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

ORDER NO. R4-2005-0059
NPDES PERMIT NO. CA0003778

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT
AND
WASTE DISCHARGE REQUIREMENTS
FOR
SHELL OIL PRODUCTS US
(LOS ANGELES REFINERY)

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

**Background**

1. Los Angeles Refining Company, a division of Equilon Enterprises LLC, discharges wastewater and storm water from the Los Angeles Refinery (hereinafter LA Refinery or Discharger), under waste discharge requirements (WDRs) and a National Pollutant Discharge Elimination System (NPDES) permit contained in Order No. 99-093 (NPDES No. CA0003778). Shell Oil Products US (hereinafter Shell) acquired Texaco's share of Equilon Enterprises LLC, and therefore, Equilon Enterprises LLC is now doing business as Shell. Order No. 99-093, adopted by the Regional Board on September 16, 1999. Order No. 99-093 expired on August 10, 2004.

2. On September 16, 1999, the Regional Board also issued a Cease and Desist Order (CDO) contained in Order No. 99-013. The CDO established interim effluent limits and required the Discharger to cease all discharges, with the exception of non-commingled storm water, to the Dominguez Channel on or before September 30, 2001.

3. Shell Oil Products US filed a Report of Waste Discharge and applied for renewal of its WDRs and a NPDES permit on February 11, 2004, for discharge of storm water from LA Refinery to surface waters. The tentative Order is the reissuance of the WDRs and NPDES permit for discharges of storm water from LA Refinery to the Dominguez Channel.

**Purpose of Order**

4. The purpose of this Order is to renew the WDRs for discharges of storm water from LA Refinery. The previous permit regulated the discharge of commingled storm water and wastewater through Discharge Serial Nos. 001, 002, and 003 to Dominguez Channel, a water of the United States. However, the CDO, issued by the Regional Board on September 16, 1999, required the Discharger to cease all discharges, with the exception of non-commingled storm water, to the Dominguez Channel on or before September 30, 2001. To comply with the CDO, discharge of treated wastewater and storm water through Discharge Serial No. 002 was discontinued on July 31, 2001. Since then, the treated wastewater and commingled storm water previously discharged through Discharge Serial No. 002 is discharged through Outfall C to the sanitary sewer of County Sanitation Districts of Los Angeles County (CSDLAC). The Facility, however, can potentially

discharge storm water through Discharge Serial Nos. 001 and 003 to Dominguez Channel. The proposed Order regulates the discharge of storm water from the facility to Dominguez Channel through Discharge Serial Nos. 001 and 003 only. Discharge Serial No. 001 is located 515 feet north of Pacific Coast Highway at Latitude 33° 47' 35" North, Longitude 118° 13' 48" West. Discharge Serial No. 003 is located 2,450 feet south of Pacific Coast Highway at Latitude 33° 47' 8" North, Longitude 118° 14' 6" West.

**Facility Description**

5. LA Refinery, a petroleum refinery facility, is located at 2101 East Pacific Coast Highway, Wilmington, California. The LA Refinery processes an average of 95,000 barrels per day (bbls/day) of crude oil and has a capacity to process 98,500 bbls/day. Crude oil is imported to the Refinery via pipeline and marine vessels. The Facility manufactures the following products from crude oil: gasoline, diesel, aviation fuels, fuel oils, liquefied petroleum gases, petroleum coke, and sulfur (as a byproduct). The refinery process includes desalting, atmospheric distillation, vacuum distillation, fluid catalytic cracking, hydrocracking, delayed coking, hydrotreating, alkylation, catalytic reforming, hydrogen generation, isomerization, benzene saturation, and sulfur recovery. The Sulfur Recovery plant is situated one mile north of the Refinery. Petrochemicals, such as aliphatic and cyclic aromatic hydrocarbons, are not produced at the plant. Based on the type of operation, LA Refinery is categorized as a cracking refinery as defined in Title 40 Code of Federal Regulation section 419.20 (40 CFR 419.20). Figure 1 shows the location of the plant relative to the vicinity.

6. Water consumption at the Refinery totals approximately 7 million gallons per day (mgd). Most of this water is groundwater (about 90 percent) supplemented with municipal water supplied by the City of Los Angeles' Department of Water and Power. Groundwater is pumped with a total capacity of 4,500 gallons per minute (gpm) from three wells in the Silverado Aquifer that is separated by aquitards from the Gaspur/Gage Aquifer. Two wells are located at the LA Refinery and one well is located at the Sulfur Recovery Plant.

7. The Refinery generates two types of wastewaters that go into two separate trains of collection and treatment systems. The high chemical oxygen demand (HCOD) wastewaters are generated from enclosed process unit systems. The low chemical oxygen demand (LCOD) wastewaters consist of boiler blowdown, cooling tower blowdown, miscellaneous wastewaters (miscellaneous cleanup wastewaters, petroleum coke-belt washwaters, excess coke drum cutting and quench waters, hydrostatic test waters, fire system test wastewater, and water softener regeneration wastewaters), and sulfur plant wastewater.

**Discharge Description**

8. Previously, the HCOD wastewaters were treated in the HCOD wastewater treatment plant (HWTP) and discharged to the sanitary sewer. The LCOD wastewaters and ~~-~~commingled storm water at the facility were treated in the LCOD wastewater treatment system (LWTP) and discharged through Discharge Serial 002 to Dominguez Channel. However, to comply with the CDO, the discharge through Discharge Serial No. 002 was discontinued on July 31, 2001. Since then, the treated HCOD wastewater from the HWTP, and the treated

LCOD and storm water from the LWTP, are blended in the effluent blending plant (EBP) before discharge through Outfall C to the sanitary sewer of CSDLAC.

9. During high storm events, the storm water may bypass treatment at LWTP and EBP and discharge to Dominguez Channel through Discharge Serial Nos. 001 and 003. This prevents flooding in the Refinery and ensures that the capacity of LWTP and the sanitary sewer is not exceeded. The proposed Order permits discharge of 4.32 mgd of non-commingled storm water from LA Refinery to Dominguez Channel through Discharge Serial No. 001 and unspecified flow of emergency discharge of commingled storm water through Discharge Serial No. 003.

10. Discharge Serial 001, also known as No. 8 Gate, drains storm water from west, northwest, and portions of north tank farm areas where products are stored. The storm water drained from these areas is not mixed with the wastewater generated from refining operations and thus is considered non-commingled storm water. The non-commingled storm water from the west and northwest tank farms goes through API separators and then to 9 Pond. The non-commingled stormwater from the north tank farm is routed directly to No. 9 Pond. The storm water is impounded in No. 9 Pond prior to routing to LWTP for treatment and discharge to the sanitary sewer. Usually, the first flush of a storm event is sent to the LWTP for treatment. To manage storm water flows/inventory during storm events, the non-commingled storm water collected in No 9 Ponds may also be discharged untreated to the Dominguez Channel through Discharge Serial No. 001. No discharge through Discharge Serial No. 001 during the term of the previous permit has been reported.

11. Discharge Serial 003 is also known as No. 3 Gate. Boiler blowdown, cooling tower blowdown, and the storm water from the Refinery process areas are sent to two lamella separators operating in parallel. Lamella separators separate out oil and solids from the wastewater and storm water. The combined water (ie commingled storm water) is then treated in the LWTP and EBP and discharged to the sanitary sewer. During very high storm events (above 6 inches in 24 hours), a portion of the combined water in the lamella separators is discharged through Discharge Serial No. 003 to prevent flooding in the Refinery. No discharge was reported through Discharge Serial No. 003 during the term of the previous permit.

**Storm Water Management**

12. The objective of the proposed Order is to protect the beneficial uses of receiving waters. To meet this objective, the proposed Order requires the Discharger to develop and implement a *Storm Water Pollution Prevention Plan* (SWPPP) and address storm water runoff to the Dominguez Channel. This is 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]. A SWPPP outlines site-specific management processes for minimizing storm water runoff contamination and for preventing contaminated storm water runoff from being discharged into surface waters. Storm water discharges occur at the Facility and Best Management Practices (BMPs) are identified as one method to reduce contamination of storm water.

13. The discharge through Discharge Serial 003 contains storm water mixed with boiler blowdown and cooling tower blowdown. Therefore, pursuant to Title 40 of the Code of Federal Regulations (CFR) Section 122.44(k), the SWPPP shall also contain BMPs for discharges through Discharge Serial 003. The Discharger shall address specific areas that are considered sources of pollutants, including, but not limited to, tank farm and refinery process area, and boiler blowdown and cooling tower blowdown wastewaters discharged through Discharge Serial 003. The BMPs shall include measures to minimize the amount of pollutants entering the discharge.

**Applicable Plans, Policies, Laws, and Regulations**

14. 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) as amended on January 27, 1997 by Regional Board Resolution No. 97-02. The Basin Plan (i) designates beneficial uses for surface and groundwaters, (ii) sets narrative and numerical objectives that must be attained or maintained to protect the designated beneficial uses and conform to the state antidegradation policy (*Statement of Policy with Respect to Maintaining High Quality Waters in California*, State Board Resolution No. 68-16, October 28, 1968), and (iii) describes implementation programs to protect all waters in the Region. In addition, the Basin Plan incorporates (by reference) applicable State and Regional Board plans and policies and other pertinent water quality policies and regulations. The Regional Board prepared the 1994 update of the Basin Plan to be consistent with all previously adopted State and Regional Board plans and policies. This Order implements the plans, policies and provisions of the Regional Board's Basin Plan.

15. 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 United States Environmental Protection Agency (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.

16. The Basin Plan contains water quality objectives and beneficial uses for inland surface waters and for the Pacific Ocean. Inland surface waters consist of rivers, streams, lakes, reservoirs, and inland wetlands. Beneficial uses for a surface water can be designated, whether or not they have been attained on a waterbody, in order to implement either federal or state mandates and goals (such as fishable and swimmable for regional waters).

17. The immediate receiving water bodies for the permitted discharge covered by this permit are Dominguez Channel and Dominguez Channel Estuary. The Basin Plan contains

beneficial uses and water quality objectives for Dominguez Channel and Dominguez Channel Estuary. The beneficial uses are listed below.

Dominguez Channel

Existing Uses: Non-contact water recreation and preservation of rare and endangered species.

Potential Uses: Municipal and domestic supply; water contact recreation; warm freshwater habitat; and wildlife habitat.

Dominguez Channel Estuary

Existing Uses: Water contact recreation; non-contact water recreation; commercial and sport fishing; estuarine habitat; marine habitat; wildlife habitat; preservation of rare and endangered species; migration of aquatic organisms; and spawning, reproduction, and/or early development.

Potential Uses: Navigation.

18. 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 inland surface waters.

19. On May 18, 2000, the U.S. EPA promulgated numeric criteria for priority pollutants for the State of California [known as the *California Toxics Rule* (CTR) and codified in 40 CFR 131.38. In the CTR, U.S. EPA promulgated criteria that protect the general population at an incremental cancer risk level of one in a million ($10^{-6}$), for all priority toxic pollutants regulated as carcinogens. The CTR criteria for the protection of aquatic saltwater organisms 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 Dominguez Channel and Dominguez Channel Estuary. The CTR also allows for a schedule of compliance not to exceed five years from the date of permit issuance for a point source discharge if the Discharger demonstrates that it is infeasible to promptly comply with effluent limitations derived from the CTR criteria. CTR's Compliance Schedule provisions sunseted on May 18, 2005. After this date, the provisions of the SIP allow for Compliance Schedules not to exceed five years from issuance or past May 18, 2010, which ever is sooner.

20. 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.

21. 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 [permitting authority] 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 numeric effluent limitations for a pollutant or pollutant parameter have not been established in the applicable state water quality control plan, 40 CFR 122.44(d)(1)(vi) specifies that WQBELs may be set based on U.S. EPA 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.

22. 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 U.S. EPA for some pollutants in this discharge. The LA Refinery is classified under the cracking subcategory of the Petroleum Refining Point Sources Category (40 CFR 419.20). Therefore, the U.S. EPA Effluent Guidelines and Standards for Petroleum Refining Point Sources based on BAT, BPT, and/or BCT, whichever is more stringent, are applicable to the Refinery' s discharges of contaminated storm water runoff. Effluent limitations for pollutants not subject to the U.S. EPA 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 U.S. EPA water quality criteria taken from the CTR. These requirements, as they are met, will protect and maintain existing beneficial uses of the receiving water. The attached Fact Sheet for this Order includes specific bases for the effluent limitations.

23. State and Federal antibacksliding and antidegradation policies require 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 sections 402(o) and 303(d)(4) of the Clean Water Act (CWA) and in 40 CFR 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.

24 Effluent limitations are established in accordance with sections 301, 304, 306, and 307 of the CWA, and amendments thereto. These requirements, as they are met, will maintain and protect the beneficial uses of Dominguez Channel and Dominguez Channel Estuary.

25. On March 30, 2000, U.S. EPA revised its regulation that specifies when new and revised State and Tribal water quality standards (WQS) become effective for Clean Water Act (CWA) purposes (40 CFR 131.21, 65 FR 24641, April 27, 2000). Under U.S. EPA' s new

regulation (also known as the Alaska rule), new and revised standards submitted to U.S. EPA after May 30, 2000, must be approved before being used for CWA purposes. The final rule also provides that standards already in effect and submitted to U.S. EPA by May 30, 2000, may be used for CWA purposes, whether or not approved by EPA.

**Watershed Management Approach and Total Maximum Daily Loads (TMDLs)**

26. The Regional Board has implemented the Watershed Management Approach 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 Total Maximum Daily Loads (TMDLs), to better assess cumulative impacts of pollutants from all point and non-point sources. A TMDL is a tool for implementing water quality standards and is based on the relationship between pollution sources and in-stream water quality conditions. The TMDL establishes the allowable loadings or other quantifiable parameters for a waterbody and thereby provides the basis to establish water quality-based controls. These controls should provide the pollution reduction necessary for a waterbody to meet water quality standards. This process facilitates the development of watershed-specific solutions that balance the environmental and economic impacts within the watershed. The TMDLs will establish waste load allocation (WLAs) and load allocations (LAs) for point and non-point sources, and will result in achieving water quality standards for the waterbody.

27. U.S. EPA approved the State's 2002 303(d) list of impaired water bodies on July 25, 2003. According to the 2002 303(d) list, the Dominguez Channel (Estuary to Vermont Avenue) is impaired for aldrin (tissue), ammonia, benthic community effects, chemA (tissue), chlordane (tissue), chromium (sediment), DDT (tissue and sediment), dieldrin (tissue), high coliform count, lead (tissue), PAHs (sediment), and zinc (sediment). To date, no TMDL has been completed for this segment of water. Therefore, no conditions in this proposed Order are based on TMDLs.

**Data Availability and Reasonable Potential Monitoring**

28. 40 CFR 122.44(d)(1)(i) and (ii) required that each toxic pollutant be analyzed with respect to its reasonable potential to (1) cause; (2) have the reasonable potential to cause; or (3) contribute to the exceedance of a receiving water quality objective. This is done by performing a reasonable potential analysis (RPA) for each pollutant.

29. RPA could not be completed for the Facility due to lack of effluent data. No discharge through Discharge Serial Nos. 001 and 003 during the term of the previous permit were reported. As a result, the Facility reported no effluent data for Discharge Serial 003 and only two samples of effluent data from No. 9 Pond that is Discharge Serial No. 001, submitted as the permit renewal application.

30. Regional Board staff has determined that pollutants that have effluent limitations for storm water in the previous Order will be included in this permit. The proposed Order includes

monitoring requirements to provide the data needed to perform an RPA on the priority pollutants.

**CEQA and Notifications**

31. 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.

32. The Regional Board, in a public hearing, heard and considered all comments pertaining to the discharge and to the tentative requirements.

33. 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 is effective 30 days (October 1, 2005) from the date of its adoption, in accordance with federal law, provided the Regional Administrator, U.S. EPA, has no objections.

34. 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, Office of Chief Counsel, ATTN: Elizabeth Miller Jennings, Senior Staff Counsel, 1001 I Street, 22nd Floor, Sacramento, California, 95814, within 30 days of adoption of this Order.

35. 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 Shell Oil Products US, Los Angeles Refinery, in order to meet the provisions contained in Division 7 of the California Water Code and regulations adopted there under, and the provisions of the Federal Clean Water Act and regulations and guidelines adopted there under, shall comply with the following:

I. DISCHARGE REQUIREMENTS

A. Discharge Prohibitions

1. Wastes discharged through Discharge Serial No. 001 shall be limited to non-commingled storm water from the LA Refinery.

2. Wastes discharged through Discharge Serial No. 003 shall be limited to storm water commingled with boiler blowdown and cooling tower blowdown from the LA Refinery.

3. Discharge through Discharge Serial Nos. 001 shall be limited to 4.32 mgd and shall occur only because of storm events. Discharge through Discharge Serial No. 003 shall be limited to emergency discharges during high storm events as

necessary to prevent flooding in the LA Refinery.

4. Discharge of wastes from this facility other than those described in Section I.A.1 and I.A.2 is prohibited.

5. The discharge through Discharge Serial No. 002 is prohibited.

6. Discharges of water, materials, thermal wastes, elevated temperature wastes, toxic wastes, deleterious substances, or wastes other than those authorized by this Order, to a storm drain system, Dominguez Channel, or waters of the State, are prohibited.

B. Effluent Limitations

The discharge of an effluent through Discharge Serial Nos. 001 and 003 in excess of the following limitations is prohibited:

1. A pH value less than 6.5 or greater than 8.5

2. A temperature greater than 86 $^{o}$F

3. Toxicity limitations:

a. Acute Toxicity Limitation and Requirements

i. 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 (or shorter test duration period with Executive Officer approval) static or continuous flow bioassay tests shall be at least 90%, and (ii) no single test shall produce less than 70% survival.

ii. If either of the above requirements [Section I.B.3.a.(i)] is not met, then the Discharger shall begin a conduct 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 sources(s) of toxicity is identified, the Discharger take all reasonable steps to reduce the toxicity to meet the objective.

iii. The Discharger shall conduct acute toxicity monitoring as specified in Monitoring and Reporting Program No. 5427.

4. Final effluent limitations:

In addition to the Requirements I.B.1 through I.B.3, the discharge of storm water through Discharge Serial No. 001 (Latitude 33° 47' 35" North, Longitude 118° 13' 48" West) and storm water mixed with boiler blowdown and cooling tower blowdown through Discharge Serial No. 003 (Latitude 33° 47' 8" North, Longitude 118° 14' 6" West) in excess of the following limitations is prohibited:

| Constituent | Units | Discharge Limitations | | |
|---|---|---|---|---|
| | | Average Monthly | Maximum Daily | Instantaneous Maximum |
| Biochemical oxygen demand (BOD) [1] | Lbs/1,000 gallons per day of storm water runoff | 0.21 | 0.40 | -- |
| Chemical oxygen demand (COD) | | 1.5 | 3.0 | -- |
| Total suspended solids (TSS) | | 0.14 | 0.24 | -- |
| Oil and grease | | 0.067 | 0.13 | -- |
| Phenolic compounds [2] | | 0.0014 | 0.0029 | -- |
| Total chromium [3] | | 0.0018 | 0.0050 | -- |
| Hexavalent chromium [4] | | 0.00023 | 0.00052 | -- |
| Arsenic [4] | µg/L | 36 | -- | 69 |
| Cadmium [4] | µg/L | 9.3 | -- | 42 |
| Copper [4] | µg/L | 2.4 | -- | 2.4 |
| Lead [4] | µg/L | 8.1 | -- | 210 |
| Mercury | µg/L | 0.025 | -- | 1.8 |
| Nickel [4] | µg/L | 8.2 | -- | 74 |
| Selenium | µg/L | 71 | -- | 290 |
| Silver [4] | µg/L | -- | -- | 2.3 |
| Thallium | µg/L | 6.3 | -- | -- |
| Zinc [4] | µg/L | 81 | -- | 90 |
| Cyanide | µg/L | 1 | -- | 1 |
| Anthracene | µg/L | -- | 110 | -- |
| 1,2-Benzanthracene [5] | µg/L | -- | 0.049 | -- |
| 3,4-Benzofluoranthene [5] | µg/L | -- | 0.049 | -- |
| Benzo(k)fluoranthene [5] | µg/L | -- | 0.049 | -- |
| Benzo(a)pyrene [5] | µg/L | -- | 0.049 | -- |
| Chrysene [5] | µg/L | -- | 0.049 | -- |
| Dibenzo(a)anthracene [5] | µg/L | -- | 0.049 | -- |
| Indeno(1,2,3-cd)pyrene [5] | µg/L | -- | 0.049 | -- |
| Pyrene | mg/L | -- | 11 | -- |
| Fluorene | mg/L | -- | 14 | -- |
| Total petroleum hydrocarbons | µg/L | -- | 100 | -- |

1. 5-day BOD at 20 °C

2. Phenolic compounds include chlorinated and non-chlorinated compounds.

3. Sum of hexavalent chromium and other chromium valences.

4 Effluent limitations for these pollutants are expressed as total recoverable.

5. The limitation is lower than the approved analytical method minimum level (ML). Any values reported below the ML will be considered in compliance.

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. At no time shall the temperature be raised above 80°F as a result of waste discharged.

4. The discharge shall not cause the following limitations 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. The ammonia criteria in the 1994 Basin Plan were revised by Regional Board Resolution No. 2002-011, adopted on April 28, 2002, to be consistent with the 1999 U.S. EPA update on ammonia criteria. Regional Board Resolution No. 2002-011 was approved by State Board, OAL and U.S. EPA on April 30, 2003, June 5, 2003, and June 19, 2003, respectively and is now in effect. Total ammonia (as N) shall not exceed concentrations specified in the Regional Board Resolution 2002-011.

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 CWA, or amendments thereto, the Regional Board will revise or modify this Order in accordance with such standards.

6. The discharge shall not cause the following to be present in receiving waters:

   a. Biostimulatory substances at concentrations that promote aquatic growth to the extent that such growth causes nuisance or adversely affects beneficial uses;

   b. Chemical substances in amounts that adversely affect any designated beneficial use;

   c. Oils, greases, waxes, or other materials in concentrations that result in a visible film or coating on the surface of the receiving water or on objects in the water;

   d. Suspended or settleable materials in concentrations that cause nuisance or adversely affect beneficial uses;

   e. Taste or odor-producing substances in concentrations that alter the natural taste, odor, and/or color of fish, shellfish, or other edible aquatic resources; cause nuisance; or adversely affect beneficial uses;

   f. Substances that result in increases of BOD at 20°C that adversely affect beneficial uses.

7. The discharge shall not alter the color, create a visual contrast with the natural appearance, nor cause aesthetically undesirable discoloration of the receiving waters.

8. The discharge shall not degrade surface water communities and populations including vertebrate, invertebrate, and plant species.

9. The discharge shall not damage, discolor, nor cause formation of sludge deposits on flood control structures or facilities nor overload their design

capacity.

10. The discharge shall not cause problems associated with breeding of mosquitoes, gnats, black flies, midges, or other pests.

## II. REQUIREMENTS

A. The Discharger shall submit within 180 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 contamination of storm water runoff and for preventing contaminated storm water runoff from being discharged to waters of the State or United States through Discharge Serial Nos. 001 and 003. The SWPPP shall be developed in accordance with the requirements in Attachment A.

2. Best Management Practice (BMPs) that entail site-specific plans and procedures implemented and/or to be implemented to prevent hazardous waste/material from being discharged to waters of the State or United States through Discharge Serial No. 003. The BMPs shall be consistent with the general guidance contained in the U.S. EPA *Guidance Manual for Developing Best Management Practices (BMPs)* (EPA 833-B-93-004). In particular, a risk assessment of each area identified by the Discharger shall be performed to determine the potential for hazardous or toxic waste/material discharge to surface waters.

3. An updated Spill Contingency Plan that shall be site specific and shall cover all areas of the facility must be prepared. The Contingency Plan shall be reviewed at the same time as the SWPPP and BMPP.

Plans shall cover all areas of the 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 (e.g., chemical and pallet storage areas); 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 of 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.

B. Monitoring For Reasonable Potential Determination - The Discharger shall monitor the effluent, and the receiving water for the CTR priority pollutants annually for the life of the permit, as outlined in MRP, No. 5427. These monitoring data shall be submitted in accordance with the reporting schedule provided in Section I.A. of the associated MRP No. 5427, and shall be identified as “Monitoring Results for CTR Priority Pollutants Reasonable Potential Determination, NPDES Permit No. CA0003778, CI-5427”.

C. Pursuant to the requirements of 40 CFR 122.42(a), the Discharger must notify the 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 limitations in 40 CFR 122.42(a).

D. The Discharger shall at all times properly operate and maintain all facilities and systems installed or used to achieve compliance with this Order.

E. For 303(d) listed pollutants, the Regional Board plans to develop and adopt TMDLs which will specify wasteload allocations (WLAs) for point sources and load allocations (LA) for non-point sources, as appropriate. Following the adoption of TMDLs by the Regional Board, NPDES permits will be issued, and where appropriate, reopened to include effluent limits consistent with the assumptions of the TMDL, based on applicable WLAs. In the absence of a TMDL, the permits will include water quality-based effluent limitations derived as provided in the CTR and SIP (if applicable). These effluent limits are based on criteria applied end-of-pipe.

F. The discharge of any product registered under the Federal Insecticide, Fungicide, and Rodenticide Act to any waste stream which may ultimately be released to waters of the United States, is prohibited unless specifically authorized elsewhere in this permit or another NPDES permit. This requirement is not applicable to products used for lawn and agricultural purposes.

G. The discharge of any waste resulting from the combustion of toxic or hazardous wastes to any waste stream that ultimately discharges to waters of the United States is prohibited, unless specifically authorized elsewhere in this permit.

H. The Discharger shall notify the Executive Officer in writing no later than 6 months prior to planned discharge of any chemical, other than the products previously reported to the Executive Officer, which may be toxic to aquatic life. Such notification shall include:

1. Name and general composition of the chemical,
2. Frequency of use,
3. Quantities to be used,
4. Proposed discharge concentrations, and
5. U.S. EPA registration number, if applicable.

No discharge of such chemical shall be made prior to the Executive Officer's approval.

I. The Regional Board and U.S. EPA shall be notified immediately by telephone, of the presence of adverse conditions in the receiving waters or on beaches and shores as a result of wastes discharged; written confirmation shall follow as soon as possible but not later than five working days after occurrence.

## 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 herein and the attached Standard Provisions, those provisions stated herein shall prevail.

B. This Order includes the attached MRP No. 5427. If there is any conflict between provisions stated in the MRP and the Standard Provisions, those provisions stated in the MRP shall prevail.

C. The Discharger shall comply with the requirements of SWPPP updates associated with industrial activity (State Board Order No. 97-03-DWQ adopted on April 17, 1997) and SWPPP updates and monitoring and reporting requirements of State Board general permit for discharges of storm water and Construction Activity (State Board Order No. 99-08-DWQ adopted on August 19, 1999). This Order R4-2005-0059 shall take precedence where conflicts or differences arise between it and the aforementioned Orders. This Order includes the relevant requirements contained in the attached *Storm Water Pollution Prevention Plan Requirements* (Attachment A).

D. This Order may be modified, revoked, reissued, or terminated in accordance with the provisions of 40 CFR sections 122.44, 122.62, 122.63, 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; endangerment to human health or the environment resulting from the permitted activity; or acquisition of newly-obtained information which would have justified the application of different conditions if known at the time of Order adoption. The filing of a request by the Discharger for an Order modification, revocation, and issuance or termination, or a notification of planned changes or anticipated noncompliance does not stay any condition of this Order.

E. The Discharger must comply with the lawful requirements of municipalities, counties, drainage districts, and other local agencies regarding discharges of storm water to storm drain systems or other water courses under their jurisdiction; including applicable requirements in municipal storm water management program developed to comply with NPDES permits issued by the Regional Board to local agencies.

F. Discharge of wastes to any point other than specifically described in this Order and permit is prohibited and constitutes a violation thereof.

G. The Discharger shall comply with all applicable effluent limitations, national standards of performance, toxic effluent standards, and all federal regulations established pursuant to Sections 301, 302, 303(d), 304, 306, 307, 316, and 423 of the Federal CWA and amendments thereto.

H. Compliance Determination

1. Compliance with single constituent effluent limitation – If the concentration of the pollutant in the monitoring sample is greater than the effluent limitation and greater than or equal to the reported Minimum Level (ML) (see Effluent Monitoring Requirements III.C. of MRP No. 5427), then the Discharger is out of compliance.

2. Compliance with monthly average limitations - In determining compliance with monthly average limitations, the following provisions shall apply to all constituents:

   a. If the analytical result of a single sample, monitored monthly, quarterly, semi-annually, or annually, does not exceed the monthly average limit for that constituent, the Discharger has demonstrated compliance with the monthly average limit for that month.

   b. If the analytical result of a single sample, monitored monthly, quarterly, semi-annually, or annually, exceeds the monthly average limit for any constituent, the Discharger shall collect up to four additional samples at approximately equal intervals during the month. All analytical results shall be reported in the monitoring report for that month, or 45 days after results for the additional samples were received, whichever is later.

      When all sample results are greater than or equal to the reported ML (see Effluent Monitoring Requirements III.C of MRP No. 5427), the numerical average of the analytical results of these samples will be used for compliance determination.

      When one or more sample results are reported as “Not-Detected (ND)” or “Detected, but Not Quantified (DNQ)” (see Effluent Monitoring Requirements III.C. of MRP No. 5427), the median value of these samples shall be used for compliance determination. If one or both of the middle values is ND or DNQ, the median shall be the lower of the two middle values.

   c. In the event of noncompliance with a monthly average effluent limitation, the sampling frequency for that constituent shall be increased to weekly and shall continue at this level until compliance with the monthly average effluent limitation has been demonstrated.

   d. If only one sample was obtained for the month or more than a monthly period and the result exceed the monthly average, then the Discharger is in violation of the monthly average limit.

3. Compliance with effluent limitations expressed as a sum of several constituents – If the sum of the individual pollutant concentrations is greater than the effluent limitation, then the Discharger is out of compliance. In calculating the sum of the concentrations of a group of pollutants, consider constituents reported as ND or DNQ to have concentrations equal to zero, provided that the applicable ML is used.

4. Compliance with effluent limitations expressed as a median – in determining compliance with a median limitation, the analytical results in a set of data will be arranged in Order of magnitude (either increasing or decreasing Order); and

   a. If the number of measurements (n) is odd, then the median will be calculated as = $X_{(n+1)/2}$, or

   b. If the number of measurements (n) is even, then the median will be calculated as = $[X_{n/2} + X_{(n/2)+1}]$, i.e. the midpoint between the n/2 and n/2+1 data points.

I. In calculating mass emission rates from the monthly average concentrations, use one half of the method detection limit for "Not Detected" (ND) and the estimated concentration for "Detected, but Not Quantified" (DNQ) for the calculation of the monthly average concentration. To be consistent with Section III.H.3, if all pollutants belonging to the same group are reported as ND or DNQ, the sum of the individual pollutant concentrations should be considered as zero for the calculation of the monthly average concentration.

## IV. REOPENERS

A. This Order may be reopened and modified, in accordance with SIP section 2.2.2.A, to incorporate new limitations based on future RPA 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 minimum levels (MLs) for each pollutant.

D. This Order may be reopened and modified, to revise effluent limitations as a result of future Basin Plan Amendments, or the adoption of a TMDL.

E. This Order may be reopened upon the submission by the Discharger, of adequate information, as determined by the Regional Board, to provide for dilution credits or a mixing zone, as may be appropriate.

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 sections 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.

## V. EXPIRATION DATE

This Order expires on August 10, 2010.

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. 99-093, adopted by this Regional Board on September 16, 1999, is hereby rescinded except for enforcement purposes.

I, Jonathan S. Bishop, 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 September 1, 2005.

_____
Jonathan S. Bishop
Executive Officer