

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

ORDER NO. R4-2005-0056  
NPDES PERMIT NO. CA0063975

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT  
AND  
WASTE DISCHARGE REQUIREMENTS  
FOR  
UNION OIL COMPANY OF CALIFORNIA, DBA UNOCAL  
(Former Unocal La Mirada Facility 0510)

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

**Background**

1. Union Oil Company of California, dba Unocal, (hereinafter Unocal or Discharger) intermittently discharges treated wastewater from a soil vapor incinerator scrubber system from its former Unocal La Mirada Facility 0510 (Facility) under waste discharge requirements (WDRs) and a National Pollutant Discharge Elimination System (NPDES) permit contained in Order No. 99-138 (NPDES Permit No. CA0063975), adopted by the Regional Board on December 9, 1999. Order No. 99-138 expired on November 10, 2004.
2. Unocal filed a Report of Waste Discharge (ROWD) and applied for renewal of its WDRs and a NPDES permit on June 14, 2004, for discharge of wastes to surface waters. On March 9, 2005, Unocal submitted an additional information to the permit renewal application. The tentative Order is the reissuance of the WDRs and a NPDES permit for discharges from Unocal.

A NPDES permit compliance evaluation inspection (CEI) was conducted on September 1, 2004, to observe operations and collect additional data to develop permit limitations and conditions.

**Purpose of Order**

3. The purpose of this NPDES permit is to renew the WDRs for the Unocal facility. This NPDES permit regulates the discharge of treated wastewater from a soil vapor incinerator scrubber system through Discharge Serial No. 001. The wastewater then flows into a storm drain located at Heron Avenue and Alondra Boulevard, which then conveys the wastewater to Coyote Creek, which merges with the San Gabriel River, a water of the United States. The point of discharge of the wastewater is located at Latitude 33° 53' 27" and Longitude 118°01' 26".

**Facility Description**

4. Unocal formerly owned and operated a chemical distribution and polymer production facility located at 14445 Alondra Boulevard, La Mirada, California. Figure 1 depicts the location map. The current property owner is Rohm and Haas Company, and operates the polymer production facility.

5. Soil and groundwater contamination was discovered on-site. On September 18, 1995, the Regional Board issued WDRs (Order No. 95-129) to Unocal for the remediation of solvent-contaminated soils associated with the removal of underground solvent tanks. The contamination was reported to be primarily due to volatile organic compounds (VOCs), semi-volatile organic compounds and total petroleum hydrocarbons (TPH). Unocal is currently implementing a soil cleanup program by utilizing a soil vapor extraction/incineration system.

### **Discharge Description**

6. Unocal uses soil vapor extraction technology for VOC-contaminated soils at the facility. Soil vapor extraction treatment involves the use of vacuum blowers and extraction wells to strip VOCs from the soil. Following extraction, gas vapors flow through a scrubber system to remove particulates and additional gases. Unocal uses the City water for the soil vapor extraction incinerator scrubber system. The scrubber wastewater is treated with an activated carbon filter prior to discharge through the Outfall. Figure 2 depicts the remediation facility intake and discharge location.
7. Unocal discharges up to 7,200 gallons per day (gpd) of treated scrubber wastewater through Discharge Serial No. 001. The facility reported an average discharge of 5,572 gpd during the permit term (First Quarter 2000 through the Fourth Quarter 2003). During the compliance evaluation inspection on September 1, 2004, the facility representative stated that there was no discharge during the monitoring periods in 2004. In addition, the ROWD indicated that the remediation system has not been operated since December 2003. However, the operation of the remediation system will be resumed in the future.

### **Storm Water Management**

8. The objectives of this Order is to protect the beneficial uses of receiving waters. To meet this objective, this Order requires Unocal to develop 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 practices for minimizing storm water runoff contamination and for preventing contaminated storm water runoff from being discharged into surface waters.

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

9. 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.

10. **Ammonia Basin Plan Amendment.** The 1994 Basin Plan provided water quality objectives for ammonia to protect aquatic life, in Tables 3-1 through Tables 3-4. However, those ammonia objectives were revised on April 25, 2002, by the Regional Board with the adoption of Resolution No. 2002-011, *Amendment to the Water Quality Control Plan for the Los Angeles Region to Update the Ammonia Objectives for Inland Surface Waters (Including Enclosed Bays, Estuaries and Wetlands) with Beneficial Use Designations for Protection of Aquatic Life*. The ammonia Basin Plan amendment was approved by the State Board, the Office of Administrative Law, and United States Environmental Protection Agency (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.
  11. 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).
  12. The receiving water for the permitted discharge covered by this permit is the Coyote Creek. The beneficial uses listed in the Basin Plan for the Coyote Creek (Hydrologic Unit 405.15) are:  
  
Existing Uses:      Preservation of rare and endangered species.  
  
Potential Uses:    Municipal and domestic supply, industrial service supply, industrial processing supply, water contact recreation<sup>1</sup>, warm freshwater habitat, wildlife habitat.  
  
Intermittent Uses: Non-contact water recreation.
- <sup>1</sup> Access only prohibited by Los Angeles County Department of Public Works in concrete-channelized areas.
13. 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.
  14. 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 as Title 40, Code of Federal Regulations (40 CFR) section 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 fresh 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 Coyote Creek. The CTR also allows 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 the CTR criteria. CTR's Compliance Schedule provisions sunset 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 17, 2010, whichever is sooner.

15. 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.

On February 9, 2005, the State Board revised the SIP, and the Office of Administrative Law approved the SIP amendments on May 31, 2005. The SIP amendments will be in effect upon the approval of the U.S. EPA.

16. Under 40 CFR section 122.44(d), Water Quality Standards and State Requirements, "Limitations must control all pollutants or pollutant parameters (either conventional, non-conventional, or toxic pollutants), which the Director [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 section 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.
17. 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. 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 which are 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.

18. 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 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.
19. The existing Order (Order No. 99-138) contains, in part, an effluent limitation for methyl tertiary butyl ether (MTBE) of 13 µg/L. On October 8, 1997, Governor Pete Wilson signed Assembly Bill 592. Assembly Bill 592 requires the State of California, Department of Health Services (DHS) to adopt primary and secondary drinking water standards for MTBE. In January 1999, DHS adopted 5 µg/L as the secondary standard for MTBE based on taste and odor threshold. This Order includes a revised effluent limitation for MTBE of 5 µg/L.
20. Tertiary Butyl Alcohol (TBA) is a gasoline constituent, an impurity in commercial-grade MTBE, and/or a breakdown product of MTBE. In 1999, California's Office of Environmental Health Hazard Assessment (OEHHA) conducted an interim assessment based on preliminary calculations of the carcinogenicity of TBA, concluding that exposures to TBA at 12 µg/L via the oral route represent a one in a million excess cancer risk. Based on this assessment, OEHHA has set a Notification Level for TBA at 12 µg/L. Based on the nature of operations (cleanup of VOCs and petroleum hydrocarbons contamination) at the facility, this Order includes an effluent limitation for TBA at 12 µg/L.
21. 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 the Coyote Creek.
22. 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)**

23. 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.

24. The 2002 State Board' s California 303(d) List classifies the Coyote Creek as impaired. The pollutants of concern, detected in the water column, in the sediment, and in the fish tissue, include: copper, lead, selenium, zinc, coliform and toxicity. No TMDLs for Coyote Creek have been completed.

### **Data Availability and Reasonable Potential Monitoring**

25. 40 CFR 122.44(d)(1)(ii) requires 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. This is done by performing a reasonable potential analysis (RPA) for each pollutant.
26. 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 criterion, or (2) the background concentration is greater than the CTR criterion, or (3) other information is available that indicates the need for a WQBEL. Sufficient effluent data are needed for this analysis.
27. Certain effluent limitations have been established based on the revised water quality criteria contained in the CTR and the requirements contained in Section 1.4 of the SIP. The data collected for the period from February 2002 through February 5, 2003 were used in the RPA. Based on the RPA, there is reasonable potential to exceed water quality criteria for hexavalent chromium, copper, lead, and nickel at Discharge Serial No. 001. Therefore, effluent limitations and effluent monitoring requirements for these pollutants have been established. Because of the Discharger's nature of operation, certain toxic pollutants (i.e., chlorobenzene, chloroethane, 1,1-dichloroethane, 1,3-dichloropropylene, ethylbenzene, methyl bromide, 1,2-trans-dichloroethane, trichloroethylene, benzene, bromoform, carbon tetrachloride, chlorodibromomethane, chloroform, dichlorobromomethane, 1,2-dichloroethane, 1,1-dichloroethylene, 1,2-dichloropropane, ethylene dibromide, methyl chloride, 1,1,2,2-tetrachloroethane, tetrachloroethylene, toluene, 1,1,1-trichloroethane, 1,1,2-trichloroethane, and vinyl chloride that have effluent limitations in the previous permit are carried over in this Order and are expected to be present in the discharge from the facility. Existing permit limitations for conventional pollutants and non-conventional pollutants were also carried over from the previous permit. This Order also includes requirements for additional monitoring to provide the data needed to perform an RPA on all of the priority pollutants.

28. The existing permit contains acute toxicity limitations and monitoring requirements. This Order includes effluent limitations and monitoring requirements for acute toxicity, and a trigger and monitoring requirements for chronic toxicity.

### **Compliance Schedules and Interim Limitations**

29. Based on effluent monitoring data submitted, the Discharger may not be able to achieve immediate compliance with the WQBELs for hexavalent chromium, copper, lead, and nickel in Section I.B.4. of this Order. Data submitted in self-monitoring reports indicate that these constituents have been detected at concentrations greater than the new limits proposed in this Order. The Discharger may not be able to achieve immediate compliance with an effluent limitation based on CTR criterion for these constituents.
30. 40 CFR 131.38(e) and the SIP provide conditions under which interim effluent limits and compliance schedules may be issued. The SIP allows inclusion of an interim limit with a specific compliance schedule included in a NPDES permit for priority pollutants if the limit for the priority pollutant is CTR-based. Interim limits for hexavalent chromium, copper, lead, and nickel have been included in this Order. During the compliance period, the current treatment facility performance is used to calculate the interim effluent limitations. These interim limitations shall be effective from the date of this Order until August 4, 2007, after which, the Discharger shall demonstrate compliance with the final effluent limitations.
31. This Order requires 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.

### **CEQA and Notifications**

32. 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.
33. The Regional Board, in a public hearing, heard and considered all comments pertaining to the discharge and to the tentative requirements.
34. 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 3, 2005) from the date of its adoption, in accordance with federal law, provided the Regional Administrator, U.S. EPA, has no objections.
35. 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.

36. 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 Unocal Corporation, 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. The maximum flow of wastewater from a soil vapor extraction scrubber shall not exceed 7,200 gpd. The discharge of wastes from accidental spills or other sources is prohibited.
2. 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, Coyote Creek, or waters of the State, are prohibited.

### **B. Effluent Limitations**

The discharge of an effluent 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 °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 static (or shorter test duration period with Executive Officer approval) or continuous flow bioassay tests shall be at least 90%, and (ii) no single test shall have less than 70% survival.
    - ii. If either of the above requirements [Section I.B.3.a.(i)] is not met, the Discharger shall conduct six additional tests over a 6-week period, if possible. The Discharger shall ensure that they receive results of a failing acute toxicity test within 24 hours of the completion of the test, and the additional tests shall begin within three business days of the receipt of the result. If the additional tests indicate compliance with acute toxicity limitation, the Discharger may resume regular testing.



However, if the results of any two of the six accelerated tests are less than 90% survival, then the Discharger shall begin a Toxicity Identification Evaluation (TIE). The TIE shall include all reasonable steps to identify the source(s) of toxicity. Once the source(s) of toxicity is identified, the Discharger shall take all reasonable steps to reduce the toxicity to meet the objective.

- iii. If the initial test and any of the additional six acute toxicity bioassay tests result in less than 70% survival, including the initial test, the Discharger shall immediately begin a TIE.
- iv. The Discharger shall conduct acute toxicity monitoring as specified in Monitoring and Reporting Program (*MRP*) No. 7688.

b. Chronic Toxicity Limitation and Requirements

- i. This Order includes a chronic testing toxicity trigger defined as an exceedance of 1.0  $TU_c$  in a critical life stage test for 100% effluent.
- ii. If the chronic toxicity of the effluent exceeds 1.0  $TU_c$ , the Discharger shall immediately implement accelerated chronic toxicity testing according to *MRP* No. 7688, Item IV.D.1. If the results of two of the six accelerated tests exceed 1.0  $TU_c$ , the Discharger shall initiate a TIE and implement the initial investigation Toxicity Reduction Evaluation (TRE) Workplan.
- iii. The Discharger shall conduct chronic toxicity monitoring as specified in *MRP* No. 7688.
- iv. 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 that causes no observable effect on test organisms, as determined by the results of a critical life stage toxicity test.

v. Preparation of an Initial Investigation TRE Workplan

- 1) The Discharger shall submit a copy of the Discharger's initial investigation TRE workplan (1-2 pages) to the Executive Officer of the Regional Board for approval within 90 days of the effective date of this permit. If the Regional Board Executive Officer does not disapprove the workplan within 60 days, the workplan shall become effective. The Discharger shall use EPA manuals

EPA/600/2-88/070 (industrial) or EPA/833B-99/002 (municipal) as guidance. This workplan shall describe the steps the Discharger intends to follow if toxicity is detected, and should include, at a minimum, the elements described in 2 through 4 below.

- 2) A description of the investigation and evaluation techniques that would be used to identify potential causes and sources of toxicity, effluent variability, and treatment system efficiency;
  - 3) A description of the facility's methods of maximizing in-house treatment efficiency and good housekeeping practices, and a list of all chemicals used in operation of the facility; and
  - 4) If a TIE is necessary, an indication of the person who would conduct the TIEs (i.e., an in-house expert or an outside contractor) (Section IV.E.3. of *MRP* No. 7688 provides references for the guidance manuals that should be used for performing TIEs.)
4. Final effluent limitations: In addition to the Requirements I.B.1 through I.B.3, the discharge of soil vapor extraction scrubber wastewater from Discharge Serial No. 001 (Latitude 33° 53' 27" and Longitude 118° 01' 26") containing constituents in excess of the following limits is prohibited:

| <b>Pollutant</b>                           | <b>Units</b> | <b>Average Monthly Effluent Limitation</b> | <b>Maximum Daily Effluent Limitation</b> |
|--|--------------|--|--|
| Total Suspended Solids                     | Mg/L         | 50   | 75                                       |
| Turbidity                                  | NTU          | 50   | 75                                       |
| BOD <sup>1</sup>                           | Mg/L         | 20   | 30                                       |
| Oil and Grease                             | Mg/L         | 10   | 15                                       |
| Settleable Solids                          | MI/L         | 0.1  | 0.3                                      |
| Sulfides                                   | Mg/L         | ---  | 1  |
| Phenols                                    | Mg/L         | ---  | 1.0                                      |
| Total Petroleum Hydrocarbons (as Gasoline) | µg/L         | ---  | 100                                      |
| Benzene                                    | µg/L         | ---  | 1  |
| Bromoform                                  | µg/L         | ---  | 100                                      |
| Carbon tetrachloride                       | µg/L         | ---  | 0.5                                      |
| Chlorobenzene                              | µg/L         | ---  | 30                                       |
| Chlorodibromomethane                       | µg/L         | ---  | 100                                      |
| Chloroethane                               | µg/L         | ---  | 100                                      |
| Chloroform                                 | µg/L         | ---  | 100                                      |
| Dichlorobromomethane                       | µg/L         | ---  | 100                                      |
| 1,1-dichloroethane                         | µg/L         | ---  | 5  |
| 1,2-dichloroethane                         | µg/L         | ---  | 0.5                                      |
| 1,1-dichloroethylene                       | µg/L         | ---  | 6  |
| 1,2-dichloropropane                        | µg/L         | ---  | 5  |
| 1,3-dichloropropylene                      | µg/L         | ---  | 0.5                                      |

| Pollutant                          | Units | Average Monthly Effluent Limitation | Maximum Daily Effluent Limitation |
|------------------------------------|-------|-------------------------------------|-----------------------------------|
| Ethylbenzene                       | µg/L  | ---                                 | 700                               |
| Ethylene dibromide                 | µg/L  | ---                                 | 0.05                              |
| Methyl bromide                     | µg/L  | ---                                 | 10                                |
| Methyl chloride                    | µg/L  | ---                                 | 3                                 |
| 1,1,2,2-tetrachloroethane          | µg/L  | ---                                 | 1                                 |
| Tetrachloroethylene                | µg/L  | ---                                 | 5                                 |
| Toluene                            | µg/L  | ---                                 | 150                               |
| 1,2-trans-dichloroethylene         | µg/L  | ---                                 | 10                                |
| 1,1,1-trichloroethane              | µg/L  | ---                                 | 200                               |
| 1,1,2-trichloroethane              | µg/L  | ---                                 | 5                                 |
| Trichloroethylene                  | µg/L  | ---                                 | 5                                 |
| Vinyl chloride                     | µg/L  | ---                                 | 0.5                               |
| Xylenes                            | µg/L  | ---                                 | 1,750                             |
| Methyl ethyl ketone                | µg/L  | ---                                 | 700                               |
| Methyl tertiary butyl ether        | µg/L  | ---                                 | 5                                 |
| Tertiary butyl alcohol (TBA)       | µg/L  | ---                                 | 12                                |
| Hexavalent chromium <sup>2,3</sup> | µg/L  | 8.12                                | 16.29                             |
| Copper <sup>2,3</sup>              | µg/L  | 6.98                                | 14                                |
| Lead <sup>2,3</sup>                | µg/L  | 2.61                                | 5.23                              |
| Nickel <sup>2,3</sup>              | µg/L  | 42.71                               | 85.69                             |

<sup>1</sup> 5-day Biochemical Oxygen Demand at 20°C.

<sup>2</sup> Effluent limitations for these metals are expressed as total recoverable.

<sup>3</sup> The interim limits in Section I.B.5. below are applicable from the date of adoption of the Order through August 4, 2007.

5. Interim Effluent Limitations. From the effective date of this Order until August 4, 2007, the discharge of an effluent in excess of the following limitations is prohibited:

| Pollutants                       | Average Monthly Effluent Limitation | Maximum Daily Effluent Limitation |
|----------------------------------|-------------------------------------|-----------------------------------|
|                                  | (units) µg/L                        | (units) µg/L                      |
| Hexavalent chromium <sup>1</sup> | ---                                 | 61                                |
| Copper <sup>1</sup>              | ---                                 | 16.6                              |
| Lead <sup>1</sup>                | 3.8                                 | ---                               |
| Nickel <sup>1</sup>              | ---                                 | 120                               |

<sup>1</sup> Expressed as total recoverable.

The Discharger must comply with the limits for these constituents specified in the Table in Section I.B.4 after August 4, 2007.

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 present in concentrations or quantities that 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 affect 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;
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 Clean Water Act, 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<sub>5</sub>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 population 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. Compliance Plan

1. The Discharger shall develop and implement a compliance plan that will identify the measures that will be taken to reduce the concentrations of hexavalent chromium, copper, lead, and nickel in the discharge. This plan must evaluate options to achieve compliance with the permit limitations specified in provision I.B.4.

2. The Discharger shall submit annual reports to describe the progress of studies and or actions undertaken to reduce hexavalent chromium, copper, lead, and nickel in the effluent, and to achieve compliance with the limits in this Order by the deadline specified in provision I.B.5. The Regional Board shall receive the first annual progress report at the same time the annual summary report is due, as required in Section I.B of *MRP* No. 7688.
  3. The interim limits stipulated in section I.B.5 shall be in effect for a period not to extend beyond August 4, 2007. Thereafter, the Discharger shall comply with the limitations specified in Section I.B.4 of this Order.
  4. The Discharger must notify the Regional Board's Executive Officer, in writing, no later than 14 days following each interim date, compliance implementation event, or quarterly report, of the Discharger's compliance or noncompliance with the interim requirements.
- B. The Discharger shall develop and implement, within 90 days of the effective date of this Order an updated Storm Water Pollution Prevention Plan (SWPPP). The plan shall be site-specific and shall describe management practices for minimizing storm water from being contaminated, and for preventing contaminated storm water runoff from being discharged to waters of the State. The SWPPP shall be developed in accordance with the requirements contained in Attachment A.
- C. Pursuant to the requirements of 40 CFR section 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 limits 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. The Discharger shall comply with the waste load allocations that will be developed from the TMDL process for the 303(d)-listed pollutants.
- 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 which 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 the planned discharge of any chemical, other than chlorine or other product previously

reported to the Executive Officer, which may be toxic to aquatic life. Such notification shall include:

- a. Name and general composition of the chemical,
- b. Frequency of use,
- c. Quantities to be used,
- d. Proposed discharge concentrations, and
- e. 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 as a result of wastes discharged; written confirmation shall follow as soon as possible but not later than 5 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 Monitoring and Reporting Program No. 7688. If there is any conflict between provisions stated in the Monitoring and Reporting Program and the Standard Provisions, those provisions stated in the former shall prevail.
- C. The Discharger shall comply with the applicable 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 R4-2005-0056 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 Clean Water Act 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 (see Reporting Requirement II.C. of *MRP* No. CI-7688), 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, semiannually, 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, semiannually, 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 Minimum Level (see Effluent Monitoring Requirement II.C. of *MRP*), 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 Requirement II.C. of *MRP*), 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.

#### **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 MLs.
- D. This Order may be reopened and modified to revise effluent limitations as a result of future Basin Plan Amendments, such as an update of an objective or the adoption of a TMDL for the Coyote Creek.
- E. This Order may be reopened upon 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, and 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. 99-138, adopted by this Regional Board on December 9, 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.

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Jonathan S. Bishop  
Executive Officer