

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
SAN FRANCISCO BAY REGION

ORDER NO. 79-75

NPDES NO. CA CA0037826

AN ORDER REISSUING  
WASTE DISCHARGE REQUIREMENTS FOR:

RODEO SANITARY DISTRICT  
CONTRA COSTA COUNTY

The California Regional Water Quality Control Board, San Francisco Bay Region, (hereinafter Board), finds that:

1. The Board on August 20, 1974, adopted Order No. 74-83 (NPDES Permit No. CA0037826) prescribing waste discharge requirements for Rodeo Sanitary District (hereinafter discharger).
2. The Board on May 20, 1975, adopted Order 75-28 amending Order 74-83 by revising requirements and time schedules.
3. The discharger submitted a Report of Waste Discharge (NPDES Standard Form A) dated December 15, 1978.
4. The discharger currently discharges about 0.7 mgd of domestic waste containing pollutants into San Pablo Bay, a water of the United States, at the shoreline near the treatment plant. The discharge can affect viable shellfish beds in San Pablo Bay. The plant provides secondary treatment for wastewater from the town of Rodeo and has a design capacity of 1.14 million gallons per day (mgd).
5. The discharger has recently completed planning and design studies to construct wastewater facilities needed to comply with the Basin Plan and to protect area shellfish beds. Principal facilities consist of an effluent conveyance line from Pinole to Rodeo and an outfall to be jointly used by Rodeo and the Cities of Hercules and Pinole, to convey treated effluent to deep waters of San Pablo Bay. Facility completion is anticipated by November 1, 1980.
6. The following environmental documents relating to the proposed facilities have been prepared in accordance with the requirements of the California Environmental Quality Act. February 1976 draft EIR - Western Contra Costa County Wastewater Management Program. January 1977 Supplemental EIR - Western Contra Costa Wastewater Management Program.
7. These documents concluded that the project will have the following significant impacts on the environment:
  - a) Beneficial impacts on shellfish growing areas by the elimination of shoreline discharges of municipal effluent.
  - b) Potential long term adverse impacts, which have not as yet been quantified, related to continuation of discharge of low concentrations of toxicants to Bay waters.

8. The current NPDES permit sets limits on the concentrations of toxic metals and chlorinated hydrocarbons discharged. These limits are intended to protect aquatic organisms from adverse effects due to long term exposure.
9. The Board adopted the Water Quality Control Plan for San Francisco Bay Basin in April 1975.
10. The beneficial uses of San Pablo Bay and contiguous water bodies are:
  - a. Water contact recreation
  - b. Non-contact water recreation
  - c. Navigation
  - d. Open commercial and sport fishing
  - e. Wildlife habitat
  - f. Fish spawning and migration
  - g. Industrial uses
  - h. Preservation of rare and endangered species
  - i. Shellfishing
11. Effluent limitations and toxic and pretreatment effluent standards established pursuant to Sections 208(b), 301, 302, 303(d), 304, and 307 of the Federal Water Pollution Control Act are applicable to the discharge.
12. The Board has notified the discharger and interested agencies and persons of its intent to prescribe revised requirements.
13. The Board, in a public meeting, heard and considered all comments pertaining to this discharge.

IT IS HEREBY ORDERED, the Rodeo 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 Water Pollution Control Act and regulations and guidelines adopted thereunder, shall comply with the following:

A. Effluent Limitations

1. The discharge of waste into the joint outfall in excess of the following limits is prohibited:

<u>Constituent</u>	<u>Units</u>	<u>30-Day Average</u>	<u>7-Day Average</u>	<u>Daily Maximum</u>
A. Settleable Matter	ml/l-hr	0.1		0.2
b. BOD	mg/l	30	45	60
	kg/day	130		389
c. Suspended Solids	mg/l	30	45	60
	kg/day	130		389
d. Oil & Grease	mg/l	10		20
	kg/day	43.2		130
e. Chlorine Residual	mg/l			0.0

2. The arithmetic mean of values for BOD and Suspended Solids effluent samples collected in a period of 30 consecutive days shall not exceed 15 percent of the arithmetic mean of respective values for influent samples collected at approximately the same times during the same period (85 percent removal).
3. Representative samples of the effluent shall not exceed the following limits more than the percentage of time indicated: (a)

<u>Constituent</u>	<u>Unit of Measurement</u>	<u>50% of time</u>	<u>10% of time</u>
Arsenic	mg/l (kg/day)	0.01 (0.043)	0.02 (0.130)
Cadmium	mg/l (kg/day)	0.02 (0.086)	0.03 (0.194)
Total Chromium	mg/l (kg/day)	0.005 (0.022)	0.01 (0.065)
Copper	mg/l (kg/day)	0.2 (0.864)	0.3 (1.945)
Lead	mg/l (kg/day)	0.1 (0.432)	0.2 (1.296)
Mercury	mg/l (kg/day)	0.001 (0.004)	0.002 (0.013)
Nickel	mg/l (kg/day)	0.1 (0.432)	0.2 (1.296)
Silver	mg/l (kg/day)	0.02 (0.086)	0.04 (0.259)
Zinc	mg/l (kg/day)	0.3 (1.296)	0.5 (3.241)
Cyanide	mg/l (kg/day)	0.1 (0.432)	0.2 (1.296)
Phenolic Compounds	mg/l (kg/day)	0.5 (2.161)	1.0 (6.482)
Total Identifiable Chlorinated Hydrocarbons	mg/l (kg/day) (b)	0.002 (0.009)	0.004 (0.026)

(a) These limits are intended to be achieved through secondary treatment, source control, and application of pretreatment standards.

(b) Total Identifiable Chlorinated Hydrocarbons shall be measured by summing the individual concentrations of DDT, DDD, DDE, aldrin, BHC, chlordane, endrin, heptachlor, lindane, dieldrin, polychlorinated biphenyls, and other identifiable chlorinated hydrocarbons.

4. Coliform:

The total coliform bacteria for a median of five consecutive effluent samples shall not exceed 240 MPN per 100 ml. Any single sample shall not exceed 1,100 MPN per 100 ml when verified by a repeat sample taken within 48 hours.

5. pH:

The discharge shall not have a pH of less than 6.0 nor greater than 9.0.

6. Toxicity:

The survival of test fishes in 96-hour bioassays of the effluent shall achieve a 90-percentile value of not less than 50% survival for 10 consecutive samples.

B. Receiving Water Limitations

1. The discharge or waste shall not cause the following conditions to exist in waters of the State at any place:
  - a. Floating, suspended, or deposited macroscopic particulate matter or foam;
  - b. Bottom deposits or aquatic growths;
  - c. Alteration of temperature, turbidity, or apparent color beyond present natural background levels;
  - d. Visible, floating, suspended, or deposited oil or other products of petroleum origin;
  - e. Toxic or other deleterious substances to be present in concentrations or quantities which will cause deleterious effects on aquatic biota, wildlife, or waterfowl, or which render any of these unfit for human consumption either at levels created in the receiving waters or as a result of biological concentration.
  
2. The discharge of waste shall not cause the following limits to be exceeded in waters of the State in any place within one foot of the water surface:
  - a. Dissolved oxygen    5.0 mg/l minimum. Annual median - 80% saturation. When natural factors cause lesser concentration(s) than those specified above, then this discharge shall not cause further reduction in the concentration of dissolved oxygen.
  - b. Dissolved sulfide    0.1 mg/l maximum.
  - c. pH                    Variation from natural ambient pH by more than 0.2 pH units.
  - d. Un-dissociated        .025 mg/l - annual median; .4 mg/l maximum  
NH<sub>4</sub>OH
  
3. The discharge shall not cause a violation of any applicable water quality standard for receiving waters adopted by the Regional Board or the State Water Resources Control Board as required by the Federal Water Pollution Control Act and regulations adopted thereunder. If more stringent applicable water quality standards are promulgated or approved pursuant to Section 303 of the Federal Water Pollution Control Act, or amendments thereto, the Board will revise and modify this Order in accordance with such more stringent standards.

C. Discharge Prohibitions

1. The discharge of waste at any point at which the wastewater does not receive an initial dilution of at least 45:1 is prohibited.
2. There shall be no bypass or overflow of untreated wastewater to waters of the State, either at the plant or from the collection system.
3. The average dry weather flow shall not exceed 1.14 mgd. Average shall be determined over three consecutive months each year.

D. Provisions

1. Neither the treatment nor the discharge of pollutants shall create a nuisance as defined in the California Water Code.
2. The discharger shall comply with all requirements of this Order immediately.
3. This Order includes all items of the attached "Standard Provisions, Reporting Requirements, and Definitions," dated April 1977, except A.16.
4. This Regional Board's Orders 74-83 and 75-28 are hereby rescinded.
5. The discharger shall review and update annually its contingency plan as required by Regional Board Resolution No. 74-10. The discharge of pollutants in violation of this Order where the discharger has failed to develop and/or implement a contingency plan will be basis for considering such discharge a willful and negligent violation of this Order pursuant to Section 13387 of the California Water Code.
6. This Order expires on May 1, 1984, and the discharger must file a Report of Waste Discharge in accordance with Title 23, California Administrative Code not later than 180 days in advance of such date as application for issuance of new waste discharge requirements.
7. This Order shall serve as a National Pollutant Discharge Elimination System permit pursuant to Section 402 of the Federal Water Pollution Control Act or amendments thereto, and shall become effective 10 days after date of its adoption provided the Regional Administrator, Environmental Protection Agency, has no objection. If the Regional Administrator objects to its issuance, the permit shall not become effective until such objection is withdrawn.

I, Fred H. Dierker, Executive Officer, do hereby certify the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, San Francisco Bay Region, on June 19, 1979.

Attachments:

Standard Provisions &  
Reporting Requirements, April 1977  
Self-Monitoring Program

FRED H. DIERKER  
Executive Officer

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
SAN FRANCISCO BAY REGION

SELF-MONITORING PROGRAM  
FOR

Rodeo Sanitary District

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NPDES NO. CA 0037826

ORDER NO. 79-75

CONSISTS OF

PART A, January 1978

AND

PART B

PART B

I. DESCRIPTION OF SAMPLING STATIONS AND SCHEDULE OF SAMPLING, ANALYSES, AND OBSERVATIONS

A. INFLUENT AND INTAKE

<u>Station</u>	<u>Description</u>
A-1	At any point in the treatment facilities head-works at which all waste tributary to the system is present and preceding any phase of treatment.

B. EFFLUENT

<u>Station</u>	<u>Description</u>
E-001	At any point in the outfall from the treatment facilities between the point of discharge and the point at which all waste tributary to that outfall is present. (May be the same as E-001-D.)
E-001-D	At any point in the disinfection facilities for Waste E-001 at which point adequate contact with the disinfectant is assured.
E-001-S	At any point in the treatment facilities following dechlorination.

C. LAND OBSERVATIONS

<u>Station</u>	<u>Description</u>
P-1 through P-'n'	Located at the corners and midpoints of the perimeter fence line surrounding the treatment facilities. (A sketch showing the locations of these stations will accompany each report.)
L-1 through L-'n'	Located along the perimeter levee of Land Disposal Site L-1 at equidistant intervals not to exceed 100 feet. (A sketch showing the locations of these stations will accompany the initial report.)

D. OVERFLOWS AND BYPASSES

<u>Station</u>	<u>Description</u>
O-1 through O-"n"	Bypass or overflows from manholes, pump stations, or collection system

Note: Initial SMP report to include map and description of each known bypass or overflow location.

Reporting: Shall be submitted monthly and include date, time, and period of each overflow or bypass.

II. SCHEDULE OF SAMPLING MEASUREMENTS AND ANALYSIS

- A. The schedule of sampling, measurements, and analysis shall be that given in Table I.

III. MODIFICATIONS OF PART A

- A. This monitoring program does not include the following sections of Part A, dated January 1978: C.3, C.4, D.3.

I, Fred H. Dierker, Executive Officer, hereby certify that the foregoing Self-Monitoring Program:

1. Has been developed in accordance with the procedure set forth in this Regional Board's Resolution No. 73-16 in order to obtain data and document compliance with waste discharge requirements established in Regional Board Order No. 79-75.
2. Is effective on the date indicated below.
3. May be reviewed at any time subsequent to the effective date upon written notice from the Executive Officer or request from the discharger, and revisions will be ordered by the Executive Officer.

FRED H. DIERKER  
Executive Officer

Effective Date \_\_\_\_\_

Attachments:

Table I  
Form A

TABLE I (1)  
SCHEDULE FOR SAMPLING, MEASUREMENTS, AND ANALYSIS

Sampling Station	A-001		E-001		E-001-D		E-001-S		P <sub>r</sub> L	O			
	G	C-24	G	C-24	Cont	G	Cont	C-24	O	O			
Flow Rate (mgd)		D			D								
BOD, 5-day, 20° C, or COD (mg/l & kg/day)		W		W									
Chlorine Residual & Dosage (mg/l & kg/day)					cont	or 2H							
Settleable Matter (ml/1-hr. & cu. ft./day)			D										
Total Suspended Matter (mg/l & kg/day)		W		W									
Oil & Grease (mg/l & kg/day)	W	(2)		(2)									
Coliform (Total or Fecal) (MPN/100 ml) per req't						3/W							
Fish Toxicity, 96-hr. TL <sub>50</sub> % Survival in undiluted waste								M					
Ammonia Nitrogen (mg/l & kg/day)				M									
Nitrate Nitrogen (mg/l & kg/day)													
Nitrite Nitrogen (mg/l & kg/day)													
Total Organic Nitrogen (mg/l & kg/day)													
Total Phosphate (mg/l & kg/day)													
Turbidity (Jackson Turbidity Units)				M									
pH (units)			D										
Dissolved Oxygen (mg/l and % Saturation)			D										
Temperature (°C)			D										
Apparent Color (color units)													
Secchi Disc (inches)													
Sulfides (if DO < 5.0 mg/l) Total & Dissolved (mg/l)			W										
Arsenic (mg/l & kg/day)				Y									
Cadmium (mg/l & kg/day)				Y									
Chromium, Total (mg/l & kg/day)				Y									
Copper (mg/l & kg/day)				Y									
Cyanide (mg/l & kg/day)				Y									
Silver (mg/l & kg/day)				Y									
Lead (mg/l & kg/day)				Y									

TABLE I (continued)  
SCHEDULE FOR SAMPLING, MEASUREMENTS, AND ANALYSIS

Sampling Station	A-001		E-001		E-001-D		E-001-S		P,L	O			
	G	C-24	G	C-24	Cont	G	Cont	C-24	O	O			
Mercury (mg/l & kg/day)				Y									
Nickel (mg/l & kg/day)				Y									
Zinc (mg/l & kg/day)				Y									
PHENOLIC COMPOUNDS (mg/l & kg/day)				Y									
All Applicable Standard Observations									W	E			
Total Identifiable Chlorinated Hydrocarbons (mg/l & kg/day)				Y									
Chlorine Residual (3) (mg/l)							Cont	or 2H					

LEGEND FOR TABLE

TYPES OF SAMPLES

G = grab sample  
C-24 = composite sample - 24-hour

Cont = continuous sampling

O = observation

FREQUENCY OF SAMPLING

E = each occurrence  
H = once each hour  
D = once each day  
W = once each week  
M = once each month  
Y = once each year

TYPES OF STATIONS

A = treatment facility influent stations  
E = waste effluent stations

P = treatment facilities perimeter stations  
L = basin and/or pond levee stations

2/H = twice per hour  
2/W = 2 days per week  
5/W = 5 days per week  
2/M = 2 days per month  
2/Y = once in March and  
once in September  
Q = quarterly, once in  
March, June, Sept.  
and December  
2H = every 2 hours  
2D = every 2 days  
2W = every 2 weeks  
3M = every 3 months  
Cont = continuous

FOOTNOTES FOR TABLE I

- (1) During any day when bypassing occurs from any treatment unit(s) in the plant, the monitoring program for the effluent shall include the following in addition to the above schedule for sampling, measurement, and analyses:
  - a. Composite sample for BOD, Total Suspended Solids, Oil and Grease
  - b. Grab sample for Coliform (Total and Fecal), Settleable Matter, and Chlorine Residual (continuous every two hours)
  
- (2) Oil and grease sampling shall consist of 3 grab samples taken at equal intervals during the sampling day, with each grab being collected in a glass container. A composite shall be made of equal volumes of each grab. Each glass container used for sample collection or mixing shall be thoroughly rinsed with solvent as soon as possible after use, and the solvent rinsings shall be added to the composite wastewater sample for extraction and analysis.
  
- (3) Chlorine residual following dechlorination shall be reported using the attached Form A or equivalent.

Month \_\_\_\_\_  
Year \_\_\_\_\_

FORM A  
CHLORINE RESIDUAL

	Grab Sample mg/l		Corresponding Analyzer Reading, mg/l		Number of Analyzer Readings	Number of Hours not in Compliance	Maximum Analyzer Reading mg/l	Average Value of Violations mg/l
	AM	PM	AM	PM				
1								
2								
3								
4								
5								
6								
7								
8								
9								
10								
11								
12								
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