

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

ORDER NO. 92-034  
NPDES PERMIT NO. CA 0062260

WASTE DISCHARGE REQUIREMENTS  
FOR  
ARCO Products Company  
(Former ARCO Station #1361)

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

1. ARCO Products Company (ARCO) has filed a report of waste discharge and has applied for a permit to discharge wastes under the National Pollutant Discharge Elimination System.
2. Former ARCO Service Station #1361 is located at 6739 West Olympic Boulevard in Los Angeles, California. The property is owned by Ebby and David Tabari.
3. The station facilities were demolished, and four 10,000-gallon underground gasoline storage tanks and one 200-gallon waste oil storage tank were removed in December 1990.
4. A soil and ground water contamination problem associated with petroleum hydrocarbon was identified during subsequent site investigation. The source of hydrocarbon contamination appears to be due to the unauthorized release of petroleum products from underground storage tanks and/or piping system. Additional offsite investigation is in progress to define the extent of the dissolved hydrocarbon plume downgradient. Free gasoline product was reported in nine out of seventeen existing ground water monitoring wells. The depth to ground water is approximately 17 feet below grade. As of October 1990, approximately 1,140 gallons of free product have been recovered.
5. ARCO has submitted a remedial action plan for soil and ground water cleanup. The proposed remedial plan includes a vapor extraction system, free product recovery and ground water remediation system.
6. ARCO proposes to install an in-situ vapor extraction system to treat the hydrocarbon-contaminated soil. Ground water will be pumped from three proposed extraction wells (GEW-1, GEW-2, and GEW-3), by pneumatically-operated ejector pumps to an aboveground product/water separator. The separated product

May 1, 1992

will be periodically removed from the tank and transported to a recycling facility. Contaminated ground water containing dissolved hydrocarbons will pass through an above-ground bioreactor and two activated carbon filter units. A total of 28,800 gallons per day will be treated by this treatment process.

7. ARCO Products Company proposes to discharge up to 21,600 gallons per day (gpd) of treated waste water from the proposed ground water cleanup operation into a storm drain catch basin, located on the east side of La Cienega Boulevard. The waste water will then flow into Ballona Creek, a water of the United States.
8. The balance (7,200 gpd) of the filtered ground water will be injected into the upper aquifer via an infiltration gallery and/or wells to control and enhance the cleanup of the gasoline plume. This discharge is subject to a separate waste discharge requirements adopted by this Board.
9. Federal law stipulates that all NPDES permits require the implementation of one of the best available technologies economically achievable. Bioreactor and carbon adsorption systems have been used for the cleanup of ground water which has been contaminated with aromatic hydrocarbons (benzene, toluene, ethylbenzene, xylenes, etc). Based on the concentrations of contaminants in the ground water and the flow rate, this system represents one of the best available technologies economically achievable.
10. The maximum discharge limitations specified in this permit are based upon State Department of Health Services recommended action levels, Environmental Protection Agency primary drinking water standards, Environmental Protection Agency Water Quality Criteria, Water Quality Control Plan for the Los Angeles River Basin and/or best available technology economically feasible.
11. 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 Ballona Creek. The requirements contained in this order, as they are met, will conform with the goals of the Water Quality Control plan.
12. The beneficial uses of the receiving waters are contact and non-contact water recreation, warm freshwater and wildlife habitats.

13. Effluent Limitation Standards established pursuant to Section 301 of the Federal Clean Water Act and amendments thereto, may be applicable to this discharge.
14. 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 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 hearing, heard and considered all comments pertaining to the discharge and to the tentative requirements.

This Order shall serve as a NPDES permit pursuant to section 402 of the Federal Clean Water Act, or amendments thereto. This Order shall take effect ten days from the date of its adoption, provided the Regional Administrator, Environmental Protection Agency, San Francisco, has no objections.

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

I. Effluent Limitations

1. Wastes discharged shall be limited to treated ground water only, as proposed.
2. The discharge of an effluent in excess of the following limits is prohibited.

Discharge Limitations

<u>Constituent</u>	<u>30 day average</u>	<u>Maximum</u>
Oil & grease	10 mg/L	15.00 mg/L
	1.80 lbs/day*	2.70 lbs/day*
Benzene	- - - -	1.00 µg/L
Toluene	- - - -	10.00 µg/L
Ethylbenzene	- - - -	10.00 µg/L
Xylene (total)	- - - -	10.00 µg/L
Lead (total)	- - - -	50.00 µg/L
Ethylene dibromide	- - - -	0.02 µg/L

\* Based upon a maximum flow rate of 21,600 gallons per day.

3. The effluent toxicity 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

1. This order includes the attached "Standard Provisions and General Monitoring and Reporting Requirements".
2. Prior to discharge from the facility, the discharger shall obtain a storm drain connection permit from the local agency as warranted.
3. Before the commencement of continuous discharge to the storm drain from the modified treatment system, the discharger shall collect effluent samples during a "trial run" of the treatment system. The effluent samples shall be analyzed in a laboratory certified for the parameters listed in the Monitoring and Reporting program to confirm that the wastewater meets the discharge limitations specified in this Order.
4. If at any time the treated effluent contains contaminants in concentrations which exceed the discharge limitations contained in this Order, the discharger shall notify Board staff by telephone within 24 hours. Written confirmation shall be submitted within one week of the telephone notification. Alternate disposal, storage, or additional treatment to meet the discharge limitations will then be required. Effluent containing contaminants in excess of

Former ARCO Station #1361  
Order No. 92-034

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the limits adopted in this Order shall not be discharged to the storm drain.

III. Expiration Date

This Order expires on May 10, 1997.

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 the application date, as application for the renewal of the waste discharge requirements.

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 June 1, 1992.



ROBERT P. GHIRELLI, D.Env.  
Executive Officer

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
LOS ANGELES REGION

MONITORING AND REPORTING PROGRAM NO. 7169  
FOR  
ARCO Products Company  
(CA 0062260)

ARCO shall implement this monitoring program on the effective date of this Order. Monitoring reports shall be submitted monthly by the first day of the second following month. The first report (July) under this program is due by September 1, 1992. If no discharge occurred, 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 that effluent can be obtained. The following shall constitute the effluent monitoring program:

<u>Constituent</u>	<u>Units</u>	<u>EPA Method Number</u>	<u>Type of Sample</u>	<u>Minimum Frequency of Analysis</u>
Effluent flow	gal/day	----	----	weekly
Temperature	F	----	grab	weekly
pH	pH units	----	grab	weekly
Oil and grease	mg/L	413.1	grab	weekly <sup>[3]</sup>
Benzene	μg/L	602	grab	weekly <sup>[3]</sup>
Toluene	μg/L	602	grab	weekly <sup>[3]</sup>
Xylene (total)	μg/L	602	grab	weekly <sup>[3]</sup>
Ethylbenzene	μg/L	602	grab	weekly <sup>[3]</sup>
Ethylene dibromide	μg/L	504	grab	weekly <sup>[3]</sup>
Total petroleum hydrocarbons	mg/L	8015	grab	Quarterly
Lead (total)	μg/L	7421 <sup>[4]</sup>	grab	Quarterly
Toxicity <sup>[1]</sup>	% survival	----	grab	Annually <sup>[2]</sup>

[1] Acute Toxicity testing shall be conducted by the method specified in "Methods for Measuring the Acute Toxicity of Effluents to Freshwater and Marine Organisms" - March 1985 (EPA/600/4-85-013). Submission of bioassay results should include the information noted on pages 45-49 of the "Methods". The fathead minnow (Pimephales promelas) shall be used as the test species unless otherwise directed by the Executive Officer.

- [2] If the results of the annual toxicity test yield a survival of less than 90%, then the frequency of analysis shall be increased to bimonthly until at least three consecutive test results have been obtained and full compliance with Effluent limitations I.c., has been demonstrated, after which the frequency of analysis shall revert to annually.
- [3] Following the complete system installation and subsequent startup, weekly sampling shall continue for at least 12 months, or until such time that the Executive Officer approves a change in the sampling frequency. At the end of three months, following a cleanup system evaluation by Board staff, the sampling frequency may be reduced to monthly intervals. Following six months of monthly sampling, the frequency of analysis shall revert to quarterly subsequent to review and evaluation of the compliance history.
- [4] Graphite furnace method

## II. Ground Water Monitoring

1. The existing ground water monitoring wells at this facility shall be used to monitor water quality, potential migration of the contaminant plume and effectiveness of ground water cleanup operation. At least one additional offsite ground water monitoring well shall be installed downgradient to existing monitoring well MW-2 and the proposed well MW-18 to monitor potential migration of downgradient extent of the plume.
2. Ground water samples shall be collected and analyzed for petroleum hydrocarbons and its aromatic constituent in accordance with EPA Methods 8015 and 602, respectively. Sampling of ground water monitoring wells shall be conducted according to the following:
  - a. The ground water monitoring wells shall be sampled and analyzed quarterly for water quality beginning July 1, 1992. Monitoring wells containing free product shall not be analyzed.
  - b. Prior to collecting samples, the depth to waster table shall be measured; then the wells shall be properly purged until the temperature, conductivity, and pH stabilize, and the water is free of suspended and settleable solids.

- c. The Quarterly ground water monitoring reports shall include the analytical results, together with the current ground water elevation data, and a ground water contour map based on the data. The reports shall also contain the measurements recorded during the purging of the well, and the disposal point of the purged water.
- d. Ground water monitoring reports shall be submitted quarterly by the dates specified in the following schedule:

<u>Monitoring Period</u>	<u>Report Due</u>
January - March	April 30
April - June	July 31
July -September	October 31
October - December	January 31

Annual summary reports shall be submitted by March first of each year. 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 groundwater monitoring and treatment system. The analysis shall include, but not limited to, the present groundwater conditions (including the analytical data from the ground water monitoring program), rate of cleanup, system operating conditions, project completion schedule (if possible) and any modifications made during the life of the system. In the event ground water extraction or cleanup system is not effectively cleaning or controlling the contaminant plume, a new remedial action plan and revised waste discharge requirements shall be required for further ground water cleanup.

ORDERED BY:



ROBERT P. GHIRELLI, D. Env.  
Executive Officer

Date: June 1, 1992

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

92-034

11 CENTRE PLAZA DRIVE  
MONTEREY PARK, CA 91754-2156  
(213) 266-7500

June 9, 1992

Ms. Marilyn Guthrie  
Environmental Engineer  
ARCO Products Company  
1055 West Seventh Street  
Los Angeles, California 90051

**WASTE DISCHARGE REQUIREMENTS FOR FORMER ARCO STATION #1361, 6739  
WEST OLYMPIC BOULEVARD, LOS ANGELES, CALIFORNIA  
(NPDES Permit No. CA 0062260)**

Our letter dated May 1, 1992, transmitted a copy of tentative waste discharge requirements for treated groundwater discharge from the subject facility.

Pursuant to Division 7 of the California Water Code, this Regional Board at a public hearing held on June 1, 1992, reviewed these tentative requirements, considered all factors in the case, and adopted Order No. 92-034 (copy attached) relative to this waste discharge. This order serves as a permit under the National Pollutant Discharge Elimination System, and expires on May 10, 1997. Section 13376 of the California Water Code requires that an application for a new permit must be filed at least 180 days before the expiration date.

Your attention is directed to Section E.5 of the enclosed Standard Provisions and General Monitoring and Reporting Requirements. This section requires you to submit a technical report to this Board no later than 30 days after receipt of this permit relative to the operation and maintenance of the groundwater treatment facility.

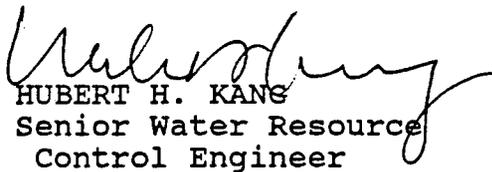
You are also required to implement the new monitoring program as stated in the Monitoring and Reporting Program by the effective date of this Order. All monitoring reports shall be referenced to compliance file No. 7169 and should be sent to this Regional Board, Attention: Technical Support Unit. All other reports should continue to be sent to the Underground Tank Unit.

We would appreciate 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.

Ms. Marilyn Guthrie  
June 9, 1992  
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As the Board adopted the tentative requirements without changes, we are sending the final copy only to the applicant. For those on the mailing list please add Order No. 92-034 to the tentative Order previously sent to you. A copy of the final order as adopted will be furnished to anyone upon request.

If you have any questions regarding this letter, please call Mr. Jay C. Huang at (213) 266-7573.

  
HUBERT H. KANG  
Senior Water Resource  
Control Engineer

Enclosures

c.c. Environmental Protection Agency, Region IX, (W-5-1)  
U. S. Army Corps of Engineers  
NOAA, National Marine Fisheries Service  
Mr. Archie Matthews, Division of Water Quality, State Water  
Resources Control Board  
California Department of Fish and Game, Region 5  
California Department of Health Services, Public Water Supply  
Branch  
California Department of Health Services, Toxic Substances  
Control Division, Facilities Permitting Unit (Region 4)  
Mr. Leonard C. L. Nagler, California Department of Water  
sources, Southern District  
South Coast Air Quality Management District  
Captain Richard Camarena, Los Angeles City Fire Department,  
Underground Tank Unit.  
Mr. Gregory R. Albright, Harding Lawson Associates  
Ronald D. Rosen, Egerman, Brown & Rosen