# STATE OF CALIFORNIA

# CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD LOS ANGELES REGION 320 W. 4<sup>th</sup> Street, Suite 200, Los Angeles

# FACT SHEET WASTE DISCHARGE REQUIREMENTS for EXXON MOBIL OIL CORPORATION (Former Mobil Station #18-LDM)

NPDES Permit No.: CA0064262 Public Notice No.: 05-046

FACILITY ADDRESS
12054 Wilshire Boulevard
Los Angeles, CA 90025

FACILITY MAILING ADDRESS 3700 W. 190<sup>th</sup> Street, TPT-2 #5 Torrance, CA 90509 Contact: Tim Strawn Telephone: (310) 212-4379

# I. Public Participation

The California Regional Water Quality Control Board, Los Angeles Region (Regional Board) is considering the issuance of waste discharge requirements (WDRs) that will serve as a National Pollutant Discharge Elimination System (NPDES) permit for the above-referenced facility. As an initial step in the WDR process, the Regional Board staff has developed tentative WDRs. The Regional Board encourages public participation in the WDR adoption process.

#### A. Written Comments

The staff determinations are tentative. Interested persons are invited to submit written comments concerning these tentative WDRs. Comments should be submitted either in person or by mail to:

Executive Officer
California Regional Water Quality Control Board
Los Angeles Region
320 West 4<sup>th</sup> Street, Suite 200
Los Angeles, CA 90013

To be fully responded to by staff and considered by the Regional Board, written comments should be received at the Regional Board offices by 5:00 p.m. on August 15, 2005.

F-1 Revised: September 1, 2005

July 18, 2005

## B. Public Hearing

The Regional Board will hold a public hearing on the tentative WDRs during its regular Board meeting on the following date and time and at the following location:

Date: September 1, 2005

Time: 9:00 A.M.

Location: City of Agoura Hills

30001 Ladyface Court Agoura Hills, California

Interested persons are invited to attend. At the public hearing, the Regional Board will hear testimony, if any, pertinent to the discharge, WDRs, and permit. Oral testimony will be heard; however, for accuracy of the record, important testimony should be in writing.

Please be aware that dates and venues may change. Our web address is <a href="http://www.waterboards.ca.gov/losangeles/">http://www.waterboards.ca.gov/losangeles/</a> where you can access the current agenda for changes in dates and locations.

## C. Waste Discharge Requirements Appeals

Any aggrieved person may petition the State Water Resources Control Board to review the decision of the Regional Board regarding the final WDRs. The petition must be submitted within 30 days of the Regional Board's action to the following address:

State Water Resources Control Board ATTN: Elizabeth Miller Jennings, Senior Staff Counsel 1001 I Street, 22<sup>nd</sup> Floor Sacramento, CA 95814

### D. Information and Copying

The Report of Waste Discharge (ROWD), related documents, tentative effluent limitations and special conditions, comments received, and other information are on file and may be inspected at 320 West 4<sup>th</sup> Street, Suite 200, Los Angeles, California 90013, at any time between 8:30 a.m. and 4:45 p.m., Monday through Friday. Copying of documents may be arranged through the Los Angeles Regional Board by calling (213) 576-6600.

## E. Register of Interested Persons

Any person interested in being placed on the mailing list for information regarding the WDRs and NPDES permit should contact the Regional Board, reference this facility, and provide a name, address, and phone number.

#### II. Introduction

Exxon Mobil Oil Corporation (hereinafter Mobil or Discharger) discharges treated groundwater from the former Mobil Station #18-LDM Remediation System (MSRS) under WDRs and a NPDES permit contained in Order No. 99-038 (NPDES No. CA0064262). Order No. 99-038 was adopted by the Regional Board on May 27, 1999 and expired on April 10, 2004.

In accordance with the existing permit, Mobil was required to file a Report of Waste Discharge and apply for renewal of its WDRs and NPDES permit for discharge of treated groundwater to surface waters on or before October 13, 2003. Mobil filed a Report of Waste Discharge and applied for renewal of its WDRs and NPDES permit on March 30, 2004. Pursuit to Section 122.6 of Title 40, Code of Federal Regulations (40 CFR) and Section 2235.4 of Title 23, California Code of Regulations (CCR), which states that an expired permit continues in force until the effective date of a new permit, provided that the permittee has made a timely submittal of a complete application for a new permit; Order No 99-038 continues in force until a new permit is adopted. The tentative Order is the reissuance of the WDRs and NPDES permit for discharge of treated groundwater from MSRS. A NPDES permit compliance evaluation inspection (CEI) was conducted at Mobil on October 25, 2004. The CEI conducted also served as a site visit to observe operations, verify conditions, and collect additional data to develop permit limitations and conditions.

# III. Description of Facility and Waste Discharge

Former Mobil Station #18-LDM and MSRS are located adjacent to the Arcadia Wellfield of the City of Santa Monica (CSM). The former Mobile Station #18-LDM operations historically consisted of retail gasoline sales, and automobile repair and maintenance. The CSM operated the Arcadia Wellfield and previously operated the Santa Monica Water Treatment Plant (SMWTP) located in Los Angeles. The Arcadia Wellfield has two municipal water supply wells (Arcadia Wells # 4 and #5) that supplied water to SMWTP.

The activities at former Mobil Station #18-LDM have contaminated the groundwater in and around the site. The station operations reportedly began in 1967 and ended in 1997. In September 1987, three groundwater monitoring wells were installed and total petroleum hydrocarbons as gasoline (TPH<sub>G</sub>) were detected in the soil samples taken during well installation. A TPH<sub>G</sub> sheen was observed in one of the wells. In September 1996, methyl tertiary butyl ether (MTBE) was detected in an onsite well at a concentration of 100,000 micrograms per liter ( $\mu$ g/L). This concentration exceeds the Primary Maximum Contaminant Level (MCL) of 13  $\mu$ g/L, and the Secondary MCL of 5  $\mu$ g/L.

Since 1996, the Arcadia Wellfield has been shut down due to contamination of the groundwater with MTBE. The MTBE originated from the adjacent former Mobil Station #18-LDM. On January 7, 1998, this Regional Board issued Cleanup and Abatement Order No. 98-001 directing Mobil to take cleanup actions.

The remedial approach for the site includes the pumping of water from wells in three water bearing zones – Shallow Aquifer, Production Aquifer, and Lower Aquifer. Two groundwater remediation systems are in operation at MSRS: (1) the Carbon Adsorption Treatment System (CATS); and (2) the Production Aquifer Remediation System (PARS). The remediation systems are operated to remediate the MTBE-impacted aquifers, and to restore the production aquifer at the Arcadia Well Field to its designed beneficial use of municipal and domestic water supply. The cleanup has been undertaken to comply with the California Department of Health Services (DHS) policy guideline memorandum 97-005. The remediation systems pump and treat the contaminated groundwater before discharge. The remediation systems are designed and operated by KOMEX H2O Science Inc., an environmental consulting and engineering company.

The CATS treats and discharges the combined groundwater flow pumped from the Shallow Aguifer and Vadose Remediation System (SAVRS) and Lower Aguifer Remediation System (LARS) at the site. The CATS consists of a 1,000-gallon batch tank, two bag filters, and three 5,000-lb granular activated carbon (GAC) vessels. SAVRS consists of 12 groundwater extraction wells that pump 5,760 gallons per day (gpd) from the shallow aquifer. Mobil has installed SAVRS to contain the migration of contaminated groundwater and to cleanup the shallow aguifer. The LARS has six groundwater wells that pump 23,040 gpd from the lower aquifer. In addition to groundwater, backwash wastewater from the PARS system and storm water within the bermed areas of the CATS and the PARS are also treated in the CATS. Approximately 30,240 gpd of combined groundwater, wastewater, and storm water are treated in the CATS and previously were discharged to the storm drain. The CATS began discharging treated groundwater to the storm drain on June 7, 2000. The treatment system is also designed to reiniect a portion of the treated groundwater into the Shallow Aquifer at approximately 8,640 gpd. The reinjection of treated groundwater in the Shallow Aquifer began recently. In the 2<sup>nd</sup> Quarter 2004, approximately 670,000 gallons of treated groundwater was reinjected in the Shallow Aquifer. Mobil is authorized to re-inject treated groundwater under a general WDR (Order No. R4-2002-0030) which was issued to the facility on March 5, 2004. groundwater from the CATS system will not be used for drinking water supply water since the aguifers that the groundwater comes from are not drinking water aguifers. Currently, a portion of the treated groundwater from the CATS (Outfall 001A) is reinjected and a portion of the treated groundwater is discharged through the SMWTP to Outfall 001, a storm drain at Saltair Avenue between Wilshire Boulevard and Texas Avenue.

The PARS effluent is discharged through Discharge Serial No. 001B. The Production Aquifer Remediation System (PARs) is designed to remove primarily MTBE and other pollutants from groundwater pumped from the City of Santa Monica Wells Arcadia #4 and #5 before distribution to the public. In the PARS, approximately 432,000 gpd of groundwater is treated in four 24,000-lb GAC units. Treated groundwater was discharged to the storm drain beginning on May 17, 2000. Pursuant to the DHS permit amendment dated May 15, 2002, the PARS began discharging treated groundwater to the SMWTP on May 23, 2002. No treated water from the PARS has been discharged to the storm drain since May 23, 2002. The water is pumped over to the SMWTP where it is distributed to customers with water purchased from the Metropolitan Water Districts of Southern California. Although no water is currently discharged from the PARS to the storm drain, the application submitted by the facility indicated that the Discharger intends

to discharge from PARS to the storm drain in future. The backwash wastewater from the PARS system is discharged at a rate of 7,500 gallons per month to an on-site 20,000-gallon backwash holding tank for settling. The wastewater is then directed to the CATS for treatment. Wastewater treated by the CATS system is discharged to the storm drain.

The tentative Order authorizes the discharge of treated groundwater from the CATS and the PARS of MSRS to the storm drain through Discharge Serial Nos. 001A and 001B, respectively. According to the permit renewal application, 30,240 gpd and 432,000 gpd of treated groundwater are discharged to the storm drain from the CATS and the PARS, respectively. The discharge through Discharge Serial Nos. 001A and 001B combine and then discharged to the storm drain system through Discharge Serial No. 001. The discharge enters the storm drain system located at Saltair Avenue between Wilshire Boulevard and Texas Avenue (Latitude 34° 02' 34" North, Longitude 118° 27' 50" West) via the storm drain connection at the SMWTP. The water then flows through various storm drains until it empties into the Sawtelle Channel, which in turn empties into Ballona Creek, a water of the United States. The Regional Board and the United States Environmental Protection Agency (U.S. EPA) have classified the facility as a minor discharge.

The discharge through Discharge Serial No. 001, as reported by the Discharger in the permit renewal application, is characterized below:

Pollutant (units)	Daily Maximum
Biochemical Oxygen Demand (BOD) (mg/L) 1	0.5
pH (standard units)	8.3
Total Suspended Solids (TSS) (mg/L)	10
Ammonia (mg/L)	0
Chemical Oxygen Demand (COD) (mg/L)	NR <sup>2</sup>
Flow (gallons per minute)	21
Temperature (summer) (°C)	28
Temperature (winter) (℃)	22
Total Organic Carbon (TOC) (mg/L)	NR <sup>2</sup>

<sup>&</sup>lt;sup>1</sup> 5-day BOD at 20 ℃

Effluent limitations contained in the existing Order (No. 99-038) for Discharge Serial No. 001 and the daily monitoring data submitted in accordance to the Monitoring and Reporting Program (MRP) of the existing Order are presented in the following Table.

	Discharge Limitations  30-Day Daily Average Maximum		Range of Reported Values	
Pollutant (units)			CATS Effluent <sup>1</sup>	PARS Effluent <sup>2</sup>
i onatani (anno)			(June 2000 – October 2004)	(May 2000 – June 2002)
BOD (mg/L) <sup>3</sup>			1.0 - 10	1.0 – 2.0
Oil and Grease (mg/L)	10	15	0.13 - 22.2	0.12 - 0.40
pH (standard units)	Between 6.0 and 9.0		6.6 – 8.5	6.54 - 7.3
Total Suspended Solids (TSS) (mg/L)	50	150	1.0 - 31	2.1 - 19

<sup>&</sup>lt;sup>2</sup> Not Reported

	Discharge Limitations		Range of Reported Values		
Pollutant (units)	Discharge	Limitations	CATS Effluent <sup>1</sup>	PARS Effluent <sup>2</sup>	
r ondtain (anno)	30-Day Average	Daily Maximum	(June 2000 – October 2004)	(May 2000 – June 2002)	
Lead (μg/L)		50	3.0 - 18	ND <sup>4</sup>	
Benzene (μg/L)		1.0	ND <sup>4</sup>	ND <sup>4</sup>	
1,1-Dichloroethane (1,1-DCA) (µg/L)		5.0	ND <sup>4</sup>	ND <sup>4</sup>	
1,1-Dichloroethylene (1,1-DCE) (μg/L)		6.0	ND <sup>4</sup>	ND <sup>4</sup>	
Ethylbenzene (μg/L)		700	ND <sup>4</sup>	ND <sup>4</sup>	
Tetrachloroethylene (μg/L)		5.0	ND <sup>4</sup>	ND <sup>4</sup>	
Toluene (μg/L)		150	ND <sup>4</sup>	ND <sup>4</sup>	
1,1,1-Trichloroethane (1,1,1-TCA) (µg/L)		200	ND <sup>4</sup>	ND <sup>4</sup>	
Trichloroethylene (µg/L)		5.0	ND <sup>4</sup>	ND <sup>4</sup>	
Acute Toxicity (% survival)		5	95 - 100	100	
Di-isopropyl Ether (DIPE) (μg/L)			ND <sup>4</sup>	ND <sup>4</sup>	
Ethylene Dibromide (μg/L)		0.050	ND <sup>4</sup>	ND <sup>4</sup>	
Ethyl Tertiary Butyl Ether (ETBE) (µg/L)			ND <sup>4</sup>	ND <sup>4</sup>	
Flow, Average (gallons per day)			12,945-46,464	$409,320 - 552,032^6$	
Hydrocarbons, Total Petroleum (μg/L)		100	ND <sup>4</sup>	63 – 99	
Methyl Tertiary Butyl Ether (MTBE) (μg/L)		13	0.36 - 2	0.14 - 0.19	
Settleable Solids (mL/L)	0.1	0.30	ND <sup>4</sup>	ND <sup>4</sup>	
Tertiary Amyl Methyl Ether (TAME) (µg/L)			ND <sup>4</sup>	ND <sup>4</sup>	
Tertiary Butyl Alcohol (TBA) (μg/L)		150	10 – 42	0.51 – 4.1	
Turbidity (NTU)	50	150	0.07 - 42	0.06 – 1.6	
Xylene (μg/L)		1750	0.20 - 0.44	ND <sup>4</sup>	

Same as Discharge Serial No. 001A in the tentative permit.

The available effluent monitoring data indicate that the Discharger did not exceed the 30-day average or the maximum daily effluent limitations in the existing Order for any of the regulated pollutants except oil and grease. The reported oil and grease concentration for the CATS effluent for November 6, 2002 is 22.2 mg/L, which is higher than the effluent limitations of the existing permit (15 mg/L).

All the available data for CATS and PARS effluent were summarized. The data included the daily monitoring data, electronic and hardcopy data submitted with the NPDES application, and other additional data submitted by the facility. The CATS effluent data are available from June 2000 to October 2004 and the PARS effluent data are available from May 2000 to June 2002. A summary of the pollutants detected in the CATS and PARS effluent is shown below.

<sup>&</sup>lt;sup>2</sup> Same as Discharge Serial No. 001B in the tentative permit.

<sup>&</sup>lt;sup>3</sup> 5-day biochemical oxygen demand at 20 ℃

<sup>&</sup>lt;sup>4</sup> ND = not detected

<sup>&</sup>lt;sup>5</sup> Average survival in effluent for any three consecutive 96-hour static or continuous flow bioassay tests shall be at least 90%, with no single test producing less than 70% survival.

<sup>&</sup>lt;sup>6</sup> The facility reported 0 gpd for January 2001 and February 2001. Discharge ceased on May 23, 2002.

	Maximum Detected Value			
Pollutant (units)	CATS Effluent	PARS Effluent		
Fonutant (units)	Discharge Serial No. 001A (June 2000 – October 2004)	Discharge Serial No. 001B (May 2000 – June 2002)		
BOD (mg/L) <sup>1</sup>	10	2		
Oil and Grease (mg/L)	22	0.40		
pH (standard units)	8.5	7.3		
Total Suspended Solids (TSS) (mg/L)	31	19		
Arsenic (μg/L)	ND <sup>2</sup>	6.0		
Copper (µg/L)	ND <sup>2</sup>	13		
Lead (μg/L)	18	ND <sup>2</sup>		
Zinc (μg/L)	59	27		
Trichloroethylene (µg/L)	1.2	ND <sup>2</sup>		
Butylbenzyl Pthalate (μg/L)	ND <sup>2</sup>	17		
Naphthalene (μg/L)	16	ND <sup>2</sup>		
Acetone	7.1	NR <sup>3</sup>		
Boron	171	NR <sup>3</sup>		
Chloride (mg/L)	126	NR <sup>3</sup>		
Dissolved Solids, Total (mg/L)	818	NR <sup>3</sup>		
Flow, Average (gallons per day)	46,464	552,032 <sup>4</sup>		
Hydrocarbons, Petroleum (μg/L)	ND <sup>2</sup>	99		
Methyl Tertiary Butyl Ether (MTBE) (μg/L)	2.0	0.19		
Sulfate (mg/L)	182	NR <sup>3</sup>		
Tertiary Butanol (μg/L)	NR <sup>3</sup>	1.3		
Tertiary Butyl Alcohol (TBA) (μg/L)	42	4.1		
1,2,4-Trimethylbenzene (μg/L)	0.2	ND <sup>2</sup>		
Turbidity (NTU)	42	1.6		
Xylene (μg/L)	0.44	ND <sup>2</sup>		

<sup>&</sup>lt;sup>1</sup>5-day biochemical oxygen demand at 20 °C

The following violations were observed during the compliance evaluation inspections conducted on October 25, 2004:

- The daily monitoring reports (DMRs) that were submitted for June through November 2000 were signed by a technical consultant (Komex). According to Part 19 of Standard Provisions the consultant is not authorized to sign the reports. No documentation was available at the time to verify that the consultant is a duly authorized representative of a person designated by Part 19 of the Standard Provisions.
- The Discharger did not monitor for all the parameters specified in Monitoring and Reporting Program CI-8041. The Discharger did not conduct monthly monitoring for di-isopropyl ether, ether tertiary butyl ether, and tertiary amyl methyl ether. Additional information submitted by the Discharger indicates that the analyses for the aforementioned analytes were completed and are included in the detailed summary of the analyses performed. The summary Table, which was originally reviewed, did not include data for these analytes since they did not have effluent limits.

<sup>&</sup>lt;sup>2</sup> ND = not detected

<sup>&</sup>lt;sup>3</sup>NR = not reported

<sup>&</sup>lt;sup>4</sup> Discharge ceased on May 23, 2002.

• The Discharger reported a pH value in the DMRs from the samples analyzed by the contract lab. This is in violation of the requirements of 40 CFR 136.3 which requires pH samples be analyzed immediately. The permit indicated that the analysis must be completed by an accredited laboratory. Therefore the analysis was not completed immediately, which is what is stipulated in 40 CFR 136.3. The analysis protocol that has been implemented by Komex, on behalf of Exxon Mobil, requires that the field measurement be taken immediately using a direct reading instrument and also requires that the calibration records for the instrument utilized be submitted along with the DMR. This protocol is acceptable. The Discharger also submits the same sample to the laboratory for analysis. Both analyses will be reported in the DMRs submitted to the Regional Board.

Identified violations are being evaluated for appropriate enforcement actions.

## IV. Applicable Plans, Policies, Laws, and Regulations

The requirements contained in the tentative Order are based on the requirements and authorities contained in the following:

- 1. The federal Clean Water Act (CWA). The federal Clean Water Act requires that any point source discharges of pollutants to a water of the United States must be done in conformance with an NPDES permit. NPDES permits establish effluent limitations that incorporate various requirements of the CWA designed to protect water quality.
- 2. Code of Federal Regulations, Title 40 (40 CFR) Protection of Environment, Chapter I, Environmental Protection Agency, Subchapter D, Water Programs, Parts 122-125 and Subchapter N, Effluent Guidelines. These CWA regulations provide effluent limitations for certain dischargers and establish procedures for NPDES permitting, including how to establish effluent limitations for certain pollutants discharged by Mobil from former Mobil Station #18-LDM facility.
- 3. On June 13, 1994, the Regional Board adopted a revised Water Quality Control Plan for the Coastal Watersheds of Los Angeles and Ventura Counties (Basin Plan). The Basin Plan contains water quality objectives and beneficial uses for inland surface waters and for the Pacific Ocean. Water quality objectives include narrative and numeric water quality criteria for several chemicals and parameters. The receiving water body for the permitted discharge covered by this permit is Ballona Creek. The Basin Plan contains beneficial uses and water quality objectives for Ballona Creek. The beneficial uses are listed below.

#### **Ballona Creek**

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

Potential Uses: Municipal and domestic water supply, warm freshwater habitat,

and water contact recreation.

- 4. 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.
- 5. 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.
- 6. 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 40 CFR section 131.38 (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<sup>-6</sup>), for all priority toxic pollutants regulated as carcinogens. The CTR also allows for a schedule of compliance not to exceed five years from the date of permit renewal for an existing discharger if the Discharger demonstrates that it is infeasible to promptly comply with effluent limitations derived from the CTR criteria. The CTR's compliance schedule provisions sunseted on May 17, 2005. After this date, the provisions of the *Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California* (State Implementation Policy or SIP) allow for compliance schedules not to exceed five years from issuance or past May 17, 2010, whichever is sooner.
- 7. On March 2, 2000, State Board adopted the 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 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 limitations (WQBELs) and to calculate the effluent limitations. The CTR criteria for the protection of aquatic freshwater organisms or human health for consumption of organisms, whichever is more stringent, are used to develop the effluent limitations in this Order to protect the beneficial uses of Ballona Creek.

- 8. 40 CFR 122.44(d)(1)(vi)(A) requires the establishment of numeric effluent limitations to attain and maintain applicable narrative water quality criteria to protect the designated beneficial uses. Where numeric water quality objectives have not been established in the Basin Plan, 40 CFR 122.44(d) specifies that WQBELs may be set based on U.S. EPA criteria and supplemented, where necessary, by other relevant information to attain and maintain narrative water quality criteria to fully protect designated beneficial uses.
- 9. State and Federal antibacksliding and antidegradation policies require that Regional Board take 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 CWA and in 40 CFR 122.44(l). Those provisions require a reissued permit to be as stringent as the existing permit with some exceptions where effluent limitations may be relaxed.
- 10. Effluent limitations are established in accordance with sections 301, 304, 306, and 307 of the federal CWA, and amendments thereto. These requirements, as they are met, will maintain and protect the beneficial uses of Ballona Creek.
- 11. Existing waste discharge requirements are contained in the existing Order No. 99-038, adopted by the Regional Board on May 27, 1999. In some cases, permit conditions (effluent limitations and other special conditions) established in the existing waste discharge requirements have been carried over to this permit.

# V. Regulatory Basis for Effluent Limitations

The CWA requires point source discharges to control the amount of conventional, nonconventional, and toxic pollutants that are discharged into the waters of the United States. The control of the discharge of pollutants is established through NPDES permits that contain effluent limitations. The CWA establishes two principal bases for effluent limitations. First, dischargers are required to meet technology-based effluent limitations that reflect the best controls available considering costs and economic impact. Second, they are required to meet WQBELs that are developed to protect applicable designated beneficial uses of the receiving water.

The CWA requires that technology-based effluent limitations be established based on several levels of control:

- Best practicable treatment control technology (BPT) is based on the average of the best performance by plants within an industrial category or subcategory. BPT standards apply to toxic, conventional, and nonconventional pollutants.
- Best available technology economically achievable (BAT) represents the best existing performance of treatment technologies that are economically achievable within an industrial point source category. BAT standards apply to toxic and nonconventional pollutants.
- Best conventional pollutant control technology (BCT) is a standard for the control from existing
  industrial point sources of conventional pollutants including BOD, TSS, fecal coliform, pH, and
  oil and grease. The BCT standard is established after considering the "cost reasonableness"
  of the relationship between the cost of attaining a reduction in effluent discharge and the
  benefits that would result, and also the cost effectiveness of additional industrial treatment
  beyond BPT.
- New source performance standards (NSPS) that represent the best available demonstrated control technology standards. The intent of NSPS guidelines is to set limitations that represent state-of-the-art treatment technology for new sources.

The CWA requires U.S. EPA to develop effluent limitations, guidelines and standards (ELGs) representing application of BPT, BCT, BAT, and NSPS. Section 402(a)(1) of the CWA and 40 CFR 125.3 of the NPDES regulations authorize the use of Best Professional Judgement (BPJ) to derive technology-based effluent limitations on a case-by-case basis where ELGs are not available for certain industrial categories and/or pollutants of concern.

If a reasonable potential exists to exceed water quality standards for pollutants in a discharge, WQBELs are also required under 40 CFR 122.44(d)(1)(i). WQBELs are established after determining that technology-based limitations are not stringent enough to ensure that state water quality standards are met for the receiving water. WQBELs are based on the designated use of the receiving water, water quality criteria necessary to support the designated uses, and the state's antidegradation policy. For discharges to inland surface waters, enclosed bays, and estuaries, the SIP establishes specific implementation procedures for determining reasonable potential and establishing WQBELs for priority pollutant criteria promulgated by U.S. EPA through the CTR and NTR, as well as the Basin Plan.

There are several other specific factors affecting the development of limitations and requirements in the tentative Order. These are discussed as follows:

#### A. Pollutants of Concern

The CWA requires that any pollutant that may be discharged by a point source in quantities of concern must be regulated through an NPDES permit. Further, the NPDES regulations

and SIP require regulation of any pollutant that (1) causes; (2) has the reasonable potential to cause; or (3) contributes to the exceedance of a receiving water quality criteria or objective. The SIP includes provisions for priority pollutant criteria promulgated by U.S. EPA in the CTR and NTR, and for those priority pollutants outlined in the Basin Plan.

Mobil Station #18-LDM operation historically consisted of retail gasoline sales, and automobile repair and maintenance. These activities have contaminated the groundwater in and around the site with metals, MTBE, petroleum products, volatile organic compounds (VOCs), and other organic compounds. Therefore, lead, total petroleum hydrocarbons, benzene, toluene, ethylbenzene, xylene, ethylene dibromide, MTBE, tertiary butyl alcohol (TBA), tetrachloroethylene, trichloroethylene, 1,1,1-trichloroethane (1,1,1-TCA), 1,1-dichloroethane (1,1-DCA), 1,1-dichloroethylene (1,1-DCE), which are regulated in the existing permit, are pollutants of concern for this type of discharge.

In addition, for this type of discharge, total suspended solids (TSS), settleable solids, and turbidity are pollutants of concern. Materials may be present in the untreated groundwater water that may contribute solids. Leaks in the seals and equipment of the groundwater treatment system may contribute to oil and grease in the discharge. The existing Order established effluent limitations for these pollutants. Effluent limitations for these parameters have been established in this permit.

Temperature, pH and toxicity may adversely affect aquatic life in receiving waters, and therefore, are pollutants of concern for waste water discharges from this facility. Consistent with the Basin Plan, effluent limitations for temperature, pH and toxicity are added in the tentative Order.

# B. Technology-Based Effluent Limitations

No ELG has been established for discharge of treated groundwater. Section 402(a)(1) of the CWA and 40 CFR 125.3 of the NPDES regulations authorize the use of BPJ to derive technology-based effluent limitations on a case-by-case basis for facilities for which ELGs are not available. Except for the limitation of lead for discharge of effluent from CATS, effluent limitations of all the regulated pollutants in the existing permit have been carried over to the tentative permit based on BPJ.

#### C. Water Quality-Based Effluent Limitations

As specified in 40 CFR 122.44(d)(1)(i), permits are required to include WQBELs for toxic pollutants (including toxicity) that are or may be discharged at levels which cause, have reasonable potential to cause, or contribute to an excursion above any state water quality standard. The process for determining reasonable potential and calculating WQBELs when necessary is intended to protect the designated uses for the receiving water as specified in the Basin Plan, and achieve applicable water quality objectives and criteria (that are contained in other state plans and policies, or U.S. EPA water quality criteria contained

in the CTR and NTR). The specific procedures for determining reasonable potential, and if necessary for calculating WQBELs, are contained in the SIP.

The CTR contains both saltwater and freshwater criteria. According to 40 CFR 131.38(c)(3), freshwater criteria apply at salinities of 1 part per thousand (ppt) and below at locations where this occurs 95 percent or more of the time; saltwater criteria apply at salinities of 10 ppt and above at locations where this occurs 95 percent or more of the time; and at salinities between 1 and 10 ppt the more stringent of the two apply. The receiving water is Ballona Creek, which is an inland surface water. The CTR criteria for the protection of aquatic freshwater organisms or human health for consumption of organisms only, whichever is more stringent, apply to discharges to the receiving water.

Some water quality criteria are hardness and pH dependent. The Discharger provided hardness and pH data for the receiving water as part of their required CTR monitoring. The lowest hardness value of 270 mg/L and the lowest pH of 9.08, representing the most conservative approach for establishing criteria, were used for evaluation of reasonable potential.

#### D. Mass-Based Effluent Limitations

Generally, mass-based effluent limitations ensure that proper treatment, and not dilution, is employed to comply with the final effluent concentration limitations. 40 CFR 122.45(f)(1) requires that all permit limits, standards or prohibitions be expressed in terms of mass units except under the following conditions:

- a. for pH, temperature, radiation or other pollutants that cannot appropriately be expressed by mass limits;
- b. when applicable standards or limitations are expressed in terms of other units of measure; or
- c. if in establishing technology-based permit limits on a case-by-case basis limits based on mass are infeasible because the mass or pollutant cannot be related to a measure of production. The limitations, however, must ensure that dilution will not be used as a substitute for treatment.

The Report of Waste Discharge indicates that the expected average discharge rate of wastewater from CATS through Discharge Serial No. 001A is 30,240 gpd and from PARS through Discharge Serial No. 001B is 432,000 gpd. Therefore, the tentative mass-based limitations for Discharge Serial No. 001A and Discharge Serial No. 001B are based on a flow of 30,240 gpd (0.03 MGD) and 432,000 gpd (0.432 MGD), respectively. The mass-based effluent limitations are established using the following formula:

Mass (lbs/day) = Flow rate (MGD) x Effluent Limitation (mg/L) x 8.34 where:

Mass (lbs/day) = mass limitation for a pollutant Effluent limitation (mg/L) = concentration limitation for a pollutant

#### VI. Derivation of Effluent Limitations

# A. Reasonable Potential Analysis (RPA)

The Regional Board conducts a reasonable potential analysis for each priority pollutant with an applicable criterion or objective to determine if a WQBEL is required in the permit. The Regional Board analyzes effluent data to determine if a pollutant in a discharge has a reasonable potential to cause or contribute to an excursion above a state water quality standard. For all parameters that have a reasonable potential, numeric WQBELs are required. The RPA considers water quality objectives outlined in the CTR, NTR, as well as the Basin Plan. To conduct the RPA, the Regional Board must identify the maximum observed effluent concentration (MEC) for each pollutant, based on data provided by the Discharger.

Section 1.3 of the SIP provides the procedures for determining reasonable potential to exceed applicable water quality criteria and objectives. The SIP specifies three triggers to complete a RPA:

- 1) <u>Trigger 1</u> If the MEC is greater than or equal to the CTR water quality criteria or applicable objective (C), a limitation is needed.
- 2) Trigger 2 If MEC<C and background water quality (B) > C, a limitation is needed.
- 3) <u>Trigger 3</u> If other related information such as CWA 303(d) listing for a pollutant, discharge type, compliance history, etc. indicates that a WQBEL is required.

Sufficient effluent and ambient data are needed to conduct a complete RPA. If data are not sufficient, the Discharger will be required to gather the appropriate data for the Regional Board to conduct the RPA. Upon review of the data, and if the Regional Board determines that WQBELs are needed to protect the beneficial uses, the permit will be reopened for appropriate modification.

The Regional Board issued a letter on March 4, 2002 that required the Discharger to monitor for priority pollutants regulated in the CTR. In response to the letter, the facility submitted monitoring data of priority pollutants for PARS and CATS effluent, and Ballona Creek for the year 2002. The CATS effluent data are available for all

four Quarters of 2002, while the PARS effluent data are available for the First and Second Quarter of 2002. The Ballona Creek data are available for the Second, Third, and Fourth Quarter of 2002. In addition, the facility submitted monitoring data of CATS effluent from June 2000 to October 2004, and PARS effluent from May 2000 to June 2002. All the available data were used to perform the RPA for discharges from CATS and PARS for the priority pollutants. Based on the two RPAs, there is reasonable potential to exceed applicable water quality standards for lead for discharge of effluent from CATS through Discharge Serial No. 001A only. Lead demonstrated reasonable potential based on concentrations detected in CATS effluent samples collected in October 2001.

# B. Calculating WQBELs

If a reasonable potential exists to exceed applicable water quality criteria or objectives, then a WQBEL must be established in accordance with one or more of the three procedures contained in Section 1.4 of the SIP. These procedures include:

- 1) If applicable and available, use of the Wasteload Allocation (WLA) established as part of a Total Maximum Daily Load (TMDL).
- 2) Use of a steady-state model to derive maximum daily effluent limitations (MDELs) and average monthly effluent limitations (AMELs).
- 3) Where sufficient effluent and receiving water data exist, use of a dynamic model, which has been approved by the Regional Board.

The procedure based on the steady-state model, available in Section 1.4 of the SIP, was used to derive the WQBELs for lead for the discharge through Discharge Serial No. 001A. Attachment A shows the calculations for derivation of the effluent limitation for lead for the CATS effluent.

#### C. Impaired Water Bodies in 303 (d) List

Section 303(d) of the CWA requires states to identify specific water bodies where water quality standards are not expected to be met after implementation of technology-based effluent limitations on point sources. For all 303(d)-listed water bodies and pollutants, the Regional Board plans to develop and adopt TMDLs that will specify WLAs for point sources and load allocations (LAs) for non-point sources, as appropriate.

The U.S. EPA approved the State's 2002 303(d) list of impaired water bodies on July 25, 2003. Certain receiving waters in the Los Angeles County Watersheds do not fully support beneficial uses and therefore have been classified as impaired on the 2002 303(d) lists and have been scheduled for TMDL development.

The 2002 303(d) list classifies Ballona Creek as impaired. According to the 2002 303(d) list, Ballona Creek is impaired for cadmium (sediment), ChemA (tissue), 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 WLAs for Permittees and Co-Permittees of the Los Angeles County Municipal Storm Water Permit that are located within (entirely or partially) the Ballona Creek Watershed. WLAs are based on a phased reduction from the estimated current discharge over a 10-year period until the final WLA (currently set at zero) is met. Because the discharge from this facility is primarily 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.

During the July 7, 2005, Regional Board Hearing, the Board adopted a TMDL to reduce metals in Ballona Creek (Order No. R05-007) and one to address toxic pollutants in the Ballona Creek Estuary (Order No. R05-008). These TMDLs will be forwarded to State Board, the Office of Administrative Law and U.S. EPA for approval prior to implementation in NPDES permits.

Order No. R05-007 includes Waste Load Allocations (WLA) dry-weather and wetweather discharges of copper, lead, selenium and zinc for NPDES permittees. Order No R05-008 includes WLAs for cadmium, copper, lead, silver, zinc, chlordane, DDT, Total PCBs, and total PAH in sediment in the Ballona Creek estuary and its tributaries.

## D. Whole Effluent Toxicity

Whole effluent toxicity (WET) protects the receiving water quality from the aggregate toxic effect of a mixture of pollutants in the effluent. WET tests measure the degree of response of exposed aquatic test organisms to an effluent. The WET approach allows for protection of the narrative "no toxics in toxic amounts" criterion or implementing numeric criteria for toxicity. There are two types of WET tests: acute and chronic. An acute toxicity test is conducted over a short time period and measures mortality. A chronic toxicity test is conducted over a longer period of time and measures mortality, reproduction, and growth.

The Basin Plan specifies a narrative objective for toxicity, requiring that all waters be maintained free of toxic substances in concentrations that are lethal to or produce other detrimental response on aquatic organisms. Detrimental response includes but is not limited to decreased growth rate, decreased reproductive success of resident or indicator species, and/or significant alterations in population, community ecology, or receiving water biota. In accordance with the Basin Plan, acute toxicity limitations dictate that the average survival in undiluted effluent for any three consecutive 96-

hour static or continuous flow bioassay tests shall be at least 90%, with no single test having less than 70% survival. The existing permit contains acute toxicity limitations and monitoring requirements. The results of acute toxicity analyses for Discharge Serial No. 001 indicate 95%-100% survival for the period from June 2000 to August 2004. Consistent with Basin Plan requirements, the tentative Order includes acute toxicity limitations and monitoring requirements.

In addition to the Basin Plan requirements, Section 4 of the SIP states that a chronic toxicity effluent limitation is required in permits for all discharges that will cause, have the reasonable potential to cause, or contribute to chronic toxicity in receiving waters. Therefore, in accordance with the SIP, the Discharger will be required to conduct chronic toxicity testing in order to determine reasonable potential and establish WQBELs as necessary. In addition, the Order includes a chronic testing trigger hereby defined as an exceedance of the monthly median of 1.0 toxic units chronic (TU<sub>c</sub>) in a critical life stage test for 100% effluent. If the chronic toxicity of the effluent exceeds 1.0 TU<sub>c</sub>, the Discharger will be required to immediately implement the Initial Investigation Toxicity Reduction Evaluation (TRE) Workplan and conduct accelerated chronic toxicity testing according to Monitoring and Reporting Program No. 8041 (MRP), Item IV.D.1. If the results of two of the six accelerated tests exceed 1.0 TU<sub>c</sub>, the Discharger shall initiate a TRE.

# VII. Specific Rationale for Each Numerical Effluent Limitation

Section 402(o) of the Clean Water Act and 40 CFR 122.44(l) require that effluent limitations standards or conditions in reissued permits be at least as stringent as those in the existing permit. Further, in compliance with section 122.45(d), permit limitations shall be expressed, unless impracticable, as both AMELs and MDELs.

The data submitted by the Discharger indicate that turbidity, TSS, oil and grease, xylene, MTBE, and TBA are present in the discharge from the CATS through Discharge Serial No. 001A. The data also indicate that turbidity, TSS, oil and grease, total petroleum hydrocarbon, MTBE, and TBA are present in the discharges from PARS through Discharge Serial No. 001B. In addition, the Regional Board has determined that settleable solids, lead, total petroleum hydrocarbons, xvlene, ethylbenzene. ethylene dibromide. tetrachloroethylene. toluene. trichloroethylene, 1,1,1-TCA, 1,1-DCA, and 1,1-DCE are pollutants of concern for the types of discharges from the CATS and PARS. All the parameters mentioned above are regulated in the existing Order for discharges from the CATS and the PARS. Because there have not been any major process changes since the last permit issuance, these pollutants are still expected to be in the discharge.

The evaluation of the data available indicated that there is no reasonable potential for the priority pollutants except lead at Outfall 001A. Since there is no reasonable potential, effluent limits for benzene, toluene, xylene, ethylbenzene, ethylene dibromide, tetrachloroethylene, trichloroethylene, 1,1,1-TCA, 1,1-DCA, and 1,1-DCE have not been included in this Order.

However, since the purpose of the treatment system is to remove MTBE, it is reasonable that MTBE could be present in the discharge. Therefore, a limit has been established by BPJ using the Secondary MCL of 5  $\mu g/L$ , which is based upon taste and odor. The Basin Plan specifies that "Wastes shall not contain taste or odor producing substances in concentrations that impart undesirable tastes or odors to fish flesh or other edible aquatic resources, cause nuisance, or adversely affect beneficial uses. Limitations for other chemicals of concern that have not had exceedances but have been detected in the effluent have also been included: total petroleum hydrocarbons, TBA. The TBA limit is based upon a "de minimis" theoretical lifetime risk of up to one excess case of cancer in a population of one million people. Based on BPJ, the MDELs for turbidity and TSS in the tentative Order are revised to 75 NTU and 75 mg/L, respectively, to be consistent with similar permits recently issued by the Regional Board (i.e., treated groundwater discharges in the Los Angeles Region).

Because lead demonstrates reasonable potential to cause or contribute to an excursion above a water quality standard, effluent limitations have been revised from the existing permit in the tentative Order for the discharge from CATS through Discharge Serial No. 001A. An AMEL and MDEL for lead are established in accordance with the requirements contained in the SIP and are based on the applicable water quality criteria contained in the CTR.

Also, effluent limitations for pH, temperature, settleable solids, oil and grease, TSS, turbidity and toxicity are established in the tentative Order. The Basin Plan states that the pH of inland surface waters shall not be depressed below 6.5 or raised above 8.5 as a result of waste discharge.

Based on the requirements of the Basin Plan an instantaneous minimum limitation of 6.5 and an instantaneous maximum limitation of 8.5 for pH are included in the proposed permit.

The Basin Plan lists temperature requirements for the receiving waters and references the Thermal Plan. Based on the requirements of the Thermal Plan and a white paper developed by Regional Water Board staff entitled *Temperature and Dissolved Oxygen Impacts on Biota in Tidal Estuaries and Enclosed Bays in the Los Angeles Region*, a maximum effluent temperature limitation of 86 °F is included in the proposed permit. The white paper evaluated the optimum temperatures for steelhead, topsmelt, ghost shrimp, brown rock crab, jackknife clam, and blue mussel. The new temperature effluent limitation is reflective of new information available that indicates that the 100 °F temperature is not protective of aquatic organisms. A survey was completed for several kinds of fish and the 86 °F temperature was found to be protective.

The effluent limitations for acute toxicity are based on the Basin Plan and are the same as those in the existing permit. Acute toxicity limitations are established to protect the beneficial uses of the receiving water. The tentative mass-based limitations for Discharge Serial No. 001A and Discharge Serial No. 001B are based on a flow of 30,240 gpd (0.03 MGD) and 432,000 gpd (0.432 MGD), respectively. Effluent limitations established in the tentative Order are shown in the table below.

Effluent limitations for discharges from the CATS through Discharge Serial No. 001A located at Latitude 34° 02' 39" North, Longitude 118° 27' 59" West are presented below

Constituent	Units	Final Discharge Limitations For Discharge Serial No. 001A		Rationale <sup>1</sup>
Constituent	Units	Average Monthly	Maximum Daily	nationale
Oil and Grease	mg/L	10	15	E, BPJ
on and arouse	lbs/day <sup>2</sup>	2.5	3.8	E, Di 0
pH	s.u.	Between 6	.5 and 8.5	BP, BPJ
Total Supponded Solida (TSS)	mg/L	50	75	E, BPJ
Total Suspended Solids (TSS)	lbs/day <sup>2</sup>	13	19	E, DFJ
Load Tatal Daggyarable	μg/L	8.8 <sup>3</sup>	20	CTR, SIP
Lead, Total Recoverable	lbs/day <sup>2</sup>	$0.0022^3$	0.005	
Acute Toxicity	% survival	4		BP
Livelya as yis and Tatal Datus lavyes	μg/L		100	E, BPJ
Hydrocarbons, Total Petroleum	lbs/day <sup>2</sup>		0.025	
Mothyl Tartiany Butyl Ethar (MTDE)	μg/L		5	DD DD I
Methyl Tertiary Butyl Ether (MTBE)	lbs/day <sup>2</sup>		0.0013	BP, BPJ
Settleable Solids	ml/L	0.10	0.30	E, BPJ
Temperature	°F		86 <sup>5</sup>	TP
Tertiary Butyl Alcohol (TBA)	μg/L		12	DD I
	lbs/day <sup>2</sup>		0.003	BPJ
Turbidity	NTU	50	75	E, BPJ

BP = Basin Plan, BPJ = Best Professional Judgment, CTR = California Toxics Rule, E= Existing permit limitation, SIP = State Implementation Policy, TP = Thermal Plan.

Effluent limitations for discharges from the PARS through Discharge Serial No. 001B located at Latitude 34° 02' 39" North, Longitude 118° 27' 59" West are presented below:

Constituent	Unito	Final Discharge Limitations For Discharge Serial No. 001B		Rationale <sup>1</sup>
Constituent	Units	Average Monthly	Maximum Daily	nationale
Oil and Grassa	mg/L	10	15	E DD I
Oil and Grease	lbs/day <sup>2</sup>	36	54	E, BPJ
pH	s.u.	Between 6.5 and 8.5		BP
Total Suspended Solids (TSS)	mg/L	50	75	E, BPJ
Total Suspended Solids (193)	lbs/day <sup>2</sup>	180	270	E, DFJ
Acute Toxicity	% survival	3		BP
Libratus as ub ana Tatal Datus la cus	μg/L		100	E DD.I
Hydrocarbons, Total Petroleum	lbs/day <sup>2</sup>		0.36	E, BPJ
Methyl Tertiary Butyl Ether (MTBE)	μg/L		5	BP. BPJ
	lbs/day <sup>2</sup>		0.02	DF, BFJ
Settleable Solids	ml/L	0.10	0.30	E, BPJ

<sup>&</sup>lt;sup>2</sup> Based on a flow of 30,240 gpd (0.03 MGD)

Limitations are applicable after September 1, 2007. The interim limitations in Section I.B.5 of the Order are applicable from the date of adoption of the Order through August 31, 2007.

<sup>&</sup>lt;sup>4</sup> Average survival in effluent for any three consecutive 96-hour static or continuous flow bioassay tests shall be at least 90%, with no single test producing less than 70 % survival.

This value represents an instantaneous maximum value, not to be exceeded at any time.

Constituent	Units	Final Discharge Limitations For Discharge Serial No. 001B		Rationale <sup>1</sup>
Constituent	Onits	Average Monthly	Maximum Daily	Rationale
Temperature	°F		86 <sup>4</sup>	TP
Tertiary Butyl Alcohol (TBA)	μg/L		12	BPJ
	lbs/day <sup>2</sup>		0.04	טרט
Turbidity	NTU	50	75	E, BPJ

<sup>&</sup>lt;sup>1</sup>BP = Basin Plan, BPJ = Best Professional Judgment, E= Existing permit limitation, TP = Thermal Plan,

## VIII. Compliance Schedule

A review of available effluent monitoring data revealed that the Discharger is unable to consistently comply with effluent limitations established in the tentative Order for lead for Discharge from CATS through Discharge Serial No. 001A. Hence, interim limitations have been prescribed for lead at Discharge Point 001A. As a result, the tentative Order contains a compliance schedule that allows the Discharger up to two years to comply with the revised effluent limitations. Within one year after the effective date of the Order, the Discharger must prepare and submit a compliance plan that describes the steps that will be taken to ensure compliance with applicable limitations.

40 CFR 131.38(e) provides conditions under which interim effluent limitations and compliance schedules may be issued. The SIP allows inclusion of an interim limitation with a specific compliance schedule included in an NPDES permit for priority pollutants if the limitation for the priority pollutant is CTR-based. Because the CTR-based effluent limitations for lead through Discharge Serial No. 001A appear infeasible for the Discharger to achieve at this time, interim limitations for lead are contained in this tentative Order.

The SIP requires that the Regional Board establish other interim requirements such as requiring the discharger to develop a pollutant minimization plan (PMP) and/or source control measures and participate in the activities necessary to achieve the final effluent limitations. These interim limitations shall be effective until September 1, 2007 after which, the Discharger shall demonstrate compliance with the final effluent limitations.

Pursuant to the SIP (Section 2.2.1, Interim Requirements under a Compliance Schedule), when compliance schedules are established in an Order, interim limitations must be included based on current treatment facility performance or on existing permit limitations, whichever is more stringent to maintain existing water quality. The existing permit contained an MDEL of 50  $\mu$ g/L for lead. The monitoring data submitted by the Discharger for the period June 2000 to October 2004 indicate that lead was detected in the CATS effluent three times. Using these data, the RPA established a final effluent limitation of 8.8  $\mu$ g/L as AMEL and 20  $\mu$ g/L as MDEL for lead for the CATS effluent through Discharge Serial No. 001A. An analysis of the data shows that the Mobil facility should be able to achieve immediate compliance with the revised MDEL but not with the final AMEL for lead

<sup>&</sup>lt;sup>2</sup> Based on a flow of 432,000 gpd (0.432 MGD)

<sup>&</sup>lt;sup>3</sup> Average survival in effluent for any three consecutive 96-hour static or continuous flow bioassay tests shall be at least 90%, with no single test producing less than 70 % survival.

<sup>&</sup>lt;sup>4</sup> This value represents an instantaneous maximum value, not to be exceeded at any time.

for Discharge Serial No. 001A. This is because the MEC of lead observed in the CATS effluent is less than the revised MDEL and greater than the AMEL established in the tentative permit. As a result, a less stringent AMEL for lead has been established in this Order for the interim period. The interim AMEL for lead is set equal to the maximum observed effluent concentration (MEC) of 18  $\mu$ g/L for lead. The Discharger is required to comply with this AMEL for lead during the interim period and the final AMEL for lead after August 31, 2007. Because the MEC is less than the final MDEL for lead, the interim MDEL for lead is set equal to the final MDEL for Discharge Serial No. 001A. It should be noted that the Board may take appropriate enforcement actions if interim limitations and requirements have not been met.

From the effective date of the tentative Order until August 31, 2007, the discharge of CATS effluent through Discharge Serial No. 001A in excess of the following is prohibited:

Pollutant (units)	Units	Interim Discharge Limitations For Discharge Serial No. 001A		Rationale <sup>1</sup>	
Load	μg/L	18	20 <sup>2</sup>	MEC	
Lead	Lead	lbs/dav <sup>3</sup>	4.5	5.0	IVIEC

<sup>&</sup>lt;sup>1</sup>MEC = Maximum effluent concentration

According to the SIP, pollution prevention measures may be particularly appropriate for priority pollutants where there is evidence that beneficial uses are being impacted. Lead can cause adverse human health impacts. Because the RPA determined that lead could exceed the applicable criteria, this permit requires that the Discharger develop and implement a PMP for lead. Described in detail in Section 2.4.5.1 of the SIP, pollution minimization includes: monitoring for potential sources of the pollutants, periodic monitoring, control strategy, control measure implementation, and an annual status report sent to the Regional Board.

The Discharger also will be required to develop and implement a compliance plan that will identify the measures that will be taken to reduce the concentrations of lead in their discharge. This plan should evaluate options to achieve compliance with the revised permit limitations. These options can include evaluation, modification, and/or proper operation and maintenance of the existing treatment system at Mobil.

## IX. Monitoring Requirements

The tentative Order carries over the monitoring requirements from the existing permit. The existing MRP requires daily monitoring of total waste flow; and monthly monitoring of pH, BOD, settleable solids, turbidity, TSS, oil and grease, lead, total petroleum hydrocarbons, benzene, toluene, xylene, ethylbenzene, ethylene dibromide, MTBE, TBA, tetrachloroethylene, trichloroethylene, 1,1,1-TCA, 1,1-DCA, 1,1-DCE, di-isopropyl ether, ether tertiary butyl ether, tertiary amyl methyl ether, tertiary butyl alcohol; and annual monitoring for toxicity. In addition, the Regional Board issued a 13267 letter on March 4, 2002 requiring effluent and receiving water monitoring for priority pollutants regulated in the CTR.

<sup>&</sup>lt;sup>2</sup> The MDEL is the same as the final MDEL.

<sup>&</sup>lt;sup>3</sup> Based on a flow of 30,240 gpd (0.03 MGD)

## A. Effluent Monitoring

The tentative Order, like the existing permit, requires monitoring for the discharge of treated groundwater from the CATS and the PARS through Discharge Serial Nos. 001A and 001B. The discharge from Discharge Serial Nos. 001A and 001B are combined and discharged through Discharge Serial No. 001 located at Latitude 34° 02' 34" North, Longitude 118° 27' 50" Westto the storm drain at SMWTP.

A sampling station shall be established for each point of discharge and shall be located where representative samples of that effluent can be obtained. A representative sample shall be collected for the CATS effluent discharge through NPDES Discharge Serial No. 001A and PARS effluent through NPDES Discharge Serial No. 001B. Discharge Serials No. 001A and 001B are located at a point before the effluents mix and its ultimate discharge to the storm drain through Discharge Serial No. 001.

The tentative Order carries over the monitoring requirements and frequency for Discharge Serial Nos. 001A and 001B. To determine compliance with the effluent limitations, the tentative Order establishes monthly monitoring of pH, temperature, settleable solids, turbidity, TSS, oil and grease, lead, total petroleum hydrocarbons, MTBE, and TBA and annual monitoring for acute toxicity. In addition, the tentative Order carries over the existing permit requirements for daily monitoring of total waste flow; and monthly monitoring of BOD, di-isopropyl ether, ether tertiary butyl ether, and tertiary amyl methyl ether. To comply with the waste discharge requirements of the tentative Order, monitoring for chronic toxicity for Discharge Serial Nos. 001A and 001B has been added to the tentative Order.

Pursuant to the SIP, the Regional Board is requiring periodic monitoring for pollutants for which criteria or objectives apply and for which no effluent limitations have been established. Accordingly, the Regional Board is requiring that the Discharger conduct annual effluent monitoring of the CTR priority pollutants. Details of the monitoring requirements for CTR priority pollutants are discussed in Section VII of MRP No. 8041.

Section III of MRP No. 8041 contains the effluent monitoring program for NPDES Discharge Serial Nos. 001A and 001B. The Regional Board determined that grab samples are sufficient to characterize the discharge for all constituents except chronic toxicity. This analysis is best characterized with a 24-hour composite sample.

#### B. Receiving Water Monitoring

The discharges from the Former Mobil Station #18-LDM enter a storm drain located on Saltair Avenue near Texas and Wilshire Boulevard. The discharge then travels in excess of five (5) miles in the Los Angeles City Storm Drain System. The storm drain system also accepts wastewater from other locations prior to reaching the receiving water

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(Ballona Creek). Therefore the Discharger will not be required to monitor the receiving water.