

State of California  
CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
LOS ANGELES REGION

**ORDER NO. R04-2002-0031**  
**NPDES NO. CA0059153**

**WASTE DISCHARGE REQUIREMENTS**  
**for**  
**BP WILMINGTON CALCINER**  
**(Wilmington)**

The California Regional Water Quality Board, Los Angeles Region, (hereinafter Regional Board), finds:

**Background**

1. BP Wilmington Calciner (BP or Discharger), formerly known as ARCO CQC Kiln, discharges wastes from its Wilmington facility under waste discharge requirements (WDRs) contained in Order No. 96-004, adopted by this Regional Board on January 22, 1996. Order No. 96-004 serves as a National Pollutant Discharge Elimination System (NPDES) permit (CA0059153).
2. BP has filed a report of waste discharge (ROWD) and has applied for renewal of its WDRs and NPDES permit.

**Purpose of Order**

3. This Order regulates the discharge from a petroleum coke calcining facility to the Cerritos Channel, then to Los Angeles/Long Beach Harbors, a water of the United State. This discharge was previously permitted by WDRs contained in Order No. 96-004, adopted by this Regional Board on January 22, 1996. The purpose of this Order is to renew WDRs for the BP Wilmington Calciner plant.

**Facility Description**

4. BP operates a petroleum coke calcining facility (Facility) located at 1175 Carrack Avenue, Wilmington, California. The green coke (petroleum coke from a refinery's coke unit) is calcined by running it through a large rotary kiln to remove water and other impurities to produce calcined coke. The green coke comes from BP's Carson Refinery. Figure 1 shows the location of the Facility. This Facility consists of a reverse osmosis (RO) unit and a 30-megawatt power generation unit with a cooling tower for coke calciner. The RO unit generates a salt-free water for spray cooling heated calcined coke. The RO unit concentrates the removed salts into a softener flush water stream, and this softener flush water is discharged to LA County Sanitary District Sewer. The remaining wastewater from the facility will be pumped into a retention basin, and then the wastewater of retention basin is discharged to Cerritos Channel.

**Discharge Description**

5. The Discharger discharges intermittently up to 1.1 million gallons per day (mgd) of treated wastewater. The wastewater consists of storm water runoff which may contain petroleum coke dust, drainage from the green coke receiving and storage area, coke storage washwater, and drainage from the green coke receiving pit. The drainage wastewater and storm water pass through two 2-compartment settling basins (110,000 gallons each) for removal of settleable solids, then flow into a retention basin having a capacity of 777,600 gallons. The entire facility is paved and sloped to direct storm water runoff to the retention basin. The wastewater from the retention basin is pumped to nearby Cerritos Channel (Longitude 118°14'19" west, Latitude 33°46'33" north), then to the Los Angeles/Long Beach Harbors, a water of the United States. Figure 2 shows the schematic diagram of the wastewater flow.

BP studied the feasibility of discharging to the sanitary sewer line and found out that the connection to the sewer is not economically feasible.

6. The effluent characteristics as reported in the Report of Waste Discharge (ROWD) are summarized as follows:

Constituent	Concentration, mg/L or as specified	
	Daily Maximum	30-Day Average
Flow, mgd	0.939	0.483
Biochemical oxygen demand (BOD)	18.0	9.1
Chemical oxygen demand (COD)	88	88
Total suspended solids (TSS)	25	12.7
Ammonia (as N)	---	---
pH, Std units	6.1 – 8.7	---
Oil and grease	11.3	8.2
Sulfate (as SO <sub>4</sub> )	490	---
Antimony, µg/L	<10	---
Arsenic, µg/L	6.3	---
Beryllium, µg/L	<4	---
Cadmium, µg/L	<5	---
Chromium, µg/L	<5	---
Copper, µg/L	10	---
Lead, µg/L	<5	---
Mercury, µg/L	<0.2	---
Nickel, µg/L	130	---
Selenium, µg/L	<5	---
Silver, µg/L	<10	---
Thallium, µg/L	9.1	---
Zinc, µg/L	220	---
Cyanide, µg/L	<25	---
Phenols, µg/L	<100	---
Benzene, µg/L	<2	---
1,2 Trans-Dichloroethylene, µg/L	2	---

Other priority pollutants were not reported, or were reported as non-detected.

7. A neutralizing agent is added to the wastewater stream for adjustment of pH prior to pumping into Cerritos Channel. Sediments from the setting basin are hauled to a legal disposal site. All other industrial and sanitary waste waters from the facility are discharged to the community sewer system. A bag-house type filter system is used for air pollution control.
8. Over the five-year period between January 1996 and December 2000, the Discharger had five exceedances of the daily maximum limitation for oil and grease, and BOD<sub>5</sub>. Exceedances were recorded in February of 1996, December of 1997, September and December of 1998, and August of 2000. Violations have been identified and evaluated for appropriate enforcement.

### **Storm Water Management**

9. The Discharger does not separate wastewater from storm water runoff because it is not feasible and the wastewater is a low volume stream. The storm water is collected in a retention basin and discharged to the Cerritos Channel.
10. Pursuant to Section 402(p) of the Clean Water Act and Title 40 Code of Federal Regulations (40 CFR) Parts 122, 123, and 124, the State Water Resources Control Board (State Board) adopted a general NPDES permit to regulate storm water discharges associated with industrial activity [State Board Order No. 97-03-DWQ, NPDES Permit No. CAS000001]. Storm water discharges from the Facility are subject to requirements under this general permit. This Order incorporates storm water requirements contained in the general storm water permit.

### **Applicable Plans, Policies, and Regulations**

11. 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 for, and lists the following beneficial uses of the receiving water (Los Angeles/Long Beach Harbors):
  - Existing: industrial service supply; non-contact water recreation; ocean commercial and sport fishing; preservation of rare and endangered species; navigation; marine habitat; and saline water habitat.
  - Potential: water contact recreation, shellfish harvesting.
12. The 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 the Los Angeles/Long Beach Harbors.
13. Under 40 CFR 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, 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 numerical effluent limitations for a pollutant or pollutant parameter have not been established in the applicable state water quality control plan, 40 CFR Part 122.44(d)(1)(vi) specifies the water quality-based effluent limitations (WQBELs) may be set based on U.S. 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.

14. 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 part 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. The SIP was effective on May 18, 2000, with respect to the priority pollutant criteria promulgated by the USEPA through the CTR.

The CTR and SIP require dischargers to submit sufficient data to conduct the determination of priority pollutants requiring WQBELs and to calculate the effluent limitations. 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 Los Angeles/Long Beach Harbors.

15. Effluent limitation guidelines requiring the application of best practicable control technology currently available (BPT), best conventional pollutant control technology (BCT), and best available technology economically achievable (BAT), were promulgated by the USEPA for some pollutants in this discharge. Effluent limitations for pollutants not subject to the USEPA effluent limitation guidelines are based on one of the following: best professional judgment (BPJ) of BPT, BCT or BAT; current plant performance; or WQBELs. The WQBELs are based on the Basin Plan, other State plans and policies, or USEPA water quality criteria taken from the California Toxics Rule. These requirements, as they are met, will protect and maintain existing beneficial uses of the receiving water.
16. Effluent limitations, toxic effluent standards, and monitoring programs established pursuant to sections 301, 304, 306, and 307 of the federal Water Pollution Control Act and amendments thereto are applicable to the discharges herein.
17. Under 40 CFR 131.38(e)(6), the CTR authorizes the Regional Board to grant a compliance schedule for WQBELs based on CTR criteria for a period up to five years from the date of permit issuance, reissuance, or modification. The SIP provides a compliance schedule for WQBELs (up to five years) and for WQBELs based upon Total

Maximum Daily Loads (TMDLs) and Waste Load Allocations development (up to 15 years). However, the USEPA has not yet approved the longer of the two compliance schedules nor depromulgated the five-year maximum in the CTR to allow for the 15 years in the SIP. Therefore, the more stringent provision, allowing a compliance schedule of five years, is the maximum duration authorized.

18. The Regional Board has found that there is not sufficient information at this time, to justify dilution credits, mixing zones, or TMDL-based compliance schedules.

### **Watershed Management and Total Maximum Daily Loads**

19. The Regional Board has implemented the Watershed Management Initiative to address water quality issues in the region. Watershed management may include diverse issues as defined by stakeholders to identify comprehensive solutions to protect, maintain, enhance, and restore water quality and beneficial uses. To achieve this goal, the watershed management approach integrates the Regional Board's many diverse programs, particularly TMDLs to better assess cumulative impacts of pollutants from all point and non-point sources to more efficiently develop watershed-specific solutions that balance the environmental and economic impacts within a watershed. The TMDLs will establish waste load allocations (WLAs) and load allocations (LAs) for point and non-point sources, and will result in achieving water quality standards for the waterbody.

20. The Los Angeles Region encompasses ten Watershed Management Areas (WMA) which are the geographically defined watershed areas where the Regional Board implements the watershed approach. The Regional Board has enumerated significant issues in each of the WMAs. Significant watershed issues in the Los Angeles/Long Beach Harbors for the coastal waters are:

- Historic deposits of dichloro-diphenyl trichloroethane (DDT) and polychlorinated biphenyls (PCBs) in sediment;
- Discharges from publicly owned treatment works (POTW) & refineries;
- Spills from ships and industrial facilities;
- Leaching of contaminated groundwater; and,
- Impairments from historic pesticides and from dredge material.

Pursuant to this Regional Board's Watershed Initiative Chapter, December 2000, the Los Angeles/Long Beach Harbors Watershed areas are targeted for the 2002-2003 fiscal year.

21. The 1998 California 303(d) list, approved by the USEPA on May 12, 1999, identified the following pollutants of concern for Los Angeles/Long Beach Harbors: DDT, PCBs, benthic community, sediment toxicity and polycyclic aromatic hydrocarbons (PAHs).
22. To prevent further degradation of the water quality of Los Angeles/Long Beach Harbors and to protect its beneficial uses, mixing zones and dilution credits are not allowed in this Order. This determination is based on:
  - The discharge may contain the 303(d)-listed pollutants that exceed water column

criteria. Since the receiving water is impaired, a dilution factor is not appropriate and the final WQBEL should be numeric objective/criterion applied end-of-pipe.

- The discharge may contain the 303(d)-listed pollutants that are bioaccumulative. These pollutants, when exceeding water criteria within the mixing zone, can potentially result in tissue contamination of organisms directly or indirectly through contamination of bed sediments with subsequent incorporation into the food chain.

### Reasonable Potential Analysis

23. 40 CFR 122.44(d)(1)(i) and (ii) require that each toxic pollutant be analyzed with respect to its reasonable potential when determining whether a discharge (1) causes; (2) has the reasonable potential to cause; or (3) contributes to the exceedance of a receiving water quality objective/criterion. This is done by performing a reasonable potential analysis (RPA) for each pollutant. In performing the RPA, the permitting authority uses procedures that account for existing controls on point and non-point sources of pollution, the variability of the pollutant or pollutant parameter in the effluent, and the sensitivity of the species to toxicity testing (when evaluating whole effluent toxicity). Because of effluent variability, there is always some degree of uncertainty in determining an effluent's impact on the receiving water. The SIP and the USEPA's *Technical Support Document for Water Quality-Based Toxics Control (TSD) of 1991* (USEPA/505/2-90-001) address this issue by suggesting the use of a statistical approach.
24. Section 1.3 of the SIP requires that a limit be imposed for a toxic pollutant if (1) the maximum effluent concentration (MEC) is greater than the most stringent CTR criteria, or (2) the background concentration is greater than the CTR criteria, or (3) other available information supports a finding of reasonable potential.
25. RPAs were performed for the priority pollutants for which effluent data were available. Best professional judgment was used in this proposed Order to determine the presence and reasonable potential of each toxic pollutant. Based on the nature of the business, and as indicated in the ROWD, four inorganic pollutants (copper, nickel, thallium, and zinc) are expected to have reasonable potential to exceed the water quality objectives. Effluent limitations are prescribed for these pollutants in this Order.
26. For some pollutants, including aldrin, alpha-BHC, beta-BHC, chlordane, DDT, dieldrin, endrin, heptachlor, heptachlor epoxide, PAHs, total PCBs, toxaphene, and TCDD equivalents, effluent limitations are not prescribed for these pollutants, because the data are not sufficient to do the RPA; however, consistent with the SIP, monitoring is required for future evaluation.
27. Until the TMDLs and the corresponding WQBELs are adopted by the Regional Board, State and Federal antibacksliding and antidegradation policies require the Regional Board to ensure that the water body will not be further degraded. Antibacksliding provisions are contained in Sections 303(d)(4) and 402(o) of the CWA, and in 40 CFR Part 122.44(l). Those provisions require a reissued permit to be as stringent as the previous permit with some exceptions. Section 402(o) establishes express statutory

language prohibiting the backsliding of effluent limitations. It consists of three parts:

1. Section 402(o)(1) prohibits (subject to exceptions in section 303(d)(4) and/or 402(o)(2)) the relaxation of effluent limitations for two situations:
  - a. When a permittee seeks to revise a technology-based effluent limitation based on best professional judgement (BPJ) to reflect a subsequently promulgated effluent guideline which is less stringent, and
  - b. When a permittee seeks relaxation of an effluent limitation which is based on State treatment standard or water quality standard.
2. Section 402(o)(2) outlines exceptions to the prohibition against establishment of less stringent effluent limitations. It provided that establishing less stringent limits may be allowed where:
  - a. There have been material and substantial alterations or additions to the permitted facility which justify the application of less stringent effluent limitations;
  - b. New information (other than revised regulations, guidance, or test methods) is available that was not available when the permit was issued, which would have justified less stringent effluent limits;
  - c. Technical mistakes or mistaken interpretations of the law were made in issuing the permit under Section 402(a)(1)(b);
  - d. Good cause exists due to events beyond the permittee's control (e.g., acts of God) for which there is no reasonably available remedy;
  - e. The permit has been modified under 40 CFR 122.62, or a variance has been granted; or
  - f. The permittee has installed and properly operated and maintained required treatment facilities, but still has been unable to meet the permit limitations (relaxation may only be allowed to the treatment levels actually achieved).

Although the statute identified six exceptions where effluent limitations may be relaxed, the language specifically stated that exceptions "c" and "e" (as listed above) do not apply to water quality-based effluent limitations. Thus, exceptions c & e would only apply to technology-based effluent limitations derived using BPJ.

3. Section 402(o)(3) prohibits the application of less stringent effluent limitations in all cases if a revised effluent limitation would result in a violation of applicable effluent limitation guidelines or water quality standards. Thus, even if any of the anti-backsliding exceptions outlined in either the statute or regulations are applicable and met, Section 402(o)(3) acts as a floor and restricts the extent to which effluent limitations may be relaxed. This requirement affirms existing provisions of the CWA that require limits, standards, and conditions to ensure compliance with applicable

technology-based limits and water quality standards.

As such, water quality objectives/criteria specified in Basin Plan, the CTR, or the effluent limits from the existing permit were used to set the limits for pollutants that are believed to be present in the effluent and have reasonable potential to exceed the water quality criteria. Other pollutants may only be monitored to gather data to be used in RPAs for future permit renewals and updates.

28. For 303(d)-listed pollutants, the Regional Board plans to develop and adopt TMDLs which will specify WLAs for point sources and LAs for non-point sources, as appropriate. Following the adoption of TMDLs by the Regional Board, NPDES permits will be issued with effluent limits for water quality-based on applicable WLAs. In the absence of a TMDL, effluent limits for 303(d) listed pollutants, for which RPA indicates a reasonable potential, were established for (1) concentration based on the most stringent applicable CTR criterion and/or Basin Plan objective, and (2) mass emission based on the maximum allowable discharge flow rate and concentration limitation.
29. For 303(d)-listed non-priority pollutants (ammonia), water quality objectives developed and specified in the Basin Plan were prescribed as effluent limitations.

#### **Interim Limits**

30. The BP Wilmington Calciner facility may not be able to achieve immediate compliance with the WQBELs for copper, nickel and zinc contained in Section I.B.5.b of this permit. Data submitted in self-monitoring reports indicate that these three constituents have been detected at a concentration greater than the new limit proposed in this Order. The Discharger has requested a compliance schedule for these constituents and demonstrated that it is infeasible for the Discharger to achieve immediate compliance with an effluent limitations based on the CTR criterion for these constituents.
31. 40 CFR Part 131.38(e) provides conditions under which interim effluent limits and compliance schedules may be issued. The SIP does allow inclusion of an interim limit with specific compliance schedule in an NPDES permit for priority pollutants if the limit for the priority pollutant is CTR-based. Interim limits for copper, nickel and zinc contained in this Order.
32. The SIP requires that the Regional Board establish other interim requirements such as requiring the discharger to develop pollutant minimization and/or source control measures and participate in the activities necessary to develop final effluent limitations. When interim requirements have been completed, the Regional Board shall calculate final WQBELs for that pollutant based on the collected data, reopen the permit, and include the final effluent limitations in the permit provisions. Once final limitations become effective, the interim limitations will no longer apply.

#### **CEQA and Notifications**

33. The Regional Board has notified the Discharger and interested agencies and persons of its intent to issue waste discharge requirements for this discharge, and has provided them

- with an opportunity to submit their written views and recommendations.
34. The Regional Board, in a public hearing, heard and considered all comments pertaining to the discharge and to the tentative requirements.
  35. This Order shall serve as a National Pollutant Discharge Elimination System permit pursuant to Section 402 of the Federal Clean Water Act or amendments thereto, and shall take effect at the end of ten days from the date of its adoption provided the Regional Administrator, USEPA, has no objections.
  36. Pursuant to California Water Code Section 13320, any aggrieved party may seek review of this Order by filing a petition with the State Board. A petition must be sent to the State Water Resources Control Board, P. O. Box 100, Sacramento, California, 95812, within 30 days of adoption of this Order.
  37. The issuance of waste discharge requirements for this discharge is exempt from the provisions of Chapter 3 (commencing with Section 21100) of Division 13 of the Public Resources Code (CEQA) in accordance with the California Water Code, Section 13389.

**IT IS HEREBY ORDERED** that BP Wilmington Calciner, in order to meet the provisions contained in Division 7 of the California Water Code and regulations adopted thereunder, and the provisions of the Federal Clean Water Act and regulations and guidelines adopted thereunder, shall comply with the following:

**I. Discharge Requirements**

**A. Discharge Prohibition**

1. Wastes discharged shall be limited to storm water runoff, drainage from the green coke receiving and storage washwater, coke storage washwater, drainage from the green coke receiving pit, boiler water from safety relief device, and feedwater pump cooling water, as proposed. The discharge of water from accidental spills or other sources is prohibited.
2. Discharges of materials, thermal wastes, elevated temperature wastes, toxic wastes, deleterious substances, or wastes other than those authorized by this Order, to the Cerritos Channel, or waters of the State are prohibited.

**B. Effluent Limitations**

The discharge of an effluent in excess of the following limits is prohibited:

1. A pH value less than 6.5 or greater than 8.5.
2. A temperature value greater than 100°F.
3. Toxicity limitations:

- a. The acute toxicity of the effluent shall be such that: (i) the average survival in the undiluted effluent for any three (3) consecutive 96-hour static or continuous flow bioassay tests shall be at least 90%, and (ii) no single test producing less than 70% survival.
- b. If either of the above requirements (Section I.B.4.a) is not met, then the Discharger shall begin a toxicity Identification Evaluation (TIE) using discharge water kept in reserve for this purpose. If the toxicity is complex, all phases including confirmatory phases of TIE may not be possible with reserve water, however, the TIE shall include all reasonable steps to identify the source(s) of toxicity. The TIE shall be continued with discharge water from the next discharge event. Once the source(s) of toxicity is identified, the Discharger shall take all reasonable steps to reduce the toxicity to meet the objective.
- c. The chronic toxicity of 100% effluent shall not exceed a monthly median of 1.0  $TU_c$  or a daily maximum of 2.0  $TU_c$  in a critical life stage test.
- d. If the chronic toxicity of the effluent exceeds the monthly median of 1.0  $TU_c$ , the Discharger shall immediately initiate a TIE using discharge water kept in reserve for this purpose.
- e. The chronic toxicity of the effluent shall be expressed and reported in toxic units, where:

$$TU_c = \frac{100}{NOEC}$$

The No Observable Effect Concentration (NOEC) is expressed as the maximum percent effluent concentration that causes no observable effect on test organisms, as determined by the results of a critical life stage toxicity test.

- f. The Discharger shall conduct acute and chronic toxicity monitoring as specified in Monitoring and Reporting Program No. 6571.
4. The discharge of an effluent in excess of the following limits is prohibited:
    - a. Conventional and non-conventional pollutants:

Constituent	Discharge Limitations <sup>1/</sup>			
	Monthly Average		Daily Maximum	
	C (mg/L)	mass <sup>2/</sup> (lbs/day)	C (mg/L)	mass <sup>2/</sup> (lbs/day)
BOD <sub>5</sub> 20°C	20	183	30	275
Oil and grease	10	92	15	138
Total suspended solids (TSS)	30	275	75	688
Settleable solids, ml/L	0.1	---	0.2	---

Constituent	Discharge Limitations <sup>1/</sup>			
	Monthly Average		Daily Maximum	
	C (mg/L)	mass <sup>2/</sup> (lbs/day)	C (mg/L)	mass <sup>2/</sup> (lbs/day)
Turbidity, NTU	---	---	75	

<sup>1/</sup> Discharge limitations include concentration (C) and mass limits for each specified pollutants.

<sup>2/</sup> The mass limits for a pollutants is calculated using the following equation:

$$m = 8.34 C_i Q$$

where: m = mass limit for a pollutant, lbs/day

C<sub>i</sub> = concentration limit for a pollutant, mg/L

Q = maximum discharge flow rate = 1.1 mgd

b. Toxic pollutants:

Constituent	Discharge Limitations <sup>1/</sup>			
	Monthly Average		Daily Maximum	
	C (µg/L)	mass <sup>2/</sup> (lbs/day)	C (µg/L)	mass <sup>2/</sup> (lbs/day)
Copper <sup>3/</sup>	2.88	0.0264	5.78	0.0530
Nickel <sup>3/</sup>	6.78	0.0622	13.61	0.1249
Thallium <sup>3/</sup>	6.30	0.0578	12.64	0.1160
Zinc <sup>3/</sup>	47.42	0.4350	95.14	0.8728

<sup>1/</sup> Discharge limitations include concentration (C) and mass limits for each specified pollutants.

<sup>2/</sup> The mass limits for a pollutants is calculated using the following equation:

$$m = 8.34 C_i Q$$

where: m = mass limit for a pollutant, lbs/day

C<sub>i</sub> = concentration limit for a pollutant, mg/L

Q = maximum discharge flow rate = 1.1 mgd

<sup>3/</sup> Discharge limitations for these metals are expressed as total recoverable.

5. Interim Limits:

- a. Commencing with the date of this Order, BP shall comply with the performance-based interim limits listed below for copper, nickel and zinc for the wastes effluent discharge:

Constituent	Discharge Limitations <sup>1/</sup>			
	Monthly Average		Daily Maximum	
	C (µg/L)	Mass <sup>3/</sup> (lbs/day)	C (µg/L)	Mass <sup>3/</sup> (lbs/day)
Copper <sup>2/</sup>	10	0.0917	10	0.0917
Nickel <sup>2/</sup>	125	1.1468	129	1.1835
Zinc <sup>2/</sup>	213	1.9541	1370	2.0091

<sup>1/</sup> Discharge limitations include concentration (C) and mass limits for each specified pollutants.

<sup>2/</sup> Discharge limitations for these metals are based on 95 percentile of four sampling data for monthly average and 99 percentile for daily maximum and expressed as total recoverable.

<sup>3/</sup> The mass limits for a pollutants is calculated using the following equation:

$$m = 8.34 C_i Q$$

where:  $m$  = mass limit for a pollutant, lbs/day  
 $C_i$  = concentration limit for a pollutant, mg/L  
 $Q$  = maximum discharge flow rate = 1.1 mgd

- b. The Discharger shall submit quarterly progress reports to describe the progress of studies and/or actions undertaken to reduce these compounds in the effluent, and to achieve compliance with the limits in this Order by the above-mentioned deadline. The first progress report shall be received at the Regional Board by April 15, 2002.
- c. BP shall submit, by July 31, 2002, a preliminary engineering work plan detailing how the limitations contained in this Order will be met. The plan shall include, at minimum, the following elements:
  - i. An engineering analysis of all water quality data collected since the adoption of the Order, along with an identification of the type of source reductions planned;
  - ii. An evaluation of treatment methods or other corrective actions to be taken to meet the requirements of this Order;
  - iii. A layout of the implementation plan, along with cost estimates for same;
  - iv. An explanation regarding any additional monitoring that will be required in order to finalize the implementation plan; and,
  - v. A schedule setting forth compliance implementation dates.
- d. The interim limits stipulated shall be in effect for a period not to extend beyond January 31, 2005. Thereafter, the Discharger shall comply with the limitations specified in Section I.B.5.b of this Order.

### **C. Receiving Water Limitations**

1. The discharge shall not cause the following conditions to exist in the receiving waters:
  - a. Floating, suspended or deposited macroscopic particulate matter or foam;
  - b. Alteration of temperature, turbidity, or apparent color beyond present natural background levels;
  - c. Visible, floating, suspended or deposited oil or other products of petroleum origin;
  - d. Bottom deposits or aquatic growths; or,
  - e. Toxic or other deleterious substances to be present in concentrations or

quantities which cause deleterious effects on aquatic biota, wildlife, or waterfowl or render any of these unfit for human consumption either at levels created in the receiving waters or as a result of biological concentration.

2. The discharge shall not cause nuisance, or adversely effect beneficial uses of the receiving water.
3. No discharge shall cause a surface water temperature rise greater than 5°F above the natural temperature of the receiving waters at any time or place.
4. The discharge shall not cause the following limits to be exceeded in the receiving waters at any place within the waterbody of the receiving waters:
  - a. The pH shall not be depressed below 6.5 nor raised above 8.5, nor caused to vary from normal ambient pH levels by more than 0.5 units;
  - b. Dissolved oxygen shall not be less than 5.0 mg/L anytime, and the median dissolved oxygen concentration for any three consecutive months shall not be less than 80 percent of the dissolved oxygen content at saturation;
  - c. Dissolved sulfide shall not be greater than 0.1 mg/L;
  - d. Total ammonia (as N) shall not exceed concentrations specified in the Basin Plan (June 13, 1994, attachment H), subject to the following conditions:

The Discharger will have until June 13, 2002, to (1) make the necessary adjustments and/or improvements to meet these objectives, or (2) conduct studies leading to an approved, less-restrictive, site-specific objective for ammonia. If it is determined that there is an immediate threat or impairment of beneficial uses due to ammonia, the objectives in Attachment A shall apply and the timing of compliance will be determined on a case-by-case basis by the Executive Officer;

- e. Chronic toxicity requirements:
  - i. There shall be no chronic toxicity in ambient waters as a result of wastes discharged.
  - ii. Receiving water and effluent toxicity testing shall be performed on the same day as close to concurrently as possible.
  - iii. If the chronic toxicity in the receiving water downstream at a monitoring station, exceeds 1.0 TU<sub>c</sub> in a critical life stage test and the toxicity cannot be attributed to upstream toxicity assessed by the discharge, then the Discharger shall immediately initiate a TIE.
  - iv. If the results of chronic toxicity testing upstream is greater than the results of the testing downstream, and the TU<sub>c</sub> of the effluent chronic toxicity test is less than 1 TU<sub>c</sub>, then the TIE does not need to be implemented.

5. The discharge shall not cause a violation of any applicable water quality standards for receiving waters adopted by the Regional Board or State Board. If more stringent applicable water quality standards are promulgated or approved pursuant to Section 303 of the Clear Water Act, or amendments thereto, the Regional Board will revise or modify this Order in accordance with such standards.

## II. Requirements

### A. Pollution Minimization Program (PMP):

The goal of the PMP is to reduce all potential sources of a priority pollutant(s) through pollutant minimization (control) strategies, including pollution prevention measures as appropriate, to maintain the effluent concentration at or below the WQBEL(s). The PMP shall include, but not be limited to, the following actions and submittals acceptable to the Regional Board:

1. An annual review and semi-annual monitoring of potential sources of the reportable priority pollutant(s), which may include fish tissue monitoring and other bio-uptake sampling;
2. Quarterly monitoring for the reportable priority pollutant(s) in the influent to the wastewater treatment system;
3. Submittal of a control strategy designed to maintain concentrations of the reportable priority pollutant(s) in the effluent at or below the effluent limitation;
4. Implementation of appropriate cost-effective control measures for the reportable priority pollutant(s), consistent with the control strategy; and,
5. An annual status report that shall be sent to the Regional Board including:
  - All PMP monitoring results for the previous year;
  - A list of potential sources of the reportable priority pollutant(s);
  - A summary of all actions undertaken pursuant to the control strategy; and
  - A description of corrective and preventive actions to be taken in the following year to maintain/achieve compliance.

The Discharger shall develop the PMP as soon as a priority pollutant was detected above its effluent limitation. However, the PMP is not required if Discharger takes additional samples or has conducted an accelerated monitoring program during the discharge and the analytical results disputed the initial excursion and showed full compliance with the effluent limitation.

### B. The Discharger shall submit within 90 days of the effective date of this Order:

1. An updated Storm Water Pollution Prevention Plan (SWPPP) that describes site-specific management practices for minimizing storm water runoff from being contaminated, and for preventing contaminated storm water runoff from being discharged directly to waters of the State.

2. A Best Management Practices Plan (BMPP) that entails site-specific plans and procedures implemented and/or to be implemented to prevent hazardous waste/material from being discharged to waters of the State. The updated BMPP shall be consistent with the requirements of 40 CFR 125, Subpart K, and the general guidance contained in the *NPDES Best Management Guidance Document*, USEPA Report No. 600/9-79-045, December 1979 (revised June 1981). In particular, a risk assessment of each area identified by the Discharger shall be performed to determine the potential of hazardous waste/material discharge to surface waters.

Both plans shall cover all areas of the terminal facility and shall include an updated drainage map for the facility. The Discharger shall identify on a map of appropriate scale the areas that contribute runoff to the permitted discharge points; describe the activities in each area and the potential for contamination of storm water runoff and the discharge of hazardous waste/material; and, address the feasibility for containment and/or treatment of the storm water. The plans shall be reviewed annually and at the same time. Updated information shall be submitted within 30 days of revision.

- C. The Discharger shall submit within 180 days of the effective date of this Order an updated Contingency Plan. The Contingency Plan shall be site-specific and shall cover all areas of the terminal facility including the tank farms. The Contingency Plan shall be reviewed at the same time as the SWPPP and BMPP. Updated information shall be submitted within 30 days of revision.
- D. Pursuant to the requirements of 40 CFR 122.42(a), the Discharger must notify the Regional Board as soon as it knows, or has reason to believe (1) that it has begun or expected to begin, to use or manufacture a toxic pollutant not reported in the permit application, or (2) a discharge of toxic pollutant not limited by this Order has occurred, or will occur, in concentrations that exceed the specified limits in 40 CFR 122.42(a).

### III. Provisions

- A. This Order includes the attached *Standard Provisions and General Monitoring and Reporting Requirements* (Standard Provisions Attachment N). If there is any conflict between provisions stated hereinbefore and the attached Standard Provisions, those provisions stated hereinbefore prevail.
- B. This Order includes the attached Monitoring and Reporting Program. If there is any conflict between provisions stated in the Monitoring and Reporting Program and the Standard Provisions, those provisions stated in the former prevail.
- C. This Order includes the attached *Storm Water Pollution Prevention Plan Requirements* (Attachment M).
- D. The Discharger must comply with the lawful requirements of municipalities, counties, drainage districts, and other local agencies regarding discharges of storm water to

their storm drain systems.

#### **IV. Reopeners**

- A. This Order may be reopened and modified, in accordance with SIP Section 2.2.2.A, to incorporate new limits based on future reasonable potential analysis to be conducted, upon completion of the collection of additional data by the Discharger.
- B. This Order may be reopened and modified, to incorporate in accordance with the provisions set forth in 40 CFR Parts 122 and 124, to include requirements for the implementation of the watershed management approach.
- C. This Order may be reopened and modified, in accordance with the provisions set forth in 40 CFR Parts 122 and 124, to include new MLs.
- D. This Order may be reopened and modified, in accordance with the provisions set forth in 40 CFR Parts 122.44(d)(1)(vi)(C)(4), if the limits on the indicator parameter (total nitrogen) no longer attain and maintain applicable water quality standards.
- E. This Order may be reopened and modified, to revise effluent limitations as a result of future Basin Plan Amendments, such as an update of the Ammonia objective, or the adoption of a TMDL for Los Angeles/Long Beach Harbors Watershed.
- F. This Order may be reopened and modified, to revise the toxicity language once that language becomes standardized.
- G. This Order may also be reopened and modified, revoked, and reissued or terminated in accordance with the provisions of 40 CFR Parts 122.44, 122.62 to 122.64, 125.62, and 125.64. Causes for taking such actions include, but are not limited to, failure to comply with any condition of this order and permit, endangerment to human health or the environment resulting from the permitted activity.
- H. This Order may be reopened and modified to add effluent limitation for fecal coliform if monitoring result indicates that the Discharger maintain fecal coliform concentration above Water Quality Objectives. Staff is directed to report the monitoring results to the Board within one year or at such time if there is any exceedance.

#### **V. Expiration Date**

This Order expires on December 10, 2006.

The Discharger must file a Report of Waste Discharge in accordance with Title 23, California Code of Regulations, not later than 180 days in advance of such date as application for issuance of new waste discharge requirements.

**VI. Rescission**

Order No. 96-004, adopted by this Regional Board on January 22, 1996, is hereby rescinded except for enforcement purposes.

I, Dennis A. Dickerson, Executive Officer, do hereby certify that the foregoing is a full, true and correct copy of an Order adopted by the California Regional Water Quality Control Board, Los Angeles Region on January 24, 2002.

Dennis A. Dickerson  
Executive Officer