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

320 West 4th Street, Suite 200, Los Angeles

FACT SHEET
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM PERMIT
FOR
HITCO CARBON COMPOSITES, INC.

NPDES No: CA0059048
Public Notice No.: 00-086

FACILITY MAILING ADDRESS	FACILITY LOCATION
1600 West 135th Street	1600 West 135th Street
Gardena, CA 90249	Gardena, CA 90249
Attn: Jonah Jimenez	Contact: Simon Ricks, Sr. Environmental Engineer
	(310) 970-5298

Hitco Carbon Composites, Inc. (hereinafter Hitco or Discharger) discharges wastewater and stormwater runoff from the Gardena facility under waste discharge requirements contained in Order No. 93-028 (NPDES No. CA0059048) adopted by this Regional Board on May 10, 1993. Order No. 93-028 was issued to BP Chemicals, Inc. whose name was changed to SGL Carbon Composites, Inc. then to Hitco Carbon Composites, Inc.

Hitco 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.

Hitco is an aerospace composite manufacturer, involved in assembly and curing of fiberglas, acid leaching of silica cloth, and heat treatment and chemical vapor deposition of carbon disk brakes. The facility is located at 1600 West 135th Street, Gardena, California (Figure 1).

I. DESCRIPTION OF FACILITY

Hitco Carbon Composites, Inc. is an aerospace composite manufacturer, involved in assembly and curing of fiberglass, acid leaching of silica cloth, heat treatment and chemical vapor deposition of carbon disk brakes.

II. DESCRIPTION OF DISCHARGE

Hitco discharges up to 126,000 gallons per day (GPD) of wastewater and stormwater runoff into the storm drain near1551 W. 139th Street through Outfall No. 1 (Latitude 33°54'27",

Longitude 118°18'20") and Outfall No. 2 (Latitude 33°54'27", Longitude 118°18'12"). The

wastewater includes cooling tower bleedoff, boiler blow down, reverse osmosis and water softener filter backwash, fire hydrant, irrigation and rinse wastes (Figure 2).

The discharge flows to Dominguez Channel, a water of the United States, above the estuary (begins at Vermont Avenue). The wastewater traverses about 1 mile in the storm drain and about four (4) miles in the Dominguez Channel before reaching the estuary.

There is a trench onsite west of Building 10, which empties into Discharge Serial No. 001. The trench begins at the parking lot and runs along a retention wall that separates the Hitco Property from an adjacent facility. The adjacent property is elevated approximately 4 to 5 feet relative to the Hitco property. Water continually seeps through cracks and joints in the block wall that is between the two facilities. The seepage is sufficient to generate a small flow in approximately twenty feet (20') of the trench when Hitco does not have a discharge in the trench.

The existing permit required the Discharger to monitor priority pollutants once during the lifetime of the permit. The maximum detected concentrations for targeted contaminants in the effluent were:

Contaminant	Units	Concentration
pH	pH Units	11.48
Suspended Solids	mg/L	243
Settleable solids	ml/L	0.2
Oil and grease	mg/L	13
$BOD_5 20^oC$	mg/L	150
Turbidity	NTU	140
Total residual chlorine	mg/L	0.14
1,1,1-Trichloroethane	µg/L	10
Benzo(a)anthracene	µg/L	15
Bromodichloromethane	µg/L	4.8
Bromoform	µg/L	1.7
Chloroform	µg/L	3.7
Dibromochloromethane	µg/L	5.5
Trichlorofluoromethane	µg/L	0.75
Arsenic	µg/L	0.19
Copper	µg/L	0. 29
Chromium	µg/L	0.056
Lead	µg/L	0.0066
Nickel	µg/L	0.026
Selenium	µg/L	<0.01
Zinc	µg/L	0.46

The results for all other priority pollutants targeted were nondetect.

The detected concentrations and the associated detection limits were high for all metals targeted in the October 1994 analysis for priority pollutants. The results reported for copper and zinc (49 and 190 µg/L respectively) exceed the water quality criteria promulgated by CTR. Facility operations did not require the addition of these constituents, nor were they produced during any of the processes. Hence, staff believed the sample results to be an anomaly.

The Discharger conducted supplemental sampling during review of the application. The results indicate that the levels of copper and zinc present in the discharge are much less than those reported in the October 1994 sampling. The maximum detected concentrations for copper and zinc during the supplemental sampling was 0.29 and 0.46 µg/L respectively. These concentrations are believed to be representative of the levels that are present in the discharge. The concentrations reported in the October 1994 sampling event are believed to be an anomaly. Hence, the metals data from that sampling event was not used in the reasonable potential analysis (RPA).

Wastes discharged to the community sewer system include sanitary discharges, wastes from photo finishing including silver recovery and wastes from acid leaching and neutralization processes.

III. BASIS FOR THE PROPOSED WASTE DISCHARGE REQUIREMENTS

A. BENEFICIAL USES

1. On June 13, 1994, the Regional Board adopted a revised *Water Quality Control Plan* (Basin Plan) *for the Coastal Watersheds of Los Angeles and Ventura Counties*. The Basin Plan contains water quality objectives for, and lists the following beneficial uses for each of the receiving waters.
   The Dominguez Channel (at the intersection of Crenshaw and Rosecrans) to Estuary – (Hydrological Unit No. 405.12):

   Existing: non-contact water recreation, and rare, threatened or endangered species;
   Potential: water contact recreation, municipal and domestic supply, warm freshwater habitat, and wildlife habitat.

   The Dominguez Channel Estuary:

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

   The most conservative of the freshwater criteria and the human health criteria for consumption of organisms in the California Toxics Rule are used to protect the warm freshwater organisms and potential human health concerns from consumption of the organisms.

B. STATUES, RULES, AND REGULATIONS APPLICABLE TO THE DISCHARGE

1. 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 Dominguez Channel.

2. Under 40 CFR 122.44, *Establishing Limitations, Standards, and other Permit Conditions*, NPDES permits should also include toxic pollutant limitations if the Discharger uses or manufactures a toxic pollutant as an intermediate or final product or byproduct.

3. Effluent limitation guidelines requiring the application of best practicable control technology currently available (BPT), best conventional pollutant control technology (BCT), and best available technology economically achievable (BAT), were promulgated by the United States Environmental Protection Agency (USEPA) for some pollutants in this discharge. Effluent limitations for pollutants not subject to the USEPA effluent limitation guidelines are based on one of the following: best professional judgment (BPJ) of BPT, BCT or BAT; current plant performance; or water quality-based effluent limitations (WQBELs). The WQBELs are based on the Basin Plan, other applicable State plans and policies, or USEPA water quality criteria. These requirements, as they are met, will protect and maintain existing beneficial uses of the receiving water.

4. 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 part 131.38]. 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 CTR and SIP require dischargers' submittal of data sufficient to conduct the determination of priority pollutants requiring 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 prescribe the effluent limitations in this Order to protect the beneficial uses of the Dominguez Channel.

5. Effluent limitations, toxic effluent standards, and monitoring programs established pursuant to sections 301, 304, 306, and 307 of the federal Water Pollution Control Act and amendments thereto are applicable to the discharges herein.

6. The issuance of waste discharge requirements for this discharge is exempt from the provisions of Chapter 3 (commencing with Section 21100) of Division

13 of the Public Resources Code (California Environmental Quality Act) in accordance with Water Code Section 13389.

IV. Watershed Management Approach and Total Maximum Daily Loads (TMDLs)

A. The Regional Board has implemented the Watershed Management Approach to address water quality issues in the region. Watershed management may include diverse issues as defined by stakeholders to identify comprehensive solutions to protect maintain, enhance, and restore water quality and beneficial uses. To achieve this goal, the Watershed Management Approach integrates the Regional Board's many diverse programs, particularly Total Maximum Daily Loads (TMDLs), to better assess cumulative impacts of pollutants from all point and nonpoint sources. A TMDL, is a tool for implementing water quality standards and is based on the relationship between pollution sources and in-stream water quality conditions. The TMDL establishes the allowable loadings or other quantifiable parameters for a waterbody and thereby provides the basis to establish water quality-based controls. These controls should provide the pollution reduction necessary for a waterbody to meet water quality standards. This process facilitates the development of watershed-specific solutions that balance the environmental and economic impacts within the watershed. The TMDLs will establish waste load allocation (WLAs) and load allocations (LAs) for point and non-point sources, and will result in achieving water quality standards for the waterbody.

B. The Dominguez Channel begins at the border of El Segundo and Los Angeles Airport and flows through portions of Hawthorne, Torrance, Gardena, Carson, and Wilmington to the East Basin of the Los Angeles Harbor. The channel is concrete-lined above the estuary (Vermont Avenue). Dominguez Channel receives discharges from highly developed and industrialized areas.

C. Dominguez Channel estuary is classified as impaired in the 1998 State Board's California 303(d) list. The pollutants of concern, detected in the channel water and sediment, and in the fish tissue, are listed below:

- In sediment: chromium, lead, zinc, DDT, PAHs, and sediment toxicity.
- In fish tissue: lead, aldrin, benthic community effects, Chem A (refers to the sum of aldrin, dieldrin, chlordane, endrin, heptachlor, heptachlor epoxide, HCH (including lindane), endosulfan, and toxaphene), chlordane, DDT, dieldrin, and PAHs.
- In water column: copper, lead, ammonia, and coliform.

Known and/or suspected sources of pollution include historical deposits of DDT and PCBs in sediment, discharges and/or spills from refineries and industrial facilities; leaching of contaminated ground water, and urban runoff.

E. The TMDL development for the Dominguez Channel watershed is scheduled for fiscal year 2003, beginning with coliform. The TMDLs will include WLAs for the 303(d) listed pollutants. When each TMDL is complete, the Regional Board will adopt a WQBEL consistent with the corresponding WLA. If authorized, a time schedule may be included in a revised permit to require compliance with the final WQBEL.

F. To prevent further degradation of the water quality of Dominguez Channel and to protect its beneficial uses, mixing zones and dilution credits are not allowed in this Order. This determination is based on:

- The 303(d) listed pollutants exceed water column criteria. Since there is no assimilative capacity of the receiving water, a dilution factor is not appropriate and the final WQBEL should be numeric objective applied end-of-pipe.

- The discharge may contain the 303(d) listed pollutants that are bioaccumulative. These pollutants when exceeding water criteria within the mixing zone can potentially result in tissue contamination of an organism directly or indirectly through contamination of sediments with subsequent incorporation into the food chain.

V. REASONABLE POTENTIAL ANALYSIS

A. 40 CFR 122.44(D)(1)(ii) requires that each toxic pollutant be analyzed with respect to its reasonable potential when determining whether a discharge (1) causes, (2) has the reasonable potential to cause, or (3) contributes to the exceedance of a receiving water quality objective. This is done by conducting a reasonable potential analysis (RPA) for each pollutant. In performing the RPA, the permitting authority uses procedures that account for existing controls on point and nonpoint sources of pollution, the variability of the pollutant or pollutant parameter in the effluent, and the sensitivity of the test species to toxicity testing (when evaluating whole effluent toxicity). Because of effluent variability, there is always some degree of uncertainty in determining an effluent's impact on the receiving water. The SIP addresses this issue by suggesting the use of a statistical approach.

B. The CTR and SIP require that a limit be imposed for a toxic pollutant if (1) the maximum effluent concentration (MEC) is greater than the most stringent CTR criteria, or (2) the background concentration is greater than the CTR criteria. However, for the pollutants on the 303(d) list, due to the impairment of Dominguez Channel, the background concentrations have already been determined to be higher than the CTR criteria. Therefore, for the pollutants on the 303(d) list, no background concentration data is necessary for RPA. Sufficient effluent data are needed for this analysis.

C. RPAs were performed for the priority pollutants for which effluent data were available. The input data are based on the effluent data provided in the ROWD and the effluent information in the permit renewal application form. The final input data used in the RPA are summarized in the attachment of RPA results. Best professional judgment was used in this proposed Order to determine the presence and reasonable potential of each toxic pollutant.

D. For some pollutants including aldrin, alpha-BHC, chlordane, DDT, dieldrin, heptachlor, heptachlor epoxide, hexachlorobenzene, several PAHs, PCBs, and toxaphene, all of which are on the 303(d) list, along with TCDD equivalents, the applicable water quality objectives are below the levels that current analytical techniques can measure. Because the actual presence and loads of these

pollutants are unknown, it is reasonably cautious to conclude that the reasonable potential exists for each of these pollutants. Effluent limitations are prescribed for these pollutants in this Order.

E. Until the TMDL and the corresponding WQBELs are adopted, State and Federal antibacksliding and antidegradation policies require that Regional Board actions ensure that the waterbody will not be further degraded. Therefore, water quality objectives/criteria specified in the Basin Plan, the CTR, or the effluent limits from the existing permit were used to set the limits for toxic pollutants that are believed to be present in the effluent and have reasonable potential. Other toxic pollutants may only be monitored to gather data to be used in RPAs for future permit renewals and updates.

The USEPA approved the State's 303(d) list of impaired water bodies. The list was prepared in accordance with Section 303(d) of the federal CWA 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. USEPA requires final effluent limits for all 303(d) listed pollutants to be based on total maximum daily loads (TMDL) and waste loads allocation (WLA) results. Table 1 (page 8) lists the pollutant stressors and type of impairment for Dominguez Channel .

For 303(d) listed pollutants, the Regional Board plans to develop and adopt TMDLs which will specify WLAs for point sources and LA for non-point sources, as appropriate. Following the adoption of TMDLs by the Regional Board, NPDES permits will be issued with effluent limits for water quality based on applicable WLAs. In the absence of a TMDL, effluent limits for 303(d) listed pollutants will be addressed in the following manner:

a. If the impairment is due to bioaccumulation of a pollutant in tissue (e.g., fish) and/or elevated levels of the pollutant in sediment and effective numeric objectives/criteria protecting the beneficial use(s) are lacking, then the only WQBEL which will not allow the discharge to cause or contribute to a violation of the narrative water quality objective protecting the beneficial use(s) is the mass-based effluent limit of "no net loading" of a pollutant discharged to the receiving water.

The "no net loading" approach is based on an analysis of effective water quality standards in the Basin Plan, including State and federal antidegradation policies (see SWRCB Resolution No. 68-16 and 40 CFR 131.12), and NPDES permitting regulations, including 40 CFR 122.44(d)(1) and 40 CFR 122.4(a). Any loading of a bioaccumulative/persistent pollutant to a receiving water with a beneficial use already impaired by that pollutant has the reasonable potential to cause or contribute to an exceedance of narrative water quality objective(s) in the Basin Plan (see 40 CFR 122.44(d)(1)(i)), and is in violation of State and federal antidegradation policies which require that existing instream beneficial uses and the level of water quality necessary to protect these uses be maintained and protected when a permit is issued by the Regional Board. The requirement that existing beneficial uses be protected is not satisfied if these uses are impaired. Where baseline water quality is less than the quality defined by the water quality objective, the antidegradation standard requires that water quality must be improved to a level which achieves the water quality objective (see page 4, Antidegradation policy implementation for NPDES permitting, SWRCB 90-004, Administrative Procedures Update, May 1990). Finally, 40 CFR 122.4(a) prohibits issuance of an NPDES permit when permit conditions do not provide for compliance with the Clean Water Act, or regulations promulgated under the Clean Water Act, including water quality standards and NPDES regulations. In the absence of a TMDL which provides that an alternative load can be assimilated by the receiving water, the only effluent limit for the pollutant which will ensure that the discharge does not cause or contribute to an exceedance of water quality standards and does comply with water quality standards and NPDES regulations is no net loading.

A "no net loading" effluent limit may be met by:

1) reducing the effluent concentration below detectable levels through source control and/or treatment;

2) reducing loads through recycling/reclamation;

3) reducing loads elsewhere in the watershed by an amount at least equal to the amount discharge (and of equivalent bioavailability) through an offset program approved by the Executive Officer. Alternatively, in lieu of the "no net loading" effluent limit, a numeric site-specific objective that is protective of the beneficial use(s) listed as impaired may be developed and used as the basis for WQBELs.

b. If the impairment is due to water column exceedances of effective numeric water quality objectives/criteria, then the only WQBEL which will not allow the discharge to cause or contribute to a violation of the numeric water quality objectives/criteria protecting the beneficial use(s) are end-of-pipe effluent limits based on these objectives/criteria.

F. The previous permit for Hitco (Order No. 93-028) only required that priority pollutants be monitored once during the lifetime of the permit. Hence, there is less than three

data points available for most of the priority pollutants. These data are insufficient to perform the statistical reasonable potential analysis prescribed in the SIP.

G. The discharge from Hitco enters Dominguez Channel near the intersection of Rosecrans Avenue and Crenshaw Boulevard. Since the discharge is continuous, and the receiving water body is 303(d) listed for a number of priority pollutants, effluent limits for those priority pollutants have been prescribed. Since the actual presence and loads of these pollutants are unknown, it is reasonably cautious to conclude that these pollutants are present in the discharge. The RPA including the WQBELs is attached.

H. The detected concentrations and the associated detection limits were high for all metals targeted in the October 1994 analyses for priority pollutants. The results reported for copper and zinc (49 and 190 µg/L respectively) exceed the water quality criteria promulgated by CTR and the WQBELs contained in Section I.5.a. of this permit. The Discharger indicated that the contaminants were not added or routinely produced in operations, thus the reported values were suspected to be an anomaly.

The Discharger performed additional sampling of the effluent at both discharge points on January 30 and February 19, 2001. The results yielded maximum concentrations of copper and zinc (0.29 and 0.36 µg/L respectively) that are well below the concentrations detected during the October 1994 sampling. This data is believed to be representative of the discharge from the Hitco facility. Hence, the metals data from the October 1994 sampling was not used in the analysis for RPA.

VI. SPECIFIC RATIONALES FOR EACH OF THE NUMERICAL EFFLUENT LIMITATIONS

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

A. Conventional and non-toxic pollutants:

		Discharge limitations		
Constituents	Units	Monthly Average[1]	Daily Maximum	Rationale
pH	pH Units	----	8.5	Basin Plan
Temperature	^{o}F	----	100	Thermal Plan
Fecal coliform	MPN/100ml	----	400	Basin Plan
Toxicity Acute	% survival	----	100	Basin Plan
Chronic Toxicity	TU_c	----	1	Ocean Plan
Total ammonia	mg/L	***	***	Basin Plan
Coliform	MPN/100 ml	200	400	Basin Plan
$BOD_5 20^{o}C$	mg/L	20	30	General Permit[2]
Oil and grease	mg/L	10	15	General Permit[2]
Total suspended solids	mg/L	50	150	General Permit[2]

		Discharge limitations		
Constituents	Units	Monthly Average[1]	Daily Maximum	Rationale

Settleable solids	ml/L	0.1	0.3	General Permit[2]
Turbidity	NTU	50	150	General Permit[2]
Residual chlorine	mg/L	----	0.5	General Permit[2]

B. 303(d) listed toxic pollutants:

			Discharge limitations		
CTR No.	Constituents	Units	Monthly Average[1]	Daily Maximum	Rationale
5b	Chromium	µg/L	171	343	CTR & SIP[3]
6	Copper	µg/L	6.7	13.5	CTR & SIP[3]
7	Lead	µg/L	2.6	5.2	CTR & SIP[3]
13	Zinc	µg/L	61	122	CTR & SIP[3]
107	Chlordane	µg/L	0.00059	0.0012	CTR & SIP[3]
102	Aldrin	µg/L	0.00014	0.00028	CTR & SIP[3]
56	Acenaphthene	µg/L	2,700	5,427	CTR & SIP[3]
58	Anthracene	µg/L	110,000	221,100	CTR & SIP[3]
60	Benzo(a)anthracene	µg/L	0.049	0.0985	CTR & SIP[3]
61	Benzo(a)pyrene	µg/L	0.049	0.0985	CTR & SIP[3]
62	Benzo(b)fluoranthene	µg/L	0.049	0.0985	CTR & SIP[3]
64	Benzo(k)fluoranthene	µg/L	0.049	0.0985	CTR & SIP[3]
73	Chrysene	µg/L	0.049	0.0985	CTR & SIP[3]
74	Dibenzo(a,h)anthracene	µg/L	0.049	0.0985	CTR & SIP[3]
111	Dieldrin	µg/L	0.00014	0.00028	CTR & SIP[3]
108	DDT	µg/L	0.00059	0.00119	CTR & SIP[3]
115	Endrin	µg/L	0.03	0.059	CTR & SIP[3]
113	Endosulfan	µg/L	0.046	0.09	CTR & SIP[3]
86	Fluoranthene	µg/L	370	744	CTR & SIP[3]
87	Fluorene	µg/L	1,400	28,140	CTR & SIP[3]
117	Heptachlor	µg/L	0.00021	0.0004	CTR & SIP[3]
118	Heptachlor epoxide	µg/L	0.00011	0.0002	CTR & SIP[3]
103	alpha HCH	µg/L	0.013	0.0261	CTR & SIP[3]
104	beta HCH	µg/L	0.043	0.0925	CTR & SIP[3]
105	gamma HCH (lindane)	µg/L	0.063	0.127	CTR & SIP[3]
92	Indeno(1,2,3-cd)pyrene	µg/L	0.049	0.0985	CTR & SIP[3]
119-125	PCBs	µg/L	0.00017	0.000342	CTR & SIP[3]
100	Pyrene	µg/L	11,000	22,110	CTR & SIP[3]
126	Toxaphene	µg/L	0.000163	0.0003	CTR & SIP[3]

[1] For parameters/constituents where both monthly average and daily maximum limits are prescribed, but where monitoring frequency is less than four times a month, the following procedure shall apply:
If analysis of a sample yields a result greater than the monthly average limit for a parameter/constituent, the sampling frequency for that parameter/constituent shall increase to weekly within one week of receiving the laboratory result until at least four consecutive weekly samples are obtained and compliance with the monthly average has been demonstrated, and the discharger has submitted for Executive Officer approval a program that will ensure future compliance with the monthly average limit.

[2] Order No. 98-055

[3] SIP is the *Policy for Implementation of Toxics Standard for Inland Surface Waters, Enclosed Bays, and Estuaries of California* that is used to implement the California Toxics Rule, codified as Rule 40 CFR Part 131.38.

***Total ammonia limitation in Attachment H, Basin Plan Tables 3-2 and 3-4.

VII. EFFLUENT MONITORING

The following table establishes the Effluent Monitoring Program at Discharge No. 001 and No. 002:

Constituent	Units	Type of Sample	Minimum Frequency of Analysis
Total waste flow	gal/day	----	monthly
Temperature	^{o}F	grab	monthly
pH	pH units	grab	semiannually
Acute Toxicity	% survival	grab	quarterly
Chronic Toxicity	TU_c	grab	quarterly
Turbidity	NTU	grab	semiannually
Total residual chlorine	mg/L	grab	semiannually
Oil and grease	mg/L	grab	semiannually
Total suspended Solids	mg/L	grab	semiannually
Settleable solids	ml/L	grab	semiannually
BOD_5 (20^{o}C)	mg/L	grab	semiannually
Fecal coliform	MPN/100 mL	grab	quarterly
Total ammonia	mg/L	grab	quarterly
Chromium	µg/L	grab	quarterly
Copper	µg/L	grab	quarterly
Lead	µg/L	grab	quarterly
Zinc	µg/L	grab	quarterly
Chlordane	µg/L	grab	quarterly
Aldrin	µg/L	grab	quarterly
Acenaphthene	µg/L	grab	quarterly
Anthracene	µg/L	grab	quarterly
Benzo(a)anthracene	µg/L	grab	quarterly
Benzo(a)pyrene	µg/L	grab	quarterly
Benzo(b)fluoranthene	µg/L	grab	quarterly
Benzo(k)fluoranthene	µg/L	grab	quarterly
Chrysene	µg/L	grab	quarterly
Dibenz(a,h)anthracene	µg/L	grab	quarterly
Dieldrin	µg/L	grab	quarterly

Constituent	Units	Type of Sample	Minimum Frequency of Analysis
DDT	µg/L	grab	quarterly
Endrin	µg/L	grab	quarterly
Endosulfan	µg/L	grab	quarterly

Fluoranthene	µg/L	grab	quarterly
Fluorene	µg/L	grab	quarterly
Heptachlor	µg/L	grab	quarterly
Heptachlor epoxide	µg/L	grab	quarterly
alpha HCH	µg/L	grab	quarterly
beta HCH	µg/L	grab	quarterly
gamma HCH (lindane)	µg/L	grab	quarterly
Indeno(1,2,3-cd)pyrene	µg/L	grab	quarterly
PCBs	µg/L	grab	quarterly
Pyrene	µg/L	grab	quarterly
Toxaphene	µg/L	grab	quarterly

X. ADDITIONAL ACUTE AND CHRONIC TOXICITY MONITORING REQUIREMENTS

A. Acute Toxicity Limitation and Requirements

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

2. If any acute toxicity bioassay test result is less than 90% survival, the Discharger shall conduct six additional tests over a six-week period. The discharger shall ensure that they receive results of a failing acute toxicity test within 24 hours of the close of the test and the additional tests shall begin within 3 business days of the receipt of the result. If the additional tests indicate compliance with acute toxicity limitation, the discharger may resume regular testing. However, if the results of any two of the six accelerated tests are less than 90 % survival, then the Discharger shall begin a Toxicity Identification Evaluation (TIE). The TIE shall include all reasonable steps to identify the sources of toxicity. Once the sources are identified, the Discharger shall take all reasonable steps to reduce toxicity to meet objective.

3. If any two of the additional six acute toxicity bioassay test result in less than 70% survival, including the initial test, the Discharger shall immediately begin a TIE.

4. The Discharger shall conduct acute toxicity monitoring as specified in Monitoring and Reporting Program No. 6520.

B. Chronic Toxicity Limitations and Requirements

1. This Order contains no numeric limitation for chronic toxicity of the effluent; however, it includes a chronic testing toxicity trigger hereby defined as an exceedance of 1 TU_c in a critical life stage test for 100% effluent. (The monthly median for chronic toxicity of 100% effluent shall not exceed 1.0 TU_c in a critical life stage test.)

2. If the chronic toxicity of the effluent exceeds 1.0 TU_c, the Discharger shall immediately implement an accelerated chronic toxicity testing according to

Monitoring and Reporting Program No. 6520, Item IV.C.1. If the results of two of the six accelerated tests exceed 1.0 TU_c, the Discharger shall initiate a TIE.

3. The Discharger shall conduct chronic toxicity monitoring as specified in Monitoring and Reporting Program No. 6520

4. The chronic toxicity of the effluent shall be expressed and reported in toxic units, where:

$$TU_c = \frac{100}{NOEC}$$

The No Observable Effect Concentration (NOEC) is expressed as the maximum percent effluent concentration that causes no observable effect on test organisms, as determined by the results of a critical life stage toxicity test.

C. ACCELERATED MONITORING

1. If toxicity is detected as defined in Order No. 01-XXX, Sections I.B.4.a.1., or I.B.4.b.1., then the Discharger shall conduct six additional tests, approximately every 7 days, over a six-week period. The samples shall be collected and the tests initiated no less than 7 days apart. The discharger shall ensure that they receive results of a failing acute toxicity test within 24 hours of the close of the test and the additional tests shall begin within 3 business days of the receipt of the result. If two of the six tests exceed 1.0 TU_c, the Discharger shall immediately implement the TIE.

2. If implementation of the TIE indicates the source of toxicity (e.g., a temporary plant upset, etc.), then the Discharger shall return to the normal sampling frequency required in Part III of Monitoring and Reporting Program No. CI-6520.

3. If toxicity is not detected in any of the six additional tests required above, then the Discharger may return to the normal sampling frequency required in Part III of the monitoring and reporting program.

4. If a TIE is initiated prior to completion of the accelerated testing schedule required by Part IV.D. of the monitoring and reporting program, then the accelerated testing schedule may be terminated, or used as necessary in performing the TRE/TIE, as determined by the Executive Officer.

5. The Discharger shall obtain 6 consecutive chronic toxicity results less than or equal to 1 TU_c in order to return to the normal sampling frequency required in Part III of the monitoring and reporting program.

XI. INTERIM MONITORING

Pursuant to the California Water Code, Section 13267, the Discharger is required to submit data sufficient for determination of priority pollutants that require water quality-based effluent limitations. The Discharger shall conduct an interim monitoring program for all California Toxics Rule pollutants for three years, or until ordered otherwise by the Regional Board.

A. Effluent – Discharge No. 001 and Discharge No. 002.

Constituent	Units	Type of Sample	Minimum Frequency of Analysis
Arsenic	µg/L	grab	quarterly[5]
Beryllium	µg/L	grab	quarterly[5]
Cadmium	µg/L	grab	quarterly[5]
Nickel	µg/L	grab	quarterly[5]
Selenium	µg/L	grab	quarterly[5]
Silver	µg/L	grab	quarterly[5]
Antimony	µg/L	grab	quarterly[5]
Mercury	µg/L	grab	quarterly[5]
Thallium	µg/L	grab	quarterly[5]
Cyanide	µg/L	grab	quarterly[5]
4,4'-DDE	µg/L	grab	quarterly[5]
4,4'-DDD	µg/L	grab	quarterly[5]
3-Methyl-4-chlorophenol	µg/L	grab	quarterly[5]
Alpha-endosulfan	µg/L	grab	quarterly[5]
Beta-endosulfan	µg/L	grab	quarterly[5]
Endosulfan sulfate	µg/L	grab	quarterly[5]
Endrin aldehyde	µg/L	grab	quarterly[5]
Delta-BHC	µg/L	grab	quarterly[5]
Benzidine	µg/L	grab	quarterly[5]
1,2,4-trichlorobenzene	µg/L	grab	quarterly[5]
Hexachlorobenzene	µg/L	grab	quarterly[5]
Hexachloroethane	µg/L	grab	quarterly[5]
Bis(2-chloroethyl) ether	µg/L	grab	quarterly[5]
2-chloronaphthalene	µg/L	grab	quarterly[5]
1,2-dichlorobenzene	µg/L	grab	quarterly[5]
1,3-dichlorobenzene	µg/L	grab	quarterly[5]
1,4-dichlorobenzene	µg/L	grab	quarterly[5]
3,3'-dichlorobenzidine	µg/L	grab	quarterly[5]
2,4-dinitrotoluene	µg/L	grab	quarterly[5]
2,6-dinitrotoluene	µg/L	grab	quarterly[5]
1,2-diphenylhydrazine	µg/L	grab	quarterly[5]
4-chlorophenyl phenyl ether	µg/L	grab	quarterly[5]
4-bromophenyl phenyl ether	µg/L	grab	quarterly[5]
Bis(2-chloroisopropyl) ether	µg/L	grab	quarterly[5]
Bis(2-chloroethoxy) methane	µg/L	grab	quarterly[5]
Hexachlorobutadiene	µg/L	grab	quarterly[5]

Hexachlorocyclopentadiene	µg/L	grab	quarterly[5]
Isophorone	µg/L	grab	quarterly[5]
Naphthalene	µg/L	grab	quarterly[5]
Nitrobenzene	µg/L	grab	quarterly[5]
N-nitrosodimethylamine	µg/L	grab	quarterly[5]
N-nitrosodi-n-propylamine	µg/L	grab	quarterly[5]
N-nitrosodiphenylamine	µg/L	grab	quarterly[5]
Bis (2-ethylhexyl) phthalate	µg/L	grab	quarterly[5]
Butyl benzyl phthalate	µg/L	grab	quarterly[5]
Di-n-butyl phthalate	µg/L	grab	quarterly[5]
Di-n-octyl phthalate	µg/L	grab	quarterly[5]
Diethyl phthalate	µg/L	grab	quarterly[5]
Dimethyl phthalate	µg/L	grab	quarterly[5]
Acenaphthylene	µg/L	grab	quarterly[5]
Anthracene	µg/L	grab	quarterly[5]
Phenanthrene	µg/L	grab	quarterly[5]
1,2,5,6-dibenzanthracene	µg/L	grab	quarterly[5]
Indeno (1,2,3-cd) pyrene	µg/L	grab	quarterly[5]
TCDD	µg/L	grab	quarterly[5]
Benzo(g,h,i)perylene	µg/L	grab	quarterly[5]
2,4,6-trichlorophenol	µg/L	grab	quarterly[5]
P-chloro-m-cresol	µg/L	grab	quarterly[5]
2-chlorophenol	µg/L	grab	quarterly[5]
2,4-dichlorophenol	µg/L	grab	quarterly[5]
2,4-dimethylphenol	µg/L	grab	quarterly[5]
2-nitrophenol	µg/L	grab	quarterly[5]
4-nitrophenol	µg/L	grab	quarterly[5]
2,4-dinitrophenol	µg/L	grab	quarterly[5]
4,6-dinitro-o-cresol	µg/L	grab	quarterly[5]
Pentachlorophenol	µg/L	grab	quarterly[5]
Phenol	µg/L	grab	quarterly[5]
Acrolein	µg/L	grab	quarterly[5]
Acrylonitrile	µg/L	grab	quarterly[5]
Benzene	µg/L	grab	quarterly[5]

Constituent	Units	Type of Sample	Minimum Frequency of Analysis
Carbon tetrachloride	µg/L	grab	quarterly[5]
Chlorobenzene	µg/L	grab	quarterly[5]
1,2-dichloroethane	µg/L	grab	quarterly[5]
1,1,1-trichloroethane	µg/L	grab	quarterly[5]
1,1-dichloroethane	µg/L	grab	quarterly[5]
1,1,2-trichloroethane	µg/L	grab	quarterly[5]
1,1,2,2-tetrachloroethane	µg/L	grab	quarterly[5]
Chloroethane	µg/L	grab	quarterly[5]
Chloroform	µg/L	grab	quarterly[5]
1,1-dichloroethylene	µg/L	grab	quarterly[5]
1,2-trans-dichloroethylene	µg/L	grab	quarterly[5]

1,2-dichloropropane	µg/L	grab	quarterly[5]
1,2-dichloropropylene	µg/L	grab	quarterly[5]
Ethylbenzene	µg/L	grab	quarterly[5]
Methylene chloride	µg/L	grab	quarterly[5]
Methyl chloride	µg/L	grab	quarterly[5]
Methyl bromide	µg/L	grab	quarterly[5]
Bromoform	µg/L	grab	quarterly[5]
Bromodichloromethane	µg/L	grab	quarterly[5]
Dibromochloromethane	µg/L	grab	quarterly[5]
Tetrachloroethylene	µg/L	grab	quarterly[5]
Toluene	µg/L	grab	quarterly[5]
Trichloroethylene	µg/L	grab	quarterly[5]
Vinyl chloride	µg/L	grab	quarterly[5]
Fluorene	µg/L	grab	quarterly[5]
2-chloroethyl vinyl ether	µg/L	grab	quarterly[5]
Xylenes	µg/L	grab	quarterly[5]
1,3-Dichloropropylene	µg/L	grab	quarterly[5]
2-Methyl-4,6-Dinitrophenol	µg/L	grab	quarterly[5]

[5] If the results of the sampling are nondetected for four consecutive sampling events, the frequency of analysis may be decreased to semiannually. However, if a result then exceeds the effluent limit, the frequency for that constituent will revert to quarterly.

B. Receiving Water

The monitoring stations shall be located 50 feet upstream and downstream of the point of discharge to Dominguez Channel (Figure 3).

1. The following general observations or measurements at the receiving water sampling locations shall be reported:

    a. Tidal stage, time, and date of monitoring
    b. General water conditions
    c. Color of the water
    d. Appearance of oil films or greases, or floatable materials
    e. Extent of visible turbidity or color patches
    f. Direction of tidal flow
    g. Description of odor, if any, of the receiving water
    h. Presence and activity of marine life
    i. Presence of the California Least Tern and California Brown Pelican.

2. Receiving water sampling will include analysis for each of the following constituents:

Constituent	Units	Type of Sample	Minimum Frequency of Analysis[7]
Hardness as Calcium carbonate ($CaCO_3$)	mg/L	----	quarterly
Temperature	^oC or ^oF	grab	quarterly
pH	pH Units	grab	quarterly

Turbidity	NTU	grab	semiannually[6]
Acute Toxicity	% survival	grab	semiannually[6]
Chronic Toxicity	TU_c	grab	semiannually[6]
Fecal coliform	MPN/100ml	grab	semiannually[6]
Total ammonia	mg/L	grab	semiannually[6]
Residual chlorine	mg/L	grab	semiannually[6]
Oil and grease	mg/L	grab	semiannually[6]
Total Suspended Solids	mg/L	grab	semiannually[6]
Settleable solids	ml/L	grab	semiannually[6]
BOD_5 (20^oC)	mg/L	grab	semiannually[6]
Arsenic	µg/L	grab	semiannually[6]
Beryllium	µg/L	grab	semiannually[6]
Cadmium	µg/L	grab	semiannually[6]
Nickel	µg/L	grab	semiannually[6]
Selenium	µg/L	grab	semiannually[6]
Silver	µg/L	grab	semiannually[6]
Chromium	µg/L	grab	semiannually[6]
Copper	µg/L	grab	semiannually[6]
Lead	µg/L	grab	semiannually[6]
Zinc	µg/L	grab	semiannually[6]
Chlordane	µg/L	grab	semiannually[6]
Aldrin	µg/L	grab	semiannually[6]
Acenaphthene	µg/L	grab	semiannually[6]
Anthracene	µg/L	grab	semiannually[6]
Benzo(a)anthracene	µg/L	grab	semiannually[6]
Benzo(a)pyrene	µg/L	grab	semiannually[6]
Benzo(b)fluoranthene	µg/L	grab	semiannually[6]
Benzo(k)fluoranthene	µg/L	grab	semiannually[6]
Chrysene	µg/L	grab	semiannually[6]
Dibenzo(a,h)anthracene	µg/L	grab	semiannually[6]
Dieldrin	µg/L	grab	semiannually[6]
DDT	µg/L	grab	semiannually[6]

Constituent	Units	Type of Sample	Minimum Frequency of Analysis
Endrin	µg/L	grab	semiannually[6]
Endosulfan	µg/L	grab	semiannually[6]
Fluoranthene	µg/L	grab	semiannually[6]
Fluorene	µg/L	grab	semiannually[6]
Heptachlor	µg/L	grab	semiannually[6]
Heptachlor epoxide	µg/L	grab	semiannually[6]
alpha HCH	µg/L	grab	semiannually[6]
beta HCH	µg/L	grab	semiannually[6]
gamma HCH (lindane)	µg/L	grab	semiannually[6]
Indeno(1,2,3-cd)pyrene	µg/L	grab	semiannually[6]
PCBs	µg/L	grab	semiannually[6]
Pyrene	µg/L	grab	semiannually[6]
Toxaphene	µg/L	grab	semiannually[6]

[6] Semiannual sampling - once during the wet weather season (November 1 through April 30) and once during the dry weather season (May 1 through October 31).

3. Monitoring for TCDD Equivalents – The Discharger shall conduct effluent and receiving water monitoring for the presence of the 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD or Dioxin) congeners. The monitoring shall be conducted by collecting a grab sample with a minimum frequency of once during dry weather season (May 1 through October 31) and once during wet weather season (November 1 through April 30). The Discharger shall calculate a Toxic Equivalence (TEQ) for each congener by multiplying its analytical concentration by the appropriate Toxicity Equivalence Factors (TEF). Compliance with the dioxin limitation shall be determined by the summation of the 17 individual TEQs compared to the human health water quality limit for 2,3,7,8-TCDD, consumption of organisms only as defined in 40 CFR Part 131 (0.000000014 μg/L).

Congeners	Toxicity Equivalence Factors
2,3,7,8-tetra CDD	1.0
1,2,3,7,8-penta CDD	1.0
1,2,3,4,7,8-hexa CDD	0.1
1,2,3,6,7,8-hexa CDD	0.1
1,2,3,7,8,9-hexa CDD	0.1
1,2,3,4,6,7,8-hepta CDD	0.01
Octa CDD	0.0001
2,3,7,8-tetra CDF	0.1
1,2,3,7,8-penta CDF	0.05
2,3,4,7,8-penta CDF	0.5
1,2,3,4,7,8-hexa CDF	0.1
1,2,3,6,7,8-hexa CDF	0.1
1,2,3,7,8,9-hexa CDF	0.1
2,3,4,6,7,8-hexa CDF	0.1
1,2,3,4,6,7,8-hepta CDF	0.01
1,2,3,4,7,8,9-hepta	0.01
Octa CDF	0.0001

XII. WRITTEN COMMENTS

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

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

Written comments regarding the tentative Order must be received at the Regional Board office by the close of business on March 9, 2000, in order to be evaluated by staff and included in the Board's agenda folder. Comments received after that date will be provided, ex agenda, to the Board for consideration, but may result in delay of the tentative Order.

XIII. PUBLIC HEARING

The proposed Waste Discharge Requirements will be considered by the Regional Board at a public hearing to be held on March 29, 2001, at the Richard M. Chambers U.S. Court of Appeals Building (Courtroom 3), 125 South Grand Avenue, Pasadena, California.

XIV. WASTE DISCHARGE REQUIREMENTS APPEALS

Any person may petition State Water Resources Control 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.

XV. ADDITIONAL INFORMATION

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, CA 90013, at any time between 8:30 AM and 4:45 PM, Monday through Friday by calling (213) 576-6600.

XVI. REGISTER OF INTERESTED PERSONS

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