

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

ORDER NO. 91-048

NPDES NO. CA0059731

WASTE DISCHARGE REQUIREMENTS
FOR
ARCO PRODUCTS COMPANY

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

1. ARCO Products Company (a division of Atlantic Richfield Company, a corporation) has filed a report of waste discharge and has filed for renewal of a permit to discharge wastes under the National Pollutant Discharge Elimination System (NPDES).
2. ARCO Products Company owns a retail gasoline station at 16804 Downey Avenue, Paramount, California. Leak detection work conducted at the site showed that the soil and shallow ground water beneath the site were contaminated with petroleum and aromatic hydrocarbons. In addition to the dissolved hydrocarbon contamination, free-phase gasoline product was also found on the ground water. The extent of the contamination in the soil and the shallow ground water has been defined by additional site assessment work.
3. ARCO Products Company installed a ground water extraction and treatment system in 1986 to remove the free product and to clean up the dissolved hydrocarbon contamination in the shallow ground water. Treated ground water from this system is discharged to the storm drain under Order Number 86-25 adopted by the Board.
4. ARCO Products Company has submitted a plan to improve the operation of the ground water extraction and treatment system. This plan was reviewed and approved by Board staff.
5. ARCO Products Company is proposing to discharge up to 144,000 gallons per day (gpd) of treated ground water to the storm drain. Prior to discharge, the contaminated ground water will be pumped through an oil/water separator, and air stripping tower and granular activated carbon (GAC) to reduce the hydrocarbon concentrations.

February 5, 1991

6. The treated ground water will be discharged directly to a storm drain catch basin immediately adjacent to the facility. From there, the wastes flow via a lined storm drain to Los Cerritos Channel, thence to Alamitos Bay, a water of the United States.
7. Federal law stipulates that all NPDES permits require the use of best available technology, economically achievable to treat these wastes. Aeration, followed by GAC has been used for the cleanup of ground water which has been contaminated with aromatic hydrocarbons (benzene, toluene, xylenes, ethylbenzene, etc.). Based on the concentrations of contaminants in the ground water, and the flow rate, this system represents the best available technology, economically achievable.
8. The maximum discharge limitations specified in this permit are based primarily upon California Department of Health Services recommended drinking water action levels, and best available technology, economically achievable.
9. The Board adopted a revised Water Quality Control Plan for the Los Angeles River Basin on November 28, 1978. The Plan contains water quality objectives for Los Cerritos Channel within the tidal prism, and Alamitos Bay. 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 beneficial uses of Los Cerritos Channel are: industrial service supply, non-contact water recreation, ocean commercial and sport fishing, preservation of rare and endangered species, marine habitat, shellfish harvesting, and saline water habitat. The beneficial uses of Alamitos Bay are: non-contact water recreation, ocean commercial and sport fishing, preservation of rare and endangered species, marine habitat, and shellfish harvesting.
11. Effluent limitation standards established pursuant to Section 301 of the federal Clean Water Act and amendments thereto, may be applicable to this discharge.
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 Resources Code, commencing with Section 21100) in accordance with California Water Code Section 13389.

The Board has notified the discharger, interested agencies and persons of its intent to prescribe 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 after adoption, provided the Regional Administrator, Environmental Protection Agency, 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 the regulations adopted thereunder, and the provisions of the federal Clean Water Act and regulations and guidelines adopted thereunder, shall comply with the following:

1. Effluent Limitations

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

<u>Constituent</u>	<u>Discharge Limitations</u>	
	<u>30-day average</u>	<u>Maximum</u>
Oil and Grease	10.0 mg/L 12.0 lbs/day*	15.0 mg/L 18.0 lbs/day*
Benzene	----	1.00 ug/L
Toluene	----	10.00 ug/L
Xylenes (total)	----	10.00 ug/L
Ethylbenzene	----	10.00 ug/L
Ethylene dibromide	----	0.02 ug/L
Lead (total)	----	50.00 ug/L

* Based on a maximum flow rate of 144,000 gpd.

- 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 less than 70% survival.

2. This Order contains the attached "Standard Provisions and General Monitoring and Reporting Requirements".
3. Prior to commencing "on-line" discharge from the facility, the discharger shall obtain a storm drain connection permit from the local agency as warranted.
4. 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 certified laboratory for the parameters listed in the Monitoring and Reporting Program to confirm that the wastewater meets the discharge limitations specified in this Order.
5. 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. Alternative disposal, storage, or additional treatment to meet the discharge limitations will then be required. Effluent containing contaminants in excess of the limits adopted in this order shall not be discharged to the storm drain.
6. This Order expires on April 10, 1996. The discharger must file a report of waste discharge in accordance with Title 23, California Code of Regulations, no later than 180 days in advance of the expiration date as application for renewal of these waste discharge requirements.
7. Order Number 86-25 is hereby rescinded.

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 April 22, 1991.

Robert P. Ghirelli

ROBERT P. GHIRELLI, D.Env.
Executive Officer

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
 LOS ANGELES REGION
 MONITORING AND REPORTING PROGRAM NO. 6730

FOR

ARCO PRODUCTS COMPANY
 (NPDES No. CA0059731)

ARCO Products Company 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 (for May) under this program will be due by July 1, 1991. If no discharge occurs during any reporting period, the report shall so state.

EFFLUENT MONITORING

A sampling station shall be established for each point of discharge and shall be located where representative 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 weekly as indicated in the following 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 [4]
Benzene	ug/L	602	grab	weekly [4]
Toluene	ug/L	602	grab	weekly [4]
Xylenes (total)	ug/L	602	grab	weekly [4]
Ethylbenzene	ug/L	602	grab	weekly [4]
Ethylene dibromide	ug/L	601 or 504	grab	weekly [4]
Lead (total)	ug/L	7421 [1]	grab	quarterly
Total petroleum hydrocarbons	mg/L	8015	grab	quarterly
Toxicity [2]	% survival	----	grab	annually [3]

[1] Graphite furnace method

ARCO Products Company
Monitoring and Reporting Program No. 6730

- [2] 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" (State Water Resources Control Board and Department of Fish and Game -- July, 1976). Submission of bioassay results shall include all information noted on pages 31 and 32 of "Guidelines". The fathead minnow (*Pimephales promelas*) may be used as the test species instead of the golden shiner (*Notemigonus crysoleucas*).
- [3] If the results of the annual toxicity test yield a survival of less than 90%, the frequency of analysis shall be increased to bimonthly until at least three consecutive test results have been obtained and full compliance with Effluent Limitation 1.c has been demonstrated. After this, the frequency of analysis 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] 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.

The first annual summary report 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 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.

Ordered by:

Robert P. Ghirelli

ROBERT P. GHIRELLI, D.Env.
Executive Officer

Date: April 22, 1991