

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

ORDER NO. 96-048

NPDES NO. CA0060348

WASTE DISCHARGE REQUIREMENTS  
for  
ROCKWELL INTERNATIONAL CORPORATION  
(Hillcrest Facility, Newbury Park)

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

1. Rockwell International Corporation (Rockwell) discharges wastes under waste discharge requirements contained in Order No. 88-29, adopted by this Board on March 28, 1988.
2. Rockwell has filed a Report of Waste Discharge (ROWD) and has applied for renewal of its waste discharge requirements and National Pollutant Discharge Elimination System (NPDES) permit.
3. Rockwell owns and operates a semiconductor die manufacturing plant at 2427 West Hillcrest Drive in Newbury Park. The facility consists of buildings 886 and 887. Building 887 was constructed in 1985 with a groundwater collection trench and dewatering system to prevent flooding of the basement area of the building. Ground water, collected in a sump, is intermittently discharged to a storm drain by a water level control pump.

Figure 1 shows the location of the facility.

4. Groundwater samples collected from the dewatering system revealed that the soil and ground water beneath the building were contaminated with volatile organic compounds (VOCs): trichloroethylene (TCE), 1,1-dichloroethylene (DCE), and 1,1,1-trichloroethane (TCA). The groundwater contamination appears to have originated from two abandoned concrete tanks located on the west side of building 886. These tanks were reportedly used for temporary storage of chemical wastes by the previous owners or lessee of the property. Rockwell never used these tanks. The tanks were closed in 1984 under the direction of the Ventura County Environmental Health Department.
5. Results of analyses for groundwater samples collected during 1995 indicated that VOCs were present in monitoring wells at concentrations exceeding 1,000  $\mu$ g/L for shallow groundwater.

May 10, 1996  
Revised: June 10, 1996

6. Ground water is treated with granular activated carbon (GAC) absorption and air stripping (if needed) to remove the volatile organics. Federal law stipulates that NPDES permits require the use of Best Available Technology (BAT) economically achievable to treat these wastes. GAC filters and air stripping towers have been used extensively for clean up contaminated groundwater, particularly for the removal of volatile organic compounds. These methods are currently considered to be the BAT economically achievable.

7. Rockwell currently treats the contaminated groundwater and discharges up to 21,600 gallons per day (gpd) of treated ground water into a storm drain located at the intersection of Hillcrest Drive and Lawrence Drive, tributary to the South Branch of Arroyo Conejo, through Discharge Serial No. 001 (Latitude 34°24'04" and Longitude 118°54'13"). The South Branch of Arroyo Conejo is tributary to Conejo Creek, Calleguas Creek, and Mugu Lagoon, a water of the United States, above the estuary, and is part of the Calleguas Creek Watershed Management Area.

8. The ROWD characterizes the waste discharge as follows:

<u>Constituent</u>	<u>Unit</u>	<u>Daily Maximum</u>
Flow	gpd	21,600
pH	pH units	7.3
Temperature	°C	20
BOD <sub>5</sub> 20 °C	mg/L	Not detected (ND)
Suspended solids	mg/L	ND
Total organic carbon	mg/l	ND

9. Effluent monitoring data during previous discharges indicated that several constituents included in the previous monitoring program were consistently not detectable or detected at low levels. The minimum monitoring frequency for these constituents has appropriately been reduced in this order.

10. The storm water requirements for the general NPDES permit, for storm water discharges associated with industrial activity, shall be incorporated into this Order.

11. The Board adopted a revised Water Quality Control Plan (Basin Plan) for the Coastal Watersheds of Los Angeles and Ventura Counties on June 13, 1994. The Basin Plan contains beneficial uses and water quality objectives for the Arroyo Simi and other tributaries of Calleguas Creek and for the South Las Posas and North Las Posas ground water basins.

12. The beneficial uses of the receiving waters are:

Arroyo Conejo - Hydro Unit No. 403.64

- potential: municipal and domestic supply;

- existing: ground water recharge, freshwater replenishment, contact and non-contact water recreation, warm freshwater habitat, wildlife habitat, and preservation of rare, threatened or endangered species;

Conejo Creek - Hydro Unit No. 403.63

- potential: municipal and domestic supply;
- existing: ground water recharge, freshwater replenishment, contact and non-contact water recreation, warm freshwater habitat, and wildlife habitat;

Calleguas Creek - Hydro Unit No. 403.12

- potential: municipal and domestic supply;
- existing: industrial service supply, industrial process supply, agricultural supply, ground water recharge, contact and non-contact water recreation, warm freshwater habitat, and wildlife habitat;

Calleguas Creek - Hydro Unit No. 403.11

- potential: municipal and domestic supply;
- existing: agricultural supply, groundwater recharge, freshwater replenishment, contact and non-contact water recreation, warm freshwater habitat, cold freshwater habitat, wildlife habitat, rare, threatened or endangered species, and wetland habitat;

Calleguas Creek Estuary - Hydro Unit No. 403.11

- potential: navigation, water contact recreation;
- existing: non-contact water recreation, commercial and sport fishing, estuarine habitat, wildlife habitat, rare, threatened or endangered species, migration of aquatic organisms, spawning, reproduction, and/or early development, and wetland habitat.

Mugu Lagoon - Hydro Unit No. 403.11

- potential: water contact recreation;
- existing: navigation, non-contact water recreation, commercial and sport fishing, estuarine habitat, marine habitat, preservation of biological habitats, wildlife habitat, rare, threatened or endangered species, migration of aquatic organisms, spawning, reproduction, and/or early development, shellfish harvesting, and wetland habitat.

13. The 1996 State Water Resources Control Board' s (SWRCB) Water Quality Assessment (WQA) identified the water quality conditions of water bodies in the state. Within the Calleguas Creek Watershed the following water bodies are classified as impaired water bodies: Mugu Lagoon, tributaries from duck ponds to Mugu lagoon, Calleguas Creek (Estuary to Arroyo Las Posas), Revolon Slough and Beardsley Channel/Wash, Conejo Creek/ Arroyo Conejo North Fork, Arroyo Las Posas, and Arroyo Simi. Impaired waters do not support beneficial uses.

Water quality problems associated with this watershed are: sedimentation, pesticides, nitrogen, nitrate and nitrite, algae, total dissolved solids (TDS), chloride, sulfate, ammonia, metals, and organic chemicals. Known and/or suspected pollution sources include: urban and agricultural runoff, septic tanks, abandoned wells, seawater intrusion, mining operations, and storm water.

14. The issuance of waste discharge requirements for this discharge is exempt from provisions of chapter 3 (commencing with Section 21100) of Division 13 of the Public Resources Code in accordance with Water Code Section 13389.

The Board has notified the discharger and interested agencies and persons of its intent to issue 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 National Pollutant Discharge Elimination System permit pursuant to Section 402 of the Federal Clean Water Act, or amendments thereto, and shall take effect at the end of ten days from the date of its adoption, provided the Regional Administrator, EPA, has no objections.

**IT IS HEREBY ORDERED** that Rockwell International Corporation, 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 only, as proposed.
- B. The discharge of an effluent from Discharge Serial No. 001 with constituents in excess of the following limits is prohibited:

<u>Constituent</u>	<u>Units</u>	Discharge Limitations 30-day Daily	
		<u>Average</u>	<u>Maximum</u>
Turbidity	NTU	50	75
Settleable solids	mL/L	0.1	0.2
Suspended solids	mg/L	50	75
	lbs/day <sup>1/</sup>	9.01	13.5
Residual chlorine <sup>2/</sup>	mg/L	---	0.1

<u>Constituent</u>	<u>Units</u>	Discharge Limitations 30-day Daily	
		<u>Average</u>	<u>Maximum</u>
Oil and grease	mg/L	10	15
	lbs/day <sup>1/</sup>	1.80	2.70
BOD <sub>5</sub> 20°C	mg/L	20	30

		lbs/day <sup>1/</sup>	3.60	5.40
Total dissolved solids		mg/L	---	850
		lbs/day <sup>1/</sup>	---	153
Sulfate	mg/L		---	250
		lbs/day <sup>1/</sup>	---	45.0
Chloride		mg/L	---	150
		lbs/day <sup>1/</sup>	---	27.0
Boron		mg/L	---	1.0
		lbs/day <sup>1/</sup>	---	0.18
Nitrate + Nitrite (as Nitrogen)		mg/L	---	10
		lbs/day <sup>1/</sup>	---	1.80
Sulfides		mg/L	---	1.0
Phenols		mg/L	---	1.0
Phenolic compounds (chlorinated)		g/L	---	1.0
Benzene		g/L	---	1.0
Toluene		g/L	---	10
Xylene	g/L		---	10
Ethylbenzene		g/L	---	10
Carbon tetrachloride		g/L	---	0.5
1,1-Dichloroethane		g/L	---	5.0
1,2-Dichloroethane		g/L	---	0.5
			Discharge Limitations Daily Maximum	
<u>Constituent</u>		<u>Units</u>		
1,1,1-Trichloroethane		g/L	5.0	
1,1-Dichloroethylene		g/L	6.0	
Trichloroethylene		g/L	5.0	
Tetrachloroethylene		g/L	5.0	

Vinyl chloride	̇ g/L	0.5
Arsenic	̇ g/L	50
Cadmium	̇ g/L	10
Chromium	̇ g/L	50
Lead	̇ g/L	50
Mercury	̇ g/L	2.0
Selenium	̇ g/L	10
Silver	̇ g/L	50

1/ Based on the maximum waste flow rate of 21,600 gpd.

2/ If chlorine is used.

C. Acute Toxicity Limitation:

The acute toxicity of the effluent shall be such that the average survival in undiluted effluent for any three (3) consecutive 96-hour static or continuous flow bioassay tests shall be at least 90%, with no single test producing less than 70% survival.

If the discharge consistently exceeds the acute toxicity limitation, a toxicity reduction evaluation (TRE) is required. The TRE shall include all reasonable steps to identify the sources of toxicity. Once the sources of toxicity are identified, the discharger shall take all reasonable steps necessary to reduce toxicity to the required level.

II. REQUIREMENTS AND PROVISIONS

- A. Discharge of wastes to any point other than specifically described in this order is prohibited and constitute a violation thereof.
- B. This Order includes the attached "Standard Provisions and General Monitoring and Reporting Requirements". If there is any conflict between provisions stated hereinbefore and attached "Standard Provisions", those provisions stated hereinbefore prevail.
- C. This Order includes the attached Monitoring and Reporting Program. If there is conflict between provisions stated in the Monitoring and Reporting Program and the Standard Provisions, those provisions stated in the former prevail.

- D. This Order includes the attached "Storm Water Pollution Prevention Plan" (Attachment A).
- E. This Order may be modified, revoked and reissued or terminated in accordance with the provisions of 40 CFR Part 122.44, 122.62, 122.63, 122.64, 125.62, and 125.64.

III. EXPIRATION DATE

This Order expires on May 10, 2001.

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. RESCISSION

Order No. 88-29, adopted by this Board on March 28, 1988, 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 June 10, 1996.

ROBERT P. GHIRELLI, D.Env.  
Executive Officer  
/HDN

**FIGURE 1**