# 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 BP WEST COAST PRODUCTS, LLC (EAST HYNES TANK FARM)

NPDES Permit No.: CA0059561 Public Notice No.: 04 – 012

#### **FACILITY ADDRESS**

BP West Coast Products, LLC East Hynes Tank Farm 5905 Paramount Boulevard Long Beach, CA 90805

#### **FACILITY MAILING ADDRESS**

BP West Coast Products, LLC East Hynes Tank Farm 5905 Paramount Boulevard Long Beach, CA 90805

> Contact: Stephen Comley Telephone: (562) 499-2241

## 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 April 9, 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: May 6, 2004 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 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 Miller Jennings, Senior Staff Counsel 1001 I Street, 22<sup>nd</sup> Floor Sacramento. CA 95814

#### D. 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

BP West Coast Products, LLC (hereinafter Discharger or BP), from its East Hynes Tank Farm Facility (Facility) discharges wastewater to the Los Angeles River, a water of the United States. Wastes discharged from the Facility are regulated by WDRs and NPDES permit contained in Board Order No. 97-019 (NPDES Permit No. CA0059561). Order No.

97-019 expired on February 10, 2002.

Formerly, the Facility was owned by ARCO Terminal Services Corporation. In January 2001 ARCO was acquired by BP West Coast Products, LLC. The Facility continued to operate under the existing Order issued to ARCO Terminal Services Corporation. On February 19, 2002 BP West Coast Products, LLC submitted an NPDES permit renewal application to the Regional Board. The tentative Order is the reissuance of the WDRs and NPDES permit for discharges from East Hynes. A site visit was conducted on August 28, 2003, to observe operations and collect additional data to develop permit limits and requirements.

## III. Description of Facility and Waste Discharge

The Discharger operates the Facility located at 5005 Paramount Boulevard, Long Beach, California. The Facility stores crude oil and refined products, transports and distributes hydrocarbons by pipeline, and operates a bulk loading/unloading truck rack.

Storm water runoff is collected by the use of five stationary pumps, a mobile pump, and gravity from roads, parking areas, and unpaved and paved areas surrounding the holding tanks. Storm water is directed to a series of four lined ponds for holding and evaporation.

The previous Order (Order No. 97-019) states that storm water runoff is treated through an oil-water separator and discharged to a series of three unlined ponds for percolation and evaporation. During the August 28, 2003 inspection, it was noted that four lined ponds served as treatment prior to discharge, and that storm water runoff is not directed through an oil-water separator prior to entering the ponds.

The previous Order also regulates the discharge of hydrostatic test water ("hydrotest water"). The Discharger periodically conducts hydrostatic tests of distribution pipes and storage tanks to evaluate pipe/tank integrity. Source water for hydrostatic tests is municipal water supply. Hydrotest water is pumped directly to the series of four lined ponds. No further treatment is performed on the hydrotest water prior to discharge.

Wastewater is sampled at the point of discharge of the pond system into the storm drain system to measure compliance with effluent limitations specified in Order No. 97-019.

The Discharger operates an on-site groundwater remediation program. The previous Order states that the treated groundwater is discharged to the sanitary sewer system. During the August 28, 2003 inspection, the Facility representative stated that treated groundwater from the groundwater remediation operation is transported off-site for treatment/disposal via trucks. Discharge of treated groundwater is not permitted under this Order.

Process water from the Facility is collected, stored on-site, and periodically transported to another Discharger-owned facility for processing/recycling. The discharge of process water is

not permitted under this Order.

As stated previously, storm water runoff and hydrotest water are collected and directed to a series of four lined ponds to discharge through Discharge Serial No. 001 (Latitude 33°52'39", Longitude 118°12'36") to a storm drain in Cherry Avenue, to the Los Angeles River, a water of the United States, at Artesia Boulevard, above the estuary. The Discharger is permitted to discharge up to 756,000 gallons per day (gpd) of effluent through Discharge Serial No. 001.

Discharger was denied by the permitting authority, to discharge storm water to sanitary sewer. Discharger prefers to discharge to sanitary sewer, if granted permission in the future.

Effluent data reported on the permit renewal application is summarized in the following table:

Pollutant (units)	Maximum Daily Value	Long Term Average
Biochemical oxygen demand	110	8
(mg/L)		
Biochemical oxygen demand	174	10.5
(lb/day)		
Total Organic Carbon (mg/L)	< 5	ND
Total Organic Carbon (lb/day)	7.9	ND
Total suspended solids (mg/L)	18	ND
Total suspended solids (lb/day)	113.3	ND
Ammonia (as N) (mg/L)	0.7	0.7
Ammonia (as N) (lb/day)	1.1	0.9
Flow (gallons per day)	750,000	
Temperature (Winter/Summer)	16/25	15/20
(deg. C)		
pH (standard units)	7.5 – 8.9	
Oil and Grease (mg/L)	< 5	
Oil and Grease (lb/day)	7.9	

All other pollutants were designated "believed absent" or were reported below detectable levels on the permit renewal application.

Effluent data reported to the Regional Board as required by the previous monitoring and reporting program for hydrostatic test water is summarized in the following table:

Pollutant	Unit	Range <sup>1</sup>
Flow	gpd ● F	23,571 - 800,000 50 - 89 <sup>2</sup>
Temperature	●F	$50 - 89^2$
рН	S.U.	6.38 – 8.9
Oil and Grease	mg/L	1 <sup>3</sup>
Turbidity	NTU	2.04 – 29.4
Suspended Solids	mg/L	15 – 161 <sup>4</sup>
BOD <sub>5</sub> 20 • C	mg/L	<2.0 - 5.8
Phenols	mg/L	<0.1 – 0.12
Sulfides	mg/L	<0.1 – 0.4
Benzene	ug/L	<0.5 – 1.47
Ethylbenzene	ug/L	<0.5 – 0.94
Toluene	ug/L	<0.3 – 1.2
Xylene	ug/L	<0.5 – 1.7
Arsenic	mg/L	<0.05 <sup>5</sup>
Berylium	mg/L	<0.05 <sup>5</sup>
Barium	mg/L	0.18 <sup>5</sup>
Cadmium	mg/L	<0.05 <sup>5</sup>
Chromium VI	mg/L	<0.05 <sup>5</sup>
Copper	mg/L	<0.05 <sup>5</sup>
Lead	mg/L	<0.05 <sup>5</sup>
Mercury	mg/L	0.0002 <sup>5</sup>
Molybdenum	mg/L	<0.05 <sup>5</sup>
Selenium	mg/L	<0.002 <sup>5</sup>
Silver	mg/L	<0.05 <sup>5</sup>
Thallium	mg/L	<0.05°
Zinc	mg/L	<0.05 <sup>5</sup>
Acute toxicity	% survival	85 - 100

Range of data for the time period between January 1997 through June 2003 submitted to the Regional Board.

Effluent data reported to the Regional Board as required by the previous monitoring and reporting program for storm water runoff is summarized in the following table:

<sup>&</sup>lt;sup>2</sup> Temperature values of <100 were also reported.

Does not include non-detected values. Non-detects reported between <1 through <5.

Does not include non-detect values (reported as low as <10).

Only value (no range).

Pollutant	Unit	Range <sup>1</sup>
Flow	gpd	0 – 756,000
Temperature	●F	50 - 60 <sup>2</sup>
рН	S.U.	7.52 – 8.9
Oil and Grease	mg/L	<5 - 2
Suspended Solids	mg/L	<10 – 11
BOD₅20 •C	mg/L	<0.1 <sup>3</sup>
Phenols	mg/L	<0.1 <sup>3</sup>

- Range of data for the time period between January 1997 through June 2003 submitted to the Regional Board.
- Temperature values were also reported as <100, these values are not included.
- Data available for review indicated all non-detectable values at this detection limit.

The results of data submitted to the Regional Board by the Discharger for a hydrostatic test effluent sample taken on April 7, 1999 indicate the Facility exceeded the allowable limit for suspended solids of 150 mg/l with a reported value of 161 mg/l. In addition, data submitted to the Regional Board by the Discharger for a hydrostatic test effluent sample taken on February 22, 2000 indicates the Facility exceeded the allowable limit for benzene of 1 µg/l with a reported value of 1.47 i g/l. Excluding the two previously mentioned exceedances, the available effluent monitoring data show that the Discharger has been in compliance with the existing effluent limitations. Further, the site inspection report dated August 28, 2003 indicates the analytical methods used on the date of August 9, 2001 to analyze oxygenates, semi-volatile organics, and metals were not the approved methods listed in 40 CFR Part 136. The inspection report further states that a transcription error was identified for a pH level for a sample taken on March 5, 2000.

# IV. Applicable Plans, Policies, Laws, and Regulations

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

- 1. 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.
- 2. 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 limits for certain dischargers and establish procedures for NPDES permitting, including how to establish effluent limits for certain pollutants discharged by East Hynes.

3. 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 Basin Plan contains beneficial uses and water quality objectives for the Los Angeles River, Reach 2 (Hydrologic Unit No. 405.21).

Existing Uses: groundwater recharge, water contact recreation, non-contact

water recreation, warm freshwater habitat, wildlife habitat, and

wetland habitat

Potential Uses: municipal and domestic supply and industrial service supply.

- 4. 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 United States Environmental Protection Agency (USEPA) 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 USEPA's 1999 ammonia criteria update.
- 5. 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.
- 6. 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 § 131.38]. 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 also allows for a schedule of compliance not to exceed 5 years from the date of permit renewal for an existing discharger if the Discharger demonstrates that it is infeasible to promptly comply with effluent limits derived from the CTR criteria.

- 7. On March 2, 2000, the 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 the 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. The SIP was effective on May 18, 2000, with respect to the priority pollutant criteria promulgated by the USEPA 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 salt 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 Los Angeles River, above the estuary.
- 8. 40 CFR section 122.44(d)(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 water quality-based effluent limits (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.
- 9. State and Federal antibacksliding and antidegradation policies require that Regional Board actions to protect the water quality of a water body and to ensure that the waterbody will not be further degraded. The antibacksliding provisions are specified in section 402(o) and 303(d)(4) of the CWA and in the Title 40 of the Code of Federal Regulations (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.
- 10. Effluent limitations are established in accordance with sections 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 the Los Angeles River.
- 11. Existing waste discharge requirements contained in Board Order No. 97-019, adopted by the Regional Board on March 3, 1997. In some cases, permit conditions (effluent limits and other special conditions) established in the existing waste discharge requirements have been carried over to this permit.

# V. Regulatory Basis for Effluent Limitations

The CWA requires point source discharges to control the amount of conventional, nonconventional, 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 water quality-based effluent limitations (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:

- A. 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 nonconventional pollutants.
- B. 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 nonconventional pollutants.
- C. 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.
- D. New source performance standards (NSPS) that 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 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 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 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 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 USEPA through the CTR and NTR, as well as priority pollutant objectives in 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:

#### 1. 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.

Effluent limitations for hydrostatic test water from Discharge Serial No. 001 in the current permit were established for oil and grease, settleable solids, suspended solids, total dissolved solids, phenols, sulfides, sulfate, chloride, residual chlorine, benzene, toluene, ethylbenzene, xylene, arsenic, cadmium, chromium, lead, mercury, selenium, and silver, because they may exist in residual amounts in the conveyances being tested and therefore have the potential to be present in hydrostatic test water. The limits given for copper and zinc in the existing permit are high. CTR limits are not given in this permit for copper and zinc until RPA indicates that there is a potential. The discharger is required to conduct interim monitoring for two years on a quarterly basis to collect enough data to perform RPA. Materials stored on-site may contribute to biological oxygen demand (BOD) and turbidity. Furthermore, BOD and turbidity are parameters used to characterize wastewater; thus these parameters are considered pollutants of concern. Effluent limitations for storm water runoff from Discharge Serial No. 001 in the current permit were established for suspended solids, oil and grease, and phenols, because they have the potential to be present in storm water runoff from the tank farm. Storm water runoff and hydrostatic test water from Discharge Serial No. 001 in the current permit may affect the pH and temperature of the discharge; therefore, effluent limitations for pH and temperature are established in this permit in addition to limits on the parameters limited by the previous permit.

#### 2. Technology-Based Effluent Limits

The previous Order required the Discharger to develop and implement a Storm Water Pollution Prevention Plan (SWPPP). This permit will require the Discharger to update

and continue to implement the revised SWPPP. The SWPPP will outline site-specific management processes for minimizing storm water runoff contamination and for preventing contaminated storm water runoff from being discharged directly into surface waters. Due to the fact that storm water discharges do occur at the East Hynes Facility, this permit will require that East Hynes develop and implement a SWPPP.

Due to the lack of national ELGs for tank farm facilities and pursuant to 40 CFR 122.44(k), the Regional Board will require the Discharger to develop and implement a *Best Management Practices Plan* (BMPP). The combination of the SWPPP and BMPP and existing permit limitations based on past performance and reflecting BPJ will serve as the equivalent of technology-based effluent limitations, in the absence of established ELGs, in order to carry out the purposes and intent of the CWA.

#### 3. Water Quality-Based Effluent Limits

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 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 USEPA water quality criteria contained in the CTR and NTR). The specific procedures for determining reasonable potential and, if necessary, for calculating WQBELs, are contained in the SIP for non-storm water discharges. In addition, in the best professional judgment of the Regional Board staff, the USEPA's *Technical Support Document for Water Quality-Based Toxics Control (TSD) of 1991* (USEPA/505/2-90-001) identifies an appropriate, rational, step-wise approach that can be used to determine whether storm water discharges demonstrate reasonable potential.

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 occurs 95 percent or more of the time; saltwater criteria apply at salinities of 10 ppt and above at locations where this occurs 95 percent 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 is more stringent, are used to prescribe the effluent limitations in this Order to protect the beneficial uses of the Los Angeles River.

Some water quality criteria are hardness-dependent. The Discharger provided hardness data as part of their required monitoring for priority pollutants. The hardness value as CaCO<sub>3</sub> is used for determining reasonable potential to exceed applicable hardness-dependent criteria for certain metals.

#### (a). Reasonable Potential Analysis (RPA)

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.

There are insufficient monitoring data available to perform RPA to the priority pollutants. The SIP requires the dischargers to submit sufficient data to conduct the determination of priority pollutants requiring WQBELs and to calculate the effluent limitations. In accordance with Section 13267 of the California Water Code, the Regional Board, in a letter dated July 27, 2001, required the Discharger to conduct an interim monitoring program of the effluent and the receiving water for 3 years. The letter stated that the data collected shall be submitted every quarter to the Regional Board. This data was intended to be used to determine the reasonable potential of a priority pollutant and to calculate the effluent limitation, if required. To date, data available for review include four data points for hydrostatic test water for the priority pollutants and no receiving water data. The Regional Board has determined these data are insufficient to complete the RPA. Thus, the proposed permit includes interim monitoring requirements to obtain the necessary data.

# (b). 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:

- 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).
- 3. Where sufficient effluent and receiving water data exist, use of a dynamic model which has been approved by the Regional Board.

## (c). Impaired Water Bodies on 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 USEPA has approved the State's 303(d) list of impaired water bodies. 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 River (Reach 2) receives discharges from highly industrial areas. The 2002 State Board's California 303(d) List classifies the Los Angeles River (Reach 2) as impaired. The pollutants of concern, detected in the water column, in the sediment, and in the fish tissue, include ammonia, high coliform count, lead, nutrients, odors, oil, and scum/foam-unnatural.

## (d). 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 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. Data indicate that acute toxicity samples conducted between July 1998 and August 2001 have resulted in survival percentages between 85 - 100.

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, this Order includes acute toxicity limitations.

The discharges at the 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, at this Facility. Discharger will be required to continue to conduct acute toxicity testing in accordance with the existing permit requirements and the Basin Plan.

### 4. Specific Rationale for Each Numerical Effluent Limitation

Section 402(o) of the Clean Water Act and 40 CFR 122.44(I) require that effluent limitations standards or conditions in reissued permits be at least as stringent as those in the existing permit. 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. The requirements in the proposed Order for oil and grease, and phenols (shown in the table below) are based on limits from permits for similar facilities and BPJ. The effluent limitations for pH and temperature are based on the Basin Plan.

In the previous Order, two separate sets of effluent limits were established for hydrostatic test water and storm water runoff. Information gathered during an NPDES site inspection conducted on August 28, 2003 revealed that it might be possible for both types of effluent to simultaneously discharge into the holding ponds prior to discharge. As a result, one set of discharge effluent limits has been established to address both hydrostatic test water and storm water runoff discharges from Serial Discharge Point 001.

Since there are insufficient monitoring data available to perform an RPA, no new priority pollutants of concern will be identified in this Order until the necessary data are obtained to perform an RPA.

Effluent limitations for pollutants of concern identified by the Regional Board in the previous Order have been carried over to this tentative Order. The previous effluent limitations for these parameters exceeded applicable water quality criteria.

This permit will replace the effluent limit for total chromium in the existing permit with chromium VI. Total chromium measures the combined levels of trivalent chromium (chromium III) and hexavalent chromium (chromium VI). Chromium (III) occurs naturally in the environment and is an essential nutrient, while chromium (VI) is generally produced by industrial processes, such as chrome plating, dyes and pigments, leather tanning, and wood preserving. Because chromium VI is more toxic than the chromium III form, and total chromium typically captures the naturally occurring chromium III form, monitoring for chromium VI instead of total chromium will better indicate the toxicity of the effluent.

In compliance with 40 CFR §122.45(d), permit limitations shall be expressed, unless impracticable, as both average monthly effluent limitations (AMELs) and maximum daily effluent limitations (MDELs). AMELs for total suspended solids and BOD $_520\,^{\circ}$ C are based on recently adopted orders of a similar nature. Furthermore, AMELs for settleable solids, BOD $_520\,^{\circ}$ C, total suspended solids, phenols, turbidity, sulfides, and sulfate are based on recently adopted orders of a similar nature. Due to the absence of AMELs in the existing permit, AMELs were calculated for all other non-CTR pollutants and selenium based on the ratios of MDEL:AMEL for those effluent limitations calculated according to the requirements in the SIP for CTR pollutants . The average of the ratios of MDELs to AMELs for metals is 2.01, based on RPA for other tank farm facilities. To calculate the AMEL for pollutants, based on this average ratio, the MDEL for each pollutant was divided by 2.01.

The following table presents the effluent limitations and specific rationales for pollutants that are expected to be present in the discharge of storm water runoff and hydrostatic test water through Discharge Serial No. 001 (Latitude 33°52'39", Longitude 118°12'36"):

		Discharge Limitations		
Constituents	Units	Monthly	Daily	Rationale <sup>1/</sup>
		Average	Maximum	
Temperature	°F		86	BP
рН	SU		6.5 - 8.5	BP
Oil and Grease	mg/L	10	15	E, BPJ
Settleable Solids	ml/L	0.1	0.3	E, BPJ
BOD₅20°C	mg/L	20	30	BPJ
Total Dissolved Solids	mg/L	750	1,500	E, BPJ
Total Suspended Solids	mg/L	50	75	BPJ
Phenols	mg/L	0.7	1.0	E, BPJ
Turbidity	TU	50	75	E, BPJ
Sulfides	mg/L	0.7	1.0	E, BPJ
Sulfate	mg/L	150	350	E, BPJ
Chloride	mg/L	75	150	E, BPJ
Residual Chlorine	mg/L	0.25	0.5	E, BPJ
Benzene	μg/L	0.5	1	E, BPJ
Toluene	μg/L	5	10	E, BPJ
Ethylbenzene	μg/L	340	680	E, BPJ
Xylene	μg/L	340	680	E, BPJ
Arsenic	ì g/L	25	50	E, BPJ
Cadmium	ì g/L	5	10	E, BPJ
Chromium VI	ì g/L	25	50	E, BPJ
Lead	ì g/L	25	50	E, BPJ

Constituents	Units	Discharge  Monthly  Average	Limitations  Daily  Maximum	Rationale <sup>1/</sup>
Mercury	ì g/L	1	2	E, BPJ
Selenium	ì g/L	5	10	E, BPJ
Silver	ì g/L	25	50	E, BPJ
Acute Toxicity	% survival		2	BP

<sup>&</sup>lt;sup>1</sup> BP = Basin Plan.

BPJ = Best professional judgment.

E = Existing permit limit.

CTR = Water quality-based effluent limits established based on the criteria in the CTR and requirements in the SIP.

# VI. Monitoring Requirements

The previous permit for the Facility required monitoring of hydrostatic test water once per discharge for total waste flow, temperature, pH, oil and grease, suspended solids, settleable solids, total dissolved solids, BOD<sub>5</sub>20°C, phenol, turbidity, residual chlorine, sulfides, sulfate, chloride, benzene, xylene, toluene, ethylbenzene, arsenic, cadmium, chromium, copper, lead, mercury, selenium, silver, and zinc. In addition, monitoring for storm water runoff included oil and grease, suspended solids, and phenols at a frequency of once per discharge.

On July 27, 2001 the Regional Board sent a letter to the Discharger requiring the monitoring of priority pollutants regulated in the CTR. Quarterly monitoring of the effluent and receiving water was required for the period from July 2001 to March 2003.

Monitoring requirements are discussed in greater detail in Section III of the Monitoring and Reporting Program No. 6710. As described in the Monitoring and Reporting Program, monitoring reports must be submitted quarterly.

#### A. Effluent Monitoring

To demonstrate compliance with effluent limitations established in the permit, and to assess the impact of the discharge on the beneficial uses of the receiving waters, this Order combines and carries over the existing monitoring requirements for all parameters for both hydrostatic test water and storm water runoff. Monitoring once per discharge event for flow, pH, temperature, oil and grease, BOD<sub>5</sub>20°C, turbidity, settleable solids, total suspended solids, total dissolved solids, phenols, sulfides, sulfate, chloride residual chlorine, benzene, toluene, ethylbenzene, xylene, arsenic,

<sup>&</sup>lt;sup>2</sup> 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.

cadmium, chromium, copper, lead, mercury, selenium, silver, and zinc are required to ensure compliance with effluent limitations. Monitoring for the remaining priority pollutants and acute toxicity is required annually.

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 limited pollutants. This Order also requires the Discharger to collect the effluent sample prior to the effluent entering the storm drain.

## B. Receiving Water Monitoring Requirements

To conduct RPA receiving water monitoring data is required. The receiving water monitoring of priority pollutants shall be conducted for the first two years on an annual basis. The two time annual monitoring of the receiving water shall be conducted at the same time as annual effluent monitoring of priority pollutants. Receiving monitoring station shall be within 50 feet upstream from or near the discharge point (of storm drain) into Receiving Water.

## C. Interim Monitoring of Effluent

This monitoring shall occur at the following locations:

Effluent discharge point (Discharge Serial No. 001); prior to entry into the storm drain.

#### 1. Monitoring of Priority Pollutants for Reasonable Potential Determination

As discussed earlier, the Regional Board issued a letter on August 3, 2001 that required the Discharger to monitor for priority pollutants regulated in the CTR, and submit the data by April 15, 2003. As discussed previously, the Discharger has submitted data for the dates of September 19, 2001, November 28, 2001, February 26, 2002, and March 20, 2003, and the Regional Board has determined these data are insufficient to conduct the RPA. The Regional Board will require periodic monitoring for pollutants for which criteria or objectives apply and for which no effluent limitations have been established, to provide data to complete the RPA for the Facility. Upon completion of the required monitoring, the Regional Board will use the gathered data to conduct the RPA and determine whether a WQBEL is required.

This permit will combine the periodic reporting requirements of the SIP with the existing permit monitoring requirements. The Regional Board is requiring, as part of the Monitoring and Reporting Program, that the Discharger shall ensure that at least 8 effluent samples are collected in the interim monitoring period (four per year (quarterly) for the first two years), the results of which will be submitted along

with the corresponding quarterly reports.

# 2. Monitoring for TCDD Equivalents

The Regional Board is requiring, as part of the Monitoring and Reporting Program, that the Discharger conduct effluent/receiving water monitoring for the presence of the 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD or Dioxin) congeners. The monitoring shall be a grab sample with a minimum frequency of once during dry weather and once during wet weather in the first year after adoption of the permit. Compliance with the dioxin limitation shall be determined by the summation of the 17 individual TEQs.