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

ORDER NO. <u>95-074</u> NPDES NO. <u>CA005</u>3651

# WASTE DISCHARGE REQUIREMENTS FOR CITY OF SAN BUENAVENTURA (Ventura Water Renovation Facility)

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

- 1. The City of San Buenaventura (City or Discharger) discharges wastes from its Ventura Water Renovation Facility under waste discharge requirements contained in Order No. 89-093 adopted by this Regional Board on August 14, 1989. This Order serves as the National Pollutant Discharge Elimination System (NPDES) permit (CA0053651).
- 2. The City has filed a report of waste discharge and has applied for renewal of its waste discharge requirements and NPDES permit.
- The City operates the Ventura Water Renovation Facility, a publicly-owned tertiary wastewater treatment facility with a design capacity of 14 million gallons per day (mgd). The facility is located at 1400 Spinnaker Drive, San Buenaventura, Ventura County, California (Figure 1 shows the location of the plant). The facility treats municipal wastewater from domestic, commercial, and industrial sources. The treated wastewater is discharged into the Santa Clara River Estuary, a water of the United States, at latitude 34° 14' 11", and longitude 119° 15' 31" (Discharge Serial No. 001).

The mouth of the Santa Clara River is normally closed off by a sand bar so that a shallow lagoon known as the Santa Clara River Embayment is created. However, at times when the sand bar is breached, either by flood waters or by mechanical means, the lagoon empties directly into the Pacific Ocean. The Pacific Ocean is about 2,000 feet away from Discharge Serial No. 001.

4. Current treatment at the facility consists of barminution, degritting, primary sedimentation, biological treatment (using an activated sludge process with a capacity of 10 mgd and a parallel trickling filter with a capacity of 4 mgd), final clarification, filtration, chlorination, and dechlorination.

Sludge is thickened, anaerobically digested, and dewatered (using filter presses). A portion of the dewatered sludge is composted (Class B), and hauled to various users in Ventura County. The rest of the dewatered sludge is disposed of in landfills - Simi Valley, and Chiquita Canyon.

Figures 2 and 3 shows the schematic of the wastewater flow.

5. In 1990, the City reconstructed the Plant's chlorine contact chambers replacing the failing asphalt contact pond system with a multi-bay concrete structure.

Currently, the City is in the process of designing renovations/upgrades to the existing aeration system and secondary sedimentation tanks of the activated sludge process. Construction of the upgrades is scheduled to start by the middle of 1995.

6. The volume and characteristics of the treated wastewater based on discharge monitoring reports from January 1990 through October 1994, are as follows:

Annual Average Influent Flow	7.06 mgd
Annual Average Flow to Santa Clara River	5.87 mgd
Highest Monthly Average Flow to Santa Clara River	8.32 mgd

<u>Constituents</u>	<u>Unit</u>	Annual Average Value
BOD₅20°C	mg/l	3.2
Total chlorine residual	mg/l	<0.1
Total dissolved solids	mg/l	1638
Total suspended solids	mg/l	1.7
Settleable solids	ml/l	<0.1
Ammonia (as N)	mg/l	4.0
Nitrate (as N)	mg/l	24.1
Kjeidahl nitrogen	mg/l	2.2
	-	

7. The U.S. Environmental Protection Agency (USEPA) and the Regional Board have classified the discharge from the Ventura Water Renovation Facility as a major discharge.

- 8. A small portion of the treated wastewater is reused for turf and landscape irrigation. The reuse of the treated wastewater is regulated under water reclamation requirements which are contained in a separate order (Order No. 87-45), adopted by this Board on April 27, 1987.
- 9. In September 1978, the City of San Buenaventura submitted a facilities plan for effluent utilization which included a demonstration of enhancement to the Santa Clara River Embayment based on an average minimum effluent flow of 5.6 mgd. The Regional Board has concurred with the findings in the facilities plan that this discharge is not degrading the beneficial uses of the Embayment, and in fact, some of the beneficial uses, such as fish and wildlife habitat and non-contact water recreation, are enhanced by the presence of the discharge.
- 10. This discharge is subject to USEPA's regulations promulgated pursuant to Section 304(1) of the Clean Water Act and to implement USEPA's "Policy for the Development of Water Quality-based Permit Limitations for Toxic Pollutants" (49 FR 9016, dated March 9, 1984). These regulations prescribe biological and other laboratory testing procedures and toxicity limits, particularly for chronic toxicity.
- 11. Pursuant to 40 CFR Part 403, the City developed and has implemented an approved industrial wastewater pretreatment program.
- 12. 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 Order implements these regulations and it is the responsibility of the discharger to comply with said regulations, which are enforceable by USEPA.
- 13. The USEPA promulgated toxics criteria for states that are not in compliance with Section 303(c)(2)(B) of the Clean Water Act (40 CFR Part 131.36). These criteria supersede any criteria adopted by the State, except when State regulations contain criteria which are more stringent for a particular use in which case the State's criteria will continue to apply. Discharge from the Ventura Water Renovation Facility is subject to the USEPA's toxics criteria.
- 14. Effluent limitations, national standards of performance, toxic and pretreatment effluent standards, test procedure guidelines, 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 this discharge.

- 15. 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 general NPDES permits 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). The City of San Buenaventura Ventura Water Renovation Facility is subject to this general permit.
- 16. On May 18, 1972 (amended on September 18, 1975), the State Board adopted a Water Quality Control Plan for Control of Temperature in the Coastal and Interstate Waters and Enclosed Bays and Estuaries of California (Thermal Plan).
- 17. On June 13, 1994, the Regional Board adopted an updated Water Quality Control Plan for the Los Angeles Region (Basin Plan). The Water Quality Control Plan incorporates by reference State Board's water quality control plans for control of temperature, significant State Board policies that are applicable to the Los Angeles Region, and the antidegradation policy. The Basin Plan also identifies water quality objectives and beneficial uses for the coastal and tidal waters of Ventura.
- 18. The beneficial uses of the receiving waters are:

# a. <u>Santa Clara River Estuary</u>

Navigation, water contact recreation, noncontact water recreation, commercial and sport fishing, estuarine habitat, marine habitat, wildlife habitat, rare, threatened, or endangered species, migration of aquatic organisms, spawning, and wetland habitat.

# b. Pacific Ocean, Nearshore\*

Industrial service supply, navigation, water contact recreation, noncontact water recreation, commercial and sport fishing, marine habitat, wildlife habitat, preservation of biological habitats, rare, threatened, or endangered species, migration of aquatic organisms, spawning, and shellfish harvesting.

- Nearshore is defined as the zone bounded by the shoreline and a line 1,000 feet from the shoreline or the 30-foot depth contours, whichever is further from the shoreline.
- 19. 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.
- 20. The requirements contained in this Order are derived using best professional judgement and are based on the Basin Plan, Federal and State plans, policies, guidelines, and plant performance; and as they are met, will be in conformance with the goals of the aforementioned water quality control plans, water quality criteria, and will protect and maintain the existing beneficial uses of the receiving water.
- 21. No numerical limit is prescribed for any toxic constituent that is consistently not detected 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.
- 22. Based on existing effluent data, the Ventura Water Renovation Facility effluent may not be able to consistently meet the limits for some heavy metals and organic pollutants. This Order contains interim limits and provisions dealing with these pollutants.
- 23. To maintain the level of 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, this Order provides that 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 95<sup>th</sup> percentile of the January 1990 through October 1994 performance data. Therefore, it is expected that one sample in twenty may exceed the goal in the long term.

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

24. 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 ten days from the date of its adoption, provided the USEPA Regional Administrator has no objections.

IT IS HEREBY ORDERED that the City of San Buenaventura, in order to meet the provisions contained in Division 7 of the California Water Code and regulations adopted thereunder, and the provisions of the Clean Water Act and regulations and guidelines adopted thereunder, shall comply with the following:

#### I. FLOW REQUIREMENTS

The running 30-day average flow of treated wastewater discharged to the Santa Clara River shall not be less than 5.6 mgd.

#### II. <u>DISCHARGE REQUIREMENTS</u>

# A. <u>EFFLUENT LIMITATIONS</u>

- 1. Wastes discharged shall be limited to tertiary treated municipal and industrial wastewater only, as proposed.
- 2. The arithmetic mean of BOD<sub>5</sub>20°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, <u>by weight</u>, for influent samples collected at approximately the same time during the same period.
- 3. The discharge of an effluent from Discharge Serial No. 001 with constituents in excess of the following limits is prohibited:

# 3a. Conventional and Nonconventional Pollutants:

Constituent	<u>Units</u>	DISCHARO 30-day Average <sup>1/</sup>	GE LIMITATIO 7-day Average <sup>1/</sup>	DNS Daily <u>Maximum<sup>2/</sup></u>
BOD₅20°C	mg/l lbs/day <sup><u>3</u>/</sup>	20 2340	30 3,500	45 5,250
Suspended solids	mg/l lbs/day <sup><u>3</u>/</sup>	15 <sup>4/</sup> 1,751	40 <sup>4</sup> / 4,670	45 5,250
Oil and grease	mg/l lbs/day <sup>3/</sup>	10 1,170		15 1,750
Settleable solids	ml/l	0.1	- 1	0.3
Residual chlorine	mg/l			0.1

<sup>1/</sup> As defined in Standard Provisions, Attachment N.

<sup>2/</sup> The daily maximum effluent concentration limits apply to both flow weighted 24-hour composite samples and grab samples, as specified in the Monitoring Program

# (Attachment T).

- 3/ The daily mass emission limits are based on the plant design flow rate of 14 mgd.
- 4/ For consistency with other dischargers with similar treatment levels.

# 3b. <u>Toxic Pollutants</u>:

		DISCHARG 30-day	E LIMITATIONS Daily
Constituent	<u>Units</u>	Average <sup>1/</sup>	Maximum <sup>2/</sup>
Arsenic	µg/l lbs/day <sup><u>3</u>/</sup>	36 <sup>4/,5/</sup> 4.20	69 <sup>4/,5/</sup> 8.06
Cadmium	µg/l lbs/day <sup>3/</sup>	9.3 <sup>4/,<u>5</u>/</sup> 1.09	43 <sup>4</sup> / 5.02
Chromium (VI) <sup>₫</sup> /	µg/l lbs/day <sup>3/</sup>	50 <sup>4</sup> / 5.84	
Copper	µg/l lbs/day <sup>3/</sup>		2.9 <sup>4/,5/</sup> 0.34
Lead	μg/l lbs/day <sup>3/</sup>	8.5 <sup>4/,5/</sup> 0.99	
Mercury	µg/l lbs/day³ <sup>/</sup>	0.025 <sup>4/,5/</sup> 0.003	2.1 <sup>4/,5/</sup> 0.25
Nickel	µg/l lbs/day <sup>3/</sup>	8.3 <sup>4/,5/</sup> 0.97	
Selenium	μg/l lbs/day <sup><u>3</u>/</sup>	71 <sup>4</sup> / 8.29	
7 <b>—</b>	0 140		er'

(For footnotes, see pages 9 and 10)

# 3b. <u>Toxic Pollutants</u> (continued):

Constituent	<u>Units</u>	DISCHARGE 30-day Average <sup>1/</sup>	<u>LIMITATIONS</u> Daily <u>Maximum<sup>2/</sup></u>
Silver	μg/l lbs/day <sup><u>3</u>/</sup>		2.3 <sup>4/,5/</sup> 0.27
Thallium	μg/l lbs/day <sup>3/</sup>	6.3 <sup>4/,<u>5</u>/</sup> 0.74	
Zinc	μg/l lbs/day <sup><u>3</u>/</sup>	86 <sup>4/,5/</sup> 10.04	95 <sup>4/,5/</sup> 11.09
Cyanide	μg/l lbs/day <sup>3/</sup>		1 <sup>5</sup> / 0.12
PCBs <sup>Z/</sup>	ng/l lbs/day <sup>3/</sup>	30 0.004	
Pentachlorophenol	μg/l lbs/day <sup>3/</sup>	7.9 0.92	13 1.52

<sup>1/</sup> As defined in Standard Provisions, Attachment N.

- In the daily maximum effluent concentration limits apply to both flow weighted 24-hour composite samples and grab samples, as specified in the Monitoring Program (Attachment T).
- 3/ The daily mass emission limits are based on the plant design flow rate of 14 mgd.
- Based on total recoverable metals. These limits may be converted to total dissolved upon request by the Discharger and only after it has conducted a study on the water-effect ratio (WER) according to the USEPA guidance document (and/or State protocols, if available).
- 5/ These limits shall be in effect after the City has conducted studies to identify the sources of pollutants, implemented all reasonable measures to reduce these pollutants in the effluent, and the limits have been determined to be achievable; otherwise, site specific objectives, if warranted, may be prescribed. The work plan and schedule for

the study(ies) shall be approved by the Executive Officer and shall be submitted in writing within 60 days of the effective date of this Order. While the aforementioned studies are being conducted, the City shall comply with the interim limits prescribed in Table II.A.4.

- The discharger has the option to meet the hexavalent chromium limitations with a total chromium analysis. However, if the total chromium level exceeds the hexavalent chromium limitation, it will be considered a violation unless an analysis has been made for hexavalent chromium in a replicate sample and the result shows within the hexavalent chromium limits.
- 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.

#### 3c. <u>Toxic Pollutants</u>:

<u>Constituent</u>	<u>Units</u>	DISCHARGE LIMITATIONS <sup>1/,2/</sup> Daily Maximum <sup>3/</sup>
Benzene	µg/l lbs/day	71 8.29
Carbon tetrachloride	µg/l lbs/day	4.4 0.51
Dichlorobromomethane	μg/l lbs/day	22 <sup>4)</sup> 2.57
Tetrachloroethylene	µg/l lbs/day	8.9 1.04
2,4,6-Trichlorophenol	µg/l lbs/day	6.5 0.76
Bis(2-ethylhexyl)- phthalate	µg/l lbs/day	5.9 0.69
(For footnotes, see page	11)	

# 3c. <u>Toxic Pollutants</u> (continued):

<u>Constituent</u>	<u>DISCHARGE LIMITATIONS</u> <sup>1/,2/</sup> <u>Units</u> <u>Daily Maximum</u> <sup>3/</sup>
Aldrin	μg/l 1.3 lbs/day 0.15
Gamma-BHC (Lindane)	μg/l 0.16 lbs/day 0.02

<sup>1/</sup> The daily mass emission limits (lbs/day) are based on the plant design flow rate of 14 mgd.

- If the constituent limit is less than the method detection limit, compliance with the constituent limit shall be based on the PQL PQL (Practical Quantitation Level) shall be determined by multiplying the USEPA method detection limit (MDL) shown in Attachment 1 or the Discharger's MDL approved by the Executive Officer with the factors five (5) for carcinogens and ten (10) for non-carcinogens.
- 3/ The daily maximum effluent concentration limit shall apply to flow weighted 24-hour composite samples and grab samples.
- This limit shall be in effect after the City has conducted studies to identify the sources of the pollutant, implemented all reasonable measures to reduce the pollutant in the effluent, and have been determined that this limit is achievable; otherwise, a site specific objective, if warranted, may be prescribed. The work plan and schedule for the study(ies) shall be approved by the Executive Officer and shall be submitted in writing within 60 days of the effective date of this Order. While the aforementioned study is being conducted, the City shall comply with the interim limit prescribed in Table II.A.4.

# 4. <u>Effluent Interim Limits</u>:

These limits are set at the 95% confidence level of the January 1990 through October 1994 performance data.

<u>Constituent</u>	<u>Units</u>	DISCHARGE LIMITATIONS <sup>1/,2/</sup> Daily Maximum <sup>3/</sup>
Arsenic	μg/l lbs/day	76 8.87
Cadmium	µg/l lbs/day	16 1.87
Copper	µg/l lbs/day	98 11.44
Lead	μg/l lbs/day	77 8.99
Mercury	μg/l lbs/day	3 0.35
Nickel	μg/l lbs/day	271 31.64
Silver	μg/l lbs/day	27 3.15
Thallium	ug/l lbs/day	1765 206.08
Zinc	µg/l lbs/day	1181 137.89
(For footnotes, see page	13)	

# 4. <u>Effluent Interim Limits</u> (continued):

<u>Constituent</u>	<u>DISCHARGE LIMITAT</u> <u>Units</u> <u>Daily Maximum<sup>3</sup></u>	<u> </u>
Cyanide	µg/l 12	
	lbs/day 1.40	
Dichlorobromometl	hane µg/l	
	lbs/day 8.17	and the second

- Except for cyanide and dichlorobromomethane, these limits are based on total recoverable metals. These limits may be converted to total dissolved upon request by the Discharger and only after it has conducted a study on the water-effect ratio. (WER) according to the USEPA guidance document (and/or State protocols, if available).
- The daily mass emission limits (lbs/day) are based on the plant design flow rate of 14 mgd.
- 3/ The daily maximum effluent concentration limits apply to flow weighted 24-hour composite samples and grab samples, as specified in the Monitoring Program.
- 5. Radioactivity of the wastes discharged shall not exceed limits specified in Title 22, Chapter 15, Article 5, Section 64443, of the California Code of Regulations, or subsequent revisions thereof.
- 6. 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.

7. 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 any of the following: (a) a daily average of 2 Nephelometric turbidity units (NTUs); (b) 5 NTUs more than 5 percent of the time during 24 hour period for which the daily average is calculated; and (c) 10 NTUs at any time.

"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 ratio of the intensity of light scattered by the sample to the intensity of incident light using approved laboratory methods.

# 8. <u>Acute Toxicity Limitation</u>:

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.

If the acute toxicity limitation is consistently violated, 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 of toxicity are identified, the Discharger shall take all reasonable steps necessary to reduce toxicity to the required level.

## B. <u>EFFLUENT QUALITY PERFORMANCE GOALS</u>

The Discharger shall make best efforts to maintain the following effluent quality goals. Exceedance of any goal shall trigger an investigation by the Discharger on the causes of the exceedance. The Discharger shall report to the Regional Board on a quarterly basis any exceedance of these effluent quality goals. If exceedance

of any particular goal persists on two succeeding quarterly monitoring periods, the second quarterly report shall contain the results of the Discharger's investigation including but not be 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 Executive Officer may require the Discharger to implement corrective measures.

The Executive Officer may modify any of the performance goals upon demonstration by the Discharger that the change is warranted.

	<b>EFFLUENT QUAL</b>	ITY PERFORMANO	CE GOALS <sup>1/</sup>
Constituents	<u>Units</u>	Daily Maximum	
Detergents (as MBAS)	mg/l	0.5	
Aluminum	μg/l	30	
Barium	μg/l	192	
Beryllium	µg/l	15	
Cobalt	μg/l	83	
Molybdenum	µg/l	56	
Selenium	μg/l	15	
Vanadium	μg/l	56	
Bromodichloromethane	μg/l	100	
Bromoform	μg/l	9	
Chloroform	μg/l	126	
Dibromochloromethane	μg/l	48	
Remaining priority			
pollutants	μg/l	PQL <sup>2/</sup>	
(See Attachment 1)			
			the state of the s

Numerical effluent quality performance goals were derived statistically using effluent performance data from January 1990 through October 1994. Effluent values (X<sub>i</sub>) are assumed to be lognormally distributed. The use of logarithmic transformation equation, Y<sub>i</sub> = Ln (X<sub>i</sub>), results in effluent values (Y<sub>i</sub>) that are normally distributed. Effluent quality performance goals are determined by the equation:

$$X_{0.95} = \exp [u_n + (Z_{0.95}) (\sigma_n)]$$

where  $X_{0.95}$  = Discharge effluent quality performance goal at the 95<sup>th</sup> percentile of the normal distribution.

		of the distribu		
u				

Z<sub>0.95</sub> = Z-value from the Table of Areas under the Standard Normal Curve, equal to 1.645 at 95 percent.

 $\sigma_n$  = Standard deviation of the distribution of the average of n values transformed.

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

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

#### D. RECEIVING WATER LIMITATIONS

- 1. The maximum temperature of wastes discharged shall not exceed the natural receiving water temperature by more than 20°F. The elevated temperature of waste discharges either individually or combined with other discharges shall not create a zone, defined by water temperatures of more than 1°F above natural receiving water temperature, which exceeds 25 percent of the cross-sectional area of a main river channel at any point. The wastes discharged shall not cause a surface water temperature rise greater than 4°F above natural temperature of the receiving waters at any time or place.
- 2. The pH of the receiving water shall not be depressed below 7.0 or raised above 8.6 as a result of wastes discharged. Ambient pH levels shall not be changed more than 0.2 units from natural conditions.
- 3. At a minimum, the mean annual dissolved oxygen concentration of all waters shall be greater than 7 mg/l, and no single determination shall be less than 5.0 mg/l, except when natural conditions cause lesser concentrations.
- 4. The fecal coliform concentration 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.

- 5. The wastes discharged shall not contain toxic pollutants at levels that will bioaccumulate in aquatic life to levels which are harmful to aquatic life or human health.
- 6. The wastes discharged shall not contain substances that result in increases in the BOD which adversely affect beneficial uses of the receiving water.
- 7. The wastes discharged shall not contain biostimulatory substances in concentrations that promote aquatic growth to the extent that such growth causes nuisance or adversely affect beneficial uses of the receiving water.
- 8. The wastes discharged shall not cause receiving water to contain any substance in concentration that adversely affect any designated beneficial use.
- 9. 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.
- 10. The wastes discharged shall not degrade surface water communities and population including vertebrate, invertebrate, and plant species.
- 11. The wastes discharged shall not result in problems due to breeding of mosquitos, gnats, black flies, midges, or other pests.
- 12. Floating particulates, foams, and oil and grease shall not be visible in the receiving waters as a result of the wastes discharged.
- 13. 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 concentration found in bottom sediments or aquatic life.
- 14. The wastes discharged shall not alter the natural taste, odor, and color of fish, shellfish, or other surface water resources used for human consumption.

- 15. The wastes discharged shall not increase the turbidity of the receiving waters to the extent that causes nuisance or adversely affect beneficial uses.
- 16. The dissolved sulfide concentration of waters in and near sediments shall not be significantly increased above that present under natural conditions as a result of wastes discharged.
- 17. The waste discharged shall not cause objectionable aquatic growths or degrade indigenous biota.
- 18. The concentration of organic materials in marine sediments shall not be increased above that which would degrade marine life as result of wastes discharged.
- 19. The concentration of organic materials in fish, shellfish or other marine resources used for human consumption shall not bioaccumulate to levels that are harmful to human health as a result of wastes discharged.
- 20. The wastes discharged shall not cause receiving waters to contain any substance in concentrations toxic to human, animal, plant, or fish life.
- 21. No physical evidence of wastes discharged shall be visible at any time in the water or on beaches, shores, rocks, or structures.
- 22. Exotic vegetation shall not be introduced around stream courses to the extent that such growth causes nuisance or adversely affects beneficial uses.
- The natural hydrologic conditions necessary to support the physical, chemical, and biological characteristics present in wetlands shall be protected to prevent significant adverse effects on (a) natural temperature, pH, dissolved oxygen, and other natural physical/chemical conditions, (b) movement of aquatic fauna, (c) survival and reproduction of aquatic flora and fauna, and (d) water levels.
- 24. The existing habitats and associated populations of wetlands fauna and flora shall be maintained by (a) maintaining substrate characteristics

City of San Buenaventura Ventura Water Renovation Facility Order No. 95-074

necessary to support flora and fauna which would be present naturally, (b) protecting food supplies for fish and wildlife, (c) protecting reproductive and nursery areas, and (d) protecting wildlife corridors.

# E. RECEIVING WATER OBJECTIVES

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 shall 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 TU<sub>c</sub> 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. SLUDGE REQUIREMENTS

For biosolids/sludge management, the City must comply with all requirements of 40 CFR Parts 257, 258, 501, and 503, including all monitoring, record keeping, and reporting requirements. Specific requirements are given in Attachment 3.

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 shall be the sole responsibility of USEPA. The Board, however, shall be furnished with a copy of any report submitted to USEPA.

#### III. PRETREATMENT REQUIREMENTS

- A. 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 and the USEPA Regional Administrator.
- B. The Discharger shall implement and enforce its approved pretreatment program. The Discharger shall be responsible and liable for the performance of all Control Authority pretreatment requirements contained 40 CFR Part 403 including subsequent regulatory revisions thereof. Where 40 CFR Part 403 or subsequent revisions thereof require 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 issuance 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 Regional Board, or other appropriate parties, as provided in the Clean Water Act. The Regional Board may initiate enforcement action against an industrial user for noncompliance with applicable standards and requirements as provided in the Clean Water Act and/or the California Water Code.
- C. The Discharger shall update its pretreatment local limits to meet the requirements of this Order. Within 60 days of the effective date of this Order, the Discharger shall submit the plan and schedule for updating the local limits for approval of the Executive Officer.

- D. The Discharger shall enforce the requirements promulgated under Sections 307(b), 3079(c), 307(d), and 402(b) of the Clean Water Act with timely, appropriate, and effective enforcement actions. The City 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.
- E. The Discharger shall perform the pretreatment functions as required in 40 CFR Part 403 including, but not be limited to:
  - 1. Implement the necessary legal authorities as provided in 40 CFR 403.8(f)(1);
  - 2. Enforce the pretreatment requirements under 40 CFR 403.5 and 403.6;
  - 3. Implement the programmatic functions as provided in 40 CFR 403.8(f)(2), and
  - 4. Provide the requisite funding and personnel to implement the pretreatment program as provided in 40 CFR 403.8(f)(3).
- F. The Discharger shall submit quarterly and annual reports to the Regional Board, State Board, and USEPA, Region 9, describing the Discharger's pretreatment activities over the period. If the Discharger is not in compliance with any conditions or requirements of this Order, then the Discharger shall include the reasons for noncompliance and state how and when the Discharger shall comply with such conditions and requirements. The annual and quarterly reports shall contain, but not be limited to, the information required in the attached Pretreatment Reporting Requirements (Attachment P), or an approved revised version thereof.

## IV. OTHER REQUIREMENTS AND PROVISIONS

- A. The Discharger shall comply with all applicable water quality objectives for the receiving waters, including the toxic criteria in 40 CFR Part 131.36.
- B. This Order includes the attached <u>Standard Provisions and General Monitoring and Reporting Requirements</u> (Standard Provisions, Attachment N). If there is any conflict between provisions stated herein and said "Standard Provisions", those provisions stated herein prevail.

- C. This Order includes the attached <u>Monitoring and Reporting Program CI 1822</u> (Attachment T). If there is any conflict between provisions stated in Monitoring and Reporting Program and the Standard Provisions, those provisions stated in the former prevail.
- D. This Order includes the requirements of the California 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).

The Discharger must develop and implement a Storm Water Pollution Prevention Plan (SWPPP) in accordance with Attachment S-2 (Storm Water Pollution Prevention Plan) within 90 days of the effective date of this Order. If the Discharger has already developed a SWPPP pursuant to the requirements in Order No.91-13-DWQ, as amended, the Discharger shall be considered in compliance with this requirement and shall continue implementing said SWPPP.

- E. 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 causes, the discharge of raw or inadequately treated sewage does not occur.
- F. 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.
- G. The Discharger shall comply with all applicable effluent limitations, national 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.
- H. This Order may be modified, in accordance with the provisions set forth in 40 CFR Parts 122 and 124, to include requirements for the implementation of the watershed protection management approach.
- I. This Order may also be modified, revoked, and reissued or terminated in accordance with the provisions of 40 CFR Parts 122.44, 122.62 to 122.64, 125.62, and 125.64. Causes for taking such actions include, but are not limited to, failure to comply with any condition of this Order, endangerment to human health or the

environment resulting from the permitted activity, or acquisition of newly obtained information which would have justified the application of different conditions if known at the time of Order adoption. The filing of a request by the City for an Order modification, revocation, and issuance or termination, or a notification of planned changes or anticipated noncompliance does not stay any condition of this Order.

#### 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. 89-026 adopted by this Board on March 27, 1989 is hereby rescinded, except for purposes of enforcement.

A, 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. GHIRELLI, D.Env.

Robert P. Ghirelli

**Executive Officer** 

/RNA