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

> NPDES PERMIT NO. <u>91-105</u> NPDES PERMIT NO. <u>CA0059650</u>

WASTE DISCHARGE REQUIREMENTS FOR CHEVRON U.S.A., INC., FORMER LONG BEACH AIRPORT FUEL DEPOT

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

- 1. Chevron U.S.A., Inc. (Chevron), operated a fueling station at 4301 Donald Douglas Drive in Long Beach, California. In 1984, leaks were discovered in the underground storage tanks which contained aviation gasoline and jet fuel. The quantity of aviation gasoline and jet fuel released is unknown. All underground storage tanks have since been removed from the facility. The soil and the shallow ground water beneath the site were found to be contaminated with free product and dissolved petroleum hydrocarbons.
- 2. Chevron has completed the definition of the soil and ground water contamination. Off-site ground water assessment has also been performed and completed. Mitigation work plans for the contaminated soil and ground water have been proposed and submitted to the Board. Chevron has proposed cleanup of the soil through vapor extraction and thermal oxidation.
- 3. Ground water extraction, cleanup, monitoring, and free product recovery programs have been underway since 1985. As of June, 1991, 2,252 gallons of free product have been recovered. Water quality data from the ground water monitoring wells have shown that prior cleanup efforts have prevented the ground water contaminant plume from migrating.
- 4. Chevron has operated an air stripper on-site to treat 36,000 gallons per day of ground water contaminated with petroleum hydrocarbons. The treated ground water was discharged under waste discharge requirements contained in the National Pollutant Discharge Elimination System Permit (NPDES No. CA0059650; Order No. 90-134) adopted by this Board on September 24, 1990.

- Revised September 26, 1991

Chevron U.S.A., Inc. Order No. <u>91-105</u> $\left(\right)$

- 5. Chevron has filed a Report of Waste Discharge and has applied for a material change to use a granular activated carbon filtration system, instead of the air stripper, for the treatment of contaminated ground water. In addition, Chevron proposes to continue ground water extraction and cleanup operations, and to discharge up to 36,000 gallons per day of treated ground water during the cleanup.
- 6. Chevron proposes to continue free product recovery and storage operations for recycling. The treated ground water is discharged to a storm drain in Donald Douglas Drive, and thence to Los Cerritos Channel, a water of the United States above the tidal prism.
- 7. Federal law stipulates that all NPDES permits require the implementation of best available technology, economically achievable to treat these waters. Granular activated carbon filters have been used extensively for cleanup of contaminated ground water, particularly for the removal of volatile organic compounds. This method is currently considered to be one of the best available technologies, economically achievable.
- 8. Maximum discharge limitations specified in this permit are based upon California Department of Health Services recommended action levels, primary drinking water standards, Environmental Protection Agency water quality criteria, the Water Quality Control Plan for the Los Angeles River Basin and/or best available technology, economically achievable.
- 9. The Board adopted a revised Water Quality Control Plan for the Los Angeles River Basin on June 3, 1991. The Water Quality Control Plan contains water quality objectives for Los Cerritos Channel. The requirements contained in this Order, as they are met, will be in conformance with the goals of the Water Quality Control Plan.
- 10. The Basin Plan for the Los Angeles River Basin details the beneficial uses of the receiving waters are: non-contact water recreation, water contact recreation, ocean commercial and sport fishing, preservation of rare and endangered species, shellfish harvesting, marine habitat and saline water habitat, warm freshwater habitat, industrial service supply, and wildlife habitat.
- 11. Effluent limitation standards established pursuant to Section 301 of the federal Clean Water Act and amendments thereto, may be applicable to this discharge.

CA0059650

Chevron U.S.A., Inc. Order No. <u>91-105</u>

12. This action is being taken for the protection of the environment and as such is exempt from the provisions of the California Environmental Quality Act (Public Resource Code commencing with Section 21100) in accordance with California Code of Regulations Section 13389.

The Board has notified the discharger, interested agencies, and persons of its intent to adopt waste discharge requirements for this discharge. The Board has provided these persons with an opportunity to submit their written views and recommendations. The Board, in a public hearing, heard and considered all comments pertaining to the discharge and to the tentative requirements.

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

IT IS HEREBY ORDERED, that Chevron U.S.A., Inc., in order to meet the provisions contained in Division 7 of the California Water Code, and regulations adopted thereunder, and the provisions of the federal Clean Water Act and regulations, and guidelines adopted thereunder, shall comply with the following:

- I. Effluent Limitations
 - a. -Wastes discharged shall be limited to treated ground - water as proposed.
 - b. The discharge of an effluent in excess of the following limits is prohibited:

	DISCHARGE LI	MITATION		
<u>CONSTITUENT</u>	<u> 30-Day Average</u>	Maximum		
Oil and grease	10.0 mg/L	15.00 mg/L		
	3.00 lbs/day*	4.50 lbs/day*		
Benzene		1.0 µg/L		
Toluene		10.0 $\mu g/L$		
Xylene (total)		10.0 $\mu g/L$		
Ethylbenzene		10.0 $\mu q/L$		
Ethylene dibromide		0.02 $\mu g/L$		
n-Hexane		10.0 $\mu q/L$		
Lead		50.0 µg/L		
Phenol		5.0 µg/L		

* Based upon a total flow rate of 36,000 gallons per day.

-3-

Chevron U.S.A., Inc. Order No. <u>91-105</u>

CA0059650

- c. The toxicity of the effluent shall be such 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 producing less than 70% survival.
- II. Requirements and Provisions
 - a. This order includes the attached "Standard Provisions and General Monitoring and Reporting Requirements".
 - b. Prior to discharge from the facility, the discharger shall obtain a storm drain connection permit from the local and/or relevant agency as warranted.
 - Prior to discharge from the facility, laboratory analysis C. of "trial run" treated effluent shall be performed to confirm that the wastewater quality is within the limits specified by this permit. The effluent shall then be discharged proposed. Effluents as containing contaminants in excess of the limits adopted in this permit shall not be discharged to the storm drain. If contaminant levels in the treated wastewater exceed permit specifications, alternative disposal, storage, or additional treatment followed by substantiating laboratory analysis of the wastewater will be required.

III. Expiration Date

This Order expires on December 10, 1996.

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

IV. <u>Rescission</u>

Order No. 90-078, adopted by this Board on September 24, 1990, is hereby rescinded.

-4-

Chevron U.S.A., Inc. Order No. <u>91-105</u>

CA0059650

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 October 28, 1991.

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ROBERT P. GHIRELLI, D.Env. Executive Officer

AGH:

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD LOS ANGELES REGION

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MONITORING AND REPORTING PROGRAM NO. <u>6716</u> FOR CHEVRON U.S.A., INC. (NPDES PERMIT NO. CA0059650)

Chevron U.S.A., Inc., shall implement this monitoring program on the effective date of this Order. Monitoring reports shall be submitted monthly by the 15th day of the second following month. The first monthly report (i.e., November) under this program will be due by January 15, 1992. If no discharge occurs during any reporting period, the report shall so state.

I. Effluent Monitoring

A sampling station shall be established for each point of discharge and shall be located where representative grab samples of the final treated effluent can be collected immediately prior to discharge.

During the first two weeks that treated effluent is discharged to the storm drain, the effluent shall be sampled daily and analyzed for the constituents listed below (except toxicity). After the first two weeks of continuous discharge, the frequency of sampling and analysis shall revert to those indicated in the following effluent monitoring program:

				MINIMUM
		EPA METHOD	TYPE	FREQUENCY
CONSTITUENT	UNITS	NUMBER	SAMPLE	OF ANALYSIS
Dffluent flee				
Effluent flow	gal/day			weekly
Temperature	F		grab	weekly
pH	pH units	150.1	grab	weekly
Oil and grease	mg/L	413.1	grab	weekly [4]
Benzene	µg/L	602	grab	weekly [4]
Xylene (total)	µg/L	602	grab	weekly [4]
Toluene	µg/L	602	grab	weekly [4]
Ethylbenzene	µg/L	602	grab	weekly [4]
Ethylene dibromide	µg/L	504	grab	weekly [4]
n-Hexane	µg/L		grab	weekly [4]
Lead	µg/L	7421 [2]	grab	weekly [4]
Phenol	µg/L	604	grab	weekly [4]
Total petroleum				
hydrocarbons	mg/L	8015	grab	weekly [4]
Toxicity [1]	<pre>% Survival</pre>		grab	annually [3]

Chevron U.S.A., Inc. Reporting and Monitoring Program No. <u>6716</u>

- [1] The toxicity test shall be conducted according to the methods specified in "Guidelines for Performing Static Acute Toxicity Fish Bioassays in Municipal and Industrial Wastewaters" (California State Water Resources Control Board and Department of Fish and Game, July 1976). Submission of bioassay results should include the information noted on pages 31 and 32 of the "Guidelines". The fathead minnow (<u>Pimephales promelas</u>) may be used as the test species instead of the golden shiner (<u>Notemigonus crysoleucas</u>).
- [2] Graphite furnace method
- [3] If the results of the annual toxicity test yield a survival of less than 90%, then the frequency of analyses shall increase to bimonthly until at least three consecutive test results have been obtained and full compliance with Effluent Limitation I.c. has been demonstrated. After this, the frequency of the analyses shall revert to annually. The results of the toxicity test shall be included in the first monitoring report submitted following completion of the test.
- [4] After the discharge has been sampled on a weekly basis for at least 1 month, the discharger may make a written request to the Executive Officer for a reduction in the frequency of sampling. Board staff will evaluate the effectiveness of the cleanup system when considering such a request.

II. Ground Water Monitoring

- 1. The existing ground water monitoring program for this facility shall continue to monitor water quality, potential migration of the contaminant plume and effectiveness of ground water cleanup operations. Ground water samples shall be collected from on-site and off-site ground water monitoring wells. The ground water samples shall be analyzed for petroleum and aromatic hydrocarbons using EPA Methods 8015 and 602 respectively. Sampling of ground water monitoring wells shall be performed according to the following schedule:
 - a. Ground water monitoring wells shall be sampled and analyzed quarterly for ground water quality beginning **November of 1991.** Monitoring wells containing free product shall not be analyzed.

Chevron U.S.A., Inc. Reporting and Monitoring Program No. 6716

b. Ground water monitoring reports shall be submitted quarterly by the dates in the following schedule:

Reporting Period		Report Due		
January	-	March	April	15th
April	-	June	July	15th
July	-	September	October	15th
October	-	December	January	15th

The first annual summary report due March 1, 1993 shall include the results of all analyses and a complete system evaluation. This evaluation shall include an analysis of the effectiveness of the ground water cleanup and treatment system. The analysis shall include, but not be limited to, the present ground water conditions, rate of cleanup, system operating conditions, projected cleanup completion schedule (if possible) and any modifications made during the life of the system. In the event ground water extraction or cleanup operations become ineffective to control and remove the contaminant plume, new remedial plan and waste discharge requirements may be required for further ground water cleanup operations.

Ordered by:

ROBERT P. GHIRELLI, D.Env. Executive Officer

Date: October 28, 1991