#### STATE OF CALIFORNIA

# CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD LOS ANGELES REGION 320 W. 4<sup>th</sup> Street, Suite 200, Los Angeles

# FACT SHEET WASTE DISCHARGE REQUIREMENTS for WESTWAY TERMINAL COMPANY, INCORPORATED

NPDES Permit No.: CA0002186 Public Notice No.: 04-031

**FACILITY ADDRESS** 

Westway Terminal Company, Inc. Berths 70-71 Signal Street San Pedro, CA 90731

FACILITY MAILING ADDRESS

Westway Terminal Company, Inc. P.O. Box 790

San Pedro, CA 90733 Contact: Jane Besch Telephone: (310) 547-0881

#### 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 4<sup>th</sup> Street, Suite 200
Los Angeles, CA 90013

To be fully responded to by staff and considered by the Regional Board, written comments should be received at the Regional Board offices by 5:00 p.m. on July 18, 2004.

# **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: August 5, 2004

Time: 9:00 a.m.

Location: Metropolitan Water District Board Room

700 North Alameda Street Los Angeles, 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 www.swrcb.ca.gov/rqcb4 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 Jennings, Senior Staff Counsel 1001 I Street, 22<sup>nd</sup> 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 4<sup>th</sup> 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

Westway Terminal Company, Incorporated (hereinafter Westway or Discharger) discharges wastewater from its Signal Street Facility (Facility), Berths 70-71, into the Los Angeles Inner Harbor, a water of the United States. Wastes discharged from the facility are regulated by WDRs and NPDES permit contained in Board Order No. 97-139 (NPDES Permit No. CA0002186), which amended Order No. 95-090.

Formerly, the GATX Terminals Corporation owned the Facility. Westway Terminal Company purchased the Facility on December 2, 1996 and in May 1997, Westway filed an application for permit modification of Order No. 95-090. This modification application included information regarding the ownership change and requested permission to discharge hydrostatic test waters from twenty-seven new tanks upon completion of construction. In addition, the modification request stated that a new outfall was to be added to the Facility (Outfall 005). Order No. 97-139, which incorporated the requested modifications, was issued on December 8, 1997.

Westway has filed a report of waste discharge and applied for renewal of its WDRs and NPDES permit. An NPDES permit compliance evaluation inspection was conducted at the Facility on August 25, 2003. Observations made and data collected during the visit were used to develop permit limits and conditions.

# III. Description of Facility and Waste Discharge

Westway Terminal Company operates a bulk liquid petrochemical handling and storage facility located at 2220 Signal Street (Berths 70-71) in San Pedro, California. The Facility provides storage and handling of bulk liquid petrochemical products for a variety of customer companies. Customers typically own the product and lease storage tanks from Westway. The Facility receives petrochemical products via marine vessel, rail or truck, stores them onsite and subsequently ships the product to the customer via railcar or truck.

The current Order (Order No. 97-139) permits Westway to discharge up to 200 gpd (gpd) of water softener backwash and rinse water through Discharge Serial No. 001. The municipal water is softened prior to use in a boiler and the resultant water softener regenerate wastes were discharged from Outfall 001. In July 2003, the water softener regenerant wastes were redirected to the sanitary sewer. Therefore, the proposed Order will not regulate these wastes. If, in the future, the Discharger wishes to resume direct discharge of water softener regenerant wastes to the Los Angeles Inner Harbor, it must seek a modification of this Order to include that waste stream.

The Facility is a tank farm with numerous storage tanks housed in bermed areas. Up to 155,000 gpd of storm water runoff may be discharged from the Facility. This storm water may

pick up pollutants from the bermed areas before it is discharged to the Los Angeles Inner Harbor, a water of the United States. The storm water discharges from outfalls (Discharge Serial Nos. 002, 003, 004, and 005) occur intermittently.

Storage tanks at the Facility range in size from 10,000 gallons to 1.5 million gallons. A list of tanks storing product, current as of September 16, 2003 is included as Attachment A3. Each tank is sporadically subject to inspection under the American Petroleum Institute (API) Standard 653, *Tank Inspection, Repair, Alteration, and Reconstruction,* which requires the maintenance, inspection, repair, alteration, and reconstruction of existing above ground and atmospheric storage tanks. API 653 inspections are only required every 5 to 10 years per tank. The tanks are also subject to hydrostatic testing using potable when a new lining has been installed or other maintenance has been completed.

Order No. 97-139 permits storm water runoff and hydrostatic test water discharges from Discharge Serial Nos. 002, 003, 004, and 005. Different effluent limitations were established for test water discharges from new tanks that were constructed during the previous Order's term and for discharges from existing pipes. No new tanks will be constructed during the proposed Order's term; therefore, limits for discharges from new tanks are not included in the proposed Order. If the Discharger wishes to discharge test water from new tanks in the future, the Order must be modified to include these new discharges. The proposed Order includes requirements for hydrostatic test water and storm water runoff discharges from a new outfall, No. 006.

The discharge points, types and proposed maximum volumes are:

Discharge Serial No. 002 - Latitude 37° 32' 00", Longitude 118° 16' 04", a maximum intermittent discharge of up to 70,000 gallons per event of hydrostatic test water and up to 26,600 gpd of storm water runoff to the Main Channel, Los Angeles Inner Harbor;

Discharge Serial No. 003 - Latitude 37° 31' 55", Longitude 118° 16' 04", a maximum intermittent discharge of up to 70,000 gallons per event of hydrostatic test water and up to 26,600 gpd of storm water runoff to the Main Channel, Los Angeles Inner Harbor at a point 300 feet south of Discharge Serial No. 001;

Discharge Serial No. 004 - Latitude 37° 31' 05", Longitude 118° 16' 05", a maximum intermittent discharge of up to 840,000 gallons per event of hydrostatic test water and up to 30,100 gpd of storm water runoff from the diked tank farm to a storm drain located at Signal Street. From here, the wastewater flows to the East Channel near Berth 59;

Discharge Serial No. 005 - Latitude 37° 31' 05", Longitude 118° 16' 05", a maximum intermittent discharge of up to 840,000 gallons per event of hydrostatic test water and up to 43,000 gpd of rainfall runoff from the diked tank farm to the East Channel near Berth 59.

Discharge Serial No. 006 - Latitude 37° 31' 00", Longitude 118° 16' 04", a maximum intermittent discharge of up to 70,000 gallons per event of hydrostatic test water and up to 30,000 gpd of storm water runoff to the Main Channel, Los Angeles Inner Harbor.

Figure 1 shows the outfall locations and Figure 2 shows the flow of wastewater offsite. The Regional Board and the United States Environmental Protection Agency (USEPA) have classified the Westway facility as a minor discharge based on effluent and flow data reported on the permit renewal application and monitoring data received during the current permit term.

# Discharge Serial No. 001 – Water Softener Backwash and Rinse Water<sup>1</sup>

Pollutant (units)	Maximum Daily Value	Long Term Average <sup>2</sup>
Flow (gpd)	251	120
Total Monthly Discharge (gallons)	5,930	3,632
Temperature (deg. F)	62	60.2
Oil & Grease (mg/L)	21.6	7.2
Biochemical oxygen demand (BOD) (mg/L)	9.3	3.5
Settleable Solids (ml/L)	4	1.3
Total suspended solids (mg/L)	138	49

<sup>&</sup>lt;sup>1</sup> This waste stream is now directed to the sanitary sewer system.

The available effluent monitoring data for Discharge Serial No. 001 show that the Discharger was not in compliance with the existing effluent limitations in December 1997. There was one exceedance of the settleable solids limit of 0.3 mg/L at 4.0 mg/L. There was also an exceedance of the oil and grease limit of 15 mg/L in that same month (21.6 mg/L).

# Discharge Serial Nos. 002, 003, 004, 005 – Storm Water Discharge (Maximum Daily Values)

Pollutant	Discharge Serial No. 002	Discharge Serial No. 003	Discharge Serial No. 004	Discharge Serial No. 005
Total monthly discharge (gal)	8,280	5,520	20,640	12,600
Temperature (deg. F)	65	66.5	71	63.5
Oil and grease (mg/L)	5.3	4.5	15.9	15
pH (Std. Units)	7.4	7.7	8.6	8.4
Phenolic compounds (mg/L)	0.037	ND	0.4	ND

ND - Non-detect

An exceedance of the oil and grease limit (15 mg/L) occurred in February 1998 at Discharge Serial No. 004 (15.9 mg/L) during a storm water discharge.

<sup>&</sup>lt;sup>2</sup> Represents a 5-year average of detected values for the period from October 1997 to December 2002.

# Discharge Serial No. 004 – Hydrostatic Test Water from New Storage Tanks

Pollutant (units)	Reported Value <sup>1</sup>
Date of Discharge	1/20/98 - 2/3/98
Discharge (total gallons)	1,650,000
Temperature (deg. F)	63
Oil & Grease (mg/L)	4.2
pH (standard units)	7.2
Phenolic Compounds (µg/L)	2
Suspended Solids (mg/L)	0.5
BOD <sub>5</sub> 20°C (mg/L)	ND
Turbidity (NTU)	10
Settleable Solids (ml/L)	ND
Sulfides (mg/L)	ND
Residual chlorine (mg/L)	0.67

Data reported is from a single sampling event.
No data reported.

Effluent monitoring data for the hydrostatic test water discharge event from newly constructed tanks through Discharge Serial No. 004 indicate one exceedance of the residual chlorine limit (0.1 mg/L) of 0.67 mg/L in the discharge which occurred between January 20, 1998 and February 3, 1998.

# Discharge Serial No. 005 – Hydrostatic Test Water from Existing Storage Tanks

Pollutant (units)	Tank E5001 <sup>1, 2</sup>	Tank 10-1C <sup>1, 2</sup>
Date Discharged	4/8/99 - 4/14/99	4/5/99 - 4/8/99
Total Discharge (gallons)	210,000	420,000
Temperature (Winter/Summer) (deg. F)	68	69
Oil & Grease (mg/L)	ND	ND
pH (units)	8	7.9
Phenolic Compounds (µg/L)	ND	ND
Suspended Solids (mg/L)	1.0	ND
BOD <sub>5</sub> 20°C (mg/L)	ND	ND
Turbidity (NTU)	13	1.8
Settleable Solids (ml/L)	ND	ND
Sulfides (mg/L)	ND	ND
Residual Chlorine (mg/L)	ND	0.92
Phenols (mg/L)	ND	ND
Benzene (μg/L)	ND	ND
Toluene (μg/L)	ND	ND
Ethylbenzene (μg/L)	ND	ND
Date Discharged	4/8/99 - 4/14/99	4/5/99 - 4/8/99
Xylene (μg/L)	ND	ND
Ethyl dibromide (μg/L)	ND	ND
Carbon tetrachloride (µg/L)	ND	ND
Tetrachloroethylene (μg/L)	ND	ND
Trichloroethylene (μg/L)	ND	ND
1,4-dichlorobenzene (μg/L)	ND	ND
1,1-dichloroethane (μg/L)	ND	ND

Pollutant (units)	Tank E5001 <sup>1, 2</sup>	Tank 10-1C <sup>1, 2</sup>
1,2-dichloroethane (µg/L)	ND	ND
1,1-dichloroethylene (µg/L)	ND	ND
Vinyl chloride (μg/L)	ND	ND
Arsenic (μg/L)	0.0065	ND
Cadmium (µg/L)	ND	ND
Copper (μg/L)	ND	ND
Lead (μg/L)	ND	ND
Mercury (μg/L)	ND	ND
Selenium (µg/L)	ND	ND
Silver (μg/L)	ND	ND
MTBE (μg/L)	NA	NA
Acute Toxicity (% survival)	100	100

<sup>&</sup>lt;sup>1</sup> Data reported is from a single sampling event.

Monitoring data for the hydrostatic test water discharge through Discharge Serial No. 005 indicate between April 5, 1999 and April 8, 1999 one exceedance of limits established in the previous Order. Discharge from tank 10-1C contained 0.92 mg/L of residual chlorine which exceeded the limit of 0.1 mg/L established in the current Order. Many of the constituents that the Monitoring and Reporting Program required analysis for in the hydrostatic effluent, were not reported in the results.

# 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. 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 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 Westway.
- C. Under title 40 Code of Federal Regulations (40 CFR) section 122.44(d), *Water Quality Standards and State Requirements*, "Limitations must control all pollutants or pollutant parameters (either conventional, non-conventional, or toxic pollutants), which the Director determines are or may be discharged at a level which will cause,

<sup>&</sup>lt;sup>2</sup> The previous Order indicates that hydrostatic test water can be discharged from tanks listed in Appendix A of this Order through Serial Outfall No. 005. Tanks E5001 and 10-1C are included on that list.

have the reasonable potential to cause, or contribute to an excursion above any State water quality standard, including State narrative criteria for water quality." Where numeric effluent limitations for a pollutant or pollutant parameter have not been established in the applicable state water quality control plan, 40 CFR section 122.44(d)(1)(vi) specifies that water quality-based effluent limitations (WQBELs) may be set based on United States Environmental Protection Agency (USEPA) criteria, and may be supplemented where necessary by other relevant information to attain and maintain narrative water quality criteria, and to fully protect designated beneficial uses.

- D. Section 402(p) of the federal Clean Water Act (CWA), as amended by the Water Quality Act of 1987, requires NPDES permits for storm water discharges. The Discharger in addition to meeting the effluent limits included in this permit for storm water only discharges, will be required to develop and implement a SWPPP as stipulated in Finding 11 of the Waste Discharge Requirements. These requirements as they are met will protect and maintain existing beneficial uses of the receiving water.
- E. 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 Basin Plan contains beneficial uses and water quality objectives for Los Angeles Inner Harbor.

Existing uses: industrial water supply, navigation, non-contact water recreation, preservation of rare and endangered species, commercial and sport fishing, and marine habitat.

Potential uses: contact water recreation and shellfish harvesting.

F. Ammonia Basin Plan Amendment. The 1994 Basin Plan provided water quality objectives for ammonia to protect aquatic life, in Table 3-1 through Tables 3-4. However, those ammonia objectives were revised on March 4, 2004, by the Regional Board with the adoption of Resolution No. 2004-022, Amendment to the Water Quality Plan for the Los Angeles Region to Update the Ammonia Objectives for Inland Surface Waters Not Characteristic of Freshwater (including enclosed bays, estuaries and wetlands) with the Beneficial Use designations for protection of "Aquatic Life". The ammonia Basin Plan amendment has not yet been approved by the Office of Administrative Law or the United States Environmental Protection Agency (USEPA). The revised criteria are not available for use until the aforementioned approvals have been obtained.

- G. 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.
- H. On May 18, 2000, the USEPA 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]. 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 was effective on April 28, 2000 with respect to the priority pollutant criteria promulgated for California by the USEPA 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 USEPA Regional Administrator. The alternate test procedures provision was effective on May 22, 2000.

In the CTR, USEPA promulgated criteria that protect the general population at an incremental cancer risk level of one in a million (10<sup>-6</sup>), for all priority toxic pollutants regulated as carcinogens. The CTR allows 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.

- I. Section 402(o) of the Clean Water Act and 40 CFR section 122.44(l) require that water-quality based effluent limits in re-issued permits must be at least as stringent as in the existing permit (anti-backsliding). There are, however, exceptions to the prohibition which are codified in sections 303(d)(4) and/or 402(o)(2) of the Clean Water Act. Therefore, many of the limits from the existing waste discharge requirements contained in Regional Board Order No. 98-051, adopted by the Regional Board on June 29, 1998, have been included in this Order. For those limits carried forward, the Regional Board has determined that there is reasonable potential for the pollutant to cause, or contribute to, an exceedance of water quality standards in accordance with State Board Order No. WQ2003-0009. Reasonable potential is determined using the procedures established in the SIP, and includes best professional judgment.
- J. <u>Antidegradation.</u> On October 28, 1968, the State Board adopted Resolution No. 68-16, Maintaining High Quality Water, which established an antidegradation policy for State and Regional Boards. Similarly, the CWA (section 304(d)(4)(B)) and USEPA regulations (40 CFR section 131.12) requires that all NPDES permitting actions be consistent with the federal antidegradation policy. Specifically, waters that are of a higher quality than needed to maintain designated beneficial shall be maintained at the higher water quality unless specific findings are made.

K. Watershed Management Approach. The Regional Board has implemented a Watershed Management Approach, in accordance with Watershed Protection: A Project Focus (EPA841-R-95-003, August 1995), to address water quality protection in the Los Angeles Region. Programs covered under the Watershed Management Approach include regulatory (e.g., NPDES), monitoring and assessment, basin planning and water quality standards, watershed management, wetlands, total maximum daily loads (TMDLs), 401 certifications, groundwater (as appropriate), and nonpoint source management activities. The Watershed Management Approach integrates the Regional Board's many diverse programs, particularly, permitting, planning, and other surface-water oriented programs. It emphasizes cooperative relationships between regulatory agencies, the regulated community, environmental groups, and other stakeholders in the watershed to achieve the greatest environmental improvements with the resources available. This approach facilitates a more accurate assessment of cumulative impacts of pollutants from both point and nonpoint sources.

The receiving water for discharges from Westway Terminal is the Los Angeles Inner Harbor, which is part of the Dominguez Channel and Los Angeles/Long Beach Harbor Watershed Management Area. The Los Angeles and Long Beach Harbors are located in the southern portion of the Los Angeles Basin. Along the northern portion of San Pedro Bay is a natural embayment formed by a westerly extension of the coastline which contains both Harbors, with the Palos Verdes Hills the dominant onshore feature. Both Harbors are considered to be one oceanographic unit. Despite its industrial nature, contaminant sources, and low flushing ability, the Inner Harbor area supports fairly diverse fish and benthic populations and provides a protected nursery area for juvenile fish. The California Least Tern, an endangered species, nests in one part of the Harbor complex.

Parts of the Los Angeles Harbor have historic deposits of pollutants in the sediment and current point and nonpoint source discharges. Fish caught in the East Basin have exhibited histopathological abnormalities (liver lesions). The abnormalities are indicative of aromatic and chlorinated hydrocarbon contamination. There is also significant degradation in the biological community of a part of Inner Harbor with high levels of PCB and DDT; and toxicity of the surface water microlayer of one part of the Harbor to a test fish species (larval kelp bass). The California Office of Environmental Health Hazard Assessment now advises against consumption of white croaker from the Harbor and recommends no more than one meal every two weeks of black croaker, queenfish, and surfperches if caught in the Harbor. The benthic community in many other areas of the Inner Harbor is healthy and sediments, though high in many pollutants, do not cause a great deal of toxicity in controlled lab tests.

The wastewater discharge from Outfalls 002 through 006 (Outfall 001 discharges have been diverted to the sanitary sewer) enter the Main and East Channels of the Los Angeles Inner Harbor.

L. 303(d) Listing of Impaired Waterways. 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 USEPA approved the State's 2002 303(d) list of impaired water bodies on July 25, 2003. Certain receiving waters in the Los Angeles and Ventura 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 Los Angeles/Long Beach Harbors are located in the southern portion of the Los Angeles Basin in the greater San Pedro Bay. Together with the Dominguez Channel, these Harbors receive discharges from highly industrialized areas. The 2002 State Board's California 303(d) List classifies the Los Angeles Inner Harbor and several water bodies within the Harbor as impaired. These water bodies include: Consolidated Slip, Southwest Slip, a portion of Main Channel, Fish Harbor, Cabrillo Pier, East Channel, and breakwater. The pollutants of concern, detected in the water column, in the sediment, and in the fish tissue, include: cadmium, copper, lead, mercury, nickel, chromium, zinc, DDT, PAHs, sediment toxicity, benthic community effects, chlordane, dieldrin, PCBs, and toxaphene.

# V. Regulatory Basis for Effluent Limitations

A. General Bases for Effluent Limits

Effluent limitations established pursuant to Sections 301 (Effluent Limitations), 302 (Water Quality-Related Effluent Limitations), 303 (Water Quality Standards and Implementation Plans), 304 (Information and Guidelines), and 402 (NPDES) of the Federal Clean Water Act and amendments thereto, are applicable to the discharges covered by the tentative order.

B. Water Quality Based Effluent Limitations (WQBELs)

As specified in 40 CFR § 122.44(d)(1)(i), permits are required to 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 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 USEPA water quality criteria contained in the CTR and NTR). 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 USEPA criteria and supplemented, where necessary by, other relevant information to attain and maintain narrative water quality criteria to fully protect designated beneficial uses. The procedures for determining reasonable potential, and if necessary for calculating WQBELs, are contained in the TSD for storm water discharges and in the SIP for other wastewater discharges. However, the TSD states that "an analagous approach developed by a regulatory authority can be used to determine the reasonable potential." Hence, Regional Board has used the SIP methodology to evaluate RP for stormwater as well.

# C. Reasonable Potential Analysis

In accordance with Section 1.3 of the SIP, the Regional Board will conduct a reasonable potential analysis (RPA) for each priority pollutant with an applicable criterion or objective to determine if a WQBEL is required in the permit. The Regional Board will analyze 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 preliminary steps involve the following:

- Collating the appropriate effluent data for the pollutant;
- Determining the observed maximum concentration in the effluent (MEC) from the effluent data; and
- Determining the observed maximum ambient background concentration of the pollutant (B) (when it is available). Ambient data was not available for the Los Angeles Inner Harbor and was not included in the analysis of the discharges from Outfalls 002 through 006.

The SIP specifies three triggers to complete a RPA:

- 1. Trigger 1 If the MEC is greater than or equal to the CTR water quality criteria or applicable objective (C), a limitation is needed. For certain constituents present in this discharge that were nondetect, the MEC was set at the method detection limit consistent with section 1.3 of the SIP.
- 2. Trigger 2 If MEC<C and background water quality (B) > C, a limitation is needed.

3. 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.

The first two triggers were evaluated using an excel spreadsheet which includes all the algorithms for evaluating reasonable potential and, when reasonable potential exists, calculating the WQBELs, following the procedures in SIP. The third trigger is evaluated by the permit writer utilizing all other information available to determine if a water quality-based effluent limitation is required to protect beneficial uses of the receiving water.

Sufficient effluent and ambient data are needed to conduct a complete RPA. If data are not sufficient, the Discharger will be required to gather 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.

In accordance with section 13267 of the California Water Code, the Regional Board, in a letter dated February 21, 2002, required the Discharger to conduct monitoring for priority pollutants regulated in the CTR in the effluent and the receiving water for four quarters from March 2002 through March 2003. The previous Order allowed Westway to discharge three distinct types of effluent: water softener backwater and rinse water, storm water and hydrostatic test water. The Discharger submitted water softener/rinse water data on priority pollutants. However, this discharge will not be covered by this Order because the discharge has been diverted to the sewer system. The Discharger submitted data for hydrostatic test water effluent and for storm water runoff. There are insufficient monitoring data available to perform a complete RPA on all of the priority pollutants for storm water or hydrostatic test water discharges. However, a partial RPA was completed utilizing the data available.

The CTR contains both saltwater and freshwater criteria. According to 40 CFR § 131.38(c)(3), freshwater criteria apply at salinities of 1 part per thousand (ppt) and below at locations where this condition occurs 95 percent or more of the time; saltwater criteria apply at salinities of 10 ppt and above at locations where this condition occurs 95 percent or more of the time; and at salinities between 1 and 10 ppt the more stringent of the two apply. Salinity data collected during 2002 and 2003 indicate values range from 33,000 ppm to 36,000 ppm. The CTR criteria for salt water or human health for consumption of organisms, whichever is more stringent, are used to prescribe the effluent limitations in this Order to protect the beneficial uses of the Los Angeles Inner Harbor.

The results of the RPA for each analyte evaluated is presented in Attachments A1 for the storm water only discharges and Attachment A2 for the hydrotest waste water. The statistical evaluation could only be completed for a few contaminants since only a limited data set was available.

# D. Calculating WQBELs

If a reasonable potential to exceed water quality standards exists for pollutants in a discharge, WQBELs are also required under 40 CFR 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 antidegradation policy. For discharges composed entirely of storm water, such as some of the potential discharges from this facility to inland surface waters, enclosed bays, and estuaries, the USEPA's Technical Support Document for Water Quality-Based Toxics Control (TSD) of 1991 (USEPA/505/2-90-001) establishes procedures for determining reasonable potential and establishing WQBELs for priority pollutant criteria promulgated by USEPA through the CTR and NTR, as well as the Basin Plan. With respect to a reasonable potential analysis, the TSD states "an analagous approach developed by a regulatory authority can be used to determine the reasonable potential." Hence, Regional Board has used the SIP methodology to evaluate RP for stormwater as well as the hydrostatic test wastewater.

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:

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

The calculated WQBEL and the final limit for each analyte with RP evaluated is presented in Attachments A1 for the storm water only discharges and Attachment A2 for the hydrotest waste water.

#### E. 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 a short time period and measures mortality. A

chronic toxicity test is conducted over a longer period of time 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 on 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 existing permit contains acute toxicity limitations and monitoring requirements for the discharge of hydrostatic test water from new and existing structures. Four hydrostatic test water samples were analyzed for acute toxicity in 1998 and 1999 showed 100% survival and this was in compliance with existing effluent limitations. One storm water sample was analyzed for acute toxicity in 1997 (Outfall No. 003) and showed 100% survival which was also in compliance with existing effluent limitations.

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 and existing permit requirements, this Order includes acute toxicity limitations.

The primary discharges at the Westway facility occur only after a significant storm event or after a hydrostatic test; they are not continuous. Therefore, the discharge is not expected to contribute to long-term toxic effects. Intermittent discharges are likely to have short-term toxic effects; therefore, Westway will be required to continue to conduct acute toxicity testing and comply with acute toxicity limitations.

#### F. Total Maximum Daily Load (TMDL)

The TMDL development for the Los Angeles Harbor is scheduled for fiscal year 2006. The TMDLs will include WLAs for the 303(d) listed pollutants. When each TMDL is complete, the Regional Board will adopt WQBELs consistent with the corresponding WLAs. If authorized, a time schedule may be included in a revised permit to require compliance with the final WQBELs.

To prevent further degradation of the water quality of the Los Angeles Harbor and to protect their beneficial uses, mixing zones and dilution credits are not allowed in this Order. This determination is based on:

 The beneficial uses stipulated for the Los Angeles Inner Harbor include preservation of rare and endangered species and marine habitat. The discharge of contaminants that bioaccumulate or have toxic effects on marine habitat observed in the Harbor could potentially affect the populations present. Since the assimilative capacity for the Los Angeles Inner Harbor has not been evaluated, a dilution factor is not appropriate and the final WQBEL should be a numeric objective applied end-of-pipe.

• The discharge may contain the 303(d) listed pollutants that are bioaccumulative such as metals. These pollutants, when exceeding water quality criteria within the mixing zone, can potentially result in tissue contamination of an organism directly or indirectly through contamination of bed sediments with subsequent incorporation into the food chain. The SIP, section 1.4.2.2.B. states that the "Regional Board shall deny or significantly limit a mixing zone and dilution credit as necessary to protect beneficial uses..." It continues that "such situations may exist based upon the quality of the discharge... or the overall discharge environment (including ... potential for bioaccumulation)."

For some pollutants, including aldrin, alpha-BHC, chlordane, DDT, dieldrin, heptachlor, heptachlor epoxide, several PAHs, PCBs, TCDD equivalents, and toxaphene, the applicable water quality objectives are below the levels that current analytical techniques can measure. Reasonable potential analyses have not been completed these constituents since the data was not available. The proposed Order requires that the Discharger monitor the constituents and subsequently they will be evaluated for RP.

# G. Specific Rationale for Each Numerical Effluent Limitation

The Regional Board has determined that reasonable potential exists for certain pollutants that are regulated under the current permit; therefore, effluent limitations have been established for these pollutants.

Section 402(o) of the Clean Water Act and 40 CFR 122.44(l) require that effluent limitations standards or conditions in reissued permits be at least as stringent as those in the existing permit unless an antibacksliding exception applies. The effluent limitations for conventional and non-conventional pollutants in the proposed Order (shown in the table below) for storm water discharges are based on limits specified in Westway's existing permit and on effluent limitations contained in similar permits recently adopted by the Regional Board. The effluent limitations for pH and temperature are based on the *Thermal Plan* and a white paper developed by Regional Board staff entitled *Temperature and Dissolved Oxygen Impacts on Biota in Tidal Estuaries and Enclosed Bays in the Los Angeles Region*. The white paper evaluated the optimum temperatures for steelhead, topsmelt, ghost shrimp, brown rock crab, jackknife clam, and blue mussel.

The SIP requires that if the data are insufficient to conduct the reasonable potential analysis, the Regional Board shall require additional monitoring for the pollutant in place of a water quality-based effluent limitation. The data set available for storm water discharges from the Westway facility only included six data points. Consequently, there was insufficient data to determine reasonable potential for many

of the priority pollutants. Those priority pollutants that had effluent limits in the current order but did not have sufficient data to determine RP, do not have effluent limits in the proposed Order. The Regional Board has determined that reasonable potential exists for copper, bis(2-ethylhexyl)phthalate, and PCBs. Effluent limits have been established for these constituents based on the CTR, and the requirements contained in Section 5.4 of the TSD.

The effluent limitations for conventional and nonconventional pollutants for hydrostatic test wastewater are based on BPJ using the requirements contained in the Regional Board's Order 97-047, General NPDES Permit No. CAG674001, General NPDES Permit and WDRs for Discharges of Hydrostatic Test Water to Surface Waters in Coastal Watersheds of Los Angeles and Ventura Counties. The data set utilized to evaluate RP for the priority pollutant concentrations detected in the hydrostatic test water discharged from Westway included nine data points. The data was collected in 1998 and none of the data points were collected from the same tank. Copper, lead and silver had effluent limits in the current Order based on BPJ. These constituents had reasonable potential to cause, or contribute to, an exceedance of WQBELS. Therefore, the effluent limit included in the current permit and the CTR-based WQBELs were compared and the most stringent effluent limitation was selected and included in the proposed Order. Other priority pollutants that have limits in the current Order but do not have RP, will be monitored once per discharge event during the tenure of the proposed Order.

Discharge Serial No. 006 is a new outfall. However, the discharge from the outfall is storm water runoff and hydrostatic test water as is the discharge from Outfalls 002 through 005. Therefore, the effluent limits prescribed for discharges from Outfalls 002 through 005 are also applicable to discharges from Outfall 006.

40 CFR §122.45(f) requires that mass-based limitations be established in the proposed Order for conventional, non-conventional, and toxic pollutants. Generally, mass-based limits ensure that proper treatment, and not dilution, is employed to comply with the final effluent concentration limits. When calculating the mass-based limitations for discharges, the appropriate flow, daily maximum limitations for daily maximum mass calculations, and the monthly average limitations when calculating the monthly average mass, should be substituted in the following equation:

Mass (lbs/day) = flow rate (MGD) X 8.34 X effluent limitation (mg/L) where: mass = mass limit for a pollutant in lbs/day effluent limitation = concentration limit for a pollutant, mg/L

flow rate = discharge flow rate in MGD

Mass-based effluent limitations for storm water discharges in the proposed Order are based on a maximum flow rate of 155,000 gpd (0.155 MGD). The mass-based limitations in this Order for Discharge Serial Nos. 004 and 005 are based on a maximum flow rate of 210,000 gpd (0.21 MGD) for hydrostatic test water. The

Discharger stated the correct maximum discharge flow through Discharge Serial Nos. 002, 003, and 006, for each event is 70,000 gallons, and each hydrostatic test event typically lasts approximately 4 days; therefore, the daily flow rate is approximately 17,500 gpd. The mass-based limitations in this Order for Discharge Serial Nos. 002, 003, and 006 are based on a maximum flow rate of 17,500 gpd (0.0175 MGD).

#### VI. Specific Rationales for Each of the Numerical Effluent Limitations

- A. The following tables present the effluent limitations and specific rationales for pollutants that are expected to be present in the discharge of each outfall:
  - 1. Effluent limitations established in this Order are applicable to storm water discharges from the Discharge Serial Nos. 002, 003, 004<sup>1</sup>, 005, and 006<sup>2</sup>.

Pollutant (units)		Maximum Daily Effluent Limitation		Average Monthly Effluent Limitation		Rationale
		Concentration	Mass <sup>3</sup> (Ibs/day)	Concentration	Mass <sup>3</sup> (lbs/day)	
Temperature	(deg. F)	86				TP/BPJ
рН	(pH units)	6.5 - 8.5				BP
Oil & Grease	(mg/L)	15	19	10	13	BPJ
Phenolic compounds (chlorinated)	(mg/L)	1.0	1.3			E, BPJ
Total suspended solids	(mg/L)	150	194	50	84	BPJ
Turbidity	(NTU)	150		50		BPJ
BOD₅20°F	(mg/L)	30	39	20	25.9	BPJ
Settleable solids	(ml/L)	0.3		0.1		BPJ
Sulfides	(mg/L)	1.0	1.3			BPJ
Residual Chlorine	(mg/L)	0.1	0.13			BPJ
Copper	(μg/L)	5.8	0.0078	2.9	0.0039	CTR
Bis(2-ethylhexyl)phthala	ate (µg/L)	11.8	0.016	5.9	0.0078	CTR
PCBs	(μg/L)	0.00034	0.00000044	0.00017	0.00000022	CTR

<sup>&</sup>lt;sup>1</sup> Note that it is assumed no hydrostatic test water from "new" tanks should be discharged through Outfall No. 004 during this permit term.

2. Effluent limitations established in this Order are applicable to hydrostatic test water discharges from the Discharge Serial Nos. 002, 003, 004, 005, and 006.

<sup>&</sup>lt;sup>2</sup> Serial No. 006 is a new outfall not previously permitted.

<sup>&</sup>lt;sup>3</sup> Mass-based effluent limitations for these pollutants are based on a maximum flow rate of 155,000 gpd

<sup>&</sup>lt;sup>4</sup> TP = Thermal Plan, BP = Basin Plan, E = Existing Permit, BPJ = Best Professional Judgment, CTR = California Toxics Rule.

	Maximum Daily Effluent Limitation			Average Monthly Effluent Limitation			
Pollutant (units)	Concentration	Mass (I Discharge Serial Nos. 002, 003, 006 <sup>2</sup>	bs/day) Discharge Serial Nos. 004 and 005 <sup>3</sup>	Concentration	Mass (I Discharge Nos. 002, 003, 006 <sup>2</sup>	bs/day) Discharge Nos. 004 and 005 <sup>3</sup>	Rationale <sup>1</sup>
Temperature (° F)	86			86			BP
Oil & Grease (mg/L)	15	2	26	10	1.5	17	BPJ
pH (standard units)	6.5-8.5	-	-		-	-	BP
Phenolic compounds (chlorinated) (mg/L)	1.0	0.15	1.75				Е
Suspended Solids (mg/L)	150	22	263	50	7.3	88	BPJ
BOD <sub>5</sub> 20°C (mg/L)	30	4.4	52	20	3	35	BPJ
Turbidity (NTU)	150			50	-		BPJ
Settleable Solids (ml/L)	0.3			0.1			BPJ
Sulfides (mg/L)	1.0	0.15	1.8		-	-	BPJ
Residual Chlorine (mg/L)	0.1	0.015	0.18				BPJ
Phenols (mg/L)	1.0	0.15	1.8				BPJ
Total Chromium (μg/L)	50	0.007	0.09		1	1	BPJ
Copper <sup>4</sup> (μg/L)	5.8	0.0009	0.01	2.9	0.0004	0.005	CTR
Lead <sup>4</sup> (µg/L)	14	0.002	0.02	7	0.001	0.01	CTR
Silver (µg/L)	2.2	0.0003	0.004	1.1	0.0002	0.002	CTR

BP = Basin Plan, E = Existing Permit, BPJ = Best Professional Judgment, CTR = California Toxics Rule.

# B. Compliance Schedule

Based on effluent monitoring data submitted by the Discharger, a comparison between the MEC and calculated AMEL values shows that the Discharger will be unable to consistently comply with effluent limitations established in the proposed Order for copper and PCBs for all storm water discharges. Hence, interim limits have been prescribed for these constituents for their respective discharge types. As a result, the proposed Order contains a compliance schedule that allows the Discharger up to two years to comply with the revised effluent limitations.

This Order establishes interim monitoring 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

<sup>&</sup>lt;sup>2</sup> Mass-based effluent limitations based on a maximum discharge flow rate of 17,500 gpd (0.0175 MGD) for Discharge Serial Nos. 002, 003, and 006.

<sup>&</sup>lt;sup>3</sup> Mass-based effluent limitations based on a maximum discharge flow rate of 210,000 gpd (0.21 MGD) for Discharge Serial Nos. 004 and 005.

<sup>&</sup>lt;sup>4</sup> Discharge limitations for these metals are expressed as total recoverable.

interim limitations shall be effective until August 4, 2006, after which, the Discharger shall demonstrate compliance with the final effluent limitations.

The interim limitations shall be the most stringent of the limitations included in Order No. 97-139 and the MEC reported in data previously collected at the site. Order No. 97-139 does not contain effluent limitations for copper or PCBs, and there are insufficient effluent data to perform a meaningful statistical analysis; therefore the MEC will serve as the interim effluent limit concentration for these constituents. It should be noted that the Board might take appropriate enforcement actions if interim limitations and requirements are not met.

1. From the effective date of this Order until August 4, 2006, the discharge of storm water only from Discharge Serial Nos. 002, 003, 004, 005, and 006 in excess of the following is prohibited:

Constituent (units)	Daily Maximum Concentration	Mass (lbs/day)	Rationale <sup>1</sup>
Copper (μg/L)	19	0.024	MEC
PCBs (μg/L)	76	0.1	MEC

<sup>1</sup>MEC = Maximum Effluent Concentration

2. From the effective date of this Order until August 4, 2006, the discharge of hydrostatic test water from Discharge Serial Nos. 002, 003, 004, 005, and 006 in excess of the following is prohibited:

Constituent (units)	Daily Maximum Concentration	Mass (lbs/day) Outfalls 002, 003 and 006	Mass (lbs/day) Outfalls 004 and 005	Rationale <sup>1</sup>
Copper (µg/L)	34	0.005	0.06	MEC
Lead (µg/L)	27	0.004	0.05	MEC
Silver (μg/L)	5	0.0007	0.009	MEC

<sup>&</sup>lt;sup>1</sup>MEC = Maximum Effluent Concentration

The Discharger also will be required to develop and implement a compliance plan that will identify the measures that will be taken to reduce the concentrations of the constituents with interim effluent limits. This plan should evaluate options to achieve compliance with the revised permit limitations. These options can include, for example, evaluating and updating available treatment unit processes, upgrading the system if necessary, and maintaining proper operation and maintenance of the treatment system.

# VII. Monitoring Requirements

The previous Order for Westway (No. 97-139) required effluent monitoring for each of the three discharge types: water softener backwater and rinse water, storm water and hydrostatic test water. The discharge of water softener backwash and rinse water to surface waters was terminated in July 2003. Consequently, the tentative Order does not include effluent limits or monitoring requirements for water softener backwash and rinse water. It does include monitoring requirements for discharges of hydrostatic test and storm water from Outfalls 002 through 006. Monitoring requirements are discussed in greater detail in Section III of the Monitoring and Reporting Program No. 5960.

# A. Effluent Monitoring

Because the characteristics of the wastewater being treated by the Discharger are not expected to vary significantly over time, grab samples are required for all pollutants of concern.

The Discharger is required to monitor the conventional and priority pollutants as outlined in the Monitoring and Reporting Program No. 5960 to assess the impact of the discharge on the beneficial uses of the receiving waters. Monitoring of these pollutants will characterize the wastes discharged and determine compliance with applicable effluent limitations established in the proposed Order.

For the storm water discharge, this Order continues to require annual monitoring for acute toxicity and the monitoring of flow, Basin Plan and conventional pollutants during every storm event discharge. The Discharger is also now required to monitor for copper, PCBs, and bis(2-ethylhexyl)phthalate during every discharge event in order to determine compliance with newly established effluent limitations. The proposed Order also requires monitoring for PCBs, copper, bis(2-ethylhexyl)phthalate, benzene, ethylbenzene, toluene, xylene, and total petroleum hydrocarbons (TPH) during each discharge event due to the possible contamination of the storm water by petroleum products stored on-site. This will allow for a more representative characterization of the storm water discharge and its potential effects on water quality. The Discharger is also required to monitor for priority pollutants annually.

This Order continues to require monitoring of hydrostatic test water during each discharge event for the following parameters: conventional pollutants, Basin Plan constituents, phenols, benzene, toluene, ethylbenzene, xylene, ethyl dibromide, carbon tetrachloride, tetrachloroethylene, trichloroethylene, 1,4-dichlorobenzene, 1,1-dichloroethane, 1,2-dichloroethane, 1,1-dichloroethylene, vinyl chloride, arsenic, cadmium, total chromium, copper,

lead, mercury, selenium, silver, and MTBE. Priority pollutants and acute toxicity are also monitored annually.

#### B. Receiving Water Monitoring

Westway is required to perform general observations of the receiving water when discharges occur and report the observations in the quarterly monitoring report. The Regional Board in assessing potential impacts of future discharges will use data from these observations. If no discharge occurred during the observation period, this shall be reported. Observations shall be descriptive where applicable, such that colors, approximate amounts, or types of materials are apparent. The following observations are required:

- Tidal stage, time, and date of monitoring;
- Weather conditions:
- Color of water:
- Appearance of oil films or grease, or floatable materials;
- Extent of visible turbidity or color patches;
- Direction of tidal flow:
- Erosion caused by test water discharge at outfall locations;
- Description of odor, if any, of the receiving water; and
- Presence and activity of California Least Tern and California Brown Pelican

# C. Storm Water Monitoring

The Discharger is required to measure and record the rainfall each day of the month. The Discharger is also required to conduct visual observations of all storm water discharges of all storm water discharge locations to observe the presence of floating and suspended materials, 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. R4-2004-0115.