STATE OF CALIFORNIA

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

FACT SHEET
WASTE DISCHARGE REQUIREMENTS
FOR
BP WEST COAST PRODUCTS LLC
LONG BEACH MARINE TERMINAL 2
(FORMERLY ARCO TERMINAL SERVICES CORPORATION)

NPDES Permit No.: CA0000442
Public Notice No.: 04-035

FACILITY ADDRESS	FACILITY MAILING ADDRESS
BP West Coast Products LLC	Long Beach Marine Terminal 2
Long Beach Marine Terminal 2	1300 Pier B Street
1300 Pier B Street	Long Beach, CA 90813
Long Beach, CA 90813	Contact: Steve 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 4th 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 15,

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 of Southern California, 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/rwqcb4 where you can access the current agenda for changes in dates and locations.

C. Waste Discharge Requirements Appeals

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

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

D. Information and Copying

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

E. Register of Interested Persons

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

II. Introduction

BP West Coast Products LLC (BP or Discharger) discharges wastewater from the Long Beach Marine Terminal 2 (Terminal or Facility) through four discharge outfalls to the Long Beach Inner Harbor, a water of the United States. Wastes discharged from BP are regulated by WDRs and a NPDES permit contained in Board Order No. 97-00660 (NPDES Permit No. CA0000442). Order No. 97-0006 expired on December 10, 2001.

BP filed a report of waste discharge and applied for renewal of its WDRs and NPDES permit on December 10, 2001. Due to changes in the overall operation of the Facility, BP submitted a revised report of waste discharge on October 6, 2003. The tentative Order is the reissuance of the WDRs and a NPDES permit for discharges from the Terminal.

III. Description of Facility and Waste Discharge

BP acquired the stock of Atlantic Richfield Company (ARCO) through merger in April 2000. As part of the transfer, effective January 2002, ARCO transferred all of its retail and refining assets to a new affiliate BP West Coast Products LLC. Among the assets transferred included the Terminal and its associated permits. By a letter dated February 15, 2002, BP informed the Regional Board of the transfer of ownership.

BP operates the Terminal located at 1300 Pier B Street, Long Beach, California. The Terminal is operated for temporary storage and transfer of crude oil, intermediates, and finished petroleum products. Products are transferred to and from oil tankers, storage tanks, the BP West Coast Products LLC – Carson Refinery, and other companies. The Terminal is comprised of three tank farms (Nos. 1, 2, and 3) containing 34 storage tanks; docks at Berths 76, 77 and 78; and storage, transfer, and ancillary operations. The Terminal's total product storage capacity is approximately 2.1 million barrels (88 million gallons).

Only storm water and hydrotest water are discharged from the three tank farms through the following four outfalls (001, 002, 003, and 004):

Outfall No.	Location	Wastewater Discharge (Tank Farm)	Quantity – Gallons/Day
001	Berth 77	Storm water / Hydrotest Water – (Tank Farm 2)	500,000 / 820,000
002	Berth 78	Storm water / Hydrotest Water – (Tank Farm 3)	500,000 / 820,000
003	Berth 77	Storm water (Tank Farms 1 and 2)	500,000
004	Berth 76	Hydrotest Water (Tank Farm 1)	820,000

The maximum permitted discharge under this NPDES permit is 3.96 mgd.

The Terminal no longer draws tank water nor receives ship ballast/cleaning water. Order No. 97-006 allowed discharge of treated groundwater. Free product and groundwater are now transported to an offsite Treatment Storage Disposal Facility (TSDF). Process water is sent to BP Carson Refinery for treatment and the treated water is subsequently discharged to a Public Owned Treatment Works (POTW). Therefore, groundwater, tank draw down water and ship ballast water will no longer be discharged under this NPDES permit. An inspection was conducted on August 23, 2003, to verify the operations and conditions at the Facility.

The previous permit (Order No. 97-006) authorizes the discharge from two outfalls and contributing wastestreams: 1) Discharge Serial No. 001, up to 1.569 million gallons per day (mgd) of treated wastewaters (commingled storm water, tank draw water, and ship ballast and cleaning water) and up to 0.82 mgd of untreated hydrotest water; and 2) Discharge Serial No. 002, up to 0.5 mgd of storm water run-off from the "diked containment tank farm area."

A. Compliance History

The survival for an acute toxicity test of an effluent sample from Discharge Serial No. 002 collected January 11, 2001 was 35 percent. The permit requires the average survival in undiluted effluent for any three consecutive acute toxicity test to be at least 90 percent with no single test producing less than 70 percent survival. The permit also contains the following statement: "If the effluent exceeds the acute toxicity limitation, the Discharger shall conduct a toxicity reduction evaluation (TRE) study. The TRE shall include all reasonable steps to identify the source(s) of

toxicity…". A TRE study has not yet been conducted. However, survival for a sample from Discharge Serial No. 002 collected on February 25, 2001, was 100 percent. In addition, the monitoring report states that the Facility reported a pH value of 9.9 pH units from Discharge Serial No. 001 on January 11, 2001. Effluent pH must be between 6.0 and 9.0 units. This exceedance was not reported on the cover letter of the Discharge Monitoring Report (DMR) and "a statement of the actions undertaken or proposed which will bring the discharge into full compliance with requirements…" was not submitted as required by General Monitoring and Reporting Requirement Section E.3. of the Standard Provisions. The effluent pH of discharges from Discharge Serial No. 001 appear to be between 6.0 and 9.0 units since this exceedance.

The results of data submitted to the Regional Board by the Discharger for a treated wastewater effluent sample from Discharge Serial No. 001 taken on December 19, 1998, indicates the Facility exceeded the allowable limit for BOD of 30 mg/L with a reported value of 93 mg/L. In addition, four other exceedances of BOD were reported between October 1997 and December 1998. The treated wastewater and the storm water are regulated under the same effluent limits for Discharge Serial No. 001.

A storm water sample taken on February 3, 1998 indicates the Facility exceeded the allowable limit for suspended solids of 150 mg/L with a reported value of 152 mg/L. A storm water sample taken on December 6, 1998 indicates the Facility exceeded the allowable limit for BOD of 30 mg/L with a reported value of 90 mg/L.

B. Corrective Measures and Future Compliance Strategy

All four Discharge Outfalls will be sampled and the analytical results compared with the effluent limitations, prior to discharge. Effluent will not be discharged until all analytical results are in compliance with the discharge requirements. In the case of an exceedance of any of the parameters, the effluent will be sent to the Refinery for processing and/or an alternate disposal method.

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:

A. The federal Clean Water Act (CWA). The federal Clean Water Act requires that any point source discharges of pollutants to a water of the United States must be done in conformance with a NPDES permit. NPDES permits establish effluent limitations that incorporate various requirements of the CWA designed to protect water quality.

B. Title 40, Code of Regulations (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.

C. On June 13, 1994, the Regional Board adopted a revised *Water Quality Control Plan for the Coastal Watersheds of Los Angeles and Ventura Counties* (Basin Plan). The Basin Plan contains water quality objectives and beneficial uses for inland surface waters and for the Pacific Ocean. The immediate receiving water body for the permitted discharges covered by this permit is the Long Beach Inner Harbor. The beneficial uses listed in the Basin Plan for All Other Inner Areas (including Long Beach Inner Harbor) are:

Long Beach Inner Harbor – Hydro Unit No. 403.12

Existing uses: Industrial service supply, navigation, non-contact water recreation, commercial and sport fishing, marine habitat, shellfish harvesting, and rare, threatened, or endangered species

Potential uses: Water contact recreation

D. **Ammonia Basin Plan Amendment.** The 1994 Basin Plan provided water quality objectives for ammonia to protect aquatic life, in Tables 3-1 through Tables 3-4. However, those ammonia objectives were revised on April 25, 2002, by the Regional Board with the adoption of Resolution No. 2002-011, *Amendment to the Water Quality Control Plan for the Los Angeles Region to Update the Ammonia Objectives for Inland Surface Waters (Including Enclosed Bays, Estuaries and Wetlands) with Beneficial Use Designations for Protection of Aquatic Lif*e. The ammonia Basin Plan amendment was approved by the State Board, the Office of Administrative Law, and U.S. EPA on April 30, 2003, June 5, 2003, and June 19, 2003, respectively. Although the revised ammonia water quality objectives may be less stringent than those contained in the 1994 Basin Plan, they are still protective of aquatic life and are consistent with U.S. EPA's 1999 ammonia criteria update.

E. The State Water Resources Control Board (State Board) adopted a *Water Quality Control Plan for Control of Temperature in the Coastal and Interstate Water and Enclosed Bays and Estuaries of California* (Thermal Plan) on May 18, 1972, and amended this plan on September 18, 1975. This plan contains temperature objectives for inland surface waters.

F. On May 18, 2000, the U.S. Environmental Protection Agency (U.S. EPA) promulgated numeric criteria for priority pollutants for the State of California [known

as the *California Toxics Rule* (CTR) and codified as 40 CFR §131.38]. In the CTR, U.S. EPA promulgated human health criteria that protect the general population at an incremental cancer risk level of one in a million (10^{-6}), for all priority toxic pollutants regulated as carcinogens, and criteria for the protection of freshwater and saltwater aquatic life. The CTR also allows for a schedule of compliance not to exceed five years from the date of permit renewal for an existing discharger if the Discharger demonstrates that it is infeasible to promptly comply with effluent limitations derived from the CTR criteria.

G. On March 2, 2000, 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 U.S. EPA 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 U.S. EPA 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 U.S. EPA through the CTR. The SIP requires the dischargers' submittal of data sufficient to conduct the determination of priority pollutants requiring water quality-based effluent limits (WQBELs) and to calculate the effluent limitations. The CTR criteria for 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 the Los Angeles Inner Harbor.

H. 40 CFR §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 WQBELs may be set based on U.S. EPA criteria and supplemented, where necessary, by other relevant information to attain and maintain narrative water quality criteria to fully protect designated beneficial uses.

I. State and Federal antibacksliding and antidegradation policies require that Regional Board actions protect the water quality of a water body and 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.

J. 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 Inner Harbor.

K. Existing waste discharge requirements contained in Board Order No. 97-006, adopted by the Regional Board on January 27, 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 WQBELs that are developed to protect applicable designated uses of the receiving water.

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

- Best practicable treatment control technology (BPT) is based on the average of the best performance by plants within an industrial category or subcategory. BPT standards apply to toxic, conventional, and nonconventional pollutants.

- Best available technology economically achievable (BAT) represents the best existing performance of treatment technologies that are economically achievable within an industrial point source category. BAT standards apply to toxic and nonconventional pollutants.

- Best conventional pollutant control technology (BCT) is a standard for the control from existing industrial point sources of conventional pollutants including BOD, TSS, fecal coliform, pH, and oil and grease. The BCT standard is established after considering the "cost reasonableness" of the relationship between the cost of attaining a reduction in effluent discharge and the benefits that would result, and also the cost effectiveness of additional industrial treatment beyond BPT.

- New source performance standards (NSPS) 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 to inland surface waters, enclosed bays, and estuaries, the SIP establishes specific implementation procedures for determining reasonable potential and establishing WQBELs for priority pollutant criteria promulgated by U.S. EPA through the CTR and NTR, as well as the Basin Plan.

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

A. Pollutants of Concern

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

Effluent limitations for Discharge Serial No. 001 in the previous Order were established for suspended solids, oil and grease, BOD, phenols, sulfides, benzene, toluene, ethylbenzene, xylene, arsenic, cadmium, chromium, copper, lead, mercury, selenium, and silver, because they are components associated with crude oil and refined petroleum products, and may exist in residual amounts in the conveyances being tested and therefore have the potential to be present in hydrostatic test water and storm water. These parameters are considered pollutants of concern.

Wastewater discharges from this Facility have the potential to affect the pH and temperature of the receiving water; therefore, effluent limitations for pH and temperature are established in this permit for all discharges.

B. Technology-Based Effluent Limits

This permit will require the Discharger to develop and implement a *Storm water Pollution Prevention Plan* (SWPPP) consistent with the SWPPP requirements in the NPDES General Permit for Storm Water Discharges Associated with Industrial Activity [State Water Resources Control Board (State Board) Order No. 97-03-DWQ, NPDES Permit No. CAS000001]. 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. (Attachment A)

Currently there are no national ELGs for petroleum storage facilities. Due to the lack of national ELGs for tank farm facilities and the absence of data available to apply BPJ, 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.

C. 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 U.S. EPA 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 the U.S. EPA's *Technical Support Document for Water Quality-Based Toxics Control* (TSD) of 1991 (USEPA/505/2-90-001) for storm water discharges and in the SIP for non-storm water discharges. Furthermore, in the best professional judgment of the Regional Board staff, the TSD 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 saltwater 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 Long Beach Inner Harbor.

1. 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 a full RPA for all priority pollutants for each discharge type and location. Dischargers are required 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 three years. The letter stated that the data collected shall be submitted every quarter to the Regional Board. These data were intended to be used to determine the reasonable potential of a priority pollutant to exceed applicable water quality criteria and to calculate the effluent limitation, if required. To date, data available for review include a single set of data points for hydrostatic test water for the priority pollutants, discharge monitoring report data for a select set of priority pollutants (benzene, ethylbenzene, toluene, xylene, arsenic, cadmium, hexavalent chromium, copper, lead, mercury, selenium, silver, nickel, and zinc), and no receiving water data. Thus, the proposed permit includes interim monitoring requirements to obtain the necessary data.

DMR data collected and reported in compliance with the previous permit were sufficient to conduct partial RPAs for storm water runoff associated with Discharge Serial Nos. 001, 002, 003, and 004, and hydrotest water. The partial RPAs were conducted for benzene, ethylbenzene, and toluene. The discharges did not indicate reasonable potential to exceed WQBELs for the tested parameters.

It should be noted that although there were insufficient data to conduct an RPA for lead and zinc associated with storm water runoff from Discharge Serial No. 001, the Facility did submit two data points that indicate the Facility did exceed water quality criteria for these two parameters on January 11, 2001 and February 12, 2001 (zinc concentrations were 120 ug/L and 200 ug/L, respectively; lead concentrations were 16 ug/L and 49 ug/L, respectively). In addition, data for hydrotest water for the date of November 19, 2002 indicates a copper concentration of 13 ug/L, which exceeds water quality criteria for this parameter.

2. Calculating WQBELs

If a reasonable potential exists to exceed applicable water quality criteria or objectives, then a WQBEL must be established in accordance with one of three procedures contained in Section 5.4 of the TSD and Section 1.4 of the SIP. These procedures include:

a. If applicable and available, use of the wasteload allocation (WLA) established as part of a total maximum daily load (TMDL).

b. Use of a steady-state model to derive maximum daily effluent limitations (MDELs) and average monthly effluent limitations (AMELs).

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

3. Impaired Water Bodies in 303 (d) List

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

The U.S. EPA has approved the State's 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. Currently there is no proposed date for the TMDL completion for the Long Beach Harbor.

The Long Beach Harbor receives discharges from highly industrial areas. The 2002 State Board's California 303(d) List classifies the Long Beach Harbor as impaired. The pollutants of concern detected in fish tissue include DDT and PCBs. The pollutants of concern in the sediment include PAHs. In addition, the water body is impaired for benthic community effects and sediment toxicity.

4. Whole Effluent Toxicity

Whole effluent toxicity (WET) protects the receiving water quality from the aggregate toxic effect of a mixture of pollutants in the effluent. WET tests measure the degree of response of exposed aquatic test organisms to an effluent. The WET approach allows for protection of the narrative "no toxics in

toxic amounts" criterion while implementing numeric criteria for toxicity. There are two types of WET tests: acute and chronic. An acute toxicity test is conducted over 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. Results from acute toxicity testing conducted during the period from 1998 through 2000 range from 85 to 100 percent survival. An analysis conducted on a January 11, 2001 storm water sample (from Discharge Serial No. 002) resulted in 35 percent survival. The Facility re-sampled on February 25, 2001, resulting in 100 percent survival.

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 discharges at the BP facility occur only after a significant storm event or a periodic hydrostatic test; the discharge is 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, BP will be required to only conduct acute toxicity testing in accordance with the Basin Plan.

D. Specific Rationale for Each Numerical Effluent Limitation

Section 402(o) of the Clean Water Act and 40 CFR 122.44(l) require that effluent limitations standards or conditions in re-issued permits are at least as stringent as in the existing permit. Therefore, existing effluent limitations for many of the regulated pollutants are carried over to this permit. In addition to these limitations, the Regional Board is implementing the CTR, and additional effluent limitations are required for those regulated pollutants that show reasonable potential to exceed water quality standards. For those that do show reasonable potential and for which existing effluent limitations exist, a comparison between existing permit limitations and CTR-based WQBELs was made and the most stringent limitation included in the Order.

The previous Order described Discharge Serial No. 001 as an outfall of ship ballast and cleaning water, tank draw water, hydrotest water, groundwater and storm water runoff. Discharge Serial No. 002 is an outfall of up to 0.5 mgd of storm water runoff collected within a diked containment tank farm area, and consisting of only storm water runoff.

The Facility has undergone numerous physical and operational changes since the issuance of Order No. 97-006. These Findings, and descriptions of the physical and operation changes are described in Section III of this Fact Sheet. Thus, the number of outfalls, types of discharges, and the limits associated with these discharges have been revised.

Due to the similarities between various types of discharges associated with this facility, this tentative Order establishes single effluent limits for both hydrotest water and storm water.

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.

The effluent limitations for pH and temperature are based on the Regional Board's Basin Plan and BPJ.

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). Due to the absence of AMELs in the existing permit for the priority pollutants and certain non-conventional pollutants, AMELs were calculated based on the ratios of MDEL:AMEL for the effluent limitations calculated according to the requirements in the CTR (copper). The ratios of MDEL to AMEL for copper is 2.01. To calculate the AMEL for all other pollutants, based on this ratio, the MDEL for each pollutant was divided by 2.01.

Effluent limitations established in this Order are applicable to hydrotest water and storm water discharges from the NPDES Discharge Serial Nos. 001 through 004 (Latitude 33°44'02", Longitude 118°16'20").

Constituent (units)	Maximum Daily Discharge Limitations	Average Monthly Discharge Limitations	Rationale[2]
	Concentration	Concentration	
pH (standard units)	Between 6.5 and 8.5	--	BP, BPJ
Temperature (°F)	86	--	BP, BPJ
Total suspended solids (mg/L)	75	50	BPJ
Oil and grease (mg/L)	15	10	E, BPJ
BOD_5 @ 20°C (mg/L)	30	20	E, BPJ
Total Phenols (mg/L)	1.0	0.5	E, BPJ
Sulfides (mg/L)	0.1	0.05	BPJ
Benzene (µg/L)	1.0	0.5	E, BPJ
Toluene (µg/L)	10	5	E, BPJ
Xylene (µg/L)	10	5	E, BPJ
Ethylbenzene (µg/L)	10	5	E, BPJ
Total petroleum hydrocarbons(µg/L)	100	--	BPJ
Arsenic (µg/L)[3]	50	25	E, BPJ
Cadmium (µg/L)[3]	10	5	E, BPJ
Chromium VI (µg/L)[3]	50	25	E, BPJ
Copper (µg/L)[3]	6	3	CTR
Lead (µg/L)[3]	50	25	E, BPJ
Mercury (µg/L)[3]	2	1	E, BPJ
Selenium (µg/L)[3]	10	5	E, BPJ
Silver (µg/L)[3]	50	25	E, BPJ
Acute Toxicity (% survival)	[4]	--	E

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

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

[3] 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.

E. Interim requirements

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 for hydrotest water discharges from Discharge Serial Nos. 001 through 004. Hence, an interim limit has been prescribed for this constituent. As a result, the proposed Order contains a compliance schedule that allows the Discharger two years to comply with the revised effluent limitation. Within six months after the effective date of the Order, the Discharger must prepare and submit a compliance plan (by March 1, 2005) that describes the steps that will be taken to ensure compliance with applicable limitations.

This Order establishes interim requirements such as requiring the Discharger to develop a pollutant minimization plan and/or source control measures and participate in the activities necessary to achieve the final effluent limitations. These interim limitations shall be effective until August 30, 2006, after which, the Discharger shall demonstrate compliance with the final effluent limitations.

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 copper. The Discharger does not currently specifically treat the wastewater to remove copper from the discharge; therefore, it is uncertain that current operations will allow the Discharger to meet the revised effluent limitations. The Discharger may need to explore available treatment systems to treat the wastewater prior to discharge. This plan should evaluate options to achieve compliance with the revised permit limitations, including an evaluation of treatment systems currently available on-site. 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.

The Regional Board reviewed data indicating current Facility performance and examined existing permit limitations, to determine whichever is more stringent to maintain existing water quality. Order No. 97-006 contains effluent limitations for copper from Discharge Serial No. 001 (hydrotest water, groundwater, ship ballast and cleaning water, tank draw water, and storm water). For hydrotest water discharges, the MEC will serve as the interim effluent limit concentration for this constituent. It should be noted that the Board will take appropriate enforcement actions if interim limitations and requirements are not met.

From the effective date of this Order until August 31, 2006 the discharge of effluent from the four outfalls in excess of the following is prohibited:

Constituent (units)	Daily Maximum Concentration	Rationale[1]
Copper (µg/L)	49	MEC

[1] MEC = Maximum Effluent Concentration

F. Monitoring Requirements

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 August 2001 through March 2003.

Monitoring requirements are discussed in greater detail in Section III of the Monitoring and Reporting Program No. 6802. As described in the Monitoring and Reporting Program, monitoring reports must be submitted quarterly.

1. 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 requires the Discharger to monitor conventional and priority pollutants. Monitoring for acute toxicity is required annually.

2. Receiving Water Monitoring Requirements

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

3. 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.