

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
LOS ANGELES REGION**

101 CENTRE PLAZA DRIVE
MONTEREY PARK, CA 91754-2156
(213) 266-7500
FAX: (213) 266-7600



November 2, 1993

Mr. Jack Braun
Union Pacific Resources
West Coast Profit Center
420 Henry Ford Avenue
P. O. Box 1317
Wilmington, CA 90748-1317

**UNION PACIFIC LAND RESOURCES CORPORATION - SUMP CLOSURE AND CAPPING
OF EXISTING WASTE MANAGEMENT UNIT (TOYOTA PARCEL/TCL SITE, LONG
BEACH) - WASTE DISCHARGE REQUIREMENTS
(FILE NO. 77-47, CI 6409)**

Reference is made to the tentative Waste Discharge Requirements (WDR's) mailed to you on October 12, and October 18, 1993, for the subject site.

Pursuant to Division 7 of the California Water Code, this Board at a public meeting held on November 1, 1993, reviewed these tentative WDR's, considered all factors in the case, and adopted Order No. 93-067 (copy attached) relative to this waste discharge.

You are required to implement the new monitoring program as stated in the Monitoring and Reporting Program on the effective date of this Order. Please reference all technical and monitoring reports to our compliance File No. 6409. We would appreciate it if you would not combine other reports, such as progress or technical reports, with your monitoring reports but would submit each type of report as a separate document.

If you have any questions, please contact David Hung at (213) 266-7611.

A large, stylized handwritten signature in black ink, appearing to read "J.E. Ross".

J.E. ROSS, Unit Chief
Site Cleanup Unit

*Correct No. 7617
See 12/18/1995
letter from J.E. Ross
to Ken Robinson*

cc: See Mailing List

Enclosures

Mr. Jack Braun

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cc: Archie Mattews, State Water Resources Control Board, Division
of Water Quality
Vanessa Dao, Department of Toxic Substances Control, Region 4,
City of Long Beach
Geraldine Knatz, Port of Long Beach
Michael Kratovil, Department of Oil and Gas, 245 W. Broadway,
Suite 475, Long Beach, CA 90802
Department of Fish and Game, Region 5
Los Angeles County, Department of Public Works
Los Angeles County, Department of Health Services
Los Angeles County, Fire Department - Health Hazardous
Materials Division
William Thompson, South Coast Air Quality Management District
Angelo Bellomo, ICF Kaiser, 10 Universal City Plaza, Suite
2400, Universal City, CA 91608-1097

STATE OF CALIFORNIA

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
LOS ANGELES REGION

ORDER NO. 93-067

REVISED WASTE DISCHARGE REQUIREMENTS
FOR
SUMP CLOSURE AND CAPPING OF EXISTING WASTE MANAGEMENT UNITS

UNION PACIFIC LAND RESOURCES CORPORATION
(FORMERLY CHAMPLIN PETROLEUM COMPANY)
TOYOTA PARCEL/TCL SITE, LONG BEACH
(FILE NO. 77-47)

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

1. Order No. 78-49 adopted by this Board on April 11, 1978, allowed Champlin Petroleum Company, 420 Henry Ford Avenue, Wilmington, a wholly owned subsidiary of Union Pacific Corporation, to dispose of 350 cubic meters (2,200 barrels) per day of semi-solid spent drilling mud containing oil, crude oil tank bottoms, flotation cell skimmings, and material from abandoned sumps by spreading on its land for disking, bacterial degradation, and drying. The site is bounded on the east by the property boundary, on the west by the Los Angeles-Long Beach City boundary, on the south by Seaside Boulevard, and on the north by Anaheim Street (R13W, T4S, Section 34; R13W, T5S, Sections 3 & 4, S.B.B. & M.). Operation of the sumps ceased and closure of the sumps began under Order No. 78-49. The brine injection activities conducted by Champlin Petroleum Company are subject to separate waste discharge requirements adopted by this Regional Board.
2. Union Pacific Land Resources Corporation (UPRC) the owner and operator of Toyota parcel, hereafter called discharger, has filed a report of waste discharge for the sump closure and capping of a 31-acre parcel of land, known as the Toyota parcel, which is located within the so-called TCL site. The TCL site is on the State of California Bond Expenditure Plan. This 31-acre parcel contains several existing sumps originally containing oily liquid waste disposed from oil field production. The Toyota Parcel has been designated for development as an expansion of an existing automobile processing and distribution facility operated by Toyota Motor Sales, U.S.A., Inc. (TMS). Order No. 78-49 remains in effect and allows for additional sump closure if requested with appropriate documentation. Such documentation has now been developed by the discharger. Under the California Code of

October 7, 1993

Revised October 18, 1993

Regulations (CCR), Title 23, Chapter 15, the Toyota sumps are characterized as "Existing Waste Management Units" that have not been classified and are inoperative and partially closed on the date of this application for closure.

3. The Toyota parcel is located in the southeastern corner of the TCL site and is bounded by a coke calciner plant to the north, Carrack Avenue to the east, and by currently operating UPRC oil and gas production areas on the south and west. The Cerritos Channel lies approximately 450 feet beyond the southern boundary of the Toyota parcel. The TCL site is bounded by the Terminal Island Freeway to the north, Port of Long Beach (Ford Motor Company) property on the west, Carrack Avenue to the east, and the Cerritos Channel to the south. The TCL site, approximately 240 acres, is situated within a 600-acre active oil field production area owned and operated by UPRC.
4. In 1982, approximately 200,000 cubic yards of sump bottoms (drilling mud/crude oil mixture) from other areas of the UPRC site were dumped into and on the surface of the Toyota parcel sumps. The average thickness of materials placed in the sumps is about 12 to 13 feet. UPRC placed additional oil sump materials over the existing Toyota parcel sumps in 1983-1984 during construction of the adjacent coke calciner facility. These materials consisted of sump and non-sump materials that were excavated from an area immediately north of the Toyota parcel. Approximately two-thirds of the Toyota parcel is comprised of former sump areas used for disposal; the remainder is comprised of roadways and adjacent oil wells and piping corridors. The site is below sea level and protected by levees and drainage facilities. The elevation of the base of the former sumps ranges from -15 feet mean low low water (MLLW) to -20 feet MLLW.
5. In August 1988, UPRC entered into a Consent Order Agreement with the Department of Toxic Substances Control (DTSC) for the investigation of chemical releases to the soil, air, and groundwater. Under that agreement, UPRC conducted a Remedial Investigation (RI) and prepared a Remedial Action Plan (RAP) for the Toyota parcel. This RAP applies exclusively to the Toyota parcel and was approved by the DTSC on July 28, 1993.
6. Most of the chemicals detected in soils were those typically associated with oil field production wastes and included total petroleum hydrocarbons (TPH), polynuclear aromatics (PNAs), volatile organic compounds (VOCs), and metals. Several VOCs and metals were detected in groundwater beneath the site and

at concentrations above their respective Maximum Contaminant Levels (MCLs). This fact was verified during a Regional Board field investigation conducted April 6 and 7, 1993, and the results indicated that at least one compound, benzene, is present in groundwater in concentrations above water quality objectives and that lead in concentrations above Soluble Threshold Limit Concentration (STLC) is present in the sump material with the potential to impact groundwater.

7. A baseline health risk assessment report for the Toyota parcel was reviewed and approved by DTSC and indicated an insignificant to very low level of potential risk to on-site workers from contaminants in soil at the site during construction activities. Risks to off-site residents were found to be insignificant.
8. The TCL site lies at the southern edge of the Los Angeles Basin within the Dominguez Gap, the alluvial flood plain of the Los Angeles River. The site is underlain with 20 to 40 feet of fill soils. Most of these soils were derived from dredging operation in nearby channels or imported from similar sources. The soils consist of very fine sandy clays and silts and silty sands. Dredge fill is underlain by approximately 70 feet of Quaternary silts and clays with interbedded layers of silts, clays, and fine sands. The Toyota parcel is located in a seismically active part of Southern California, approximately three miles northeast of the Palos Verdes Fault and approximately four miles southwest of the Newport-Inglewood Fault.
9. The shallowest regional occurrence of groundwater underlying the Toyota parcel is the Gaspar Aquifer. The Gaspar Aquifer is typically comprised of gravel and cobbles at its base and grades upward into medium to coarse sand. Along the northern edge of the Toyota parcel, the Gaspar Aquifer ranges in thickness from 60 to 100 feet. Depth to first groundwater beneath the Toyota parcel occurs at approximately one to eight feet below ground surface (bgs) in a shallow unconfined groundwater bearing unit that occurs well above the Gaspar Aquifer. The shallow groundwater beneath the site is separated from the Gaspar Aquifer by thick sequences of bay muds and clays as evidenced by the test excavations and Cone Penetrometer Test (CPT) work recently conducted on-site on April 6 and 7, 1993. The groundwater flow direction beneath the site appears to be generally towards the south-southeast.
10. The gradient and flow of the shallow groundwater bearing zone located at the southern boundary of the Toyota parcel is

affected by the Cerritos Channel and a toe drain system located just inboard from the Cerritos Channel levee. The toe drain system collects groundwater moving towards the southern boundary of the Toyota parcel and groundwater moving from the Cerritos Channel inland. The collected water is directed to an on-site oil-water separator and reinjected into an underlying oil reservoir for subsidence control.

11. Prior to the construction of the Toyota facility expansion which includes placement of new soil fill materials, the existing oil sump materials on-site will be remediated in accordance with the approved RAP. Specifically, approximately 50,000 cubic yards of very low strength (VLS) material will be physically stabilized by ex-situ and in-situ methods, depending on its location within the soil column, to improve its geotechnical properties and to reduce the potential for migration of contaminants. The existing oil sump (OS) and stabilized VLS material will then be capped with a low-permeability layer and several feet of imported fill. Contaminants and water that drain, or are expressed, from the oil sump materials in the vadose zone will be removed, treated if necessary, and disposed of. Six additional groundwater monitoring wells will be installed to monitor for contaminants potentially expressed during remediation and backfilling activities. All unused existing pipelines, structures, and utility lines associated with existing oil and gas production will be removed or relocated.
12. The site will be graded with fill placement varying from 5 feet to 15 feet across the site. Fluids that are expressed from the underlying OS and VLS materials in the vadose zone during consolidation, hereafter termed consolidation and drainage fluid (CDF), will be collected in drains traversing the project area. The quantity of waste is estimated at approximately 4,000,000 gallons of CDF generated over the period of consolidation (estimated to be up to several years). The probable sources of CDF include a) the consolidation fluids collected from the oil sump materials during consolidation, b) seepage from stockpiles of the VLS materials, c) stormwater drainage from the VLS stockpiles placed off the project area, and d) VLS or other excavation water. This fluid will consist of oil and, to the extent described in the CDF removal criteria presented in the approved RAP, water which has collected in these drainage trenches. CDFs will be collected from the various sources in a tanker truck and delivered to storage tanks of an on-site treatment facility. This treatment facility will consist of an oil/water separation tank with a liquid-phase carbon system.

The oil will be temporarily stored and then removed from the site by a certified oil recycler. The treated CDF will be delivered to the UPRC Produced Water Processing Facility. The Department of Oil and Gas (DOG) and DTSC will decide whether the CDF can be directly processed at the UPRC Produced Water Processing Facility. Stormwater runoff will be addressed in the General Construction Stormwater Activity Permit.

13. Seven temporary sample vents screened in the sump materials were installed within the Toyota parcel. Water was found in five of the seven vents and oil was observed in two of these five. The thickness of accumulated oil in the two vents which had oil accumulations was 0.24 and 0.96 inches. A water sample from each of the five vents was collected. Total Recoverable Petroleum Hydrocarbon (TRPH) concentrations detected ranged from 15 to 510 mg/l. PCBs (Aroclor 1254) were detected in only one of the five water samples and at a concentration of 49 $\mu\text{g}/\text{l}$. Total VOCs ranged from approximately 40 to 500 $\mu\text{g}/\text{l}$, the petroleum-related aromatics being predominant. Benzene was detected in three of the five samples at concentrations of 37, 66, and 300 $\mu\text{g}/\text{l}$. Several samples were found to have metals concentrations above the State MCL. Arsenic was detected in two samples at 70 and 150 $\mu\text{g}/\text{l}$. Chromium was detected in two samples at 120 and 70 $\mu\text{g}/\text{l}$. Lead was detected in one sample at a concentration of 60 $\mu\text{g}/\text{l}$. Based on the above results and in accordance with CCR, Title 23, Chapter 15, CDF monitoring will be required.
14. This Board adopted a revised Water Quality Control Plan for the Los Angeles River Basin on May 18, 1992. The Plan contains water quality objectives for the Ground Water Basin which lies within the Coastal Plain Subunit. The requirements contained in this Order, as they are met, will be in conformance with the goals of the Water Quality Control Plan.
15. The beneficial uses of the ground water in the Coastal Plain Ground Water Basin of Los Angeles County are: municipal, agricultural water supply, industrial service and process water supply. Lower aquifers are usually of best quality and quantity.
16. Water bodies within the Region that do not have beneficial uses designated are assigned for municipal or domestic water supply (MUN) designations in accordance with provisions of State Water Resources Control Board Resolution No. 88-63. These MUN designations in no way affect the presence or absence of other beneficial use designations in these water bodies.

17. A Negative Declaration prepared by the Port of Long Beach pursuant to the requirements of the California Environmental Quality Act (CEQA) has been adopted on September 27, 1993, for the proposed automobile processing and distribution facility expansion project. The proposed project has been determined not to have any significant adverse environmental impacts.

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

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

IT IS HEREBY ORDERED, that Union Pacific Land Resources Corporation shall comply with the following:

A. Waste Discharge Requirements

1. Wastes discharged shall meet the requirements, contained in California Code of Regulations, Title 23, Chapter 15 for construction standards (Article 4), water quality monitoring (Article 5), and closure and post-closure maintenance of landfills and surface impoundments (Articles 8 & 9), to the extent such requirements are not inconsistent with the approved RAP.
2. The treatment, handling, and disposal of wastes, including those produced and/or discharged on-site as a result of remediation by a stabilization process, shall be conducted in such a way that no contaminants are added to surface water or ground waters.
3. Wastes discharged or reclaimed for reuse as soil backfill shall not contain any substance in concentrations toxic to human, animal, plant, or aquatic life.
4. During the remediation operations, surface runoff from the drainage area tributary to this site shall be prevented from passing over or percolating through the remediation and excavation zones. Adequate facilities shall be provided to divert all surface runoff from storm water away from the remediation and excavation areas.
5. Consolidation Drainage Fluid produced must be properly collected, withdrawn, and disposed of in such a manner as to not adversely impact ground or surface waters.

6. Six additional ground water monitoring wells shall be installed within and immediately adjacent to the Toyota parcel and shall be monitored consistent with Appendix C of the approved RAP.
7. An approved quality assurance and quality control program for each source location shall be developed for assuring that the backfilling of approximately 600,000 cubic yards of imported material at site is free of contaminations likely to impact groundwater.
8. Groundwater at the Toyota parcel is known to have been impacted, therefore, long term monitoring, reporting, modeling and remediation will be required in a site-wide (TCL) groundwater cleanup remedial action plan.
9. Neither the disposal nor any handling of waste shall cause a condition of pollution or nuisance.
10. Wastes shall be discharged only at the site covered by these requirements and only on property owned or controlled by the discharger.
11. All wastes not disposed of in accordance with the foregoing requirements shall be retained in impervious containers and, if transported off site, the final discharge shall be to a legal disposal site in accordance with Division 7.5 of the California Water Code. The Board shall be informed in writing in the monitoring reports when relocation of wastes is necessary. The final disposition (and location) of the wastes shall also be reported.

B. Provisions

1. The Regional Board and other authorized representative shall be allowed:
 - a. Entry upon premises where a regulated facility or activity is located or conducted, or where records are kept under the conditions of this Order;
 - b. Access to copy any records that are kept under the conditions of this Order;
 - c. To inspect any facility, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Order,

and;

- d. To photograph, sample, and monitor for the purpose of assuring compliance with this Order, or as otherwise authorized by the California Code.
2. The discharger shall obtain all permits necessary for any on-site remediation program from the appropriate State and local governmental agencies as required by law.
3. This Order does not exempt the discharger from compliance with any other laws, regulations, or ordinances which may be applicable, it does not legalize these waste treatment and disposal facilities and it leaves unaffected any further restraints on those facilities which may be contained in other statutes or required by other agencies.
4. This Order is not intended to stop or redirect any investigation or mitigation activities not required by this Order but ordered by this Regional Board or other agency.
5. A copy of this Order shall be maintained at the site, where it will be available at all times to operating personnel.
6. In accordance with Section 13260 of the Water Code, the discharger shall file a report of any material change or proposed change in the character, location or volume of the discharge.
7. In the event of any change in name, ownership, or control of these waste disposal facilities, the discharger shall notify this Board of such change and shall notify the succeeding owner or operator of the existence of this Order by letter, a copy of which shall be forwarded to the Board.
8. The discharger shall notify this Board immediately by telephone of any adverse condition resulting from this discharge or from operations producing this waste discharge, such notifications to be affirmed in writing with in one week from the date of such occurrence.
9. In accordance with Section 13267 of the Water Code, the discharger shall furnish, under penalty of perjury, technical monitoring program reports; such reports shall be submitted in accordance with specifications prepared

by the Executive Officer, which specifications are subject to periodic revisions as may be warranted.

10. In accordance with Section 13263 of the Water Code, these waste discharge requirements are subject to periodic review and revision by this Regional Board.

I, Robert P. Ghirelli, 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 November 1, 1993.



ROBERT P. GHIRELLI, D.Env
Executive Officer

STATE OF CALIFORNIA
CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
LOS ANGELES REGION

MONITORING AND REPORTING PROGRAM NO. (6409) 7617
FOR

SUMP CLOSURE AND CAPPING OF THE EXISTING WASTE MANAGEMENT UNITS

UNION PACIFIC LAND RESOURCES CORPORATION
(FORMERLY CHAMPLIN PETROLEUM COMPANY)
TOYOTA PARCEL/TCL SITE
(FILE NO. 77-47)

The discharger shall implement this Monitoring and Reporting Program on the date of issuance of the Waste Discharge Requirements and consistent with the Appendix C of the approved RAP. Thereafter, monitoring reports shall be submitted by the date in the following schedule:

<u>Reporting Period</u>	<u>Report Due</u>
January - March	April 15
April - June	July 15
July - September	October 15
October - December	January 15

I. GROUND WATER MONITORING

The following shall constitute the groundwater monitoring program for all required monitoring wells within or adjacent to the Toyota parcel in order to establish the baseline as referenced in the approved RAP:

<u>Parameter</u>	<u>Units</u>	<u>Frequency</u>
Water Elevation (0.01 feet) from Datum		Quarterly
Total Dissolved Solids	mg/l	Quarterly
Turbidity	NTU	Quarterly
pH	pH units	Quarterly
Total Petroleum Hydrocarbon (EPA 418.1 and Modified 8015)	µg/l	Quarterly
CAM Metals	mg/l	Quarterly
Volatile Organic compounds (EPA Method 624, 625)	µg/l	Quarterly
PCBs	µg/l	Semi-annually

II. CONSOLIDATION DRAINAGE FLUID (CDF) MONITORING

CDF shall be sampled properly and monitored at the CDF collection system for the following parameters:

<u>Parameter</u>	<u>Units</u>	<u>Frequency</u>
Oil Thickness (0.01 inches, if any)		Quarterly
Total Petroleum Hydrocarbon (EPA 418.1 and Modified 8015)	$\mu\text{g}/\ell$	Quarterly
CAM Metals	mg/ℓ	Quarterly
Volatile Organic compounds (EPA Method 624, 625)	$\mu\text{g}/\ell$	Quarterly
PCBs	$\mu\text{g}/\ell$	Quarterly

III. GENERAL PROVISIONS FOR SAMPLING AND ANALYSIS

- A. All sampling, sample preservation, and analysis shall be performed in accordance with the latest edition of "Guidelines Establishing Test Procedure for Analysis of Pollutants," promulgated by the United States Environmental Protection Agency.
- B. All analyses shall be conducted at a laboratory certified for such analyses by the State Department of Health Services, or approved by the Executive Officer. No changes shall be made in sampling points without prior approval of the Executive Officer.
- C. All sampling require 72 hours written and verbal notice to the Regional Board in order for staff to participate in the sampling.
- D. The discharger shall maintain all sampling and analytical results, including date, exact location, and time of sampling, date analysis were performed, name of analyst, analytical techniques used, and results of all analyses. Such result shall be retained for a minimum of three years. This period of retention shall be extended during the course of any unresolved litigation regarding this discharge or when requested by the Regional Board.

IV. SPECIFIC REPORTING REQUIREMENTS

- A. The following technical reports shall be filed with the Regional Board:
1. A "VLS Removal and Stabilization Study Report", shall be submitted within 30 days of completing VLS stabilization study, verifying that an appropriate design mix for the pozzolanic additives and the effectiveness of the VLS stabilization, as referenced in the approved RAP.
 2. A "Lead Leachability Testing" shall be submitted within 30 days of completing testing, verifying that the stabilization process itself does not contribute to the potential leachability of lead or otherwise impact groundwater.
 3. A "Groundwater Monitoring Well Installation Report" shall be submitted within 30 days of completing six groundwater monitoring wells within or adjacent to the Toyota parcel, reporting the well construction details for each well and the location of the well with geological information, as referenced in the approved RAP.
 4. A "Final Project Completion Report" shall be submitted within 30 days of completing all remediation and backfilling activities, summarizing the quantity and the final disposition of the stabilized and imported material along with laboratory analytical results and well data.
- B. All technical reports prepared for submittal to the Regional Board shall be signed by either a California registered professional engineer, a registered geologist, or certified engineering geologist.
- C. For every item where the requirements are not met the discharger shall submit a statement of the actions undertaken or proposed, together with a timetable, to bring the discharge back into full compliance with the requirements at the earliest time.
- D. In reporting the monitoring data, the discharger shall arrange the data in tabular form so that the data, the constituents, and the concentrations are readily discernible. The data shall

be summarized to determine compliance with waste discharge requirements and, where applicable, shall include receiving ground water observations.

E. Monitoring reports submitted to the Regional Board shall be signed by:

1. In the case of corporation, principal executive officer at least the level of Vice President or his duly authorized representative, if such representative is responsible for the overall operation of the facility from which discharge originates;
2. In case of partnership, a general partner;
3. In case of sole proprietorship, the proprietor;
4. In the case of a municipal, state or public facility, either a principal executive officer, ranking elected official, or other duly authorized employee.

Each report shall contain the following completed declaration:

" I declare under penalty of perjury that the foregoing is true and correct.

Executed on the day of _____ at _____

_____ (Signature)

_____ (Title)"

Ordered by



ROBERT P. GHIRELLI, D.Env.
Executive Officer

Date: November 1, 1993