

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
 SAN FRANCISCO BAY REGION

ORDER NO. 71-76

WASTE DISCHARGE REQUIREMENTS
 FOR
 THE CITY OF LIVERMORE

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

1. This Regional Board prescribed requirements for the City of Livermore, called the discharger below, as follows:

Resolution Number	Date Adopted	For Discharge To
683	July 15, 1965	Arroyo Las Positas
752	May 19, 1966	Land (Airport and Golf Course)
67-21	April 28, 1967	Four Temporary Septic Tanks
67-28	May 18, 1967	Land (Amends Resolution No. 752)
68-19	April 30, 1968	Arroyo Las Positas (Amends Resolution No. 683)
68-20	April 30, 1968	Time Schedule for Compliance with Mineral Quality Requirements
68-45	August 28, 1968	Amends Time Schedule of Resolution No. 67-21
68-50	August 28, 1968	Land (Amends Resolution No. 752 and 67-28)

2. Information in the Regional Board's files and in the City's report of waste discharge dated February 8, 1971 describes the existing waste discharge as approximately 3.6 mgd (million gallons per day) of sewage serving a population of 38,000. The current plant capacity is 5.0 mgd. Discharger proposes to increase plant capacity to 10.0 mgd and provide a higher degree of treatment. Effluent from the Livermore Water Reclamation Plant is used seasonally for agricultural irrigation and horticulture on the municipal airport and golf course grounds.
3. These wastes may affect the following beneficial water uses in Arroyo Las Positas, Arroyo de la Laguna and Alameda Creek:

Recharge of ground waters in the Santa Rita subbasin (near El Charro Road) and the Niles Cone (near Niles) that are sources of supply for domestic, agricultural and industrial use;

Bathing in Alameda Creek;

Wading;

Fish propagation in Arroyo de la Laguna and Alameda Creek;

Fishing in Arroyo de la Laguna and Alameda Creek.

4. Land in the waste discharge point is used for residences, recreation, agriculture and commerce.
5. The San Francisco Water Department has rights for the surface water at the confluence of Arroyo de la Laguna and Alameda Creek near Sunol and the Department also owns and uses the subsurface water rights to part of the Amador Valley south of Highway 50. The Alameda County Water District has rights for surface water diversion to the Niles Cone from Alameda Creek between Mission Boulevard and Decoto Road for municipal, industrial and irrigation uses.
6. The City of Pleasanton owns and the Pleasanton Township County Water District uses the subsurface water rights to part of the Amador Valley south of Highway 50.
7. The waters of Arroyo de la Laguna are readily accessible to persons using the golf course at Hacienda Road.
8. The channel of Alameda Creek and Arroyo de la Laguna may be used for the conveyance of water, imported from the Sacramento-San Joaquin Delta, to the Niles Cone for recharge of the ground water basin.
9. A water quality management study for the Livermore Valley area is currently underway. The findings of this study will influence the nature of future treatment and disposal.
10. The Board adopted an Interim Water Quality Control Plan for the San Francisco Bay Basin on June 17, 1971.
11. The Board in a public meeting heard and considered all comments pertaining to this discharge.

IT IS HEREBY ORDERED, the discharger shall comply with the following:

A. Waste Discharge Requirements

1. The treatment or disposal of waste shall not create a nuisance as defined in Section 13050(m) of the California Water Code.
2. The discharge shall not cause:
 - a. Floating, suspended, or deposited macroscopic particulate matter or foam, in waters of the State at any place;
 - b. Bottom deposits or aquatic growths at any place;
 - c. Alteration of temperature, turbidity, or apparent color beyond present natural background levels in waters of the State at any place;
 - d. Visible, floating, suspended or deposited oil or other products of petroleum origin in waters of the State at any place;

e. Waters of the State to exceed the following limits of quality at any point:

Dissolved oxygen in Arroyo Las Positas, Arroyo Mocho, or Arroyo de la Laguna	Minimum 5.0 mg/l Annual median 80% saturation
Dissolved oxygen in Alameda Creek	Minimum 7.0 mg/l Annual median 90% saturation When natural factors cause lesser concentrations, then this discharge shall not cause further reduction.
pH	No change in the natural ambient pH value by more than 0.1 pH unit.
Dissolved sulfide	0.1 mg/l maximum
Other substances	No toxic or other substances shall 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.

f. Ground water at any point to contain tastes or odors of waste origin.

g. Ground waters to exceed the following limits of quality at any point:

Arsenic (As)	0.05 mg/l, maximum
Barium (Ba)	1.0 mg/l, maximum
Cadmium (Cd)	0.01 mg/l, maximum
Chromium (hexavalent)	0.05 mg/l, maximum
Cyanide (Cn)	0.2 mg/l, maximum
Fluoride (F)	1.0 mg/l, maximum
Lead (Pb)	0.05 mg/l, maximum
Selenium (Se)	0.01 mg/l, maximum
Silver (Ag)	0.05 mg/l, maximum

3. The waste as discharged to waters of the State shall meet these quality limits at all times:

a. In any grab sample:

pH	7.0, minimum (6.5 when the natural ambient value is as low as 6.5) 8.5, maximum
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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
Dissolved sulfide	0.1 mg/l, maximum.

- b. For 24-hour composite samples collected one day each week throughout the year and made up of portions collected at hourly intervals in proportion to rate of flow at time of collection:

Turbidity	10 units, maximum
5-day BOD and Suspended Solids	The waste as discharged, or at some point in the treatment process, shall meet quality requirements equivalent to those which would result from conformance with Section 8047 of Title 17, California Administrative Code.

The monthly average concentration of constituents, as listed below, shall not exceed the sum of the increment listed for each, plus its weighted average concentration in the water supply tributary to the discharge (as determined by monthly analyses of each water source):

Constituent	Increment as measured in the influent to the treatment facilities
Total dissolved solids	325 mg/l*
Chloride	75 mg/l*
Others	**

*To be reviewed by the Board whenever data becomes available which indicates to the staff of the Board and/or the discharger that review is necessary.

**To be established by the Board when sufficient data are available.

Methylene Blue Active Substances or MBAS	1.0 mg/l, maximum.
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- c. The waste as discharged, or at some point in the treatment process, shall be adequately disinfected, and for the purpose of this Order adequate disinfection shall mean any disinfection which produces a moving median coliform MPN value not exceeding 2.2 per 100 milliliters at some point in the treatment process, providing that moving median values shall be determined from:

Consecutive results obtained from samples collected on the previous seven sampling days, and

Samples shall be collected at a frequency of at least seven days each week, and

Samples shall be collected during those periods when the coliform MPN has been demonstrated to be at its daily maximum.

4. Wastes used for irrigation shall comply with all requirements above, and:
 - a. All equipment, including pumps, piping and valves, storage ponds, etc. which may at any time contain the waste shall be adequately and clearly identified with warning signs and discharger shall make all necessary provisions, in addition, to inform the public that the liquid contained therein is sewage and is unfit for human consumption.
 - b. No wastes used for irrigation shall be allowed to escape from the property of discharger via surface flow.
5. This Regional Board hereby prohibits waste discharges by the City of Livermore to Arroyo Las Positas or any other tributary of Alameda Creek above Niles:
 - a. In excess of 5.0 million gallons per day average dry weather flow for any calendar month until the City has provided facilities capable of meeting the requirements above.
 - b. Subsequent to implementation of the program in "Provision 5" below, except in conformance with that program.

B. Provisions

1. This Order includes items numbered 1, 2, 6 and 7 of the attached "Reporting Requirements" dated August 28, 1970.
2. This Order includes items numbered 1, 2, 3, 4, 5 and 6 of the attached "Notifications", dated January 6, 1970.
3. The City of Livermore shall comply with the following time schedule and reporting program to assure compliance with the waste discharge requirements of this order except turbidity in receiving waters and effluent disinfection and suspended solids.

<u>TASK</u>	<u>COMPLETION DATE</u>	<u>STATUS REPORT DATE</u>
Demonstrate compliance with disinfection requirements and assure continuing compliance therewith at all times	December 1, 1971	December 15, 1971
Report on progress toward compliance with requirements for mineral increments		January 31, 1972
Complete Final Design	September 1, 1972	September 15, 1972
Authorization of Funding	October 1, 1972	October 15, 1972
Commence Construction	December 1, 1972	December 15, 1972
Report on progress toward compliance with requirements for mineral increments		January 31, 1973
Compliance with Requirements	September 1, 1973	September 15, 1973

The above compliance time schedule is subject to revision at the discretion of this Regional Board.

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. It is the intention of this Board, at the earliest practicable date to:
 - a. Adopt quality objectives for ground waters in the Livermore groundwater basins.
 - b. Review the quality limits contained herein to ensure their adequacy in achieving the objectives previously established by this Board in its Resolution No. 226, as amended by Paragraph XVI of Resolution No. 446, for groundwater in the Niles Cone.
5. This Regional Board adopts the following time schedule for long-term compliance with the objectives of Resolution No. 226, and to assure adequate protection of Livermore-Amador Valley groundwaters:

The Valley Community Services District, the Cities of Livermore and Pleasanton and the Alameda County Flood Control and Water Conservation District - Zone 7, shall complete by April, 1972, a study which shall be the basis for a comprehensive water quality management program for the Alameda Creek System above Niles which is necessary to achieve the above and which is acceptable to this Board. The schedule, description, and program shall include consideration of at least the following items:

Facilities necessary.

Definition of the agency or agencies which will implement the program, operate facilities, etc.

Means for securing a commitment by all agencies involved to implement the selected program.

In the light of presently available information the agencies named above are required to complete necessary facilities and to implement this program no later than January 1975. An earlier date may be prescribed by this Regional Board after review of additional information.

6. This Board's Resolutions Nos. 683, 752, 67-21, 67-28, 68-19, 68-20, 68-45 and 68-50 are rescinded.

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 October 28, 1971.

Executive Officer

