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

ORDER NO. 95-081

NPDES NO. CA0054216

WASTE DISCHARGE REQUIREMENTS FOR

COUNTY SANITATION DISTRICTS OF LOS ANGELES COUNTY (Valencia Water Reclamation Plant)

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

- 1. County Sanitation Districts of Los Angeles County (hereinafter CSDLAC or Discharger) discharge treated wastewater from the Valencia Water Reclamation Plant (WRP) under waste discharge requirements contained in Order No. 89-129 (NPDES No. CA0054216), adopted by this Regional Board on December 4, 1989.
- 2. CSDLAC have filed a Report of Waste Discharge (RWD) and have applied for renewal of their waste discharge requirements and National Pollutant Discharge Elimination System (NPDES) permit. The RWD also includes information about the plant expansion. Completion of construction and operation of the additional facilities will be during the life of the permit in consideration; therefore, this permit reflects these changes in the plant capacity.
- The Valencia WRP, located at 28185 The Old Road, Valencia, is a tertiary wastewater treatment plant with a design capacity of 11 million gallons per day (mgd). The plant design capacity will increase to 12.6 mgd after completing the construction of an additional aeration tank and secondary sedimentation tank and structural modifications of the existing secondary tanks damaged by the January 17, 1994, Northridge Earthquake. Treatment consists of comminution, primary sedimentation, flow equalization, activated sludge biological treatment, secondary filtration, sedimentation, coagulation, inert media chlorination and dechlorination. Waste activated sludge, concentrated by air floatation, is blended with primary sludge and is anaerobically digested.

The Valencia WRP is a part of CSDLAC's regional system, known as the Santa Clarita Joint Sewerage System, which combines two water reclamation plants: Valencia WRP (District No. 32) and

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Saugus WRP (District No. 26). The regional system allows sludge and excess flows from the Saugus WRP to be diverted to the Valencia WRP for treatment and disposal.

Figures 1 and 2 show the location of the plant and the schematic of wastewater flow.

- 4. The Valencia WRP discharges tertiary treated municipal and industrial wastewater into the Santa Clara River, a water of the United States, through Discharge Serial No. 001 (Latitude 34°25'47", Longitude 118°35'27"). The Discharge Serial No. 001 is located 2,000 feet downstream from The Old Road Bridge, above the estuary.
- 5. The RWD describes the 1993 discharge as follows:

<u>Constituent</u>	<u>Unit</u> <u>Effluent Annual Average</u>
Flow	mgd 9.02
рн	pH unit 7.01
Temperature	^o F 74-79
BOD	mg/1 7
Chemical oxygen demand	mg/1 40
Suspended solids	mg/1 < 3
Total dissolved solids	mg/1 821

- 6. The U.S. Environmental Protection Agency (USEPA) and the Regional Board have classified this discharge as a major discharge.
- 7. A portion of the treated effluent is reclaimed for landscape irrigation and is regulated under Order No. 87-48, adopted by this Board on April 27, 1987.
- 8. Digested biosolids and solids separated by screening are combined, dewatered by filter press, and then land applied for agricultural purposes with option of landfill disposal. The grit is dried and currently disposed of at the Chiquita Canyon Landfill.
- 9. The Valencia WRP is currently undergoing various expansions. The Stage-IV Expansion, which increased the plant design capacity from 7.5 mgd to 11 mgd, was completed in November 1994. After the January 17, 1994, Northridge Earthquake, an additional aeration tank and sedimentation tank are being constructed to accommodate modifications/repairs of the damaged existing tanks. After the completion of the modifications, expected in May 1996, the plant design capacity will increase to 12.6 mgd. The Stage-V Expansion, currently

being designed, will further increase the plant capacity. The sexact capacity increase is undetermined at this time because CSDLAC have not fully evaluated the benefits of flow equalization. Construction is scheduled to be completed by January 1997. The solids processing expansion, which would provide additional solids handling for the plant Stage-V Expansion, is also being designed and the construction is scheduled to be completed by July 1997.

After the Stage-IV expansion, the plant has 6 influent pumps, 9 primary sedimentation tanks, 2 primary effluent flow equalization basins, 6 aeration tanks, 7 final sedimentation tanks, 3 filter feed pumps, 8 pressure filters, 3 chlorine contact tanks, 3 dissolved air floatation units, and 3 flares.

- 10. The Board adopted a revised Water Quality Control Plan for the Santa Clara River Basin (4A) on June 13, 1994. The plan contains water quality objectives for the Santa Clara River.
- 11. The beneficial uses of the receiving water (Santa Clara River) are: (a) potential municipal and domestic water supply; (b) existing industrial service and process supply, agricultural supply, groundwater recharge, freshwater replenishment, contact and non-contact water recreation, warm freshwater habitat, wildlife habitat, preservation of rare and endangered species, migration of aquatic organisms (downstream from the boundary of the hydrologic areas 403.40 and 403.50), and wetland habitat.
- 12. There is public contact in the downstream areas; hence, the quality of wastewater discharged to the Santa Clara River must be such that no health hazard is created.
- 13. In 1993, the chloride concentrations of the final effluent ranged from 112 mg/l to 170 mg/l (annual average 142 mg/l). The daily maximum chloride limit in Order No. 89-129 was 100 mg/l. On March 26, 1990, the Board adopted Resolution No. 90-004, which stated that because of the long term drought in California, the Board would temporarily not enforce the chloride limit where violations were primarily due to increased chloride concentrations in imported water. However, if a discharge exceeds the chloride limitation, Resolution No. 90-004 requires the discharger to take measures to reduce chlorides in the waste discharge. CSDLAC have fully complied with this provision and have not exceeded the interim limits and guidelines for chloride contained in Resolution No. 90-004.

- 14. This discharge is subject to USEPA's 304(1) regulations which prescribe biological and other laboratory testing procedures and toxicity limits, particularly chronic toxicity, for the implementation of USEPA's "Policy for the Development of Water Quality-based Permit Limitations for Toxic Pollutants" (49 FR 9016, dated March 9, 1984).
- 15. To implement Section 405(d) of the Clean Water Act, on February 19, 1993, USEPA promulgated 40 CFR part 503 to regulate the use and disposal of municipal sewage sludge. This permit implements the regulations and it is the responsibility of the discharger to comply with said regulations, which are enforceable by USEPA.
- 16. Pursuant to Section 402(p) of the Clean Water Act and 40 CFR Parts 122, 123, and 124, the State Water Resources Control Board (State Board) adopted a general NPDES permit to regulate stormwater discharges associated with industrial activity (State Board Order No. 91-13-DWQ adopted in November 1991, amended by Order No. 92-12-DWQ adopted in September 1992) and construction activity (State Board Order No. 92-008-DWQ adopted in August 1992). Stormwater discharges from Valencia WRP are subject to requirements under these general permits.
- 17. Pursuant to 40 CFR Part 403, CSDLAC developed and have implemented a USEPA approved industrial wastewater pretreatment program.
- 18. Effluent limitations, national standards of performance, toxic and pretreatment effluent standards, regulations, requirements, and/or guidelines established pursuant to Sections 208(b), 301, 302, 303(d), 304, 306, 307, and 405 of the Clean water Act, and amendments thereto, are applicable to the discharges.
- 19. Except for constituents imposed in the previous permit, no numerical limit is prescribed for any toxic constituent that is consistently not detectable in the effluent and where it has been determined that there is a very low probability of causing or contributing to excursions in water quality standards. A narrative limit to comply with all water quality objectives is provided in lieu of such numerical limits.
- 20. The requirements contained in this Order are based on the Basin Plan, other Federal and State plans, policies, guidelines, and best engineering judgment; and, as they are met, will be in conformance with the goals of the aforementioned water quality control plans and will protect and maintain existing beneficial uses of the receiving waters.

21. The Discharger's monitoring data during 1989-1994 consistently showed high effluent quality. To maintain the plant performance, effluent quality performance goals are prescribed in this Order. This approach requires the Discharger to maintain its treatment efficiency, while recognizing normal variations in treatment plant operations, influent quality, and sampling and analytical techniques. However, this approach does not address substantial changes in plant operations that may occur in the future and could affect the quality of the treated effluent. As such, the performance goals may be modified by the Executive Officer, if warranted.

For pollutants which have been routinely detected in the effluent, the performance goals are statistically set at the 95th percentile of the 1989-1994 performance data. At the 95th percentile, it is expected that one sample in twenty would exceed the goal in the long term.

For other pollutants whose effluent monitoring data have consistently showed non-detectable levels or occasionally detected at levels less than the Practical Quantitation Level (PQL), the effluent quality performance goals are set at the PQL. The PQL is determined by multiplying the USEPA published method detection limit (MDL) or the Discharger's MDL approved by the Executive Officer with the factor five (5) for carcinogens and ten (10) for non-carcinogens.

22. 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.

The Regional 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 Regional 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, USEPA, has no objections.

IT IS HEREBY ORDERED that County Sanitation Districts of Los Angeles County, 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. DISCHARGE REQUIREMENTS

A. Effluent Limitations

- 1. Wastes discharged shall be limited to treated municipal and industrial wastewater only, as proposed.
- 2. The pH of wastes discharged shall at all times be within the range of 6.0 and 9.0.
- 3. The temperature of wastes discharged shall not exceed 100°F.
- 4. The discharge of an effluent from Discharge Serial No. 001 with constituents in excess of the following limits is prohibited:
 - a. Conventional and nonconventional pollutants:

		Dischar	ge Limita	ations -
		30-day <u>verage¹/ A</u>	7-day,	Daily,
<u>Constituent</u>	<u>Units</u> Av	<u>rerage±′A</u>	verage=/	Maxımum²'
BOD ₅ 20°C	mg/l lbs/day ^{3/}	20 1,835	30 2,752	45 4,128
Suspended solids	mg/l lbs/day ^{3/}	15 1,376	40 3,670	45 4,128
Settleable solids	ml/l	0.1		0.3
Oil and grease	mg/l lbs/day ^{<u>3</u>/}	10 917		15 1,376
Total dissolved solids	mg/l lbs/day ^{<u>3</u>/}		 	1,000 91,740
Sulfate	mg/l lbs/day ^{<u>3</u>/}	 		400 36,696
Chloride ⁴ /	mg/l lbs/day <u>3</u> /		· · · · · · · · · · · · · · · · · · ·	100 9,174

Constituent		<u>Limitations</u> y Maximum ^{2/}
Boron	mg/l lbs/day ^{<u>3</u>/}	1.5 138
Nitrate + Nitrite (as Nitrogen)	mg/l lbs/day ³ /	10 917
Fluoride	mg/l lbs/day ^{<u>3</u>/}	1.6 147
Detergents (as MBAS) mg/l lbs/day ^{<u>3</u>/}	0.5 46

^{1/} As defined in Standard Provisions, Attachment N.

In accordance with the Resolution 90-004, the chloride limitation shall not be considered to be violated unless the effluent concentrations of chlorides exceed 250 mg/l or water supply concentrations plus 85 mg/l, whichever is less.

b. Toxic pollutants:

Constituent	<u>Units</u>	<u>Discharge Limitations</u> 30-day Average ^{5/}
Antimony	μg/l lbs/day ^{<u>3</u>/}	6 <u>6</u> / 0.550
Arsenic	μg/l lbs/day ^{<u>3</u>/}	50 ^{6/} 4.59
Barium	μg/l lbs/day ^{<u>3</u>/}	1,000 <u>6</u> / 91.7
Beryllium	μg/l lbs/day ³ /	<u>4</u> 6/ 0.367
Cadmium	μg/l lbs/day ^{<u>3</u>/}	<u>56</u> / 0.459

Except for grab samples, the daily maximum effluent concentration limit shall apply to flow-weighted 24-hour composite samples.

Based on the plant design flow rate of 11 mgd. The mass discharge rate limitations will accordingly be modified upon certification and approval of increased treatment capacity. During events such as storms in which the flow exceeds the plant design capacity, the mass discharge rate limitations will be tabulated using the same concentration limits and the actual flow rates.

<u>Constituent</u>	<u>Units</u>	<u>Discharge Limitations</u> 30-day Average ^{5/}
Chromium (VI) ⁷ /	μg/l lbs/day ^{<u>3</u>/}	50 <u>6</u> / 4.59
Iron	μg/l lbs/day <u>³</u> /	300 <u>€</u> / 27.5
Lead	μg/l lbs/day <u>3</u> /	50 <u>6</u> / 4.59
Mercury	μg/l lbs/day <u>³</u> /	2 <u>6</u> / 0.183
Nickel	μg/l lbs/day <u>3</u> /	100 ⁶ / 9.17
Selenium	μg/l lbs/day <u>3</u> /	10 ⁶ / 0.917
Silver	μg/l lbs/day <u>³</u> /	50 ⁶ / 4.59
Zinc	μg/l lbs/day <u>3</u> /	5,000 <u>6</u> / 459
Cyanide ^{8/}	μg/l lbs/day ^{<u>3</u>/}	5.2 0.477
Endrin ⁹ /	μg/l lbs/day <u>³</u> /	2 0.183
Lindane	μg/l lbs/day <u>³</u> /	0.2 0.0183
Methoxychlor	μg/l lbs/day ³ /	40 3.67
Toxaphene	μg/l lbs/day ^{<u>3</u>/}	3 0.275
2,4-D	μg/l lbs/day <u>^{3/}</u>	70 6.42
2,4,5-TP (Silvex)	μg/l lbs/day ^{<u>3</u>/}	10 0.917

Constituent	<u>Units</u>	<u>Discharge Limitations</u> 30-day Average ^{5/}
Halomethanes 10/	μg/l lbs/day ^{<u>3</u>/}	100 9.17
Tetrachloroethylene	μg/l lbs/day ^{3/}	5 0.459
Carbon tetrachlorid	e μg/l lbs/day ³ /	0.5 0.0459
1,1,1-Trichloroetha	ne μg/l lbs/day ³ /	200 18.35
p-Dichlorobenzene	μg/l lbs/day ³ /	5 0.459
Di(2-ethylhexyl) phthalate	μg/l lbs/day ³ /	4 0.367

- 5/ Compliance may be determined from a single analysis or from the average of the initial analysis and three additional analyses taken one week apart once the results of the initial analysis are obtained.
- 6/ Based on total recoverable metals. These limits may be modified to total dissolved metals if the Discharger requests and has conducted a study on the water-effect ratio (WER) according to the USEPA guidance document and/or state protocols, if available.
- 7/ The Discharger may, at his option, meet this limitation as total chromium.
- 8/ The recovery of free cyanide from metal complexes must be comparable to that achieved by Standard Methods 412 F, G, and H (Standard Methods for the Examination of Water and Wastewater; Joint Editorial Board, American Public Health Association, American Water Works Association, and Water Pollution Control Federation [Water Environment Federation]; Most recent edition).
- 9/ ENDRIN shall mean the sum of endrin and endrin aldehyde.
- 10/ HALOMETHANES shall mean the sum of bromoform, chloroform, bromomethane, chloromethane, and dichlorobromomethane.
 - 5. Radioactivity of the wastes discharged shall not exceed the limits specified in Title 22, Chapter 15, Article 5, Section 64443, of the California Code of Regulations, or subsequent revisions.
 - 6. The arithmetic mean of BOD₅20°C and suspended solids values, <u>by weight</u>, for effluent samples collected in a period of 30 consecutive calendar days shall not exceed

15 percent of the arithmetic mean of values, by weight, for influent samples collected at approximately the same time during the same period.

- 7. The wastes discharged to water courses shall at all times be adequately disinfected. For the purpose of this requirement, the wastes shall be considered adequately disinfected if the median number of coliform organisms at some point in the treatment process does not exceed 2.2 per 100 milliliters, and the number of coliform organisms does not exceed 23 per 100 milliliters in more than one sample within any 30-day period. The median value shall be determined from the bacteriological results of the last seven (7) days for which analysis have been completed. Samples shall be collected at a time when wastewater flow and characteristics are most demanding on treatment facilities and disinfection processes.
- 8. The wastes discharged to water courses shall have received treatment equivalent to that of filtered wastewater. Filtered wastewater means oxidized and coagulated wastewater which has been passed through natural undisturbed soils or filter media, such as sand or diatomaceous earth, so that the turbidity of the filtered wastewater does not exceed (a) a daily average of 2 Nephelometric turbidity units (NTU's), (b) and does not exceed 5 NTU's more than 5 percent of the time (72 minutes) during any 24 hour period.

"Oxidized wastewater" means wastewater in which the organic matter has been stabilized, is nonputrescible, and contains dissolved oxygen. "Coagulated wastewater" means oxidized wastewater in which colloidal and finely divided suspended matter have been destabilized and agglomerated upstream of a filter by the addition of suitable floc-forming chemicals.

NTU means a measurement of turbidity as determined by the ratio of the intensity of light scattered by the sample to the intensity of incident light using approved laboratory methods.

9. Acute Toxicity Limitation:

a. The acute toxicity of the effluent shall be such that 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%, with no single test producing less than 70% survival.

b. 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 source(s) of toxicity. Once the source of toxicity is identified, the Discharger shall take all reasonable steps necessary to reduce toxicity to the required level.

B. Effluent Quality Performance Goals

The Discharger shall make best efforts to maintain the following effluent quality goals. Any exceedance of any goal shall trigger an investigation by the Discharger on the cause of the exceedance. The Discharger shall report to the Regional Board on a quarterly basis any exceedance of any of these effluent quality goals. If exceedance of any particular goal persists on two succeeding quarterly monitoring periods, the Discharger shall submit with the second quarterly report the investigation results including but not limited to the description of the exceedance, cause (s) of the exceedance, and proposed corrective measures, if necessary. If the exceedance of any goal becomes chronic, the Discharger shall proceed to implement the proposed action plan to correct the exceedance. The Executive Officer may modify the action plan.

The Executive Officer may modify any of the performance goals if the Discharger requests and has demonstrated that the change is warranted.

	Effluent Qua		
<u>Constituent</u>	<u>Units</u>	30-day <u>Average</u>	Daily <u>Maximum</u>
BOD ₅ 20°C Suspended solids Arsenic Cadmium Chromium (VI) ^Z / Copper Lead Mercury Nickel Selenium Silver Zinc Phenol Chloroform Bromodichloromethane	mg/l mg/l µg/l µg/l µg/l µg/l µg/l µg/l µg/l µ	11 ¹¹ / ₄ 11/ 	511/ 511/ 3011/ 3011/ 4811/ PQL12/ 4211/ 211/ 811/ 12511/ 2011/ 1611/ 311/

Effluent Quality Performance Goals

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		30-day	Daily	
<u>Constituent</u>	<u>Units</u>	<u>Average</u>	<u>Maximum</u>	
			11 /	
Dibromochloromethane	$\mu g/1$	<u></u>	$2\frac{11}{11}$	
Bromoform	$\mu g/1$		$1\frac{11}{11}$	
1,1,1-Trichloroethane			4 <u>11</u> /	
Tetrachloroethylene	μ g/l		3 <u>11</u> /	
Remaining priority			127	
pollutants	$\mu g/1$		PQL^{12}	

Numerical effluent quality performance goals were derived statistically using effluent performance data for the period of 1989 through 1994. Effluent values (X_i) are assumed to be lognormally distributed. The use of logarithmic transformation equation, $Y_i = \text{Ln }(X_i)$, results in effluent values (Y_i) that are normally distributed. Effluent quality performance goals are determined by the equation:

$$X_{.95} = \exp [u_n + (Z_{.95}) (\sigma_n)]$$

where X_{.95} = discharge effluent quality performance goal at the 95th percentile of the normal distribution.

 $u_n = mean of the distribution of the average of n values transformed.$

Z_{.95} = z-value from the Table of Areas under the Standard Normal Curve, equal to 1.645 at 95 percent.

 σ_n = standard deviation of the distribution of the average of n values transformed.

Exp is an exponential to the base "e" value = 2.7183

12/ PQL (Practical Quantitation Limit) shall be determined by multiplying the USEPA published method detection limit (MDL) (Attachment 1) or the Discharger's MDL approved by the Executive Officer with the factor five (5) for carcinogens and ten (10) for non-carcinogens.

C. Receiving Water Limitations

- 1. The temperature of the receiving water at any time or place and within any given 24-hour period shall not be increased by more than 5°F (or above 70°F if the ambient receiving water temperature is less than 60°F) as a result of the wastes discharged.
- 2. The pH of the receiving water shall not be depressed below 6.5 or raised above 8.5 as a result of wastes discharged. Ambient pH levels shall not be changed more than 0.5 units from natural conditions.
- 3. The dissolved oxygen in the receiving water shall not be depressed below 5 mg/l as a result of the wastes discharged.

- 4. The residual chlorine in the receiving water shall not exceed 0.1 mg/l as a result of the wastes discharged.
- 5. The fecal coliform concentration in the receiving water shall not exceed a log mean of 200/100 ml (based on a minimum of not less than four samples for any 30-day period), nor shall more than 10 % of total samples during any 30-day period exceed 400/100 ml as a result of the wastes discharged.
- 6. The wastes discharged shall not produce concentrations of toxic substances in the receiving water that are toxic to or cause detrimental physiological responses in human, animal, or aquatic life.
- 7. The wastes discharged shall not contain substances that result in increases in the BOD which adversely affect beneficial uses of the receiving waters.
- 8. The wastes discharged shall not contain biostimulatory substances in concentrations that promote aquatic growth to the extent that such growth causes nuisance or adversely affects beneficial uses of the receiving waters.
- 9. The wastes discharged shall not cause the receiving waters to contain any substance in concentrations that adversely affect any designated beneficial use.
- 10. The wastes discharged shall not alter the color of the receiving waters; create a visual contrast with the natural appearance of the water; nor cause aesthetically undesirable discoloration of the receiving waters.
- 11. The wastes discharged shall not degrade surface water communities and populations, including vertebrate, invertebrate, and plant species.
- 12. The wastes discharged shall not result in problems due to breeding of mosquitos, gnats, black flies, midges, or other pests.
- 13. The wastes discharged shall not result in visible floating particulates, foams, and oil and grease in the receiving waters.
- 14. The wastes discharged shall not contain any individual pesticide or combination of pesticides in concentrations that adversely affect beneficial uses of the receiving

waters. There shall be no increase in pesticide concentrations found in bottom sediments or aquatic life.

- 15. The wastes discharged shall not alter the natural taste, odor, and color of fish, shellfish, or other surface water resources used for human consumption.
- 16. The wastes discharged shall not increase the turbidity of the receiving waters to the extent that such an increase causes nuisance or adversely affects beneficial uses.

D. Receiving Water Objective

1. To protect aquatic life, ammonia in receiving waters shall not exceed concentrations specified in Tables 3-2 and 3-4 of the Basin Plan (Attachment 2) as a result of the wastes discharged, subject to the following conditions:

The Discharger shall have up to 8 years following the adoption of this Order (i) to make the necessary adjustments/improvements to meet these objectives; or (ii) to conduct studies leading to an approved less restrictive site specific objective for ammonia. If it is determined that there is an immediate threat or impairment of beneficial uses due to ammonia, the objectives in Tables 3-2 and 3-4 of Attachment 2 shall apply and the timing of compliance will be determined on a case-by-case basis.

- 2. To protect underlying groundwater basins, ammonia shall not be present in the wastes discharged at levels that when oxidized to nitrate will pose a threat to ground water.
- 3. There shall be no chronic toxicity in ambient waters as a result of wastes discharged.

If the chronic toxicity in the receiving water downstream of the discharge point consistently exceeds 1.0 $\rm TU_{\rm c}$ in a critical life stage test, the Discharger shall determine if the cause of the exceedance is the wastes discharged. If it is determined that the wastes discharged caused the exceedance, the Discharger shall conduct a toxicity reduction evaluation (TRE). The TRE 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 the objective.

II. <u>SLUDGE REQUIREMENTS</u>

For biosolids management, the Discharger must comply with all requirements of 40 CFR Parts 257, 258, 501, and 503, including all monitoring, recordkeeping, and reporting requirements.

Since the State of California, hence the Regional Board, has not been delegated the authority to implement the sludge program, enforcement of the sludge requirements contained in this Order and permit shall be the sole responsibility of USEPA.

III. PRETREATMENT REQUIREMENTS

- 1. This Order includes the discharger's pretreatment program as previously submitted to this Regional Board. Any change to the program shall be reported to the Regional Board and USEPA in writing and shall not become effective until approved by the Executive Officer.
- The Discharger shall implement and enforce its approved 2. pretreatment program. The Discharger shall be responsible and liable for the performance of all pretreatment requirements contained in Federal Regulations 40 CFR Part 403 including subsequent regulatory revisions thereof. Where Part 403 or subsequent revision places mandatory actions upon the Discharger as Control Authority but does not specify a timetable for completion of the actions, the Discharger shall complete the required actions within six months from the effective date of this Order or the effective date of the Part 403 revisions, whichever comes later. For violations of pretreatment requirements, the Discharger shall be subject to enforcement actions, penalties, fines, and other remedies by the Regional Board, USEPA, or other appropriate parties, as provided in the Clean Water Act. The Regional Board or USEPA may initiate enforcement action against an industrial user for mon-compliance with acceptable standards and requirements as provided in the Clean Water Act and/or the California Water Code.
- 3. The Discharger shall enforce the requirements promulgated under Sections 307(b), 307(c), 307(d), and 402(b) of the Federal Clean Water Act. The Discharger shall cause industrial users subject to the Federal Categorical Standards to achieve compliance no later than the date specified in those requirements or, in the case of a new industrial user, upon commencement of the discharge.

- 4. The Discharger shall perform the pretreatment functions as required in Federal Regulations 40 CFR Part 403 including, but not limited to:
 - a. Implement the necessary legal authorities as provided in 40 CFR 403.8(f)(1);
 - b. Enforce the pretreatment requirements under 40 CFR 403.5 and 403.6;
 - c. Implement the programmatic functions as provided in 40 CFR 403.8(f)(2); and
 - d. Provide the requisite funding of personnel to implement the pretreatment program as provided in 40 CFR 403.8(f)(3).
- 5. The Discharger shall submit annually a report to the Regional Board, the State Board, and the Environmental Protection Agency, Region 9, describing the discharger's pretreatment activities over the previous twelve months. In the event the discharger is not in compliance with any conditions or requirements of this permit, then the discharger will also include the reasons for non-compliance and state how and when the discharger shall comply with such conditions and requirements. This annual report is due on April 1 of each year and shall contain, but not be limited to, the information required in the attached "Requirements for Pretreatment Annual Report."

 (Attachment 3), or an approved revised version thereof.

IV. REQUIREMENTS AND PROVISIONS

- 1. Treatment capacity of 12.6 mgd or greater shall not become effective until the Discharger has submitted a report to the Regional Board certifying that treatment capacity is available to treat up to 12.6 mgd or greater of wastewater.
- 2. Discharge of wastes to any point other than specifically described in this order and permit is prohibited and constitute a violation thereof.
- 3. The Discharger shall comply with all applicable effluent limitations, national standards of performance, toxic and pretreatment effluent standards, and all federal regulations established pursuant to Sections 301, 302, 303(d), 304, 306, 307, 316, and 405 of the Clean Water Act and amendments thereto.

NPDES No. CA0054216

CSDLAC, Valencia WRP Order No. 95-081

- This Order includes the attached Monitoring and Reporting Program (Attachment T). If there is any conflict between provisions stated in the Monitoring and Reporting Program and the Standard Provisions, those provisions stated in the former prevail.
- 5. This Order includes the attached "Standard Provisions and General Monitoring and Reporting Requirements" (Standard Provisions, Attachment N). If there is any conflict between provisions stated hereinbefore and the attached "Standard Provisions", those provisions stated hereinbefore prevail.
- This Order includes the requirements of the State Water Resources Control Board's General NPDES permits for discharges of storm water associated with industrial activity (Order No. 91-13-DWQ, as amended by Order No. 92-12-DWQ, Attachment S-I) and construction activity (Order No. 92-08-DWQ, Attachment S-C) and amendments thereto.
- 7. The Discharger shall provide standby or emergency power facilities and/or storage capacity or other means so that in the event of plant upset or outage due to power failure or other cause, discharge of raw or inadequately treated sewage does not occur.
- 8. The Discharger shall protect the facility from inundation which could occur as a result of a flood having a predicted frequency of once in 100 years.
- 9. This Order may be modified, revoked, and reissued or terminated in accordance with the provisions of 40 CFR Parts 122.44, 122.62, 122.63, 122.64, 125.62, and 125.64.

V. EXPIRATION DATE

This Order expires on May 10, 2000.

The Discharger must file a Report of Waste Discharge in accordance with Title 23, California Code of Regulations, not later than 180 days in advance of the expiration date as application for issuance of new waste discharge requirements.

VI. RESCISSION

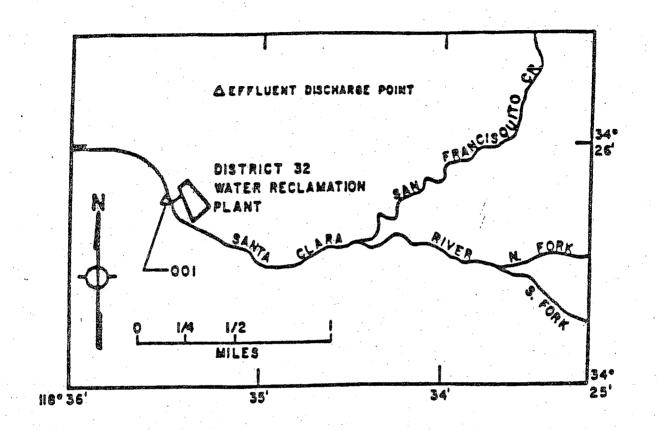
Order No. 89-129, adopted by this Board on December 4, 1989, is hereby rescinded.

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 12, 1995.

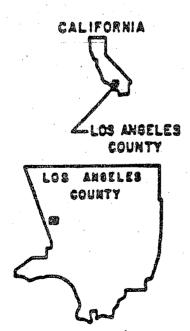
ROBERT P. GHIRELET, D.Env.

Executive Officer

/hdn



SOURCE: USGS QUADRANGLE MAP - NEWHALL

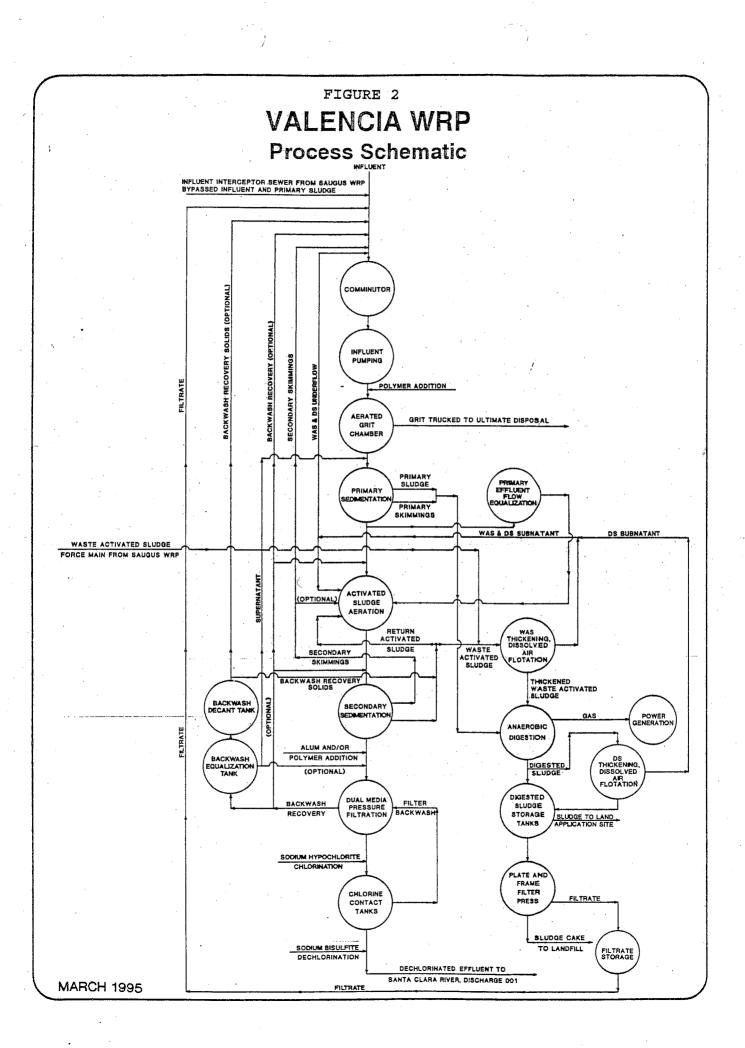


LOCATION MAP

COUNTY SANITATION DISTRICTS OF

LOS ANGELES COUNTY

VALENCIA WRP-VALENCIA, CA.



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

MONITORING AND REPORTING PROGRAM NO. 4993
for
COUNTY SANITATION DISTRICTS OF LOS ANGELES COUNTY
(Valencia Water Reclamation Plant)
(NPDES NO. CA0054216)

I. REPORTING REQUIREMENTS

The Discharger shall implement this monitoring program on the effective date of this Order. All monitoring reports shall be submitted monthly, by the fifteenth day of the second month following each monthly sampling period, addressed to the Regional Board, Attention: Technical Support. The first monitoring report under this Program is due by September 15, 1995, and will cover the monitoring period of July 1995. Quarterly monitoring shall be performed during the months of February, May, August and November. Semiannual monitoring shall be performed during the months of February and August. Annual monitoring shall be performed during the month of August.

The analysis shall specify the USEPA analytical method used and its Method Detection Limit (MDL). For the purpose of reporting compliance with effluent limitations, performance goals, receiving water limitations, analytical data shall be reported with an actual numerical value or "nondetected (ND)" with the MDL indicated for the analytical method used. The maximum allowed MDLs are those published by the USEPA (MDLs for priority pollutants are listed in Attachment 1). The Discharger shall not use a MDL higher than that published by the USEPA unless the Discharger can demonstrate that a particular detection limit is not attainable and obtains approval for a higher MDL from the Executive Officer.

The Discharger shall submit an annual report containing a discussion of the previous year's effluent and receiving water monitoring data, as well as graphical and tabular summaries of the data. This annual report is due by April 1st of the year following data collection.

The Discharger shall inform the Regional Board well in advance of any construction activity proposed that can potentially affect compliance with applicable requirements.

Revised June 12, 1995

II. REGIONAL MONITORING PROGRAM

- 1. Pursuant to the Code of Federal Regulations [40 CFR §122.41(j) and §122.48(b)], the monitoring program for a discharger receiving a National Pollutant Discharge Elimination System (NPDES) permit must determine compliance with NPDES permit terms and conditions, and demonstrate that State water quality standards are met.
- 2. Since compliance monitoring focuses on the effects of the point source discharge, it is not designed to assess impacts from other sources of pollution (e.g., non-point source runoff, aerial fallout) nor to evaluate the current status of important ecological resources on a regional basis.

The Regional Board is planning to develop and implement a comprehensive monitoring program for each watershed in the region. The goal is to establish regional programs to address public health concerns, monitor trends in natural resources, assess regional impacts from all contaminant sources, and ensure protection of beneficial uses.

- 3. Substantial changes to the compliance monitoring program for the Valencia Water Reclamation Plant will be required to fulfill the goals of regional monitoring, while retaining the compliance monitoring component required to evaluate the potential impacts from the NPDES discharge. Revisions to the Valencia program will be made under the direction of USEPA and LA Regional Board as necessary to accomplish this goal, and may include a reduction or increase in the number of parameters to be monitored, the frequency of monitoring, or the number and size of samples collected.
- 4. Until such time when a regional monitoring program is developed, the Discharger shall perform the analyses described in the following monitoring program.

III. <u>INFLUENT MONITORING REQUIREMENTS</u> (Footnotes on pages T-8 through T-11)

Influent monitoring is required to:

- determine compliance with NPDES permit conditions and water quality standards,

- assess treatment plant performance, and
- assess the effectiveness of the pretreatment program.

Sampling stations shall be established at each point of inflow to the sewage treatment plant and shall be located upstream of any in-plant return flows and where representative samples of the influent can be obtained. The date of sampling shall be reported with the analytical values determined.

Samples for influent $BOD_520\,^{\circ}C$ and suspended solids shall be obtained on the same day that effluent $BOD_520\,^{\circ}C$ and suspended solids samples are obtained in order to demonstrate percent removal.

Constituent	Units	Type of MSample	inimum Frequency of Analysis
Flow Suspended solids BOD ₅ 20°C Chromium ² Pesticides ³ EPA priority pollutants (exclud	mg/l μg/l μg/l μg/l	recorder/totalizer 24-hour composite 24-hour composite 24-hour composite 24-hour composite 24-hour composite 24-hour composite os, Attachment T-1)	continuous ¹ weekly weekly semiannually semiannually

IV. <u>EFFLUENT MONITORING REQUIREMENTS</u> (Footnotes on pages T-8 through T-11)

Effluent monitoring is required to:

- determine compliance with NPDES permit conditions,

- identify operational problems and improve plant

performance,

- provide information on wastewater characteristics and flows for use in interpreting water quality and biological data.

An effluent sampling station shall be established for each point of discharge and shall be located downstream of any inplant return flows where representative samples of the effluent (after receiving all treatment) can be obtained. Effluent samples may be obtained at a single station provided that station is representative of the effluent quality at all discharge points. Any changes in sampling station locations shall be approved by the Executive Officer.

The following shall constitute the effluent monitoring program:

	·	
<u>Constituent</u> <u>Units</u>	Type of <u>Sample</u>	Minimum Frequency of Analysis
Total waste flow mgd	recorder	continuous1
Turbidity ⁴ NTU		continuous1
Total residual mg/l	recorder	continuous ¹
chlorine		
Temperature ^o F	grab	daily
pH units	grab	daily
Settleable solids ml/l	grab	daily
Suspended solids mg/l	24-hour composit	e daily
Total coliforms MPN/100 m	l grab	daily
Oil and grease mg/l	-	weekly
BOD ₅ 20°C mg/l	24-hour composit	
Total dissolved		
solids mg/l	24-hour composit	e monthly
Sulfate mg/l	24-hour composit	
Chloride mg/1	24-hour composit	<u>-</u>
Ammonia nitrogen mg/1		
Nitrate nitrogen mg/1	24-hour composit	
	24-hour composit	
<u> </u>	24-hour composit	
Organic nitrogen mg/l		-
Total nitrogen mg/l		
Boron mg/l	24-hour composit	
Fluoride mg/l		
Detergents (as MBAS) mg/l	24-hour composit	
Chronic toxicity ⁶ TU _{c,}	24-hour composit	
Antimony $\mu g/1$	24-hour composit	
Arsenic $\mu g/1$		- , · · · -
Barium $\mu g/1$	24-hour composit	
Beryllium $\mu g/1$	24-hour composit	
Cadmium $\mu g/1$		
Chromium $(VI)^2$ $\mu g/1$		
Copper $\mu g/1$		
Iron $\mu g/1$	24-hour composit	
Lead $\mu g/1$	24-hour composit	
Mercury $\mu g/1$	24-hour composit	e quarterly
Nickel μ g/l	24-hour composit	e quarterly
Selenium $\mu g/1$	24-hour composit	e quarterly
Silver $\mu g/1$	24-hour composit	
Zinc μ g/1	24-hour composit	
Cyanide ⁷ $\mu g/1$	grab	quarterly
Endrin ⁸ $\mu g/1$	24-hour composit	
Lindane $\mu g/1$	24-hour composit	
Methoxychlor $\mu g/1$		
— · · · · · · · · · · · · · · · · · · ·	24-hour composit	
Toxaphene $\mu g/1$	Z= HOUL COMPOBIL	2 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4

Constituent	<u>Units</u>	Type of Sample		nimum Frequency <u>Analysis</u>
2,4-D 2,4,5-TP (Silvex) Halomethanes ¹² Tetrachloroethylene Carbon tetrachloride 1,1,1-Trichloroethane p-Dichlorobenzene Di(2-ethylhexyl)	μg/l μg/l μg/l μg/l μg/l μg/l	24-hour grab grab grab grab	composite composite	quarterly quarterly quarterly quarterly quarterly quarterly quarterly
phthalate Pesticides ³ DDT ⁹ PAHs ¹⁰ PCBs ¹¹ Remaining EPA priority pollutants ¹³	μg/l μg/l μg/l μg/l μg/l μg/l	24-hour 24-hour 24-hour 24-hour	composite composite composite composite composite composite composite	quarterly semiannually semiannually semiannually semiannually semiannually
Radioactivity ¹⁴ Acute toxicity ¹⁵	pCi/l TU _a	24-hour	composite composite	semiannually annually

V. SOLIDS HANDLING MONITORING REQUIREMENTS

A monthly report shall be provided, noting the moisture content, weight, and volume of screenings, sludges, grit, and other solids removed from the wastewater. The point(s) from which these wastes were obtained and the disposal sites to which waste solids are transported should be specified in the monthly reports.

A representative sample of biosolids shall be analyzed for priority pollutants and pesticides, at least semiannually. Samples shall typify the character of sludge or biosolids that is ready for ultimate disposal at a sanitary landfill. The biosolids shall be a composite sample of a minimum of 12 discrete samples taken at equal time intervals over the 24-hour period.

VI. RECEIVING WATER MONITORING REQUIREMENTS (Footnotes on pages T-8 through T-11)

A. Receiving water stations shall be established at the following locations:

Station No.	<u>Description</u>
R-C	Santa Clara River, 300 feet upstream of point of discharge to river.
R-D	Santa Clara River, 300 feet downstream of point of discharge to river.
R-E	Santa Clara River, 1.6 miles upstream of Chiquita Canyon Road.

B. The following analyses shall be conducted on grab samples collected from each station:

<u>Constituent</u>	<u>Units</u>	Minimum Frequency of Analysis
Temperature pH Total coliform Residual chlorine Dissolved oxygen Nitrate nitrogen Nitrite nitrogen Ammonia nitrogen Organic nitrogen Total nitrogen Total phosphate Total dissolved solids Sulfate Chlorides Chronic toxicity Acute toxicity MBAS Arsenic Cadmium Chromium Copper Lead Mercury Nickel Zinc Cyanide Phenolic compounds PAHs PCBs 11	PH units MPN/100 ml mg/l mg/l mg/l mg/l mg/l mg/l mg/l mg	weekly weekly weekly weekly weekly quarterly annually

- 1. In the event of a spill or bypass of raw or partially treated sewage into the Santa Clara River, total and fecal coliform analyses shall be made on grab samples collected at all potentially affected downstream receiving water and at least one unaffected upstream receiving water. Coliform samples shall be collected on the date of the spill or bypass, if possible, and daily on each of the following four days.
- 2. At the time of sampling, the following observations shall be made at all the sampling stations and the times of the observations shall be noted:
 - a) Estimate of flow
 - b) Odor of water
 - c) Color of Water
 - d) Occurrence of significant storm runoff (river only)
 - e) Presence of floating solids (Type)
 - f) Presence of any sludge banks or deposits, grease, oil, foam, or visible solids of waste origin
 - g) Tide and wind conditions
 - h) Presence of any aquatic plant growth, sessile or floating
 - i) Any unusual occurrence
- 3. The time, date, and weather conditions at the time of sampling shall be reported.
- 4. The color of the effluent shall be contrasted with that of the receiving water and reported descriptively.
- 5. Receiving water samples shall not be taken during or within 48 hours following the flow of rainwater runoff in the Santa Clara River.
- 6. Weekly sampling may be omitted at stations R-C, R-D and R-E if weather and flow conditions would endanger personnel collecting receiving water samples. The monthly monitoring report shall note such occasions.
- 7. Weekly sampling may be omitted at Station R-C on any occasion when no flow is observed in the river. Monthly monitoring report shall note such occasions.
- 8. The results of receiving water monitoring and observations shall be submitted with the effluent monitoring reports.

VII. GROUNDWATER MONITORING

Underground receiving water sampling stations shall be established at well No. 4N/17W-14Q2.

The following analyses on grab samples shall constitute the groundwater monitoring program:

<u>Constituent</u>	<u>Units</u>	Minimum Frequency <u>of Analysis</u>
Nitrate - N plus Nitrite -N	mg/l	semi-annually
Total dissolved solids Chloride Sulfate	mg/l mg/l mg/l	semi-annually semi-annually semi-annually

The results of groundwater monitoring shall be submitted with the effluent monitoring reports.

VIII. STORM WATER MONITORING AND REPORTING

The Discharger shall implement the attached Storm Water Monitoring and Reporting Program (Attachment T-2).

IX. FOOTNOTES

<u>1</u>/ Where continuous monitoring of a constituent is required, the following shall be reported:

Total waste flow - Total daily flow and peak daily flow (24-hour basis);

Total chlorine residual - maximum daily value (24-hour basis);

Turbidity - Maximum daily value, total amount of time each day that turbidity exceeded five (5) turbidity units, the flow-proportioned average daily value, and the monthly mean value.

2/ For Cr(VI) analysis, the appropriate sampling and analytical method must be used.

- <u>3</u>/ Pesticides are, for purposes of this Order, those six constituents referred to in 40 CFR Part 125.58 (m) (demeton, guthion, malathion, mirex, methoxychlor, and parathion).
- Coliform and turbidity samples shall be obtained at some point in the treatment process at a time when wastewater flow and characteristics are most demanding on the treatment facilities, filtration, and disinfection procedures.
- 5/ If any result of weekly BOD analysis yields 90% or greater of the 30-day average limit, the frequency of analyses shall be increased to daily within one week of knowledge of the test result for at least one month and compliance with the 7-day and 30-day average BOD limits is demonstrated; after which the frequency shall revert to weekly.
- Initial screening shall be conducted using a minimum of three test species with approved test protocols to determine the most sensitive test organism for chronic toxicity testing. The initial screening process shall be conducted for a minimum of three months, but not to exceed five months, to account for potential variability of the effluent/receiving water. If possible, the test species used during the screening process should include a fish, an invertebrate and an aquatic plant.

After the initial screening period, chronic toxicity testing may be limited to the most sensitive test species. However, the initial screening process shall be repeated annually, with a minimum of three test species with approved test protocols, to ensure use of the most sensitive species for chronic toxicity testing.

Dilution and control waters for the effluent should be obtained from an unaffected area of the receiving waters. Standard dilution water may be used if the above source exhibits toxicity greater than 1.0 $\rm TU_{\rm c}$. The sensitivity of the test organisms to a reference toxicant shall be determined concurrently with each batch of bioassay tests and reported with the test results.

Chronic toxicity shall be expressed and reported as toxic units, where: $TU_c = 100/\text{NOEC}$

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

Except with prior approval from the Regional Board (Executive Officer) and USEPA, ammonia shall not be removed from the bioassay samples. The wastewater used for the toxicity test shall be analyzed for ammonia, and the result, along with an interpretation, shall be submitted with the toxicity data. If the test result is greater than the permit limitation, parallel tests of 100% effluent without ammonia removal and 100% effluent with ammonia removed shall be conducted.

- 7/ The recovery of free cyanide from metal complexes must be comparable to that achieved by Standard Methods 412 F, G, and H (Standard Methods for the Examination of Water and Wastewater; Joint Editorial Board, American Public Health Association, American Water Works Association, and Water Pollution Control Federation [Water Environment Federation]; Most recent edition).
- 8/ ENDRIN shall mean the sum of endrin and endrin aldehyde.
- 9/ DDT shall mean the sum of the p,p' and o,p' isomers of DDT, DDD, and DDE.
- 10/ PAHs (polynuclear aromatic hydrocarbons) shall mean the sum of acenaphthylene, anthracene, 1,2-benzanthracene, 3,4-benzofluoranthene, benzo[k]fluoranthene, 1,12-benzoperylene, benzo[a]pyrene, chrysene, dibenzo[ah]anthracene, fluorene, indeno[1,2,3-cd]pyrene, phenanthrene, and pyrene.
- 11/ PCBs (polychlorinated biphenyls) shall mean the sum of chlorinated biphenyls whose analytical characteristics resemble those of Aroclor-1016, Aroclor-1221, Aroclor-1232, Aroclor-1242, Aroclor-1248, Aroclor-1254, and Aroclor-1260.
- 12/ HALOMETHANES shall mean the sum of bromoform, chloroform, bromomethane, chloromethane, chlorodibromomethane, and dichlorobromomethane.
- 13/ For volatile organics, grab samples shall be collected instead of 24-hour composite.

- 14/ Radioactivity determinations of gross and net beta activity, in picocuries per liter, shall be made within 48 hours following preparation of composite samples. The overall efficiency of the counting system, size of sample and counting time shall be such that radioactivity can be determined to a sensitivity of ten picocuries per liter with a 95% confidence limit not to exceed 50 percent.
 - 15/ By methods specified in "Methods for Measuring the Acute Toxicity of Effluent to Freshwater and Marine Organisms" (March 1985, EPA/600/4-85/013). Submission of bioassay results should include the information noted on pages 45 through 49 of the "Methods" where appropriate. The fathead minnow (Pimephales promelas) shall be used as the test species.

Except with prior approval from the LA Regional Board (Executive Officer) and USEPA, ammonia shall not be removed from the bioassay samples. The wastewater used for the toxicity test shall be analyzed for ammonia, and the result, along with an interpretation, shall be submitted with the toxicity data. If the test result is greater than the permit limitation, parallel tests of 100% effluent without ammonia removal and 100% effluent with ammonia removed shall be conducted.

16/ In lieu of conducting the standard acute toxicity test with fathead minnow, the Discharger may elect to report the results from the first 48 hours of the chronic toxicity test as acute toxicity test results.

Ordered by: Vellered Oc

ROBERT P. GHIRELLY, D.Env.

Executive Officer

Date: June 12, 1995

/hdn