

State of California
CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
LOS ANGELES REGION
320 West 4th Street, Suite 200, Los Angeles

FACT SHEET
WASTE DISCHARGE REQUIREMENTS
for
EDOCO
(Carson Facility)

NPDES Permit No.: CA0002941
Public Notice No.: 01-036

FACILITY ADDRESS

Edoco
Carson Facility
22039 S. Westward Avenue
Carson, Calif. 90745

FACILITY MAILING ADDRESS

Edoco
22039 S. Westward Avenue
Long Beach, Calif. 90810-1681
Contact: Dave Webster
Telephone: (310) 834-3401

I. PUBLIC PARTICIPATION

A. WRITTEN COMMENTS

Interested persons are invited to submit written comments upon these tentative Waste Discharge Requirements. Comments should be submitted either in person or by mail to:

Executive Officer
California Regional Water Quality Control Board, Los Angeles Region
320 West 4th Street, Suite 200
Los Angeles, CA 90013

Written comments regarding the tentative waste discharge requirements must be received at the Regional Board office by 5:00 p.m. the close of business on September 24, 2001, in order to be evaluated by staff and included in the Board's agenda folder.

B. PUBLIC HEARING

The proposed waste discharge requirements will be considered by the Regional Board at a public hearing to be held on October 25, 2001, at the Richard H. Chambers U.S. Court of Appeals Building (Courtroom 3), 125 South Grand Avenue, and will begin at 9:00 a.m.

C. WASTE DISCHARGE REQUIREMENT APPEALS

Any person may petition the State Water Resources Control Board (State Board) to review the decision of the Regional Board regarding the final waste discharge requirements. A petition must be made within 30 days of the Regional Board public hearing.

D. INFORMATION AND COPYING

The application, related documents, tentative effluent limitations and special conditions, comments received, and other information are on file and may be inspected at 320 West 4th Street, Suite 200, Los Angeles, California, 90013, at any time between 8:30 am and 4:45 pm, Monday through Friday. Copying of documents may be arranged through the Los Angeles Regional Board by calling (213) 576-6600.

E. REGISTER OF INTERESTED PERSONS

Any person interested in this particular application or NPDES permit may leave his name, address, and phone number with the Regional Board as a part of the Board's file.

II. PURPOSE OF ORDER

Edoco discharges storm water runoff and single pass non-contact cooling water under waste discharge requirements contained in Order No. 94-012 adopted by this Regional Board on February 28, 1994. Order No. 94-012 serves as the National Pollutant Discharge Elimination System (NPDES) Permit for the facility with an expiration date of January 10, 1999. Edoco has filed a report of waste discharge (ROWD) and has applied for renewal of its waste discharge requirements and NPDES permit.

III. DESCRIPTION OF FACILITY

Edoco operates a facility at 22039 South Westward Avenue in Carson, California, that blends, packs, and distributes chemicals for concrete repair and/or construction. Raw/bulk materials used in the operation include various types of mineral spirits, petroleum hydrocarbons, resins, copolymers, polyols, and acids. Some of these materials are listed as hazardous materials. Bulk/raw materials and finished products are stored under roofed areas or in containment areas. During rains, packaging is limited to covered areas.

The facility has three outfalls through which the facility's storm water and non-contact cooling water pass. Two oil/water interceptors were installed at the Discharge Serial Nos. 001 and 002 to treat the storm water runoff and to catch spills, if occurs, before entering the storm drain. Edoco also installed a number of spill sumps to collect spilled oil and curing compounds. These sumps are periodically pumped out and the wastes are hauled away to a legal disposal point. No pesticides, herbicides, or soil conditioners are applied to planted areas.

Wastes discharged include storm water runoff and single pass non-contact cooling water. Due to the limited capacity of wastewater treatment plants, the discharge of these wastes into the sanitary sewer is restricted.

IV. DESCRIPTION OF WASTE DISCHARGE

Edoco discharges storm water runoff and single pass non-contact cooling water into an open storm drain adjacent to the facility along the north side of San Diego Freeway (Interstate 450). The waste then flows to Dominguez Channel, a water of the United States, near Wilmington Avenue, within the Dominguez Channel Estuary. Storm water runoff discharged through Outfalls Nos. 001 and 002 is treated with a 650-gallon clarifier. The discharge is described as below:

Discharge Serial No. 001 (Latitude 33°49'32", Longitude 118°13'36") discharges up to 4.608 million gallons per day (mgd), after the first 0.1 inch of rainfall, of storm water runoff that may pick up pollutants from the 76,000 square feet of the material storage and manufacturing areas. A maximum of 5,330 gallons per day of single-pass cooling water is also discharged through this Outfall, intermittently. The ROWD describes the quality of the discharge as follow:

<u>Pollutant</u>	<u>Unit</u>	<u>Maximum Values</u>	<u>Average Values</u>
Oil and grease	mg/L	8.0	1.33
Total suspended solids	mg/L	37	20
Benzene	µg/L	840	140
Phenols	µg/L	120	45
Chromium	µg/L	500	83
Copper	µg/L	140	23
Silver	µg/L	110	18
Zinc	µg/L	360	206

All other priority pollutants were reported as non-detected (ND).

Discharge Serial No. 002 (Latitude 33°49'32", Longitude 118°13'32") discharges storm water runoff that may pick up pollutants from the 90,000 square feet of the material storage buildings, the finished goods area, the backup power supply and fuel storage area, the maintenance and equipment storage building, and the office building. The ROWD describes the quality of the discharge as follow:

<u>Pollutant</u>	<u>Unit</u>	<u>Maximum Values</u>	<u>Average Values</u>
Oil and grease	mg/L	6.3	2.76
Total suspended solids	mg/L	53	29
Benzene	µg/L	1420	236
Toluene	µg/L	1180	305
Phenols	µg/L	140	45
Chromium	µg/L	470	78
Nickel	µg/L	2270	378
Silver	µg/L	110	18
Zinc	µg/L	340	158

All other priority pollutants were reported as non-detected.

Discharge Serial No. 003 (Latitude 33°49'32", Longitude 118°13'28") discharges storm water runoff from the 40, 000 square feet of the parking areas and the areas in front of the administration office.

All other industrial wastes, sanitary wastes, and the first 0.1 inches of rainfall from Discharge Serial No. 001 are discharged into the County Sanitation Districts of Los Angeles County sanitary sewer system.

V. COMPLIANCE HISTORY

During period from January 1997 to October 2000, the Discharger had a number of violations. These violations include arsenic (1 time), cadmium (2 times), chromium (3 times), lead (2 times), nickel (8 times), silver (2 times), benzene (1 time), and toluene (1 time). The Discharger investigated and identified the source was from the offsite storm water runoff that flowed into the facility. Concrete berms/gutters were constructed to divert the flows. However, subsequent samplings still showed trace metals. Edoco was investigating the source(s), one indication is the atmospheric depository. Corrective measures will be taken when the source is identified.

The above mentioned violations are being evaluated for appropriate enforcement action.

VI. GENERAL RATIONALE

The following documents are bases for proposed requirements:

1. The federal Clean Water Act (CWA).
2. Water Quality Control Plan (Basin Plan) for the Coastal Watersheds of Los Angeles and Ventura Counties adopted June 13, 1994; The Plan provides water quality objectives and lists the following beneficial uses for Dominguez Channel Estuary.

Existing: water contact recreation, non-water contact recreation, commercial and sport fishing, estuarine habitat, marine habitat, wildlife habitat, preservation of rare and endangered species, migration of aquatic organisms, and spawning, reproduction, or early development.

Potential: navigation.

3. The California Toxics Rule (CTR) promulgated by the USEPA on May 18, 2000. The CTR establishes numerical criteria for priority pollutants for inland surface water as well as water in the enclosed bays and estuaries.
4. The State Implementation Plan (SIP) adopted by the State Board on March 2, 2000. The SIP lists procedures to apply CTR and establish effluent limitations for priority pollutants.
5. Anti-backsliding - Section 402(o) of the Clean Water Act and 40 CFR 122.44(i) require that water quality-based effluent limits in re-issued permits are at least as stringent as in the

existing permits. The anti-backsliding also provides six exceptions in which the effluent limitations can be relaxed. One of the exceptions is for technical mistakes or misinterpretation of the law.

VI. **ESTABLISHMENT OF EFFLUENT LIMITATIONS**

There are several other factors affecting the development of effluent limitations and requirements in this proposed Order. These are discussed as follows:

1. **Technology-Based Limitations**

40 CFR 125.3 (a) states that a permit, issued under Section 402 of the CWA, must contain technology-based treatment requirements representing the minimum level of control. As such, the effluent limitations for conventional and non conventional pollutants in this Order are derived from treatment requirements for Best Practical Control Technology (BPT), Best Conventional Pollutant Control Technology (BCT), and Best Available Technology Economically Achievable (BAT). These pollutants include pH, suspended solids, settleable solids, oil and grease, and chlorine residual.

2. **Water Quality-Based Effluent Limitations**

40 CFR 122.44 states that each permit shall include conditions meeting requirements under sections 301, 304, 306, 307, 318 of CWA. As such, the WQBELs, based on the Basin Plan or the CTR whichever is more stringent, are prescribed for priority pollutants in this Order. These limitations are established in accordance with the SIP as described below:

Reasonable Potential Analysis (RPA)

As specified in 40 CFR 122.44(d)(1)(i), permits are required to include effluent limits for pollutants that are or may be discharged at a level which cause, have reasonable potential to cause, or contribute to an excursion above any State water quality standard.

For toxic pollutants, the SIP specified three tiers to complete a RPA:

- a. Tier 1 – If the maximum effluent concentration (MEC) is greater than or equal to the CTR water quality criteria (C), a limit is needed.
- b. Tier 2 – If background water quality (B) > C, a limit is needed.
- c. Tier 3 – Use other information to determine a reasonable potential.

Monitoring data from January 1997 to October 2000 were used to conduct reasonable potential analyses (RPAs) for the priority pollutants for which effluent data were sufficient. The RPAs indicate a reasonable potential for: arsenic, cadmium, chromium VI, copper, lead, nickel, silver, zinc, cyanide, benzene, and heptachlor. These priority pollutants are subject to effluent limitations. Pollutants with insufficient data for RPAs are subject to interim monitoring.

Calculation of the effluent limitations

Effluent limitations for the above-listed priority pollutants that have a reasonable potential were calculated pursuant to the procedures described in Section 1.4 of the SIP. Due to lack of assimilation capacity per monitoring data for Dominguez Channel, the calculation:

- Does not allow mixing zones and dilution credits to prevent further degradation of the impaired Dominguez Channel and to protect its beneficial uses;
- Uses the USEPA standard conversion factors in the CTR to adjust the CTR water criteria for metals; and
- Uses coefficient of variations of 0.6 for pollutants with less than ten data points or 80 percent of data are not detected.

3. Compliance schedule

Under 40 CFR 131.38(e)(6), the CTR authorizes the Regional Board to grant a compliance schedule for WQBELs based on CTR criteria for up to five years from the date of permit issuance, reissuance, or modification. The SIP also provides a compliance schedule up to 5 years for WQBELs.

Monitoring data indicate that the concentrations of copper, nickel, silver, and zinc are exceeding the CTR water quality criteria. The Discharger has demonstrated that it is infeasible to immediately achieve compliance with the CTR criteria for these constituents. The Discharger has requested a compliance schedule of 5 years to comply with the more stringent CTR water quality criteria for these metals. Based on the site-specific condition and the type of waste discharge, a 4-year compliance schedule is provided. During the compliance period, the current treatment facility performance or the existing effluent limitations, whichever is more stringent, are imposed as the interim effluent limitations for these metals.

4. Mass Limitations

The mass emission limitation for a pollutant was tabulated using the following equation:

$$m = 8.34 Q \times C_i$$

where

Q = maximum daily discharge flow rate, mgd
C_i = concentration limit for a pollutant, mg/L
m = mass limitation for a pollutant, lbs/day

5. Whole Effluent Toxicity

The Basin Plan specifies narrative and numeric water quality objectives for toxicity, requiring that all waters shall be maintained free of toxic substances in concentrations that are lethal to or produce other detrimental response on aquatic organisms. Detrimental response includes but is not limited to decreased growth rate, decreased reproductive success of resident or indicator species, and/or significant alterations in population, community ecology, or receiving water biota. These acute toxicity objectives in the Basin Plan are necessary to ensure that this objective is protected.