	<b>958.96</b>	<b>8.25</b>	<b>124.73</b>	<b>102.30</b>	<b>884,507.76</b>

Operational Settings:

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2015 Temperature (F): 80 Season: Summer

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
Cruise Parking Shuttle Outer Harbor		0.10	students	786.00	78.60	702.41
Cruise Ship Terminal Berth 91-93		1.46	students	5,240.00	7,650.40	73,673.35
Los Angeles Maritime Institute		0.50	students	10.00	5.00	48.15
Cruise Ship Terminal Berth 45-50		1.46	students	2,620.00	3,825.20	34,742.38
San Pedro Park at 22nd & Miner St		66.44	acres	18.00	1,195.92	10,861.94

Port of Call Restaurant Development	94.32	1000 sq ft	78.20	7,375.82	67,798.57
Port of Call Retail Development	42.04	1000 sq ft	109.30	4,594.97	42,236.98
S.S. Lane Victory	5.40	1000 sq ft	10.00	54.00	484.54
Ralph J Scott Fireboat Museum	5.40	1000 sq ft	10.00	54.00	484.54
Mercardo Warehouse 9 & 10 Reuse	21.03	1000 sq ft	35.00	736.05	6,819.50
Warehouse 9 & 10 Reuse	1.29	1000 sq ft	35.00	45.15	418.31
Red Car Museum	5.40	1000 sq ft	10.00	54.00	494.40
Red Car Maintenance Facility	3.03	employees	37.00	112.11	1,491.06
Millennium Tugboat Office	0.56	employees	25.00	14.00	186.20
Waterfront Promenade Town Sq	20.00	acres	15.30	306.00	2,745.74
Fisherman Park	20.00	acres	6.00	120.00	1,076.76
Research & Dev at Westways	22.46	acres	13.00	291.98	2,619.94
Crowley Tugboat	0.57	unknown	7.00	3.99	53.07
Outer Harbor Park	66.50	acres	6.00	399.00	3,580.23
				26,916.19	250,518.07

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	1.5	0.0	0.0	100.0
Light Truck < 3750 lbs	2.8	0.0	0.0	100.0
Light Truck 3751-5750 lbs	0.0	0.0	0.0	100.0
Med Truck 5751-8500 lbs	0.0	0.0	0.0	100.0
Lite-Heavy Truck 8501-10,000 lbs	0.0	0.0	0.0	100.0
Lite-Heavy Truck 10,001-14,000 lbs	0.0	0.0	0.0	100.0
Med-Heavy Truck 14,001-33,000 lbs	0.0	0.0	0.0	100.0
Heavy-Heavy Truck 33,001-60,000 lbs	35.2	0.0	0.0	100.0
Other Bus	59.2	0.0	0.0	100.0
Urban Bus	0.0	0.0	0.0	100.0
Motorcycle	0.0	0.0	0.0	100.0
School Bus	0.0	0.0	0.0	100.0

Motor Home	1.3	0.0	0.0	100.0
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Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	12.7	7.0	9.5	13.3	7.4	8.9
Rural Trip Length (miles)	17.6	12.1	14.9	15.4	9.6	12.6
Trip speeds (mph)	30.0	30.0	30.0	30.0	30.0	30.0
% of Trips - Residential	32.9	18.0	49.1			
% of Trips - Commercial (by land use)						
Cruise Parking Shuttle Outer Harbor				1.0	0.5	98.5
Cruise Ship Terminal Berth 91-93				20.0	10.0	70.0
Los Angeles Maritime Institute				20.0	10.0	70.0
Cruise Ship Terminal Berth 45-50				5.0	2.5	92.5
San Pedro Park at 22nd & Miner St				5.0	2.5	92.5
Port of Call Restaurant Development				8.0	4.0	88.0
Port of Call Retail Development				8.0	4.0	88.0
S.S. Lane Victory				2.0	1.0	97.0
Ralph J Scott Fireboat Museum				2.0	1.0	97.0
Mercardo Warehouse 9 & 10 Reuse				10.0	5.0	85.0
Warehouse 9 & 10 Reuse				10.0	5.0	85.0
Red Car Museum				7.0	3.5	89.5
Red Car Maintenance Facility				100.0	0.0	0.0
Millennium Tugboat Office				100.0	0.0	0.0
Waterfront Promenade Town Sq				2.0	1.0	97.0
Fisherman Park				2.0	1.0	97.0
Research & Dev at Westways				2.0	1.0	97.0
Crowley Tugboat				100.0	0.0	0.0
Outer Harbor Park				2.0	1.0	97.0

Urbemis 2007 Version 9.2.4

## Combined Annual Emissions Reports (Tons/Year)

File Name: C:\Documents and Settings\mslavick\Application Data\Urbemis\Version9a\Projects\SPW\_Alternative\_3\_2022\_wkdy.urb924

Project Name: San Pedro Waterfront Alternative 3 2022 Weekday Diesel PM

Project Location: South Coast AQMD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

## Summary Report:

## OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (tons/year, unmitigated)	23.57	284.51	139.83	1.61	17.99	14.17	171,816.88

## SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (tons/year, unmitigated)	23.57	284.51	139.83	1.61	17.99	14.17	171,816.88

## Operational Unmitigated Detail Report:

## OPERATIONAL EMISSION ESTIMATES Annual Tons Per Year, Unmitigated

<u>Source</u>	ROG	NOX	CO	SO2	PM10	PM25	CO2
Cruise Parking Shuttle Outer Harbor	0.07	0.86	0.42	0.00	0.05	0.04	518.23
Cruise Ship Terminal Berth 91-93	7.45	89.96	44.21	0.51	5.69	4.47	54,328.20
Los Angeles Maritime Institute	0.03	0.34	0.17	0.00	0.02	0.02	204.76
Cruise Ship Terminal Berth 45-50	3.51	42.43	20.85	0.24	2.68	2.11	25,624.00
San Pedro Park at 22nd & Miner St	0.43	5.20	2.56	0.03	0.33	0.26	3,142.27

Port of Call Restaurant Development	5.71	68.99	33.91	0.39	4.36	3.43	41,661.03
Port of Call Retail Development	3.94	47.51	23.35	0.27	3.01	2.36	28,690.76
S.S. Lane Victory	0.03	0.34	0.17	0.00	0.02	0.02	208.14
Ralph J Scott Fireboat Museum	0.03	0.34	0.17	0.00	0.02	0.02	208.14
Mercardo Warehouse 9 & 10 Reuse	0.64	7.67	3.77	0.04	0.49	0.38	4,632.24
Warehouse 9 & 10 Reuse	0.14	1.72	0.85	0.01	0.11	0.09	1,038.44
Red Car Museum	0.03	0.35	0.17	0.00	0.02	0.02	212.37
Red Car Maintenance Facility	0.13	1.59	0.78	0.01	0.10	0.08	957.57
Millennium Tugboat Office	0.10	1.18	0.58	0.01	0.07	0.06	711.28
Waterfront Promenade Town Sq	0.24	2.93	1.44	0.02	0.19	0.15	1,769.18
Fisherman Park	0.10	1.15	0.56	0.01	0.07	0.06	693.79
Research & Dev at Westways	0.82	9.91	4.87	0.06	0.63	0.49	5,984.33
Crowley Tugboat	0.03	0.33	0.16	0.00	0.02	0.02	197.36
Outer Harbor Park	0.14	1.71	0.84	0.01	0.11	0.09	1,034.79
<b>TOTALS (tons/year, unmitigated)</b>	<b>23.57</b>	<b>284.51</b>	<b>139.83</b>	<b>1.61</b>	<b>17.99</b>	<b>14.17</b>	<b>171,816.88</b>

Operational Settings:

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2020 Season: Annual

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
Cruise Parking Shuttle Outer Harbor		0.10	students	900.00	90.00	804.28
Cruise Ship Terminal Berth 91-93		1.46	students	5,997.00	8,755.62	84,316.62
Los Angeles Maritime Institute		3.30	students	10.00	33.00	317.79
Cruise Ship Terminal Berth 45-50		1.46	students	2,999.00	4,378.54	39,768.09
San Pedro Park at 22nd & Miner St		29.83	acres	18.00	536.94	4,876.76

Port of Call Restaurant Development	89.95	1000 sq ft	78.20	7,034.09	64,657.35
Port of Call Retail Development	44.32	1000 sq ft	109.30	4,844.18	44,527.67
S.S. Lane Victory	3.60	1000 sq ft	10.00	36.00	323.03
Ralph J Scott Fireboat Museum	3.60	1000 sq ft	10.00	36.00	323.03
Mercardo Warehouse 9 & 10 Reuse	22.17	1000 sq ft	35.00	775.95	7,189.18
Warehouse 9 & 10 Reuse	4.97	1000 sq ft	35.00	173.95	1,611.65
Red Car Museum	3.60	1000 sq ft	10.00	36.00	329.60
Red Car Maintenance Facility	3.02	employees	37.00	111.74	1,486.14
Millennium Tugboat Office	3.32	employees	25.00	83.00	1,103.90
Waterfront Promenade Town Sq	20.00	acres	15.30	306.00	2,745.74
Fisherman Park	20.00	acres	6.00	120.00	1,076.76
Research & Dev at Westways	79.62	acres	13.00	1,035.06	9,287.59
Crowley Tugboat	3.29	unknown	7.00	23.03	306.30
Outer Harbor Park	29.83	acres	6.00	178.98	1,605.99
				28,588.08	266,657.47

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	1.5	0.0	0.0	100.0
Light Truck < 3750 lbs	2.8	0.0	0.0	100.0
Light Truck 3751-5750 lbs	0.0	0.0	0.0	100.0
Med Truck 5751-8500 lbs	0.0	0.0	0.0	100.0
Lite-Heavy Truck 8501-10,000 lbs	0.0	0.0	0.0	100.0
Lite-Heavy Truck 10,001-14,000 lbs	0.0	0.0	0.0	100.0
Med-Heavy Truck 14,001-33,000 lbs	0.0	0.0	0.0	100.0
Heavy-Heavy Truck 33,001-60,000 lbs	35.2	0.0	0.0	100.0
Other Bus	59.2	0.0	0.0	100.0
Urban Bus	0.0	0.0	0.0	100.0
Motorcycle	0.0	0.0	0.0	100.0
School Bus	0.0	0.0	0.0	100.0



Motor Home	1.3	0.0	0.0	100.0
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Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	12.7	7.0	9.5	13.3	7.4	8.9
Rural Trip Length (miles)	17.6	12.1	14.9	15.4	9.6	12.6
Trip speeds (mph)	30.0	30.0	30.0	30.0	30.0	30.0
% of Trips - Residential	32.9	18.0	49.1			
% of Trips - Commercial (by land use)						
Cruise Parking Shuttle Outer Harbor				1.0	0.5	98.5
Cruise Ship Terminal Berth 91-93				20.0	10.0	70.0
Los Angeles Maritime Institute				20.0	10.0	70.0
Cruise Ship Terminal Berth 45-50				5.0	2.5	92.5
San Pedro Park at 22nd & Miner St				5.0	2.5	92.5
Port of Call Restaurant Development				8.0	4.0	88.0
Port of Call Retail Development				8.0	4.0	88.0
S.S. Lane Victory				2.0	1.0	97.0
Ralph J Scott Fireboat Museum				2.0	1.0	97.0
Mercardo Warehouse 9 & 10 Reuse				10.0	5.0	85.0
Warehouse 9 & 10 Reuse				10.0	5.0	85.0
Red Car Museum				7.0	3.5	89.5
Red Car Maintenance Facility				100.0	0.0	0.0
Millennium Tugboat Office				100.0	0.0	0.0
Waterfront Promenade Town Sq				2.0	1.0	97.0
Fisherman Park				2.0	1.0	97.0
Research & Dev at Westways				2.0	1.0	97.0
Crowley Tugboat				100.0	0.0	0.0
Outer Harbor Park				2.0	1.0	97.0

Urbemis 2007 Version 9.2.4

## Combined Annual Emissions Reports (Tons/Year)

File Name: C:\Documents and Settings\mslavick\Application Data\Urbemis\Version9a\Projects\SPW\_Alternative\_3\_2022\_wkend.urb924

Project Name: San Pedro Waterfront Alternative 3 2022 Weekend Diesel PM

Project Location: South Coast AQMD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

## Summary Report:

## OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (tons/year, unmitigated)	23.52	284.18	139.65	1.60	17.95	14.14	171,597.98

## SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (tons/year, unmitigated)	23.52	284.18	139.65	1.60	17.95	14.14	171,597.98

## Operational Unmitigated Detail Report:

## OPERATIONAL EMISSION ESTIMATES Annual Tons Per Year, Unmitigated

<u>Source</u>	ROG	NOX	CO	SO2	PM10	PM25	CO2
Cruise Parking Shuttle Outer Harbor	0.07	0.86	0.42	0.00	0.05	0.04	518.23
Cruise Ship Terminal Berth 91-93	7.45	89.96	44.21	0.51	5.69	4.47	54,328.20
Los Angeles Maritime Institute	0.00	0.05	0.03	0.00	0.00	0.00	31.02
Cruise Ship Terminal Berth 45-50	3.51	42.43	20.85	0.24	2.68	2.11	25,624.00
San Pedro Park at 22nd & Miner St	0.96	11.59	5.70	0.07	0.73	0.58	6,998.74

Port of Call Restaurant Development	6.00	72.37	35.57	0.41	4.58	3.60	43,703.56
Port of Call Retail Development	3.73	45.07	22.15	0.25	2.85	2.24	27,214.79
S.S. Lane Victory	0.04	0.52	0.25	0.00	0.03	0.03	312.21
Ralph J Scott Fireboat Museum	0.04	0.52	0.25	0.00	0.03	0.03	312.21
Mercardo Warehouse 9 & 10 Reuse	0.60	7.28	3.58	0.04	0.46	0.36	4,394.05
Warehouse 9 & 10 Reuse	0.04	0.45	0.22	0.00	0.03	0.02	269.54
Red Car Museum	0.04	0.53	0.26	0.00	0.03	0.03	318.56
Red Car Maintenance Facility	0.13	1.59	0.78	0.01	0.10	0.08	960.74
Millennium Tugboat Office	0.02	0.20	0.10	0.00	0.01	0.01	119.98
Waterfront Promenade Town Sq	0.24	2.93	1.44	0.02	0.19	0.15	1,769.18
Fisherman Park	0.10	1.15	0.56	0.01	0.07	0.06	693.79
Research & Dev at Westways	0.23	2.80	1.37	0.02	0.18	0.14	1,688.12
Crowley Tugboat	0.00	0.06	0.03	0.00	0.00	0.00	34.19
Outer Harbor Park	0.32	3.82	1.88	0.02	0.24	0.19	2,306.87
<b>TOTALS (tons/year, unmitigated)</b>	<b>23.52</b>	<b>284.18</b>	<b>139.65</b>	<b>1.60</b>	<b>17.95</b>	<b>14.14</b>	<b>171,597.98</b>

Operational Settings:

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2020 Season: Annual

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
Cruise Parking Shuttle Outer Harbor		0.10	students	900.00	90.00	804.28
Cruise Ship Terminal Berth 91-93		1.46	students	5,997.00	8,755.62	84,316.62
Los Angeles Maritime Institute		0.50	students	10.00	5.00	48.15
Cruise Ship Terminal Berth 45-50		1.46	students	2,999.00	4,378.54	39,768.09
San Pedro Park at 22nd & Miner St		66.44	acres	18.00	1,195.92	10,861.94

Port of Call Restaurant Development	94.36	1000 sq ft	78.20	7,378.95	67,827.32
Port of Call Retail Development	42.04	1000 sq ft	109.30	4,594.97	42,236.98
S.S. Lane Victory	5.40	1000 sq ft	10.00	54.00	484.54
Ralph J Scott Fireboat Museum	5.40	1000 sq ft	10.00	54.00	484.54
Mercardo Warehouse 9 & 10 Reuse	21.03	1000 sq ft	35.00	736.05	6,819.50
Warehouse 9 & 10 Reuse	1.29	1000 sq ft	35.00	45.15	418.31
Red Car Museum	5.40	1000 sq ft	10.00	54.00	494.40
Red Car Maintenance Facility	3.03	employees	37.00	112.11	1,491.06
Millennium Tugboat Office	0.56	employees	25.00	14.00	186.20
Waterfront Promenade Town Sq	20.00	acres	15.30	306.00	2,745.74
Fisherman Park	20.00	acres	6.00	120.00	1,076.76
Research & Dev at Westways	22.46	acres	13.00	291.98	2,619.94
Crowley Tugboat	0.57	unknown	7.00	3.99	53.07
Outer Harbor Park	66.50	acres	6.00	399.00	3,580.23
				28,589.28	266,317.67

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	1.5	0.0	0.0	100.0
Light Truck < 3750 lbs	2.8	0.0	0.0	100.0
Light Truck 3751-5750 lbs	0.0	0.0	0.0	100.0
Med Truck 5751-8500 lbs	0.0	0.0	0.0	100.0
Lite-Heavy Truck 8501-10,000 lbs	0.0	0.0	0.0	100.0
Lite-Heavy Truck 10,001-14,000 lbs	0.0	0.0	0.0	100.0
Med-Heavy Truck 14,001-33,000 lbs	0.0	0.0	0.0	100.0
Heavy-Heavy Truck 33,001-60,000 lbs	35.2	0.0	0.0	100.0
Other Bus	59.2	0.0	0.0	100.0
Urban Bus	0.0	0.0	0.0	100.0
Motorcycle	0.0	0.0	0.0	100.0
School Bus	0.0	0.0	0.0	100.0

Motor Home	1.3	0.0	0.0	100.0
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Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	12.7	7.0	9.5	13.3	7.4	8.9
Rural Trip Length (miles)	17.6	12.1	14.9	15.4	9.6	12.6
Trip speeds (mph)	30.0	30.0	30.0	30.0	30.0	30.0
% of Trips - Residential	32.9	18.0	49.1			
% of Trips - Commercial (by land use)						
Cruise Parking Shuttle Outer Harbor				1.0	0.5	98.5
Cruise Ship Terminal Berth 91-93				20.0	10.0	70.0
Los Angeles Maritime Institute				20.0	10.0	70.0
Cruise Ship Terminal Berth 45-50				5.0	2.5	92.5
San Pedro Park at 22nd & Miner St				5.0	2.5	92.5
Port of Call Restaurant Development				8.0	4.0	88.0
Port of Call Retail Development				8.0	4.0	88.0
S.S. Lane Victory				2.0	1.0	97.0
Ralph J Scott Fireboat Museum				2.0	1.0	97.0
Mercardo Warehouse 9 & 10 Reuse				10.0	5.0	85.0
Warehouse 9 & 10 Reuse				10.0	5.0	85.0
Red Car Museum				7.0	3.5	89.5
Red Car Maintenance Facility				100.0	0.0	0.0
Millennium Tugboat Office				100.0	0.0	0.0
Waterfront Promenade Town Sq				2.0	1.0	97.0
Fisherman Park				2.0	1.0	97.0
Research & Dev at Westways				2.0	1.0	97.0
Crowley Tugboat				100.0	0.0	0.0
Outer Harbor Park				2.0	1.0	97.0

Urbemis 2007 Version 9.2.4

## Combined Annual Emissions Reports (Tons/Year)

File Name: C:\Documents and Settings\mslavick\Application Data\Urbemis\Version9a\Projects\SPW\_Alternative\_3\_2022\_wkend.urb924

Project Name: San Pedro Waterfront Alternative 3 2022 Weekend Diesel PM

Project Location: South Coast AQMD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

## Summary Report:

## OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (tons/year, unmitigated)	23.52	284.18	139.65	1.60	17.95	14.14	171,597.98

## SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (tons/year, unmitigated)	23.52	284.18	139.65	1.60	17.95	14.14	171,597.98

## Operational Unmitigated Detail Report:

## OPERATIONAL EMISSION ESTIMATES Annual Tons Per Year, Unmitigated

<u>Source</u>	ROG	NOX	CO	SO2	PM10	PM25	CO2
Cruise Parking Shuttle Outer Harbor	0.07	0.86	0.42	0.00	0.05	0.04	518.23
Cruise Ship Terminal Berth 91-93	7.45	89.96	44.21	0.51	5.69	4.47	54,328.20
Los Angeles Maritime Institute	0.00	0.05	0.03	0.00	0.00	0.00	31.02
Cruise Ship Terminal Berth 45-50	3.51	42.43	20.85	0.24	2.68	2.11	25,624.00
San Pedro Park at 22nd & Miner St	0.96	11.59	5.70	0.07	0.73	0.58	6,998.74

Port of Call Restaurant Development	6.00	72.37	35.57	0.41	4.58	3.60	43,703.56
Port of Call Retail Development	3.73	45.07	22.15	0.25	2.85	2.24	27,214.79
S.S. Lane Victory	0.04	0.52	0.25	0.00	0.03	0.03	312.21
Ralph J Scott Fireboat Museum	0.04	0.52	0.25	0.00	0.03	0.03	312.21
Mercardo Warehouse 9 & 10 Reuse	0.60	7.28	3.58	0.04	0.46	0.36	4,394.05
Warehouse 9 & 10 Reuse	0.04	0.45	0.22	0.00	0.03	0.02	269.54
Red Car Museum	0.04	0.53	0.26	0.00	0.03	0.03	318.56
Red Car Maintenance Facility	0.13	1.59	0.78	0.01	0.10	0.08	960.74
Millennium Tugboat Office	0.02	0.20	0.10	0.00	0.01	0.01	119.98
Waterfront Promenade Town Sq	0.24	2.93	1.44	0.02	0.19	0.15	1,769.18
Fisherman Park	0.10	1.15	0.56	0.01	0.07	0.06	693.79
Research & Dev at Westways	0.23	2.80	1.37	0.02	0.18	0.14	1,688.12
Crowley Tugboat	0.00	0.06	0.03	0.00	0.00	0.00	34.19
Outer Harbor Park	0.32	3.82	1.88	0.02	0.24	0.19	2,306.87
<b>TOTALS (tons/year, unmitigated)</b>	<b>23.52</b>	<b>284.18</b>	<b>139.65</b>	<b>1.60</b>	<b>17.95</b>	<b>14.14</b>	<b>171,597.98</b>

Operational Settings:

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2020 Season: Annual

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
Cruise Parking Shuttle Outer Harbor		0.10	students	900.00	90.00	804.28
Cruise Ship Terminal Berth 91-93		1.46	students	5,997.00	8,755.62	84,316.62
Los Angeles Maritime Institute		0.50	students	10.00	5.00	48.15
Cruise Ship Terminal Berth 45-50		1.46	students	2,999.00	4,378.54	39,768.09
San Pedro Park at 22nd & Miner St		66.44	acres	18.00	1,195.92	10,861.94

Port of Call Restaurant Development	94.36	1000 sq ft	78.20	7,378.95	67,827.32
Port of Call Retail Development	42.04	1000 sq ft	109.30	4,594.97	42,236.98
S.S. Lane Victory	5.40	1000 sq ft	10.00	54.00	484.54
Ralph J Scott Fireboat Museum	5.40	1000 sq ft	10.00	54.00	484.54
Mercardo Warehouse 9 & 10 Reuse	21.03	1000 sq ft	35.00	736.05	6,819.50
Warehouse 9 & 10 Reuse	1.29	1000 sq ft	35.00	45.15	418.31
Red Car Museum	5.40	1000 sq ft	10.00	54.00	494.40
Red Car Maintenance Facility	3.03	employees	37.00	112.11	1,491.06
Millennium Tugboat Office	0.56	employees	25.00	14.00	186.20
Waterfront Promenade Town Sq	20.00	acres	15.30	306.00	2,745.74
Fisherman Park	20.00	acres	6.00	120.00	1,076.76
Research & Dev at Westways	22.46	acres	13.00	291.98	2,619.94
Crowley Tugboat	0.57	unknown	7.00	3.99	53.07
Outer Harbor Park	66.50	acres	6.00	399.00	3,580.23
				28,589.28	266,317.67

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	1.5	0.0	0.0	100.0
Light Truck < 3750 lbs	2.8	0.0	0.0	100.0
Light Truck 3751-5750 lbs	0.0	0.0	0.0	100.0
Med Truck 5751-8500 lbs	0.0	0.0	0.0	100.0
Lite-Heavy Truck 8501-10,000 lbs	0.0	0.0	0.0	100.0
Lite-Heavy Truck 10,001-14,000 lbs	0.0	0.0	0.0	100.0
Med-Heavy Truck 14,001-33,000 lbs	0.0	0.0	0.0	100.0
Heavy-Heavy Truck 33,001-60,000 lbs	35.2	0.0	0.0	100.0
Other Bus	59.2	0.0	0.0	100.0
Urban Bus	0.0	0.0	0.0	100.0
Motorcycle	0.0	0.0	0.0	100.0
School Bus	0.0	0.0	0.0	100.0



Motor Home	1.3	0.0	0.0	100.0
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Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	12.7	7.0	9.5	13.3	7.4	8.9
Rural Trip Length (miles)	17.6	12.1	14.9	15.4	9.6	12.6
Trip speeds (mph)	30.0	30.0	30.0	30.0	30.0	30.0
% of Trips - Residential	32.9	18.0	49.1			
% of Trips - Commercial (by land use)						
Cruise Parking Shuttle Outer Harbor				1.0	0.5	98.5
Cruise Ship Terminal Berth 91-93				20.0	10.0	70.0
Los Angeles Maritime Institute				20.0	10.0	70.0
Cruise Ship Terminal Berth 45-50				5.0	2.5	92.5
San Pedro Park at 22nd & Miner St				5.0	2.5	92.5
Port of Call Restaurant Development				8.0	4.0	88.0
Port of Call Retail Development				8.0	4.0	88.0
S.S. Lane Victory				2.0	1.0	97.0
Ralph J Scott Fireboat Museum				2.0	1.0	97.0
Mercardo Warehouse 9 & 10 Reuse				10.0	5.0	85.0
Warehouse 9 & 10 Reuse				10.0	5.0	85.0
Red Car Museum				7.0	3.5	89.5
Red Car Maintenance Facility				100.0	0.0	0.0
Millennium Tugboat Office				100.0	0.0	0.0
Waterfront Promenade Town Sq				2.0	1.0	97.0
Fisherman Park				2.0	1.0	97.0
Research & Dev at Westways				2.0	1.0	97.0
Crowley Tugboat				100.0	0.0	0.0
Outer Harbor Park				2.0	1.0	97.0

Urbemis 2007 Version 9.2.4

## Combined Summer Emissions Reports (Pounds/Day)

File Name: C:\Documents and Settings\mslavick\Application Data\Urbemis\Version9a\Projects\SPW\_Alternative\_3\_2022\_wkdy.urb924

Project Name: San Pedro Waterfront Alternative 3 2022 Weekday Diesel PM

Project Location: South Coast AQMD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

## Summary Report:

## OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (lbs/day, unmitigated)	129.15	1,506.25	766.19	8.78	98.62	77.49	941,462.39

## SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (lbs/day, unmitigated)	129.15	1,506.25	766.19	8.78	98.62	77.49	941,462.39

## Operational Unmitigated Detail Report:

## OPERATIONAL EMISSION ESTIMATES Summer Pounds Per Day, Unmitigated

<u>Source</u>	ROG	NOX	CO	SO2	PM10	PM25	CO2
Cruise Parking Shuttle Outer Harbor	0.39	4.54	2.31	0.03	0.30	0.23	2,839.61
Cruise Ship Terminal Berth 91-93	40.84	476.28	242.27	2.77	31.18	24.50	297,688.77
Los Angeles Maritime Institute	0.15	1.80	0.91	0.01	0.12	0.09	1,121.99
Cruise Ship Terminal Berth 45-50	19.26	224.64	114.27	1.31	14.71	11.56	140,405.45
San Pedro Park at 22nd & Miner St	2.36	27.55	14.01	0.16	1.80	1.42	17,217.91

Port of Call Restaurant Development	31.31	365.23	185.78	2.13	23.91	18.79	228,279.62
Port of Call Retail Development	21.57	251.52	127.94	1.46	16.47	12.94	157,209.64
S.S. Lane Victory	0.16	1.82	0.93	0.01	0.12	0.09	1,140.48
Ralph J Scott Fireboat Museum	0.16	1.82	0.93	0.01	0.12	0.09	1,140.48
Mercardo Warehouse 9 & 10 Reuse	3.48	40.61	20.66	0.24	2.66	2.09	25,382.15
Warehouse 9 & 10 Reuse	0.78	9.10	4.63	0.05	0.60	0.47	5,690.09
Red Car Museum	0.16	1.86	0.95	0.01	0.12	0.10	1,163.68
Red Car Maintenance Facility	0.72	8.39	4.27	0.05	0.55	0.43	5,246.98
Millennium Tugboat Office	0.53	6.24	3.17	0.04	0.41	0.32	3,897.44
Waterfront Promenade Town Sq	1.33	15.51	7.89	0.09	1.02	0.80	9,694.12
Fisherman Park	0.52	6.08	3.09	0.04	0.40	0.31	3,801.62
Research & Dev at Westways	4.50	52.46	26.69	0.31	3.43	2.70	32,790.83
Crowley Tugboat	0.15	1.73	0.88	0.01	0.11	0.09	1,081.42
Outer Harbor Park	0.78	9.07	4.61	0.05	0.59	0.47	5,670.11
<b>TOTALS (lbs/day, unmitigated)</b>	<b>129.15</b>	<b>1,506.25</b>	<b>766.19</b>	<b>8.78</b>	<b>98.62</b>	<b>77.49</b>	<b>941,462.39</b>

Operational Settings:

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2020 Temperature (F): 80 Season: Summer

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
Cruise Parking Shuttle Outer Harbor		0.10	students	900.00	90.00	804.28
Cruise Ship Terminal Berth 91-93		1.46	students	5,997.00	8,755.62	84,316.62
Los Angeles Maritime Institute		3.30	students	10.00	33.00	317.79
Cruise Ship Terminal Berth 45-50		1.46	students	2,999.00	4,378.54	39,768.09
San Pedro Park at 22nd & Miner St		29.83	acres	18.00	536.94	4,876.76

Port of Call Restaurant Development	89.95	1000 sq ft	78.20	7,034.09	64,657.35
Port of Call Retail Development	44.32	1000 sq ft	109.30	4,844.18	44,527.67
S.S. Lane Victory	3.60	1000 sq ft	10.00	36.00	323.03
Ralph J Scott Fireboat Museum	3.60	1000 sq ft	10.00	36.00	323.03
Mercardo Warehouse 9 & 10 Reuse	22.17	1000 sq ft	35.00	775.95	7,189.18
Warehouse 9 & 10 Reuse	4.97	1000 sq ft	35.00	173.95	1,611.65
Red Car Museum	3.60	1000 sq ft	10.00	36.00	329.60
Red Car Maintenance Facility	3.02	employees	37.00	111.74	1,486.14
Millennium Tugboat Office	3.32	employees	25.00	83.00	1,103.90
Waterfront Promenade Town Sq	20.00	acres	15.30	306.00	2,745.74
Fisherman Park	20.00	acres	6.00	120.00	1,076.76
Research & Dev at Westways	79.62	acres	13.00	1,035.06	9,287.59
Crowley Tugboat	3.29	unknown	7.00	23.03	306.30
Outer Harbor Park	29.83	acres	6.00	178.98	1,605.99
				28,588.08	266,657.47

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	1.5	0.0	0.0	100.0
Light Truck < 3750 lbs	2.8	0.0	0.0	100.0
Light Truck 3751-5750 lbs	0.0	0.0	0.0	100.0
Med Truck 5751-8500 lbs	0.0	0.0	0.0	100.0
Lite-Heavy Truck 8501-10,000 lbs	0.0	0.0	0.0	100.0
Lite-Heavy Truck 10,001-14,000 lbs	0.0	0.0	0.0	100.0
Med-Heavy Truck 14,001-33,000 lbs	0.0	0.0	0.0	100.0
Heavy-Heavy Truck 33,001-60,000 lbs	35.2	0.0	0.0	100.0
Other Bus	59.2	0.0	0.0	100.0
Urban Bus	0.0	0.0	0.0	100.0
Motorcycle	0.0	0.0	0.0	100.0
School Bus	0.0	0.0	0.0	100.0

Motor Home	1.3	0.0	0.0	100.0
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Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	12.7	7.0	9.5	13.3	7.4	8.9
Rural Trip Length (miles)	17.6	12.1	14.9	15.4	9.6	12.6
Trip speeds (mph)	30.0	30.0	30.0	30.0	30.0	30.0
% of Trips - Residential	32.9	18.0	49.1			
% of Trips - Commercial (by land use)						
Cruise Parking Shuttle Outer Harbor				1.0	0.5	98.5
Cruise Ship Terminal Berth 91-93				20.0	10.0	70.0
Los Angeles Maritime Institute				20.0	10.0	70.0
Cruise Ship Terminal Berth 45-50				5.0	2.5	92.5
San Pedro Park at 22nd & Miner St				5.0	2.5	92.5
Port of Call Restaurant Development				8.0	4.0	88.0
Port of Call Retail Development				8.0	4.0	88.0
S.S. Lane Victory				2.0	1.0	97.0
Ralph J Scott Fireboat Museum				2.0	1.0	97.0
Mercardo Warehouse 9 & 10 Reuse				10.0	5.0	85.0
Warehouse 9 & 10 Reuse				10.0	5.0	85.0
Red Car Museum				7.0	3.5	89.5
Red Car Maintenance Facility				100.0	0.0	0.0
Millennium Tugboat Office				100.0	0.0	0.0
Waterfront Promenade Town Sq				2.0	1.0	97.0
Fisherman Park				2.0	1.0	97.0
Research & Dev at Westways				2.0	1.0	97.0
Crowley Tugboat				100.0	0.0	0.0
Outer Harbor Park				2.0	1.0	97.0

Urbemis 2007 Version 9.2.4

## Combined Annual Emissions Reports (Tons/Year)

File Name: C:\Documents and Settings\mslavick\Application Data\Urbemis\Version9a\Projects\SPW\_Alternative\_3\_2037\_wkdy.urb924

Project Name: San Pedro Waterfront Alternative 3 2037 Weekday Diesel PM

Project Location: South Coast AQMD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

## Summary Report:

## OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (tons/year, unmitigated)	19.00	173.03	122.46	1.84	15.72	11.65	196,895.39

## SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (tons/year, unmitigated)	19.00	173.03	122.46	1.84	15.72	11.65	196,895.39

## Operational Unmitigated Detail Report:

## OPERATIONAL EMISSION ESTIMATES Annual Tons Per Year, Unmitigated

<u>Source</u>	ROG	NOX	CO	SO2	PM10	PM25	CO2
Cruise Parking Shuttle Outer Harbor	0.07	0.60	0.42	0.01	0.05	0.04	679.38
Cruise Ship Terminal Berth 91-93	6.87	62.63	44.33	0.66	5.68	4.23	71,270.29
Los Angeles Maritime Institute	0.02	0.18	0.13	0.00	0.02	0.01	204.74
Cruise Ship Terminal Berth 45-50	3.24	29.54	20.91	0.31	2.68	1.99	33,609.16
San Pedro Park at 22nd & Miner St	0.30	2.76	1.95	0.03	0.25	0.19	3,141.93

Port of Call Restaurant Development	4.02	36.61	25.91	0.39	3.32	2.47	41,656.51
Port of Call Retail Development	2.77	25.21	17.84	0.27	2.29	1.70	28,687.65
S.S. Lane Victory	0.02	0.18	0.13	0.00	0.02	0.01	208.12
Ralph J Scott Fireboat Museum	0.02	0.18	0.13	0.00	0.02	0.01	208.12
Mercardo Warehouse 9 & 10 Reuse	0.45	4.07	2.88	0.04	0.37	0.27	4,631.74
Warehouse 9 & 10 Reuse	0.10	0.91	0.65	0.01	0.08	0.06	1,038.33
Red Car Museum	0.02	0.19	0.13	0.00	0.02	0.01	212.35
Red Car Maintenance Facility	0.09	0.84	0.60	0.01	0.08	0.06	957.47
Millennium Tugboat Office	0.07	0.63	0.44	0.01	0.06	0.04	711.20
Waterfront Promenade Town Sq	0.17	1.55	1.10	0.02	0.14	0.10	1,768.98
Fisherman Park	0.07	0.61	0.43	0.01	0.06	0.04	693.72
Research & Dev at Westways	0.58	5.26	3.72	0.06	0.48	0.35	5,983.68
Crowley Tugboat	0.02	0.17	0.12	0.00	0.02	0.01	197.34
Outer Harbor Park	0.10	0.91	0.64	0.01	0.08	0.06	1,034.68
<b>TOTALS (tons/year, unmitigated)</b>	<b>19.00</b>	<b>173.03</b>	<b>122.46</b>	<b>1.84</b>	<b>15.72</b>	<b>11.65</b>	<b>196,895.39</b>

Operational Settings:

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2035 Season: Annual

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
Cruise Parking Shuttle Outer Harbor		0.10	students	1,180.00	118.00	1,054.51
Cruise Ship Terminal Berth 91-93		1.46	students	7,868.00	11,487.28	110,622.51
Los Angeles Maritime Institute		3.30	students	10.00	33.00	317.79
Cruise Ship Terminal Berth 45-50		1.46	students	3,934.00	5,743.64	52,166.61
San Pedro Park at 22nd & Miner St		29.83	acres	18.00	536.94	4,876.76

Port of Call Restaurant Development	89.95	1000 sq ft	78.20	7,034.09	64,657.35
Port of Call Retail Development	44.32	1000 sq ft	109.30	4,844.18	44,527.67
S.S. Lane Victory	3.60	1000 sq ft	10.00	36.00	323.03
Ralph J Scott Fireboat Museum	3.60	1000 sq ft	10.00	36.00	323.03
Mercardo Warehouse 9 & 10 Reuse	22.17	1000 sq ft	35.00	775.95	7,189.18
Warehouse 9 & 10 Reuse	4.97	1000 sq ft	35.00	173.95	1,611.65
Red Car Museum	3.60	1000 sq ft	10.00	36.00	329.60
Red Car Maintenance Facility	3.02	employees	37.00	111.74	1,486.14
Millennium Tugboat Office	3.32	employees	25.00	83.00	1,103.90
Waterfront Promenade Town Sq	20.00	acres	15.30	306.00	2,745.74
Fisherman Park	20.00	acres	6.00	120.00	1,076.76
Research & Dev at Westways	79.62	acres	13.00	1,035.06	9,287.59
Crowley Tugboat	3.29	unknown	7.00	23.03	306.30
Outer Harbor Park	29.83	acres	6.00	178.98	1,605.99
				32,712.84	305,612.11

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	1.5	0.0	0.0	100.0
Light Truck < 3750 lbs	2.8	0.0	0.0	100.0
Light Truck 3751-5750 lbs	0.0	0.0	0.0	100.0
Med Truck 5751-8500 lbs	0.0	0.0	0.0	100.0
Lite-Heavy Truck 8501-10,000 lbs	0.0	0.0	0.0	100.0
Lite-Heavy Truck 10,001-14,000 lbs	0.0	0.0	0.0	100.0
Med-Heavy Truck 14,001-33,000 lbs	0.0	0.0	0.0	100.0
Heavy-Heavy Truck 33,001-60,000 lbs	35.2	0.0	0.0	100.0
Other Bus	59.2	0.0	0.0	100.0
Urban Bus	0.0	0.0	0.0	100.0
Motorcycle	0.0	0.0	0.0	100.0
School Bus	0.0	0.0	0.0	100.0



Motor Home	1.3	0.0	0.0	100.0
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Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	12.7	7.0	9.5	13.3	7.4	8.9
Rural Trip Length (miles)	17.6	12.1	14.9	15.4	9.6	12.6
Trip speeds (mph)	30.0	30.0	30.0	30.0	30.0	30.0
% of Trips - Residential	32.9	18.0	49.1			
% of Trips - Commercial (by land use)						
Cruise Parking Shuttle Outer Harbor				1.0	0.5	98.5
Cruise Ship Terminal Berth 91-93				20.0	10.0	70.0
Los Angeles Maritime Institute				20.0	10.0	70.0
Cruise Ship Terminal Berth 45-50				5.0	2.5	92.5
San Pedro Park at 22nd & Miner St				5.0	2.5	92.5
Port of Call Restaurant Development				8.0	4.0	88.0
Port of Call Retail Development				8.0	4.0	88.0
S.S. Lane Victory				2.0	1.0	97.0
Ralph J Scott Fireboat Museum				2.0	1.0	97.0
Mercardo Warehouse 9 & 10 Reuse				10.0	5.0	85.0
Warehouse 9 & 10 Reuse				10.0	5.0	85.0
Red Car Museum				7.0	3.5	89.5
Red Car Maintenance Facility				100.0	0.0	0.0
Millennium Tugboat Office				100.0	0.0	0.0
Waterfront Promenade Town Sq				2.0	1.0	97.0
Fisherman Park				2.0	1.0	97.0
Research & Dev at Westways				2.0	1.0	97.0
Crowley Tugboat				100.0	0.0	0.0
Outer Harbor Park				2.0	1.0	97.0

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Urbemis 2007 Version 9.2.4

## Combined Annual Emissions Reports (Tons/Year)

File Name: C:\Documents and Settings\mslavick\Application Data\Urbemis\Version9a\Projects\SPW\_Alternative\_3\_2037\_wkend.urb924

Project Name: San Pedro Waterfront Alternative 3 2037 Weekend Diesel PM

Project Location: South Coast AQMD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

## Summary Report:

## OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (tons/year, unmitigated)	18.94	172.83	122.32	1.83	15.67	11.66	196,676.48

## SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (tons/year, unmitigated)	18.94	172.83	122.32	1.83	15.67	11.66	196,676.48

## Operational Unmitigated Detail Report:

## OPERATIONAL EMISSION ESTIMATES Annual Tons Per Year, Unmitigated

<u>Source</u>	ROG	NOX	CO	SO2	PM10	PM25	CO2
Cruise Parking Shuttle Outer Harbor	0.07	0.60	0.42	0.01	0.05	0.04	679.38
Cruise Ship Terminal Berth 91-93	6.87	62.63	44.33	0.66	5.68	4.23	71,270.29
Los Angeles Maritime Institute	0.00	0.03	0.02	0.00	0.00	0.00	31.02
Cruise Ship Terminal Berth 45-50	3.24	29.54	20.91	0.31	2.68	1.99	33,609.16
San Pedro Park at 22nd & Miner St	0.67	6.15	4.35	0.07	0.56	0.41	6,997.98

Port of Call Restaurant Development	4.21	38.40	27.18	0.41	3.49	2.59	43,698.82
Port of Call Retail Development	2.62	23.91	16.93	0.25	2.17	1.61	27,211.84
S.S. Lane Victory	0.03	0.27	0.19	0.00	0.02	0.02	312.17
Ralph J Scott Fireboat Museum	0.03	0.27	0.19	0.00	0.02	0.02	312.17
Mercardo Warehouse 9 & 10 Reuse	0.42	3.86	2.73	0.04	0.35	0.26	4,393.57
Warehouse 9 & 10 Reuse	0.03	0.24	0.17	0.00	0.02	0.02	269.51
Red Car Museum	0.03	0.28	0.20	0.00	0.03	0.02	318.52
Red Car Maintenance Facility	0.09	0.84	0.60	0.01	0.08	0.06	960.64
Millennium Tugboat Office	0.01	0.11	0.07	0.00	0.01	0.01	119.96
Waterfront Promenade Town Sq	0.17	1.55	1.10	0.02	0.14	0.10	1,768.98
Fisherman Park	0.07	0.61	0.43	0.01	0.06	0.04	693.72
Research & Dev at Westways	0.16	1.48	1.05	0.02	0.13	0.10	1,687.94
Crowley Tugboat	0.00	0.03	0.02	0.00	0.00	0.00	34.19
Outer Harbor Park	0.22	2.03	1.43	0.02	0.18	0.14	2,306.62
<b>TOTALS (tons/year, unmitigated)</b>	<b>18.94</b>	<b>172.83</b>	<b>122.32</b>	<b>1.83</b>	<b>15.67</b>	<b>11.66</b>	<b>196,676.48</b>

Operational Settings:

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2035 Season: Annual

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
Cruise Parking Shuttle Outer Harbor		0.10	students	1,180.00	118.00	1,054.51
Cruise Ship Terminal Berth 91-93		1.46	students	7,868.00	11,487.28	110,622.51
Los Angeles Maritime Institute		0.50	students	10.00	5.00	48.15
Cruise Ship Terminal Berth 45-50		1.46	students	3,934.00	5,743.64	52,166.61
San Pedro Park at 22nd & Miner St		66.44	acres	18.00	1,195.92	10,861.94

Port of Call Restaurant Development	94.36	1000 sq ft	78.20	7,378.95	67,827.32
Port of Call Retail Development	42.04	1000 sq ft	109.30	4,594.97	42,236.98
S.S. Lane Victory	5.40	1000 sq ft	10.00	54.00	484.54
Ralph J Scott Fireboat Museum	5.40	1000 sq ft	10.00	54.00	484.54
Mercardo Warehouse 9 & 10 Reuse	21.03	1000 sq ft	35.00	736.05	6,819.50
Warehouse 9 & 10 Reuse	1.29	1000 sq ft	35.00	45.15	418.31
Red Car Museum	5.40	1000 sq ft	10.00	54.00	494.40
Red Car Maintenance Facility	3.03	employees	37.00	112.11	1,491.06
Millennium Tugboat Office	0.56	employees	25.00	14.00	186.20
Waterfront Promenade Town Sq	20.00	acres	15.30	306.00	2,745.74
Fisherman Park	20.00	acres	6.00	120.00	1,076.76
Research & Dev at Westways	22.46	acres	13.00	291.98	2,619.94
Crowley Tugboat	0.57	unknown	7.00	3.99	53.07
Outer Harbor Park	66.50	acres	6.00	399.00	3,580.23
				32,714.04	305,272.31

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	1.5	0.0	0.0	100.0
Light Truck < 3750 lbs	2.8	0.0	0.0	100.0
Light Truck 3751-5750 lbs	0.0	0.0	0.0	100.0
Med Truck 5751-8500 lbs	0.0	0.0	0.0	100.0
Lite-Heavy Truck 8501-10,000 lbs	0.0	0.0	0.0	100.0
Lite-Heavy Truck 10,001-14,000 lbs	0.0	0.0	0.0	100.0
Med-Heavy Truck 14,001-33,000 lbs	0.0	0.0	0.0	100.0
Heavy-Heavy Truck 33,001-60,000 lbs	35.2	0.0	0.0	100.0
Other Bus	59.2	0.0	0.0	100.0
Urban Bus	0.0	0.0	0.0	100.0
Motorcycle	0.0	0.0	0.0	100.0
School Bus	0.0	0.0	0.0	100.0

Motor Home	1.3	0.0	0.0	100.0
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Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	12.7	7.0	9.5	13.3	7.4	8.9
Rural Trip Length (miles)	17.6	12.1	14.9	15.4	9.6	12.6
Trip speeds (mph)	30.0	30.0	30.0	30.0	30.0	30.0
% of Trips - Residential	32.9	18.0	49.1			
% of Trips - Commercial (by land use)						
Cruise Parking Shuttle Outer Harbor				1.0	0.5	98.5
Cruise Ship Terminal Berth 91-93				20.0	10.0	70.0
Los Angeles Maritime Institute				20.0	10.0	70.0
Cruise Ship Terminal Berth 45-50				5.0	2.5	92.5
San Pedro Park at 22nd & Miner St				5.0	2.5	92.5
Port of Call Restaurant Development				8.0	4.0	88.0
Port of Call Retail Development				8.0	4.0	88.0
S.S. Lane Victory				2.0	1.0	97.0
Ralph J Scott Fireboat Museum				2.0	1.0	97.0
Mercardo Warehouse 9 & 10 Reuse				10.0	5.0	85.0
Warehouse 9 & 10 Reuse				10.0	5.0	85.0
Red Car Museum				7.0	3.5	89.5
Red Car Maintenance Facility				100.0	0.0	0.0
Millennium Tugboat Office				100.0	0.0	0.0
Waterfront Promenade Town Sq				2.0	1.0	97.0
Fisherman Park				2.0	1.0	97.0
Research & Dev at Westways				2.0	1.0	97.0
Crowley Tugboat				100.0	0.0	0.0
Outer Harbor Park				2.0	1.0	97.0

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Urbemis 2007 Version 9.2.4

## Combined Summer Emissions Reports (Pounds/Day)

File Name: C:\Documents and Settings\mslavick\Application Data\Urbemis\Version9a\Projects\SPW\_Alternative\_3\_2037\_wkdy.urb924

Project Name: San Pedro Waterfront Alternative 3 2037 Weekday Diesel PM

Project Location: South Coast AQMD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

## Summary Report:

## OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (lbs/day, unmitigated)	104.05	916.07	671.07	10.06	86.02	63.97	1,078,878.85

## SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (lbs/day, unmitigated)	104.05	916.07	671.07	10.06	86.02	63.97	1,078,878.85

## Operational Unmitigated Detail Report:

## OPERATIONAL EMISSION ESTIMATES Summer Pounds Per Day, Unmitigated

<u>Source</u>	ROG	NOX	CO	SO2	PM10	PM25	CO2
Cruise Parking Shuttle Outer Harbor	0.36	3.16	2.32	0.03	0.30	0.22	3,722.65
Cruise Ship Terminal Berth 91-93	37.66	331.59	242.91	3.64	31.14	23.16	390,522.14
Los Angeles Maritime Institute	0.11	0.95	0.70	0.01	0.09	0.07	1,121.87
Cruise Ship Terminal Berth 45-50	17.76	156.37	114.55	1.72	14.69	10.92	184,159.78
San Pedro Park at 22nd & Miner St	1.66	14.62	10.71	0.16	1.37	1.02	17,216.04

Port of Call Restaurant Development	22.01	193.81	141.98	2.13	18.20	13.53	228,254.87
Port of Call Retail Development	15.16	133.47	97.77	1.46	12.54	9.32	157,192.60
S.S. Lane Victory	0.11	0.97	0.71	0.01	0.09	0.07	1,140.36
Ralph J Scott Fireboat Museum	0.11	0.97	0.71	0.01	0.09	0.07	1,140.36
Mercardo Warehouse 9 & 10 Reuse	2.45	21.55	15.79	0.24	2.02	1.50	25,379.40
Warehouse 9 & 10 Reuse	0.55	4.83	3.54	0.05	0.45	0.34	5,689.47
Red Car Museum	0.11	0.99	0.72	0.01	0.09	0.07	1,163.55
Red Car Maintenance Facility	0.51	4.45	3.26	0.05	0.42	0.31	5,246.41
Millennium Tugboat Office	0.38	3.31	2.42	0.04	0.31	0.23	3,897.01
Waterfront Promenade Town Sq	0.93	8.23	6.03	0.09	0.77	0.57	9,693.07
Fisherman Park	0.37	3.23	2.36	0.04	0.30	0.23	3,801.20
Research & Dev at Westways	3.16	27.84	20.39	0.31	2.61	1.94	32,787.28
Crowley Tugboat	0.10	0.92	0.67	0.01	0.09	0.06	1,081.30
Outer Harbor Park	0.55	4.81	3.53	0.05	0.45	0.34	5,669.49
<b>TOTALS (lbs/day, unmitigated)</b>	<b>104.05</b>	<b>916.07</b>	<b>671.07</b>	<b>10.06</b>	<b>86.02</b>	<b>63.97</b>	<b>1,078,878.85</b>

Operational Settings:

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2035 Temperature (F): 80 Season: Summer

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
Cruise Parking Shuttle Outer Harbor		0.10	students	1,180.00	118.00	1,054.51
Cruise Ship Terminal Berth 91-93		1.46	students	7,868.00	11,487.28	110,622.51
Los Angeles Maritime Institute		3.30	students	10.00	33.00	317.79
Cruise Ship Terminal Berth 45-50		1.46	students	3,934.00	5,743.64	52,166.61
San Pedro Park at 22nd & Miner St		29.83	acres	18.00	536.94	4,876.76

Port of Call Restaurant Development	89.95	1000 sq ft	78.20	7,034.09	64,657.35
Port of Call Retail Development	44.32	1000 sq ft	109.30	4,844.18	44,527.67
S.S. Lane Victory	3.60	1000 sq ft	10.00	36.00	323.03
Ralph J Scott Fireboat Museum	3.60	1000 sq ft	10.00	36.00	323.03
Mercardo Warehouse 9 & 10 Reuse	22.17	1000 sq ft	35.00	775.95	7,189.18
Warehouse 9 & 10 Reuse	4.97	1000 sq ft	35.00	173.95	1,611.65
Red Car Museum	3.60	1000 sq ft	10.00	36.00	329.60
Red Car Maintenance Facility	3.02	employees	37.00	111.74	1,486.14
Millennium Tugboat Office	3.32	employees	25.00	83.00	1,103.90
Waterfront Promenade Town Sq	20.00	acres	15.30	306.00	2,745.74
Fisherman Park	20.00	acres	6.00	120.00	1,076.76
Research & Dev at Westways	79.62	acres	13.00	1,035.06	9,287.59
Crowley Tugboat	3.29	unknown	7.00	23.03	306.30
Outer Harbor Park	29.83	acres	6.00	178.98	1,605.99
				32,712.84	305,612.11

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	1.5	0.0	0.0	100.0
Light Truck < 3750 lbs	2.8	0.0	0.0	100.0
Light Truck 3751-5750 lbs	0.0	0.0	0.0	100.0
Med Truck 5751-8500 lbs	0.0	0.0	0.0	100.0
Lite-Heavy Truck 8501-10,000 lbs	0.0	0.0	0.0	100.0
Lite-Heavy Truck 10,001-14,000 lbs	0.0	0.0	0.0	100.0
Med-Heavy Truck 14,001-33,000 lbs	0.0	0.0	0.0	100.0
Heavy-Heavy Truck 33,001-60,000 lbs	35.2	0.0	0.0	100.0
Other Bus	59.2	0.0	0.0	100.0
Urban Bus	0.0	0.0	0.0	100.0
Motorcycle	0.0	0.0	0.0	100.0
School Bus	0.0	0.0	0.0	100.0



Motor Home	1.3	0.0	0.0	100.0
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Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	12.7	7.0	9.5	13.3	7.4	8.9
Rural Trip Length (miles)	17.6	12.1	14.9	15.4	9.6	12.6
Trip speeds (mph)	30.0	30.0	30.0	30.0	30.0	30.0
% of Trips - Residential	32.9	18.0	49.1			
% of Trips - Commercial (by land use)						
Cruise Parking Shuttle Outer Harbor				1.0	0.5	98.5
Cruise Ship Terminal Berth 91-93				20.0	10.0	70.0
Los Angeles Maritime Institute				20.0	10.0	70.0
Cruise Ship Terminal Berth 45-50				5.0	2.5	92.5
San Pedro Park at 22nd & Miner St				5.0	2.5	92.5
Port of Call Restaurant Development				8.0	4.0	88.0
Port of Call Retail Development				8.0	4.0	88.0
S.S. Lane Victory				2.0	1.0	97.0
Ralph J Scott Fireboat Museum				2.0	1.0	97.0
Mercardo Warehouse 9 & 10 Reuse				10.0	5.0	85.0
Warehouse 9 & 10 Reuse				10.0	5.0	85.0
Red Car Museum				7.0	3.5	89.5
Red Car Maintenance Facility				100.0	0.0	0.0
Millennium Tugboat Office				100.0	0.0	0.0
Waterfront Promenade Town Sq				2.0	1.0	97.0
Fisherman Park				2.0	1.0	97.0
Research & Dev at Westways				2.0	1.0	97.0
Crowley Tugboat				100.0	0.0	0.0
Outer Harbor Park				2.0	1.0	97.0

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Urbemis 2007 Version 9.2.4

## Combined Summer Emissions Reports (Pounds/Day)

File Name: C:\Documents and Settings\mslavick\Application Data\Urbemis\Version9a\Projects\SPW\_Alternative\_3\_2037\_wkend.urb924

Project Name: San Pedro Waterfront Alternative 3 2037 Weekend Diesel PM

Project Location: South Coast AQMD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

## Summary Report:

## OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (lbs/day, unmitigated)	103.92	915.03	670.32	10.06	85.95	63.90	1,077,679.42

## SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (lbs/day, unmitigated)	103.92	915.03	670.32	10.06	85.95	63.90	1,077,679.42

## Operational Unmitigated Detail Report:

## OPERATIONAL EMISSION ESTIMATES Summer Pounds Per Day, Unmitigated

<u>Source</u>	ROG	NOX	CO	SO2	PM10	PM25	CO2
Cruise Parking Shuttle Outer Harbor	0.36	3.16	2.32	0.03	0.30	0.22	3,722.65
Cruise Ship Terminal Berth 91-93	37.66	331.59	242.91	3.64	31.14	23.16	390,522.14
Los Angeles Maritime Institute	0.02	0.14	0.11	0.00	0.01	0.01	169.98
Cruise Ship Terminal Berth 45-50	17.76	156.37	114.55	1.72	14.69	10.92	184,159.78
San Pedro Park at 22nd & Miner St	3.70	32.56	23.85	0.36	3.06	2.27	38,345.09

Port of Call Restaurant Development	23.09	203.31	148.94	2.23	19.10	14.20	239,445.59
Port of Call Retail Development	14.38	126.60	92.74	1.39	11.89	8.84	149,105.98
S.S. Lane Victory	0.16	1.45	1.06	0.02	0.14	0.10	1,710.54
Ralph J Scott Fireboat Museum	0.16	1.45	1.06	0.02	0.14	0.10	1,710.54
Mercardo Warehouse 9 & 10 Reuse	2.32	20.44	14.97	0.22	1.92	1.43	24,074.37
Warehouse 9 & 10 Reuse	0.14	1.25	0.92	0.01	0.12	0.09	1,476.74
Red Car Museum	0.17	1.48	1.09	0.02	0.14	0.10	1,745.33
Red Car Maintenance Facility	0.51	4.47	3.27	0.05	0.42	0.31	5,263.79
Millennium Tugboat Office	0.06	0.56	0.41	0.01	0.05	0.04	657.33
Waterfront Promenade Town Sq	0.93	8.23	6.03	0.09	0.77	0.57	9,693.07
Fisherman Park	0.37	3.23	2.36	0.04	0.30	0.23	3,801.20
Research & Dev at Westways	0.89	7.85	5.75	0.09	0.74	0.55	9,248.96
Crowley Tugboat	0.02	0.16	0.12	0.00	0.01	0.01	187.34
Outer Harbor Park	1.22	10.73	7.86	0.12	1.01	0.75	12,639.00
<b>TOTALS (lbs/day, unmitigated)</b>	<b>103.92</b>	<b>915.03</b>	<b>670.32</b>	<b>10.06</b>	<b>85.95</b>	<b>63.90</b>	<b>1,077,679.42</b>

Operational Settings:

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2035 Temperature (F): 80 Season: Summer

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
Cruise Parking Shuttle Outer Harbor		0.10	students	1,180.00	118.00	1,054.51
Cruise Ship Terminal Berth 91-93		1.46	students	7,868.00	11,487.28	110,622.51
Los Angeles Maritime Institute		0.50	students	10.00	5.00	48.15
Cruise Ship Terminal Berth 45-50		1.46	students	3,934.00	5,743.64	52,166.61
San Pedro Park at 22nd & Miner St		66.44	acres	18.00	1,195.92	10,861.94

Port of Call Restaurant Development	94.36	1000 sq ft	78.20	7,378.95	67,827.32
Port of Call Retail Development	42.04	1000 sq ft	109.30	4,594.97	42,236.98
S.S. Lane Victory	5.40	1000 sq ft	10.00	54.00	484.54
Ralph J Scott Fireboat Museum	5.40	1000 sq ft	10.00	54.00	484.54
Mercardo Warehouse 9 & 10 Reuse	21.03	1000 sq ft	35.00	736.05	6,819.50
Warehouse 9 & 10 Reuse	1.29	1000 sq ft	35.00	45.15	418.31
Red Car Museum	5.40	1000 sq ft	10.00	54.00	494.40
Red Car Maintenance Facility	3.03	employees	37.00	112.11	1,491.06
Millennium Tugboat Office	0.56	employees	25.00	14.00	186.20
Waterfront Promenade Town Sq	20.00	acres	15.30	306.00	2,745.74
Fisherman Park	20.00	acres	6.00	120.00	1,076.76
Research & Dev at Westways	22.46	acres	13.00	291.98	2,619.94
Crowley Tugboat	0.57	unknown	7.00	3.99	53.07
Outer Harbor Park	66.50	acres	6.00	399.00	3,580.23
				32,714.04	305,272.31

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	1.5	0.0	0.0	100.0
Light Truck < 3750 lbs	2.8	0.0	0.0	100.0
Light Truck 3751-5750 lbs	0.0	0.0	0.0	100.0
Med Truck 5751-8500 lbs	0.0	0.0	0.0	100.0
Lite-Heavy Truck 8501-10,000 lbs	0.0	0.0	0.0	100.0
Lite-Heavy Truck 10,001-14,000 lbs	0.0	0.0	0.0	100.0
Med-Heavy Truck 14,001-33,000 lbs	0.0	0.0	0.0	100.0
Heavy-Heavy Truck 33,001-60,000 lbs	35.2	0.0	0.0	100.0
Other Bus	59.2	0.0	0.0	100.0
Urban Bus	0.0	0.0	0.0	100.0
Motorcycle	0.0	0.0	0.0	100.0
School Bus	0.0	0.0	0.0	100.0

Motor Home	1.3	0.0	0.0	100.0
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Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	12.7	7.0	9.5	13.3	7.4	8.9
Rural Trip Length (miles)	17.6	12.1	14.9	15.4	9.6	12.6
Trip speeds (mph)	30.0	30.0	30.0	30.0	30.0	30.0
% of Trips - Residential	32.9	18.0	49.1			
% of Trips - Commercial (by land use)						
Cruise Parking Shuttle Outer Harbor				1.0	0.5	98.5
Cruise Ship Terminal Berth 91-93				20.0	10.0	70.0
Los Angeles Maritime Institute				20.0	10.0	70.0
Cruise Ship Terminal Berth 45-50				5.0	2.5	92.5
San Pedro Park at 22nd & Miner St				5.0	2.5	92.5
Port of Call Restaurant Development				8.0	4.0	88.0
Port of Call Retail Development				8.0	4.0	88.0
S.S. Lane Victory				2.0	1.0	97.0
Ralph J Scott Fireboat Museum				2.0	1.0	97.0
Mercardo Warehouse 9 & 10 Reuse				10.0	5.0	85.0
Warehouse 9 & 10 Reuse				10.0	5.0	85.0
Red Car Museum				7.0	3.5	89.5
Red Car Maintenance Facility				100.0	0.0	0.0
Millennium Tugboat Office				100.0	0.0	0.0
Waterfront Promenade Town Sq				2.0	1.0	97.0
Fisherman Park				2.0	1.0	97.0
Research & Dev at Westways				2.0	1.0	97.0
Crowley Tugboat				100.0	0.0	0.0
Outer Harbor Park				2.0	1.0	97.0

Urbemis 2007 Version 9.2.4

## Combined Annual Emissions Reports (Tons/Year)

File Name: C:\Documents and Settings\mslavick\Application Data\Urbemis\Version9a\Projects\SPW\_Alternative\_4\_2015\_wkdy.urb924

Project Name: San Pedro Waterfront Alternative 4 2015 Weekday Diesel PM

Project Location: South Coast AQMD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

## Summary Report:

## OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (tons/year, unmitigated)	39.44	568.82	223.40	1.92	29.06	23.80	206,040.33

## SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (tons/year, unmitigated)	39.44	568.82	223.40	1.92	29.06	23.80	206,040.33

## Operational Unmitigated Detail Report:

## OPERATIONAL EMISSION ESTIMATES Annual Tons Per Year, Unmitigated

<u>Source</u>	ROG	NOX	CO	SO2	PM10	PM25	CO2
Cruise Ship Terminal Berth 91-93	13.00	187.58	73.67	0.63	9.58	7.86	67,946.31
Los Angeles Maritime Institute	0.04	0.57	0.22	0.00	0.03	0.02	204.77
Conference Facilities at POC	0.87	12.60	4.95	0.04	0.64	0.53	4,564.84
San Pedro Park at 22nd & Miner St	0.60	8.68	3.41	0.03	0.44	0.36	3,142.36
Port of Call Restaurant Development	12.75	183.86	72.20	0.62	9.39	7.70	66,595.76

Port of Call Retail Development	8.79	126.82	49.81	0.43	6.48	5.31	45,938.12
S.S. Lane Victory	0.04	0.57	0.23	0.00	0.03	0.02	208.14
Ralph J Scott Fireboat Museum	0.04	0.57	0.23	0.00	0.03	0.02	208.14
Mercardo Warehouse 9 & 10 Reuse	0.89	12.79	5.02	0.04	0.65	0.54	4,632.38
Warehouse 9 & 10 Reuse	0.20	2.87	1.13	0.01	0.15	0.12	1,038.47
Red Car Museum	0.04	0.59	0.23	0.00	0.03	0.02	212.38
Red Car Maintenance Facility	0.18	2.64	1.04	0.01	0.14	0.11	957.60
Millennium Tugboat Office	0.14	1.96	0.77	0.01	0.10	0.08	711.30
Waterfront Promenade Town Sq	0.34	4.88	1.92	0.02	0.25	0.20	1,769.23
Fisherman Park	0.13	1.92	0.75	0.01	0.10	0.08	693.82
Research & Dev at Westways	1.15	16.52	6.49	0.06	0.84	0.69	5,984.51
Crowley Tugboat	0.04	0.54	0.21	0.00	0.03	0.02	197.37
Outer Harbor Park	0.20	2.86	1.12	0.01	0.15	0.12	1,034.83
<b>TOTALS (tons/year, unmitigated)</b>	<b>39.44</b>	<b>568.82</b>	<b>223.40</b>	<b>1.92</b>	<b>29.06</b>	<b>23.80</b>	<b>206,040.33</b>

Operational Settings:

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2015 Season: Annual

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
Cruise Ship Terminal Berth 91-93		1.46	passengers	7,500.00	10,950.00	105,448.50
Los Angeles Maritime Institute		0.50	employees	10.00	33.00	317.79
Conference Facilities at POC		1.30	attendees	300.00	780.00	7,084.35
San Pedro Park at 22nd & Miner St		66.44	acres	18.00	536.94	4,876.76
Port of Call Restaurant Development		94.36	1000 sq ft	125.00	11,243.75	103,352.54
Port of Call Retail Development		42.04	1000 sq ft	175.00	7,756.00	71,293.15

S.S. Lane Victory	5.40	1000 sq ft	10.00	36.00	323.03
Ralph J Scott Fireboat Museum	5.40	1000 sq ft	10.00	36.00	323.03
Mercardo Warehouse 9 & 10 Reuse	21.03	1000 sq ft	35.00	775.95	7,189.18
Warehouse 9 & 10 Reuse	1.29	1000 sq ft	35.00	173.95	1,611.65
Red Car Museum	5.40	1000 sq ft	10.00	36.00	329.60
Red Car Maintenance Facility	3.03	employees	37.00	111.74	1,486.14
Millennium Tugboat Office	0.56	employees	25.00	83.00	1,103.90
Waterfront Promenade Town Sq	20.00	acres	15.30	306.00	2,745.74
Fisherman Park	20.00	acres	6.00	120.00	1,076.76
Research & Dev at Westways	22.46	acres	13.00	1,035.06	9,287.59
Crowley Tugboat	0.57	employees	7.00	23.03	306.30
Outer Harbor Park	66.50	acres	6.00	178.98	1,605.99
				34,215.40	319,762.00

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	1.5	0.0	0.0	100.0
Light Truck < 3750 lbs	2.8	0.0	0.0	100.0
Light Truck 3751-5750 lbs	0.0	0.0	0.0	100.0
Med Truck 5751-8500 lbs	0.0	0.0	0.0	100.0
Lite-Heavy Truck 8501-10,000 lbs	0.0	0.0	0.0	100.0
Lite-Heavy Truck 10,001-14,000 lbs	0.0	0.0	0.0	100.0
Med-Heavy Truck 14,001-33,000 lbs	0.0	0.0	0.0	100.0
Heavy-Heavy Truck 33,001-60,000 lbs	35.2	0.0	0.0	100.0
Other Bus	59.2	0.0	0.0	100.0
Urban Bus	0.0	0.0	0.0	100.0
Motorcycle	0.0	0.0	0.0	100.0
School Bus	0.0	0.0	0.0	100.0
Motor Home	1.3	0.0	0.0	100.0

Travel Conditions



	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	12.7	7.0	9.5	13.3	7.4	8.9
Rural Trip Length (miles)	17.6	12.1	14.9	15.4	9.6	12.6
Trip speeds (mph)	30.0	30.0	30.0	30.0	30.0	30.0
% of Trips - Residential	32.9	18.0	49.1			
% of Trips - Commercial (by land use)						
Cruise Ship Terminal Berth 91-93				20.0	10.0	70.0
Los Angeles Maritime Institute				20.0	10.0	70.0
Conference Facilities at POC				5.0	2.5	92.5
San Pedro Park at 22nd & Miner St				5.0	2.5	92.5
Port of Call Restaurant Development				8.0	4.0	88.0
Port of Call Retail Development				8.0	4.0	88.0
S.S. Lane Victory				2.0	1.0	97.0
Ralph J Scott Fireboat Museum				2.0	1.0	97.0
Mercardo Warehouse 9 & 10 Reuse				10.0	5.0	85.0
Warehouse 9 & 10 Reuse				10.0	5.0	85.0
Red Car Museum				7.0	3.5	89.5
Red Car Maintenance Facility				100.0	0.0	0.0
Millennium Tugboat Office				100.0	0.0	0.0
Waterfront Promenade Town Sq				2.0	1.0	97.0
Fisherman Park				2.0	1.0	97.0
Research & Dev at Westways				2.0	1.0	97.0
Crowley Tugboat				100.0	0.0	0.0
Outer Harbor Park				2.0	1.0	97.0

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Urbemis 2007 Version 9.2.4

## Combined Annual Emissions Reports (Tons/Year)

File Name: C:\Documents and Settings\mslavick\Application Data\Urbemis\Version9a\Projects\SPW\_Alternative\_4\_2015\_wkend.urb924

Project Name: San Pedro Waterfront Alternative 4 2015 Weekend Diesel PM

Project Location: South Coast AQMD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

## Summary Report:

## OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (tons/year, unmitigated)	39.01	562.83	221.03	1.90	28.74	23.58	203,874.19

## SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (tons/year, unmitigated)	39.01	562.83	221.03	1.90	28.74	23.58	203,874.19

## Operational Unmitigated Detail Report:

## OPERATIONAL EMISSION ESTIMATES Annual Tons Per Year, Unmitigated

<u>Source</u>	ROG	NOX	CO	SO2	PM10	PM25	CO2
Cruise Ship Terminal Berth 91-93	13.00	187.58	73.67	0.63	9.58	7.86	67,946.31
Los Angeles Maritime Institute	0.01	0.09	0.03	0.00	0.00	0.00	31.03
Conference Facilities at POC	0.44	6.30	2.47	0.02	0.32	0.26	2,282.42
San Pedro Park at 22nd & Miner St	1.34	19.32	7.59	0.07	0.99	0.81	6,998.95
Port of Call Restaurant Development	13.37	192.87	75.74	0.65	9.85	8.08	69,860.77

Port of Call Retail Development	8.34	120.30	47.24	0.41	6.14	5.04	43,574.88
S.S. Lane Victory	0.06	0.86	0.34	0.00	0.04	0.04	312.22
Ralph J Scott Fireboat Museum	0.06	0.86	0.34	0.00	0.04	0.04	312.22
Mercardo Warehouse 9 & 10 Reuse	0.84	12.13	4.76	0.04	0.62	0.51	4,394.18
Warehouse 9 & 10 Reuse	0.05	0.74	0.29	0.00	0.04	0.03	269.54
Red Car Museum	0.06	0.88	0.35	0.00	0.04	0.04	318.57
Red Car Maintenance Facility	0.18	2.65	1.04	0.01	0.14	0.11	960.77
Millennium Tugboat Office	0.02	0.33	0.13	0.00	0.02	0.01	119.98
Waterfront Promenade Town Sq	0.34	4.88	1.92	0.02	0.25	0.20	1,769.23
Fisherman Park	0.13	1.92	0.75	0.01	0.10	0.08	693.82
Research & Dev at Westways	0.32	4.66	1.83	0.02	0.24	0.20	1,688.17
Crowley Tugboat	0.01	0.09	0.04	0.00	0.00	0.00	34.19
Outer Harbor Park	0.44	6.37	2.50	0.02	0.33	0.27	2,306.94
<b>TOTALS (tons/year, unmitigated)</b>	<b>39.01</b>	<b>562.83</b>	<b>221.03</b>	<b>1.90</b>	<b>28.74</b>	<b>23.58</b>	<b>203,874.19</b>

Operational Settings:

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2015 Season: Annual

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
Cruise Ship Terminal Berth 91-93		1.46	passengers	7,500.00	10,950.00	105,448.50
Los Angeles Maritime Institute		0.50	employees	10.00	5.00	48.15
Conference Facilities at POC		1.30	attendees	300.00	390.00	3,542.17
San Pedro Park at 22nd & Miner St		66.44	acres	18.00	1,195.92	10,861.94
Port of Call Restaurant Development		94.36	1000 sq ft	125.00	11,795.00	108,419.64
Port of Call Retail Development		42.04	1000 sq ft	175.00	7,357.00	67,625.54

S.S. Lane Victory	5.40	1000 sq ft	10.00	54.00	484.54
Ralph J Scott Fireboat Museum	5.40	1000 sq ft	10.00	54.00	484.54
Mercardo Warehouse 9 & 10 Reuse	21.03	1000 sq ft	35.00	736.05	6,819.50
Warehouse 9 & 10 Reuse	1.29	1000 sq ft	35.00	45.15	418.31
Red Car Museum	5.40	1000 sq ft	10.00	54.00	494.40
Red Car Maintenance Facility	3.03	employees	37.00	112.11	1,491.06
Millennium Tugboat Office	0.56	employees	25.00	14.00	186.20
Waterfront Promenade Town Sq	20.00	acres	15.30	306.00	2,745.74
Fisherman Park	20.00	acres	6.00	120.00	1,076.76
Research & Dev at Westways	22.46	acres	13.00	291.98	2,619.94
Crowley Tugboat	0.57	employees	7.00	3.99	53.07
Outer Harbor Park	66.50	acres	6.00	399.00	3,580.23
				33,883.20	316,400.23

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	1.5	0.0	0.0	100.0
Light Truck < 3750 lbs	2.8	0.0	0.0	100.0
Light Truck 3751-5750 lbs	0.0	0.0	0.0	100.0
Med Truck 5751-8500 lbs	0.0	0.0	0.0	100.0
Lite-Heavy Truck 8501-10,000 lbs	0.0	0.0	0.0	100.0
Lite-Heavy Truck 10,001-14,000 lbs	0.0	0.0	0.0	100.0
Med-Heavy Truck 14,001-33,000 lbs	0.0	0.0	0.0	100.0
Heavy-Heavy Truck 33,001-60,000 lbs	35.2	0.0	0.0	100.0
Other Bus	59.2	0.0	0.0	100.0
Urban Bus	0.0	0.0	0.0	100.0
Motorcycle	0.0	0.0	0.0	100.0
School Bus	0.0	0.0	0.0	100.0
Motor Home	1.3	0.0	0.0	100.0

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	12.7	7.0	9.5	13.3	7.4	8.9
Rural Trip Length (miles)	17.6	12.1	14.9	15.4	9.6	12.6
Trip speeds (mph)	30.0	30.0	30.0	30.0	30.0	30.0
% of Trips - Residential	32.9	18.0	49.1			
% of Trips - Commercial (by land use)						
Cruise Ship Terminal Berth 91-93				20.0	10.0	70.0
Los Angeles Maritime Institute				20.0	10.0	70.0
Conference Facilities at POC				5.0	2.5	92.5
San Pedro Park at 22nd & Miner St				5.0	2.5	92.5
Port of Call Restaurant Development				8.0	4.0	88.0
Port of Call Retail Development				8.0	4.0	88.0
S.S. Lane Victory				2.0	1.0	97.0
Ralph J Scott Fireboat Museum				2.0	1.0	97.0
Mercardo Warehouse 9 & 10 Reuse				10.0	5.0	85.0
Warehouse 9 & 10 Reuse				10.0	5.0	85.0
Red Car Museum				7.0	3.5	89.5
Red Car Maintenance Facility				100.0	0.0	0.0
Millennium Tugboat Office				100.0	0.0	0.0
Waterfront Promenade Town Sq				2.0	1.0	97.0
Fisherman Park				2.0	1.0	97.0
Research & Dev at Westways				2.0	1.0	97.0
Crowley Tugboat				100.0	0.0	0.0
Outer Harbor Park				2.0	1.0	97.0

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Urbemis 2007 Version 9.2.4

## Combined Summer Emissions Reports (Pounds/Day)

File Name: C:\Documents and Settings\mslavick\Application Data\Urbemis\Version9a\Projects\SPW\_Alternative\_4\_2015\_wkdy.urb924

Project Name: San Pedro Waterfront Alternative 4 2015 Weekday Diesel PM

Project Location: South Coast AQMD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

## Summary Report:

## OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (lbs/day, unmitigated)	216.11	3,011.61	1,224.06	10.53	159.19	130.57	1,128,988.22

## SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (lbs/day, unmitigated)	216.11	3,011.61	1,224.06	10.53	159.19	130.57	1,128,988.22

## Operational Unmitigated Detail Report:

## OPERATIONAL EMISSION ESTIMATES Summer Pounds Per Day, Unmitigated

<u>Source</u>	<u>ROG</u>	<u>NOX</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM25</u>	<u>CO2</u>
Cruise Ship Terminal Berth 91-93	71.26	993.15	403.66	3.47	52.50	43.06	372,308.53
Los Angeles Maritime Institute	0.21	2.99	1.22	0.01	0.16	0.13	1,122.03
Conference Facilities at POC	4.79	66.72	27.12	0.23	3.53	2.89	25,012.81
San Pedro Park at 22nd & Miner St	3.30	45.93	18.67	0.16	2.43	1.99	17,218.44
Port of Call Restaurant Development	69.84	973.41	395.63	3.40	51.45	42.20	364,908.30

Port of Call Retail Development	48.18	671.46	272.91	2.35	35.49	29.11	251,715.74
S.S. Lane Victory	0.22	3.04	1.24	0.01	0.16	0.13	1,140.52
Ralph J Scott Fireboat Museum	0.22	3.04	1.24	0.01	0.16	0.13	1,140.52
Mercardo Warehouse 9 & 10 Reuse	4.86	67.71	27.52	0.24	3.58	2.94	25,382.93
Warehouse 9 & 10 Reuse	1.09	15.18	6.17	0.05	0.80	0.66	5,690.26
Red Car Museum	0.22	3.10	1.26	0.01	0.16	0.13	1,163.72
Red Car Maintenance Facility	1.00	14.00	5.69	0.05	0.74	0.61	5,247.14
Millennium Tugboat Office	0.75	10.40	4.23	0.04	0.55	0.45	3,897.56
Waterfront Promenade Town Sq	1.86	25.86	10.51	0.09	1.37	1.12	9,694.42
Fisherman Park	0.73	10.14	4.12	0.04	0.54	0.44	3,801.73
Research & Dev at Westways	6.28	87.47	35.55	0.31	4.62	3.79	32,791.84
Crowley Tugboat	0.21	2.88	1.17	0.01	0.15	0.13	1,081.45
Outer Harbor Park	1.09	15.13	6.15	0.05	0.80	0.66	5,670.28
<b>TOTALS (lbs/day, unmitigated)</b>	<b>216.11</b>	<b>3,011.61</b>	<b>1,224.06</b>	<b>10.53</b>	<b>159.19</b>	<b>130.57</b>	<b>1,128,988.22</b>

Operational Settings:

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2015 Temperature (F): 80 Season: Summer

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
Cruise Ship Terminal Berth 91-93		1.46	passengers	7,500.00	10,950.00	105,448.50
Los Angeles Maritime Institute		0.50	employees	10.00	33.00	317.79
Conference Facilities at POC		1.30	attendees	300.00	780.00	7,084.35
San Pedro Park at 22nd & Miner St		66.44	acres	18.00	536.94	4,876.76
Port of Call Restaurant Development		94.36	1000 sq ft	125.00	11,243.75	103,352.54
Port of Call Retail Development		42.04	1000 sq ft	175.00	7,756.00	71,293.15

S.S. Lane Victory	5.40	1000 sq ft	10.00	36.00	323.03
Ralph J Scott Fireboat Museum	5.40	1000 sq ft	10.00	36.00	323.03
Mercardo Warehouse 9 & 10 Reuse	21.03	1000 sq ft	35.00	775.95	7,189.18
Warehouse 9 & 10 Reuse	1.29	1000 sq ft	35.00	173.95	1,611.65
Red Car Museum	5.40	1000 sq ft	10.00	36.00	329.60
Red Car Maintenance Facility	3.03	employees	37.00	111.74	1,486.14
Millennium Tugboat Office	0.56	employees	25.00	83.00	1,103.90
Waterfront Promenade Town Sq	20.00	acres	15.30	306.00	2,745.74
Fisherman Park	20.00	acres	6.00	120.00	1,076.76
Research & Dev at Westways	22.46	acres	13.00	1,035.06	9,287.59
Crowley Tugboat	0.57	employees	7.00	23.03	306.30
Outer Harbor Park	66.50	acres	6.00	178.98	1,605.99
				34,215.40	319,762.00

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	1.5	0.0	0.0	100.0
Light Truck < 3750 lbs	2.8	0.0	0.0	100.0
Light Truck 3751-5750 lbs	0.0	0.0	0.0	100.0
Med Truck 5751-8500 lbs	0.0	0.0	0.0	100.0
Lite-Heavy Truck 8501-10,000 lbs	0.0	0.0	0.0	100.0
Lite-Heavy Truck 10,001-14,000 lbs	0.0	0.0	0.0	100.0
Med-Heavy Truck 14,001-33,000 lbs	0.0	0.0	0.0	100.0
Heavy-Heavy Truck 33,001-60,000 lbs	35.2	0.0	0.0	100.0
Other Bus	59.2	0.0	0.0	100.0
Urban Bus	0.0	0.0	0.0	100.0
Motorcycle	0.0	0.0	0.0	100.0
School Bus	0.0	0.0	0.0	100.0
Motor Home	1.3	0.0	0.0	100.0

Travel Conditions



	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	12.7	7.0	9.5	13.3	7.4	8.9
Rural Trip Length (miles)	17.6	12.1	14.9	15.4	9.6	12.6
Trip speeds (mph)	30.0	30.0	30.0	30.0	30.0	30.0
% of Trips - Residential	32.9	18.0	49.1			
% of Trips - Commercial (by land use)						
Cruise Ship Terminal Berth 91-93				20.0	10.0	70.0
Los Angeles Maritime Institute				20.0	10.0	70.0
Conference Facilities at POC				5.0	2.5	92.5
San Pedro Park at 22nd & Miner St				5.0	2.5	92.5
Port of Call Restaurant Development				8.0	4.0	88.0
Port of Call Retail Development				8.0	4.0	88.0
S.S. Lane Victory				2.0	1.0	97.0
Ralph J Scott Fireboat Museum				2.0	1.0	97.0
Mercardo Warehouse 9 & 10 Reuse				10.0	5.0	85.0
Warehouse 9 & 10 Reuse				10.0	5.0	85.0
Red Car Museum				7.0	3.5	89.5
Red Car Maintenance Facility				100.0	0.0	0.0
Millennium Tugboat Office				100.0	0.0	0.0
Waterfront Promenade Town Sq				2.0	1.0	97.0
Fisherman Park				2.0	1.0	97.0
Research & Dev at Westways				2.0	1.0	97.0
Crowley Tugboat				100.0	0.0	0.0
Outer Harbor Park				2.0	1.0	97.0

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Urbemis 2007 Version 9.2.4

## Combined Summer Emissions Reports (Pounds/Day)

File Name: C:\Documents and Settings\mslavick\Application Data\Urbemis\Version9a\Projects\SPW\_Alternative\_4\_2015\_wkend.urb924

Project Name: San Pedro Waterfront Alternative 4 2015 Weekend Diesel PM

Project Location: South Coast AQMD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

## Summary Report:

## OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (lbs/day, unmitigated)	213.83	2,979.95	1,211.17	10.43	157.53	129.20	1,117,118.85

## SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (lbs/day, unmitigated)	213.83	2,979.95	1,211.17	10.43	157.53	129.20	1,117,118.85

## Operational Unmitigated Detail Report:

## OPERATIONAL EMISSION ESTIMATES Summer Pounds Per Day, Unmitigated

<u>Source</u>	ROG	NOX	CO	SO2	PM10	PM25	CO2
Cruise Ship Terminal Berth 91-93	71.26	993.15	403.66	3.47	52.50	43.06	372,308.53
Los Angeles Maritime Institute	0.03	0.45	0.18	0.00	0.02	0.02	170.00
Conference Facilities at POC	2.39	33.36	13.56	0.12	1.76	1.45	12,506.41
San Pedro Park at 22nd & Miner St	7.34	102.30	41.58	0.36	5.41	4.44	38,350.42
Port of Call Restaurant Development	73.27	1,021.13	415.03	3.57	53.98	44.27	382,798.76

Port of Call Retail Development	45.70	636.92	258.87	2.22	33.67	27.61	238,766.47
S.S. Lane Victory	0.33	4.56	1.85	0.02	0.24	0.20	1,710.78
Ralph J Scott Fireboat Museum	0.33	4.56	1.85	0.02	0.24	0.20	1,710.78
Mercardo Warehouse 9 & 10 Reuse	4.61	64.23	26.11	0.22	3.40	2.78	24,077.72
Warehouse 9 & 10 Reuse	0.28	3.94	1.60	0.01	0.21	0.17	1,476.95
Red Car Museum	0.33	4.66	1.89	0.02	0.25	0.20	1,745.57
Red Car Maintenance Facility	1.01	14.04	5.71	0.05	0.74	0.61	5,264.52
Millennium Tugboat Office	0.13	1.75	0.71	0.01	0.09	0.08	657.42
Waterfront Promenade Town Sq	1.86	25.86	10.51	0.09	1.37	1.12	9,694.42
Fisherman Park	0.73	10.14	4.12	0.04	0.54	0.44	3,801.73
Research & Dev at Westways	1.77	24.68	10.03	0.09	1.30	1.07	9,250.25
Crowley Tugboat	0.04	0.50	0.20	0.00	0.03	0.02	187.36
Outer Harbor Park	2.42	33.72	13.71	0.12	1.78	1.46	12,640.76
<b>TOTALS (lbs/day, unmitigated)</b>	<b>213.83</b>	<b>2,979.95</b>	<b>1,211.17</b>	<b>10.43</b>	<b>157.53</b>	<b>129.20</b>	<b>1,117,118.85</b>

Operational Settings:

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2015 Temperature (F): 80 Season: Summer

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
Cruise Ship Terminal Berth 91-93		1.46	passengers	7,500.00	10,950.00	105,448.50
Los Angeles Maritime Institute		0.50	employees	10.00	5.00	48.15
Conference Facilities at POC		1.30	attendees	300.00	390.00	3,542.17
San Pedro Park at 22nd & Miner St		66.44	acres	18.00	1,195.92	10,861.94
Port of Call Restaurant Development		94.36	1000 sq ft	125.00	11,795.00	108,419.64
Port of Call Retail Development		42.04	1000 sq ft	175.00	7,357.00	67,625.54

S.S. Lane Victory	5.40	1000 sq ft	10.00	54.00	484.54
Ralph J Scott Fireboat Museum	5.40	1000 sq ft	10.00	54.00	484.54
Mercardo Warehouse 9 & 10 Reuse	21.03	1000 sq ft	35.00	736.05	6,819.50
Warehouse 9 & 10 Reuse	1.29	1000 sq ft	35.00	45.15	418.31
Red Car Museum	5.40	1000 sq ft	10.00	54.00	494.40
Red Car Maintenance Facility	3.03	employees	37.00	112.11	1,491.06
Millennium Tugboat Office	0.56	employees	25.00	14.00	186.20
Waterfront Promenade Town Sq	20.00	acres	15.30	306.00	2,745.74
Fisherman Park	20.00	acres	6.00	120.00	1,076.76
Research & Dev at Westways	22.46	acres	13.00	291.98	2,619.94
Crowley Tugboat	0.57	employees	7.00	3.99	53.07
Outer Harbor Park	66.50	acres	6.00	399.00	3,580.23
				33,883.20	316,400.23

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	1.5	0.0	0.0	100.0
Light Truck < 3750 lbs	2.8	0.0	0.0	100.0
Light Truck 3751-5750 lbs	0.0	0.0	0.0	100.0
Med Truck 5751-8500 lbs	0.0	0.0	0.0	100.0
Lite-Heavy Truck 8501-10,000 lbs	0.0	0.0	0.0	100.0
Lite-Heavy Truck 10,001-14,000 lbs	0.0	0.0	0.0	100.0
Med-Heavy Truck 14,001-33,000 lbs	0.0	0.0	0.0	100.0
Heavy-Heavy Truck 33,001-60,000 lbs	35.2	0.0	0.0	100.0
Other Bus	59.2	0.0	0.0	100.0
Urban Bus	0.0	0.0	0.0	100.0
Motorcycle	0.0	0.0	0.0	100.0
School Bus	0.0	0.0	0.0	100.0
Motor Home	1.3	0.0	0.0	100.0

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	12.7	7.0	9.5	13.3	7.4	8.9
Rural Trip Length (miles)	17.6	12.1	14.9	15.4	9.6	12.6
Trip speeds (mph)	30.0	30.0	30.0	30.0	30.0	30.0
% of Trips - Residential	32.9	18.0	49.1			
% of Trips - Commercial (by land use)						
Cruise Ship Terminal Berth 91-93				20.0	10.0	70.0
Los Angeles Maritime Institute				20.0	10.0	70.0
Conference Facilities at POC				5.0	2.5	92.5
San Pedro Park at 22nd & Miner St				5.0	2.5	92.5
Port of Call Restaurant Development				8.0	4.0	88.0
Port of Call Retail Development				8.0	4.0	88.0
S.S. Lane Victory				2.0	1.0	97.0
Ralph J Scott Fireboat Museum				2.0	1.0	97.0
Mercardo Warehouse 9 & 10 Reuse				10.0	5.0	85.0
Warehouse 9 & 10 Reuse				10.0	5.0	85.0
Red Car Museum				7.0	3.5	89.5
Red Car Maintenance Facility				100.0	0.0	0.0
Millennium Tugboat Office				100.0	0.0	0.0
Waterfront Promenade Town Sq				2.0	1.0	97.0
Fisherman Park				2.0	1.0	97.0
Research & Dev at Westways				2.0	1.0	97.0
Crowley Tugboat				100.0	0.0	0.0
Outer Harbor Park				2.0	1.0	97.0

Urbemis 2007 Version 9.2.4

## Combined Annual Emissions Reports (Tons/Year)

File Name: C:\Documents and Settings\mslavick\Application Data\Urbemis\Version9a\Projects\SPW\_Alternative\_4\_2022\_wkdy.urb924

Project Name: San Pedro Waterfront Alternative 4 2022 Weekday Diesel PM

Project Location: South Coast AQMD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

## Summary Report:

## OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (tons/year, unmitigated)	29.61	357.37	175.64	2.01	22.61	17.80	215,817.98

## SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (tons/year, unmitigated)	29.61	357.37	175.64	2.01	22.61	17.80	215,817.98

## Operational Unmitigated Detail Report:

## OPERATIONAL EMISSION ESTIMATES Annual Tons Per Year, Unmitigated

<u>Source</u>	ROG	NOX	CO	SO2	PM10	PM25	CO2
Cruise Ship Terminal Berth 91-93	10.66	128.71	63.26	0.72	8.14	6.40	77,728.19
Los Angeles Maritime Institute	0.03	0.34	0.17	0.00	0.02	0.02	204.76
Conference Facilities at POC	0.63	7.56	3.71	0.04	0.48	0.38	4,564.70
San Pedro Park at 22nd & Miner St	0.43	5.20	2.56	0.03	0.33	0.26	3,142.27
Port of Call Restaurant Development	9.13	110.27	54.20	0.62	6.98	5.48	66,593.72

Port of Call Retail Development	6.30	76.07	37.38	0.43	4.81	3.78	45,936.71
S.S. Lane Victory	0.03	0.34	0.17	0.00	0.02	0.02	208.14
Ralph J Scott Fireboat Museum	0.03	0.34	0.17	0.00	0.02	0.02	208.14
Mercardo Warehouse 9 & 10 Reuse	0.64	7.67	3.77	0.04	0.49	0.38	4,632.24
Warehouse 9 & 10 Reuse	0.14	1.72	0.85	0.01	0.11	0.09	1,038.44
Red Car Museum	0.03	0.35	0.17	0.00	0.02	0.02	212.37
Red Car Maintenance Facility	0.13	1.59	0.78	0.01	0.10	0.08	957.57
Millennium Tugboat Office	0.10	1.18	0.58	0.01	0.07	0.06	711.28
Waterfront Promenade Town Sq	0.24	2.93	1.44	0.02	0.19	0.15	1,769.18
Fisherman Park	0.10	1.15	0.56	0.01	0.07	0.06	693.79
Research & Dev at Westways	0.82	9.91	4.87	0.06	0.63	0.49	5,984.33
Crowley Tugboat	0.03	0.33	0.16	0.00	0.02	0.02	197.36
Outer Harbor Park	0.14	1.71	0.84	0.01	0.11	0.09	1,034.79
<b>TOTALS (tons/year, unmitigated)</b>	<b>29.61</b>	<b>357.37</b>	<b>175.64</b>	<b>2.01</b>	<b>22.61</b>	<b>17.80</b>	<b>215,817.98</b>

Operational Settings:

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2020 Season: Annual

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
Cruise Ship Terminal Berth 91-93		1.46	passengers	8,580.00	12,526.80	120,633.08
Los Angeles Maritime Institute		0.50	employees	10.00	33.00	317.79
Conference Facilities at POC		1.30	attendees	300.00	780.00	7,084.35
San Pedro Park at 22nd & Miner St		66.44	acres	18.00	536.94	4,876.76
Port of Call Restaurant Development		94.36	1000 sq ft	125.00	11,243.75	103,352.54
Port of Call Retail Development		42.04	1000 sq ft	175.00	7,756.00	71,293.15

S.S. Lane Victory	5.40	1000 sq ft	10.00	36.00	323.03
Ralph J Scott Fireboat Museum	5.40	1000 sq ft	10.00	36.00	323.03
Mercardo Warehouse 9 & 10 Reuse	21.03	1000 sq ft	35.00	775.95	7,189.18
Warehouse 9 & 10 Reuse	1.29	1000 sq ft	35.00	173.95	1,611.65
Red Car Museum	5.40	1000 sq ft	10.00	36.00	329.60
Red Car Maintenance Facility	3.03	employees	37.00	111.74	1,486.14
Millennium Tugboat Office	0.56	employees	25.00	83.00	1,103.90
Waterfront Promenade Town Sq	20.00	acres	15.30	306.00	2,745.74
Fisherman Park	20.00	acres	6.00	120.00	1,076.76
Research & Dev at Westways	22.46	acres	13.00	1,035.06	9,287.59
Crowley Tugboat	0.57	employees	7.00	23.03	306.30
Outer Harbor Park	66.50	acres	6.00	178.98	1,605.99
				35,792.20	334,946.58

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	1.5	0.0	0.0	100.0
Light Truck < 3750 lbs	2.8	0.0	0.0	100.0
Light Truck 3751-5750 lbs	0.0	0.0	0.0	100.0
Med Truck 5751-8500 lbs	0.0	0.0	0.0	100.0
Lite-Heavy Truck 8501-10,000 lbs	0.0	0.0	0.0	100.0
Lite-Heavy Truck 10,001-14,000 lbs	0.0	0.0	0.0	100.0
Med-Heavy Truck 14,001-33,000 lbs	0.0	0.0	0.0	100.0
Heavy-Heavy Truck 33,001-60,000 lbs	35.2	0.0	0.0	100.0
Other Bus	59.2	0.0	0.0	100.0
Urban Bus	0.0	0.0	0.0	100.0
Motorcycle	0.0	0.0	0.0	100.0
School Bus	0.0	0.0	0.0	100.0
Motor Home	1.3	0.0	0.0	100.0

Travel Conditions



	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	12.7	7.0	9.5	13.3	7.4	8.9
Rural Trip Length (miles)	17.6	12.1	14.9	15.4	9.6	12.6
Trip speeds (mph)	30.0	30.0	30.0	30.0	30.0	30.0
% of Trips - Residential	32.9	18.0	49.1			
% of Trips - Commercial (by land use)						
Cruise Ship Terminal Berth 91-93				20.0	10.0	70.0
Los Angeles Maritime Institute				20.0	10.0	70.0
Conference Facilities at POC				5.0	2.5	92.5
San Pedro Park at 22nd & Miner St				5.0	2.5	92.5
Port of Call Restaurant Development				8.0	4.0	88.0
Port of Call Retail Development				8.0	4.0	88.0
S.S. Lane Victory				2.0	1.0	97.0
Ralph J Scott Fireboat Museum				2.0	1.0	97.0
Mercardo Warehouse 9 & 10 Reuse				10.0	5.0	85.0
Warehouse 9 & 10 Reuse				10.0	5.0	85.0
Red Car Museum				7.0	3.5	89.5
Red Car Maintenance Facility				100.0	0.0	0.0
Millennium Tugboat Office				100.0	0.0	0.0
Waterfront Promenade Town Sq				2.0	1.0	97.0
Fisherman Park				2.0	1.0	97.0
Research & Dev at Westways				2.0	1.0	97.0
Crowley Tugboat				100.0	0.0	0.0
Outer Harbor Park				2.0	1.0	97.0

Urbemis 2007 Version 9.2.4

## Combined Annual Emissions Reports (Tons/Year)

File Name: C:\Documents and Settings\mslavick\Application Data\Urbemis\Version9a\Projects\SPW\_Alternative\_4\_2022\_wkend.urb924

Project Name: San Pedro Waterfront Alternative 4 2022 Weekend Diesel PM

Project Location: South Coast AQMD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

## Summary Report:

## OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (tons/year, unmitigated)	30.46	367.92	180.81	2.07	23.25	18.31	222,170.07

## SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (tons/year, unmitigated)	30.46	367.92	180.81	2.07	23.25	18.31	222,170.07

## Operational Unmitigated Detail Report:

## OPERATIONAL EMISSION ESTIMATES Annual Tons Per Year, Unmitigated

<u>Source</u>	ROG	NOX	CO	SO2	PM10	PM25	CO2
Cruise Ship Terminal Berth 91-93	11.83	142.82	70.19	0.80	9.03	7.10	86,246.35
Los Angeles Maritime Institute	0.00	0.05	0.03	0.00	0.00	0.00	31.02
Conference Facilities at POC	0.31	3.78	1.86	0.02	0.24	0.19	2,282.35
San Pedro Park at 22nd & Miner St	0.96	11.59	5.70	0.07	0.73	0.58	6,998.74
Port of Call Restaurant Development	9.58	115.68	56.85	0.65	7.32	5.75	69,858.63

Port of Call Retail Development	5.98	72.15	35.46	0.41	4.56	3.59	43,573.54
S.S. Lane Victory	0.04	0.52	0.25	0.00	0.03	0.03	312.21
Ralph J Scott Fireboat Museum	0.04	0.52	0.25	0.00	0.03	0.03	312.21
Mercardo Warehouse 9 & 10 Reuse	0.60	7.28	3.58	0.04	0.46	0.36	4,394.05
Warehouse 9 & 10 Reuse	0.04	0.45	0.22	0.00	0.03	0.02	269.54
Red Car Museum	0.04	0.53	0.26	0.00	0.03	0.03	318.56
Red Car Maintenance Facility	0.13	1.59	0.78	0.01	0.10	0.08	960.74
Millennium Tugboat Office	0.02	0.20	0.10	0.00	0.01	0.01	119.98
Waterfront Promenade Town Sq	0.24	2.93	1.44	0.02	0.19	0.15	1,769.18
Fisherman Park	0.10	1.15	0.56	0.01	0.07	0.06	693.79
Research & Dev at Westways	0.23	2.80	1.37	0.02	0.18	0.14	1,688.12
Crowley Tugboat	0.00	0.06	0.03	0.00	0.00	0.00	34.19
Outer Harbor Park	0.32	3.82	1.88	0.02	0.24	0.19	2,306.87
<b>TOTALS (tons/year, unmitigated)</b>	<b>30.46</b>	<b>367.92</b>	<b>180.81</b>	<b>2.07</b>	<b>23.25</b>	<b>18.31</b>	<b>222,170.07</b>

Operational Settings:

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2020 Season: Annual

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
Cruise Ship Terminal Berth 91-93		1.46	passengers	8,580.00	13,899.60	133,853.15
Los Angeles Maritime Institute		0.50	employees	10.00	5.00	48.15
Conference Facilities at POC		1.30	attendees	300.00	390.00	3,542.17
San Pedro Park at 22nd & Miner St		66.44	acres	18.00	1,195.92	10,861.94
Port of Call Restaurant Development		94.36	1000 sq ft	125.00	11,795.00	108,419.64
Port of Call Retail Development		42.04	1000 sq ft	175.00	7,357.00	67,625.54

S.S. Lane Victory	5.40	1000 sq ft	10.00	54.00	484.54
Ralph J Scott Fireboat Museum	5.40	1000 sq ft	10.00	54.00	484.54
Mercardo Warehouse 9 & 10 Reuse	21.03	1000 sq ft	35.00	736.05	6,819.50
Warehouse 9 & 10 Reuse	1.29	1000 sq ft	35.00	45.15	418.31
Red Car Museum	5.40	1000 sq ft	10.00	54.00	494.40
Red Car Maintenance Facility	3.03	employees	37.00	112.11	1,491.06
Millennium Tugboat Office	0.56	employees	25.00	14.00	186.20
Waterfront Promenade Town Sq	20.00	acres	15.30	306.00	2,745.74
Fisherman Park	20.00	acres	6.00	120.00	1,076.76
Research & Dev at Westways	22.46	acres	13.00	291.98	2,619.94
Crowley Tugboat	0.57	employees	7.00	3.99	53.07
Outer Harbor Park	66.50	acres	6.00	399.00	3,580.23
				36,832.80	344,804.88

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	1.5	0.0	0.0	100.0
Light Truck < 3750 lbs	2.8	0.0	0.0	100.0
Light Truck 3751-5750 lbs	0.0	0.0	0.0	100.0
Med Truck 5751-8500 lbs	0.0	0.0	0.0	100.0
Lite-Heavy Truck 8501-10,000 lbs	0.0	0.0	0.0	100.0
Lite-Heavy Truck 10,001-14,000 lbs	0.0	0.0	0.0	100.0
Med-Heavy Truck 14,001-33,000 lbs	0.0	0.0	0.0	100.0
Heavy-Heavy Truck 33,001-60,000 lbs	35.2	0.0	0.0	100.0
Other Bus	59.2	0.0	0.0	100.0
Urban Bus	0.0	0.0	0.0	100.0
Motorcycle	0.0	0.0	0.0	100.0
School Bus	0.0	0.0	0.0	100.0
Motor Home	1.3	0.0	0.0	100.0

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	12.7	7.0	9.5	13.3	7.4	8.9
Rural Trip Length (miles)	17.6	12.1	14.9	15.4	9.6	12.6
Trip speeds (mph)	30.0	30.0	30.0	30.0	30.0	30.0
% of Trips - Residential	32.9	18.0	49.1			
% of Trips - Commercial (by land use)						
Cruise Ship Terminal Berth 91-93				20.0	10.0	70.0
Los Angeles Maritime Institute				20.0	10.0	70.0
Conference Facilities at POC				5.0	2.5	92.5
San Pedro Park at 22nd & Miner St				5.0	2.5	92.5
Port of Call Restaurant Development				8.0	4.0	88.0
Port of Call Retail Development				8.0	4.0	88.0
S.S. Lane Victory				2.0	1.0	97.0
Ralph J Scott Fireboat Museum				2.0	1.0	97.0
Mercardo Warehouse 9 & 10 Reuse				10.0	5.0	85.0
Warehouse 9 & 10 Reuse				10.0	5.0	85.0
Red Car Museum				7.0	3.5	89.5
Red Car Maintenance Facility				100.0	0.0	0.0
Millennium Tugboat Office				100.0	0.0	0.0
Waterfront Promenade Town Sq				2.0	1.0	97.0
Fisherman Park				2.0	1.0	97.0
Research & Dev at Westways				2.0	1.0	97.0
Crowley Tugboat				100.0	0.0	0.0
Outer Harbor Park				2.0	1.0	97.0

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Urbemis 2007 Version 9.2.4

## Combined Summer Emissions Reports (Pounds/Day)

File Name: C:\Documents and Settings\mslavick\Application Data\Urbemis\Version9a\Projects\SPW\_Alternative\_4\_2022\_wkdy.urb924

Project Name: San Pedro Waterfront Alternative 4 2022 Weekday Diesel PM

Project Location: South Coast AQMD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

## Summary Report:

## OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (lbs/day, unmitigated)	162.21	1,892.00	962.41	11.03	123.88	97.33	1,182,564.37

## SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (lbs/day, unmitigated)	162.21	1,892.00	962.41	11.03	123.88	97.33	1,182,564.37

## Operational Unmitigated Detail Report:

## OPERATIONAL EMISSION ESTIMATES Summer Pounds Per Day, Unmitigated

<u>Source</u>	ROG	NOX	CO	SO2	PM10	PM25	CO2
Cruise Ship Terminal Berth 91-93	58.42	681.42	346.62	3.97	44.62	35.05	425,907.89
Los Angeles Maritime Institute	0.15	1.80	0.91	0.01	0.12	0.09	1,121.99
Conference Facilities at POC	3.43	40.02	20.36	0.23	2.62	2.06	25,012.05
San Pedro Park at 22nd & Miner St	2.36	27.55	14.01	0.16	1.80	1.42	17,217.91
Port of Call Restaurant Development	50.05	583.81	296.96	3.40	38.22	30.03	364,897.11

Port of Call Retail Development	34.53	402.71	204.85	2.35	26.37	20.72	251,708.02
S.S. Lane Victory	0.16	1.82	0.93	0.01	0.12	0.09	1,140.48
Ralph J Scott Fireboat Museum	0.16	1.82	0.93	0.01	0.12	0.09	1,140.48
Mercardo Warehouse 9 & 10 Reuse	3.48	40.61	20.66	0.24	2.66	2.09	25,382.15
Warehouse 9 & 10 Reuse	0.78	9.10	4.63	0.05	0.60	0.47	5,690.09
Red Car Museum	0.16	1.86	0.95	0.01	0.12	0.10	1,163.68
Red Car Maintenance Facility	0.72	8.39	4.27	0.05	0.55	0.43	5,246.98
Millennium Tugboat Office	0.53	6.24	3.17	0.04	0.41	0.32	3,897.44
Waterfront Promenade Town Sq	1.33	15.51	7.89	0.09	1.02	0.80	9,694.12
Fisherman Park	0.52	6.08	3.09	0.04	0.40	0.31	3,801.62
Research & Dev at Westways	4.50	52.46	26.69	0.31	3.43	2.70	32,790.83
Crowley Tugboat	0.15	1.73	0.88	0.01	0.11	0.09	1,081.42
Outer Harbor Park	0.78	9.07	4.61	0.05	0.59	0.47	5,670.11
<b>TOTALS (lbs/day, unmitigated)</b>	<b>162.21</b>	<b>1,892.00</b>	<b>962.41</b>	<b>11.03</b>	<b>123.88</b>	<b>97.33</b>	<b>1,182,564.37</b>

Operational Settings:

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2020 Temperature (F): 80 Season: Summer

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
Cruise Ship Terminal Berth 91-93		1.46	passengers	8,580.00	12,526.80	120,633.08
Los Angeles Maritime Institute		0.50	employees	10.00	33.00	317.79
Conference Facilities at POC		1.30	attendees	300.00	780.00	7,084.35
San Pedro Park at 22nd & Miner St		66.44	acres	18.00	536.94	4,876.76
Port of Call Restaurant Development		94.36	1000 sq ft	125.00	11,243.75	103,352.54
Port of Call Retail Development		42.04	1000 sq ft	175.00	7,756.00	71,293.15

S.S. Lane Victory	5.40	1000 sq ft	10.00	36.00	323.03
Ralph J Scott Fireboat Museum	5.40	1000 sq ft	10.00	36.00	323.03
Mercardo Warehouse 9 & 10 Reuse	21.03	1000 sq ft	35.00	775.95	7,189.18
Warehouse 9 & 10 Reuse	1.29	1000 sq ft	35.00	173.95	1,611.65
Red Car Museum	5.40	1000 sq ft	10.00	36.00	329.60
Red Car Maintenance Facility	3.03	employees	37.00	111.74	1,486.14
Millennium Tugboat Office	0.56	employees	25.00	83.00	1,103.90
Waterfront Promenade Town Sq	20.00	acres	15.30	306.00	2,745.74
Fisherman Park	20.00	acres	6.00	120.00	1,076.76
Research & Dev at Westways	22.46	acres	13.00	1,035.06	9,287.59
Crowley Tugboat	0.57	employees	7.00	23.03	306.30
Outer Harbor Park	66.50	acres	6.00	178.98	1,605.99
				35,792.20	334,946.58

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	1.5	0.0	0.0	100.0
Light Truck < 3750 lbs	2.8	0.0	0.0	100.0
Light Truck 3751-5750 lbs	0.0	0.0	0.0	100.0
Med Truck 5751-8500 lbs	0.0	0.0	0.0	100.0
Lite-Heavy Truck 8501-10,000 lbs	0.0	0.0	0.0	100.0
Lite-Heavy Truck 10,001-14,000 lbs	0.0	0.0	0.0	100.0
Med-Heavy Truck 14,001-33,000 lbs	0.0	0.0	0.0	100.0
Heavy-Heavy Truck 33,001-60,000 lbs	35.2	0.0	0.0	100.0
Other Bus	59.2	0.0	0.0	100.0
Urban Bus	0.0	0.0	0.0	100.0
Motorcycle	0.0	0.0	0.0	100.0
School Bus	0.0	0.0	0.0	100.0
Motor Home	1.3	0.0	0.0	100.0

Travel Conditions



	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	12.7	7.0	9.5	13.3	7.4	8.9
Rural Trip Length (miles)	17.6	12.1	14.9	15.4	9.6	12.6
Trip speeds (mph)	30.0	30.0	30.0	30.0	30.0	30.0
% of Trips - Residential	32.9	18.0	49.1			
% of Trips - Commercial (by land use)						
Cruise Ship Terminal Berth 91-93				20.0	10.0	70.0
Los Angeles Maritime Institute				20.0	10.0	70.0
Conference Facilities at POC				5.0	2.5	92.5
San Pedro Park at 22nd & Miner St				5.0	2.5	92.5
Port of Call Restaurant Development				8.0	4.0	88.0
Port of Call Retail Development				8.0	4.0	88.0
S.S. Lane Victory				2.0	1.0	97.0
Ralph J Scott Fireboat Museum				2.0	1.0	97.0
Mercardo Warehouse 9 & 10 Reuse				10.0	5.0	85.0
Warehouse 9 & 10 Reuse				10.0	5.0	85.0
Red Car Museum				7.0	3.5	89.5
Red Car Maintenance Facility				100.0	0.0	0.0
Millennium Tugboat Office				100.0	0.0	0.0
Waterfront Promenade Town Sq				2.0	1.0	97.0
Fisherman Park				2.0	1.0	97.0
Research & Dev at Westways				2.0	1.0	97.0
Crowley Tugboat				100.0	0.0	0.0
Outer Harbor Park				2.0	1.0	97.0

5/27/2008 12:13:38 PM

Urbemis 2007 Version 9.2.4

## Combined Summer Emissions Reports (Pounds/Day)

File Name: C:\Documents and Settings\mslavick\Application Data\Urbemis\Version9a\Projects\SPW\_Alternative\_4\_2022\_wkend.urb924

Project Name: San Pedro Waterfront Alternative 4 2022 Weekend Diesel PM

Project Location: South Coast AQMD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

## Summary Report:

## OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (lbs/day, unmitigated)	166.98	1,947.70	990.72	11.36	127.53	100.17	1,217,370.20

## SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (lbs/day, unmitigated)	166.98	1,947.70	990.72	11.36	127.53	100.17	1,217,370.20

## Operational Unmitigated Detail Report:

## OPERATIONAL EMISSION ESTIMATES Summer Pounds Per Day, Unmitigated

<u>Source</u>	ROG	NOX	CO	SO2	PM10	PM25	CO2
Junior high school	64.83	756.10	384.60	4.40	49.51	38.89	472,582.72
High school	0.02	0.27	0.14	0.00	0.02	0.01	170.00
Junior college (2 yrs)	1.72	20.01	10.18	0.12	1.31	1.03	12,506.02
City park	5.26	61.36	31.21	0.36	4.02	3.16	38,349.24
Quality resturant	52.51	612.43	311.52	3.57	40.10	31.50	382,787.02

High turnover (sit-down) rest.	32.75	382.00	194.31	2.22	25.01	19.65	238,759.15
General office building	0.23	2.74	1.39	0.02	0.18	0.14	1,710.73
Office park	0.23	2.74	1.39	0.02	0.18	0.14	1,710.73
Government office building	3.30	38.52	19.59	0.22	2.52	1.98	24,076.98
Government (civic center)	0.20	2.36	1.20	0.01	0.15	0.12	1,476.90
Medical office building	0.24	2.79	1.42	0.02	0.18	0.14	1,745.52
General light industry	0.72	8.42	4.28	0.05	0.55	0.43	5,264.36
Industrial park	0.09	1.05	0.54	0.01	0.07	0.05	657.40
Waterfront Town Sq	1.33	15.51	7.89	0.09	1.02	0.80	9,694.12
Fisherman Park	0.52	6.08	3.09	0.04	0.40	0.31	3,801.62
Research Dev	1.27	14.80	7.53	0.09	0.97	0.76	9,249.96
Crowley Tugboat	0.03	0.30	0.15	0.00	0.02	0.02	187.36
Outer Harbor Park	1.73	20.22	10.29	0.12	1.32	1.04	12,640.37
<b>TOTALS (lbs/day, unmitigated)</b>	<b>166.98</b>	<b>1,947.70</b>	<b>990.72</b>	<b>11.36</b>	<b>127.53</b>	<b>100.17</b>	<b>1,217,370.20</b>

Operational Settings:

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2020 Temperature (F): 80 Season: Summer

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
Junior high school		1.62	students	8,580.00	13,899.60	133,853.15
High school		0.50	students	10.00	5.00	48.15
Junior college (2 yrs)		1.30	students	300.00	390.00	3,542.17
City park		66.44	acres	18.00	1,195.92	10,861.94
Quality resturant		94.36	1000 sq ft	125.00	11,795.00	108,419.64
High turnover (sit-down) rest.		42.04	1000 sq ft	175.00	7,357.00	67,625.54

General office building	5.40	1000 sq ft	10.00	54.00	484.54
Office park	5.40	1000 sq ft	10.00	54.00	484.54
Government office building	21.03	1000 sq ft	35.00	736.05	6,819.50
Government (civic center)	1.29	1000 sq ft	35.00	45.15	418.31
Medical office building	5.40	1000 sq ft	10.00	54.00	494.40
General light industry	3.03	employees	37.00	112.11	1,491.06
Industrial park	0.56	employees	25.00	14.00	186.20
Waterfront Town Sq	20.00	acres	15.30	306.00	2,745.74
Fisherman Park	20.00	acres	6.00	120.00	1,076.76
Research Dev	22.46	acres	13.00	291.98	2,619.94
Crowley Tugboat	0.57	unknown	7.00	3.99	53.07
Outer Harbor Park	66.50	acres	6.00	399.00	3,580.23
				36,832.80	344,804.88

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	1.5	0.0	0.0	100.0
Light Truck < 3750 lbs	2.8	0.0	0.0	100.0
Light Truck 3751-5750 lbs	0.0	0.0	0.0	100.0
Med Truck 5751-8500 lbs	0.0	0.0	0.0	100.0
Lite-Heavy Truck 8501-10,000 lbs	0.0	0.0	0.0	100.0
Lite-Heavy Truck 10,001-14,000 lbs	0.0	0.0	0.0	100.0
Med-Heavy Truck 14,001-33,000 lbs	0.0	0.0	0.0	100.0
Heavy-Heavy Truck 33,001-60,000 lbs	35.2	0.0	0.0	100.0
Other Bus	59.2	0.0	0.0	100.0
Urban Bus	0.0	0.0	0.0	100.0
Motorcycle	0.0	0.0	0.0	100.0
School Bus	0.0	0.0	0.0	100.0
Motor Home	1.3	0.0	0.0	100.0

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	12.7	7.0	9.5	13.3	7.4	8.9
Rural Trip Length (miles)	17.6	12.1	14.9	15.4	9.6	12.6
Trip speeds (mph)	30.0	30.0	30.0	30.0	30.0	30.0
% of Trips - Residential	32.9	18.0	49.1			
% of Trips - Commercial (by land use)						
Cruise Ship Terminal Berth 91-93				20.0	10.0	70.0
Los Angeles Maritime Institute				20.0	10.0	70.0
Conference Facilities at POC				5.0	2.5	92.5
San Pedro Park at 22nd & Miner St				5.0	2.5	92.5
Port of Call Restaurant Development				8.0	4.0	88.0
Port of Call Retail Development				8.0	4.0	88.0
S.S. Lane Victory				2.0	1.0	97.0
Ralph J Scott Fireboat Museum				2.0	1.0	97.0
Mercardo Warehouse 9 & 10 Reuse				10.0	5.0	85.0
Warehouse 9 & 10 Reuse				10.0	5.0	85.0
Red Car Museum				7.0	3.5	89.5
Red Car Maintenance Facility				100.0	0.0	0.0
Millennium Tugboat Office				100.0	0.0	0.0
Waterfront Promenade Town Sq				2.0	1.0	97.0
Fisherman Park				2.0	1.0	97.0
Research & Dev at Westways				2.0	1.0	97.0
Crowley Tugboat				100.0	0.0	0.0
Outer Harbor Park				2.0	1.0	97.0

Urbemis 2007 Version 9.2.4

## Combined Annual Emissions Reports (Tons/Year)

File Name: C:\Documents and Settings\mslavick\Application Data\Urbemis\Version9a\Projects\SPW\_Alternative\_4\_2037\_wkdy.urb924

Project Name: San Pedro Waterfront Alternative 4 2037 Weekday Diesel PM

Project Location: South Coast AQMD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

## Summary Report:

## OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (tons/year, unmitigated)	21.97	200.15	141.66	2.13	18.18	13.48	227,751.48

## SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (tons/year, unmitigated)	21.97	200.15	141.66	2.13	18.18	13.48	227,751.48

## Operational Unmitigated Detail Report:

## OPERATIONAL EMISSION ESTIMATES Annual Tons Per Year, Unmitigated

<u>Source</u>	ROG	NOX	CO	SO2	PM10	PM25	CO2
Cruise Ship Terminal Berth 91-93	8.65	78.81	55.78	0.84	7.15	5.32	89,676.65
Los Angeles Maritime Institute	0.02	0.18	0.13	0.00	0.02	0.01	204.74
Conference Facilities at POC	0.44	4.01	2.84	0.04	0.36	0.27	4,564.20
San Pedro Park at 22nd & Miner St	0.30	2.76	1.95	0.03	0.25	0.19	3,141.93
Port of Call Restaurant Development	6.42	58.52	41.42	0.62	5.31	3.95	66,586.50

Port of Call Retail Development	4.43	40.37	28.57	0.43	3.66	2.72	45,931.73
S.S. Lane Victory	0.02	0.18	0.13	0.00	0.02	0.01	208.12
Ralph J Scott Fireboat Museum	0.02	0.18	0.13	0.00	0.02	0.01	208.12
Mercardo Warehouse 9 & 10 Reuse	0.45	4.07	2.88	0.04	0.37	0.27	4,631.74
Warehouse 9 & 10 Reuse	0.10	0.91	0.65	0.01	0.08	0.06	1,038.33
Red Car Museum	0.02	0.19	0.13	0.00	0.02	0.01	212.35
Red Car Maintenance Facility	0.09	0.84	0.60	0.01	0.08	0.06	957.47
Millennium Tugboat Office	0.07	0.63	0.44	0.01	0.06	0.04	711.20
Waterfront Promenade Town Sq	0.17	1.55	1.10	0.02	0.14	0.10	1,768.98
Fisherman Park	0.07	0.61	0.43	0.01	0.06	0.04	693.72
Research & Dev at Westways	0.58	5.26	3.72	0.06	0.48	0.35	5,983.68
Crowley Tugboat	0.02	0.17	0.12	0.00	0.02	0.01	197.34
Outer Harbor Park	0.10	0.91	0.64	0.01	0.08	0.06	1,034.68
<b>TOTALS (tons/year, unmitigated)</b>	<b>21.97</b>	<b>200.15</b>	<b>141.66</b>	<b>2.13</b>	<b>18.18</b>	<b>13.48</b>	<b>227,751.48</b>

Operational Settings:

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2035 Season: Annual

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
Cruise Ship Terminal Berth 91-93		1.46	passengers	9,900.00	14,454.00	139,192.02
Los Angeles Maritime Institute		0.50	employees	10.00	33.00	317.79
Conference Facilities at POC		1.30	attendees	300.00	780.00	7,084.35
San Pedro Park at 22nd & Miner St		66.44	acres	18.00	536.94	4,876.76
Port of Call Restaurant Development		94.36	1000 sq ft	125.00	11,243.75	103,352.54
Port of Call Retail Development		42.04	1000 sq ft	175.00	7,756.00	71,293.15

S.S. Lane Victory	5.40	1000 sq ft	10.00	36.00	323.03
Ralph J Scott Fireboat Museum	5.40	1000 sq ft	10.00	36.00	323.03
Mercardo Warehouse 9 & 10 Reuse	21.03	1000 sq ft	35.00	775.95	7,189.18
Warehouse 9 & 10 Reuse	1.29	1000 sq ft	35.00	173.95	1,611.65
Red Car Museum	5.40	1000 sq ft	10.00	36.00	329.60
Red Car Maintenance Facility	3.03	employees	37.00	111.74	1,486.14
Millennium Tugboat Office	0.56	employees	25.00	83.00	1,103.90
Waterfront Promenade Town Sq	20.00	acres	15.30	306.00	2,745.74
Fisherman Park	20.00	acres	6.00	120.00	1,076.76
Research & Dev at Westways	22.46	acres	13.00	1,035.06	9,287.59
Crowley Tugboat	0.57	employees	7.00	23.03	306.30
Outer Harbor Park	66.50	acres	6.00	178.98	1,605.99
				37,719.40	353,505.52

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	1.5	0.0	0.0	100.0
Light Truck < 3750 lbs	2.8	0.0	0.0	100.0
Light Truck 3751-5750 lbs	0.0	0.0	0.0	100.0
Med Truck 5751-8500 lbs	0.0	0.0	0.0	100.0
Lite-Heavy Truck 8501-10,000 lbs	0.0	0.0	0.0	100.0
Lite-Heavy Truck 10,001-14,000 lbs	0.0	0.0	0.0	100.0
Med-Heavy Truck 14,001-33,000 lbs	0.0	0.0	0.0	100.0
Heavy-Heavy Truck 33,001-60,000 lbs	35.2	0.0	0.0	100.0
Other Bus	59.2	0.0	0.0	100.0
Urban Bus	0.0	0.0	0.0	100.0
Motorcycle	0.0	0.0	0.0	100.0
School Bus	0.0	0.0	0.0	100.0
Motor Home	1.3	0.0	0.0	100.0

Travel Conditions



	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	12.7	7.0	9.5	13.3	7.4	8.9
Rural Trip Length (miles)	17.6	12.1	14.9	15.4	9.6	12.6
Trip speeds (mph)	30.0	30.0	30.0	30.0	30.0	30.0
% of Trips - Residential	32.9	18.0	49.1			
% of Trips - Commercial (by land use)						
Cruise Ship Terminal Berth 91-93				20.0	10.0	70.0
Los Angeles Maritime Institute				20.0	10.0	70.0
Conference Facilities at POC				5.0	2.5	92.5
San Pedro Park at 22nd & Miner St				5.0	2.5	92.5
Port of Call Restaurant Development				8.0	4.0	88.0
Port of Call Retail Development				8.0	4.0	88.0
S.S. Lane Victory				2.0	1.0	97.0
Ralph J Scott Fireboat Museum				2.0	1.0	97.0
Mercardo Warehouse 9 & 10 Reuse				10.0	5.0	85.0
Warehouse 9 & 10 Reuse				10.0	5.0	85.0
Red Car Museum				7.0	3.5	89.5
Red Car Maintenance Facility				100.0	0.0	0.0
Millennium Tugboat Office				100.0	0.0	0.0
Waterfront Promenade Town Sq				2.0	1.0	97.0
Fisherman Park				2.0	1.0	97.0
Research & Dev at Westways				2.0	1.0	97.0
Crowley Tugboat				100.0	0.0	0.0
Outer Harbor Park				2.0	1.0	97.0

Urbemis 2007 Version 9.2.4

## Combined Annual Emissions Reports (Tons/Year)

File Name: C:\Documents and Settings\mslavick\Application Data\Urbemis\Version9a\Projects\SPW\_Alternative\_4\_2037\_wkend.urb924

Project Name: San Pedro Waterfront Alternative 4 2037 Weekend Diesel PM

Project Location: South Coast AQMD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

## Summary Report:

## OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (tons/year, unmitigated)	21.74	198.25	140.30	2.11	17.97	13.38	225,585.62

## SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (tons/year, unmitigated)	21.74	198.25	140.30	2.11	17.97	13.38	225,585.62

## Operational Unmitigated Detail Report:

## OPERATIONAL EMISSION ESTIMATES Annual Tons Per Year, Unmitigated

<u>Source</u>	ROG	NOX	CO	SO2	PM10	PM25	CO2
Cruise Ship Terminal Berth 91-93	8.65	78.81	55.78	0.84	7.15	5.32	89,676.65
Los Angeles Maritime Institute	0.00	0.03	0.02	0.00	0.00	0.00	31.02
Conference Facilities at POC	0.22	2.01	1.42	0.02	0.18	0.14	2,282.10
San Pedro Park at 22nd & Miner St	0.67	6.15	4.35	0.07	0.56	0.41	6,997.98
Port of Call Restaurant Development	6.74	61.39	43.45	0.65	5.57	4.14	69,851.06

Port of Call Retail Development	4.20	38.29	27.10	0.41	3.47	2.58	43,568.82
S.S. Lane Victory	0.03	0.27	0.19	0.00	0.02	0.02	312.17
Ralph J Scott Fireboat Museum	0.03	0.27	0.19	0.00	0.02	0.02	312.17
Mercardo Warehouse 9 & 10 Reuse	0.42	3.86	2.73	0.04	0.35	0.26	4,393.57
Warehouse 9 & 10 Reuse	0.03	0.24	0.17	0.00	0.02	0.02	269.51
Red Car Museum	0.03	0.28	0.20	0.00	0.03	0.02	318.52
Red Car Maintenance Facility	0.09	0.84	0.60	0.01	0.08	0.06	960.64
Millennium Tugboat Office	0.01	0.11	0.07	0.00	0.01	0.01	119.96
Waterfront Promenade Town Sq	0.17	1.55	1.10	0.02	0.14	0.10	1,768.98
Fisherman Park	0.07	0.61	0.43	0.01	0.06	0.04	693.72
Research & Dev at Westways	0.16	1.48	1.05	0.02	0.13	0.10	1,687.94
Crowley Tugboat	0.00	0.03	0.02	0.00	0.00	0.00	34.19
Outer Harbor Park	0.22	2.03	1.43	0.02	0.18	0.14	2,306.62
<b>TOTALS (tons/year, unmitigated)</b>	<b>21.74</b>	<b>198.25</b>	<b>140.30</b>	<b>2.11</b>	<b>17.97</b>	<b>13.38</b>	<b>225,585.62</b>

Operational Settings:

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2035 Season: Annual

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
Cruise Ship Terminal Berth 91-93		1.46	passengers	9,900.00	14,454.00	139,192.02
Los Angeles Maritime Institute		0.50	employees	10.00	5.00	48.15
Conference Facilities at POC		1.30	attendees	300.00	390.00	3,542.17
San Pedro Park at 22nd & Miner St		66.44	acres	18.00	1,195.92	10,861.94
Port of Call Restaurant Development		94.36	1000 sq ft	125.00	11,795.00	108,419.64
Port of Call Retail Development		42.04	1000 sq ft	175.00	7,357.00	67,625.54

S.S. Lane Victory	5.40	1000 sq ft	10.00	54.00	484.54
Ralph J Scott Fireboat Museum	5.40	1000 sq ft	10.00	54.00	484.54
Mercardo Warehouse 9 & 10 Reuse	21.03	1000 sq ft	35.00	736.05	6,819.50
Warehouse 9 & 10 Reuse	1.29	1000 sq ft	35.00	45.15	418.31
Red Car Museum	5.40	1000 sq ft	10.00	54.00	494.40
Red Car Maintenance Facility	3.03	employees	37.00	112.11	1,491.06
Millennium Tugboat Office	0.56	employees	25.00	14.00	186.20
Waterfront Promenade Town Sq	20.00	acres	15.30	306.00	2,745.74
Fisherman Park	20.00	acres	6.00	120.00	1,076.76
Research & Dev at Westways	22.46	acres	13.00	291.98	2,619.94
Crowley Tugboat	0.57	employees	7.00	3.99	53.07
Outer Harbor Park	66.50	acres	6.00	399.00	3,580.23
				37,387.20	350,143.75

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	1.5	0.0	0.0	100.0
Light Truck < 3750 lbs	2.8	0.0	0.0	100.0
Light Truck 3751-5750 lbs	0.0	0.0	0.0	100.0
Med Truck 5751-8500 lbs	0.0	0.0	0.0	100.0
Lite-Heavy Truck 8501-10,000 lbs	0.0	0.0	0.0	100.0
Lite-Heavy Truck 10,001-14,000 lbs	0.0	0.0	0.0	100.0
Med-Heavy Truck 14,001-33,000 lbs	0.0	0.0	0.0	100.0
Heavy-Heavy Truck 33,001-60,000 lbs	35.2	0.0	0.0	100.0
Other Bus	59.2	0.0	0.0	100.0
Urban Bus	0.0	0.0	0.0	100.0
Motorcycle	0.0	0.0	0.0	100.0
School Bus	0.0	0.0	0.0	100.0
Motor Home	1.3	0.0	0.0	100.0

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	12.7	7.0	9.5	13.3	7.4	8.9
Rural Trip Length (miles)	17.6	12.1	14.9	15.4	9.6	12.6
Trip speeds (mph)	30.0	30.0	30.0	30.0	30.0	30.0
% of Trips - Residential	32.9	18.0	49.1			
% of Trips - Commercial (by land use)						
Cruise Ship Terminal Berth 91-93				20.0	10.0	70.0
Los Angeles Maritime Institute				20.0	10.0	70.0
Conference Facilities at POC				5.0	2.5	92.5
San Pedro Park at 22nd & Miner St				5.0	2.5	92.5
Port of Call Restaurant Development				8.0	4.0	88.0
Port of Call Retail Development				8.0	4.0	88.0
S.S. Lane Victory				2.0	1.0	97.0
Ralph J Scott Fireboat Museum				2.0	1.0	97.0
Mercardo Warehouse 9 & 10 Reuse				10.0	5.0	85.0
Warehouse 9 & 10 Reuse				10.0	5.0	85.0
Red Car Museum				7.0	3.5	89.5
Red Car Maintenance Facility				100.0	0.0	0.0
Millennium Tugboat Office				100.0	0.0	0.0
Waterfront Promenade Town Sq				2.0	1.0	97.0
Fisherman Park				2.0	1.0	97.0
Research & Dev at Westways				2.0	1.0	97.0
Crowley Tugboat				100.0	0.0	0.0
Outer Harbor Park				2.0	1.0	97.0

5/27/2008 12:16:34 PM

Urbemis 2007 Version 9.2.4

## Combined Summer Emissions Reports (Pounds/Day)

File Name: C:\Documents and Settings\mslavick\Application Data\Urbemis\Version9a\Projects\SPW\_Alternative\_4\_2037\_wkdy.urb924

Project Name: San Pedro Waterfront Alternative 4 2037 Weekday Diesel PM

Project Location: South Coast AQMD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

## Summary Report:

## OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (lbs/day, unmitigated)	120.36	1,059.63	776.23	11.64	99.50	73.99	1,247,953.34

## SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (lbs/day, unmitigated)	120.36	1,059.63	776.23	11.64	99.50	73.99	1,247,953.34

## Operational Unmitigated Detail Report:

## OPERATIONAL EMISSION ESTIMATES Summer Pounds Per Day, Unmitigated

<u>Source</u>	ROG	NOX	CO	SO2	PM10	PM25	CO2
Cruise Ship Terminal Berth 91-93	47.39	417.22	305.64	4.58	39.19	29.14	491,378.91
Los Angeles Maritime Institute	0.11	0.95	0.70	0.01	0.09	0.07	1,121.87
Conference Facilities at POC	2.41	21.24	15.56	0.23	1.99	1.48	25,009.34
San Pedro Park at 22nd & Miner St	1.66	14.62	10.71	0.16	1.37	1.02	17,216.04
Port of Call Restaurant Development	35.19	309.80	226.94	3.40	29.10	21.63	364,857.55

Port of Call Retail Development	24.27	213.70	156.55	2.35	20.07	14.92	251,680.73
S.S. Lane Victory	0.11	0.97	0.71	0.01	0.09	0.07	1,140.36
Ralph J Scott Fireboat Museum	0.11	0.97	0.71	0.01	0.09	0.07	1,140.36
Mercardo Warehouse 9 & 10 Reuse	2.45	21.55	15.79	0.24	2.02	1.50	25,379.40
Warehouse 9 & 10 Reuse	0.55	4.83	3.54	0.05	0.45	0.34	5,689.47
Red Car Museum	0.11	0.99	0.72	0.01	0.09	0.07	1,163.55
Red Car Maintenance Facility	0.51	4.45	3.26	0.05	0.42	0.31	5,246.41
Millennium Tugboat Office	0.38	3.31	2.42	0.04	0.31	0.23	3,897.01
Waterfront Promenade Town Sq	0.93	8.23	6.03	0.09	0.77	0.57	9,693.07
Fisherman Park	0.37	3.23	2.36	0.04	0.30	0.23	3,801.20
Research & Dev at Westways	3.16	27.84	20.39	0.31	2.61	1.94	32,787.28
Crowley Tugboat	0.10	0.92	0.67	0.01	0.09	0.06	1,081.30
Outer Harbor Park	0.55	4.81	3.53	0.05	0.45	0.34	5,669.49
<b>TOTALS (lbs/day, unmitigated)</b>	<b>120.36</b>	<b>1,059.63</b>	<b>776.23</b>	<b>11.64</b>	<b>99.50</b>	<b>73.99</b>	<b>1,247,953.34</b>

Operational Settings:

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2035 Temperature (F): 80 Season: Summer

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
Cruise Ship Terminal Berth 91-93		1.46	passengers	9,900.00	14,454.00	139,192.02
Los Angeles Maritime Institute		0.50	employees	10.00	33.00	317.79
Conference Facilities at POC		1.30	attendees	300.00	780.00	7,084.35
San Pedro Park at 22nd & Miner St		66.44	acres	18.00	536.94	4,876.76
Port of Call Restaurant Development		94.36	1000 sq ft	125.00	11,243.75	103,352.54
Port of Call Retail Development		42.04	1000 sq ft	175.00	7,756.00	71,293.15

S.S. Lane Victory	5.40	1000 sq ft	10.00	36.00	323.03
Ralph J Scott Fireboat Museum	5.40	1000 sq ft	10.00	36.00	323.03
Mercardo Warehouse 9 & 10 Reuse	21.03	1000 sq ft	35.00	775.95	7,189.18
Warehouse 9 & 10 Reuse	1.29	1000 sq ft	35.00	173.95	1,611.65
Red Car Museum	5.40	1000 sq ft	10.00	36.00	329.60
Red Car Maintenance Facility	3.03	employees	37.00	111.74	1,486.14
Millennium Tugboat Office	0.56	employees	25.00	83.00	1,103.90
Waterfront Promenade Town Sq	20.00	acres	15.30	306.00	2,745.74
Fisherman Park	20.00	acres	6.00	120.00	1,076.76
Research & Dev at Westways	22.46	acres	13.00	1,035.06	9,287.59
Crowley Tugboat	0.57	employees	7.00	23.03	306.30
Outer Harbor Park	66.50	acres	6.00	178.98	1,605.99
				37,719.40	353,505.52

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	1.5	0.0	0.0	100.0
Light Truck < 3750 lbs	2.8	0.0	0.0	100.0
Light Truck 3751-5750 lbs	0.0	0.0	0.0	100.0
Med Truck 5751-8500 lbs	0.0	0.0	0.0	100.0
Lite-Heavy Truck 8501-10,000 lbs	0.0	0.0	0.0	100.0
Lite-Heavy Truck 10,001-14,000 lbs	0.0	0.0	0.0	100.0
Med-Heavy Truck 14,001-33,000 lbs	0.0	0.0	0.0	100.0
Heavy-Heavy Truck 33,001-60,000 lbs	35.2	0.0	0.0	100.0
Other Bus	59.2	0.0	0.0	100.0
Urban Bus	0.0	0.0	0.0	100.0
Motorcycle	0.0	0.0	0.0	100.0
School Bus	0.0	0.0	0.0	100.0
Motor Home	1.3	0.0	0.0	100.0

Travel Conditions



	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	12.7	7.0	9.5	13.3	7.4	8.9
Rural Trip Length (miles)	17.6	12.1	14.9	15.4	9.6	12.6
Trip speeds (mph)	30.0	30.0	30.0	30.0	30.0	30.0
% of Trips - Residential	32.9	18.0	49.1			
% of Trips - Commercial (by land use)						
Cruise Ship Terminal Berth 91-93				20.0	10.0	70.0
Los Angeles Maritime Institute				20.0	10.0	70.0
Conference Facilities at POC				5.0	2.5	92.5
San Pedro Park at 22nd & Miner St				5.0	2.5	92.5
Port of Call Restaurant Development				8.0	4.0	88.0
Port of Call Retail Development				8.0	4.0	88.0
S.S. Lane Victory				2.0	1.0	97.0
Ralph J Scott Fireboat Museum				2.0	1.0	97.0
Mercardo Warehouse 9 & 10 Reuse				10.0	5.0	85.0
Warehouse 9 & 10 Reuse				10.0	5.0	85.0
Red Car Museum				7.0	3.5	89.5
Red Car Maintenance Facility				100.0	0.0	0.0
Millennium Tugboat Office				100.0	0.0	0.0
Waterfront Promenade Town Sq				2.0	1.0	97.0
Fisherman Park				2.0	1.0	97.0
Research & Dev at Westways				2.0	1.0	97.0
Crowley Tugboat				100.0	0.0	0.0
Outer Harbor Park				2.0	1.0	97.0

## Combined Summer Emissions Reports (Pounds/Day)

File Name: C:\Documents and Settings\mslavick\Application Data\Urbemis\Version9a\Projects\SPW\_Alternative\_4\_2037\_wkend.urb924

Project Name: San Pedro Waterfront Alternative 4 2037 Weekend Diesel PM

Project Location: South Coast AQMD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

## Summary Report:

## OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (lbs/day, unmitigated)	119.20	1,049.52	768.84	11.54	98.58	73.30	1,236,085.64

## SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (lbs/day, unmitigated)	119.20	1,049.52	768.84	11.54	98.58	73.30	1,236,085.64

## Operational Unmitigated Detail Report:

## OPERATIONAL EMISSION ESTIMATES Summer Pounds Per Day, Unmitigated

<u>Source</u>	ROG	NOX	CO	SO2	PM10	PM25	CO2
Cruise Ship Terminal Berth 91-93	47.39	417.22	305.64	4.58	39.19	29.14	491,378.91
Los Angeles Maritime Institute	0.02	0.14	0.11	0.00	0.01	0.01	169.98
Conference Facilities at POC	1.21	10.62	7.78	0.12	1.00	0.74	12,504.67
San Pedro Park at 22nd & Miner St	3.70	32.56	23.85	0.36	3.06	2.27	38,345.09
Port of Call Restaurant Development	36.91	324.98	238.07	3.57	30.52	22.70	382,745.52

Port of Call Retail Development	23.02	202.70	148.49	2.22	19.04	14.16	238,733.26
S.S. Lane Victory	0.16	1.45	1.06	0.02	0.14	0.10	1,710.54
Ralph J Scott Fireboat Museum	0.16	1.45	1.06	0.02	0.14	0.10	1,710.54
Mercardo Warehouse 9 & 10 Reuse	2.32	20.44	14.97	0.22	1.92	1.43	24,074.37
Warehouse 9 & 10 Reuse	0.14	1.25	0.92	0.01	0.12	0.09	1,476.74
Red Car Museum	0.17	1.48	1.09	0.02	0.14	0.10	1,745.33
Red Car Maintenance Facility	0.51	4.47	3.27	0.05	0.42	0.31	5,263.79
Millennium Tugboat Office	0.06	0.56	0.41	0.01	0.05	0.04	657.33
Waterfront Promenade Town Sq	0.93	8.23	6.03	0.09	0.77	0.57	9,693.07
Fisherman Park	0.37	3.23	2.36	0.04	0.30	0.23	3,801.20
Research & Dev at Westways	0.89	7.85	5.75	0.09	0.74	0.55	9,248.96
Crowley Tugboat	0.02	0.16	0.12	0.00	0.01	0.01	187.34
Outer Harbor Park	1.22	10.73	7.86	0.12	1.01	0.75	12,639.00
<b>TOTALS (lbs/day, unmitigated)</b>	<b>119.20</b>	<b>1,049.52</b>	<b>768.84</b>	<b>11.54</b>	<b>98.58</b>	<b>73.30</b>	<b>1,236,085.64</b>

Operational Settings:

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2035 Temperature (F): 80 Season: Summer

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
Cruise Ship Terminal Berth 91-93		1.46	passengers	9,900.00	14,454.00	139,192.02
Los Angeles Maritime Institute		0.50	employees	10.00	5.00	48.15
Conference Facilities at POC		1.30	attendees	300.00	390.00	3,542.17
San Pedro Park at 22nd & Miner St		66.44	acres	18.00	1,195.92	10,861.94
Port of Call Restaurant Development		94.36	1000 sq ft	125.00	11,795.00	108,419.64
Port of Call Retail Development		42.04	1000 sq ft	175.00	7,357.00	67,625.54

S.S. Lane Victory	5.40	1000 sq ft	10.00	54.00	484.54
Ralph J Scott Fireboat Museum	5.40	1000 sq ft	10.00	54.00	484.54
Mercardo Warehouse 9 & 10 Reuse	21.03	1000 sq ft	35.00	736.05	6,819.50
Warehouse 9 & 10 Reuse	1.29	1000 sq ft	35.00	45.15	418.31
Red Car Museum	5.40	1000 sq ft	10.00	54.00	494.40
Red Car Maintenance Facility	3.03	employees	37.00	112.11	1,491.06
Millennium Tugboat Office	0.56	employees	25.00	14.00	186.20
Waterfront Promenade Town Sq	20.00	acres	15.30	306.00	2,745.74
Fisherman Park	20.00	acres	6.00	120.00	1,076.76
Research & Dev at Westways	22.46	acres	13.00	291.98	2,619.94
Crowley Tugboat	0.57	employees	7.00	3.99	53.07
Outer Harbor Park	66.50	acres	6.00	399.00	3,580.23
				37,387.20	350,143.75

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	1.5	0.0	0.0	100.0
Light Truck < 3750 lbs	2.8	0.0	0.0	100.0
Light Truck 3751-5750 lbs	0.0	0.0	0.0	100.0
Med Truck 5751-8500 lbs	0.0	0.0	0.0	100.0
Lite-Heavy Truck 8501-10,000 lbs	0.0	0.0	0.0	100.0
Lite-Heavy Truck 10,001-14,000 lbs	0.0	0.0	0.0	100.0
Med-Heavy Truck 14,001-33,000 lbs	0.0	0.0	0.0	100.0
Heavy-Heavy Truck 33,001-60,000 lbs	35.2	0.0	0.0	100.0
Other Bus	59.2	0.0	0.0	100.0
Urban Bus	0.0	0.0	0.0	100.0
Motorcycle	0.0	0.0	0.0	100.0
School Bus	0.0	0.0	0.0	100.0
Motor Home	1.3	0.0	0.0	100.0

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	12.7	7.0	9.5	13.3	7.4	8.9
Rural Trip Length (miles)	17.6	12.1	14.9	15.4	9.6	12.6
Trip speeds (mph)	30.0	30.0	30.0	30.0	30.0	30.0
% of Trips - Residential	32.9	18.0	49.1			
% of Trips - Commercial (by land use)						
Cruise Ship Terminal Berth 91-93				20.0	10.0	70.0
Los Angeles Maritime Institute				20.0	10.0	70.0
Conference Facilities at POC				5.0	2.5	92.5
San Pedro Park at 22nd & Miner St				5.0	2.5	92.5
Port of Call Restaurant Development				8.0	4.0	88.0
Port of Call Retail Development				8.0	4.0	88.0
S.S. Lane Victory				2.0	1.0	97.0
Ralph J Scott Fireboat Museum				2.0	1.0	97.0
Mercardo Warehouse 9 & 10 Reuse				10.0	5.0	85.0
Warehouse 9 & 10 Reuse				10.0	5.0	85.0
Red Car Museum				7.0	3.5	89.5
Red Car Maintenance Facility				100.0	0.0	0.0
Millennium Tugboat Office				100.0	0.0	0.0
Waterfront Promenade Town Sq				2.0	1.0	97.0
Fisherman Park				2.0	1.0	97.0
Research & Dev at Westways				2.0	1.0	97.0
Crowley Tugboat				100.0	0.0	0.0
Outer Harbor Park				2.0	1.0	97.0

Urbemis 2007 Version 9.2.4

## Combined Annual Emissions Reports (Tons/Year)

File Name: C:\Documents and Settings\mslavick\Application Data\Urbemis\Version9a\Projects\SPW\_Alternative\_5\_2015\_wkdy.urb924

Project Name: San Pedro Waterfront Alternative 5 2015 Weekday Diesel PM

Project Location: South Coast AQMD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

## Summary Report:

## OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (tons/year, unmitigated)	39.04	563.03	221.13	1.90	28.76	23.57	203,945.30

## SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (tons/year, unmitigated)	39.04	563.03	221.13	1.90	28.76	23.57	203,945.30

## Operational Unmitigated Detail Report:

## OPERATIONAL EMISSION ESTIMATES Annual Tons Per Year, Unmitigated

<u>Source</u>	ROG	NOX	CO	SO2	PM10	PM25	CO2
Cruise Ship Terminal Berth 91-93	13.00	187.58	73.67	0.63	9.58	7.86	67,946.31
Conference Facilities at POC	0.87	12.60	4.95	0.04	0.64	0.53	4,564.84
San Pedro Park at 22nd & Miner St	0.60	8.68	3.41	0.03	0.44	0.36	3,142.36
Port of Call Restaurant Development	12.75	183.86	72.20	0.62	9.39	7.70	66,595.76
Port of Call Retail Development	8.79	126.82	49.81	0.43	6.48	5.31	45,938.12

S.S. Lane Victory	0.04	0.57	0.23	0.00	0.03	0.02	208.14
Ralph J Scott Fireboat Museum	0.04	0.57	0.23	0.00	0.03	0.02	208.14
Mercardo Warehouse 9 & 10 Reuse	0.89	12.79	5.02	0.04	0.65	0.54	4,632.38
Warehouse 9 & 10 Reuse	0.20	2.87	1.13	0.01	0.15	0.12	1,038.47
Red Car Maintenance Facility	0.18	2.64	1.04	0.01	0.14	0.11	957.60
Millennium Tugboat Office	0.14	1.96	0.77	0.01	0.10	0.08	711.30
Waterfront Promenade Town Sq	0.02	0.25	0.10	0.00	0.01	0.01	91.35
Fisherman Park	0.13	1.92	0.75	0.01	0.10	0.08	693.82
Research & Dev at Westways	1.15	16.52	6.49	0.06	0.84	0.69	5,984.51
Crowley Tugboat	0.04	0.54	0.21	0.00	0.03	0.02	197.37
Outer Harbor Park	0.20	2.86	1.12	0.01	0.15	0.12	1,034.83
<b>TOTALS (tons/year, unmitigated)</b>	<b>39.04</b>	<b>563.03</b>	<b>221.13</b>	<b>1.90</b>	<b>28.76</b>	<b>23.57</b>	<b>203,945.30</b>

Operational Settings:

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2015 Season: Annual

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
Cruise Ship Terminal Berth 91-93		1.46	students	7,500.00	10,950.00	105,448.50
Conference Facilities at POC		2.60	students	300.00	780.00	7,084.35
San Pedro Park at 22nd & Miner St		29.83	acres	18.00	536.94	4,876.76
Port of Call Restaurant Development		89.95	1000 sq ft	125.00	11,243.75	103,352.54
Port of Call Retail Development		44.32	1000 sq ft	175.00	7,756.00	71,293.15
S.S. Lane Victory		3.60	1000 sq ft	10.00	36.00	323.03
Ralph J Scott Fireboat Museum		3.60	1000 sq ft	10.00	36.00	323.03
Mercardo Warehouse 9 & 10 Reuse		22.17	1000 sq ft	35.00	775.95	7,189.18

Warehouse 9 & 10 Reuse	4.97	1000 sq ft	35.00	173.95	1,611.65
Red Car Maintenance Facility	3.02	employees	37.00	111.74	1,486.14
Millennium Tugboat Office	3.32	employees	25.00	83.00	1,103.90
Waterfront Promenade Town Sq	20.00	acres	0.79	15.80	141.77
Fisherman Park	20.00	acres	6.00	120.00	1,076.76
Research & Dev at Westways	79.62	acres	13.00	1,035.06	9,287.59
Crowley Tugboat	3.29	unknown	7.00	23.03	306.30
Outer Harbor Park	29.83	acres	6.00	178.98	1,605.99
				33,856.20	316,510.64

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	1.5	0.0	0.0	100.0
Light Truck < 3750 lbs	2.8	0.0	0.0	100.0
Light Truck 3751-5750 lbs	0.0	0.0	0.0	100.0
Med Truck 5751-8500 lbs	0.0	0.0	0.0	100.0
Lite-Heavy Truck 8501-10,000 lbs	0.0	0.0	0.0	100.0
Lite-Heavy Truck 10,001-14,000 lbs	0.0	0.0	0.0	100.0
Med-Heavy Truck 14,001-33,000 lbs	0.0	0.0	0.0	100.0
Heavy-Heavy Truck 33,001-60,000 lbs	35.2	0.0	0.0	100.0
Other Bus	59.2	0.0	0.0	100.0
Urban Bus	0.0	0.0	0.0	100.0
Motorcycle	0.0	0.0	0.0	100.0
School Bus	0.0	0.0	0.0	100.0
Motor Home	1.3	0.0	0.0	100.0

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	12.7	7.0	9.5	13.3	7.4	8.9
Rural Trip Length (miles)	17.6	12.1	14.9	15.4	9.6	12.6



Trip speeds (mph)	30.0	30.0	30.0	30.0	30.0	30.0
% of Trips - Residential	32.9	18.0	49.1			
% of Trips - Commercial (by land use)						
Cruise Ship Terminal Berth 91-93				20.0	10.0	70.0
Conference Facilities at POC				5.0	2.5	92.5
San Pedro Park at 22nd & Miner St				5.0	2.5	92.5
Port of Call Restaurant Development				8.0	4.0	88.0
Port of Call Retail Development				8.0	4.0	88.0
S.S. Lane Victory				2.0	1.0	97.0
Ralph J Scott Fireboat Museum				2.0	1.0	97.0
Mercardo Warehouse 9 & 10 Reuse				10.0	5.0	85.0
Warehouse 9 & 10 Reuse				10.0	5.0	85.0
Red Car Maintenance Facility				100.0	0.0	0.0
Millennium Tugboat Office				100.0	0.0	0.0
Waterfront Promenade Town Sq				2.0	1.0	97.0
Fisherman Park				2.0	1.0	97.0
Research & Dev at Westways				2.0	1.0	97.0
Crowley Tugboat				100.0	0.0	0.0
Outer Harbor Park				2.0	1.0	97.0

Urbemis 2007 Version 9.2.4

## Combined Annual Emissions Reports (Tons/Year)

File Name: C:\Documents and Settings\mslavick\Application Data\Urbemis\Version9a\Projects\SPW\_Alternative\_5\_2015\_wkend.urb924

Project Name: San Pedro Waterfront Alternative 5 2015 Weekend Diesel PM

Project Location: South Coast AQMD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

## Summary Report:

## OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (tons/year, unmitigated)	38.62	557.23	218.83	1.88	28.46	23.35	201,846.71

## SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (tons/year, unmitigated)	38.62	557.23	218.83	1.88	28.46	23.35	201,846.71

## Operational Unmitigated Detail Report:

## OPERATIONAL EMISSION ESTIMATES Annual Tons Per Year, Unmitigated

<u>Source</u>	ROG	NOX	CO	SO2	PM10	PM25	CO2
Cruise Ship Terminal Berth 91-93	13.00	187.58	73.67	0.63	9.58	7.86	67,946.31
Conference Facilities at POC	0.44	6.30	2.47	0.02	0.32	0.26	2,282.42
San Pedro Park at 22nd & Miner St	1.34	19.32	7.59	0.07	0.99	0.81	6,998.95
Port of Call Restaurant Development	13.37	192.87	75.74	0.65	9.85	8.08	69,860.77
Port of Call Retail Development	8.34	120.30	47.24	0.41	6.14	5.04	43,574.88

S.S. Lane Victory	0.06	0.86	0.34	0.00	0.04	0.04	312.22
Ralph J Scott Fireboat Museum	0.06	0.86	0.34	0.00	0.04	0.04	312.22
Mercardo Warehouse 9 & 10 Reuse	0.84	12.13	4.76	0.04	0.62	0.51	4,394.18
Warehouse 9 & 10 Reuse	0.05	0.74	0.29	0.00	0.04	0.03	269.54
Red Car Maintenance Facility	0.18	2.65	1.04	0.01	0.14	0.11	960.77
Millennium Tugboat Office	0.02	0.33	0.13	0.00	0.02	0.01	119.98
Waterfront Promenade Town Sq	0.02	0.25	0.10	0.00	0.01	0.01	91.35
Fisherman Park	0.13	1.92	0.75	0.01	0.10	0.08	693.82
Research & Dev at Westways	0.32	4.66	1.83	0.02	0.24	0.20	1,688.17
Crowley Tugboat	0.01	0.09	0.04	0.00	0.00	0.00	34.19
Outer Harbor Park	0.44	6.37	2.50	0.02	0.33	0.27	2,306.94
<b>TOTALS (tons/year, unmitigated)</b>	<b>38.62</b>	<b>557.23</b>	<b>218.83</b>	<b>1.88</b>	<b>28.46</b>	<b>23.35</b>	<b>201,846.71</b>

Operational Settings:

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2015 Season: Annual

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
Cruise Ship Terminal Berth 91-93		1.46	students	7,500.00	10,950.00	105,448.50
Conference Facilities at POC		1.30	students	300.00	390.00	3,542.17
San Pedro Park at 22nd & Miner St		66.44	acres	18.00	1,195.92	10,861.94
Port of Call Restaurant Development		94.36	1000 sq ft	125.00	11,795.00	108,419.64
Port of Call Retail Development		42.04	1000 sq ft	175.00	7,357.00	67,625.54
S.S. Lane Victory		5.40	1000 sq ft	10.00	54.00	484.54
Ralph J Scott Fireboat Museum		5.40	1000 sq ft	10.00	54.00	484.54
Mercardo Warehouse 9 & 10 Reuse		21.03	1000 sq ft	35.00	736.05	6,819.50

Warehouse 9 & 10 Reuse	1.29	1000 sq ft	35.00	45.15	418.31
Red Car Maintenance Facility	3.03	employees	37.00	112.11	1,491.06
Millennium Tugboat Office	0.56	employees	25.00	14.00	186.20
Waterfront Promenade Town Sq	20.00	acres	0.79	15.80	141.77
Fisherman Park	20.00	acres	6.00	120.00	1,076.76
Research & Dev at Westways	22.46	acres	13.00	291.98	2,619.94
Crowley Tugboat	0.57	unknown	7.00	3.99	53.07
Outer Harbor Park	66.50	acres	6.00	399.00	3,580.23
				33,534.00	313,253.71

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	1.5	0.0	0.0	100.0
Light Truck < 3750 lbs	2.8	0.0	0.0	100.0
Light Truck 3751-5750 lbs	0.0	0.0	0.0	100.0
Med Truck 5751-8500 lbs	0.0	0.0	0.0	100.0
Lite-Heavy Truck 8501-10,000 lbs	0.0	0.0	0.0	100.0
Lite-Heavy Truck 10,001-14,000 lbs	0.0	0.0	0.0	100.0
Med-Heavy Truck 14,001-33,000 lbs	0.0	0.0	0.0	100.0
Heavy-Heavy Truck 33,001-60,000 lbs	35.2	0.0	0.0	100.0
Other Bus	59.2	0.0	0.0	100.0
Urban Bus	0.0	0.0	0.0	100.0
Motorcycle	0.0	0.0	0.0	100.0
School Bus	0.0	0.0	0.0	100.0
Motor Home	1.3	0.0	0.0	100.0

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	12.7	7.0	9.5	13.3	7.4	8.9
Rural Trip Length (miles)	17.6	12.1	14.9	15.4	9.6	12.6

Trip speeds (mph)	30.0	30.0	30.0	30.0	30.0	30.0
% of Trips - Residential	32.9	18.0	49.1			
% of Trips - Commercial (by land use)						
Cruise Ship Terminal Berth 91-93				20.0	10.0	70.0
Conference Facilities at POC				5.0	2.5	92.5
San Pedro Park at 22nd & Miner St				5.0	2.5	92.5
Port of Call Restaurant Development				8.0	4.0	88.0
Port of Call Retail Development				8.0	4.0	88.0
S.S. Lane Victory				2.0	1.0	97.0
Ralph J Scott Fireboat Museum				2.0	1.0	97.0
Mercardo Warehouse 9 & 10 Reuse				10.0	5.0	85.0
Warehouse 9 & 10 Reuse				10.0	5.0	85.0
Red Car Maintenance Facility				100.0	0.0	0.0
Millennium Tugboat Office				100.0	0.0	0.0
Waterfront Promenade Town Sq				2.0	1.0	97.0
Fisherman Park				2.0	1.0	97.0
Research & Dev at Westways				2.0	1.0	97.0
Crowley Tugboat				100.0	0.0	0.0
Outer Harbor Park				2.0	1.0	97.0

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Urbemis 2007 Version 9.2.4

## Combined Summer Emissions Reports (Pounds/Day)

File Name: C:\Documents and Settings\mslavick\Application Data\Urbemis\Version9a\Projects\SPW\_Alternative\_5\_2015\_wkdy.urb924

Project Name: San Pedro Waterfront Alternative 5 2015 Weekday Diesel PM

Project Location: South Coast AQMD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

## Summary Report:

## OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (lbs/day, unmitigated)	213.92	2,981.00	1,211.61	10.42	157.57	129.25	1,117,508.61

## SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (lbs/day, unmitigated)	213.92	2,981.00	1,211.61	10.42	157.57	129.25	1,117,508.61

## Operational Unmitigated Detail Report:

## OPERATIONAL EMISSION ESTIMATES Summer Pounds Per Day, Unmitigated

<u>Source</u>	ROG	NOX	CO	SO2	PM10	PM25	CO2
Cruise Ship Terminal Berth 91-93	71.26	993.15	403.66	3.47	52.50	43.06	372,308.53
Conference Facilities at POC	4.79	66.72	27.12	0.23	3.53	2.89	25,012.81
San Pedro Park at 22nd & Miner St	3.30	45.93	18.67	0.16	2.43	1.99	17,218.44
Port of Call Restaurant Development	69.84	973.41	395.63	3.40	51.45	42.20	364,908.30
Port of Call Retail Development	48.18	671.46	272.91	2.35	35.49	29.11	251,715.74

S.S. Lane Victory	0.22	3.04	1.24	0.01	0.16	0.13	1,140.52
Ralph J Scott Fireboat Museum	0.22	3.04	1.24	0.01	0.16	0.13	1,140.52
Mercardo Warehouse 9 & 10 Reuse	4.86	67.71	27.52	0.24	3.58	2.94	25,382.93
Warehouse 9 & 10 Reuse	1.09	15.18	6.17	0.05	0.80	0.66	5,690.26
Red Car Maintenance Facility	1.00	14.00	5.69	0.05	0.74	0.61	5,247.14
Millennium Tugboat Office	0.75	10.40	4.23	0.04	0.55	0.45	3,897.56
Waterfront Promenade Town Sq	0.10	1.34	0.54	0.00	0.07	0.06	500.56
Fisherman Park	0.73	10.14	4.12	0.04	0.54	0.44	3,801.73
Research & Dev at Westways	6.28	87.47	35.55	0.31	4.62	3.79	32,791.84
Crowley Tugboat	0.21	2.88	1.17	0.01	0.15	0.13	1,081.45
Outer Harbor Park	1.09	15.13	6.15	0.05	0.80	0.66	5,670.28
<b>TOTALS (lbs/day, unmitigated)</b>	<b>213.92</b>	<b>2,981.00</b>	<b>1,211.61</b>	<b>10.42</b>	<b>157.57</b>	<b>129.25</b>	<b>1,117,508.61</b>

Operational Settings:

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2015 Temperature (F): 80 Season: Summer

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
Cruise Ship Terminal Berth 91-93		1.46	students	7,500.00	10,950.00	105,448.50
Conference Facilities at POC		2.60	students	300.00	780.00	7,084.35
San Pedro Park at 22nd & Miner St		29.83	acres	18.00	536.94	4,876.76
Port of Call Restaurant Development		89.95	1000 sq ft	125.00	11,243.75	103,352.54
Port of Call Retail Development		44.32	1000 sq ft	175.00	7,756.00	71,293.15
S.S. Lane Victory		3.60	1000 sq ft	10.00	36.00	323.03
Ralph J Scott Fireboat Museum		3.60	1000 sq ft	10.00	36.00	323.03
Mercardo Warehouse 9 & 10 Reuse		22.17	1000 sq ft	35.00	775.95	7,189.18

Warehouse 9 & 10 Reuse	4.97	1000 sq ft	35.00	173.95	1,611.65
Red Car Maintenance Facility	3.02	employees	37.00	111.74	1,486.14
Millennium Tugboat Office	3.32	employees	25.00	83.00	1,103.90
Waterfront Promenade Town Sq	20.00	acres	0.79	15.80	141.77
Fisherman Park	20.00	acres	6.00	120.00	1,076.76
Research & Dev at Westways	79.62	acres	13.00	1,035.06	9,287.59
Crowley Tugboat	3.29	unknown	7.00	23.03	306.30
Outer Harbor Park	29.83	acres	6.00	178.98	1,605.99
				33,856.20	316,510.64

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	1.5	0.0	0.0	100.0
Light Truck < 3750 lbs	2.8	0.0	0.0	100.0
Light Truck 3751-5750 lbs	0.0	0.0	0.0	100.0
Med Truck 5751-8500 lbs	0.0	0.0	0.0	100.0
Lite-Heavy Truck 8501-10,000 lbs	0.0	0.0	0.0	100.0
Lite-Heavy Truck 10,001-14,000 lbs	0.0	0.0	0.0	100.0
Med-Heavy Truck 14,001-33,000 lbs	0.0	0.0	0.0	100.0
Heavy-Heavy Truck 33,001-60,000 lbs	35.2	0.0	0.0	100.0
Other Bus	59.2	0.0	0.0	100.0
Urban Bus	0.0	0.0	0.0	100.0
Motorcycle	0.0	0.0	0.0	100.0
School Bus	0.0	0.0	0.0	100.0
Motor Home	1.3	0.0	0.0	100.0

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	12.7	7.0	9.5	13.3	7.4	8.9



Rural Trip Length (miles)	17.6	12.1	14.9	15.4	9.6	12.6
Trip speeds (mph)	30.0	30.0	30.0	30.0	30.0	30.0
% of Trips - Residential	32.9	18.0	49.1			
% of Trips - Commercial (by land use)						
Cruise Ship Terminal Berth 91-93				20.0	10.0	70.0
Conference Facilities at POC				5.0	2.5	92.5
San Pedro Park at 22nd & Miner St				5.0	2.5	92.5
Port of Call Restaurant Development				8.0	4.0	88.0
Port of Call Retail Development				8.0	4.0	88.0
S.S. Lane Victory				2.0	1.0	97.0
Ralph J Scott Fireboat Museum				2.0	1.0	97.0
Mercardo Warehouse 9 & 10 Reuse				10.0	5.0	85.0
Warehouse 9 & 10 Reuse				10.0	5.0	85.0
Red Car Maintenance Facility				100.0	0.0	0.0
Millennium Tugboat Office				100.0	0.0	0.0
Waterfront Promenade Town Sq				2.0	1.0	97.0
Fisherman Park				2.0	1.0	97.0
Research & Dev at Westways				2.0	1.0	97.0
Crowley Tugboat				100.0	0.0	0.0
Outer Harbor Park				2.0	1.0	97.0

Urbemis 2007 Version 9.2.4

## Combined Summer Emissions Reports (Pounds/Day)

File Name: C:\Documents and Settings\mslavick\Application Data\Urbemis\Version9a\Projects\SPW\_Alternative\_5\_2015\_wkend.urb924

Project Name: San Pedro Waterfront Alternative 5 2015 Weekend Diesel PM

Project Location: South Coast AQMD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

## Summary Report:

## OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (lbs/day, unmitigated)	211.71	2,950.32	1,199.13	10.32	155.96	127.92	1,106,009.42

## SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (lbs/day, unmitigated)	211.71	2,950.32	1,199.13	10.32	155.96	127.92	1,106,009.42

## Operational Unmitigated Detail Report:

## OPERATIONAL EMISSION ESTIMATES Summer Pounds Per Day, Unmitigated

<u>Source</u>	<u>ROG</u>	<u>NOX</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM25</u>	<u>CO2</u>
Cruise Ship Terminal Berth 91-93	71.26	993.15	403.66	3.47	52.50	43.06	372,308.53
Conference Facilities at POC	2.39	33.36	13.56	0.12	1.76	1.45	12,506.41
San Pedro Park at 22nd & Miner St	7.34	102.30	41.58	0.36	5.41	4.44	38,350.42
Port of Call Restaurant Development	73.27	1,021.13	415.03	3.57	53.98	44.27	382,798.76
Port of Call Retail Development	45.70	636.92	258.87	2.22	33.67	27.61	238,766.47

S.S. Lane Victory	0.33	4.56	1.85	0.02	0.24	0.20	1,710.78
Ralph J Scott Fireboat Museum	0.33	4.56	1.85	0.02	0.24	0.20	1,710.78
Mercardo Warehouse 9 & 10 Reuse	4.61	64.23	26.11	0.22	3.40	2.78	24,077.72
Warehouse 9 & 10 Reuse	0.28	3.94	1.60	0.01	0.21	0.17	1,476.95
Red Car Maintenance Facility	1.01	14.04	5.71	0.05	0.74	0.61	5,264.52
Millennium Tugboat Office	0.13	1.75	0.71	0.01	0.09	0.08	657.42
Waterfront Promenade Town Sq	0.10	1.34	0.54	0.00	0.07	0.06	500.56
Fisherman Park	0.73	10.14	4.12	0.04	0.54	0.44	3,801.73
Research & Dev at Westways	1.77	24.68	10.03	0.09	1.30	1.07	9,250.25
Crowley Tugboat	0.04	0.50	0.20	0.00	0.03	0.02	187.36
Outer Harbor Park	2.42	33.72	13.71	0.12	1.78	1.46	12,640.76
<b>TOTALS (lbs/day, unmitigated)</b>	<b>211.71</b>	<b>2,950.32</b>	<b>1,199.13</b>	<b>10.32</b>	<b>155.96</b>	<b>127.92</b>	<b>1,106,009.42</b>

Operational Settings:

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2015 Temperature (F): 80 Season: Summer

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
Cruise Ship Terminal Berth 91-93		1.46	students	7,500.00	10,950.00	105,448.50
Conference Facilities at POC		1.30	students	300.00	390.00	3,542.17
San Pedro Park at 22nd & Miner St		66.44	acres	18.00	1,195.92	10,861.94
Port of Call Restaurant Development		94.36	1000 sq ft	125.00	11,795.00	108,419.64
Port of Call Retail Development		42.04	1000 sq ft	175.00	7,357.00	67,625.54
S.S. Lane Victory		5.40	1000 sq ft	10.00	54.00	484.54
Ralph J Scott Fireboat Museum		5.40	1000 sq ft	10.00	54.00	484.54
Mercardo Warehouse 9 & 10 Reuse		21.03	1000 sq ft	35.00	736.05	6,819.50

Warehouse 9 & 10 Reuse	1.29	1000 sq ft	35.00	45.15	418.31
Red Car Maintenance Facility	3.03	employees	37.00	112.11	1,491.06
Millennium Tugboat Office	0.56	employees	25.00	14.00	186.20
Waterfront Promenade Town Sq	20.00	acres	0.79	15.80	141.77
Fisherman Park	20.00	acres	6.00	120.00	1,076.76
Research & Dev at Westways	22.46	acres	13.00	291.98	2,619.94
Crowley Tugboat	0.57	unknown	7.00	3.99	53.07
Outer Harbor Park	66.50	acres	6.00	399.00	3,580.23
				33,534.00	313,253.71

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	1.5	0.0	0.0	100.0
Light Truck < 3750 lbs	2.8	0.0	0.0	100.0
Light Truck 3751-5750 lbs	0.0	0.0	0.0	100.0
Med Truck 5751-8500 lbs	0.0	0.0	0.0	100.0
Lite-Heavy Truck 8501-10,000 lbs	0.0	0.0	0.0	100.0
Lite-Heavy Truck 10,001-14,000 lbs	0.0	0.0	0.0	100.0
Med-Heavy Truck 14,001-33,000 lbs	0.0	0.0	0.0	100.0
Heavy-Heavy Truck 33,001-60,000 lbs	35.2	0.0	0.0	100.0
Other Bus	59.2	0.0	0.0	100.0
Urban Bus	0.0	0.0	0.0	100.0
Motorcycle	0.0	0.0	0.0	100.0
School Bus	0.0	0.0	0.0	100.0
Motor Home	1.3	0.0	0.0	100.0

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	12.7	7.0	9.5	13.3	7.4	8.9
Rural Trip Length (miles)	17.6	12.1	14.9	15.4	9.6	12.6

Trip speeds (mph)	30.0	30.0	30.0	30.0	30.0	30.0
% of Trips - Residential	32.9	18.0	49.1			
% of Trips - Commercial (by land use)						
Cruise Ship Terminal Berth 91-93				20.0	10.0	70.0
Conference Facilities at POC				5.0	2.5	92.5
San Pedro Park at 22nd & Miner St				5.0	2.5	92.5
Port of Call Restaurant Development				8.0	4.0	88.0
Port of Call Retail Development				8.0	4.0	88.0
S.S. Lane Victory				2.0	1.0	97.0
Ralph J Scott Fireboat Museum				2.0	1.0	97.0
Mercardo Warehouse 9 & 10 Reuse				10.0	5.0	85.0
Warehouse 9 & 10 Reuse				10.0	5.0	85.0
Red Car Maintenance Facility				100.0	0.0	0.0
Millennium Tugboat Office				100.0	0.0	0.0
Waterfront Promenade Town Sq				2.0	1.0	97.0
Fisherman Park				2.0	1.0	97.0
Research & Dev at Westways				2.0	1.0	97.0
Crowley Tugboat				100.0	0.0	0.0
Outer Harbor Park				2.0	1.0	97.0

Urbemis 2007 Version 9.2.4

## Combined Annual Emissions Reports (Tons/Year)

File Name: C:\Documents and Settings\mslavick\Application Data\Urbemis\Version9a\Projects\SPW\_Alternative\_5\_2022\_wkdy.urb924

Project Name: San Pedro Waterfront Alternative 5 2022 Weekday Diesel PM

Project Location: South Coast AQMD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

## Summary Report:

## OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (tons/year, unmitigated)	29.32	353.90	173.93	1.99	22.39	17.62	213,723.02

## SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (tons/year, unmitigated)	29.32	353.90	173.93	1.99	22.39	17.62	213,723.02

## Operational Unmitigated Detail Report:

## OPERATIONAL EMISSION ESTIMATES Annual Tons Per Year, Unmitigated

<u>Source</u>	ROG	NOX	CO	SO2	PM10	PM25	CO2
Cruise Ship Terminal Berth 91-93	10.66	128.71	63.26	0.72	8.14	6.40	77,728.19
Conference Facilities at POC	0.63	7.56	3.71	0.04	0.48	0.38	4,564.70
San Pedro Park at 22nd & Miner St	0.43	5.20	2.56	0.03	0.33	0.26	3,142.27
Port of Call Restaurant Development	9.13	110.27	54.20	0.62	6.98	5.48	66,593.72
Port of Call Retail Development	6.30	76.07	37.38	0.43	4.81	3.78	45,936.71

S.S. Lane Victory	0.03	0.34	0.17	0.00	0.02	0.02	208.14
Ralph J Scott Fireboat Museum	0.03	0.34	0.17	0.00	0.02	0.02	208.14
Mercardo Warehouse 9 & 10 Reuse	0.64	7.67	3.77	0.04	0.49	0.38	4,632.24
Warehouse 9 & 10 Reuse	0.14	1.72	0.85	0.01	0.11	0.09	1,038.44
Red Car Maintenance Facility	0.13	1.59	0.78	0.01	0.10	0.08	957.57
Millennium Tugboat Office	0.10	1.18	0.58	0.01	0.07	0.06	711.28
Waterfront Promenade Town Sq	0.01	0.15	0.07	0.00	0.01	0.01	91.35
Fisherman Park	0.10	1.15	0.56	0.01	0.07	0.06	693.79
Research & Dev at Westways	0.82	9.91	4.87	0.06	0.63	0.49	5,984.33
Crowley Tugboat	0.03	0.33	0.16	0.00	0.02	0.02	197.36
Outer Harbor Park	0.14	1.71	0.84	0.01	0.11	0.09	1,034.79
<b>TOTALS (tons/year, unmitigated)</b>	<b>29.32</b>	<b>353.90</b>	<b>173.93</b>	<b>1.99</b>	<b>22.39</b>	<b>17.62</b>	<b>213,723.02</b>

Operational Settings:

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2020 Season: Annual

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
Cruise Ship Terminal Berth 91-93		1.46	students	8,580.00	12,526.80	120,633.08
Conference Facilities at POC		2.60	students	300.00	780.00	7,084.35
San Pedro Park at 22nd & Miner St		29.83	acres	18.00	536.94	4,876.76
Port of Call Restaurant Development		89.95	1000 sq ft	125.00	11,243.75	103,352.54
Port of Call Retail Development		44.32	1000 sq ft	175.00	7,756.00	71,293.15
S.S. Lane Victory		3.60	1000 sq ft	10.00	36.00	323.03
Ralph J Scott Fireboat Museum		3.60	1000 sq ft	10.00	36.00	323.03
Mercardo Warehouse 9 & 10 Reuse		22.17	1000 sq ft	35.00	775.95	7,189.18

Warehouse 9 & 10 Reuse	4.97	1000 sq ft	35.00	173.95	1,611.65
Red Car Maintenance Facility	3.02	employees	37.00	111.74	1,486.14
Millennium Tugboat Office	3.32	employees	25.00	83.00	1,103.90
Waterfront Promenade Town Sq	20.00	acres	0.79	15.80	141.77
Fisherman Park	20.00	acres	6.00	120.00	1,076.76
Research & Dev at Westways	79.62	acres	13.00	1,035.06	9,287.59
Crowley Tugboat	3.29	unknown	7.00	23.03	306.30
Outer Harbor Park	29.83	acres	6.00	178.98	1,605.99
				35,433.00	331,695.22

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	1.5	0.0	0.0	100.0
Light Truck < 3750 lbs	2.8	0.0	0.0	100.0
Light Truck 3751-5750 lbs	0.0	0.0	0.0	100.0
Med Truck 5751-8500 lbs	0.0	0.0	0.0	100.0
Lite-Heavy Truck 8501-10,000 lbs	0.0	0.0	0.0	100.0
Lite-Heavy Truck 10,001-14,000 lbs	0.0	0.0	0.0	100.0
Med-Heavy Truck 14,001-33,000 lbs	0.0	0.0	0.0	100.0
Heavy-Heavy Truck 33,001-60,000 lbs	35.2	0.0	0.0	100.0
Other Bus	59.2	0.0	0.0	100.0
Urban Bus	0.0	0.0	0.0	100.0
Motorcycle	0.0	0.0	0.0	100.0
School Bus	0.0	0.0	0.0	100.0
Motor Home	1.3	0.0	0.0	100.0

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	12.7	7.0	9.5	13.3	7.4	8.9
Rural Trip Length (miles)	17.6	12.1	14.9	15.4	9.6	12.6



Trip speeds (mph)	30.0	30.0	30.0	30.0	30.0	30.0
% of Trips - Residential	32.9	18.0	49.1			
% of Trips - Commercial (by land use)						
Cruise Ship Terminal Berth 91-93				20.0	10.0	70.0
Conference Facilities at POC				5.0	2.5	92.5
San Pedro Park at 22nd & Miner St				5.0	2.5	92.5
Port of Call Restaurant Development				8.0	4.0	88.0
Port of Call Retail Development				8.0	4.0	88.0
S.S. Lane Victory				2.0	1.0	97.0
Ralph J Scott Fireboat Museum				2.0	1.0	97.0
Mercardo Warehouse 9 & 10 Reuse				10.0	5.0	85.0
Warehouse 9 & 10 Reuse				10.0	5.0	85.0
Red Car Maintenance Facility				100.0	0.0	0.0
Millennium Tugboat Office				100.0	0.0	0.0
Waterfront Promenade Town Sq				2.0	1.0	97.0
Fisherman Park				2.0	1.0	97.0
Research & Dev at Westways				2.0	1.0	97.0
Crowley Tugboat				100.0	0.0	0.0
Outer Harbor Park				2.0	1.0	97.0

Urbemis 2007 Version 9.2.4

## Combined Annual Emissions Reports (Tons/Year)

File Name: C:\Documents and Settings\mslavick\Application Data\Urbemis\Version9a\Projects\SPW\_Alternative\_5\_2022\_wkend.urb924

Project Name: San Pedro Waterfront Alternative 5 2022 Weekend Diesel PM

Project Location: South Coast AQMD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

## Summary Report:

## OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (tons/year, unmitigated)	30.19	364.56	179.15	2.05	23.04	18.14	220,142.66

## SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (tons/year, unmitigated)	30.19	364.56	179.15	2.05	23.04	18.14	220,142.66

## Operational Unmitigated Detail Report:

## OPERATIONAL EMISSION ESTIMATES Annual Tons Per Year, Unmitigated

<u>Source</u>	ROG	NOX	CO	SO2	PM10	PM25	CO2
Cruise Ship Terminal Berth 91-93	11.83	142.82	70.19	0.80	9.03	7.10	86,246.35
Conference Facilities at POC	0.31	3.78	1.86	0.02	0.24	0.19	2,282.35
San Pedro Park at 22nd & Miner St	0.96	11.59	5.70	0.07	0.73	0.58	6,998.74
Port of Call Restaurant Development	9.58	115.68	56.85	0.65	7.32	5.75	69,858.63
Port of Call Retail Development	5.98	72.15	35.46	0.41	4.56	3.59	43,573.54

S.S. Lane Victory	0.04	0.52	0.25	0.00	0.03	0.03	312.21
Ralph J Scott Fireboat Museum	0.04	0.52	0.25	0.00	0.03	0.03	312.21
Mercardo Warehouse 9 & 10 Reuse	0.60	7.28	3.58	0.04	0.46	0.36	4,394.05
Warehouse 9 & 10 Reuse	0.04	0.45	0.22	0.00	0.03	0.02	269.54
Red Car Maintenance Facility	0.13	1.59	0.78	0.01	0.10	0.08	960.74
Millennium Tugboat Office	0.02	0.20	0.10	0.00	0.01	0.01	119.98
Waterfront Promenade Town Sq	0.01	0.15	0.07	0.00	0.01	0.01	91.35
Fisherman Park	0.10	1.15	0.56	0.01	0.07	0.06	693.79
Research & Dev at Westways	0.23	2.80	1.37	0.02	0.18	0.14	1,688.12
Crowley Tugboat	0.00	0.06	0.03	0.00	0.00	0.00	34.19
Outer Harbor Park	0.32	3.82	1.88	0.02	0.24	0.19	2,306.87
<b>TOTALS (tons/year, unmitigated)</b>	<b>30.19</b>	<b>364.56</b>	<b>179.15</b>	<b>2.05</b>	<b>23.04</b>	<b>18.14</b>	<b>220,142.66</b>

Operational Settings:

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2020 Season: Annual

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
Cruise Ship Terminal Berth 91-93		1.62	students	8,580.00	13,899.60	133,853.15
Conference Facilities at POC		1.30	students	300.00	390.00	3,542.17
San Pedro Park at 22nd & Miner St		66.44	acres	18.00	1,195.92	10,861.94
Port of Call Restaurant Development		94.36	1000 sq ft	125.00	11,795.00	108,419.64
Port of Call Retail Development		42.04	1000 sq ft	175.00	7,357.00	67,625.54
S.S. Lane Victory		5.40	1000 sq ft	10.00	54.00	484.54
Ralph J Scott Fireboat Museum		5.40	1000 sq ft	10.00	54.00	484.54
Mercardo Warehouse 9 & 10 Reuse		21.03	1000 sq ft	35.00	736.05	6,819.50

Warehouse 9 & 10 Reuse	1.29	1000 sq ft	35.00	45.15	418.31
Red Car Maintenance Facility	3.03	employees	37.00	112.11	1,491.06
Millennium Tugboat Office	0.56	employees	25.00	14.00	186.20
Waterfront Promenade Town Sq	20.00	acres	0.79	15.80	141.77
Fisherman Park	20.00	acres	6.00	120.00	1,076.76
Research & Dev at Westways	22.46	acres	13.00	291.98	2,619.94
Crowley Tugboat	0.57	unknown	7.00	3.99	53.07
Outer Harbor Park	66.50	acres	6.00	399.00	3,580.23
				36,483.60	341,658.36

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	1.5	0.0	0.0	100.0
Light Truck < 3750 lbs	2.8	0.0	0.0	100.0
Light Truck 3751-5750 lbs	0.0	0.0	0.0	100.0
Med Truck 5751-8500 lbs	0.0	0.0	0.0	100.0
Lite-Heavy Truck 8501-10,000 lbs	0.0	0.0	0.0	100.0
Lite-Heavy Truck 10,001-14,000 lbs	0.0	0.0	0.0	100.0
Med-Heavy Truck 14,001-33,000 lbs	0.0	0.0	0.0	100.0
Heavy-Heavy Truck 33,001-60,000 lbs	35.2	0.0	0.0	100.0
Other Bus	59.2	0.0	0.0	100.0
Urban Bus	0.0	0.0	0.0	100.0
Motorcycle	0.0	0.0	0.0	100.0
School Bus	0.0	0.0	0.0	100.0
Motor Home	1.3	0.0	0.0	100.0

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	12.7	7.0	9.5	13.3	7.4	8.9
Rural Trip Length (miles)	17.6	12.1	14.9	15.4	9.6	12.6

Trip speeds (mph)	30.0	30.0	30.0	30.0	30.0	30.0
% of Trips - Residential	32.9	18.0	49.1			
% of Trips - Commercial (by land use)						
Cruise Ship Terminal Berth 91-93				20.0	10.0	70.0
Conference Facilities at POC				5.0	2.5	92.5
San Pedro Park at 22nd & Miner St				5.0	2.5	92.5
Port of Call Restaurant Development				8.0	4.0	88.0
Port of Call Retail Development				8.0	4.0	88.0
S.S. Lane Victory				2.0	1.0	97.0
Ralph J Scott Fireboat Museum				2.0	1.0	97.0
Mercardo Warehouse 9 & 10 Reuse				10.0	5.0	85.0
Warehouse 9 & 10 Reuse				10.0	5.0	85.0
Red Car Maintenance Facility				100.0	0.0	0.0
Millennium Tugboat Office				100.0	0.0	0.0
Waterfront Promenade Town Sq				2.0	1.0	97.0
Fisherman Park				2.0	1.0	97.0
Research & Dev at Westways				2.0	1.0	97.0
Crowley Tugboat				100.0	0.0	0.0
Outer Harbor Park				2.0	1.0	97.0

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Urbemis 2007 Version 9.2.4

## Combined Summer Emissions Reports (Pounds/Day)

File Name: C:\Documents and Settings\mslavick\Application Data\Urbemis\Version9a\Projects\SPW\_Alternative\_5\_2022\_wkdy.urb924

Project Name: San Pedro Waterfront Alternative 5 2022 Weekday Diesel PM

Project Location: South Coast AQMD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

## Summary Report:

## OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (lbs/day, unmitigated)	160.64	1,873.63	953.07	10.92	122.67	96.38	1,171,085.13

## SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (lbs/day, unmitigated)	160.64	1,873.63	953.07	10.92	122.67	96.38	1,171,085.13

## Operational Unmitigated Detail Report:

## OPERATIONAL EMISSION ESTIMATES Summer Pounds Per Day, Unmitigated

<u>Source</u>	ROG	NOX	CO	SO2	PM10	PM25	CO2
Cruise Ship Terminal Berth 91-93	58.42	681.42	346.62	3.97	44.62	35.05	425,907.89
Conference Facilities at POC	3.43	40.02	20.36	0.23	2.62	2.06	25,012.05
San Pedro Park at 22nd & Miner St	2.36	27.55	14.01	0.16	1.80	1.42	17,217.91
Port of Call Restaurant Development	50.05	583.81	296.96	3.40	38.22	30.03	364,897.11
Port of Call Retail Development	34.53	402.71	204.85	2.35	26.37	20.72	251,708.02

S.S. Lane Victory	0.16	1.82	0.93	0.01	0.12	0.09	1,140.48
Ralph J Scott Fireboat Museum	0.16	1.82	0.93	0.01	0.12	0.09	1,140.48
Mercardo Warehouse 9 & 10 Reuse	3.48	40.61	20.66	0.24	2.66	2.09	25,382.15
Warehouse 9 & 10 Reuse	0.78	9.10	4.63	0.05	0.60	0.47	5,690.09
Red Car Maintenance Facility	0.72	8.39	4.27	0.05	0.55	0.43	5,246.98
Millennium Tugboat Office	0.53	6.24	3.17	0.04	0.41	0.32	3,897.44
Waterfront Promenade Town Sq	0.07	0.80	0.41	0.00	0.05	0.04	500.55
Fisherman Park	0.52	6.08	3.09	0.04	0.40	0.31	3,801.62
Research & Dev at Westways	4.50	52.46	26.69	0.31	3.43	2.70	32,790.83
Crowley Tugboat	0.15	1.73	0.88	0.01	0.11	0.09	1,081.42
Outer Harbor Park	0.78	9.07	4.61	0.05	0.59	0.47	5,670.11
<b>TOTALS (lbs/day, unmitigated)</b>	<b>160.64</b>	<b>1,873.63</b>	<b>953.07</b>	<b>10.92</b>	<b>122.67</b>	<b>96.38</b>	<b>1,171,085.13</b>

Operational Settings:

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2020 Temperature (F): 80 Season: Summer

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
Cruise Ship Terminal Berth 91-93		1.46	students	8,580.00	12,526.80	120,633.08
Conference Facilities at POC		2.60	students	300.00	780.00	7,084.35
San Pedro Park at 22nd & Miner St		29.83	acres	18.00	536.94	4,876.76
Port of Call Restaurant Development		89.95	1000 sq ft	125.00	11,243.75	103,352.54
Port of Call Retail Development		44.32	1000 sq ft	175.00	7,756.00	71,293.15
S.S. Lane Victory		3.60	1000 sq ft	10.00	36.00	323.03
Ralph J Scott Fireboat Museum		3.60	1000 sq ft	10.00	36.00	323.03
Mercardo Warehouse 9 & 10 Reuse		22.17	1000 sq ft	35.00	775.95	7,189.18

Warehouse 9 & 10 Reuse	4.97	1000 sq ft	35.00	173.95	1,611.65
Red Car Maintenance Facility	3.02	employees	37.00	111.74	1,486.14
Millennium Tugboat Office	3.32	employees	25.00	83.00	1,103.90
Waterfront Promenade Town Sq	20.00	acres	0.79	15.80	141.77
Fisherman Park	20.00	acres	6.00	120.00	1,076.76
Research & Dev at Westways	79.62	acres	13.00	1,035.06	9,287.59
Crowley Tugboat	3.29	unknown	7.00	23.03	306.30
Outer Harbor Park	29.83	acres	6.00	178.98	1,605.99
				35,433.00	331,695.22

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	1.5	0.0	0.0	100.0
Light Truck < 3750 lbs	2.8	0.0	0.0	100.0
Light Truck 3751-5750 lbs	0.0	0.0	0.0	100.0
Med Truck 5751-8500 lbs	0.0	0.0	0.0	100.0
Lite-Heavy Truck 8501-10,000 lbs	0.0	0.0	0.0	100.0
Lite-Heavy Truck 10,001-14,000 lbs	0.0	0.0	0.0	100.0
Med-Heavy Truck 14,001-33,000 lbs	0.0	0.0	0.0	100.0
Heavy-Heavy Truck 33,001-60,000 lbs	35.2	0.0	0.0	100.0
Other Bus	59.2	0.0	0.0	100.0
Urban Bus	0.0	0.0	0.0	100.0
Motorcycle	0.0	0.0	0.0	100.0
School Bus	0.0	0.0	0.0	100.0
Motor Home	1.3	0.0	0.0	100.0

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	12.7	7.0	9.5	13.3	7.4	8.9
Rural Trip Length (miles)	17.6	12.1	14.9	15.4	9.6	12.6



Trip speeds (mph)	30.0	30.0	30.0	30.0	30.0	30.0
% of Trips - Residential	32.9	18.0	49.1			
% of Trips - Commercial (by land use)						
Cruise Ship Terminal Berth 91-93				20.0	10.0	70.0
Conference Facilities at POC				5.0	2.5	92.5
San Pedro Park at 22nd & Miner St				5.0	2.5	92.5
Port of Call Restaurant Development				8.0	4.0	88.0
Port of Call Retail Development				8.0	4.0	88.0
S.S. Lane Victory				2.0	1.0	97.0
Ralph J Scott Fireboat Museum				2.0	1.0	97.0
Mercardo Warehouse 9 & 10 Reuse				10.0	5.0	85.0
Warehouse 9 & 10 Reuse				10.0	5.0	85.0
Red Car Maintenance Facility				100.0	0.0	0.0
Millennium Tugboat Office				100.0	0.0	0.0
Waterfront Promenade Town Sq				2.0	1.0	97.0
Fisherman Park				2.0	1.0	97.0
Research & Dev at Westways				2.0	1.0	97.0
Crowley Tugboat				100.0	0.0	0.0
Outer Harbor Park				2.0	1.0	97.0

Urbemis 2007 Version 9.2.4

## Combined Summer Emissions Reports (Pounds/Day)

File Name: C:\Documents and Settings\mslavick\Application Data\Urbemis\Version9a\Projects\SPW\_Alternative\_5\_2022\_wkend.urb924

Project Name: San Pedro Waterfront Alternative 5 2022 Weekend Diesel PM

Project Location: South Coast AQMD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

## Summary Report:

## OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (lbs/day, unmitigated)	165.46	1,929.93	981.68	11.25	126.36	99.26	1,206,261.11

## SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (lbs/day, unmitigated)	165.46	1,929.93	981.68	11.25	126.36	99.26	1,206,261.11

## Operational Unmitigated Detail Report:

## OPERATIONAL EMISSION ESTIMATES Summer Pounds Per Day, Unmitigated

<u>Source</u>	ROG	NOX	CO	SO2	PM10	PM25	CO2
Cruise Ship Terminal Berth 91-93	64.83	756.10	384.60	4.40	49.51	38.89	472,582.72
Conference Facilities at POC	1.72	20.01	10.18	0.12	1.31	1.03	12,506.02
San Pedro Park at 22nd & Miner St	5.26	61.36	31.21	0.36	4.02	3.16	38,349.24
Port of Call Restaurant Development	52.51	612.43	311.52	3.57	40.10	31.50	382,787.02
Port of Call Retail Development	32.75	382.00	194.31	2.22	25.01	19.65	238,759.15

S.S. Lane Victory	0.23	2.74	1.39	0.02	0.18	0.14	1,710.73
Ralph J Scott Fireboat Museum	0.23	2.74	1.39	0.02	0.18	0.14	1,710.73
Mercardo Warehouse 9 & 10 Reuse	3.30	38.52	19.59	0.22	2.52	1.98	24,076.98
Warehouse 9 & 10 Reuse	0.20	2.36	1.20	0.01	0.15	0.12	1,476.90
Red Car Maintenance Facility	0.72	8.42	4.28	0.05	0.55	0.43	5,264.36
Millennium Tugboat Office	0.09	1.05	0.54	0.01	0.07	0.05	657.40
Waterfront Promenade Town Sq	0.07	0.80	0.41	0.00	0.05	0.04	500.55
Fisherman Park	0.52	6.08	3.09	0.04	0.40	0.31	3,801.62
Research & Dev at Westways	1.27	14.80	7.53	0.09	0.97	0.76	9,249.96
Crowley Tugboat	0.03	0.30	0.15	0.00	0.02	0.02	187.36
Outer Harbor Park	1.73	20.22	10.29	0.12	1.32	1.04	12,640.37
<b>TOTALS (lbs/day, unmitigated)</b>	<b>165.46</b>	<b>1,929.93</b>	<b>981.68</b>	<b>11.25</b>	<b>126.36</b>	<b>99.26</b>	<b>1,206,261.11</b>

Operational Settings:

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2020 Temperature (F): 80 Season: Summer

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
Cruise Ship Terminal Berth 91-93		1.62	students	8,580.00	13,899.60	133,853.15
Conference Facilities at POC		1.30	students	300.00	390.00	3,542.17
San Pedro Park at 22nd & Miner St		66.44	acres	18.00	1,195.92	10,861.94
Port of Call Restaurant Development		94.36	1000 sq ft	125.00	11,795.00	108,419.64
Port of Call Retail Development		42.04	1000 sq ft	175.00	7,357.00	67,625.54
S.S. Lane Victory		5.40	1000 sq ft	10.00	54.00	484.54
Ralph J Scott Fireboat Museum		5.40	1000 sq ft	10.00	54.00	484.54
Mercardo Warehouse 9 & 10 Reuse		21.03	1000 sq ft	35.00	736.05	6,819.50

Warehouse 9 & 10 Reuse	1.29	1000 sq ft	35.00	45.15	418.31
Red Car Maintenance Facility	3.03	employees	37.00	112.11	1,491.06
Millennium Tugboat Office	0.56	employees	25.00	14.00	186.20
Waterfront Promenade Town Sq	20.00	acres	0.79	15.80	141.77
Fisherman Park	20.00	acres	6.00	120.00	1,076.76
Research & Dev at Westways	22.46	acres	13.00	291.98	2,619.94
Crowley Tugboat	0.57	unknown	7.00	3.99	53.07
Outer Harbor Park	66.50	acres	6.00	399.00	3,580.23
				36,483.60	341,658.36

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	1.5	0.0	0.0	100.0
Light Truck < 3750 lbs	2.8	0.0	0.0	100.0
Light Truck 3751-5750 lbs	0.0	0.0	0.0	100.0
Med Truck 5751-8500 lbs	0.0	0.0	0.0	100.0
Lite-Heavy Truck 8501-10,000 lbs	0.0	0.0	0.0	100.0
Lite-Heavy Truck 10,001-14,000 lbs	0.0	0.0	0.0	100.0
Med-Heavy Truck 14,001-33,000 lbs	0.0	0.0	0.0	100.0
Heavy-Heavy Truck 33,001-60,000 lbs	35.2	0.0	0.0	100.0
Other Bus	59.2	0.0	0.0	100.0
Urban Bus	0.0	0.0	0.0	100.0
Motorcycle	0.0	0.0	0.0	100.0
School Bus	0.0	0.0	0.0	100.0
Motor Home	1.3	0.0	0.0	100.0

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	12.7	7.0	9.5	13.3	7.4	8.9
Rural Trip Length (miles)	17.6	12.1	14.9	15.4	9.6	12.6

Trip speeds (mph)	30.0	30.0	30.0	30.0	30.0	30.0
% of Trips - Residential	32.9	18.0	49.1			
% of Trips - Commercial (by land use)						
Cruise Ship Terminal Berth 91-93				20.0	10.0	70.0
Conference Facilities at POC				5.0	2.5	92.5
San Pedro Park at 22nd & Miner St				5.0	2.5	92.5
Port of Call Restaurant Development				8.0	4.0	88.0
Port of Call Retail Development				8.0	4.0	88.0
S.S. Lane Victory				2.0	1.0	97.0
Ralph J Scott Fireboat Museum				2.0	1.0	97.0
Mercardo Warehouse 9 & 10 Reuse				10.0	5.0	85.0
Warehouse 9 & 10 Reuse				10.0	5.0	85.0
Red Car Maintenance Facility				100.0	0.0	0.0
Millennium Tugboat Office				100.0	0.0	0.0
Waterfront Promenade Town Sq				2.0	1.0	97.0
Fisherman Park				2.0	1.0	97.0
Research & Dev at Westways				2.0	1.0	97.0
Crowley Tugboat				100.0	0.0	0.0
Outer Harbor Park				2.0	1.0	97.0

Urbemis 2007 Version 9.2.4

## Combined Annual Emissions Reports (Tons/Year)

File Name: C:\Documents and Settings\mslavick\Application Data\Urbemis\Version9a\Projects\SPW\_Alternative\_5\_2037\_wkdy.urb924

Project Name: San Pedro Waterfront Alternative 5 2037 Weekday Diesel PM

Project Location: South Coast AQMD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

## Summary Report:

## OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (tons/year, unmitigated)	21.77	198.31	140.36	2.11	18.01	13.37	225,656.75

## SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (tons/year, unmitigated)	21.77	198.31	140.36	2.11	18.01	13.37	225,656.75

## Operational Unmitigated Detail Report:

## OPERATIONAL EMISSION ESTIMATES Annual Tons Per Year, Unmitigated

<u>Source</u>	ROG	NOX	CO	SO2	PM10	PM25	CO2
Cruise Ship Terminal Berth 91-93	8.65	78.81	55.78	0.84	7.15	5.32	89,676.65
Conference Facilities at POC	0.44	4.01	2.84	0.04	0.36	0.27	4,564.20
San Pedro Park at 22nd & Miner St	0.30	2.76	1.95	0.03	0.25	0.19	3,141.93
Port of Call Restaurant Development	6.42	58.52	41.42	0.62	5.31	3.95	66,586.50
Port of Call Retail Development	4.43	40.37	28.57	0.43	3.66	2.72	45,931.73

S.S. Lane Victory	0.02	0.18	0.13	0.00	0.02	0.01	208.12
Ralph J Scott Fireboat Museum	0.02	0.18	0.13	0.00	0.02	0.01	208.12
Mercardo Warehouse 9 & 10 Reuse	0.45	4.07	2.88	0.04	0.37	0.27	4,631.74
Warehouse 9 & 10 Reuse	0.10	0.91	0.65	0.01	0.08	0.06	1,038.33
Red Car Maintenance Facility	0.09	0.84	0.60	0.01	0.08	0.06	957.47
Millennium Tugboat Office	0.07	0.63	0.44	0.01	0.06	0.04	711.20
Waterfront Promenade Town Sq	0.01	0.08	0.06	0.00	0.01	0.01	91.34
Fisherman Park	0.07	0.61	0.43	0.01	0.06	0.04	693.72
Research & Dev at Westways	0.58	5.26	3.72	0.06	0.48	0.35	5,983.68
Crowley Tugboat	0.02	0.17	0.12	0.00	0.02	0.01	197.34
Outer Harbor Park	0.10	0.91	0.64	0.01	0.08	0.06	1,034.68
<b>TOTALS (tons/year, unmitigated)</b>	<b>21.77</b>	<b>198.31</b>	<b>140.36</b>	<b>2.11</b>	<b>18.01</b>	<b>13.37</b>	<b>225,656.75</b>

Operational Settings:

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2035 Season: Annual

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
Cruise Ship Terminal Berth 91-93		1.46	students	9,900.00	14,454.00	139,192.02
Conference Facilities at POC		2.60	students	300.00	780.00	7,084.35
San Pedro Park at 22nd & Miner St		29.83	acres	18.00	536.94	4,876.76
Port of Call Restaurant Development		89.95	1000 sq ft	125.00	11,243.75	103,352.54
Port of Call Retail Development		44.32	1000 sq ft	175.00	7,756.00	71,293.15
S.S. Lane Victory		3.60	1000 sq ft	10.00	36.00	323.03
Ralph J Scott Fireboat Museum		3.60	1000 sq ft	10.00	36.00	323.03
Mercardo Warehouse 9 & 10 Reuse		22.17	1000 sq ft	35.00	775.95	7,189.18

Warehouse 9 & 10 Reuse	4.97	1000 sq ft	35.00	173.95	1,611.65
Red Car Maintenance Facility	3.02	employees	37.00	111.74	1,486.14
Millennium Tugboat Office	3.32	employees	25.00	83.00	1,103.90
Waterfront Promenade Town Sq	20.00	acres	0.79	15.80	141.77
Fisherman Park	20.00	acres	6.00	120.00	1,076.76
Research & Dev at Westways	79.62	acres	13.00	1,035.06	9,287.59
Crowley Tugboat	3.29	unknown	7.00	23.03	306.30
Outer Harbor Park	29.83	acres	6.00	178.98	1,605.99
				37,360.20	350,254.16

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	1.5	0.0	0.0	100.0
Light Truck < 3750 lbs	2.8	0.0	0.0	100.0
Light Truck 3751-5750 lbs	0.0	0.0	0.0	100.0
Med Truck 5751-8500 lbs	0.0	0.0	0.0	100.0
Lite-Heavy Truck 8501-10,000 lbs	0.0	0.0	0.0	100.0
Lite-Heavy Truck 10,001-14,000 lbs	0.0	0.0	0.0	100.0
Med-Heavy Truck 14,001-33,000 lbs	0.0	0.0	0.0	100.0
Heavy-Heavy Truck 33,001-60,000 lbs	35.2	0.0	0.0	100.0
Other Bus	59.2	0.0	0.0	100.0
Urban Bus	0.0	0.0	0.0	100.0
Motorcycle	0.0	0.0	0.0	100.0
School Bus	0.0	0.0	0.0	100.0
Motor Home	1.3	0.0	0.0	100.0

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	12.7	7.0	9.5	13.3	7.4	8.9
Rural Trip Length (miles)	17.6	12.1	14.9	15.4	9.6	12.6



Trip speeds (mph)	30.0	30.0	30.0	30.0	30.0	30.0
% of Trips - Residential	32.9	18.0	49.1			
% of Trips - Commercial (by land use)						
Cruise Ship Terminal Berth 91-93				20.0	10.0	70.0
Conference Facilities at POC				5.0	2.5	92.5
San Pedro Park at 22nd & Miner St				5.0	2.5	92.5
Port of Call Restaurant Development				8.0	4.0	88.0
Port of Call Retail Development				8.0	4.0	88.0
S.S. Lane Victory				2.0	1.0	97.0
Ralph J Scott Fireboat Museum				2.0	1.0	97.0
Mercardo Warehouse 9 & 10 Reuse				10.0	5.0	85.0
Warehouse 9 & 10 Reuse				10.0	5.0	85.0
Red Car Maintenance Facility				100.0	0.0	0.0
Millennium Tugboat Office				100.0	0.0	0.0
Waterfront Promenade Town Sq				2.0	1.0	97.0
Fisherman Park				2.0	1.0	97.0
Research & Dev at Westways				2.0	1.0	97.0
Crowley Tugboat				100.0	0.0	0.0
Outer Harbor Park				2.0	1.0	97.0

Urbemis 2007 Version 9.2.4

## Combined Annual Emissions Reports (Tons/Year)

File Name: C:\Documents and Settings\mslavick\Application Data\Urbemis\Version9a\Projects\SPW\_Alternative\_5\_2037\_wkend.urb924

Project Name: San Pedro Waterfront Alternative 5 2037 Weekend Diesel PM

Project Location: South Coast AQMD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

## Summary Report:

## OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (tons/year, unmitigated)	21.55	196.47	139.04	2.09	17.81	13.27	223,558.44

## SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (tons/year, unmitigated)	21.55	196.47	139.04	2.09	17.81	13.27	223,558.44

## Operational Unmitigated Detail Report:

## OPERATIONAL EMISSION ESTIMATES Annual Tons Per Year, Unmitigated

<u>Source</u>	ROG	NOX	CO	SO2	PM10	PM25	CO2
Cruise Ship Terminal Berth 91-93	8.65	78.81	55.78	0.84	7.15	5.32	89,676.65
Conference Facilities at POC	0.22	2.01	1.42	0.02	0.18	0.14	2,282.10
San Pedro Park at 22nd & Miner St	0.67	6.15	4.35	0.07	0.56	0.41	6,997.98
Port of Call Restaurant Development	6.74	61.39	43.45	0.65	5.57	4.14	69,851.06
Port of Call Retail Development	4.20	38.29	27.10	0.41	3.47	2.58	43,568.82

S.S. Lane Victory	0.03	0.27	0.19	0.00	0.02	0.02	312.17
Ralph J Scott Fireboat Museum	0.03	0.27	0.19	0.00	0.02	0.02	312.17
Mercardo Warehouse 9 & 10 Reuse	0.42	3.86	2.73	0.04	0.35	0.26	4,393.57
Warehouse 9 & 10 Reuse	0.03	0.24	0.17	0.00	0.02	0.02	269.51
Red Car Maintenance Facility	0.09	0.84	0.60	0.01	0.08	0.06	960.64
Millennium Tugboat Office	0.01	0.11	0.07	0.00	0.01	0.01	119.96
Waterfront Promenade Town Sq	0.01	0.08	0.06	0.00	0.01	0.01	91.34
Fisherman Park	0.07	0.61	0.43	0.01	0.06	0.04	693.72
Research & Dev at Westways	0.16	1.48	1.05	0.02	0.13	0.10	1,687.94
Crowley Tugboat	0.00	0.03	0.02	0.00	0.00	0.00	34.19
Outer Harbor Park	0.22	2.03	1.43	0.02	0.18	0.14	2,306.62
<b>TOTALS (tons/year, unmitigated)</b>	<b>21.55</b>	<b>196.47</b>	<b>139.04</b>	<b>2.09</b>	<b>17.81</b>	<b>13.27</b>	<b>223,558.44</b>

Operational Settings:

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2035 Season: Annual

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
Cruise Ship Terminal Berth 91-93		1.46	students	9,900.00	14,454.00	139,192.02
Conference Facilities at POC		1.30	students	300.00	390.00	3,542.17
San Pedro Park at 22nd & Miner St		66.44	acres	18.00	1,195.92	10,861.94
Port of Call Restaurant Development		94.36	1000 sq ft	125.00	11,795.00	108,419.64
Port of Call Retail Development		42.04	1000 sq ft	175.00	7,357.00	67,625.54
S.S. Lane Victory		5.40	1000 sq ft	10.00	54.00	484.54
Ralph J Scott Fireboat Museum		5.40	1000 sq ft	10.00	54.00	484.54
Mercardo Warehouse 9 & 10 Reuse		21.03	1000 sq ft	35.00	736.05	6,819.50

Warehouse 9 & 10 Reuse	1.29	1000 sq ft	35.00	45.15	418.31
Red Car Maintenance Facility	3.03	employees	37.00	112.11	1,491.06
Millennium Tugboat Office	0.56	employees	25.00	14.00	186.20
Waterfront Promenade Town Sq	20.00	acres	0.79	15.80	141.77
Fisherman Park	20.00	acres	6.00	120.00	1,076.76
Research & Dev at Westways	22.46	acres	13.00	291.98	2,619.94
Crowley Tugboat	0.57	unknown	7.00	3.99	53.07
Outer Harbor Park	66.50	acres	6.00	399.00	3,580.23
				37,038.00	346,997.23

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	1.5	0.0	0.0	100.0
Light Truck < 3750 lbs	2.8	0.0	0.0	100.0
Light Truck 3751-5750 lbs	0.0	0.0	0.0	100.0
Med Truck 5751-8500 lbs	0.0	0.0	0.0	100.0
Lite-Heavy Truck 8501-10,000 lbs	0.0	0.0	0.0	100.0
Lite-Heavy Truck 10,001-14,000 lbs	0.0	0.0	0.0	100.0
Med-Heavy Truck 14,001-33,000 lbs	0.0	0.0	0.0	100.0
Heavy-Heavy Truck 33,001-60,000 lbs	35.2	0.0	0.0	100.0
Other Bus	59.2	0.0	0.0	100.0
Urban Bus	0.0	0.0	0.0	100.0
Motorcycle	0.0	0.0	0.0	100.0
School Bus	0.0	0.0	0.0	100.0
Motor Home	1.3	0.0	0.0	100.0

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	12.7	7.0	9.5	13.3	7.4	8.9
Rural Trip Length (miles)	17.6	12.1	14.9	15.4	9.6	12.6

Trip speeds (mph)	30.0	30.0	30.0	30.0	30.0	30.0
% of Trips - Residential	32.9	18.0	49.1			
% of Trips - Commercial (by land use)						
Cruise Ship Terminal Berth 91-93				20.0	10.0	70.0
Conference Facilities at POC				5.0	2.5	92.5
San Pedro Park at 22nd & Miner St				5.0	2.5	92.5
Port of Call Restaurant Development				8.0	4.0	88.0
Port of Call Retail Development				8.0	4.0	88.0
S.S. Lane Victory				2.0	1.0	97.0
Ralph J Scott Fireboat Museum				2.0	1.0	97.0
Mercardo Warehouse 9 & 10 Reuse				10.0	5.0	85.0
Warehouse 9 & 10 Reuse				10.0	5.0	85.0
Red Car Maintenance Facility				100.0	0.0	0.0
Millennium Tugboat Office				100.0	0.0	0.0
Waterfront Promenade Town Sq				2.0	1.0	97.0
Fisherman Park				2.0	1.0	97.0
Research & Dev at Westways				2.0	1.0	97.0
Crowley Tugboat				100.0	0.0	0.0
Outer Harbor Park				2.0	1.0	97.0

5/27/2008 03:20:14 PM

Urbemis 2007 Version 9.2.4

## Combined Summer Emissions Reports (Pounds/Day)

File Name: C:\Documents and Settings\mslavick\Application Data\Urbemis\Version9a\Projects\SPW\_Alternative\_5\_2037\_wkdy.urb924

Project Name: San Pedro Waterfront Alternative 5 2037 Weekday Diesel PM

Project Location: South Coast AQMD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

## Summary Report:

## OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (lbs/day, unmitigated)	119.26	1,049.88	769.09	11.53	98.59	73.31	1,236,475.34

## SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (lbs/day, unmitigated)	119.26	1,049.88	769.09	11.53	98.59	73.31	1,236,475.34

## Operational Unmitigated Detail Report:

## OPERATIONAL EMISSION ESTIMATES Summer Pounds Per Day, Unmitigated

<u>Source</u>	<u>ROG</u>	<u>NOX</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM25</u>	<u>CO2</u>
Cruise Ship Terminal Berth 91-93	47.39	417.22	305.64	4.58	39.19	29.14	491,378.91
Conference Facilities at POC	2.41	21.24	15.56	0.23	1.99	1.48	25,009.34
San Pedro Park at 22nd & Miner St	1.66	14.62	10.71	0.16	1.37	1.02	17,216.04
Port of Call Restaurant Development	35.19	309.80	226.94	3.40	29.10	21.63	364,857.55
Port of Call Retail Development	24.27	213.70	156.55	2.35	20.07	14.92	251,680.73

S.S. Lane Victory	0.11	0.97	0.71	0.01	0.09	0.07	1,140.36
Ralph J Scott Fireboat Museum	0.11	0.97	0.71	0.01	0.09	0.07	1,140.36
Mercardo Warehouse 9 & 10 Reuse	2.45	21.55	15.79	0.24	2.02	1.50	25,379.40
Warehouse 9 & 10 Reuse	0.55	4.83	3.54	0.05	0.45	0.34	5,689.47
Red Car Maintenance Facility	0.51	4.45	3.26	0.05	0.42	0.31	5,246.41
Millennium Tugboat Office	0.38	3.31	2.42	0.04	0.31	0.23	3,897.01
Waterfront Promenade Town Sq	0.05	0.42	0.31	0.00	0.04	0.03	500.49
Fisherman Park	0.37	3.23	2.36	0.04	0.30	0.23	3,801.20
Research & Dev at Westways	3.16	27.84	20.39	0.31	2.61	1.94	32,787.28
Crowley Tugboat	0.10	0.92	0.67	0.01	0.09	0.06	1,081.30
Outer Harbor Park	0.55	4.81	3.53	0.05	0.45	0.34	5,669.49
<b>TOTALS (lbs/day, unmitigated)</b>	<b>119.26</b>	<b>1,049.88</b>	<b>769.09</b>	<b>11.53</b>	<b>98.59</b>	<b>73.31</b>	<b>1,236,475.34</b>

Operational Settings:

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2035 Temperature (F): 80 Season: Summer

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
Cruise Ship Terminal Berth 91-93		1.46	students	9,900.00	14,454.00	139,192.02
Conference Facilities at POC		2.60	students	300.00	780.00	7,084.35
San Pedro Park at 22nd & Miner St		29.83	acres	18.00	536.94	4,876.76
Port of Call Restaurant Development		89.95	1000 sq ft	125.00	11,243.75	103,352.54
Port of Call Retail Development		44.32	1000 sq ft	175.00	7,756.00	71,293.15
S.S. Lane Victory		3.60	1000 sq ft	10.00	36.00	323.03
Ralph J Scott Fireboat Museum		3.60	1000 sq ft	10.00	36.00	323.03
Mercardo Warehouse 9 & 10 Reuse		22.17	1000 sq ft	35.00	775.95	7,189.18

Warehouse 9 & 10 Reuse	4.97	1000 sq ft	35.00	173.95	1,611.65
Red Car Maintenance Facility	3.02	employees	37.00	111.74	1,486.14
Millennium Tugboat Office	3.32	employees	25.00	83.00	1,103.90
Waterfront Promenade Town Sq	20.00	acres	0.79	15.80	141.77
Fisherman Park	20.00	acres	6.00	120.00	1,076.76
Research & Dev at Westways	79.62	acres	13.00	1,035.06	9,287.59
Crowley Tugboat	3.29	unknown	7.00	23.03	306.30
Outer Harbor Park	29.83	acres	6.00	178.98	1,605.99
				37,360.20	350,254.16

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	1.5	0.0	0.0	100.0
Light Truck < 3750 lbs	2.8	0.0	0.0	100.0
Light Truck 3751-5750 lbs	0.0	0.0	0.0	100.0
Med Truck 5751-8500 lbs	0.0	0.0	0.0	100.0
Lite-Heavy Truck 8501-10,000 lbs	0.0	0.0	0.0	100.0
Lite-Heavy Truck 10,001-14,000 lbs	0.0	0.0	0.0	100.0
Med-Heavy Truck 14,001-33,000 lbs	0.0	0.0	0.0	100.0
Heavy-Heavy Truck 33,001-60,000 lbs	35.2	0.0	0.0	100.0
Other Bus	59.2	0.0	0.0	100.0
Urban Bus	0.0	0.0	0.0	100.0
Motorcycle	0.0	0.0	0.0	100.0
School Bus	0.0	0.0	0.0	100.0
Motor Home	1.3	0.0	0.0	100.0

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	12.7	7.0	9.5	13.3	7.4	8.9
Rural Trip Length (miles)	17.6	12.1	14.9	15.4	9.6	12.6



Trip speeds (mph)	30.0	30.0	30.0	30.0	30.0	30.0
% of Trips - Residential	32.9	18.0	49.1			
% of Trips - Commercial (by land use)						
Cruise Ship Terminal Berth 91-93				20.0	10.0	70.0
Conference Facilities at POC				5.0	2.5	92.5
San Pedro Park at 22nd & Miner St				5.0	2.5	92.5
Port of Call Restaurant Development				8.0	4.0	88.0
Port of Call Retail Development				8.0	4.0	88.0
S.S. Lane Victory				2.0	1.0	97.0
Ralph J Scott Fireboat Museum				2.0	1.0	97.0
Mercardo Warehouse 9 & 10 Reuse				10.0	5.0	85.0
Warehouse 9 & 10 Reuse				10.0	5.0	85.0
Red Car Maintenance Facility				100.0	0.0	0.0
Millennium Tugboat Office				100.0	0.0	0.0
Waterfront Promenade Town Sq				2.0	1.0	97.0
Fisherman Park				2.0	1.0	97.0
Research & Dev at Westways				2.0	1.0	97.0
Crowley Tugboat				100.0	0.0	0.0
Outer Harbor Park				2.0	1.0	97.0

Urbemis 2007 Version 9.2.4

## Combined Summer Emissions Reports (Pounds/Day)

File Name: C:\Documents and Settings\mslavick\Application Data\Urbemis\Version9a\Projects\SPW\_Alternative\_5\_2037\_wkend.urb924

Project Name: San Pedro Waterfront Alternative 5 2037 Weekend Diesel PM

Project Location: South Coast AQMD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

## Summary Report:

## OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (lbs/day, unmitigated)	118.13	1,040.09	761.92	11.43	97.70	72.65	1,224,977.75

## SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (lbs/day, unmitigated)	118.13	1,040.09	761.92	11.43	97.70	72.65	1,224,977.75

## Operational Unmitigated Detail Report:

## OPERATIONAL EMISSION ESTIMATES Summer Pounds Per Day, Unmitigated

<u>Source</u>	<u>ROG</u>	<u>NOX</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM25</u>	<u>CO2</u>
Cruise Ship Terminal Berth 91-93	47.39	417.22	305.64	4.58	39.19	29.14	491,378.91
Conference Facilities at POC	1.21	10.62	7.78	0.12	1.00	0.74	12,504.67
San Pedro Park at 22nd & Miner St	3.70	32.56	23.85	0.36	3.06	2.27	38,345.09
Port of Call Restaurant Development	36.91	324.98	238.07	3.57	30.52	22.70	382,745.52
Port of Call Retail Development	23.02	202.70	148.49	2.22	19.04	14.16	238,733.26

S.S. Lane Victory	0.16	1.45	1.06	0.02	0.14	0.10	1,710.54
Ralph J Scott Fireboat Museum	0.16	1.45	1.06	0.02	0.14	0.10	1,710.54
Mercardo Warehouse 9 & 10 Reuse	2.32	20.44	14.97	0.22	1.92	1.43	24,074.37
Warehouse 9 & 10 Reuse	0.14	1.25	0.92	0.01	0.12	0.09	1,476.74
Red Car Maintenance Facility	0.51	4.47	3.27	0.05	0.42	0.31	5,263.79
Millennium Tugboat Office	0.06	0.56	0.41	0.01	0.05	0.04	657.33
Waterfront Promenade Town Sq	0.05	0.42	0.31	0.00	0.04	0.03	500.49
Fisherman Park	0.37	3.23	2.36	0.04	0.30	0.23	3,801.20
Research & Dev at Westways	0.89	7.85	5.75	0.09	0.74	0.55	9,248.96
Crowley Tugboat	0.02	0.16	0.12	0.00	0.01	0.01	187.34
Outer Harbor Park	1.22	10.73	7.86	0.12	1.01	0.75	12,639.00
<b>TOTALS (lbs/day, unmitigated)</b>	<b>118.13</b>	<b>1,040.09</b>	<b>761.92</b>	<b>11.43</b>	<b>97.70</b>	<b>72.65</b>	<b>1,224,977.75</b>

Operational Settings:

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2035 Temperature (F): 80 Season: Summer

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
Cruise Ship Terminal Berth 91-93		1.46	students	9,900.00	14,454.00	139,192.02
Conference Facilities at POC		1.30	students	300.00	390.00	3,542.17
San Pedro Park at 22nd & Miner St		66.44	acres	18.00	1,195.92	10,861.94
Port of Call Restaurant Development		94.36	1000 sq ft	125.00	11,795.00	108,419.64
Port of Call Retail Development		42.04	1000 sq ft	175.00	7,357.00	67,625.54
S.S. Lane Victory		5.40	1000 sq ft	10.00	54.00	484.54
Ralph J Scott Fireboat Museum		5.40	1000 sq ft	10.00	54.00	484.54
Mercardo Warehouse 9 & 10 Reuse		21.03	1000 sq ft	35.00	736.05	6,819.50

Warehouse 9 & 10 Reuse	1.29	1000 sq ft	35.00	45.15	418.31
Red Car Maintenance Facility	3.03	employees	37.00	112.11	1,491.06
Millennium Tugboat Office	0.56	employees	25.00	14.00	186.20
Waterfront Promenade Town Sq	20.00	acres	0.79	15.80	141.77
Fisherman Park	20.00	acres	6.00	120.00	1,076.76
Research & Dev at Westways	22.46	acres	13.00	291.98	2,619.94
Crowley Tugboat	0.57	unknown	7.00	3.99	53.07
Outer Harbor Park	66.50	acres	6.00	399.00	3,580.23
				37,038.00	346,997.23

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	1.5	0.0	0.0	100.0
Light Truck < 3750 lbs	2.8	0.0	0.0	100.0
Light Truck 3751-5750 lbs	0.0	0.0	0.0	100.0
Med Truck 5751-8500 lbs	0.0	0.0	0.0	100.0
Lite-Heavy Truck 8501-10,000 lbs	0.0	0.0	0.0	100.0
Lite-Heavy Truck 10,001-14,000 lbs	0.0	0.0	0.0	100.0
Med-Heavy Truck 14,001-33,000 lbs	0.0	0.0	0.0	100.0
Heavy-Heavy Truck 33,001-60,000 lbs	35.2	0.0	0.0	100.0
Other Bus	59.2	0.0	0.0	100.0
Urban Bus	0.0	0.0	0.0	100.0
Motorcycle	0.0	0.0	0.0	100.0
School Bus	0.0	0.0	0.0	100.0
Motor Home	1.3	0.0	0.0	100.0

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	12.7	7.0	9.5	13.3	7.4	8.9
Rural Trip Length (miles)	17.6	12.1	14.9	15.4	9.6	12.6

Trip speeds (mph)	30.0	30.0	30.0	30.0	30.0	30.0
% of Trips - Residential	32.9	18.0	49.1			
% of Trips - Commercial (by land use)						
Cruise Ship Terminal Berth 91-93				20.0	10.0	70.0
Conference Facilities at POC				5.0	2.5	92.5
San Pedro Park at 22nd & Miner St				5.0	2.5	92.5
Port of Call Restaurant Development				8.0	4.0	88.0
Port of Call Retail Development				8.0	4.0	88.0
S.S. Lane Victory				2.0	1.0	97.0
Ralph J Scott Fireboat Museum				2.0	1.0	97.0
Mercardo Warehouse 9 & 10 Reuse				10.0	5.0	85.0
Warehouse 9 & 10 Reuse				10.0	5.0	85.0
Red Car Maintenance Facility				100.0	0.0	0.0
Millennium Tugboat Office				100.0	0.0	0.0
Waterfront Promenade Town Sq				2.0	1.0	97.0
Fisherman Park				2.0	1.0	97.0
Research & Dev at Westways				2.0	1.0	97.0
Crowley Tugboat				100.0	0.0	0.0
Outer Harbor Park				2.0	1.0	97.0

Urbemis 2007 Version 9.2.4

## Combined Annual Emissions Reports (Tons/Year)

File Name: C:\Documents and Settings\mslavick\Application Data\Urbemis\Version9a\Projects\SPW\_No\_Project\_2015\_wkdy.urb924

Project Name: San Pedro Waterfront No Project 2015 Weekday Diesel PM

Project Location: South Coast AQMD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

## Summary Report:

## OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (tons/year, unmitigated)	20.94	301.93	118.59	1.01	15.43	12.64	109,366.49

## SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (tons/year, unmitigated)	20.94	301.93	118.59	1.01	15.43	12.64	109,366.49

## Operational Unmitigated Detail Report:

## OPERATIONAL EMISSION ESTIMATES Annual Tons Per Year, Unmitigated

<u>Source</u>	<u>ROG</u>	<u>NOX</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM25</u>	<u>CO2</u>
Port of Call Resturant Development	6.12	88.25	34.66	0.30	4.51	3.70	31,965.97
Port of Call Retail Development	1.99	28.65	11.25	0.10	1.46	1.20	10,377.40
Downtown Harbor Docking Slips	0.04	0.58	0.23	0.00	0.03	0.02	210.68
Port of Call Docking Slips	0.42	6.03	2.37	0.02	0.31	0.25	2,182.70
Temporary Red Car Maint Facility	0.04	0.63	0.25	0.00	0.03	0.03	228.05
Warehouses 9 & 10 Operations	0.08	1.11	0.44	0.00	0.06	0.05	402.65

S.S. Lane Victory	0.04	0.57	0.23	0.00	0.03	0.02	208.14
Cruise Ship Terminal Berth 87-93	12.12	174.79	68.64	0.59	8.93	7.32	63,310.72
Los Angeles Maritime Institute	0.05	0.78	0.31	0.00	0.04	0.03	282.81
Crowley Tugboat Office	0.04	0.54	0.21	0.00	0.03	0.02	197.37
<b>TOTALS (tons/year, unmitigated)</b>	<b>20.94</b>	<b>301.93</b>	<b>118.59</b>	<b>1.01</b>	<b>15.43</b>	<b>12.64</b>	<b>109,366.49</b>

Operational Settings:

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2015 Season: Annual

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
Port of Call Resturant Development		89.95	1000 sq ft	60.00	5,397.00	49,609.22
Port of Call Retail Development		44.33	1000 sq ft	40.00	1,773.20	16,105.09
Downtown Harbor Docking Slips		3.00	rooms	12.00	36.00	326.97
Port of Call Docking Slips		2.96	rooms	126.00	372.96	3,387.41
Temporary Red Car Maint Facility		3.00	employees	11.00	33.00	353.93
Warehouses 9 & 10 Operations		3.00	employees	20.00	60.00	624.88
S.S. Lane Victory		3.60	1000 sq ft	10.00	36.00	323.03
Cruise Ship Terminal Berth 87-93		1.46	unknown	7,500.00	10,950.00	98,254.35
Los Angeles Maritime Institute		3.30	unknown	10.00	33.00	438.90
Crowley Tugboat Office		3.29	unknown	7.00	23.03	306.30
					18,714.19	169,730.08

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	1.5	0.0	0.0	100.0
Light Truck < 3750 lbs	2.8	0.0	0.0	100.0
Light Truck 3751-5750 lbs	0.0	0.0	0.0	100.0

Med Truck 5751-8500 lbs	0.0	0.0	0.0	100.0
Lite-Heavy Truck 8501-10,000 lbs	0.0	0.0	0.0	100.0
Lite-Heavy Truck 10,001-14,000 lbs	0.0	0.0	0.0	100.0
Med-Heavy Truck 14,001-33,000 lbs	0.0	0.0	0.0	100.0
Heavy-Heavy Truck 33,001-60,000 lbs	35.2	0.0	0.0	100.0
Other Bus	59.2	0.0	0.0	100.0
Urban Bus	0.0	0.0	0.0	100.0
Motorcycle	0.0	0.0	0.0	100.0
School Bus	0.0	0.0	0.0	100.0
Motor Home	1.3	0.0	0.0	100.0

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	12.7	7.0	9.5	13.3	7.4	8.9
Rural Trip Length (miles)	17.6	12.1	14.9	15.4	9.6	12.6
Trip speeds (mph)	30.0	30.0	30.0	30.0	30.0	30.0
% of Trips - Residential	32.9	18.0	49.1			

% of Trips - Commercial (by land use)

Quality resturant	8.0	4.0	88.0
High turnover (sit-down) rest.	5.0	2.5	92.5
Hotel	5.0	2.5	92.5
Motel	5.0	2.5	92.5
General light industry	50.0	25.0	25.0
Industrial park	41.5	20.8	37.8
Museum	2.0	1.0	97.0
Cruise Ship Terminal	2.0	1.0	97.0
Maritime Office LAMI	100.0	0.0	0.0
Crowley Tugboat Office	100.0	0.0	0.0



Urbemis 2007 Version 9.2.4

## Combined Annual Emissions Reports (Tons/Year)

File Name: C:\Documents and Settings\mslavick\Application Data\Urbemis\Version9a\Projects\SPW\_No\_Project\_2015\_wkend.urb924

Project Name: San Pedro Waterfront No Project 2015 Weekend Diesel PM

Project Location: South Coast AQMD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

## Summary Report:

## OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (tons/year, unmitigated)	21.06	303.82	119.32	1.01	15.51	12.73	110,045.30

## SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (tons/year, unmitigated)	21.06	303.82	119.32	1.01	15.51	12.73	110,045.30

## Operational Unmitigated Detail Report:

## OPERATIONAL EMISSION ESTIMATES Annual Tons Per Year, Unmitigated

<u>Source</u>	<u>ROG</u>	<u>NOX</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM25</u>	<u>CO2</u>
Port of Call Resturant Development	6.42	92.59	36.36	0.31	4.73	3.88	33,536.73
Port of Call Retail Development	1.88	27.18	10.67	0.09	1.39	1.14	9,843.66
Downtown Harbor Docking Slips	0.04	0.63	0.25	0.00	0.03	0.03	228.24
Port of Call Docking Slips	0.45	6.56	2.57	0.02	0.33	0.27	2,374.42
Temporary Red Car Maint Facility	0.04	0.63	0.25	0.00	0.03	0.03	228.05
Warehouses 9 & 10 Operations	0.03	0.37	0.15	0.00	0.02	0.02	134.22

S.S. Lane Victory	0.06	0.86	0.34	0.00	0.04	0.04	312.22
Cruise Ship Terminal Berth 87-93	12.12	174.79	68.64	0.59	8.93	7.32	63,310.72
Los Angeles Maritime Institute	0.01	0.12	0.05	0.00	0.01	0.00	42.85
Crowley Tugboat Office	0.01	0.09	0.04	0.00	0.00	0.00	34.19
<b>TOTALS (tons/year, unmitigated)</b>	<b>21.06</b>	<b>303.82</b>	<b>119.32</b>	<b>1.01</b>	<b>15.51</b>	<b>12.73</b>	<b>110,045.30</b>

Operational Settings:

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2015 Season: Annual

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
Port of Call Resturant Development		94.37	1000 sq ft	60.00	5,662.20	52,046.94
Port of Call Retail Development		42.05	1000 sq ft	40.00	1,682.00	15,276.76
Downtown Harbor Docking Slips		3.25	rooms	12.00	39.00	354.22
Port of Call Docking Slips		3.22	rooms	126.00	405.72	3,684.95
Temporary Red Car Maint Facility		3.00	employees	11.00	33.00	353.93
Warehouses 9 & 10 Operations		1.00	employees	20.00	20.00	208.29
S.S. Lane Victory		5.40	1000 sq ft	10.00	54.00	484.54
Cruise Ship Terminal Berth 87-93		1.46	unknown	7,500.00	10,950.00	98,254.35
Los Angeles Maritime Institute		0.50	unknown	10.00	5.00	66.50
Crowley Tugboat Office		0.57	unknown	7.00	3.99	53.07
					18,854.91	170,783.55

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	1.5	0.0	0.0	100.0
Light Truck < 3750 lbs	2.8	0.0	0.0	100.0
Light Truck 3751-5750 lbs	0.0	0.0	0.0	100.0

Med Truck 5751-8500 lbs	0.0	0.0	0.0	100.0
Lite-Heavy Truck 8501-10,000 lbs	0.0	0.0	0.0	100.0
Lite-Heavy Truck 10,001-14,000 lbs	0.0	0.0	0.0	100.0
Med-Heavy Truck 14,001-33,000 lbs	0.0	0.0	0.0	100.0
Heavy-Heavy Truck 33,001-60,000 lbs	35.2	0.0	0.0	100.0
Other Bus	59.2	0.0	0.0	100.0
Urban Bus	0.0	0.0	0.0	100.0
Motorcycle	0.0	0.0	0.0	100.0
School Bus	0.0	0.0	0.0	100.0
Motor Home	1.3	0.0	0.0	100.0

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	12.7	7.0	9.5	13.3	7.4	8.9
Rural Trip Length (miles)	17.6	12.1	14.9	15.4	9.6	12.6
Trip speeds (mph)	30.0	30.0	30.0	30.0	30.0	30.0
% of Trips - Residential	32.9	18.0	49.1			
% of Trips - Commercial (by land use)						
Quality restaurant				8.0	4.0	88.0
High turnover (sit-down) rest.				5.0	2.5	92.5
Hotel				5.0	2.5	92.5
Motel				5.0	2.5	92.5
General light industry				50.0	25.0	25.0
Industrial park				41.5	20.8	37.8
Museum				2.0	1.0	97.0
Cruise Ship Terminal				2.0	1.0	97.0
Maritime Office LAMI				100.0	0.0	0.0
Crowley Tugboat Office				100.0	0.0	0.0

Urbemis 2007 Version 9.2.4

## Combined Summer Emissions Reports (Pounds/Day)

File Name: C:\Documents and Settings\mslavick\Application Data\Urbemis\Version9a\Projects\SPW\_No\_Project\_2015\_wkdy.urb924

Project Name: San Pedro Waterfront No Project 2015 Weekday Diesel PM

Project Location: South Coast AQMD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

## Summary Report:

## OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (lbs/day, unmitigated)	114.70	1,598.55	649.72	5.57	84.51	69.31	599,268.39

## SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (lbs/day, unmitigated)	114.70	1,598.55	649.72	5.57	84.51	69.31	599,268.39

## Operational Unmitigated Detail Report:

## OPERATIONAL EMISSION ESTIMATES Summer Pounds Per Day, Unmitigated

<u>Source</u>	<u>ROG</u>	<u>NOX</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM25</u>	<u>CO2</u>
Port of Call Resturant Development	33.52	467.23	189.90	1.63	24.70	20.26	175,155.98
Port of Call Retail Development	10.88	151.68	61.65	0.53	8.02	6.58	56,862.47
Downtown Harbor Docking Slips	0.22	3.08	1.25	0.01	0.16	0.13	1,154.44
Port of Call Docking Slips	2.29	31.90	12.97	0.11	1.69	1.38	11,959.97
Temporary Red Car Maint Facility	0.24	3.33	1.35	0.01	0.18	0.14	1,249.61
Warehouses 9 & 10 Operations	0.42	5.89	2.39	0.02	0.31	0.26	2,206.29

S.S. Lane Victory	0.22	3.04	1.24	0.01	0.16	0.13	1,140.52
Cruise Ship Terminal Berth 87-93	66.40	925.39	376.12	3.23	48.92	40.12	346,908.03
Los Angeles Maritime Institute	0.30	4.13	1.68	0.01	0.22	0.18	1,549.63
Crowley Tugboat Office	0.21	2.88	1.17	0.01	0.15	0.13	1,081.45
<b>TOTALS (lbs/day, unmitigated)</b>	<b>114.70</b>	<b>1,598.55</b>	<b>649.72</b>	<b>5.57</b>	<b>84.51</b>	<b>69.31</b>	<b>599,268.39</b>

Operational Settings:

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2015 Temperature (F): 80 Season: Summer

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
Port of Call Resturant Development		89.95	1000 sq ft	60.00	5,397.00	49,609.22
Port of Call Retail Development		44.33	1000 sq ft	40.00	1,773.20	16,105.09
Downtown Harbor Docking Slips		3.00	rooms	12.00	36.00	326.97
Port of Call Docking Slips		2.96	rooms	126.00	372.96	3,387.41
Temporary Red Car Maint Facility		3.00	employees	11.00	33.00	353.93
Warehouses 9 & 10 Operations		3.00	employees	20.00	60.00	624.88
S.S. Lane Victory		3.60	1000 sq ft	10.00	36.00	323.03
Cruise Ship Terminal Berth 87-93		1.46	unknown	7,500.00	10,950.00	98,254.35
Los Angeles Maritime Institute		3.30	unknown	10.00	33.00	438.90
Crowley Tugboat Office		3.29	unknown	7.00	23.03	306.30
					18,714.19	169,730.08

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	1.5	0.0	0.0	100.0
Light Truck < 3750 lbs	2.8	0.0	0.0	100.0
Light Truck 3751-5750 lbs	0.0	0.0	0.0	100.0

Med Truck 5751-8500 lbs	0.0	0.0	0.0	100.0
Lite-Heavy Truck 8501-10,000 lbs	0.0	0.0	0.0	100.0
Lite-Heavy Truck 10,001-14,000 lbs	0.0	0.0	0.0	100.0
Med-Heavy Truck 14,001-33,000 lbs	0.0	0.0	0.0	100.0
Heavy-Heavy Truck 33,001-60,000 lbs	35.2	0.0	0.0	100.0
Other Bus	59.2	0.0	0.0	100.0
Urban Bus	0.0	0.0	0.0	100.0
Motorcycle	0.0	0.0	0.0	100.0
School Bus	0.0	0.0	0.0	100.0
Motor Home	1.3	0.0	0.0	100.0

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	12.7	7.0	9.5	13.3	7.4	8.9
Rural Trip Length (miles)	17.6	12.1	14.9	15.4	9.6	12.6
Trip speeds (mph)	30.0	30.0	30.0	30.0	30.0	30.0
% of Trips - Residential	32.9	18.0	49.1			

% of Trips - Commercial (by land use)

Quality resturant	8.0	4.0	88.0
High turnover (sit-down) rest.	5.0	2.5	92.5
Hotel	5.0	2.5	92.5
Motel	5.0	2.5	92.5
General light industry	50.0	25.0	25.0
Industrial park	41.5	20.8	37.8
Museum	2.0	1.0	97.0
Cruise Ship Terminal	2.0	1.0	97.0
Maritime Office LAMI	100.0	0.0	0.0
Crowley Tugboat Office	100.0	0.0	0.0

Urbemis 2007 Version 9.2.4

## Combined Summer Emissions Reports (Pounds/Day)

File Name: C:\Documents and Settings\mslavick\Application Data\Urbemis\Version9a\Projects\SPW\_No\_Project\_2015\_wkend.urb924

Project Name: San Pedro Waterfront No Project 2015 Weekend Diesel PM

Project Location: South Coast AQMD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

## Summary Report:

## OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (lbs/day, unmitigated)	115.41	1,608.49	653.76	5.61	85.03	69.73	602,987.92

## SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (lbs/day, unmitigated)	115.41	1,608.49	653.76	5.61	85.03	69.73	602,987.92

## Operational Unmitigated Detail Report:

## OPERATIONAL EMISSION ESTIMATES Summer Pounds Per Day, Unmitigated

<u>Source</u>	<u>ROG</u>	<u>NOX</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM25</u>	<u>CO2</u>
Port of Call Resturant Development	35.17	490.19	199.24	1.71	25.91	21.25	183,762.88
Port of Call Retail Development	10.32	143.88	58.48	0.50	7.61	6.24	53,937.89
Downtown Harbor Docking Slips	0.24	3.34	1.36	0.01	0.18	0.14	1,250.64
Port of Call Docking Slips	2.49	34.71	14.11	0.12	1.83	1.50	13,010.51
Temporary Red Car Maint Facility	0.24	3.33	1.35	0.01	0.18	0.14	1,249.61
Warehouses 9 & 10 Operations	0.14	1.96	0.80	0.01	0.10	0.09	735.43

S.S. Lane Victory	0.33	4.56	1.85	0.02	0.24	0.20	1,710.78
Cruise Ship Terminal Berth 87-93	66.40	925.39	376.12	3.23	48.92	40.12	346,908.03
Los Angeles Maritime Institute	0.04	0.63	0.25	0.00	0.03	0.03	234.79
Crowley Tugboat Office	0.04	0.50	0.20	0.00	0.03	0.02	187.36
<b>TOTALS (lbs/day, unmitigated)</b>	<b>115.41</b>	<b>1,608.49</b>	<b>653.76</b>	<b>5.61</b>	<b>85.03</b>	<b>69.73</b>	<b>602,987.92</b>

Operational Settings:

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2015 Temperature (F): 80 Season: Summer

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
Port of Call Resturant Development		94.37	1000 sq ft	60.00	5,662.20	52,046.94
Port of Call Retail Development		42.05	1000 sq ft	40.00	1,682.00	15,276.76
Downtown Harbor Docking Slips		3.25	rooms	12.00	39.00	354.22
Port of Call Docking Slips		3.22	rooms	126.00	405.72	3,684.95
Temporary Red Car Maint Facility		3.00	employees	11.00	33.00	353.93
Warehouses 9 & 10 Operations		1.00	employees	20.00	20.00	208.29
S.S. Lane Victory		5.40	1000 sq ft	10.00	54.00	484.54
Cruise Ship Terminal Berth 87-93		1.46	unknown	7,500.00	10,950.00	98,254.35
Los Angeles Maritime Institute		0.50	unknown	10.00	5.00	66.50
Crowley Tugboat Office		0.57	unknown	7.00	3.99	53.07
					18,854.91	170,783.55

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	1.5	0.0	0.0	100.0
Light Truck < 3750 lbs	2.8	0.0	0.0	100.0
Light Truck 3751-5750 lbs	0.0	0.0	0.0	100.0



Med Truck 5751-8500 lbs	0.0	0.0	0.0	100.0
Lite-Heavy Truck 8501-10,000 lbs	0.0	0.0	0.0	100.0
Lite-Heavy Truck 10,001-14,000 lbs	0.0	0.0	0.0	100.0
Med-Heavy Truck 14,001-33,000 lbs	0.0	0.0	0.0	100.0
Heavy-Heavy Truck 33,001-60,000 lbs	35.2	0.0	0.0	100.0
Other Bus	59.2	0.0	0.0	100.0
Urban Bus	0.0	0.0	0.0	100.0
Motorcycle	0.0	0.0	0.0	100.0
School Bus	0.0	0.0	0.0	100.0
Motor Home	1.3	0.0	0.0	100.0

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	12.7	7.0	9.5	13.3	7.4	8.9
Rural Trip Length (miles)	17.6	12.1	14.9	15.4	9.6	12.6
Trip speeds (mph)	30.0	30.0	30.0	30.0	30.0	30.0
% of Trips - Residential	32.9	18.0	49.1			
% of Trips - Commercial (by land use)						
Quality resturant				8.0	4.0	88.0
High turnover (sit-down) rest.				5.0	2.5	92.5
Hotel				5.0	2.5	92.5
Motel				5.0	2.5	92.5
General light industry				50.0	25.0	25.0
Industrial park				41.5	20.8	37.8
Museum				2.0	1.0	97.0
Cruise Ship Terminal				2.0	1.0	97.0
Maritime Office LAMI				100.0	0.0	0.0
Crowley Tugboat Office				100.0	0.0	0.0

Urbemis 2007 Version 9.2.4

## Combined Annual Emissions Reports (Tons/Year)

File Name: C:\Documents and Settings\mslavick\Application Data\Urbemis\Version9a\Projects\SPW\_No\_Project\_2022\_wkdy.urb924

Project Name: San Pedro Waterfront No Project 2022 Weekday Diesel PM

Project Location: South Coast AQMD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

## Summary Report:

## OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (tons/year, unmitigated)	16.05	193.67	95.20	1.08	12.25	9.63	116,960.20

## SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (tons/year, unmitigated)	16.05	193.67	95.20	1.08	12.25	9.63	116,960.20

## Operational Unmitigated Detail Report:

## OPERATIONAL EMISSION ESTIMATES Annual Tons Per Year, Unmitigated

<u>Source</u>	<u>ROG</u>	<u>NOX</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM25</u>	<u>CO2</u>
Port of Call Resturant Development	4.38	52.93	26.01	0.30	3.35	2.63	31,964.99
Port of Call Retail Development	1.42	17.18	8.45	0.10	1.09	0.85	10,377.08
Downtown Harbor Docking Slips	0.03	0.35	0.17	0.00	0.02	0.02	210.68
Port of Call Docking Slips	0.30	3.61	1.78	0.02	0.23	0.18	2,182.63
Temporary Red Car Maint Facility	0.03	0.38	0.19	0.00	0.02	0.02	228.05
Warehouses 9 & 10 Operations	0.06	0.67	0.33	0.00	0.04	0.03	402.64

S.S. Lane Victory	0.03	0.34	0.17	0.00	0.02	0.02	208.14
Cruise Ship Terminal Berth 87-93	9.73	117.41	57.71	0.66	7.43	5.84	70,905.83
Los Angeles Maritime Institute	0.04	0.47	0.23	0.00	0.03	0.02	282.80
Crowley Tugboat Office	0.03	0.33	0.16	0.00	0.02	0.02	197.36
<b>TOTALS (tons/year, unmitigated)</b>	<b>16.05</b>	<b>193.67</b>	<b>95.20</b>	<b>1.08</b>	<b>12.25</b>	<b>9.63</b>	<b>116,960.20</b>

Operational Settings:

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2020 Season: Annual

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
Port of Call Resturant Development		89.95	1000 sq ft	60.00	5,397.00	49,609.22
Port of Call Retail Development		44.33	1000 sq ft	40.00	1,773.20	16,105.09
Downtown Harbor Docking Slips		3.00	rooms	12.00	36.00	326.97
Port of Call Docking Slips		2.96	rooms	126.00	372.96	3,387.41
Temporary Red Car Maint Facility		3.00	employees	11.00	33.00	353.93
Warehouses 9 & 10 Operations		3.00	employees	20.00	60.00	624.88
S.S. Lane Victory		3.60	1000 sq ft	10.00	36.00	323.03
Cruise Ship Terminal Berth 87-93		1.46	unknown	8,400.00	12,264.00	110,044.87
Los Angeles Maritime Institute		3.30	unknown	10.00	33.00	438.90
Crowley Tugboat Office		3.29	unknown	7.00	23.03	306.30
					20,028.19	181,520.60

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	1.5	0.0	0.0	100.0
Light Truck < 3750 lbs	2.8	0.0	0.0	100.0
Light Truck 3751-5750 lbs	0.0	0.0	0.0	100.0

Med Truck 5751-8500 lbs	0.0	0.0	0.0	100.0
Lite-Heavy Truck 8501-10,000 lbs	0.0	0.0	0.0	100.0
Lite-Heavy Truck 10,001-14,000 lbs	0.0	0.0	0.0	100.0
Med-Heavy Truck 14,001-33,000 lbs	0.0	0.0	0.0	100.0
Heavy-Heavy Truck 33,001-60,000 lbs	35.2	0.0	0.0	100.0
Other Bus	59.2	0.0	0.0	100.0
Urban Bus	0.0	0.0	0.0	100.0
Motorcycle	0.0	0.0	0.0	100.0
School Bus	0.0	0.0	0.0	100.0
Motor Home	1.3	0.0	0.0	100.0

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	12.7	7.0	9.5	13.3	7.4	8.9
Rural Trip Length (miles)	17.6	12.1	14.9	15.4	9.6	12.6
Trip speeds (mph)	30.0	30.0	30.0	30.0	30.0	30.0
% of Trips - Residential	32.9	18.0	49.1			
% of Trips - Commercial (by land use)						
Quality resturant				8.0	4.0	88.0
High turnover (sit-down) rest.				5.0	2.5	92.5
Hotel				5.0	2.5	92.5
Motel				5.0	2.5	92.5
General light industry				50.0	25.0	25.0
Industrial park				41.5	20.8	37.8
Museum				2.0	1.0	97.0
Cruise Ship Terminal				2.0	1.0	97.0
Maritime Office LAMI				100.0	0.0	0.0
Crowley Tugboat Office				100.0	0.0	0.0

Urbemis 2007 Version 9.2.4

## Combined Annual Emissions Reports (Tons/Year)

File Name: C:\Documents and Settings\mslavick\Application Data\Urbemis\Version9a\Projects\SPW\_No\_Project\_2022\_wkend.urb924

Project Name: San Pedro Waterfront No Project 2022 Weekend Diesel PM

Project Location: South Coast AQMD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

## Summary Report:

## OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (tons/year, unmitigated)	16.14	194.80	95.74	1.08	12.30	9.69	117,638.98

## SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (tons/year, unmitigated)	16.14	194.80	95.74	1.08	12.30	9.69	117,638.98

## Operational Unmitigated Detail Report:

## OPERATIONAL EMISSION ESTIMATES Annual Tons Per Year, Unmitigated

<u>Source</u>	<u>ROG</u>	<u>NOX</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM25</u>	<u>CO2</u>
Port of Call Resturant Development	4.60	55.53	27.29	0.31	3.51	2.76	33,535.70
Port of Call Retail Development	1.35	16.30	8.01	0.09	1.03	0.81	9,843.36
Downtown Harbor Docking Slips	0.03	0.38	0.19	0.00	0.02	0.02	228.23
Port of Call Docking Slips	0.33	3.93	1.93	0.02	0.25	0.20	2,374.35
Temporary Red Car Maint Facility	0.03	0.38	0.19	0.00	0.02	0.02	228.05
Warehouses 9 & 10 Operations	0.02	0.22	0.11	0.00	0.01	0.01	134.21

S.S. Lane Victory	0.04	0.52	0.25	0.00	0.03	0.03	312.21
Cruise Ship Terminal Berth 87-93	9.73	117.41	57.71	0.66	7.43	5.84	70,905.83
Los Angeles Maritime Institute	0.01	0.07	0.03	0.00	0.00	0.00	42.85
Crowley Tugboat Office	0.00	0.06	0.03	0.00	0.00	0.00	34.19
<b>TOTALS (tons/year, unmitigated)</b>	<b>16.14</b>	<b>194.80</b>	<b>95.74</b>	<b>1.08</b>	<b>12.30</b>	<b>9.69</b>	<b>117,638.98</b>

Operational Settings:

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2020 Season: Annual

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
Port of Call Resturant Development		94.37	1000 sq ft	60.00	5,662.20	52,046.94
Port of Call Retail Development		42.05	1000 sq ft	40.00	1,682.00	15,276.76
Downtown Harbor Docking Slips		3.25	rooms	12.00	39.00	354.22
Port of Call Docking Slips		3.22	rooms	126.00	405.72	3,684.95
Temporary Red Car Maint Facility		3.00	employees	11.00	33.00	353.93
Warehouses 9 & 10 Operations		1.00	employees	20.00	20.00	208.29
S.S. Lane Victory		5.40	1000 sq ft	10.00	54.00	484.54
Cruise Ship Terminal Berth 87-93		1.46	unknown	8,400.00	12,264.00	110,044.87
Los Angeles Maritime Institute		0.50	unknown	10.00	5.00	66.50
Crowley Tugboat Office		0.57	unknown	7.00	3.99	53.07
					20,168.91	182,574.07

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	1.5	0.0	0.0	100.0
Light Truck < 3750 lbs	2.8	0.0	0.0	100.0
Light Truck 3751-5750 lbs	0.0	0.0	0.0	100.0

Med Truck 5751-8500 lbs	0.0	0.0	0.0	100.0
Lite-Heavy Truck 8501-10,000 lbs	0.0	0.0	0.0	100.0
Lite-Heavy Truck 10,001-14,000 lbs	0.0	0.0	0.0	100.0
Med-Heavy Truck 14,001-33,000 lbs	0.0	0.0	0.0	100.0
Heavy-Heavy Truck 33,001-60,000 lbs	35.2	0.0	0.0	100.0
Other Bus	59.2	0.0	0.0	100.0
Urban Bus	0.0	0.0	0.0	100.0
Motorcycle	0.0	0.0	0.0	100.0
School Bus	0.0	0.0	0.0	100.0
Motor Home	1.3	0.0	0.0	100.0

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	12.7	7.0	9.5	13.3	7.4	8.9
Rural Trip Length (miles)	17.6	12.1	14.9	15.4	9.6	12.6
Trip speeds (mph)	30.0	30.0	30.0	30.0	30.0	30.0
% of Trips - Residential	32.9	18.0	49.1			
% of Trips - Commercial (by land use)						
Quality restaurant				8.0	4.0	88.0
High turnover (sit-down) rest.				5.0	2.5	92.5
Hotel				5.0	2.5	92.5
Motel				5.0	2.5	92.5
General light industry				50.0	25.0	25.0
Industrial park				41.5	20.8	37.8
Museum				2.0	1.0	97.0
Cruise Ship Terminal				2.0	1.0	97.0
Maritime Office LAMI				100.0	0.0	0.0
Crowley Tugboat Office				100.0	0.0	0.0

Urbemis 2007 Version 9.2.4

## Combined Summer Emissions Reports (Pounds/Day)

File Name: C:\Documents and Settings\mslavick\Application Data\Urbemis\Version9a\Projects\SPW\_No\_Project\_2022\_wkdy.urb924

Project Name: San Pedro Waterfront No Project 2022 Weekday Diesel PM

Project Location: South Coast AQMD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

## Summary Report:

## OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (lbs/day, unmitigated)	87.92	1,025.35	521.57	5.96	67.13	52.74	640,877.69

## SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (lbs/day, unmitigated)	87.92	1,025.35	521.57	5.96	67.13	52.74	640,877.69

## Operational Unmitigated Detail Report:

## OPERATIONAL EMISSION ESTIMATES Summer Pounds Per Day, Unmitigated

<u>Source</u>	<u>ROG</u>	<u>NOX</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM25</u>	<u>CO2</u>
Port of Call Resturant Development	24.03	280.23	142.54	1.63	18.35	14.41	175,150.61
Port of Call Retail Development	7.80	90.97	46.28	0.53	5.96	4.68	56,860.72
Downtown Harbor Docking Slips	0.16	1.85	0.94	0.01	0.12	0.10	1,154.40
Port of Call Docking Slips	1.64	19.13	9.73	0.11	1.25	0.98	11,959.61
Temporary Red Car Maint Facility	0.17	2.00	1.02	0.01	0.13	0.10	1,249.57
Warehouses 9 & 10 Operations	0.30	3.53	1.80	0.02	0.23	0.18	2,206.22



S.S. Lane Victory	0.16	1.82	0.93	0.01	0.12	0.09	1,140.48
Cruise Ship Terminal Berth 87-93	53.30	621.61	316.19	3.62	40.70	31.98	388,525.08
Los Angeles Maritime Institute	0.21	2.48	1.26	0.01	0.16	0.13	1,549.58
Crowley Tugboat Office	0.15	1.73	0.88	0.01	0.11	0.09	1,081.42
<b>TOTALS (lbs/day, unmitigated)</b>	<b>87.92</b>	<b>1,025.35</b>	<b>521.57</b>	<b>5.96</b>	<b>67.13</b>	<b>52.74</b>	<b>640,877.69</b>

Operational Settings:

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2020 Temperature (F): 80 Season: Summer

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
Port of Call Resturant Development		89.95	1000 sq ft	60.00	5,397.00	49,609.22
Port of Call Retail Development		44.33	1000 sq ft	40.00	1,773.20	16,105.09
Downtown Harbor Docking Slips		3.00	rooms	12.00	36.00	326.97
Port of Call Docking Slips		2.96	rooms	126.00	372.96	3,387.41
Temporary Red Car Maint Facility		3.00	employees	11.00	33.00	353.93
Warehouses 9 & 10 Operations		3.00	employees	20.00	60.00	624.88
S.S. Lane Victory		3.60	1000 sq ft	10.00	36.00	323.03
Cruise Ship Terminal Berth 87-93		1.46	unknown	8,400.00	12,264.00	110,044.87
Los Angeles Maritime Institute		3.30	unknown	10.00	33.00	438.90
Crowley Tugboat Office		3.29	unknown	7.00	23.03	306.30
					20,028.19	181,520.60

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	1.5	0.0	0.0	100.0
Light Truck < 3750 lbs	2.8	0.0	0.0	100.0
Light Truck 3751-5750 lbs	0.0	0.0	0.0	100.0

Med Truck 5751-8500 lbs	0.0	0.0	0.0	100.0
Lite-Heavy Truck 8501-10,000 lbs	0.0	0.0	0.0	100.0
Lite-Heavy Truck 10,001-14,000 lbs	0.0	0.0	0.0	100.0
Med-Heavy Truck 14,001-33,000 lbs	0.0	0.0	0.0	100.0
Heavy-Heavy Truck 33,001-60,000 lbs	35.2	0.0	0.0	100.0
Other Bus	59.2	0.0	0.0	100.0
Urban Bus	0.0	0.0	0.0	100.0
Motorcycle	0.0	0.0	0.0	100.0
School Bus	0.0	0.0	0.0	100.0
Motor Home	1.3	0.0	0.0	100.0

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	12.7	7.0	9.5	13.3	7.4	8.9
Rural Trip Length (miles)	17.6	12.1	14.9	15.4	9.6	12.6
Trip speeds (mph)	30.0	30.0	30.0	30.0	30.0	30.0
% of Trips - Residential	32.9	18.0	49.1			
% of Trips - Commercial (by land use)						
Quality restaurant				8.0	4.0	88.0
High turnover (sit-down) rest.				5.0	2.5	92.5
Hotel				5.0	2.5	92.5
Motel				5.0	2.5	92.5
General light industry				50.0	25.0	25.0
Industrial park				41.5	20.8	37.8
Museum				2.0	1.0	97.0
Cruise Ship Terminal				2.0	1.0	97.0
Maritime Office LAMI				100.0	0.0	0.0
Crowley Tugboat Office				100.0	0.0	0.0

Urbemis 2007 Version 9.2.4

## Combined Summer Emissions Reports (Pounds/Day)

File Name: C:\Documents and Settings\mslavick\Application Data\Urbemis\Version9a\Projects\SPW\_No\_Project\_2022\_wkend.urb924

Project Name: San Pedro Waterfront No Project 2022 Weekend Diesel PM

Project Location: South Coast AQMD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

## Summary Report:

## OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (lbs/day, unmitigated)	88.42	1,031.32	524.59	6.00	67.52	53.05	644,597.14

## SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (lbs/day, unmitigated)	88.42	1,031.32	524.59	6.00	67.52	53.05	644,597.14

## Operational Unmitigated Detail Report:

## OPERATIONAL EMISSION ESTIMATES Summer Pounds Per Day, Unmitigated

<u>Source</u>	<u>ROG</u>	<u>NOX</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM25</u>	<u>CO2</u>
Port of Call Resturant Development	25.21	294.00	149.55	1.71	19.25	15.12	183,757.25
Port of Call Retail Development	7.40	86.29	43.89	0.50	5.65	4.44	53,936.24
Downtown Harbor Docking Slips	0.17	2.00	1.02	0.01	0.13	0.10	1,250.60
Port of Call Docking Slips	1.78	20.82	10.59	0.12	1.36	1.07	13,010.11
Temporary Red Car Maint Facility	0.17	2.00	1.02	0.01	0.13	0.10	1,249.57
Warehouses 9 & 10 Operations	0.10	1.18	0.60	0.01	0.08	0.06	735.41

S.S. Lane Victory	0.23	2.74	1.39	0.02	0.18	0.14	1,710.73
Cruise Ship Terminal Berth 87-93	53.30	621.61	316.19	3.62	40.70	31.98	388,525.08
Los Angeles Maritime Institute	0.03	0.38	0.19	0.00	0.02	0.02	234.79
Crowley Tugboat Office	0.03	0.30	0.15	0.00	0.02	0.02	187.36
<b>TOTALS (lbs/day, unmitigated)</b>	<b>88.42</b>	<b>1,031.32</b>	<b>524.59</b>	<b>6.00</b>	<b>67.52</b>	<b>53.05</b>	<b>644,597.14</b>

Operational Settings:

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2020 Temperature (F): 80 Season: Summer

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
Port of Call Resturant Development		94.37	1000 sq ft	60.00	5,662.20	52,046.94
Port of Call Retail Development		42.05	1000 sq ft	40.00	1,682.00	15,276.76
Downtown Harbor Docking Slips		3.25	rooms	12.00	39.00	354.22
Port of Call Docking Slips		3.22	rooms	126.00	405.72	3,684.95
Temporary Red Car Maint Facility		3.00	employees	11.00	33.00	353.93
Warehouses 9 & 10 Operations		1.00	employees	20.00	20.00	208.29
S.S. Lane Victory		5.40	1000 sq ft	10.00	54.00	484.54
Cruise Ship Terminal Berth 87-93		1.46	unknown	8,400.00	12,264.00	110,044.87
Los Angeles Maritime Institute		0.50	unknown	10.00	5.00	66.50
Crowley Tugboat Office		0.57	unknown	7.00	3.99	53.07
					20,168.91	182,574.07

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	1.5	0.0	0.0	100.0
Light Truck < 3750 lbs	2.8	0.0	0.0	100.0
Light Truck 3751-5750 lbs	0.0	0.0	0.0	100.0

Med Truck 5751-8500 lbs	0.0	0.0	0.0	100.0
Lite-Heavy Truck 8501-10,000 lbs	0.0	0.0	0.0	100.0
Lite-Heavy Truck 10,001-14,000 lbs	0.0	0.0	0.0	100.0
Med-Heavy Truck 14,001-33,000 lbs	0.0	0.0	0.0	100.0
Heavy-Heavy Truck 33,001-60,000 lbs	35.2	0.0	0.0	100.0
Other Bus	59.2	0.0	0.0	100.0
Urban Bus	0.0	0.0	0.0	100.0
Motorcycle	0.0	0.0	0.0	100.0
School Bus	0.0	0.0	0.0	100.0
Motor Home	1.3	0.0	0.0	100.0

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	12.7	7.0	9.5	13.3	7.4	8.9
Rural Trip Length (miles)	17.6	12.1	14.9	15.4	9.6	12.6
Trip speeds (mph)	30.0	30.0	30.0	30.0	30.0	30.0
% of Trips - Residential	32.9	18.0	49.1			
% of Trips - Commercial (by land use)						
Quality restaurant				8.0	4.0	88.0
High turnover (sit-down) rest.				5.0	2.5	92.5
Hotel				5.0	2.5	92.5
Motel				5.0	2.5	92.5
General light industry				50.0	25.0	25.0
Industrial park				41.5	20.8	37.8
Museum				2.0	1.0	97.0
Cruise Ship Terminal				2.0	1.0	97.0
Maritime Office LAMI				100.0	0.0	0.0
Crowley Tugboat Office				100.0	0.0	0.0

Urbemis 2007 Version 9.2.4

## Combined Annual Emissions Reports (Tons/Year)

File Name: C:\Documents and Settings\mslavick\Application Data\Urbemis\Version9a\Projects\SPW\_No\_Project\_2037\_wkdy.urb924

Project Name: San Pedro Waterfront No Project 2037 Weekday Diesel PM

Project Location: South Coast AQMD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

## Summary Report:

## OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (tons/year, unmitigated)	12.50	113.90	80.61	1.20	10.34	7.68	129,607.89

## SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (tons/year, unmitigated)	12.50	113.90	80.61	1.20	10.34	7.68	129,607.89

## Operational Unmitigated Detail Report:

## OPERATIONAL EMISSION ESTIMATES Annual Tons Per Year, Unmitigated

<u>Source</u>	<u>ROG</u>	<u>NOX</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM25</u>	<u>CO2</u>
Port of Call Resturant Development	3.08	28.09	19.88	0.30	2.55	1.90	31,961.52
Port of Call Retail Development	1.00	9.12	6.45	0.10	0.83	0.62	10,375.96
Downtown Harbor Docking Slips	0.02	0.19	0.13	0.00	0.02	0.01	210.66
Port of Call Docking Slips	0.21	1.92	1.36	0.02	0.17	0.13	2,182.39
Temporary Red Car Maint Facility	0.02	0.20	0.14	0.00	0.02	0.01	228.02
Warehouses 9 & 10 Operations	0.04	0.35	0.25	0.00	0.03	0.02	402.59

S.S. Lane Victory	0.02	0.18	0.13	0.00	0.02	0.01	208.12
Cruise Ship Terminal Berth 87-93	8.06	73.43	51.97	0.78	6.66	4.95	83,558.52
Los Angeles Maritime Institute	0.03	0.25	0.18	0.00	0.02	0.02	282.77
Crowley Tugboat Office	0.02	0.17	0.12	0.00	0.02	0.01	197.34
<b>TOTALS (tons/year, unmitigated)</b>	<b>12.50</b>	<b>113.90</b>	<b>80.61</b>	<b>1.20</b>	<b>10.34</b>	<b>7.68</b>	<b>129,607.89</b>

Operational Settings:

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2035 Season: Annual

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
Port of Call Resturant Development		89.95	1000 sq ft	60.00	5,397.00	49,609.22
Port of Call Retail Development		44.33	1000 sq ft	40.00	1,773.20	16,105.09
Downtown Harbor Docking Slips		3.00	rooms	12.00	36.00	326.97
Port of Call Docking Slips		2.96	rooms	126.00	372.96	3,387.41
Temporary Red Car Maint Facility		3.00	employees	11.00	33.00	353.93
Warehouses 9 & 10 Operations		3.00	employees	20.00	60.00	624.88
S.S. Lane Victory		3.60	1000 sq ft	10.00	36.00	323.03
Cruise Ship Terminal Berth 87-93		1.46	unknown	9,900.00	14,454.00	129,695.74
Los Angeles Maritime Institute		3.30	unknown	10.00	33.00	438.90
Crowley Tugboat Office		3.29	unknown	7.00	23.03	306.30
					22,218.19	201,171.47

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	1.5	0.0	0.0	100.0
Light Truck < 3750 lbs	2.8	0.0	0.0	100.0
Light Truck 3751-5750 lbs	0.0	0.0	0.0	100.0

Med Truck 5751-8500 lbs	0.0	0.0	0.0	100.0
Lite-Heavy Truck 8501-10,000 lbs	0.0	0.0	0.0	100.0
Lite-Heavy Truck 10,001-14,000 lbs	0.0	0.0	0.0	100.0
Med-Heavy Truck 14,001-33,000 lbs	0.0	0.0	0.0	100.0
Heavy-Heavy Truck 33,001-60,000 lbs	35.2	0.0	0.0	100.0
Other Bus	59.2	0.0	0.0	100.0
Urban Bus	0.0	0.0	0.0	100.0
Motorcycle	0.0	0.0	0.0	100.0
School Bus	0.0	0.0	0.0	100.0
Motor Home	1.3	0.0	0.0	100.0

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	12.7	7.0	9.5	13.3	7.4	8.9
Rural Trip Length (miles)	17.6	12.1	14.9	15.4	9.6	12.6
Trip speeds (mph)	30.0	30.0	30.0	30.0	30.0	30.0
% of Trips - Residential	32.9	18.0	49.1			

% of Trips - Commercial (by land use)

Quality resturant	8.0	4.0	88.0
High turnover (sit-down) rest.	5.0	2.5	92.5
Hotel	5.0	2.5	92.5
Motel	5.0	2.5	92.5
General light industry	50.0	25.0	25.0
Industrial park	41.5	20.8	37.8
Museum	2.0	1.0	97.0
Cruise Ship Terminal	2.0	1.0	97.0
Maritime Office LAMI	100.0	0.0	0.0
Crowley Tugboat Office	100.0	0.0	0.0



Urbemis 2007 Version 9.2.4

## Combined Annual Emissions Reports (Tons/Year)

File Name: C:\Documents and Settings\mslavick\Application Data\Urbemis\Version9a\Projects\SPW\_No\_Project\_2037\_wkend.urb924

Project Name: San Pedro Waterfront No Project 2037 Weekend Diesel PM

Project Location: South Coast AQMD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

## Summary Report:

## OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (tons/year, unmitigated)	12.55	114.50	81.03	1.20	10.37	7.71	130,286.60

## SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (tons/year, unmitigated)	12.55	114.50	81.03	1.20	10.37	7.71	130,286.60

## Operational Unmitigated Detail Report:

## OPERATIONAL EMISSION ESTIMATES Annual Tons Per Year, Unmitigated

<u>Source</u>	<u>ROG</u>	<u>NOX</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM25</u>	<u>CO2</u>
Port of Call Resturant Development	3.23	29.47	20.86	0.31	2.67	1.99	33,532.06
Port of Call Retail Development	0.95	8.65	6.12	0.09	0.78	0.58	9,842.30
Downtown Harbor Docking Slips	0.02	0.20	0.14	0.00	0.02	0.01	228.21
Port of Call Docking Slips	0.23	2.09	1.48	0.02	0.19	0.14	2,374.09
Temporary Red Car Maint Facility	0.02	0.20	0.14	0.00	0.02	0.01	228.02
Warehouses 9 & 10 Operations	0.01	0.12	0.08	0.00	0.01	0.01	134.20

S.S. Lane Victory	0.03	0.27	0.19	0.00	0.02	0.02	312.17
Cruise Ship Terminal Berth 87-93	8.06	73.43	51.97	0.78	6.66	4.95	83,558.52
Los Angeles Maritime Institute	0.00	0.04	0.03	0.00	0.00	0.00	42.84
Crowley Tugboat Office	0.00	0.03	0.02	0.00	0.00	0.00	34.19
<b>TOTALS (tons/year, unmitigated)</b>	<b>12.55</b>	<b>114.50</b>	<b>81.03</b>	<b>1.20</b>	<b>10.37</b>	<b>7.71</b>	<b>130,286.60</b>

Operational Settings:

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2035 Season: Annual

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
Port of Call Resturant Development		94.37	1000 sq ft	60.00	5,662.20	52,046.94
Port of Call Retail Development		42.05	1000 sq ft	40.00	1,682.00	15,276.76
Downtown Harbor Docking Slips		3.25	rooms	12.00	39.00	354.22
Port of Call Docking Slips		3.22	rooms	126.00	405.72	3,684.95
Temporary Red Car Maint Facility		3.00	employees	11.00	33.00	353.93
Warehouses 9 & 10 Operations		1.00	employees	20.00	20.00	208.29
S.S. Lane Victory		5.40	1000 sq ft	10.00	54.00	484.54
Cruise Ship Terminal Berth 87-93		1.46	unknown	9,900.00	14,454.00	129,695.74
Los Angeles Maritime Institute		0.50	unknown	10.00	5.00	66.50
Crowley Tugboat Office		0.57	unknown	7.00	3.99	53.07
					22,358.91	202,224.94

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	1.5	0.0	0.0	100.0
Light Truck < 3750 lbs	2.8	0.0	0.0	100.0
Light Truck 3751-5750 lbs	0.0	0.0	0.0	100.0

Med Truck 5751-8500 lbs	0.0	0.0	0.0	100.0
Lite-Heavy Truck 8501-10,000 lbs	0.0	0.0	0.0	100.0
Lite-Heavy Truck 10,001-14,000 lbs	0.0	0.0	0.0	100.0
Med-Heavy Truck 14,001-33,000 lbs	0.0	0.0	0.0	100.0
Heavy-Heavy Truck 33,001-60,000 lbs	35.2	0.0	0.0	100.0
Other Bus	59.2	0.0	0.0	100.0
Urban Bus	0.0	0.0	0.0	100.0
Motorcycle	0.0	0.0	0.0	100.0
School Bus	0.0	0.0	0.0	100.0
Motor Home	1.3	0.0	0.0	100.0

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	12.7	7.0	9.5	13.3	7.4	8.9
Rural Trip Length (miles)	17.6	12.1	14.9	15.4	9.6	12.6
Trip speeds (mph)	30.0	30.0	30.0	30.0	30.0	30.0
% of Trips - Residential	32.9	18.0	49.1			

% of Trips - Commercial (by land use)

Quality restaurant	8.0	4.0	88.0
High turnover (sit-down) rest.	5.0	2.5	92.5
Hotel	5.0	2.5	92.5
Motel	5.0	2.5	92.5
General light industry	50.0	25.0	25.0
Industrial park	41.5	20.8	37.8
Museum	2.0	1.0	97.0
Cruise Ship Terminal	2.0	1.0	97.0
Maritime Office LAMI	100.0	0.0	0.0
Crowley Tugboat Office	100.0	0.0	0.0

Urbemis 2007 Version 9.2.4

## Combined Summer Emissions Reports (Pounds/Day)

File Name: C:\Documents and Settings\mslavick\Application Data\Urbemis\Version9a\Projects\SPW\_No\_Project\_2037\_wkdy.urb924

Project Name: San Pedro Waterfront No Project 2037 Weekday Diesel PM

Project Location: South Coast AQMD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

## Summary Report:

## OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (lbs/day, unmitigated)	68.48	603.00	441.73	6.61	56.63	42.10	710,180.17

## SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (lbs/day, unmitigated)	68.48	603.00	441.73	6.61	56.63	42.10	710,180.17

## Operational Unmitigated Detail Report:

## OPERATIONAL EMISSION ESTIMATES Summer Pounds Per Day, Unmitigated

<u>Source</u>	<u>ROG</u>	<u>NOX</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM25</u>	<u>CO2</u>
Port of Call Resturant Development	16.89	148.70	108.93	1.63	13.97	10.38	175,131.62
Port of Call Retail Development	5.48	48.27	35.36	0.53	4.53	3.37	56,854.56
Downtown Harbor Docking Slips	0.11	0.98	0.72	0.01	0.09	0.07	1,154.28
Port of Call Docking Slips	1.15	10.15	7.44	0.11	0.95	0.71	11,958.31
Temporary Red Car Maint Facility	0.12	1.06	0.78	0.01	0.10	0.07	1,249.43
Warehouses 9 & 10 Operations	0.21	1.87	1.37	0.02	0.18	0.13	2,205.98

S.S. Lane Victory	0.11	0.97	0.71	0.01	0.09	0.07	1,140.36
Cruise Ship Terminal Berth 87-93	44.16	388.76	284.79	4.27	36.51	27.15	457,854.92
Los Angeles Maritime Institute	0.15	1.32	0.96	0.01	0.12	0.09	1,549.41
Crowley Tugboat Office	0.10	0.92	0.67	0.01	0.09	0.06	1,081.30
<b>TOTALS (lbs/day, unmitigated)</b>	<b>68.48</b>	<b>603.00</b>	<b>441.73</b>	<b>6.61</b>	<b>56.63</b>	<b>42.10</b>	<b>710,180.17</b>

Operational Settings:

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2035 Temperature (F): 80 Season: Summer

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
Port of Call Resturant Development		89.95	1000 sq ft	60.00	5,397.00	49,609.22
Port of Call Retail Development		44.33	1000 sq ft	40.00	1,773.20	16,105.09
Downtown Harbor Docking Slips		3.00	rooms	12.00	36.00	326.97
Port of Call Docking Slips		2.96	rooms	126.00	372.96	3,387.41
Temporary Red Car Maint Facility		3.00	employees	11.00	33.00	353.93
Warehouses 9 & 10 Operations		3.00	employees	20.00	60.00	624.88
S.S. Lane Victory		3.60	1000 sq ft	10.00	36.00	323.03
Cruise Ship Terminal Berth 87-93		1.46	unknown	9,900.00	14,454.00	129,695.74
Los Angeles Maritime Institute		3.30	unknown	10.00	33.00	438.90
Crowley Tugboat Office		3.29	unknown	7.00	23.03	306.30
					22,218.19	201,171.47

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	1.5	0.0	0.0	100.0
Light Truck < 3750 lbs	2.8	0.0	0.0	100.0
Light Truck 3751-5750 lbs	0.0	0.0	0.0	100.0

Med Truck 5751-8500 lbs	0.0	0.0	0.0	100.0
Lite-Heavy Truck 8501-10,000 lbs	0.0	0.0	0.0	100.0
Lite-Heavy Truck 10,001-14,000 lbs	0.0	0.0	0.0	100.0
Med-Heavy Truck 14,001-33,000 lbs	0.0	0.0	0.0	100.0
Heavy-Heavy Truck 33,001-60,000 lbs	35.2	0.0	0.0	100.0
Other Bus	59.2	0.0	0.0	100.0
Urban Bus	0.0	0.0	0.0	100.0
Motorcycle	0.0	0.0	0.0	100.0
School Bus	0.0	0.0	0.0	100.0
Motor Home	1.3	0.0	0.0	100.0

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	12.7	7.0	9.5	13.3	7.4	8.9
Rural Trip Length (miles)	17.6	12.1	14.9	15.4	9.6	12.6
Trip speeds (mph)	30.0	30.0	30.0	30.0	30.0	30.0
% of Trips - Residential	32.9	18.0	49.1			
% of Trips - Commercial (by land use)						
Quality resturant				8.0	4.0	88.0
High turnover (sit-down) rest.				5.0	2.5	92.5
Hotel				5.0	2.5	92.5
Motel				5.0	2.5	92.5
General light industry				50.0	25.0	25.0
Industrial park				41.5	20.8	37.8
Museum				2.0	1.0	97.0
Cruise Ship Terminal				2.0	1.0	97.0
Maritime Office LAMI				100.0	0.0	0.0
Crowley Tugboat Office				100.0	0.0	0.0

Urbemis 2007 Version 9.2.4

## Combined Summer Emissions Reports (Pounds/Day)

File Name: C:\Documents and Settings\mslavick\Application Data\Urbemis\Version9a\Projects\SPW\_No\_Project\_2037\_wkend.urb924

Project Name: San Pedro Waterfront No Project 2037 Weekend Diesel PM

Project Location: South Coast AQMD

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

## Summary Report:

## OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (lbs/day, unmitigated)	68.84	606.16	444.06	6.65	56.93	42.31	713,899.20

## SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (lbs/day, unmitigated)	68.84	606.16	444.06	6.65	56.93	42.31	713,899.20

## Operational Unmitigated Detail Report:

## OPERATIONAL EMISSION ESTIMATES Summer Pounds Per Day, Unmitigated

<u>Source</u>	<u>ROG</u>	<u>NOX</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM25</u>	<u>CO2</u>
Port of Call Resturant Development	17.72	156.01	114.29	1.71	14.65	10.89	183,737.32
Port of Call Retail Development	5.20	45.79	33.54	0.50	4.30	3.20	53,930.39
Downtown Harbor Docking Slips	0.12	1.06	0.78	0.01	0.10	0.07	1,250.47
Port of Call Docking Slips	1.25	11.05	8.09	0.12	1.04	0.77	13,008.70
Temporary Red Car Maint Facility	0.12	1.06	0.78	0.01	0.10	0.07	1,249.43
Warehouses 9 & 10 Operations	0.07	0.62	0.46	0.01	0.06	0.04	735.33

S.S. Lane Victory	0.16	1.45	1.06	0.02	0.14	0.10	1,710.54
Cruise Ship Terminal Berth 87-93	44.16	388.76	284.79	4.27	36.51	27.15	457,854.92
Los Angeles Maritime Institute	0.02	0.20	0.15	0.00	0.02	0.01	234.76
Crowley Tugboat Office	0.02	0.16	0.12	0.00	0.01	0.01	187.34
<b>TOTALS (lbs/day, unmitigated)</b>	<b>68.84</b>	<b>606.16</b>	<b>444.06</b>	<b>6.65</b>	<b>56.93</b>	<b>42.31</b>	<b>713,899.20</b>

Operational Settings:

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2035 Temperature (F): 80 Season: Summer

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
Port of Call Resturant Development		94.37	1000 sq ft	60.00	5,662.20	52,046.94
Port of Call Retail Development		42.05	1000 sq ft	40.00	1,682.00	15,276.76
Downtown Harbor Docking Slips		3.25	rooms	12.00	39.00	354.22
Port of Call Docking Slips		3.22	rooms	126.00	405.72	3,684.95
Temporary Red Car Maint Facility		3.00	employees	11.00	33.00	353.93
Warehouses 9 & 10 Operations		1.00	employees	20.00	20.00	208.29
S.S. Lane Victory		5.40	1000 sq ft	10.00	54.00	484.54
Cruise Ship Terminal Berth 87-93		1.46	unknown	9,900.00	14,454.00	129,695.74
Los Angeles Maritime Institute		0.50	unknown	10.00	5.00	66.50
Crowley Tugboat Office		0.57	unknown	7.00	3.99	53.07
					22,358.91	202,224.94

Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	1.5	0.0	0.0	100.0
Light Truck < 3750 lbs	2.8	0.0	0.0	100.0
Light Truck 3751-5750 lbs	0.0	0.0	0.0	100.0



Med Truck 5751-8500 lbs	0.0	0.0	0.0	100.0
Lite-Heavy Truck 8501-10,000 lbs	0.0	0.0	0.0	100.0
Lite-Heavy Truck 10,001-14,000 lbs	0.0	0.0	0.0	100.0
Med-Heavy Truck 14,001-33,000 lbs	0.0	0.0	0.0	100.0
Heavy-Heavy Truck 33,001-60,000 lbs	35.2	0.0	0.0	100.0
Other Bus	59.2	0.0	0.0	100.0
Urban Bus	0.0	0.0	0.0	100.0
Motorcycle	0.0	0.0	0.0	100.0
School Bus	0.0	0.0	0.0	100.0
Motor Home	1.3	0.0	0.0	100.0

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	12.7	7.0	9.5	13.3	7.4	8.9
Rural Trip Length (miles)	17.6	12.1	14.9	15.4	9.6	12.6
Trip speeds (mph)	30.0	30.0	30.0	30.0	30.0	30.0
% of Trips - Residential	32.9	18.0	49.1			
% of Trips - Commercial (by land use)						
Quality restaurant				8.0	4.0	88.0
High turnover (sit-down) rest.				5.0	2.5	92.5
Hotel				5.0	2.5	92.5
Motel				5.0	2.5	92.5
General light industry				50.0	25.0	25.0
Industrial park				41.5	20.8	37.8
Museum				2.0	1.0	97.0
Cruise Ship Terminal				2.0	1.0	97.0
Maritime Office LAMI				100.0	0.0	0.0
Crowley Tugboat Office				100.0	0.0	0.0