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

ORDER NO. 01-157

NPDES No. CA0064301

WASTE DISCHARGE REQUIREMENTS
For
EXXONMOBIL OIL CORPORATION
FORMER MOBIL SERVICE STATION #18-FX5

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

1. ExxonMobil Oil Corporation (hereinafter referred to as ExxonMobil or Discharger) has filed a report of waste discharge dated March, 2001, and has applied for renewal of its waste discharge requirements and a National Pollutant Discharge Elimination System (NPDES) permit.

2. Former Mobil Service Station #18-FX5 is located at 3800 Sepulveda Boulevard, Culver City, California (Site). The Site is near the City of Santa Monica's Charnock wellfield and the Southern California Water Company (SCWC) Wellfield located approximately 0.5 miles to the north-northwest and northwest, respectively (Figure 1). The Site is an inactive service station. The service station operations reportedly began in 1973 as a Mobil Service Station. Historically, station operations consisted of retail gasoline sales with automobile repair and maintenance. The station was closed in November 1999. Four 10,000-gallon double wall fiberglass underground storage tanks (USTs) used to store gasoline USTs were removed on August 29, 2000. Currently there are no USTs at the Site.

3. An unauthorized gasoline was first discovered on August 9, 1990. Investigations performed 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 (TPHg), benzene, toluene, ethyl benzene, xylenes (BTEX), methyl tertiary butyl ether (MTBE), tertiary butyl alcohol (TBA), and other petroleum constituents.

4. The City of Santa Monica (City) formerly operated five drinking water production wells at the Charnock Wellfield located at 11375 Westminster Avenue, Los Angeles, and a water treatment plant located at 1228 South Bundy Drive, Los Angeles, California. In addition, the SCWC owns and previously operated two production wells located at 11615 Charnock Road, Los Angeles, near the Charnock Wellfield (hereinafter both wellfields are referred to as Charnock Wellfields). Groundwater pumped from the Charnock Wellfields was used for public distribution as a municipal supply water. The Charnock Wellfields draw water from the Charnock Sub-Basin consisting of the Shallow Unnamed Aquifer, the Upper Silverado Aquifer, and the Silverado Aquifer. The Charnock

Wellfields contained seven active municipal water supply wells as recently as 1996. In late 1996, the City and SCWC shut down all their municipal water supply wells in the Charnock Wellfields due to MTBE pollution.

5. The Regional Board has identified sites potentially contributing to the MTBE pollution of the Charnock Sub-Basin. The Regional Board has identified Former Mobil Service Station #18-FX5 as one of these source sites based on the presence of petroleum constituents and MTBE in the soil and groundwater at the Site.

6. In 1999, the Regional Board directed ExxonMobil to conduct an investigation and to prepare a corrective action plan to remedy the effects of the unauthorized release at the Site. ExxonMobil has been remediating the contaminated soil and local groundwater using soil vapor extraction and groundwater extraction and treatment system since November 1999. Since that time, a total of 13,985 pounds of TPHg and 305 pounds of MTBE have been removed. The purpose of these remediation methods is to remove residual contaminants contained in soil underlying the Site, to control the migration of polluted groundwater, and to clean up the Shallow Unnamed Aquifer underneath the Site.

7. The groundwater extraction system consists of three extraction wells drawing water from the Shallow Unnamed Aquifer. Pursuant to the workplan approved by the Regional Board, the maximum combined groundwater pump rate does not exceed 50 gallons per minute (72,000 gallons per day).

8. ExxonMobil has been treating the soil using soil vapor extraction and a thermal destruction system. Soil vapors are extracted from up to sixteen vapor extraction wells. Extracted soil vapors containing hydrocarbon constituents are treated using a thermal destruction unit.

9. ExxonMobil has been using a liquid-phase granular activated carbon adsorption system to remove primarily MTBE, TBA and other gasoline constituents. ExxonMobil discharges treated wastewater to the municipal separate storm sewer system pursuant to requirements established by the Regional Board. The discharge point is to a stormdrain located in Venice Boulevard north of the intersection of Venice Boulevard and Sepulveda Boulevard (Latitude 34º 00' 49", Longitude 118º 24' 56"). From there, the treated wastes flow to Ballona Creek Estuary, a water body of the United States.

10. The Regional Board, USEPA, the City, and the SCWC have reviewed the soil and groundwater remediation plans. After considering comments from the City and SCWC, the Regional Board and USEPA conditionally approved the cleanup plans on May 20, 1999.

11. The Regional Board adopted a revised Water Quality Control Plan for the Coastal Watersheds of Los Angeles and Ventura Counties (Basin Plan) on June 13, 1994. The Basin Plan incorporated by reference the State Water Resources Control Board's Water Quality Control Plans and policies on ocean waters (California Ocean Plan, revised - July 23, 1997).

12. The Basin Plan identifies the beneficial uses of Ballona Creek Estuary as estuarine habitat, navigation, water contact recreation, non-contact water recreation, commercial and sport fishing, marine habitat, rare and endangered species, migration of aquatic organisms, spawning, wildlife habitat, and shellfish harvesting.

13. The site overlies the Los Angeles Central Basin of the Coastal Plain. The Basin Plan identifies the beneficial uses of the groundwater as municipal, industrial, agricultural, and industrial process supply.

14. Potential beneficial reuse of the treated groundwater from this system was considered. The potential reuses included irrigation, re-injection, pipeline to local water purveyor, and/or pipeline to Metropolitan Water District. However, based on a water reuse study conducted by Wayne Perry Incorporation in July 1998 for an adjacent site, located at 3800 Sepulveda Boulevard, Culver City, technical, economic, logistic, and time constrains prohibit the beneficial reuse of treated groundwater in the vicinity of Site.

15. The requirements contained in this Order are based on the Basin Plan, Ocean Plan, and other federal and state plans including maximum contaminant levels (MCL) and policies and the best professional judgment available and are intended to protect the beneficial uses of the receiving waters.

16. MTBE is an oxygenate that some refiners have added to gasoline in order to meet federal Clean Air Act oxygenate requirements and to increase the octane rating of a gasoline blend. The Department of Health Services has established the primary MCL for MTBE in drinking water as 13 µg/L.

17. 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 via the oral route represent a one in a million excess cancer risk at 12 µg/L. Based on this assessment, OEHHA has set an Action Level for TBA of 12 µg/L.

18. On May 18, 2000, the USEPA promulgated numeric criteria for priority pollutants for the State of California [known as the *California Toxics Rule* (CTR) and codified as 40 CFR part 131.38]. On March 2, 2000, State Board adopted the *Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California* (State Implementation Policy or SIP). The SIP was effective April 28, 2000 with respect to the priority pollutants criteria that were promulgated for California by the USEPA through the National Toxics Rule (NTR) and also with respect to the priority pollutant objectives established by the Regional Boards in their Basin Plans, with the exception of the provision on "alternate test procedures for individual discharges" that have been approved by the USEPA Regional Administrator. The "alternate test procedures" provision was effective on May 22, 2000. The SIP was effective on May 18, 2000 with respect to the priority pollutant criteria promulgated by the USEPA through the CTR.

19. The CTR and SIP require dischargers to submit sufficient data to conduct the determination of priority pollutants requiring water quality-based effluent limitations (WQBELs) and to calculate the effluent limitations. The CTR criteria for freshwater or human health for consumption of organisms, whichever is more stringent, were used to prescribe the WQBELs in this Order to protect the beneficial uses of the Ballona Creek Estuary.

20. Effluent limitation guidelines requiring the application of best practicable control technology currently available (BPT), best conventional pollutant control technology (BCT), and best available technology economically achievable (BAT), were promulgated by the USEPA for some pollutants in this discharge. Effluent limitations for pollutants not subject to the USEPA effluent limitation guidelines are based on one of the following: best professional judgment (BPJ) of BPT, BCT or BAT; current plant performance; or WQBELs. The WQBELs are based on the Basin Plan, other State plans and policies, or USEPA water quality criteria 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.

21. 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 in accordance with Water Code Section 13389.

22. Pursuant to California Water Code Section 13320, any aggrieved party may seek review of this Order by filling a petition with the State Board. A petition must be sent to the State Water Resources Control Board, P.O. Box 100, Sacramento, California 95812, within 30 days of adoption of the Order.

The Regional Board has notified the discharger and interested agencies and persons of its intent to prescribe waste discharge requirements for the discharge and has provided them with an opportunity to submit their written views and recommendations.

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

This Order shall serve as a National Pollutant Discharge Elimination System permit pursuant to Section 402 of the Federal Clean Water Act or amendments thereto, and shall take effect at the end of ten days from the date of its adoption, provided the Regional Administrator of the Environmental Protection Agency, has no objections.

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

I. Effluent Limitations

1. Discharge shall be limited to the treated groundwater only.

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

Constituent	Discharge Limitations[1] Monthly Average[2]		Daily Maximum	
	C (µg/L)	m (lbs/day)	C (µg/L)	m (lbs/day)
Total Suspended solids	50 (mg/L)	30	150(mg/L)	90
Total Settleable Solid	0.1(mg/L)	---	0.3(mg/L)	---
Turbidity	50	---	150	---
Oil and grease	10 (mg/L)	6	15(mg/L)	9
Lead	2.04	0.0012	4.1	0.0024
Copper	6.47	0.0039	12.98	0.0078
Zinc	59.71	0.0359	119.8	0.072
Total Petroleum Hydrocarbons	---	---	100	0.06
Benzene	---	---	1.0	0.0006
Toluene	---	---	150	0.09
Ethylbenzene	---	---	700	0.42
Xylene (Total)	---	---	1,750	1.05
Naphthalene	---	---	50	0.03
Methyl Tertiary Butyl Ether (MTBE)	---	---	13	0.0078
Tertiary Butyl Alcohol (TBA)	---	---	12	0.0072
Ethylene Dibromide	---	---	0.05	0.00003
Tetrachloroethylene	0.4	0.00024	0.8	0.0005
Trichloroethylene	1.34	0.00081	2.7	0.0016
1,1,1-Trichloroethane (1,1,1-TCA)	---	---	200	0.12
1,1-Dichloroethane (1,1-DCA)	---	---	5	0.003
1,1-Dichloroethylene (1,1-DCE)	0.03	0.00002	0.06	0.00004
Acute Toxicity	---	---	1.0	0.0006

1 The mass emission for a pollutant was calculated based on a discharge flow rate of 50 gpm or 72,000 gpd.

2 The monthly average concentration shall be the arithmetic average of all the values of daily concentrations calculated using the results of analyses of all samples collected during the month. If only one sample was taken within that month, compliance would be based on the result of analyses of that sample.

3. The pH of the discharge shall at all times be within the range of 6.5 and 8.5.

4. The acute toxicity of the effluent shall be such that the average survival in undiluted effluent for any three (3) consecutive 96-hour static or continuous flow bioassay tests shall be at least 90%, with no single test producing less than 70% survival.

II. Interim Limitations

ExxonMobil may not be able to achieve immediate compliance with the CTR-based limitations for priority toxic pollutants. Data submitted in previous self monitoring reports indicate that these constituents either have been detected in the effluent at a concentration greater than the new limit proposed in this Order, or have been reported "ND" with a method detection level of higher than the new limits proposed in this Order. On October 15, 2001, ExxonMobil submitted a workplan for attainment of limits for copper, lead, zinc, PCE, TCE, and 1,1-DCE based on the CTR. This workplan specifies various tasks and duration for each task necessary for ExxonMobil to achieve compliance with the final CTR limits for lead, copper, and zinc. ExxonMobil requested two years to achieve compliance for lead, copper, and zinc. The SIP allows compliance schedules and inclusion of interim limits within an NPDES permit for priority pollutants if the limit for the priority pollutant is CTR-based. ExxonMobil is required to comply with the final WQBELs by October 25, 2003. In the mean time, ExxonMobil shall comply with the following interim limitations. These limitations were developed according to the 95th percentile occurrence probability method for monthly average limits and 99th percentile occurrence probability method for daily maximum limits. For ND data points, half of their respective MDL were used in calculations. Since the new CTR-based limitations for PCE, TCE, and 1,1-DCE are below the EPA method 8260B detection limits, ExxonMobil is required to meet the minimum level (ML) listed in the attached Table T-1.

Interim Effluent Limitations:

Constituent	Discharge Limitations			
	Monthly Average		Daily Maximum	
	C (µg/L)	m (lbs/day)	C (µg/L)	m (lbs/day)
Lead	2.5	0.0015	9.8	0.0059
Copper	16.0	0.0096	32.4	0.0195
Zinc	87.3	0.0525	139.4	0.0195
Tetrachloroethylene (PCE) [1]	2	0.0012	2	0.0012
Trichloroethylene (TCE) [1]	2	0.0012	2	0.0012
1,1-Dichloroethylene (1,1-DCE) [1]	2	0.0012	2	0.0012

[1.] Method detection limit of GCMS is used for ML (see Table T-1 in the attachment)

III. Receiving Water Limitations

1. The waste discharged shall not cause the following to be present in the receiving waters:

   a. Toxic pollutants at concentrations that will bioaccumulate in aquatic life to levels that are harmful to aquatic life or human health;

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

   c. Chemical substances in amounts that adversely affect any designated beneficial uses;

   d. Visible floating materials, including solids, liquids, foams, and scum;

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

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

   g. 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;

   h. Fecal coliform concentrations which exceed a log mean of 200 per 100 ML (based on a minimum of not less than four samples of any 30-day period), nor shall more than 10% of total samples during any 30-day period exceed 400 per 100 ml; and

   i. Concentrations of toxic substances that are toxic to, or cause detrimental physiological responses in human, animal, or aquatic life.

2. The discharge shall not cause the following to occur in the receiving waters:

   a. The dissolved oxygen to be depressed below 5 mg/L as a result of waste discharged;

   b. Turbidity increases to the extent that such increases cause nuisance or adversely affects beneficial uses;

c. The effluent shall not contain salts, heavy metals, arsenic, or cyanide in concentrations exceeding the limits contained in the current California Drinking Water Standards;

d. Residual chlorine in concentrations that persist and impairs beneficial uses;

e. Radioactivity of wastes discharged shall not exceed the limits specified in Title 22, California Code of Regulations, Chapter 15, Article5, Sections 64441 and 64443, or subsequent revisions;

f. Any wastes that do not meet each of the forgoing requirements shall be held in impervious containers, and if transferred elsewhere, the final discharge shall be at a legal point of disposal; and

g. Any individual pesticide or combination of pesticides in concentrations that adversely affect beneficial uses or increase pesticide concentration in bottom sediments or aquatic life.

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

4. The waste discharged shall not degrade surface water communities and populations including vertebrate, invertebrate, and plant species.

5. The waste discharged shall not damage, discolor, nor cause formation of sludge deposits on flood control structures or facilities, nor overload their design capacity.

6. The waste discharged shall not cause problems associated with breeding of mosquitoes, gnats, black flies, midges, or other pests.

IV. Provisions

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

2. This Order includes the attached "Standard Provisions and General Monitoring and Reporting Requirements." If there is any conflict between provisions stated hereinbefore and the attached "Standard Provisions", those provisions stated hereinbefore prevail.

3. Wastes shall not be disposed of in geologically unstable areas or so as to cause earth movement.

4. This Order includes the attached Monitoring and Reporting Program. If there is conflict between provisions stated in the Monitoring and Reporting Program and the Standard Provisions, those provisions stated in the former prevail. The

discharger shall file with the Board technical reports on self-monitoring work performed according to the detailed specifications contained in the Monitoring and Reporting Program as directed by the Executive Officer.

5. A copy of this Order shall be maintained at the treatment and discharge facility so as to be available at all times to operating personnel.

6. The Discharger shall notify this Board within 24 hours by telephone of any adverse condition as a result from this discharge; written confirmation shall follow within five working days. This information shall be confirmed in the next monitoring report. In addition, the report shall also include the reasons for the violations or adverse conditions, the steps being taken to correct the problem (including dates thereof), and the steps being taken to prevent a recurrence.

7. This Order does not alleviate the responsibility of the Discharger to obtain other necessary local, state, and federal permits to construct facilities necessary for compliance with this Order; nor does this Order prevent imposition of additional standards, requirements, or conditions by any other regulatory agency.

8. Any discharge of wastewater at any point other than specifically described in this Order is prohibited, and constitutes a violation of the Order.

9. This Order may be modified, revoked and reissued, or terminated in accordance with the provisions of 40 CFR Part 122.44, 122.62, 122.63, 122.64, 125.62, and 125.64. and/or for cause(s) including but not limited to:

   a) Violation of any term or condition contained in this Order;
   b) Obtaining this Order by misrepresentation, or failure to disclose all relevant facts; and
   c) A change in any condition that requires elimination of the authorized discharge.

10. The Discharger shall furnish, within a reasonable time, any information the Regional Board may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this Order. The Discharger shall also furnish to the Regional Board, upon request, copies of records required to be kept under this Order.

V. Expiration Date

This Order expires on October 24, 2006.

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

VI. Rescission

Order No. 99-062, adopted by this Regional Board on July 8, 1999, is hereby rescinded.

I, Dennis A. Dickerson, Executive Officer, do hereby certify that the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, Los Angeles Region, on October 25, 2001.

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DENNIS A. DICKERSON
Executive Officer

/WXT