

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

ORDER NO. R4-2004-0144
NPDES PERMIT NO. CA0064289

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT
AND
WASTE DISCHARGE REQUIREMENTS
FOR
EQUILON ENTERPRISES, LLC DBA SHELL OIL PRODUCTS US
SHELL SERVICE STATION #204-1944-0100

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

Background

1. Equilon Enterprises, LLC dba Shell Oil Products US - Shell Service Station #204-1944-0100 (hereinafter Shell or Discharger) discharges treated groundwater under waste discharge requirements (WDRs) and National Pollutant Discharge Elimination System (NPDES) permit contained in Order No. 99-065 (NPDES Permit No. CA0064289). Order No. 99-065 was adopted by the Regional Board on July 8, 1999.
2. Shell has filed a report of waste discharge and has applied for renewal of its WDRs and NPDES permit. This Order is the reissuance of the WDRs and NPDES permit for discharges from Shell.

Purpose of Order

3. The purpose of this NPDES permit is to renew the WDRs for the Shell Service Station #204-1944-0100. This NPDES permit regulates the discharge of treated groundwater through Discharge Serial No. 001 to a storm drain which then conveys the treated groundwater to Ballona Creek, a water of the United States, above the estuary. The point of discharge of the treated groundwater is located at Latitude 34°00'47" N, and Longitude 118°24'58" W.

Facility Description

4. Shell Oil Company was the operator of the Shell Service Station #204-1944-0100 when the release occurred. Equilon Enterprises, LLC was originally formed as a joint venture between Shell Oil Company and Texaco Refining and Marketing. During late 2001, Texaco merged with Chevron Corporation. At that time, Texaco's interest in Equilon was purchased by Shell. As of March 1, 2002, Equilon Enterprises LLC is a legally viable, operating entity doing business as Shell Oil Products US. Shell Service Station #204-1944-0100 is located at 3801 Sepulveda Boulevard, Culver City, California.
5. Shell Service Station #204-1944-0100 is located near the City of Santa Monica's Charnock Wellfield and the Southern California Water Company Wellfield (Figure 1). The Charnock Wellfields draw water from the Charnock Sub-Basin consisting of the Shallow Unnamed Aquifer, the Upper Silverado Aquifer, prior to their shut down in 1996 due to methyl tertiary

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butyl ether (MTBE) pollution. Groundwater pumped from the Charnock Wellfields was used for public distribution as municipal supply water. The Regional Board has identified Shell Service Station #204-1944-0100 as a potential source site contributing to the MTBE pollution of the Charnock Sub-Basin. The service station operations reportedly began in January 1940. Historically, station operations consisted of retail gasoline sales and automobile repair and maintenance. The site is currently an active service station with five 12,000-gallon double wall fiberglass underground storage tanks used to store gasoline, diesel, and methanol, four dispenser islands, and a kiosk.

6. Investigations performed in the past at the site and in the vicinity of the site have indicated that the soil and groundwater are contaminated with total petroleum hydrocarbons (as gasoline), benzene, toluene, ethylbenzene, xylene, MTBE, tertiary butyl alcohol (TBA), and other associated petroleum constituents.
7. The soil and groundwater cleanup plans for the site were approved by the Regional Board and United States Environmental Protection Agency (U.S. EPA) on June 21, 1999. The remediation systems have been operational since 1999.

Discharge Description

8. Shell remediates the contaminated soil and local groundwater using soil vapor extraction and groundwater extraction and treatment prior to discharge. The purpose of these remediation methods is to clean up the Shallow Unnamed Aquifer and the Upper Silverado Aquifer in close proximity of the site and to contain the migration of polluted groundwater. Since groundwater pumping commenced in November 1999, wells historically used for groundwater pumping have included at various times, nine extraction wells used to extract water from the Shallow Unnamed Aquifer and five extraction wells used to extract water from the Upper Silverado Aquifer. The current active pumping array consists of five extraction wells used to extract water from the Shallow Unnamed Aquifer and two extraction wells used to extract water from the Upper Silverado Aquifer. In the future, wells may be added to or removed from the active pumping array as necessary to optimize groundwater remediation. The maximum combined groundwater pump rate will not exceed 400 gallons per minute (576,000 gallons per day).
9. Shell treats the groundwater using a combination of treatment technologies. First, groundwater is injected with hydrogen peroxide for flocculation of various metals. Next, the groundwater flows through three (4,500-gallon) inlet surge tanks. The groundwater is then treated with a filtration aid, and is subsequently sent through filters for iron and manganese removal. The groundwater is sent through three air strippers for total petroleum hydrocarbons (as gasoline), benzene, toluene, ethylbenzene, and xylene, and MTBE removal followed by an air stripper off-gas control system and then sent through two (10,000 pound) granular activated carbon adsorbers for polishing and TBA removal. Finally, the discharge is treated for pH prior to discharge (Figure 3).

At the time of the site inspection conducted on March 22, 2004, the facility was running a pilot program for a sand filter at 30 gallons per minute for metals and minerals removal. If successful, a sand filter will replace the bag filters in the treatment train. The discharge point is a storm drain located on Venice Boulevard near the intersection of Venice Boulevard and

Sepulveda Boulevard (Latitude 34°00'47", Longitude 118°24'58"). The treated groundwater flows approximately one mile to Ballona Creek, a water of the United States (Figure 2).

10. One objective of this Order is to protect the beneficial uses of receiving waters. To meet this objective, storm water runoff discharges from the facility are subject to requirements in this NPDES permit and the Discharger will be required to comply with all applicable provisions of the Storm Water Pollution Prevention Plan (Attachment A). This plan includes requirements to develop, implement, and when appropriate update a Storm Water Pollution Prevention Plan (SWPPP) along with Best Management Practices (BMPs) with the intent of preventing all pollutants from contacting storm water and with the intent of keeping all contaminants of concern from moving into receiving waters.

Applicable Plans, Policies, and Regulations

11. On June 13, 1994, the Regional Board adopted a revised *Water Quality Control Plan for the Coastal Watersheds of Los Angeles and Ventura Counties* (Basin Plan) 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.
12. 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 in a waterbody, in order to implement either federal or state mandates and goals (such as fishable and swimmable for regional waters).
13. The receiving waters for the permitted discharge covered by this permit is Ballona Creek. The beneficial uses listed in the Basin Plan for Ballona Creek are:

Existing Uses: non-contact water recreation and wildlife habitat.

Potential Uses: municipal and domestic supply, water contact recreation (prohibited by LA County DPW), and freshwater habitat.

The potential beneficial use of municipal and domestic supply (MUN) for Ballona Creek is consistent with Regional Board Resolution 89-03; however the Regional Board has only conditionally designated the MUN beneficial uses and at this time cannot establish effluent limitations designed to protect the conditional designation.

14. **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 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.
15. 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.
16. On May 18, 2000, the U.S. Environmental Protection Agency (U.S. EPA) promulgated numeric criteria for priority pollutants for the State of California [known as the *California Toxics Rule* (CTR) and codified as 40 CFR 131.38]. In the CTR, U.S. EPA promulgated 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 also allows a schedule of compliance not to exceed 5 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.
17. 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 Discharger's submittal of data sufficient to conduct the determination of priority pollutants requiring water quality-based effluent limits (WQBELs) and to calculate the effluent limitations. The CTR criteria for fresh water or human health for consumption of organisms, whichever is more stringent, are used to develop the effluent limitations that are used to protect the beneficial uses of Ballona Creek in this Order.
18. 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 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.

19. 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, which has been reviewed and considered by the Regional Board, is considered part of this Order. The Fact Sheet includes specific bases for the effluent limitations, including the basis for determining reasonable potential for a pollutant to cause or contribute to an exceedance of water quality standards.
20. 40 CFR section 122.45(f)(1) requires that except under certain conditions, all permit limits, standards, or prohibitions be expressed in terms of mass units. 40 CFR section 122.45(f)(2) allows the permit writer, at its discretion, to express limits in additional units (e.g., concentration units). The regulations mandate that, where limits are expressed in more than one unit, the permittee must comply with both. Generally, mass-based effluent limits would ensure that proper treatment, and not dilution, is employed to comply with the final effluent concentration limits. Concentration-based effluent limits, on the other hand, would discourage the reduction in treatment efficiency during low flow periods and would require proper operation of treatment units at all times. In the absence of concentration-based effluent limits, a permittee would be able to increase its effluent concentration (i.e., reduce its level of treatment) during low flow periods and still meet its mass-based effluent limits.
21. State and Federal antibacksliding and antidegradation policies require Regional Board actions ensure that the waterbody will not be further degraded. Antibacksliding provisions are contained in Section 303(d)(4) and 402(o) of the 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. For those limits carried forward, the Regional Board has determined that there is reasonable potential for the pollutant to cause or contribute to an exceedance of water quality standards. Reasonable potential is determined using the procedures established in the SIP.
22. Effluent limitations established pursuant to sections 301 (Effluent Limitations), 302 (Water Quality-Related Effluent Limitations), 303 (Water Quality Standards and Implementation Plans), 304 (Information and Guidelines), and 402 (NPDES) of the CWA and amendments thereto, are applicable to the discharges herein. These requirements, as they are met, will maintain and protect the beneficial uses of Ballona Creek.
23. Under 40 CFR section 131.38(e)(6), the CTR authorizes the Regional Board to grant a compliance schedule for WQBELs based on CTR criteria for a period up to five years from

the date of permit issuance, reissuance, or modification. The SIP provides a compliance schedule for WQBELs (up to five years) and for WQBELs based upon Total Maximum Daily Loads (TMDL) and Waste Load Allocations development (up to 15 years). However, the U.S. EPA has not yet approved the longer of the two compliance schedules nor depromulgated the five-year maximum in the CTR to allow for the 15 years in the SIP. Therefore, the more stringent provision, allowing a compliance schedule of five years, is the maximum duration authorized.

Watershed Management Approach and Total Maximum Daily Loads (TMDLs)

24. 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 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.
25. The U.S. EPA approved the State's 2002 303(d) list of impaired water bodies on July 25, 2003. The 2002 State Board's California 303(d) List classifies Ballona Creek as impaired. The pollutants of concern, detected in the water column, in the sediment, and in the fish tissue, include cadmium (sediment), ChemA (tissue) [refers to the sum of aldrin, dieldrin, chlordane, endrin, heptachlor, heptachlor epoxide, HCH (including lindane), endosulfan, and toxaphene], chlordane (tissue), dissolved copper, DDT (tissue), dieldrin (tissue) enteric viruses, high coliform count, dissolved lead, PCBs (tissue), pH, sediment toxicity, total selenium, silver (sediment), toxicity, and dissolved zinc.

The Trash TMDL for the Ballona Creek and Wetland was adopted by the Regional Board on September 19, 2001. It designates Waste Load Allocations for permittees and co-permittees of the Los Angeles County Municipal Stormwater Permit that are located within (entirely or partially) the Ballona Creek Watershed. Waste Load allocations are based on a phased reduction from the estimated current discharge over a 10-year period until the final Waste Load Allocation (currently set at zero) is met. Because the discharge from this facility is treated groundwater, it is not likely to contribute trash to the Ballona Creek Watershed. However, because the facility discharges to the Los Angeles County municipal separate storm sewer system, Los Angeles County may invoke requirements on the facility in order to meet the waste load allocation.

Data Availability and Reasonable Potential Monitoring

26. 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.
27. 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.
28. Regional Board staff has determined that contaminants that have been detected in the groundwater contaminant plume or targeted by the cleanup operation will be included in this permit. 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 CTR criteria for the protection of aquatic freshwater organisms or human health for consumption of organisms, which ever is more stringent, are used to prescribe the effluent limitations in this Order to protect the beneficial uses of Ballona Creek. This Order also includes requirements for additional monitoring to provide the data needed to perform a complete RPA on all of the priority pollutants.
29. An RPA was completed using the data collected at the site for the period from November 1999 through September 2003 to determine if any of the constituents in the discharge from the site have a reasonable potential to exceed applicable water quality standards. Based on the RPA, there was reasonable potential to exceed the water quality criteria at Discharge Serial No. 001 for selenium.

Compliance Schedules and Interim Limitations

30. Data submitted in self-monitoring reports indicate that selenium has been detected at concentrations greater than the new WQBEL proposed in this Order. The Discharger may not be able to achieve immediate compliance with the WQBELs for selenium contained in Section I.B.4. of this Order. Hence this Order includes a compliance schedule designed to provide time for the Discharger to determine the appropriate treatment technology and implement it to treat the discharge.
31. The SIP requires that the Regional Board establish other interim requirements such as requiring the Discharger to develop a pollutant minimization plan and/or source control measures and participate in the activities necessary to achieve the final effluent limitations. These interim limitations shall be effective until March 2, 2008, after which, the Discharger shall demonstrate compliance with 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 shall take effect 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 Equilon Enterprises, LLC dba as Shell Oil Products US, Shell Service Station #201-1944-0100, 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 daily maximum flow of treated groundwater shall not exceed 576,000 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, Ballona Creek, or waters of the United States, 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 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. 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 3 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, the Discharger shall immediately begin a TIE.
 - iv. The Discharger shall conduct acute toxicity monitoring as specified in Monitoring and Reporting Program (*M&RP*) No. 8030.
 - 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. (The monthly median for chronic toxicity of 100% effluent shall not exceed, 1 TU_c in a critical life stage test.)
 - ii. If the chronic toxicity of the effluent exceeds 1.0 TU_c, the Discharger shall immediately implement accelerated chronic toxicity testing according to *M&RP* No. 8030, 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 TRE Workplan.

- iii. The Discharger shall conduct chronic toxicity monitoring as specified in *M&RP* No. 8030.
- 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 Toxicity Reduction Evaluation (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 or the current versions. At a minimum, the TRE workplan must contain the provisions in Attachment C. 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 *M&RP* No. 8030 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 treated groundwater from Discharge Serial No. 001 containing constituents in excess of the following limits is prohibited:

Constituents	Units	Average Monthly Effluent Limitations		Maximum Daily Effluent Limitations	
		Concentration	Mass ¹ (lbs/day)	Concentration	Mass ¹ (lbs/day)
Oil and grease	mg/L	10	48	15	72
Total settleable solids	ml/L	0.1	--	0.3	--
Total suspended solids	mg/L	50	240	150	721
Turbidity	NTU	50	--	150	--
Lead ²	µg/L	15.2	0.07	30.5	0.15
Selenium ^{2,3}	µg/L	4.0	0.02	8.2	0.04
Benzene	µg/L	--	--	1	0.005
1,1-Dichloroethane	µg/L	--	--	5	0.02
1,1-Dichloroethylene	µg/L	--	--	6	0.03
Ethylbenzene	µg/L	--	--	700	3.4
Ethylene dibromide	µg/L	--	--	0.05	0.0002
Methyl tertiary butyl ether	µg/L	--	--	13	0.06
Naphthalene	µg/L	--	--	50	0.24
Tertiary butyl alcohol	µg/L	--	--	1750	8.4
Tetrachloroethylene	µg/L	--	--	5	0.02
Toluene	µg/L	--	--	150	0.72
Total petroleum hydrocarbons	µg/L	--	--	100	0.48
1,1,1-Trichloroethane	µg/L	--	--	200	1.0
Trichloroethylene	µg/L	--	--	5	0.02
Xylene	µg/L	--	--	1750	8.4
Hydrogen Peroxide	mg/L	--	--	5	24

¹ The mass emission (in lb/day) for the discharge shall be calculated and reported using the limitation concentration and the actual flow rate measured at the time of discharge, using the formula:

$$m = 8.34 C_i Q$$

where: m = mass discharge for a pollutant, lbs/day
 C_i = limitation concentration for a pollutant, mg/L
 Q = actual discharge flow rate, mgd

Mass-based effluent limitations for pollutants are based on a maximum discharge flow rate of 576,000 gpd (0.576 mgd).

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

³ The interim limits in Section I.B.5 below are applicable from the date of adoption of the Order through March 2, 2008.

5. Interim Effluent Limitations. From the effective date of this Order until March 2, 2008, the discharge of an effluent in excess of the following limitations is prohibited:

Constituents	Discharge Limitation (Maximum Daily)	
	Concentration ($\mu\text{g/L}$)	Mass ¹ (lbs/day)
Selenium	20	0.10

¹The mass-based effluent limitations are based on a flow rate of 576,000 gpd (0.576 mgd).

Discharges after March 2, 2008 must comply with the limits for these constituents stipulated in the table in section I.B.4.

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;
 - c. Dissolved sulfide shall not be greater than 0.1 mg/L;
 - d. The ammonia limits 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 (Attachment H).
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 BOD₅@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. Within six months after the effective date of the Order, the Discharger shall develop and implement a compliance plan, that will identify the measures that will be taken to reduce the concentrations of selenium in their 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 selenium 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 *M&RP* No. 8030.
3. The interim limits stipulated in Section I.B.5 shall be in effect for a period not to extend beyond September 2, 2006. Thereafter, the Discharger shall comply with the limitations specified in Section I.B.4 of this Order.

B. A *Storm Water Pollution Prevention Plan* (SWPPP) that describes site-specific management practices for minimizing storm water runoff from being contaminated, and for preventing contaminated storm water runoff from being discharged directly to waters of the State. The SWPPP shall be developed in accordance with the requirements contained in Attachment A and submitted to the Regional Board within 90 days of the effective date of this Order.

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 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 *M&RP* No. 8030. If there is any conflict between provisions stated in the *M&RP* and the Standard Provisions, those provisions stated in the former shall prevail.
- C. 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.
- D. 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.
- E. Discharge of wastes to any point other than specifically described in this Order and permit is prohibited and constitutes a violation thereof.
- F. 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.
- G. 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 *M&RP* No. CI-8030), 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 Reporting Requirement II.C. of *M&RP*), 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 Reporting Requirement III.C. of *M&RP*), 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 for one month.
 - 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.
- H. 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.G.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 to include effluent limitations for toxic constituents determined to be present in significant amounts in the discharge through a more comprehensive monitoring program included as part of this Order and based on the results of the RPA.
- 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 Ballona 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 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, 2009.

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.

Equilon Enterprises, LLC dba Shell Oil Products US
Shell Service Station #201-1944-0100
Order No. R4-2004-0144

CA0064289

VI. RESCISSION

Order No. 99-065, adopted by this Regional Board on July 8, 1999, is hereby rescinded except for enforcement purposes.

I, Jonathan 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 2, 2004.

Jonathan Bishop
Executive Officer