# STATE OF CALIFORNIA CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD LOS ANGELES REGION

# ORDER NO. <u>90-062</u> NPDES NO. <u>CA0053961</u>

# WASTE DISCHARGE REQUIREMENTS FOR OJAI VALLEY SANITARY DISTRICT WASTEWATER TREATMENT PLANT

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

- 1. Ojai Valley Sanitary District (formerly known as Oakview Sanitary District) operates the Ojai Valley Wastewater Treatment Plant which discharges wastes under waste discharge requirements contained in Order No. 84-72 (NPDES Permit No. CA0053961) adopted by this Board on September 17, 1984.
- 2. Ojai Valley Sanitary District has filed a report of waste discharge and has applied for renewal of its waste discharge requirements and National Pollutant Discharge Elimination System Permit (NPDES).
- 3. Ojai Valley Wastewater Treatment Plant is located at 6363 North Ventura Avenue, Ventura, and has a design capacity of 3.0 million gallons per day. The plant discharges an average of 2.11 million gallons per day (mgd) of treated municipal wastewater to Ventura River, a water of the United States, at a point located upstream of Canada Larga Road (latitude 34° 20' 33'', longitude 119° 17' 26'') above the tidal prism. Attachment 1 shows the Plant Location Map.
- 4. Currently, wastewater treatment at the plant consists of: primary clarification for solids removal; biological treatment using oxidation towers for BOD removal; nitrification for oxidation of ammonia into nitrates/nitrites in rotating biological contactors (RBC); secondary clarification; chlorination; and dechlorination. Attachment 2 shows the liquid process flow diagram.

Sludge is digested anaerobically in a two-stage process and is then periodically pumped to sludge drying beds. Dried sludge is made available to commercial landscapers and the remainder is hauled to a landfill.

5. The Board adopted a revised Water Quality Control Plan for Santa Clara River Basin on March 27, 1978. The Water Quality Control Plan contains water quality objectives for the Ventura River.

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- 6. The beneficial uses of the receiving waters are: contact and non-contact water recreation, agricultural and industrial service supplies, groundwater recharge, freshwater replenishment, wildlife habitat, warm and cold freshwater habitats, fish spawning and migration; and, within the tidal prism, contact and non-contact water recreation, marine and saline water habitats, commercial ocean and sport fishing, and shellfish harvesting.
- 7. The Ventura River flows about 5 miles from the treatment plant through the Ventura River Valley to the ocean. At its mouth, the river traverses an alluvial delta and forms a lagoon at the ocean shore. This lagoon is generally closed by a sand bar during low flow months, although during winter months the bar may be breached by high river flows. The upper end of the lagoon is included within the Emma Wood State Beach-Ventura River Group Camp. The lower end of the lagoon is included within the City of San Buenventura's Seaside Wilderness Park.

Due to the development of both private and public recreational facilities downstream of the discharge, the use of the river for water-contact recreation, particularly at the mouth, has been significantly increasing. Since there is public contact in the receiving water, the quality of wastewater discharged to the Ventura River must be that of reclaimed water used as source of supply in nonrestricted recreational impoundments. Title 22 of the California Code of Regulation requires that such reclaimed water shall be at all times an adequately disinfected, oxidized, coagulated, clarified, <u>filtered</u> wastewater. Therefore, there is the need for the wastewater discharged to Ventura River to be filtered such that no health hazard is created.

- 8. The wastes discharged have occasionally increased the ambient receiving water temperature by more than the 5°F objective contained in the Water Quality Control Plan, particularly during the coldest months of the year when ambient receiving water temperatures are the lowest. However, such a temperature increase would not adversely impact the beneficial uses provided receiving water temperatures do not exceed 80°F and fluctuations of receiving water temperature is less than 5°F within any given 24-hour period.
- 9. The wastes discharged have occasionally decreased the ambient receiving water pH levels by more than the 0.5 pH unit objective contained in the Water Quality Control Plan. However, such a pH change would not adversely impact the

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> beneficial uses provided receiving water pH levels remain within the range of 6.5 to 8.5 and fluctuations of receiving water pH is less than 0.5 pH units within any given 24-hour period.

- 10. During summer and winter months, the dissolved oxygen concentration of the receiving waters below the discharge point has been found to fall below the 7.0 mg/l objective contained in the Water Quality Control Plan for cold water streams. This dissolved oxygen depression may be due to the wastes discharged, since the dissolved oxygen concentration upstream of the discharge point consistently remains above 7.0 mg/l. However, further studies are required to determine the specific factor(s) responsible for the low dissolved oxygen concentrations in the receiving waters.
- 11. Nuisance growths of aquatic plants have been observed in the receiving waters below the discharge point. These nuisance growths may be due to high nutrient levels (for example, nitrogen and phosphorous compounds) in the wastes discharged, since excessive plant growth is not observed upstream of the discharge point. However, additional studies are required to determine the specific factor(s) responsible for promoting this excessive plant growth and establish appropriate effluent or receiving water limit(s) to mitigate this problem
- 12. The requirements contained in this Order, as they are met, will be in conformance with the goal of the Water Quality Control Plan and will protect and maintain the beneficial uses of the receiving waters.
- 13. Effluent limitations, national standards of performance, toxic and pretreatment effluent standards established pursuant to Sections 208(b), 301, 302, 303(d), 304, 306, and 307 of the Federal Clean Water Act and amendments thereto are applicable to the discharges to navigable waters and tributaries thereto.
- 14. This discharge is subject to EPA's proposed 304(h) regulations. The proposed 304(h) regulations prescribe biological and other laboratory testing procedures and toxicity limits, particularly for chronic toxicity, for the implementation of EPA's "Policy for the Development of Water Quality Based Permit Limitations for Toxic Pollutants" (49 FR 9016, dated March 9, 1984).

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- 15. Sewage sludge use and disposal practices at this facility are subject to Section 405 (d) of the Clean Water Act and regulations promulgated thereunder.
- 16. 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 Board has notified the discharger and interested agencies and persons of its intent to issue waste discharge requirements for this discharge and has provided them with an opportunity to submit their written views and recommendations.

The Board, in a public hearing, heard and considered all comments pertaining to the discharge and to the tentative requirements.

This Order shall serve as a National Pollutant Discharge Elimination system permit pursuant to Section 402 of the Federal Clean Water Act or amendments thereto, and shall take effect at the end of ten days from the date of its adoption provided the Regional Administrator, EPA, has no objections.

IT IS HEREBY ORDERED that Ojai Valley Sanitary District, 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:

A. NATURE OF WASTE DISCHARGE

Wastes discharged shall be limited to treated municipal wastewater only, as proposed.

- B. EFFLUENT LIMITATIONS
  - 1. The discharge of an effluent in excess of the following limits is prohibited:

<u>Constituents</u>	Units of	Discharge L:	imitations
	measurements	<u>30-Day Ave</u>	<u>Maximum</u>
BOD <sub>5</sub> 20°C	mg/l	10	20
	lbs/day*	250	500

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Constituents	Units of <u>measurements</u>	Discharg 30-Day A	ge Limitations Ave <u>Maximum</u>	
Suspended solids	mg/l lbs/day*	<b>10</b> 250	15 375	
Oil and Grease	mg/l lbs/day*	10 250	15 375	
Settleable Solid	s ml/l	0.1	0.2	
Detergents (as MBAS)	mg/l lbs/day*	0.5 12.5	0.5	
Residual Chlorin	e mg/l		0.1	
Total Dissolved Solids	mg/l lbs/day*	1,500 37,530	1,500 37,530	
Chloride	mg/l lbs/day*	600 15,010	600 15,010	
Sulfate	mg/l lbs/day*	600 15,010	600 15,010	
Boron	mg/l lbs/day*	1.5 37.5	1.5 37.5	
Fluoride	mg/l lbs/day*	1.0 25.0	1.0 25.0	

\* Based on a maximum flow of 3 mgd.

- 2. 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 less than 70% survival.
- 3. The arithmetic mean of BOD<sub>5</sub>20<sup>0</sup>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 <u>by weight</u>, of the arithmetic mean of BOD<sub>5</sub>20<sup>o</sup>C and suspended solids values, respectively, <u>by weight</u>, for influent samples collected at approximately the same times during the same period.

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- 4. The pH of wastes discharged shall at all times be within the range of 6.5 to 8.5.
- 5. Wastes discharged to watercourses shall at all times be adequately disinfected. For the purpose of this requirement, the wastes shall be considered adequately disinfected if at some point in the treatment process the median number of coliform organisms 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 7 days for which analyses have been completed. Samples shall be collected at a time when wastewater flow and characteristics are most demanding on the treatment facilities and disinfection processes.
- 6. Wastes discharged to watercourses shall have received treatment equivalent to that of filtered wastewater. Filtered wastewater means oxidized, coagulated, clarified wastewater which has been passed through natural undisturbed soils or filter media, such as sand or diatomaceous earth, so that the turbidity as determined by an approved laboratory method does not exceed an average <u>daily</u> operating turbidity of 2 turbidity units and does not exceed 5 turbidity units more than 5 percent of the time during any 24 hour period.
- 7. The temperature of wastes discharged shall not exceed 80°F; except when the ambient temperature of the receiving waters is higher than 80°F, the temperature of the wastes discharged shall not exceed the ambient temperature of the receiving waters.
- Radioactivity in the waste discharged shall not exceed the limits specified in Title 17, Chapter 5, Subchapter 4, Group 3, Article 3, Section 30269, of the California Code of Regulations, or subsequent revisions.

# C. <u>RECEIVING WATER LIMITATIONS</u>

1. The wastes discharged shall not cause the pH of the receiving water to be less than 6.5 nor more than 8.5. The wastes discharged shall not change the normal ambient pH levels by more than 0.2 units within any given 24-hour period in receiving waters with designated marine or saline beneficial uses, nor by more than 0.5 units

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within any given 24-hour period in receiving waters with designated cold or warm beneficial uses.

2. The wastes discharged shall not increase the receiving water temperature at any time or place by more than 5°F above natural receiving water temperature; except when ambient receiving water is less than 60°F, the wastes discharged shall not increase the receiving water temperature above 70°F. The wastes discharged shall not increase the temperature of the receiving waters at any time or place by more than 5°F within any given 24-hour period.

3. The wastes discharged shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses of the receiving waters.

4. The wastes discharged shall not cause the un-ionized ammonia concentration in the receiving waters to exceed 0.025 mg/l.

5. The wastes discharged shall not cause the dissolved oxygen concentration of the receiving waters to be depressed below 7.0 mg/l, except when natural conditions cause lesser concentrations, in which case the wastes discharged shall not cause any further reduction in the dissolved oxygen concentration of the receiving waters.

6. The wastes discharged shall not cause foaming in the receiving water beyond the immediate area of the discharge.

7. The wastes discharged shall not alter the natural taste, odor, and color of fish or other edible products used for human consumption, and shall not cause nuisance or adversely effect beneficial uses.

8. The wastes discharged shall not produce concentrations of toxic substances in the receiving waters that are toxic to or produce detrimental physiological responses in human, plant, animal or aquatic life.

9. Wastes discharged shall not result in problems due to breeding of mosquitoes, gnats, black flies, midges, or other pests.

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## D. PRETREATMENT REQUIREMENTS

- 1. This Order includes the discharger's pretreatment program as previously submitted to this Board. Any change to the program shall be reported to the Board in writing and shall not become effective until approved by the Executive Officer.
- 2. The discharger shall be responsible for the performance of all pretreatment requirements contained in Federal Regulations 40 CFR Part 403 and shall be subject to enforcement actions, penalties, fines, and other remedies as provided in the Federal Clean Water Act, as amended. The discharger shall implement and enforce its approved Pretreatment Program. Enforcement actions may be initiated against an industrial user for noncompliance with acceptable standards and requirements as provided in the Federal Clean Water Act.
- 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 with copies to the State Board and to the Environmental Protection Agency, Region IX, describing

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> 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 noncompliance and state how and when the discharger shall comply with such conditions and requirements. This annual report is due on March 1 of each year and shall contain, but not be limited to, the information required in the attached "Requirements for Pretreatment Annual Report."

### E. <u>REQUIREMENTS AND PROVISIONS</u>

- 1. This Order includes the attached "Standard Provisions and General Monitoring and Reporting Requirements" ("Standard Provisions"). If there is any conflict between provisions stated hereinbefore and said "Standard Provisions", those provisions stated hereinbefore prevail.
- 2. Standby or emergency power facilities and/or storage capacity or other means shall be provided 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.
- 3. The discharger shall comply with all existing Federal and State laws and regulations that apply to its sewage sludge use and disposal practices and with the technical standards in Section 405 (d) of the Federal Clean Water Act when promulgated.
- 4. This Order includes the "Requirements for Sludge Reporting". The discharger must submit all required information and comply with the monitoring, reporting, and recordkeeping programs as specified in these requirements.
- 5. If an applicable "acceptable" management practice or numerical limitation for pollutants in sewage sludge promulgated under Section 405 (d) (2) of the Clean Water Act, as amended by the Water Quality Act. of 1987, is more stringent than the sludge pollutant limit or acceptable management practice in this permit, this permit may be reopened to include requirements promulgated under Section 405 (d) (2). Regardless of whether or not the permit is modified, the discharger

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shall comply with the limitations by no later than the compliance deadline specified in the applicable regulations as required by Section 405 (d) (2) (D) of the Clean Water Act.

6. If results of the special study on nuisance growth problems warrants imposition of effluent and/or receiving water limits on nutrients, this permit may be reopened to include nutrient limitations.

# F. EXPIRATION DATE

This Order expires August 10, 1994.

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.

### G. <u>RESCISSION</u>

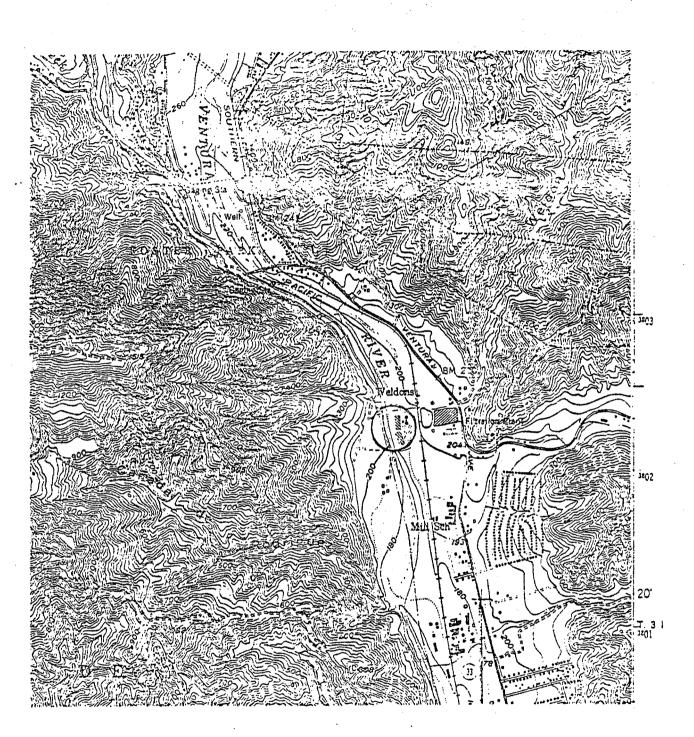
Order No. 84-72, adopted by this Board on September 17, 1984, is hereby rescinded except for enforcement purposes.

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 May 21, 1990.

Robert P. Alivelli

ROBERT P. GHIRELLI, D.Env. Executive Officer

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LOCATION MAP FROM U.S. GEOLOGICAL SURVEY MAP 1967 OJAI VALLEY WASTEWATER TREATMENT PLANT VENTURA, VENTURA CO. CALIFORNIA

ATTACHMENT 1

