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

ORDER NO. R4-2005-0058
NPDES PERMIT NO. CA0064262

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT
AND
WASTE DISCHARGE REQUIREMENTS
FOR
EXXON MOBIL OIL CORPORATION
(Former Mobil Station #18-LDM)

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

Background

1. Exxon Mobil Oil Corporation (hereinafter Mobil or Discharger) discharges treated groundwater from former Mobil Station #18-LDM Remediation System (MSRS) under Waste Discharge Requirements (WDRs) and a National Pollutant Discharge Elimination System (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.

2. Mobil filed a Report of Waste Discharge and applied for renewal of its WDRs and NPDES permit on March 30, 2004, for discharge of treated groundwater to surface waters. The tentative Order is the reissuance of the WDRs and NPDES permit for discharge of treated groundwater from MSRS.

Purpose of Order

3. The purpose of this tentative Order is to renew the WDRs for discharge of treated groundwater from MSRS. The groundwater is contaminated by the activities at former Mobil Station #18-LDM and is treated at the MSRS. Two groundwater remediation systems are included in at MSRS: (1) a Carbon Adsorption Treatment System (CATS); and (2) a Production Aquifer Remediation System (PARS). The CATS effluent is discharged through Discharge Serial No. 001A and the PARS effluent is discharged through Discharge Serial No. 001B. Discharge Serial Nos. 001A and 001B are co-located at Latitude 34° 02' 39" North, Longitude 118° 27' 59" West. The discharge pipe which transport effluent from CATS (Outfall 001A) is located immediately adjacent to the pipe that transports effluent from PARS (Outfall 001B). The discharge from Discharge Serial Nos. 001A and 001B are combined and discharged through Discharge Serial No. 001 to the storm drain located at Santa Monica Water Treatment Plant (SMWTP). The existing permit regulates the combined flow through Discharge Serial No. 001 located at Latitude 34° 02' 34" North, Longitude 118° 27' 50" West. This tentative NPDES permit regulates the discharge of treated groundwater from the CATS and the PARS separately

through Discharge Serial Nos. 001A and 001B, respectively. The storm drain to which the discharge occurs, ultimately discharges to Ballona Creek, a water of the United States.

Facility Description

4. Former Mobil Station #18-LDM and MSRS are located at 12054 Wilshire Boulevard, Los Angeles, California. Mobil Station #18-LDM operations reportedly began in 1967 and ended in 1997. Station operation historically consisted of retail gasoline sales, and automobile repair and maintenance. A location map is provided as Figure 1.

5. Former Mobil Station #18-LDM is located adjacent to the Arcadia Wellfield of the City of Santa Monica (CSM). The CSM operated the Arcadia Wellfield and SMWTP located at 1228 South Bundy Drive, Los Angeles, California. 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. Since 1996, the Arcadia Wellfield has been shut down due to contamination by methyl tertiary butyl ether (MTBE) that originated from the adjacent former Mobil Station #18-LDM.

6. On January 7, 1998, this Regional Board issued a Cleanup and Abatement Order No. 98-001 directing Mobil to take cleanup actions.

7. The groundwater contaminated by former Mobil Station #18-LDM is treated at the MSRS. Two groundwater remediation systems are in operation at MSRS: (1) the CATS; and (2) the PARS. The remediation systems are operated to remediate the MTBE-impacted production aquifer at CSM wellfield, and to restore the production aquifer to its designed beneficial use in compliance 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 schematic diagram of the CATS and the PARS is shown in Figure 2.

8. The CATS treats and discharges the combined groundwater flow pumped from the Shallow Aquifer and Vadose Remediation System (SAVRS) and the Lower Aquifer 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. The 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 clean up the shallow aquifer. 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 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 reinject a portion of the treated groundwater into the Shallow Aquifer at approximately 8,640 gpd. The re-injection of treated groundwater in the Shallow Aquifer began recently. During the 2nd Quarter 2004, approximately 670,000 gallons of treated ground-

water was re-injected in the Shallow Aquifer. Mobil is authorized to re-inject treated groundwater under a general WDR contained in Order No. R4-2002-0030.

9. The PARS is designed to remove primarily MTBE and other pollutants from groundwater pumped from CSM Wells Arcadia #4 and #5 before transport to the SMWTP and distribution to the public. In the PARS, approximately 432,000 gpd of groundwater is treated in four 24,000-lb GAC units. As part of the demonstration testing of the PARS, treated groundwater was discharged to the storm drain from May 17, 2000 to May 22, 2002. From May 23, 2002, the PARS began discharging treated groundwater to the SMWTP, pursuant to the DHS permit amendment dated May 15, 2002. No treated water from the PARS has been discharged to the storm drain since May 23, 2002. Approximately 7,500 gallons per month of backwash wastewater from the PARS system is discharged to an on-site 20,000-gallon backwash holding tank for settling. The wastewater is then directed to the CATS for treatment.

10. The treatment systems are bermed. Storm water that falls within the bermed areas of both CATS and PARS are directed to the CATS system for treatment. Storm water that falls out of the bermed area is permitted to runoff (as sheetflow) into the street.

Discharge Description

11. The tentative Order authorizes the discharge of treated groundwater from the CATS and the PARS through Discharge Serial Nos. 001A and 001B, respectively, located at Latitude 34° 02' 39" North, Longitude 118° 27' 59" West. The discharge from Discharge Serial Nos. 001A and 001B are combined and discharged through Discharge Serial No. 001 to the storm drain at SMWTP. The existing permit regulates combined flow to the storm drain through Discharge Serial No. 001. This NPDES permit regulates the discharge of treated groundwater from the CATS and the PARS separately through Discharge Serial Nos. 001A and 001B, respectively.

12. The CATS treats and discharges the combined groundwater flow pumped from the SAVRS and LARS at the site. The PARS treats and discharges groundwater pumped from CSM Wells Arcadia #4 and #5. Approximately, 30,240 gpd of treated groundwater from the CATS and 432,000 gpd of treated groundwater from the PARS are discharged through Discharge Serial Nos. 001A and 001B, respectively.

13. The combined discharge through Discharge Serial No. 001 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 a variety of storm drains until it empties into the Sawtelle Channel, which in turn empties into Ballona Creek.

Applicable Plans, Policies, Laws, and Regulations

14. On June 13, 1994, the Regional Board adopted a revised *Water Quality Control Plan for the Coastal Watersheds of Los Angeles and Ventura Counties* (Basin Plan) as amended on January 27, 1997 by Regional Board Resolution No. 97-02. The Basin Plan (i) designates

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

15. Ammonia Basin Plan Amendment. The 1994 Basin Plan provided water quality objectives for ammonia to protect aquatic life, in Tables 3-1 through Tables 3-4. However, those ammonia objectives were revised on April 25, 2002, by the Regional Board with the adoption of Resolution No. 2002-011, *Amendment to the Water Quality Control Plan for the Los Angeles Region to Update the Ammonia Objectives for Inland Surface Waters (Including Enclosed Bays, Estuaries and Wetlands) with Beneficial Use Designations for Protection of Aquatic Lif*e. The ammonia Basin Plan amendment was approved by the State Board, the Office of Administrative Law, and United States Environmental Protection Agency (U.S. EPA) on April 30, 2003, June 5, 2003, and June 19, 2003, respectively. Although the revised ammonia water quality objectives may be less stringent than those contained in the 1994 Basin Plan, they are still protective of aquatic life and are consistent with U.S. EPA's 1999 ammonia criteria update.

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

17. The 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.

18. The State Board adopted a *Water Quality Control Plan for Control of Temperature in the Coastal and Interstate Water and Enclosed Bays and Estuaries of California* (Thermal Plan) on May 18, 1972, and amended this plan on September 18, 1975. This plan contains temperature objectives for inland surface waters.

19. On May 18, 2000, the U.S. EPA promulgated numeric criteria for priority pollutants for the State of California [known as the *California Toxics Rule* (CTR) and codified as Title 40, Code of Federal Regulations 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^{-6}), 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 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. 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.

20. On March 2, 2000, the 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 the National Toxics Rule (NTR), and to the priority pollutant objectives established by the Regional Boards in their basin plans, with the exception of the provision on alternate test procedures for individual discharges that have been approved by the U.S. EPA Regional Administrator. The alternate test procedures provision was effective on May 22, 2000. The SIP was effective on May 18, 2000, with respect to the priority pollutant criteria promulgated by the U.S. EPA through the CTR*.* The SIP requires the dischargers' submittal of data sufficient to conduct the determination of priority pollutants requiring water quality-based effluent limits (WQBELs) and to calculate the effluent limitations. 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.

21. Under 40 CFR 122.44(d), Water Quality Standards and State Requirements, "Limitations must control all pollutants or pollutant parameters (either conventional, non-conventional, or toxic pollutants), which the Director [permitting authority] determines are or may be discharged at a level which will cause, have the reasonable potential to cause, or contribute to an excursion above any State water quality standard, including State narrative criteria for water quality." Where numeric effluent limitations for a pollutant or pollutant parameter have not been established in the applicable state water quality control plan, 40 CFR 122.44(d)(1)(vi) specifies that WQBELs may be set based on U.S. EPA criteria, and may be supplemented where necessary by other relevant information to attain and maintain narrative water quality criteria, and to fully protect designated beneficial uses.

22. Effluent limitation guidelines requiring the application of best practicable control technology currently available (BPT), best conventional pollutant control technology (BCT), and best available technology economically achievable (BAT), were not promulgated by the U.S. EPA for pollutants in this discharge. Effluent limitations for pollutants not subject to the U.S. EPA effluent limitation guidelines are based on one of the following: best professional judgment (BPJ) of BPT, BCT or BAT; current plant performance; or WQBELs. The WQBELs are based on the Basin Plan, other State plans and policies, or U.S. EPA water quality criteria which are taken from the CTR. These requirements, as they are met, will protect and maintain existing beneficial uses of the receiving water. The attached Fact Sheet for this Order includes specific bases for the effluent limitations.

23. State and Federal antibacksliding and antidegradation policies require Regional Board actions to protect the water quality of a water body and to ensure that the waterbody will not be further degraded. The antibacksliding provisions are specified in sections 402(o) and 303(d)(4) of the Clean Water Act (CWA) and in 40 CFR 122.44(l). Those provisions require a reissued permit to be as stringent as the existing permit with some exceptions where effluent limitations may be relaxed.

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

25. On March 30, 2000, U.S. EPA revised its regulation that specifies when new and revised State and Tribal water quality standards (WQS) become effective for CWA purposes (40 CFR 131.21, 65 FR 24641, April 27, 2000). Under U.S. EPA's new regulation (also known as the Alaska rule), new and revised standards submitted to U.S. EPA after May 30, 2000, must be approved before being used for CWA purposes. The final rule also provides that standards already in effect and submitted to U.S. EPA by May 30, 2000, may be used for CWA purposes, whether or not approved by U.S. EPA.

Watershed Management Approach and Total Maximum Daily Loads (TMDLs)

26. The Regional Board has implemented the Watershed Management Approach to address water quality issues in the region. Watershed management may include diverse issues as defined by stakeholders to identify comprehensive solutions to protect, maintain, enhance, and restore water quality and beneficial uses. To achieve this goal, the Watershed Management Approach integrates the Regional Board's many diverse programs, particularly Total Maximum Daily Loads (TMDLs), to better assess cumulative impacts of pollutants from all point and non-point sources. A TMDL is a tool for implementing water quality standards and is based on the relationship between pollution sources and in-stream water quality conditions. The TMDL establishes the allowable loadings or other quantifiable parameters for a waterbody and thereby provides the basis to establish water quality-based controls. These controls should provide the pollution reduction necessary for a waterbody to meet water quality standards. This process facilitates the development of watershed-specific solutions that balance the environmental and economic impacts within the watershed. The TMDLs will establish waste load allocation (WLAs) and load allocations (LAs) for point and non-point sources, and will result in achieving water quality standards for the waterbody.

27. U.S. EPA approved the State's 2002 303(d) list of impaired water bodies on July 25, 2003. According to the 2002 303(d) list, 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 WLA.

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 the State Board, the Office of Administrative Law and U.S. EPA for approval prior to implementation in NPDES permits.

Order No. R05-007 includes WLA dry-weather and wet-weather 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.

Data Availability and Reasonable Potential Monitoring

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

29. Section 1.3 of the SIP requires that limitations be imposed for a toxic pollutant if (1) the maximum effluent concentration (MEC) is greater than the most stringent CTR criteria, or (2) the background concentration is greater than the CTR criteria, or (3) other information is available. Sufficient effluent data are needed for this analysis.

30. Two RPAs, one for the CATS effluent and another for the PARS effluent, were completed using the effluent and the receiving water data submitted by the Discharger. 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. The receiving water data for Ballona Creek is available for the 2nd, 3rd, and 4th Quarter of 2002.

31. Based on the two RPAs, there is reasonable potential to exceed applicable water quality standards for lead for the discharge of CATS effluent through Discharge Serial No. 001A. Lead demonstrated reasonable potential based on concentrations detected in CATS effluent samples collected in October 2001.

32. Effluent limitations for lead for the discharge of CATS effluent through Discharge Serial No. 001A are revised in this Order. The revised effluent limitations for lead for the discharge of CATS effluent through Discharge Serial No. 001A have been established based on the water quality criteria contained in the CTR and the requirements contained in Section 1.4 of the SIP. Several of the priority pollutants that have effluent limitations in the current Order did not demonstrate reasonable potential. Hence, the tentative requirements do not include effluent limitations for these constituents. There are several constituents that are targeted for clean up in the groundwater that are not priority pollutants: total petroleum hydrocarbons, methyl tertiary butyl ether, and total butyl alcohol. Effluent limits for these constituents as well as several Basin Plan constituents have been retained based on BPJ.

Compliance Schedules and Interim Limitations

33. 40 CFR 131.38(e) and the SIP provide conditions under which interim effluent limitations and compliance schedules may be issued. The CTR and SIP allow inclusion of interim limitations with a specific compliance schedule included in a NPDES permit for priority pollutants if the limitations for the priority pollutant is based on CTR. An interim limitation has been included in this Order for lead for the discharge of CATS effluent through Discharge Serial No. 001A.

34. Data submitted in self-monitoring reports indicate that the Discharger should be able to achieve immediate compliance with the revised MDEL but not with the final AMEL for lead 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 MEC of lead. The Discharger is required to comply with the interim AMEL for lead during the compliance schedule 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 has been set equal to the final MDEL for Discharge Serial No. 001A.

35. 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 final effluent limitations. These interim limitations shall be effective from September 1, 2005 through August 31, 2007 of this Order. After which, the Discharger must demonstrate compliance with the final effluent limitations.

    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 health impacts and the 2002 State Water Board's California 303(d) List classifies Ballona Creek as impaired for lead. Because the RPA determined that it could exceed the WQBELs, the permit requires that the Discharger develop and implement a PMP for lead.

CEQA and Notifications

36. 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.

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

38. This Order shall serve as a NPDES permit pursuant to Section 402 of the Federal CWA or amendments thereto, and is effective 30 days October 1, 2005 from the date of this adoption, in accordance with federal law provided the Regional Administrator, U.S. EPA, has no objections.

39. 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.

40. 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 Exxon Mobil Oil Corporation, in order to meet the provisions contained in Division 7 of the California Water Code and regulations adopted there under, and the provisions of the Federal Clean Water Act and regulations and guidelines adopted there under, shall comply with the following:

I. DISCHARGE REQUIREMENTS

A. Discharge Prohibitions

1. Waste discharged through Discharge Serial No. 001A shall be limited to 30,240 gallons per day (gpd) of treated groundwater from the Carbon Adsorption Treatment System (CATS).

2. Waste discharged through Discharge Serial No. 001B shall be limited to 432,000 gallons per day (gpd) of treated groundwater from the Production Aquifer Remediation System (PARS).

3. The discharge of wastes from accidental spills or other sources is prohibited. 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 or waters of the State, are prohibited.

B. Effluent Limitations for discharges to surface waters from Outfalls 001A and 001B.

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 ^{o}F

3. Toxicity limitations

(a) Acute Toxicity Limitation and Requirements

(1) 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 producing less than 70% survival.

(2) If any acute toxicity bioassay test result is less than 90% survival, the Discharger shall begin the investigation and evaluation as specified in the Discharger's Initial Investigation Toxicity Reduction Evaluation (TRE) Workplan and conduct six additional tests every 2 weeks during a 12-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 discontinue the Initial Investigation TRE Workplan and 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 Reduction Evaluation. The TRE 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.

(3) If any two out of the initial test and the additional six acute toxicity bioassay tests result in less than 70% survival, including the initial test, the Discharger shall immediately begin a TRE.

(4) The Discharger shall conduct acute toxicity monitoring as specified in Monitoring and Reporting Program No. 8041.

(b) Chronic Toxicity Trigger and Requirements

(1) This Order includes a chronic testing toxicity trigger defined as an exceedance of the monthly median of 1.0 TU_c in a critical life stage test for 100% effluent.

(2) If the chronic toxicity of the effluent exceeds 1.0 TU_c, the Discharger shall begin the investigation and evaluation as specified in the Discharger's Initial Investigation Toxicity Reduction Evaluation (TRE) Workplan and conduct six additional tests every 2 weeks during a 12-week period, according to Monitoring and Reporting Program No. 8041, Item IV.B.1. If the results of two of the six accelerated tests exceed 1.0 TU_c, the Discharger shall initiate a TRE.

(3) The Discharger shall conduct chronic toxicity monitoring as specified in Monitoring and Reporting Program No. 8041.

(4) 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 concentration that causes no observable effect on test organisms, as determined by the results of a critical life stage toxicity test.

(5) Preparation of an Initial Investigation TRE Workplan

i. The Discharger shall submit a copy of the Discharger's initial investigation TRE workplan (1-2 pages) to the Executive Officer of the Regional Board for approval within 90 days of the effective date of this permit. If the Regional Board Executive Officer does not disapprove the workplan within 60 days, the workplan shall become effective. The Discharger shall use EPA manuals EPA/600/2-88/070 (industrial) or EPA/833B-99/002 (municipal) as guidance. This workplan shall describe the steps the Discharger intends to follow if toxicity is detected, and should include, at a minimum, the elements described in ii through iv below.

ii. 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;

iii. 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

iv. 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 Monitoring and Reporting Program No. 8041 provides references for the guidance manuals that should be used for performing TIEs.)

4. Final effluent limitations

(a) In addition to the Requirements I.B.1 through I.B.3, the discharge of an effluent through Discharge Serial No. 001A (Latitude 34° 02' 39" North, Longitude 118° 27' 59" West) in excess of the following limitations is prohibited:

Constituent	**Units**	**Final Discharge Limitations For Discharge Serial No. 001A**	
		Average Monthly	**Maximum Daily**
Oil and Grease	mg/L	10	15
	lbs/day[1]	2.5	3.8
Total Suspended Solids (TSS)	mg/L	50	75
	lbs/day[1]	13	19
Lead, Total Recoverable	µg/L	8.8[2]	20
	lbs/day[1]	0.0022[2]	0.005
Hydrocarbons, Total Petroleum	µg/L	---	100
	lbs/day[1]	---	0.025

Constituent	Units	Final Discharge Limitations For Discharge Serial No. 001A	
		Average Monthly	Maximum Daily
Methyl Tertiary Butyl Ether (MTBE)	µg/L	---	5
	lbs/day[1]	---	0.0013
Settleable Solids	ml/L	0.10	0.30
Tertiary Butyl Alcohol (TBA)	µg/L	---	12
	lbs/day[1]	---	0.003
Turbidity	NTU	50	75

[1] Based on a flow of 30,240 gpd (0.03 MGD)
[2] Limitations are applicable on September 1, 2007. The interim limitations in Section I.B.5 below are applicable from the date of adoption of the Order through August 31, 2007.

(b) In addition to the Requirements I.B.1 through I.B.3, the discharge of an effluent through Discharge Serial No. 001B (Latitude 34° 02' 39" North, Longitude 118° 27' 59" West) in excess of the following limitations is prohibited:

Constituent	Units	Final Discharge Limitations For Discharge Serial No. 001B	
		Average Monthly	Maximum Daily
Oil and Grease	mg/L	10	15
	lbs/day[1]	36	54
Total Suspended Solids (TSS)	mg/L	50	75
	lbs/day[1]	180	270
	lbs/day[1]	---	0.00018
Hydrocarbons, Total Petroleum	µg/L	---	100
	lbs/day[1]	---	0.36
Methyl Tertiary Butyl Ether (MTBE)	µg/L	---	5
	lbs/day[1]	---	0.02
Settleable Solids	ml/L	0.10	0.30
Tertiary Butyl Alcohol (TBA)	µg/L	---	12
	lbs/day[1]	---	0.04
Turbidity	NTU	50	75

[1] Based on a flow of 432,000 gpd (0.432 MGD)

5. Interim Effluent Limitations: From the effective date of this Order until August 31, 2007, the discharge of CATS effluent through Discharge Serial No. 001A (Latitude 34° 02' 39" North, Longitude 118° 27' 59" West) in excess of the following is prohibited:

Constituent (units)	Units	Interim Discharge Limitations For Discharge Serial No. 001A	
		Average Monthly	Maximum Daily
Lead	µg/L	18	20[1]
	lbs/day[2]	0.0045	0.005

[1] The MDEL is the same as the final MDEL
[2] Based on a flow of 30,240 gpd (0.03 MGD)

Discharges after August 31, 2007 must comply with the limitations for lead specified 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 to be present in concentrations or quantities which cause deleterious effects on aquatic biota, wildlife, or waterfowl or render any of these unfit for human consumption either at levels created in the receiving waters or as a result of biological concentration.

2. The discharge shall not cause nuisance, or adversely effect beneficial uses of the receiving water.

3. No discharge shall cause a surface water temperature rise greater than $5^{o}F$ above the natural temperature of the receiving waters at any time or place. At no time the temperature be raised above 86 ^{0}F as a result of waste discharged.

4. The discharge shall not cause the following limitations to be exceeded in the receiving waters at any place within the waterbody of the receiving waters:

   (a) The pH shall not be depressed below 6.5 nor raised above 8.5, nor caused to vary from normal ambient pH levels by more than 0.5 units;

   (b) Dissolved oxygen shall not be less than 5.0 mg/L anytime, and the median dissolved oxygen concentration for any three consecutive months shall not be less than 80 percent of the dissolved oxygen content at saturation;

   (c) The ammonia 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, Office of Administrative Law (OAL) and U.S. EPA on April 30, 2003, June 5, 2003, and June 19, 2003, respectively and is now in effect. Total ammonia (as N) shall not exceed concentrations specified in the Regional Board Resolution 2002-011.

5. The discharge shall not cause a violation of any applicable water quality standards for receiving waters adopted by the Regional Board or State Board. If more stringent applicable water quality standards are promulgated or approved pursuant to Section 303 of the CWA, or amendments thereto, the

Regional Board will revise or modify this Order in accordance with such standards.

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

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

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

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

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

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

   f. Substances that result in increases of BOD that adversely affect beneficial uses.

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

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

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

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

II. REQUIREMENTS

A. Compliance Plan

1. The Discharger shall develop and implement a compliance plan that will identify the measures that will be taken to reduce the concentrations of lead in the discharge of the CATS effluent through Discharge Serial 001A. This plan must

evaluate options to achieve compliance with the permit limitations specified in Section I.B.4 of this Order.

2. The Discharger shall submit annual progress reports to describe the progress of studies and or actions undertaken to reduce lead in the CATS effluent, and to achieve compliance with the limitations in this Order by the deadline specified in Section 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 Monitoring and Reporting Program (MRP) No. 8041.

3. The Discharger shall develop a PMP to maintain effluent concentrations of lead at or below the effluent limitations specified in Section I.B.4 of this Order. The PMP shall include the following:

   (a) Annual review and quarterly monitoring of the potential sources of lead;
   (b) Submittal of a control strategy designed to proceed toward the goal of maintaining effluent concentrations at or below the effluent limitation;
   (c) Implementation of appropriate cost-effective control measures consistent with the control strategy;
   (d) An annual status report that shall be sent to the Regional Board at the same time the annual summary report is submitted in accordance with Section I.B. of MRP No. 8041, and include:
      - All PMP monitoring results for the previous year
      - A list of potential sources of lead
      - A summary of all actions undertaken pursuant to the control strategy
      - A description of actions to be taken in the following year.

4. The interim limitations stipulated in section I.B.5 shall be in effect for a period not to extend beyond August 31, 2007. Thereafter, the Discharger shall comply with the limitations specified in Section I.B.4 of this Order.

B. Monitoring For Reasonable Potential Determination - The Discharger shall monitor the effluent for the CTR priority pollutants annually for the life of the permit, as outlined in the MRP No. 8041. These monitoring data shall be submitted in accordance with the reporting schedule provided in Section I.A. of the associated MRP No. 8041.

C. Pursuant to the requirements of 40 CFR 122.42(a), the Discharger must notify the Board as soon as it knows, or has reason to believe (1) that it has begun or expected to begin, to use or manufacture a toxic pollutant not reported in the permit application, or (2) a discharge of toxic pollutant not limited by this Order has occurred, or will occur, in concentrations that exceed the specified limitations in 40 CFR 122.42(a).

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

E. 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.

F. 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.

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

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

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

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

III. PROVISIONS

A. This Order includes the attached *Standard Provisions and General Monitoring and Reporting Requirements* (Standard Provisions, Attachment N). If there is any conflict between provisions stated herein and the attached Standard Provisions, those provisions stated herein shall prevail.

B. This Order includes the attached MRP No. 8041. If there is any conflict between provisions stated in the MRP and the Standard Provisions, those provisions stated in the MRP 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 CWA 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 (ML) (see Reporting Requirement II.C. of the MRP No. 8041), then the Discharger is out of compliance.

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

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

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

      When all sample results are greater than or equal to the reported Minimum Level (see Effluent Monitoring Requirements II.C of MRP No. 8041), the numerical average of the analytical results of these samples will be used for compliance determination.

      When one or more sample results are reported as “Not-Detected (ND)” or “Detected, but Not Quantified (DNQ)” (see Effluent Monitoring Requirements II.C. of MRP No. 8041), the median value of these samples shall be used for compliance determination. If one or both of the middle values is ND or DNQ, the median shall be the lower of the two middle values.

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

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

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

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

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

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

H. In calculating mass emission rates from the monthly average concentrations, use one half of the method detection limit for ND and the estimated concentration for "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 and modified, in accordance with SIP Section 2.2.2.A, to incorporate new limitations based on future RPA to be conducted for CTR pollutants, upon completion of the collection of additional data by the Discharger.

B. This Order may be reopened and modified, to incorporate in accordance with the provisions set forth in 40 CFR Parts 122 and 124, to include requirements for the implementation of the watershed management approach.

C. This Order may be reopened and modified, in accordance with the provisions set forth in 40 CFR Parts 122 and 124, to include new MLs for each pollutant.

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

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

F. This Order may also be reopened and modified, revoked, and reissued or terminated in accordance with the provisions of 40 CFR sections 122.44, 122.62 to 122.64, 125.62, and 125.64. Causes for taking such actions include, but are not limited to, failure to comply with any condition of this order and permit, endangerment to human health or the environment resulting from the permitted activity.

V. EXPIRATION DATE

This Order expires on August 10, 2010.

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

VI. RESCISSION

Order No. 99-038, adopted by this Regional Board on May 27, 1999, is hereby rescinded except for enforcement purposes.

I, Jonathan S. Bishop, Executive Officer, do hereby certify that the foregoing is a full, true and correct copy of an Order adopted by the California Regional Water Quality Control Board, Los Angeles Region, on September 1, 2005.

_____
Jonathan S. Bishop
Executive Officer