

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

ORDER NO. 79-147

ORDER REQUIRING THE CITIES OF SAN JOSE AND SANTA CLARA TO CEASE AND DESIST FROM DISCHARGING WASTES FROM THE SAN JOSE/SANTA CLARA WATER POLLUTION CONTROL PLANT IN VIOLATION OF THE REQUIREMENTS OF ORDER NO. 77-107 (NPDES PERMIT NO. CA0037842) AS AMENDED BY ORDER NO. 78-92 PRESCRIBED BY THE CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD

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

1. On July 19, 1977, this Board adopted Order No. 77-107 (NPDES Permit No. CA0037842) prescribing waste discharge requirements for the discharge of waste to Artesian Slough by the Cities of San Jose and Santa Clara (hereinafter called the discharger) from the San Jose/Santa Clara Water Pollution Control Plant.
2. On November 21, 1978, this Board adopted Order No. 78-92 prescribing revised discharge requirements and a time schedule for compliance.
3. The requirements of Order No. 77-107 as amended by Order No. 78-92 provide, in part, as follows.

"B. Effluent Limitations:

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2. Chlorine residual shall not exceed an instantaneous maximum of 0.0 mg/l.
3. The discharge of an effluent containing constituents 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>Maximum Daily</u>	<u>Instantaneous Maximum</u>
a. BOD	mg/l	10	--	20	--
	lbs/day	17,140	--	34,250	--
	kg/day	7,780	--	15,560	--
b. Suspended Solids	mg/l	10	--	20	--
	lbs/day	17,140	--	34,300	--
	kg/day	7,780	--	15,550	--
...					
d. Settleable matter	ml/l-hr	0.1	--	--	0.2
e. Turbidity	JTU	--	--	--	10.0

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7. The arithmetic mean of values for BOD and Suspended Solids in 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 (i.e., 85 percent removal).
8. At some point in the treatment process, the waste shall not exceed a median MPN of Coliform Organisms of 2.2/100 ml as determined from the results of the previous consecutive seven (7) days for which analyses have been completed.

C. Receiving Water Limitations

1. The discharge of 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;
 - ...
 - 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.

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E. Provisions

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4. The discharger shall comply with the self-monitoring program as ordered by the Executive Officer.
 5. The discharger shall comply with all items of the attached 'Standard Provisions, Reporting Requirements and Definitions' dated April 1977 except B.3."
4. Beginning at 9:30 a.m. on Thursday, October 25, 1979, in the Santa Clara County Board of Supervisors Chambers, 70 West Hedding Street, San Jose, after due notice to the discharger and all other affected persons the Regional Board conducted a public hearing at which the discharger appeared and evidence was received concerning the discharge.
 5. During September and October 1979 the discharge of waste from the San Jose/Santa Clara Water Pollution Control Plant was in violation of the requirements listed in Finding 3 of this Order.
 6. The violations cited in Finding 3 of this Order were due to a biological upset of the secondary treatment process which was probably caused by one or more of the following factors: Inadequate hydraulic or organic treatment capacity; high organic loadings; inadequate operational control of the treatment process; and/or inadequate treatment plant staffing with the major factors the inadequate operational control of the treatment process and inadequate treatment plant staffing.
 7. The discharger threatens to violate the requirements cited in Finding 3 of this Order until it is determined which of the factors, listed in Finding 6 of this Order or such other factors as may be determined in the future contributed to the plant upset and the discharger implements those actions determined to be necessary to prevent recurrence of this incident.
 8. The discharger of said waste and pollutants during September and October 1979 created a condition of pollution and nuisance in that the quality of waters were altered to a degree which unreasonably affected and prevented full enjoyment of commercial and sport fishing, marine and freshwater habitat, boating, esthetic and other beneficial uses of Artesian Slough, Coyote Creek and San Francisco Bay.
 9. The discharger has demonstrated that treatment plant upsets can occur and that these upsets can have a significant adverse effect on the receiving waters and beneficial water uses. These effects are magnified because of the location of the discharge which does not provide for any dispersion or dilution capability. The discharger is required in waste discharge requirements to cease discharge into San Francisco Bay south of the Dumbarton Bridge and to prepare an EIS on the various alternative projects necessary for compliance. The draft EIS includes a discussion of the no-project alternative which would not provide for compliance with the prohibition.

10. A contingency plan to mitigate the adverse effects on beneficial water uses caused by the San Jose/Santa Clara treatment plant discharge during periods of plant upset is urgently needed and must be developed and implemented at the earliest practicable date.
11. A complete investigation of all factors which caused or contributed to the treatment plant upset must be conducted and corrective actions taken; however, immediate actions regarding plant operation, staffing and monitoring the recovery of beneficial water uses must be implemented.
12. That it may be necessary to prohibit additional discharges to the sewer systems served by the discharger to prevent the violation or threatened violation of waste discharge requirements.
13. The discharger was negligent in the operation of its waste treatment facilities which contributed to the plant upset and violation of waste discharge requirements and further was negligent in failing to promptly report to the Board the violation of waste discharge requirements.
14. This action is an order to enforce waste discharge requirements previously adopted by the Board. This Action is therefore categorically exempt from the provisions of the California Environmental Quality Act (CEQA) pursuant to Section 15121 of the Resources Agency Guidelines.

IT IS HEREBY ORDERED THAT the Cities of San Jose and Santa Clara cease and desist from discharging wastes or threatening to discharge wastes contrary to the requirements contained in Order No. 77-107 as amended by Order No. 78-92 as follows:

- A. The discharger shall immediately comply with all effluent and receiving water limitations of Order No. 77-107 as amended by Order No. 78-92.
- B. The discharger shall assure the immediate notification of all occurrences at the treatment plant which cause or which could cause violation of waste discharge requirements. The discharger shall submit a report acceptable to the Executive Officer by November 8, 1979, discussing the following:
 1. Person or persons responsible for making a determination that an immediate notification should be made to the Board and for making such notification.
 2. A description of those parameters or factors which will be used in determining whether or not to provide immediate notification to the Board.
- C. The discharger shall retain an independent consultant to prepare a report on the capability of the waste treatment facility to treat present and future waste flows. This consultant and the scope of work shall be approved by the Executive Officer. The report shall cover the following:

1. Review the criteria used in the design and the actual design of the treatment facility. Current loadings, growth and projected loading projections should be utilized in order to determine the adequacy of the present design.
2. Review the actual capabilities of the treatment plant to meet present waste discharge requirements at present and projected loadings.
3. Review the staffing levels, modes of operation and operational controls being used.
4. Evaluate the potential cause of the plant upset and indicate to what extent each contributed to the upset.
5. Recommend corrective actions for any of the above topics where deficiencies are identified.

This report shall be prepared and submitted according to the following time schedule:

<u>Task</u>	<u>Compliance Date</u>
Retain Consultant	by November 14, 1979
Submit Scope of Work	by November 28, 1979
Submit Report (Item 1 thru 3)	by January 4, 1980
Submit Complete Report	by February 15, 1980
Submit Time Schedule for necessary Treatment Plant Improvements or Plans to limit further connections to the remaining capacity of the treatment plant	by February 29, 1980

- D. The discharger shall implement not later than November 15, 1979, a receiving water monitoring program which is acceptable to the Executive Officer and developed pursuant to this Board's Resolution No. 73-16. This program is intended to document the recovery of the area for beneficial uses. The actual program will be developed jointly by the Regional Board staff, the Department of Fish and Game and the discharger.
- E. The discharger shall forthwith provide for treatment plant staffing as recommended in the existing Treatment Plant Operations and Maintenance Manual. This shall include qualified personnel to evaluate, develop and implement plant operating strategies and process controls to optimize performance and provide for early detection of possible plant upsets including implementation of necessary corrective action. The discharger shall submit a report by November 8, 1979 documenting compliance with this requirement. If compliance cannot be documented then the report shall identify the action and the timing of such action being taken to achieve compliance.

- F. If the discharger proposes to request an exemption to the prohibition of discharge to San Francisco Bay south of the Dumbarton Bridge pursuant to an EIS as described in Finding 9 of this Order the discharger shall, as part of an exemption request, provide documentation that the proposed project will provide for a level of environmental protection against the adverse effects of a plant upset equivalent to that which would be provided if a project to comply with the prohibition of discharge was constructed.
- G. The discharger is required to submit by December 16, 1979, an interim contingency plan that will mitigate the adverse impacts on beneficial water uses during treatment plant upsets or failure to provide dechlorination pending compliance with the prohibition of discharge south of the Dumbarton Bridge or any exception. The contingency plan shall include a full description of all feasible actions to be taken, persons responsible for taking the actions and the anticipated effect of those actions. The discharger shall review, update and submit by January 15, 1980 the contingency plan submitted pursuant to this Board's Resolution 77-10.
- H. The discharger shall report forthwith on the feasibility of the formation of a sanitation district or other appropriate public entity for the purposes of operation of sewage treatment plant.
- I. If the Executive Officer determines during his further investigation of this incident that the waste treatment facilities do not have or will not have capacity to treat waste from projected growth to assure continuous and consistent compliance with waste discharge requirements, he is directed to immediately notice after consulting with the Chairman a hearing to amend this Order to include a prohibition of additional discharges to the sewer system.
- J. If the Executive Officer finds that the discharger has failed to comply with the provisions of this Order, he is authorized, after approval of the Board Chairman, to request the Attorney General to take appropriate enforcement action against the discharger, including injunction and civil monetary remedies, if appropriate.

If the Executive Officer determines that the provisions of this Order are violated and does not refer the matter to the Attorney General, he is instructed to report to the Board the reasons that the discharger has been unable to comply with the provisions of this Order.

I, Roger B. James, Acting 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 25, 1979.

FRED H. DIERKER
Executive Officer

by ROGER B. JAMES
Acting Executive Officer