STATE OF CALIFORNIA

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
LOS ANGELES REGION
320 W. 4th Street, Suite 200, Los Angeles

FACT SHEET
WASTE DISCHARGE REQUIREMENTS
for
HOME DEPOT, U.S.A. (FORMER ITT AEROSPACE CONTROLS FACILITY)

NPDES Permit No.: CA0064467
Public Notice No.: 02-022

FACILITY ADDRESS	FACILITY MAILING ADDRESS
Home Depot 1200 Flower Street Burbank, CA 91502	Home Depot, U.S.A. 3800 W. Chapman Avenue Orange, CA 92868 Contact Person: Scott Sobeck Telephone: (714) 940-3542

I. Public Participation

The California Regional Water Quality Control Board, Los Angeles Region (Regional Board) is considering the issuance of waste discharge requirements (WDRs) that will serve as a National Pollutant Discharge Elimination System (NPDES) permit for the above-referenced facility. As an initial step in the WDR process, the Regional Board staff has developed tentative WDRs. The Regional Board encourages public participation in the WDR adoption process.

A. Written Comments

The staff determinations are tentative. Interested persons are invited to submit written comments concerning these tentative WDRs. 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

To be fully responded to by staff and considered by the Regional Board, written comments should be received at the Regional Board offices by 5:00 p.m. on November 18, 2002.

B. Public Hearing

The Regional Board will hold a public hearing on the tentative WDRs during its regular Board meeting on the following date and time and at the following location:

Date: December 12, 2002
Time: 9:00 a.m.
Location: City of Los Angeles
Board of Public Works Meeting Room
200 North Spring Street
Los Angeles, California

Interested persons are invited to attend. At the public hearing, the Regional Board will hear testimony, if any, pertinent to the discharge, WDRs, and permit. Oral testimony will be heard; however, for accuracy of the record, important testimony should be in writing.

C. Waste Discharge Requirements Appeals

Any aggrieved person may petition the State Water Resources Control Board (State Board) to review the decision of the Regional Board regarding the final WDRs. The petition must be submitted within 30 days of the Regional Board's action to the following address:

State Water Resources Control Board, Office of the Chief Counsel
ATTN: Elizabeth Miller Jennings, Senior Staff Counsel
1001 I Street, 22nd Floor
Sacramento, CA 95814

D. Information and Copying

The Report of Waste Discharge (ROWD), 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 a.m. and 4:45 p.m., 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 being placed on the mailing list for information regarding the WDRs and NPDES permit should contact the Regional Board, reference this facility, and provide a name, address, and phone number.

II. Introduction

Home Depot, U.S.A. (Home Depot) plans to discharge treated groundwater from the former ITT Aerospace Control Facility under WDRs and NPDES permit. Home Depot has filed a ROWD and has applied for WDRs that will serve as an NPDES permit

III. Description of Facility and Waste Discharge

Home Depot plans to construct a retail building supply store at 1200 South Flower Street, Burbank, California. From 1940 to 1963, General Controls manufactured thermostats and pressure instruments at this site. In 1963, ITT purchased General Controls and named it ITT General Controls. From 1963 to 1994, aerospace controls manufacturing business was conducted at the site. The manufacturing process included metal plating and the use of solvents for cleaning of electronic components. During the routine handling of these chemicals, accidental leaks and spills of spent solvents occurred. The owners ceased operation in 1994 and relocated. There have been no other occupants at this facility. Groundwater contamination has necessitated the installation of a groundwater cleanup facility at the site. Home Depot is currently working with the Regional Board to perform the necessary remediation at the site.

Home Depot proposes to discharges up to 57,600 gallons per day (0.0576 million gallons per day, MGD) of treated groundwater produced from the cleanup of solvents, petroleum hydrocarbons and heavy metals contamination. The discharge enters a storm drain located on Flower Street, close to the site (Latitude: 118º, 17', 54" North and Longitude: 34º, 10', 13" West) and flows to Los Angeles River, a water of the United States.

Groundwater extracted from wells will be treated by passing through an oil/water separator, bag filter, two liquid phase granulated activated carbon vessels in series, and finally a reverse osmosis filtering unit and then discharged to the storm drain.

Home Depot has also applied to the City of Burbank to discharge the treated wastewater to the municipal sanitary sewer. The City of Burbank is currently performing hydraulic studies to determine the hydraulic capacity availability. Home Depot plan to rescind the NPDES permit and discharge to sanitary sewer, if granted permission by the City of Burbank.

IV. Applicable Plans, Policies, and Regulations

The requirements contained in the proposed Order are based on the requirements and authorities contained in the following:

A. The Federal Clean Water Act (CWA). The federal Clean Water Act requires that any point source discharges of pollutants to a water of the United States must be done in conformance with an NPDES permit. NPDES permits establish effluent limitations that incorporate various requirements of the CWA designed to protect water quality.

B. Title 40, Code of Federal Regulations (40 CFR) – Protection of Environment, Chapter I, Environmental Protection Agency, Subchapter D, Water Programs, Parts 122-125 and Subchapter N, Effluent Guidelines. These CWA regulations provide effluent limitations for certain dischargers and establish procedures for NPDES permitting, including how to establish effluent limitations, for certain pollutants discharged by

Home Depot.

C. On June 13, 1994, the Regional Board adopted a revised *Water Quality Control Plan for the Coastal Watersheds of Los Angeles and Ventura Counties* (Basin Plan). The Basin Plan contains water quality objectives, and lists the following beneficial uses of Los Angeles River (Upstream of Figueroa Street – Hydrologic Unit 405.21).

Existing: groundwater recharge, contact and non-contact water recreation, warm freshwater habitat, wildlife habitat, and wetland habitat.

Potential: municipal and domestic supply and industrial service supply. The potential beneficial use of municipal and domestic water supply (MUN) for the water body is consistent with Regional Board Resolution 89-03; however the Regional Board has only conditionally designated the MUN beneficial uses and at this time cannot establish effluent limitations solely to protect a conditional designation.

D. The State Board adopted a *Water Quality Control Plan for Control of Temperature in the Coastal and Interstate Water and Enclosed Bays and Estuaries of California* (Thermal Plan) on May 18, 1972, and amended this plan on September 18, 1975. This plan contains temperature objectives for Los Angeles River watershed.

E. On May 18, 2000, the USEPA promulgated numeric criteria for priority pollutants for the State of California [known as the *California Toxics Rule* (CTR) and codified as 40 CFR section 131.38]. In the CTR, USEPA promulgated criteria that protects the general population at an incremental cancer risk level of one in a million (10^{-6}), for all priority toxic pollutants regulated as carcinogens.

F. On March 2, 2000, State Board adopted the *Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California* (State Implementation Policy or SIP*).* The SIP was effective on April 28, 2000, with respect to the priority pollutant criteria promulgated for California by the USEPA through National Toxics Rule (NTR) and to the priority pollutant objectives established by the Regional Boards in their basin plans, with the exception of the provision on alternate test procedures for individual discharges that have been approved by the USEPA Regional Administrator. The alternate test procedures provision was effective on May 22, 2000. The SIP was effective on May 18, 2000, with respect to the priority pollutant criteria promulgated by the USEPA through the CTR. The SIP provide a rationale approach for determining reasonable potential and represent the best available science with respect to minimum levels for all surface water discharges. The SIP requires the dischargers' submittal of data sufficient to conduct the determination of priority pollutants requiring water quality based effluent limitations (WQBELs) and to calculate the effluent limitations. The CTR criteria for freshwater or human health for consumption of organisms, whichever is more stringent, are used to develop the effluent limitations in this Order to protect the beneficial uses of Los Angeles River.

G. 40 CFR Section 122.44(d)(vi)(A) requires the establishment of numeric effluent limitations to attain and maintain applicable narrative water quality criteria to protect the designated beneficial uses. Where numeric water quality objectives have not been established in the Basin Plan, 40 CFR section 122.44(d) specifies that water quality based effluent limits (WQBELs) may be set based on USEPA criteria and supplemented, where necessary, by other relevant information to attain and maintain narrative water quality criteria to fully protect designated beneficial uses.

H. State and Federal antidegradation policies require Regional Board actions to protect the water quality of a water body and to ensure that the waterbody will not be further degraded. The Los Angeles River upstream of Figueroa Street is impaired for certain constituents and consistent with the anti-degradation policy contained at 40 CFR 131.12 and State Board Resolution 68-16, the effluent limitations established in this Order will protect and maintain the level of water quality necessary to protect the existing uses in the receiving water. Further the highest statutory and regulatory requirements are required for this new point source. Allowing the discharge covered by the accompanying Order is consistent with the maximum benefit to the people of the State, as it allows historical contamination that threatens local groundwater resources to be remediated and thereby assures a safe, consistent source of drinking water for thousands of citizens.

I. Effluent limitations are established in accordance with sections 301, 304, 306, and 307 of the federal Water Pollution Control Act, and amendments thereto. These requirements, as they are met, will maintain and protect the beneficial uses of the Los Angeles River.

V. Regulatory Basis for Effluent Limitations

The CWA requires point source discharges to control the amount of conventional, nonconventional, and toxic pollutants that are discharged into the waters of the United States. The control of the discharge of pollutants is established through NPDES permits that contain effluent limitations and standards. The CWA establishes two principal bases for effluent limitations. First, dischargers are required to meet technology-based effluent limitations that reflect the best controls available considering costs and economic impact. Second, they are required to meet WQBELs that are developed to protect applicable designated uses of the receiving water.

The CWA requires that technology-based effluent limitations be established based on several levels of controls:

- Best practicable treatment control technology (BPT) is based on the average of the best performance by plants within an industrial category or subcategory. BPT standards apply to toxic, conventional, and nonconventional pollutants.

- Best available technology economically achievable (BAT) represents the best existing performance of treatment technologies that are economically achievable within an industrial point source category. BAT standards apply to toxic and nonconventional

pollutants.

- Best conventional pollutant control technology (BCT) is a standard for the control from existing industrial point sources of conventional pollutants including BOD, TSS, fecal coliform, pH, and oil and grease. The BCT standard is established after considering the "cost reasonableness" of the relationship between the cost of attaining a reduction in effluent discharge and the benefits that would result, and also the cost effectiveness of additional industrial treatment beyond BPT.

- New source performance standards (NSPS) that represent the best available demonstrated control technology standards. The intent of NSPS guidelines is to set limitations that represent state-of-the-art treatment technology for new sources.

The CWA requires EPA to develop effluent limitations, guidelines and standards (ELGs) representing application of BPT, BCT, BAT, and NSPS. Section 402(a)(1) of the CWA and 40 CFR 125.3 of the NPDES regulations authorize the use of best professional judgment (BPJ) to derive technology-based effluent limitations on a case-by-case basis where ELGs are not available for certain industrial categories and/or pollutants of concern.

If a reasonable potential exists for pollutants in a discharge to cause or contribute to an exceedance of water quality standards, WQBELs are also required under 40 CFR 122.44(d)(1)(i). WQBELs are established after determining that technology-based limitations are not stringent enough to ensure that state water quality standards are met for the receiving water. WQBELs are based on the designated use of the receiving water, water quality criteria necessary to support the designated uses, and the state's antidegradation policy. For discharges to inland surface waters, the SIP establishes specific implementation procedures for determining reasonable potential and establishing WQBELs for priority pollutant criteria promulgated by USEPA through the CTR and NTR, as well as the Basin Plan.

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

A. Pollutants of Concern

The CWA requires that any pollutant that may be discharged by a point source in quantities of concern must be regulated through an NPDES permit. Further, the NPDES regulations require regulation of any pollutant that (1) causes; (2) has the reasonable potential to cause; or (3) contributes to the exceedance of a receiving water quality criteria or objective.
Effluent limitations in the current permit were established for conventional pollutants, metals, and volatile toxic pollutants that are present because of past manufacturing operations at the site that resulted in contamination of the ground water. The proposed permit also prescribed interim monitoring to obtain necessary data to conduct reasonable potential analysis and to calculate effluent limitation, if required.

B. Water Quality-Based Effluent Limits

As specified in 40 CFR 122.44(d)(1)(i), permits are required to include WQBELs for toxic pollutants (including toxicity) that are or may be discharged at levels which cause, have reasonable potential to cause, or contribute to an excursion above any state water quality standard. The process for determining reasonable potential and calculating WQBELs when necessary is intended to protect the designated uses for the receiving water as specified in the Basin Plan, and achieve applicable water quality objectives and criteria (that are contained in other state plans and policies, or USEPA water quality criteria contained in the CTR and NTR).

The CTR criteria for freshwater or human health for consumption of organisms, whichever is more stringent, are used to prescribe the effluent limitations in this Order to protect the beneficial uses of Los Angeles River.

1. Reasonable Potential Analysis (RPA)

   In accordance with Section 1.3 of the SIP, the Regional Board conducts a reasonable potential analysis for each priority pollutant with an applicable criterion or objective to determine if a WQBEL is required in the permit. The Regional Board analyzes effluent data to determine if a pollutant in a discharge has a reasonable potential to cause or contribute to an excursion above a state water quality standard. For all parameters that have a reasonable potential, numeric WQBELs are required. The RPA considers water quality objectives outlined in the CTR, NTR, as well as the Basin Plan. To conduct the RPA, the Regional Board must identify the maximum observed effluent concentration (MEC) for each constituent, based on data provided by the Discharger.

   Section 1.3 of the SIP provides the procedures for determining reasonable potential to exceed water applicable water quality criteria and objectives. The SIP specifies three triggers to complete a RPA:

   a. Trigger 1 – If the MEC is greater than or equal to the CTR water quality criteria or applicable objective (C), a limit is needed.

   b. Trigger 2 – If MEC<C and background water quality (B) > C, a limit is needed.

   c. Trigger 3 – If other related information such as CWA 303(d) listing for a pollutant, discharge type, compliance history, etc. indicates that a WQBEL is required.

   Sufficient effluent and ambient data are needed to conduct a complete RPA. However, it is important to understand that under Trigger 3, the Regional Board staff may determine reasonable potential based on the discharger type. In this case, the contaminants the Discharger is treating are likely to be present in effluent based on the treatment system influent and the Regional Board's experience with similar discharges. As a result, it is appropriate to conclude that there is RPA for certain toxic chemicals present in the discharge. Accompanying effluent limitations are appropriate given that this is a new

discharge and consistent with antidegradation requirements.

The Discharger will be required to gather the appropriate data for the Regional Board to conduct the RPA for other CTR constituents for which the Regional Board does not establish effluent limitations. Upon review of the data, and if the Regional Board determines that WQBELs are needed to protect the beneficial uses, the permit will be reopened for appropriate modification.

2. Calculating WQBELs

If a reasonable potential exists to exceed applicable water quality criteria or objectives, then a WQBEL must be established in accordance with one of three procedures contained in Section 1.4 of the SIP. These procedures include:

a. If applicable and available, use of the wasteload allocation (WLA) established as part of a total maximum daily load (TMDL).

b. Use of a steady-state model to derive maximum daily effluent limitations (MDELs) and average monthly effluent limitations (AMELs).

c. Where sufficient effluent and receiving water data exist, use of a dynamic model which has been approved by the Regional Board.

3. Impaired Water Bodies in 303 (d) List

Section 303(d) of the CWA requires states to identify specific water bodies where water quality standards are not expected to be met after implementation of technology-based effluent limitations on point sources. For all 303(d) listed water bodies and pollutants, the Regional Board plans to develop and adopt TMDLs that will specify WLAs for point sources and load allocations (LAs) for non-point sources, as appropriate.

The USEPA has approved the State's 303(d) list of impaired water bodies. Certain receiving waters in the Los Angeles and Ventura County watersheds do not fully support beneficial uses and therefore have been classified as impaired on the 1998 303(d) list and have been scheduled for TMDL development.

The Los Angeles River watershed is one of the largest in the Region. It is also one of the most diverse in terms of land use patterns. Los Angeles River flows for 55 miles from the Santa Monica Mountains at the western end of the San Fernando Valley to the Pacific Ocean at San Pedro Bay. The natural hydrology of the river and many of its tributaries has been altered by flood control efforts including the channelization of much of the river and construction of flood control reservoirs. Most of the mainstream of the Los Angeles River and most of the tributaries are concrete-lined. Approximately 324 square miles of the watershed are covered by forest or open space land. The rest of the watershed is highly developed. Major tributieries to the river include: Pacoima Wash,

Tujunga Wash, Burbank Western Channel, Verdugo Wash, Arroyo Seco, Rio Hondo, and Compton Creek.

The 1998 State Water Resources Control Board's (State Board) Water Quality Assessment (WQA) classifies the water quality conditions of water bodies in the state. Within the Los Angeles River Watershed the following water bodies are classified as impaired water bodies, and are listed on the 1998 California 303 (d) List and TMDL Schedule: Los Angeles River Reaches 1,2,3,4, 5, and 6, Tajunga Wash, Burbank Western Channel, Verdugo Wash Reaches 1 and 2, Arroyo Seco Reaches 1 and 2, Rio Hondo Reaches 1 and 2, Compton Creek, and Aliso Canyon Wash.

The 1998 California 303(d) list, approved by the USEPA on May 12, 1999, identified the following pollutants of concern for Los Angeles River - Reach 2 (Carson to Figueroa Street): ammonia, coliform, lead, nutrients (algae), odors, oil, scum, and trash.

4. Whole Effluent Toxicity

Whole Effluent Toxicity (WET) protects the receiving water quality from the aggregate toxic effect of a mixture of pollutants in the effluent. WET tests measure the degree of response of exposed aquatic test organisms to an effluent. The WET approach allows for protection of the narrative "no toxics in toxic amounts" criterion while implementing numeric criteria for toxicity. There are two types of WET tests: acute and chronic. An acute toxicity test is conducted over a short time period and measures mortality. A chronic toxicity test is conducted over a longer period of time and measures mortality, reproduction, and growth.

The Basin Plan specifies a narrative objective for toxicity, requiring that all waters 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. The existing permit contains acute toxicity limitations to implement requirements of the Basin Plan. Specifically, the acute toxicity limitations dictate 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 having less than 70% survival.

In addition to the Basin Plan requirements, Section 4 of the SIP states that a chronic toxicity effluent limitation is required in permits for all discharges that will cause, have the reasonable potential to cause, or contribute to chronic toxicity in receiving waters.

The treatment system influent contains toxic constituents and as discussed above, there is a reasonable potential for these constituents to impact receiving

waters. Home Depot will be required to conduct acute and chronic toxicity testing in accordance with the permit requirements.

C. Specific Rationale for Each Numerical Effluent Limitation

The following table presents the effluent limitations and the specific rationales for pollutants that are expected to be present in the discharge:

Constituents	**Units**	**Discharge Monthly Average**	**Limitations Daily Maximum**	**Monthly/Daily Rationale**
Total suspended solids	mg/L	50	75	BPJ
$BOD_5 20^oC$	mg/L	20	30	BPJ
Oil and grease	mg/L	10	15	BPJ
Turbidity	NTU	50	75	BPJ
Settleable solids	ml/L	0.1	0.3	BPJ
Sulfides	mg/L		1.0	BPJ
Phenols	mg/L		1.0	BPJ
Phenolic compounds (chlorinated)	µg/L		1.0	BPJ
Benzene	µg/L		1.2	CTR
Toluene	µg/L		150	BPJ
Xylene	µg/L		1750	BPJ
Ethylbenzene	µg/L		700	BPJ
Carbon tetrachloride	µg/L		0.25	CTR
Tetrachloroethylene	µg/L		0.8	CTR
Trichloroethylene	µg/L		2.7	CTR
1,1,1-trichloroethane	µg/L		200	BPJ
1,4-dichlorobenzene	µg/L		400	CTR
1,1-dichloroethane	µg/L		5.0	BPJ
1,2-dichloroethane	µg/L		0.38	CTR
1,1-dichloroethylene	µg/L		0.057	CTR
Vinyl chloride	µg/L		2	CTR
Tertiary butyl alcohol (TBA)	µg/L		12	BPJ
Methyl teriary butyl ether (MTBE)	µg/L		13	BPJ
Arsenic ~~3/~~	µg/L	150	340	CTR
Cadmium ~~3/~~	µg/L	2.2	4.3	CTR
Chromium (III) ~~3/~~	µg/L	180	550	CTR
Chromium (VI) ~~3/~~	µg/L	11.0	16.0	CTR
Copper ~~3/~~	µg/L	9	13	CTR
Lead ~~3/~~	µg/L	2.5	65	CTR
Mercury ~~3/~~	µg/L		0.05	CTR
Nickel ~~3/~~	µg/L	52	470	CTR

Constituents	Units	Discharge Monthly Average	Limitations Daily Maximum	Monthly/Daily Rationale
Silver [3/]	µg/L		3.4	CTR
Selenium [3/]	µg/L	5.0		CTR
Zinc [3/]	µg/L		120	CTR

BPJ = Best Professional Judgement, CTR = California Toxics Rule

The proposed permit prescribes limits for the conventional pollutant, metals and volatile toxic pollutants. The CTR and SIP require the dischargers to submit sufficient data to conduct further RPA for priority pollutants WQBELs and to calculate effluent limitations, if required. The proposed permit includes an interim monitoring requirements to obtain the necessary data.

D. Monitoring Requirements

According to Section 1.3 of the SIP, if data are unavailable or insufficient to conduct the RPA, the Regional Board must establish interim requirements that require additional monitoring for the pollutants in place of a WQBEL. Upon completion of the required monitoring, the Regional Board must use the gathered data to conduct the RPA and determine if a WQBEL is required. As prescribed in the Monitoring and Reporting Program, the Regional Board shall require periodic monitoring for pollutants for which criteria or objectives apply and for which no effluent limitations have been established.

1. Effluent Monitoring

To assess the impact of the discharge to the beneficial uses of the receiving waters, the Discharger is required to monitor the conventional and priority pollutants. Monitoring of these pollutants will characterize the wastes discharged.

2. Effluent Monitoring for Reasonable Potential Determination

In compliance with the SIP, the Discharger is required to submit data sufficient for: (1) determining if WQBELs for priority pollutants are required, and (2) to calculate effluent limitations, if required. The data will be provided for two years. Therefore, the Discharger will be required to conduct an interim monitoring program for all CTR priority pollutants until December 31, 2004. As described in the Monitoring and Reporting Program, monitoring reports must be submitted quarterly.