

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
SAN FRANCISCO BAY REGION

RESOLUTION NO. 70-80

PRESCRIBING REVISED REQUIREMENTS FOR WASTE DISCHARGE BY VALLEJO SANITATION AND FLOOD CONTROL DISTRICT INTO CARQUINEZ STRAIT AND ONTO LAND NEAR WHITE SLOUGH IN VALLEJO, SOLANO COUNTY AND RESCINDING RESOLUTIONS NOS. 135 AND 716, AND THAT PART OF RESOLUTION NO. 69-39 PERTAINING TO THIS DISTRICT

WHEREAS THIS REGIONAL BOARD HAS CONSIDERED

INFORMATION ABOUT THIS DISCHARGE

1. Vallejo Sanitation and Flood Control District, called the discharger below, filed a Technical Report dated May 25, 1970 with this Regional Water Quality Control Board pursuant to Section 13267(b) of the California Water Code.
2. That Report describes these existing waste discharges as follows:

Waste "A" is about 7.6 mgd of sewage mixed with industrial waste from a present population of 80,000. The present primary treatment facilities are designed to serve a population of 100,000 persons and an average daily flow of 10 mgd; the discharger plans to expand them to serve 200,000 persons and 20 mgd, and to provide secondary treatment. The outfall, a 42-inch pipe, discharges the waste into Carquinez Strait near and west of the Carquinez Bridge through eight diffuser ports about 64 feet below mean lower low water. This outfall is identified herein as Outfall "A" and is large enough to serve the proposed expansion.

Waste "B" is about 28,000 gallons per week of digested sludge from the waste treatment facilities. The waste is discharged onto land on a diked 5.6 acre site located at the Napa River near and south of White Slough, identified herein as Land Disposal Site "L-1".

3. The discharger has reported that untreated sewage is discharged into the Napa River and Mare Island Strait during periods of rainfall:
  - a. Sears Point pump station which discharges to a drainage channel then pumped to the Napa River.
  - b. Twenty-four inch bypass to Mare Island Strait between Ohio and Kentucky Streets.
  - c. Twenty-four inch bypass to Mare Island Strait south of Maryland Street and west of Sonoma Boulevard.
  - d. Thirty-six inch bypass to Mare Island Strait at the west end of Ryder Street.
  - e. Thirty-inch bypass to Mare Island Strait north of Chestnut Street.

4. This Regional Water Quality Control Board prescribed requirements for the discharger in Resolution No. 135, adopted July 16, 1953, and prescribed additional requirements by adopting Resolution No. 716 on January 20, 1966 and Resolution No. 69-39 on August 28, 1969.
5. This Regional Board has stated intent to revise requirements for existing waste discharges to conform with the Bay Water Quality Control Plan.

#### CORRESPONDENCE

This Regional Board has considered recommendations about this matter from:

1. Memorandum from State Department of Fish and Game dated September 14, 1970.
2. Memorandum from State Department of Public Health dated September 3, 1970.
3. Memorandum from State Department of Public Health, Bureau of Vector Control and Solid Waste Management dated September 14, 1970.
4. Memorandum from State Department of Water Resources dated October 6, 1970.
5. Letter from Solano County Health department dated September 21, 1970.

#### STAFF INVESTIGATION

1. These wastes can affect the following present beneficial water uses in Carquinez Strait and contiguous water bodies:

Industrial cooling and process water supply year-round

Swimming, water-skiing, pleasure boating, marinas, fishing, and hunting

Fish and wildlife propagation and sustenance, and waterfowl and migratory birds habitat and resting

Navigation channels and port facilities

Esthetic enjoyment.

2. Land within 1000 feet of the Outfall is used for industry.
3. The waste in Land Disposal Site "L-1" is matter which the Regional Board has defined as requiring confinement in Class II dumpsites.
4. Land within 1000 feet of the Land Disposal Site is used for residence, business, pasture, and transportation.

RESOLVED BY THIS REGIONAL BOARD

BOARD INTENT

1. Protect public health as it may be affected by these waste discharges.
2. Prevent nuisance, as defined in Section 13050(m) of the California Water Code.
3. Protect the beneficial water uses listed under "Staff Investigation" above.

WASTE DISCHARGE REQUIREMENTS - RECEIVING WATERS

1. The treatment or disposal of Wastes "A" and "B" shall not create a nuisance as defined in Section 13050(m) of the California Water Code.
2. The discharge of Wastes "A" and "B" shall not:

- a. Unreasonably affect any of the protected beneficial water uses resulting from:

Floating, suspended, or deposited macroscopic particulate matter,  
or foam in waters of the State at any place;

Bottom deposits at any place;

Aquatic growths at any place;

Alteration of temperature, color or turbidity beyond present natural  
background levels in waters of the State at any place.

- b. Cause visible, floating, suspended or deposited oil or other products of petroleum origin in waters of the State at any place.
- c. Cause waters of the state to exceed the following limits of quality at any point within one foot of the water surface:

pH	7.0 minimum 8.5 maximum
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Dissolved Oxygen	5.0 mg/l, minimum
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Dissolved Sulfide	0.1 mg/l, maximum
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Nutrients	to be prescribed at the earliest practicable date
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Other substances	Any one or more substances in concentrations that impair any of the protected beneficial water uses or make aquatic life or wildlife unfit or unpalatable for consumption.
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- d. Cause waters of the State to exceed the following limits of quality at any place within one foot of the water surface:

Coliform Organisms	240 MPN/100 ml, median of five consecutive samples, maximum
	10,000 MPN/100 ml, maximum any single sample, when verified by a repeat sample taken within 48 hours
	Whenever either of these bacterial values is exceeded in the receiving water for any reason they shall both be met instead in the waste at some point in the treatment process.
	The discharger may demonstrate compliance in the waste stream as an optional alternative.
	The Board will accept proof of effective effluent disinfection in terms of factors other than bacterial concentrations if the discharger documents a sound statistical correlation between such factors and bacterial analysis, and provided the conditions of sewage strength and treatment do not change from the demonstration period.
	Analyses to be determined by the multiple-tube fermentation method using at least two portions per decimal dilution.

WASTE DISCHARGE REQUIREMENTS - WASTE "A"

Waste "A" as discharged to waters of the State shall meet these quality limits at all times:

1. In any grab sample:

pH	6.5 minimum 8.5 maximum
Settleable matter	
The arithmetic average of any six or more samples collected on any day	0.5 ml/l/hr. maximum
80% of all individual samples collected during maximum daily flow over any 30-day period	0.4 ml/l/hr. maximum
Any sample	1.0 ml/l/hr. maximum

2. 5-day, 20° C BOD removal from the waste as indicated by analysis of 24-hour composite samples of effluent and influent shall be sufficient to maintain the dissolved oxygen concentration prescribed above. When the dissolved oxygen is less than the concentration prescribed above the BOD removal during the preceding 21 days shall be at least

Average	90%
Not more than two consecutive daily determinations shall indicate BOD removals less than	80%

3. In any representative, 24-hour composite sample:

Toxicity: the concentration of the waste itself in the receiving waters at any point within one foot of their surface	10 percent of the 96-hour TLM concentration of the waste as discharged, maximum
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Toxicity of the waste stream in terms of minimum TLM or percent survival will be prescribed in addition to the above as soon as practicable.

#### WASTE DISCHARGE REQUIREMENTS - WASTE "B"

1. The discharge of Waste "B" shall not cause waste material to be in any position where it is, or can be carried from Land Disposal Site "L-1" and deposited into waters of the State.
2. Land Disposal Site "L-1" shall have facilities adequate to exclude flood and tidal waters, to divert surface runoff from adjacent areas, to protect boundaries of the site from erosion, and to prevent any conditions that would cause drainage from the materials in the disposal site. Adequate protection is defined as protection from at least a 100-year storm.

#### PROHIBITION

Pursuant to Section 13243 of the California Water Code this Regional Board prohibits at any time:

1. The disposal of material acceptable only at Class I waste disposal sites in Land Disposal Site "L-1".
2. The bypass of untreated wastes from the discharger's sewer system.

#### TIME SCHEDULE FOR COMPLIANCE WITH REQUIREMENTS

Pursuant to Section 13263(c) of the California Water Code, this Regional Board adopts the following time schedule for compliance with the above requirements:

Complete construction of necessary facilities and demonstrate compliance with all requirements pertaining to Waste "B"	by	December 1, 1970
Complete a master plan for recommended improvements to permit compliance with all requirements	by	June 1, 1971
Submit to Regional Board a time schedule for major steps leading to the compliance with all requirements	by	August 1, 1971

REPORTING REQUIREMENTS

1. The discharger, American Canyon County Water District, Napa Sanitation District, and the U. S. Navy, Mare Island Naval Shipyard are required to develop a coordinated subregional water quality control program consistent with the general concepts of Phase I of the plan recommended by the Final Bay-Delta Program Report and submit a progress report on the status of needed studies by December 1, 1970.
2. The discharger is required to file written progress reports with this Regional Board pursuant to Section 13267 of the California Water Code within 15 days after each of the dates specified above.
3. This Resolution includes items numbered 1, 2, 3, 4, 5, 6, and 7 of the attached "Reporting Requirements", dated August 23, 1970.

NOTIFICATIONS

1. This Board's Resolutions Nos. 135 and 716, and that part of Resolution No. 69-39 pertaining to this District are hereby rescinded.
2. The above compliance time schedule is subject to revision in the discretion of this Regional Board.
3. If the discharger fails to comply with the above time schedule, the Executive Officer is instructed to bring a recommendation on the initiation of formal enforcement proceedings to the Regional Board for its consideration.
4. This Resolution includes items numbered 1 through 7 of the attached "Notifications", dated January 6, 1970.

WILLIAM C. WEBER  
Chairman

October 22, 1970

I, Fred H. Dierker, hereby certify that the foregoing is a true and correct copy of Resolution No. 70-80 adopted by the California Regional Water Quality Control Board - San Francisco Bay Region at its regular meeting on October 22, 1970.

FRED H. DIERKER  
Executive Officer  
CALIFORNIA REGIONAL WATER QUALITY CONTROL  
BOARD - SAN FRANCISCO BAY REGION