

STATE OF CALIFORNIA

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
LOS ANGELES REGION
320 W 4th Street, Suite 200, Los Angeles

FACT SHEET
WASTE DISCHARGE REQUIREMENTS
for
PACIFIC TERMINALS, LLC
(DOMINGUEZ HILLS TANK FARM)

NPDES Permit No.: CA0052949
Public Notice No.: 05-017

FACILITY ADDRESS

Pacific Terminals, LLC
Dominguez Hills Tank Farm
2500 East Victoria Street
Compton, CA. 90220

FACILITY MAILING ADDRESS

Pacific Terminals, LLC
5900 Cherry Avenue
Long Beach, CA. 90805
Contact: Mark Reese
Telephone: 562-728-2358

I. Public Participation

The California Regional Water Quality Control Board, Los Angeles Region (Regional Board) is considering the issuance of Waste Discharge Requirements (WDRs) that will serve as a National Pollutant Discharge Elimination System (NPDES) permit for the above-referenced facility. As an initial step in the WDR process, the Regional Board staff has developed tentative WDRs. The Regional Board encourages public participation in the WDR adoption process.

A. Written Comments

The staff determinations are tentative. Interested persons are invited to submit written comments concerning these tentative WDRs. Comments should be submitted either in person or by mail to:

Executive Officer
California Regional Water Quality Control Board
Los Angeles Region
320 West 4th Street, Suite 200
Los Angeles, CA 90013

To be fully responded to by staff and considered by the Regional Board, written comments pertaining to this proposed Board action must be submitted to the Regional Board staff no later than 5 p.m. on April 15, 2005. The Regional Board chair may exclude from the record written materials received after this date. (See Cal. Code Regs., tit. 23, § 648.4).

B. Public Hearing

The Regional Board will hold a public hearing on the tentative WDRs during its regular Board meeting on the following date and time and at the following location:

Date: May 5, 2005
Time: 9:00 a.m.
Location: The City of Simi Valley Council Chambers,
2929 Tapo Canyon Road, Simi Valley, California.

Interested persons are invited to attend. At the public hearing, the Regional Board will hear testimony, if any, pertinent to the discharge, WDRs, and permit. Oral testimony will be heard; however, for accuracy of the record, important testimony should be in writing.

Please be aware that dates and venues may change. Our web address is <http://www.waterboards.ca.gov/losangeles/> where you can access the current agenda for changes in dates and locations.

C. Waste Discharge Requirements Appeals

Any aggrieved person may petition the State Water Resources Control Board to review the decision of the Regional Board regarding the final WDRs. The petition must be submitted within 30 days of the Regional Board's action to the following address:

State Water Resources Control Board, Office of Chief Counsel
ATTN: Elizabeth Miller Jennings, Senior Staff Counsel
1001 I Street, 22nd Floor
Sacramento, CA 95814

D. Information and Copying

The Report of Waste Discharge (ROWD), related documents, tentative effluent limitations and special conditions, comments received, and other information are on file and may be inspected at 320 West 4th Street, Suite 200, Los Angeles, California, 90013, at any time between 8:30 a.m. and 4:45 p.m., Monday through Friday. Copying of documents may be arranged through the Los Angeles Regional Board by calling (213) 576-6600.

E. Register of Interested Persons

Any person interested in being placed on the mailing list for information regarding the WDRs and NPDES permit should contact the Regional Board, reference this facility, and provide a name, address, and phone number.

II. Introduction

Pacific Terminals, LLC, (hereinafter Pacific Terminals or Discharger), discharges wastewater (i.e., pipeline hydrotest water, fuel oil tank hydrotest water, fuel equipment washdown water, and storm water runoff) from Dominguez Hills Tank Farm facility to Compton Creek, and then into the Los Angeles River, a water of the United States, above the Los Angeles River Estuary. Wastes discharged from the facility are regulated by WDRs and a NPDES permit contained in Board Order No. 99-043 (NPDES Permit No. CA0052949). Order No. 99-043 expired on April 10, 2004.

Edison Pipeline and Terminal Company (e.g., Southern California Edison) previously owned and operated the Dominguez Hills facility. Edison Pipeline and Terminal Company transferred ownership to Pacific Terminals on August 1, 2003.

Pacific Terminals filed a Report of Waste Discharge (ROWD) and applied for renewal of its WDRs and NPDES permit on September 27, 2004. The tentative Order is the reissuance of the WDRs and NPDES permit for discharges from Pacific Terminals.

A NPDES permit compliance evaluation inspection (CEI) was conducted on August 31, 2004. The CEI served as a site visit to observe operations, verify conditions, and collect additional data to develop permit limitations and conditions.

III. Description of Facility and Waste Discharge

Pacific Terminals owns and operates a bulk storage and transportation facility (to other Pacific Terminal sites) for petroleum products (crude, fuel oil, and displacement oil) located at 2500 East Victoria Street, Compton, California. The 70-acre site is highly vegetated and is protected from flooding adjacent properties by a concrete channel which traverses eastward down the center of the property. This channel is part of the Los Angeles County's flood control system. The site consists of North and South Tank Farms. Six aboveground storage tanks reside at the South Tank Farm and seven aboveground storage tanks reside at the North Tank Farm. The tank capacities range from 50,000 barrels (2.1 million gallons) to 500,000 barrels (21 million gallons).

Approximately 4.32 million gallons per day of contact wastewater consisting of storm water runoff, tank hydrotest water, and processed wastewater will be discharged through Discharge Serial Number 001 (Latitude 33°51'53" North, Longitude 118°13'10" West) to the storm drain. The discharge then flows three-quarters of a mile in a sub-surface storm drain system before reaching Compton Creek. The wastewater then flows to the Los

Angeles River, a water of the United States, at a point located approximately one-quarter mile upstream from Del Amo Boulevard, above the Los Angeles River Estuary. Prior to any releases to Compton Creek, all waste streams will be sampled to ensure compliance with effluent limitations in the NPDES permit. If the waste streams meet the effluent limitations, then the waste streams will be released to Compton Creek. If effluent limitations are not met, the impacted water will be processed through a proposed, on-site wastewater treatment system.

Contact storm water runoff from both the North and South Tank Farms and the pumping areas, drain to a water retention basin (located at the northeast portion of the Facility). The water retention basin consists of a surge reservoir (primary) and storm water impounding basin (secondary). The primary basin is approximately 10,900 square feet, 10 feet deep and is concrete lined. The holding capacity of the primary tank is 800,000 gallons. The secondary basin is approximately 72,500 square feet, five feet deep and has asphalt banks and a clay-lined floor. The holding capacity of the secondary basin is approximately 2.7 million gallons.

In the secondary basin, the accumulated storm water may percolate into the groundwater or evaporate.

During light storm events, rainwater is allowed to percolate into the ground or evaporate within the tank farms. During heavy rainfall events, storm water that accumulates in the tank farms is allowed to drain into the primary retention basin. Prior to draining into the primary retention basin, visual inspection is performed to make sure there is no oil sheen. If any oil sheen is noticed, booms are placed to absorb the sheen and the impacted water is either processed through the treatment system or disposed offsite. Flow is diverted from the primary retention basin to the secondary basin by opening a valve or from the over flow weir. In the secondary basin, the accumulated storm water may percolate into the groundwater or evaporate. In the event of storm water accumulation exceeds the retention basin capacity, the storm water will be sampled to ensure compliance with the effluent limitations in the NPDES permit. If the storm water meets the effluent limitations, then the storm water runoff that is collected in the retention basin will be discharged to storm drain through Discharge Serial Number 001. If the storm water does not meet the discharge requirements, then the storm water runoff will be treated before discharge to storm drain.

Occasionally, the storage tanks have to be refurbished or upgraded. The tanks are properly cleaned prior to refurbishment or upgrades. They are hydrotested by using potable city water. The hydrotest water is tested and is discharged over an extended period (not to exceed the authorized flow of 4.3 mgd), if it meets the discharge requirements. The hydrotest water is treated if the sample results show exceedance of any of the discharge limitations.

The processed wastewater include wastewater generated from the following sources: pipeline hydrotest water (from Pacific Terminal and other Pacific Terminal owned oil handling facilities), tank and pipeline cleaning, equipment wash water, oily water drained

into relief sumps, and storm water from vaults at the various tank farms and along the pipeline owned by Pacific Pipeline Terminals LLC, including Dominguez Hills facility. Pacific Terminals propose to use a treatment system that includes an oil water separator, particulate removal filters, organoclay media filter columns for removing oil and higher carbon chain compounds, and granulated activated carbon column filters for removing residual organic compounds. The treated processed wastewater discharged will be 72,000 gallons and will be a part of the 4.32 mgd total wastewater that is discharged through Outfall 001 to the storm drain which ultimately discharges to Compton Creek. According to the existing Order, waters from the retention basin which require treatment are directed to an oil/water separator (tricellerator) prior to being discharged. The tricellerator consists of an air floatation unit which separates the suspended solids from the water prior to discharge. According to the Discharger, the existing tricellerator has not been tested and may not be used in the future. Under the existing Order, up to 2,000 gpd of hydrotest water accumulated from other oil handling facilities is authorized to be transported to the Dominguez Hills facility for treatment and discharge. Dominguez Hills serves as a centralized facility which receives off-site hydrotest water via trucks or pipelines for treatment and discharge. While this practice is allowable under the existing Order, Pacific Terminals is currently not accepting hydrotest water from other operations, but proposes to retain this option in the proposed Order.

Pacific Terminals is looking into the option of using the wastewater from the secondary basin that meets future Waste Discharge Requirements for irrigation on site.

According to facility personnel, recently installed isolation valves throughout the operation prevent waste streams at the facility from mixing (e.g., storm water and oily water drained into a relief sump) and from entering into the retention basin. Mixing of waste streams, if at all, may occur less than 10 percent of the time. All waste streams are treated, if necessary, before discharge.

The existing Order references a 1996 chlorine study which supported an increase in the residual chlorine effluent limit to 0.5 mg/L, taking into consideration the dissipation of residual chlorine that occurs between the facility and Compton Creek. In the case of residual chlorine, according to facility personnel, when sampling occurs and indicates that levels of residual chlorine could exceed effluent limitations, the wastewater is treated with sodium metabisulfate. Then, when the residual chlorine level is within permitted effluent limitations, the wastewater is then discharged.

The Regional Board and the United States Environmental Protection Agency (U.S. EPA) have classified the Pacific Terminals facility as a major discharge based on discharge flow.

The Discharger characterized the hydrotest water, storm water, and wastewater from NPDES Discharge Serial No. 001 in the permit renewal application. The permit renewal application included information for daily maximum values on EPA Form 2C and attached laboratory data, which is presented as follows:

Hydrotest Water		
Pollutant (units)	Reported Maximum Daily Value: Form 2C	Reported Concentrations from Attached Lab Data
Biochemical Oxygen Demand (BOD) ¹ (mg/L)	<RL	<1.0
Total Suspended Solids (TSS) (mg/L)	<RL	<1.0
Waste Flow (mgd)	4.32	--
Phenolics, Total (mg/L)	--	<0.10
Temperature (winter/summer) (°C)	20	--
pH (min./max.) (s.u.)	7.81 / 7.81	7.81
Residual Chlorine (mg/L)	--	1.1
Oil and Grease (mg/L)	--	<1.0
Benzene (µg/L)	--	<0.5
Toluene (µg/l)	1.8	1.8
Toluene (lbs/day)	0.07	--
Xylene (µg/l)	--	--
p/m - Xylene (µg/l)	--	<1.0
o-Xylene (µg/l)	--	<1.0
Ethylbenzene (µg/l)	--	<1.0
Arsenic (µg/l)	9.6	9.58
Arsenic (lbs/day)	0.4	--
Cadmium (µg/l)	--	<5.0
Copper (µg/l)	3.2	3.15
Copper (lbs/day)	0.1	--
Total Chromium (µg/l)	0.7	0.684
Total Chromium (lbs/day)	0.03	--
Lead (µg/l)	2.9	2.87
Lead (lbs/day)	0.1	--
Mercury (µg/l)	--	<0.5
Selenium (µg/l)	5.9	5.87
Selenium (lbs/day)	0.2	--
Silver (µg/l)	--	<5.0
Zinc (µg/l)	12.8	12.8
Zinc (lbs/day)	0.5	--
Acute Toxicity (% Survival)	100%	100%

1 5-Day Biochemical Oxygen Demand at 20°C.
 RL = Reporting Limit.
 -- = Not Applicable/Not Reported.

Storm Water			
Pollutant (units)	Reported Maximum Daily Value: Form 2C	Reported Concentrations from Attached Lab Data	
		Primary Basin	Secondary Basin
Biochemical Oxygen Demand (BOD) ¹ (mg/L)	3.6	2.0	5.3
BOD (lbs/day)	61	--	--
Total Suspended Solids (TSS) (mg/L)	24.5	28	21
TSS (lbs/day)	415	--	
Waste Flow (mgd)	2	--	
pH (min./max.) (s.u.)	7.08/ 7.18	7.18	7.08
Oil and Grease (mg/L)	0.5	--	
Oil and Grease (lbs/day)	8.5	--	
Oil and Grease ² (µg/l)	--	<0.1	1.0

1. 5-Day Biochemical Oxygen Demand at 20°C.
2. Oil and Grease measurements using the hexane extractable material (HEM) method.

-- = Not Applicable.

The wastewater results submitted with the permit renewal application were for a treatment system pilot test. Pacific Terminals performed an upgrade on Tank 1 and cleaned the tank interior. Approximately 100,000 gallons of wastewater were generated during this process and were temporarily stored in on-site Baker Tanks. The wastewater profile samples are labeled Baker Tanks – Pond Influent and Baker Tanks 1. The wastewater was treated on site in test batches to determine proper retention times for treatment. After determining the proper retention time, the wastewater was treated (results listed as “treated”) and discharged to the primary retention basin for evaporation. The wastewater was not discharged to Compton Creek. Samples identified as “Retention Pond” represent wastewater samples after treatment, prior to discharge. It should be noted, however, that the levels of total petroleum hydrocarbons (TPH) as gasoline were less in the treated water than in the final sample collected in the retention basin (e.g., <100 µg/L after treatment; 140 µg/L in the retention basin). A permit limit for TPH has been added based upon BPJ and the bench test.

Wastewater					
Pollutant (units)	Reported Maximum Daily Value: Form 2C	Reported Concentrations from Attached Lab Data: Baker Tanks-Pond Influent	Reported Concentrations from Attached Lab Data: Baker Tanks 1	Reported Concentrations from Attached Lab Data: Baker Tanks (Treated)¹	Reported Concentrations from Attached Lab Data: Retention Pond
Biochemical Oxygen Demand (BOD) ² (mg/L)	6.5	25	--	6.5	--
BOD (lbs/d)	4	--	--	--	--
Total Suspended Solids (TSS) (mg/L)	7.9	600	--	7.9	--
TSS (lbs/day)	4.8	--	--	--	--
Settleable Solids (ml/L)	--	0.24	--	<0.10	--
Waste Flow (mgd)	72	--	--	--	--
Turbidity (NTU)	--	0.99	--	0.99	--
Sulfide (mg/L)	--	<0.050	--	<0.050	--
Oil and Grease (mg/L)	<1.0	460	--	<1.0	--
Total Residual Chlorine (mg/L)	--	--	--	<0.10	--
Benzene (µg/L)	1.4	5.8	<7.5	1.4 – 4.2	<0.30
Benzene (lbs/day)	0.0008	--	--	--	--
Phenolics, Total (mg/L)	--	--	--	<0.10	--
Toluene (µg/L)	--	6.2	21	<0.30 – 0.89	<0.30
Xylene (µg/L)	--	32	130	<0.30	<0.30
Ethylbenzene (µg/L)	--	3.7	15	<0.30	<0.30
Arsenic (µg/L)	24.9	--	--	24.9	--

Wastewater					
Pollutant (units)	Reported Maximum Daily Value: Form 2C	Reported Concentrations from Attached Lab Data: Baker Tanks-Pond Influent	Reported Concentrations from Attached Lab Data: Baker Tanks 1	Reported Concentrations from Attached Lab Data: Baker Tanks (Treated) ¹	Reported Concentrations from Attached Lab Data: Retention Pond
Cadmium (µg/L)	--	--	--	<5	--
Chromium (Total) (µg/L)	--	--	--	<5	--
Copper (µg/L)	--	--	--	<5	--
Lead (µg/L)	--	--	--	<10	--
Mercury (µg/L)	--	--	--	<0.5	--
Selenium (µg/L)	--	--	--	<15	--
Silver (µg/L)	<.5	--	--	<5	--
Zinc (µg/L)	<10	--	--	<10	--
TPH as Gasoline (µg/L)	<100	--	54,000	<100	140
TPH as Diesel (µg/L)	--	--	400,000	--	--
MTBE (µg/L)	--	23	<130	27 - 74	7.5

1. Samples identified as "Treated" were from November 7, 2003 and November 14, 2003 to determine retention times.

2. 5-Day Biochemical Oxygen Demand at 20°C.

-- = Not Applicable.

The available effluent data presented with the permit renewal for hydrotest water and storm water were evaluated to determine compliance with the existing effluent limitations. Wastewater effluent data were not evaluated¹ to determine compliance because the data represented test results only and were not representative of discharges from the facility. Based on the evaluation using hydrotest water and storm water data from the permit renewal application, the Discharger did not exceed effluent limitations contained in Order

1. However, the BOD effluent limitation of 30 mg/L was exceeded once in wastewater on May 9, 2002 (35 mg/L) and the TDS effluent limitation of 1,500 mg/L was exceeded once in wastewater on May 9, 2002 (1,900 mg/L).

No. 99-043.

Effluent monitoring data from Discharge Serial No. 001 were submitted with quarterly monitoring and annual reports for the period from January 1999 through February 2005². These data and existing effluent limitations are summarized³ below:

Pollutant (units)	Existing Maximum Daily Effluent Limitation (MDEL)	Reported Concentrations: Hydrotest Water	Reported Concentrations: Tricellerator Water	Reported Concentrations: Storm Water
pH (s.u.)	6.0 – 9.0	8.0	6.3 – 8.1	6.43 – 7.31
Temperature (°F)	100	54	54.1 – 59.7	59
Oil and Grease (mg/L)	15	2	<2.0 – 3.6	<1.0 – 4.8
Total Suspended Solids (TSS) (mg/L)	75	<4	7.2 – 41.5	<1.0 – 200
Total Dissolved Solids (TDS) ¹ (mg/L)	1,500	441	--	66.0 – 180
Settleable Solids (ml/L)	0.2	<0.2	--	<0.10
Turbidity (NTU)	75	1.9	10.7 – 44.7	0.71 – 300
Sulfides (mg/L)	1	<0.1	<0.1	<0.02 – <0.05
Biochemical Oxygen Demand (BOD) ² (mg/L)	30	<2	<1 – 3	<1.0 – 5.3
Residual Chlorine (mg/L)	0.5	<0.1	0.05	<0.03 – < 0.10
Phenols (µg/L)	1	<10	<0.1 – <500	<100 – 0.295
Arsenic (µg/L)	50	<5	<10	<10 – 6.83

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2. All other data between December 2002 and March 2004 were submitted with the permit renewal application.
 3. Sample results labeled Jar Test, Pretreatment and Filter Water from December 23, 2002 were provided. However, a rationale for conducting these samples were not provided and therefore, the data were not reviewed for compliance. Further, the sample locations were not identified with the sample results.

Pollutant (units)	Existing Maximum Daily Effluent Limitation (MDEL)	Reported Concentrations: Hydrotest Water	Reported Concentrations: Tricellerator Water	Reported Concentrations: Storm Water
Cadmium (µg/L)	10	<2	<5	<5
Total Chromium (µg/L)	50	<5	<10 – 19	<5 – 1.31
Copper (µg/L)	1,000	12	<5.0 – 55.6	4.01 – 22.1
Lead (µg/L)	50	<5	<10 – 10.2	<10 – 10.6
Mercury (µg/L)	2	<0.5	<0.5 – <1	<0.50 – 0.22
Selenium (µg/L)	10	<10	<5	<15.0 – 5.92
Silver (µg/L)	50	<5	<10	<5 – 0.72
Zinc (µg/L)	5,000	0.054	<100 – 164	50.2 – 194
Benzene (µg/L)	1	<0.5	<0.3 – 0.94	<0.3 – 4.1
Toluene (µg/L)	10	<0.5	<0.3 – 1.3	<0.3 – 8.5
Xylene (µg/L)	1,750	--	<0.6 – 4.6	<0.3 – 8.2
Ethylbenzene (µg/L)	680	<0.5	<0.3	<0.3 – <1
Acute Toxicity (% Survival)	100	100	100	100

Note: In some cases, only one value was reported. Much of this data was collected when Edison Pipeline operated the facility. Also, three data sets were provided from between August 26, 1999 and September 1, 1999. However, the sample location was not provided and therefore, the data were not reviewed for compliance.

1 For TDS, samples collected on September 10, 1999 exceeded effluent limitations (1,200 mg/L and 1,050 mg/L). However, it is not clear whether the samples were from hydrotest water or storm water. Therefore, these results were not summarized in the table above.

2 5-Day Biochemical Oxygen Demand at 20°C.

-- = Not Applicable.

All other effluent monitoring data were compiled and evaluated to determine compliance with the effluent limitations outlined above. The available effluent data indicate that the Discharger exceeded effluent limitations contained in Order No. 99-043 for benzene, TDS, TSS, and turbidity.

The benzene effluent limitation of 1.0 µg/L was exceeded twice in storm water effluent on December 19, 2002 (4.1 µg/L) and December 23, 2002 (1.3 µg/L); the TSS effluent limitation

of 75.0 mg/L was exceeded once in storm water on December 29, 2004 (200 mg/L); and the turbidity effluent limitation of 75 NTU was exceeded once in storm water on December 29, 2004 (300 NTU). A review of available effluent data reveals the Discharger has complied with all other existing effluent limitations. All identified violations are being evaluated for appropriate enforcement actions.

The existing Order required the Discharger to also collect and submit receiving water data on residual chlorine from Compton Creek. The Discharger sampled for residual chlorine during the 4th Quarter, 2002 and the pollutant was not detected.

The Discharger collected quarterly samples per the existing Monitoring and Reporting Program (hereinafter *MRP*) No. CI-5841 for select CTR pollutants (e.g., phenols, benzene, toluene, ethylbenzene, and metals). In addition, the existing Order required the Discharger to sample for other priority pollutants once during the permit term.

During the CEI that was conducted on August 31, 2004, the facility appeared to be well operated and maintained. Appropriate BMPs appeared to be in place, and the facility representatives appeared knowledgeable about NPDES responsibilities. The requested documents were available for review, were organized, and up to date.

Discharge Monitoring Reports for the 4th Quarter 2002, the 1st – 4th Quarter 2003 and 1st and 2nd Quarter 2004, were reviewed as a component of the inspection and the benzene permit effluent limitation exceedance, as previously described, was verified. This exceedance occurred prior to the change in ownership between Edison Pipeline and Pacific Terminals. In addition, stormwater data from 2005 were also reviewed and evaluated. Based on this review, the following exceedances were reported: the TSS effluent limitation of 75 mg/L and the turbidity effluent limitation of 75 NTU were both exceeded on December 29, 2004 (200 mg/L and 300 NTU, respectively).

On the date of inspection, it was noted that a turbidity result for a sample taken on March 10, 2004 from the primary basin was 78 NTU. The permitted effluent limitation is 75 NTU. The wastewater from the primary basin was discharged with the effluent from the secondary basin. The turbidity of the secondary basin was reported at 37 NTU. It appears the Discharger averaged these two values for an average of 56.5 NTU. The average was not flow-weighted. While the actual flow-weighted average appears to be under the effluent limitation for turbidity, the averaged value reported to the Regional Board does not appear to be accurate.

IV. Applicable Plans, Policies, and Regulations

The requirements contained in the proposed Order are based on the requirements and authorities contained in the following:

- A. The Federal Clean Water Act (CWA). The Federal Clean Water Act requires that any point source discharges of pollutants to a water of the United States must be

done in conformance with an NPDES permit. NPDES permits establish effluent limitations that incorporate various requirements of the CWA designed to protect water quality.

- B. Code of Regulations, Title 40 (40 CFR) – Protection of Environment, Chapter I, Environmental Protection Agency, Subchapter D, Water Programs, Parts 122-125 and Subchapter N, Effluent Guidelines. These CWA regulations provide effluent limitations for certain dischargers and establish procedures for NPDES permitting, including how to establish effluent limitations for certain pollutants discharged by Pacific Terminals.
- C. On June 13, 1994, the Regional Board adopted a revised *Water Quality Control Plan for the Coastal Watersheds of Los Angeles and Ventura Counties* (Basin Plan). The Basin Plan contains water quality objectives and beneficial uses for inland surface waters and for the Pacific Ocean. The beneficial uses listed in the Basin Plan for Compton Creek, above the Estuary (H.U. 403.15) are:
- Existing Uses: Groundwater recharge; contact and non-contact water recreation; warm freshwater habitat; marine habitat; wildlife habitat, and preservation of rare, threatened or endangered species.
- Potential Uses: Municipal and domestic water supply
- D. Ammonia Basin Plan Amendment. The 1994 Basin Plan provided water quality objectives for ammonia to protect aquatic life, in Tables 3-1 through Tables 3-4. However, those ammonia objectives were revised on April 25, 2002, by the Regional Board with the adoption of Resolution No. 2002-011, *Amendment to the Water Quality Control Plan for the Los Angeles Region to Update the Ammonia Objectives for Inland Surface Waters (Including Enclosed Bays, Estuaries and Wetlands) with Beneficial Use Designations for Protection of Aquatic Life*. The Ammonia Basin Plan Amendment was approved by the State Board, the Office of Administrative Law, and the U.S. EPA on April 30, 2003, June 5, 2003, and June 19, 2003, respectively. Although the revised ammonia water quality objectives may be less stringent than those contained in the 1994 Basin Plan, they are still protective of aquatic life and are consistent with the U.S. EPA's 1999 ammonia criteria update.
- E. The State Water Resources Control Board (State Board) adopted a *Water Quality Control Plan for Control of Temperature in the Coastal and Interstate Water and Enclosed Bays and Estuaries of California* (Thermal Plan) on May 18, 1972, and amended this plan on September 18, 1975. This plan contains temperature objectives for inland surface waters.
- F. On May 18, 2000, the U.S. EPA promulgated numeric criteria for priority pollutants for the State of California [known as the *California Toxics Rule* (CTR) and codified as 40 CFR section 131.38]. In the CTR, the U.S. EPA promulgated criteria that protect the

general population at an incremental cancer risk level of one in a million (10^{-6}) for all priority toxic pollutants regulated as carcinogens. The CTR also allows for a schedule of compliance not to exceed five years from the date of permit renewal for an existing discharger if the Discharger demonstrates that it is infeasible to promptly comply with effluent limitations derived from the CTR criteria.

- G. On March 2, 2000, State Board adopted the *Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California* (State Implementation Policy or SIP). The SIP became effective on April 28, 2000, with respect to the priority pollutant criteria promulgated for California by the U.S. EPA through National Toxics Rule (NTR) and to the priority pollutant objectives established by the Regional Boards in their basin plans, with the exception of the provision on alternate test procedures for individual discharges that have been approved by the U.S. EPA Regional Administrator. The alternate test procedures provision was effective on May 22, 2000. The SIP became effective on May 18, 2000, with respect to the priority pollutant criteria promulgated by the U.S. EPA through the CTR. The SIP requires the dischargers' submittal of data sufficient to conduct the determination of priority pollutants requiring water quality-based effluent limits (WQBELs) and to calculate the effluent limitations. The CTR criteria for fresh water or human health for consumption of organisms, whichever is more stringent, are used to develop the effluent limitations in this Order to protect the beneficial uses of Compton Creek
- H. 40 CFR section 122.44(d)(1)(vi)(A) requires the establishment of numeric effluent limitations to attain and maintain applicable narrative water quality criteria to protect the designated beneficial uses. Where numeric water quality objectives have not been established in the Basin Plan, 40 CFR section 122.44(d) specifies that WQBELs may be set based on U.S. EPA criteria and supplemented, where necessary, by other relevant information to attain and maintain narrative water quality criteria to fully protect designated beneficial uses.
- I. State and Federal anti-backsliding and anti-degradation policies require that Regional Board actions to protect the water quality of a water body and to ensure that the water body will not be further degraded. The anti-backsliding provisions are specified in section 402(o) and 303(d)(4) of the CWA and in 40 CFR section 122.44(l). Those provisions require a reissued permit to be as stringent as the previous permit with some exceptions where effluent limitations may be relaxed.
- J. Effluent limitations are established in accordance with Parts 301, 304, 306, and 307 of the Federal CWA, and amendments thereto. These requirements, as they are met, will maintain and protect the beneficial uses of Compton Creek.
- K. Existing waste discharge requirements are contained in Order No. 99-043, adopted by the Regional Board on May 27, 1999. Permit conditions (e.g., effluent limitations and other special conditions) established in the existing waste discharge requirements have

been carried over to proposed Order.

V. Regulatory Basis for Effluent Limitations

The CWA requires point source discharges to control the amount of conventional, non-conventional, and toxic pollutants that are discharged into the waters of the United States. The control of the discharge of pollutants is established through NPDES permits that contain effluent limitations and standards. The CWA establishes two principal bases for effluent limitations. First, dischargers are required to meet technology-based effluent limitations that reflect the best controls available considering costs and economic impact. Second, they are required to meet WQBELs that are developed to protect applicable designated uses of the receiving water.

The CWA requires that technology-based effluent limitations be established based on several levels of control:

- Best practicable treatment control technology (BPT) is based on the average of the best performance by plants within an industrial category or subcategory. BPT standards apply to toxic, conventional, and non-conventional pollutants.
- Best available technology economically achievable (BAT) represents the best existing performance of treatment technologies that are economically achievable within an industrial point source category. BAT standards apply to toxic and non-conventional pollutants.
- Best conventional pollutant control technology (BCT) is a standard for the control from existing industrial point sources of conventional pollutants including BOD, TSS, fecal coliform, pH, and oil and grease. The BCT standard is established after considering the “cost reasonableness” of the relationship between the cost of attaining a reduction in effluent discharge and the benefits that would result, and also the cost effectiveness of additional industrial treatment beyond BPT.
- New source performance standards (NSPS) represent the best available demonstrated control technology standards. The intent of NSPS guidelines is to set limitations that represent state-of-the-art treatment technology for new sources.

The CWA requires U.S. EPA to develop effluent limitations, guidelines and standards (ELGs) representing application of BPT, BCT, BAT, and NSPS. Section 402(a)(1) of the CWA and 40 CFR section 125.3 of the NPDES regulations authorize the use of Best Professional Judgment (BPJ) to derive technology-based effluent limitations on a case-by-case basis where ELGs are not available for certain industrial categories and/or pollutants of concern.

If a reasonable potential exists for pollutants in a discharge to exceed water quality standards, WQBELs are also required under 40 CFR section 122.44(d)(1)(i). WQBELs are established after determining that technology-based limitations are not stringent enough to

ensure that state water quality standards are met for the receiving water. WQBELs are based on the designated use of the receiving water, water quality criteria necessary to support the designated uses, and the state's anti-degradation policy. For discharges from this facility to inland surface waters, enclosed bays, and estuaries, the SIP establishes specific implementation procedures for determining reasonable potential and establishing WQBELs for priority pollutant criteria promulgated by U.S. EPA through the CTR and NTR, as well as the Basin Plan.

There are several other specific factors affecting the development of limitations and requirements in the proposed Order. These are discussed as follows:

A. Pollutants of Concern

The CWA requires that any pollutant that may be discharged by a point source in quantities of concern must be regulated through an NPDES permit. Further, the NPDES regulations require regulation of any pollutant that (1) causes; (2) has the reasonable potential to cause; or (3) contributes to the exceedance of a receiving water quality criteria or objective.

Pacific Terminals stores crude and heating oil, and facilitates the transportation of oil products to other Pacific Terminal sites. Wastewater discharged from the facility is comprised of pipeline hydrotest water, fuel equipment washdown water, and storm water runoff. Typical pollutants expected in the discharge include oil and grease, total petroleum hydrocarbons (TPH), total suspended solids, phenols, organic pollutants, metals, and sulfides.

Effluent limitations for Discharge Serial No. 001 in the existing Order were established for oil and grease, TPH, total suspended solids (TSS), and phenols because they have the potential to be present in storm water runoff from a petroleum tank farm. Storm water runoff may affect the pH and temperature of the discharge. Wastewater discharges may affect the temperature and pH of the receiving water, and because the Basin Plan contains water quality objectives for these pollutants, they are considered pollutants of concern in the discharge. Storm water runoff from the tank farm areas may contain constituents that may contribute to biochemical oxygen demand (BOD) and turbidity, and add TSS and total dissolved solids (TDS) to the discharge. Therefore, BOD, turbidity, TSS, and TDS are considered pollutants of concern in the proposed Order.

Pollutants typically associated with pipeline and fuel oil tank hydrotesting include but are not limited to benzene, toluene, ethylbenzene, xylene (BTEX), and metals (e.g., copper, lead, mercury, selenium, and zinc) because they may be components of materials stored in the tanks on-site. Thus, these pollutants may be present in the discharge of hydrotest water and storm water and are considered pollutants of concern in the discharge. Hydrotest wastewater may also add TSS, oil and grease, sulfides, phenols, and residual chlorine to the discharge, and may affect pH and

contribute to BOD. Therefore, these constituents are also considered pollutants of concern.

The existing Order establishes a limit for residual chlorine. City tap water is used in the hydrotesting process and may account for this constituent found in the waste stream. Therefore, there is potential for this constituent to be present in the effluent and therefore, residual chlorine is a pollutant of concern.

Intermittent discharges may also carry pollutants that may contribute to acute toxicity. Therefore, toxicity, an indicator of the presence of toxic pollutants, is also considered a pollutant of concern.

B. Technology-Based Effluent Limitations

The previous Order required the Discharger to develop and implement a *Storm Water Pollution Prevention Plan* (SWPPP). A SWPPP outlines site-specific management processes for minimizing contamination from storm water runoff and for preventing contaminated storm water runoff from being discharged into surface waters. During the CEI, it was noted that Pacific Terminals was updating the SWPPP from the previous owners of the operation, Edison Pipeline. As a result, the proposed Order requires Pacific Terminals to implement a revised SWPPP and address storm water runoff and minimize pollutants from entering Compton Creek. The SWPPP should address specific areas of concern to determine if additional treatment is required to meet final effluent limitations. In addition, the SWPPP must identify measures that can be implemented to prevent contaminated storm water from discharging into Compton Creek. During the CEI, it was noted that the existing SWPPP states that daily inspections of the facility are conducted. However, documentation was not available to indicate that the daily inspections have taken place. The facility representative stated that the daily inspections are not recorded and that reporting is prepared "by-exception." According to a facility representative, this term means that inspections are recorded when there is a significant issue at the facility which requires follow-up action.

National ELGs have not been developed for tank farm facilities. Therefore, pursuant to 40 CFR section 122.44(k), the Regional Board will require the Discharger to develop and implement *Best Management Practices* (BMPs) to be included in the SWPPP. The purpose of the BMPs is to address the management of non-storm water related wastewaters and to establish site-specific procedures that ensure proper operation of the facility and maintenance of equipment. For instance, proper operation and maintenance procedures may address alternative methods for reducing oil and grease, TPH, TDS, BOD, benzene, and residual chloride levels in the hydrotest water and wastewater which will assist the facility in complying with effluent limitations for these pollutants. The purpose of the SWPPP is to address the management of storm water and to establish site-specific procedures that prevents the contamination of storm water. In the absence of established ELGs, the combination of the SWPPP and BMPs will serve as the equivalent of technology-based effluent limitations to carry out the

purposes and intent of the CWA.

C. Water Quality-Based Effluent Limitations

As specified in 40 CFR section 122.44(d)(1)(i), Orders must include WQBELs for toxic pollutants (including toxicity) that are or may be discharged at levels which cause, have reasonable potential to cause, or contribute to an excursion above any state water quality standard. The process for determining reasonable potential and calculating WQBELs when necessary is intended to protect the designated uses for the receiving water as specified in the Basin Plan, and achieve applicable water quality objectives and criteria that are contained in other state plans and policies, or the U.S. EPA water quality criteria contained in the CTR and NTR. The procedures for determining reasonable potential for discharges from Pacific Terminals, and if necessary for calculating WQBELs, are contained in the SIP.

The CTR contains both saltwater and freshwater criteria. According to 40 CFR section 131.38(c)(3), freshwater criteria apply at salinities of 1 part per thousand (ppt) and below at locations where this occurs 95% or more of the time; saltwater criteria apply at salinities of 10 ppt and above at locations where this occurs 95% or more of the time; and at salinities between 1 and 10 ppt, the more stringent of the two apply. The CTR criteria for fresh water or human health for consumption of organisms, whichever are more stringent, are used to prescribe the effluent limitations in the proposed Order to protect the beneficial uses of the Compton Creek, in the vicinity of the discharge.

1. *Reasonable Potential Analysis (RPA)*

In accordance with Section 1.3 of the SIP, the Regional Board conducts a reasonable potential analysis for each priority pollutant with an applicable criterion or objective to determine if a WQBEL is required in the permit. The Regional Board analyzes effluent data to determine if a pollutant in a discharge has a reasonable potential to cause or contribute to an excursion above a state water quality standard. For all parameters that have a reasonable potential, numeric WQBELs are required. The RPA considers water quality objectives outlined in the CTR, NTR, as well as the Basin Plan. To conduct the RPA, the Regional Board must identify the maximum observed effluent concentration (MEC) for each constituent, based on data provided by the Discharger.

Section 1.3 of the SIP provides the procedures for determining reasonable potential to exceed applicable water quality criteria and objectives. The SIP specifies three triggers to complete an RPA:

- a. Trigger 1 – If the MEC is greater than or equal to the CTR water quality criteria or applicable objective (C), a limit is needed.

- b. Trigger 2 – If $MEC < C$ and background water quality $(B) > C$, a limit is needed.
- c. Trigger 3 – If other related information such as CWA 303(d) listing for a pollutant, discharge type, compliance history, etc. indicates that a WQBEL is required.

Sufficient effluent and ambient data are needed to conduct and complete the RPA. If data are not sufficient, the Discharger is required to collect the appropriate data for the Regional Board to conduct the RPA. Upon review of the data, and if the Regional Board determines that WQBELs are needed to protect the beneficial uses, the permit will be reopened for appropriate modification.

As previously stated, the Discharger submitted data for a partial listing of CTR priority pollutants (See Section II) as part of their quarterly monitoring requirement as required by the *MRP* No. CI-5841, as well as data for CTR priority pollutant monitoring once during the permit term. The Regional Board used all these data submitted for the discharges of hydrotest water, tricellerator water, wastewater⁴, and storm water runoff to conduct the RPA, as all waste streams are discharged from Discharge Point 001. However, there were sufficient data to conduct an RPA on only the following pollutants (i.e., 3 or more samples) in the hydrotest water, tricellerator water, wastewater, and storm water runoff: arsenic, cadmium, copper, lead, mercury, selenium, silver, zinc, benzene, ethylbenzene, toluene, phenol, 1,2 dichlorobenzene, naphthalene, 2,4 dichlorophenol, 2,4 dimethylphenol, 2-methyl-4,6-dinitrophenol, 2,4 dinitrophenol, 2-nitrophenol, 4-nitrophenol, 3-methyl-4-chlorophenol, pentachlorophenol, and 2,4,6 trichlorophenol. The following pollutants showed reasonable potential: copper, lead, mercury, selenium, and zinc. Chrysene data included only one data point; therefore, an RPA was not conducted for chrysene. However, it is important to note that the single data point did exceed applicable CTR water quality criteria.

The Regional Board also determined that benzene, ethylbenzene, toluene, and xylene demonstrate reasonable potential based on activities on-site and BPJ. For this reason, the Regional Board is carrying over the effluent limitations contained in Order No. 99-043 to the proposed Order for benzene, ethylbenzene, toluene, and xylene.

Insufficient data were unavailable to perform the RPA for the remaining priority pollutants in the hydrotest water, tricellerator water, wastewater, and storm water runoff. In accordance with section 13267 of the California Water Code,

⁴ Only four of the six wastewater data sets were used to conduct the RPA; all Baker Tank data were used. Retention Pond and Pond Influent data sets were not used.

the Regional Board is requiring the Discharger to monitor the effluent and receiving water to collect data for evaluating reasonable potential. The monitoring requirements are discussed in greater detail in the associated *MRP* No. CI-5841.

In order to collect representative effluent data to conduct the RPA in the future, the Discharger is required to monitor the effluent and receiving water for priority pollutants regulated in the CTR annually, to determine the presence of CTR pollutants, for the life of the permit. Further, the Discharger must also provide receiving water data for pH, hardness, salinity, and all CTR pollutants, to complete the RPA. The receiving water monitoring and analyses must be conducted at the same time as the effluent monitoring and analysis.

2. *Calculating WQBELs*

If a reasonable potential exists to exceed applicable water quality criteria or objectives, then a WQBEL must be established in accordance with one of three procedures contained in Section 1.4 of the SIP. These procedures include:

- a. If applicable and available, use of the wasteload allocation (WLA) established as part of a total maximum daily load (TMDL).
- b. Use of a steady-state model to derive maximum daily effluent limitations (MDELs) and average monthly effluent limitations (AMELs).
- c. Where sufficient effluent and receiving water data exist, use of a dynamic model which has been approved by the Regional Board.

3. *Impaired Water Bodies on the 303 (d) List*

Section 303(d) of the CWA requires states to identify specific water bodies where water quality standards are not expected to be met after implementation of technology-based effluent limitations on point sources. For all 303(d)-listed water bodies and pollutants, the Regional Board plans to develop and adopt TMDLs that will specify WLAs for point sources and load allocations (LAs) for non-point sources, as appropriate.

The U.S. EPA has approved the State's 303(d) list of impaired water bodies on July 25, 2003. Certain receiving waters in Los Angeles County watersheds do not fully support beneficial uses and therefore have been classified as impaired on the 2002 303(d) list and have been scheduled for TMDL development.

The 2002 303(d) list classifies Compton Creek, a tributary to the Los Angeles River, as impaired. The facility discharges within Reach 1 of the Los Angeles River. The pollutants of concern in Compton Creek, detected in the water column,

include copper and high coliform count. No TMDLs have been completed to date. When completed, and if applicable, associated waste load allocations will be included in the Order. No conditions in the proposed Order are based on TMDLs.

4. *Whole Effluent Toxicity*

Whole effluent toxicity (WET) protects the receiving water quality from the aggregate toxic effect of a mixture of pollutants in the effluent. WET tests measure the degree of response of exposed aquatic test organisms to an effluent. The WET approach allows for protection of the narrative “no toxics in toxic amounts” criterion while implementing numeric criteria for toxicity. There are two types of WET tests: acute and chronic. An acute toxicity test is conducted over the short term and measures mortality. A chronic toxicity test is conducted over the long term and measures mortality, reproduction, and growth.

The Basin Plan specifies a narrative objective for toxicity, requiring that all waters be maintained free of toxic substances in concentrations that are lethal to or produce other detrimental response from aquatic organisms. Detrimental response includes but is not limited to, decreased growth rate, decreased reproductive success of resident or indicator species, and/or significant alterations in population, community ecology, or receiving water biota. The previous Order contained acute toxicity effluent limitations and monitoring requirements.

In accordance with the Basin Plan, acute toxicity limitations dictate that the average survival in undiluted effluent for any three consecutive 96-hour static or continuous flow bioassay tests shall be at least 90%, with no single test having less than 70% survival. Consistent with Basin Plan requirements, the proposed Order will establish acute toxicity limitations and monitoring requirements in the existing Order.

During the normal course of business, the storm water discharges at Pacific Terminals occur only after a significant storm event. The discharge is not continuous and the discharge of storm water is not expected to contribute to long term toxic effects. Intermittent discharges are likely to have short term toxic effects. Pacific Terminals will be required to conduct acute toxicity testing in accordance with the Basin Plan. Also, hydrotesting of pipes and tanks are intermittent as is done on as needed basis. The discharges at Pacific Terminals are not continuous and does not contribute to long term toxic effects. As a result, Pacific Terminals will be required to conduct only acute toxicity testing.

D. Specific Rationale for Each Numerical Effluent Limitation

Section 402(o) of the Clean Water Act and 40 section CFR 122.44(l) require that effluent limitations or conditions in reissued Orders be at least as stringent as those in the existing Orders based on the submitted sampling data. The Regional Board

determined that reasonable potential existed for copper, lead, mercury, selenium, and zinc. Therefore, the proposed Order establishes WQBEL-based limitations for these pollutants.

The requirements in the proposed Order for TDS, TSS, settleable solids, BOD, oil and grease, turbidity, phenols, sulfides, and residual chlorine, benzene, toluene, ethylbenzene, and xylene will be carried over from the previous Order. Acute toxicity for discharges (shown in the table below) will also be carried over the proposed Order. The effluent limitations for pH and temperature are based on the Basin Plan and Thermal Plan, respectively, and have been added to the proposed Order. Based on new effluent data, reasonable potential exists for copper, lead, mercury, selenium, and zinc and effluent limitations have been revised based on WQBELs for these pollutants. The existing Order also included effluent limitations for arsenic, cadmium, total chromium and silver but was not specific as to the basis for those limits. These metals do not demonstrate reasonable potential and therefore, WQBELs for these pollutants will not be established in the proposed Order.

The Regional Board is also implementing the CTR and SIP, and additional effluent limitations are required for those pollutants that show reasonable potential to exceed water quality standards. As previously stated, the RPA was conducted with four sets of effluent data (e.g., stormwater, tricellerator water, wastewater and hydrotest water); receiving water data were not provided. For those that do show reasonable potential and for which existing effluent limitations exist, a comparison between existing permit limitations and CTR-based WQBELs was made and the most stringent limitation included in the Order. For copper, lead, mercury, selenium, and zinc, existing permit limitations are less stringent; therefore, the CTR-based WQBELs will be included in this permit.

The existing Order contained effluent limitations expressed as maximum daily effluent limitations (MDELs). In compliance with 40 CFR section 122.45(d), effluent limitations shall be expressed, unless impracticable, as both AMELs and MDELs. The discharge is not continuous as defined in 40 CFR Section 122.2; therefore, average monthly effluent limitations (AMELs) are not appropriate for this facility and maximum daily effluent limitations (MDELs) will be applied, as in the existing Order.

Final Effluent Limitations for Discharge Serial No. 001

Effluent limitations established in the proposed Order are applicable for discharges (storm water runoff, tank hydrotest water, and processed wastewater) from NPDES Discharge Serial No. 001 (Latitude 33° 51' 53" North; Longitude 118° 13' 10" West):

Pollutant (units)	Maximum Daily Effluent Limitations (MDELs), Concentration	Rationale ¹
pH (s.u.)	Between 6.5 – 8.5	BP
Temperature (°F)	86	TP
Total Suspended Solids (TSS) (mg/L)	75	BPJ, E
Total Dissolved Solids (TDS) (mg/L)	1,500	BP
Settleable Solids (ml/L)	0.2	E
Biochemical Oxygen Demand (BOD) (mg/L)	30	BPJ, E
Oil and Grease (mg/L)	15	BPJ, E
Turbidity (NTU)	75	BPJ, E
Phenols (mg/L)	1	E
Sulfides (mg/L)	1	E
Residual Chlorine (mg/L)	0.5	E
Benzene (µg/L)	1	E
Toluene (µg/L)	10	E
Xylene (µg/L)	1,750	E
Ethylbenzene (µg/L)	680	E
Copper (µg/L) ²	21.3	CTR
Lead (µg/L) ²	9.2	CTR
Mercury (µg/L) ²	0.1	CTR
Selenium (µg/L) ²	8.2	CTR
Zinc (µg/L) ²	175	CTR
Total Petroleum Hydrocarbons (µg/L)	100	BPJ
Acute Toxicity (% Survival)	³	BP

1. BP = Basin Plan; TP = Thermal Plan; E = Existing Permit (Order No. 99-043); BPJ = Best Professional Judgment; CTR = California Toxic Rule.
2. Discharge for these metals are expressed as total recoverable.
6. Average survival in effluent for any three consecutive 96-hour static or continuous flow bioassay tests shall be at least 90%, with no single test producing less than 70 % survival.
3. This Order includes a chronic testing trigger defined as the monthly median for chronic toxicity of 100% effluent shall not exceed 1 TUc in a critical life stage test.

D. Compliance Schedule

The proposed Order contains a compliance schedule that allows the Discharger up to 30 months to comply with the revised effluent limitations based on CTR limits, except selenium. Within 1 year after the effective date of the proposed Order, the Discharger must prepare and submit a compliance plan that describes the steps that will be taken

to ensure compliance with applicable limitations.

The SIP requires that the Regional Board establish other interim requirements such as requiring the Discharger to develop a pollutant minimization plan and/or source control measures and participate in the activities necessary to achieve the final effluent limitations. These interim effluent limitations shall be effective until December 31, 2007, after which, the Discharger shall demonstrate compliance with the final effluent limitations.

Pursuant to the SIP (Section 2.2.1, Interim Requirements under a Compliance Schedule), when compliance schedules are established in an Order, interim effluent limitations must be included based on current treatment facility performance or existing permit limitations, whichever is more stringent to maintain existing water quality. The existing Orders did not contain effluent limitations for priority pollutants.

1. *Interim Effluent Limitations and Compliance Schedule for Discharge Point 001*

A review of the monitoring data for Discharge Point 001 indicates that of a total of ten samples, there were seven detected concentrations of copper; of a total of twelve samples, there were three detected concentrations of lead; of a total of thirteen samples, there was one detected concentration of mercury; and of a total of twelve samples, there were three detected concentrations of selenium for Discharge Point 001. As a result, interim effluent limitations are prescribed for copper, lead, mercury, and zinc for discharges through Discharge Point 001. The Discharger can meet the CTR limit for selenium. Therefore, no interim limit is given for selenium.

40 CFR section 131.38(e) provides conditions under which interim effluent limitations and compliance schedules may be issued. The SIP allows inclusion of an interim limit with a specific compliance schedule included in an NPDES permit for priority pollutants if the limit for the priority pollutant is CTR-based. Because the CTR-based WQBELs for copper, lead, mercury, and zinc and at Discharge Point 001 appear infeasible for the Discharger at this time, interim effluent limitations are contained in the proposed Order.

Pursuant to the SIP (section 2.1.1, Interim Requirements under a Compliance Schedule), when compliance schedules are established in an Order, interim limitations must be included based on current facility performance or existing permit limitations, whichever is more stringent to maintain existing water quality. When sufficient effluent data exist, a statistical analysis can be performed to calculate the 99th percentile for the MDEL, based on procedures contained in the EPA's *Technical Support Document for Water Quality-Based Toxics Control* (TSD). The 99th percentile value is compared to the MEC, and the more stringent of the two serves as the basis for the MDEL interim limitation. Effluent data contained in the quarterly monitoring reports for the period from 1999 to 2005,

were considered in the evaluation. For copper, lead, and zinc, the MEC is more stringent than the 99th percentile value of detected data and the existing effluent limitation; therefore, the MEC serves as the basis for the interim MDEL for these pollutants. For mercury, there was only one detected data point and it was more stringent than the existing effluent limitation; therefore, the MEC serves as the basis for the interim MDEL for mercury.

For copper, lead, mercury, and zinc, it appears that the Discharger will be unable to comply with the WQBELs (MDELs) and the MEC will be established as the interim effluent limitation. From the effective date of this Order until December 31, 2007 the discharge of effluent from Discharge Serial No. 001 in excess of the following is prohibited:

Discharge Point 001 Interim Effluent Limitations		
Pollutant (units)	Maximum Daily Effluent Limitation	Rationale ¹
Copper ² (µg/L)	55.6	MEC
Lead ² (µg/L)	10.6	MEC
Mercury (µg/L)	0.22	MEC
Zinc ² (µg/L)	194	MEC

1. MEC = Maximum Effluent Concentration

2. Discharge limitations for these metals are expressed as total recoverable.

F. Monitoring Requirements

The existing *MRP* requires monitoring for storm water once per discharge event for total waste flow, pH, temperature, TDS, TSS, settleable solids, BOD, oil and grease, turbidity, phenols, sulfides, residual chlorine, benzene, toluene, xylene, ethylbenzene, arsenic, cadmium, copper, chromium (total), lead, mercury, selenium, silver, and zinc. Acute toxicity and other priority pollutants, must be sampled for annually.

1. Effluent Monitoring

To demonstrate compliance with effluent limitations established in the permit for discharges through Discharge Point 001, the proposed Order carries over the requirements for monitoring once per discharge event for total waste flow, pH, temperature, turbidity, TSS, settleable solids, BOD, TDS, oil and grease, phenols, sulfides, residual chlorine, benzene, toluene, xylene, ethylbenzene, copper, lead, mercury, selenium, and zinc. In addition, the annual acute toxicity sampling

requirement will also be carried over from the previous Order. Requirements for additional sampling of ammonia, total petroleum hydrocarbons and methyl tertiary butyl ether have been included.

The Discharger is also required to measure rainfall monthly and report in the appropriate quarterly monitoring reports.

The Discharger is required to analyze effluent samples for CTR priority pollutants annually for the life of the permit as described in Section IV.5.(c), to determine the presence of these pollutants in the discharges. Further, monitoring for 2,3,7,8 – TCDD (dioxin) and 16 congeners is required and is described in more detail in Section IV.5.(d), to evaluate reasonable potential.

Representative effluent monitoring shall be conducted at Discharge Point 001, prior to entry into the storm drain system.

2. *Receiving Water Monitoring*

In order to collect sufficient receiving water data to complete the RPA, the Discharger is also required to conduct receiving water monitoring for all CTR priority pollutants at a location within 50 feet upstream of the facility discharge point (i.e., a storm drain three-quarters of a mile from the facility) to the receiving water (Compton Creek). Receiving water monitoring is required at the same time as effluent monitoring (e.g., hydrotest, wastewater, and storm water) and analysis is conducted. Further, the Discharger must analyze pH, salinity, and hardness of the receiving water concurrently with the analysis for the CTR priority pollutants. A list of CTR priority pollutants is included in the *MRP*.

The existing *MRP* No. CI-5841 does not establish a receiving water sampling station. However, the proposed Order requires the Discharger to collect receiving water samples for priority pollutants at a location within 50 feet upstream of the discharge point into Compton Creek.

3. *Effluent and Receiving Water Monitoring for Reasonable Potential Determination*

The proposed Order requires the Discharger to submit data sufficient for: (1) determining if WQBELs for priority pollutants are required for the discharges of storm water and (2) to calculate effluent limitations, if required. As previously discussed, there were insufficient effluent monitoring data for all CTR priority pollutants to complete the RPA. If data are unavailable or insufficient to conduct the RPA, the Regional Board will require additional monitoring for the pollutants in place of a WQBEL.

The proposed Order requires the Discharger to conduct annual monitoring for all CTR priority pollutants, as listed in the *MRP*, in the effluent (i.e., Discharge Point

001) and in the receiving water. As stated previously, the results of the annual effluent and receiving water monitoring shall be submitted in accordance with the reporting schedule provided in the *MRP*. The Regional Board will use the data to conduct the RPA and determine if a WQBEL is required, and may reopen the permit to incorporate additional effluent limitations and requirements, if necessary.

4. *Effluent and Receiving Water Monitoring for TCDD Equivalents*

The Discharger is also required to conduct effluent and receiving water monitoring for the presence of the 2,3,7,8-TCDD (or Dioxin) and the 16 congeners. The monitoring shall be grab samples from Discharge Serial No. 001 and from the receiving water locations, as described in Section VI of the *MRP*, conducted twice during the permit term (once during the 2nd year of the permit term and once during the 4th year). The Discharger is required to monitor for 2,3,7,8-TCDD and the 16 congeners listed in the *MRP*. The Discharger is required to calculate Toxic Equivalence (TEQ) for each congener by multiplying its analytical concentration by the appropriate Toxicity Equivalence Factors (TEF). A list of 2,3,7,8-TCDD and congeners is presented in Section VI of the *MRP*.

5. *Storm Water Monitoring*

The Discharger is required to measure and record the rainfall each day of the month and report it with the appropriate quarterly monitoring reports. The Discharger is also required to conduct visual observations of all combined discharges of all discharge locations to observe the presence of floating and suspended materials, sheen, oil and grease, discoloration, turbidity and odor. Furthermore, the Discharger shall implement the Storm Water Pollution Prevention Plan Requirements (SWPPP) as enumerated in Attachment A of the WDR Order No. R4-2005-0028.