

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
SAN FRANCISCO BAY REGION

ORDER NO. 85-42

ORDER REQUIRING THE VALLEJO SANITATION AND FLOOD  
CONTROL DISTRICT TO CEASE AND DESIST FROM  
DISCHARGING WASTES CONTRARY TO REQUIREMENTS  
PRESCRIBED IN ORDER NO. 83-24 AND RESCINDING  
CEASE AND DESIST ORDER NO. 83-25

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

1. The Vallejo Sanitation and Flood Control District, hereinafter discharger, owns and operates a wastewater treatment plant located in Vallejo. The plant was designed to treat up to 12.5 mgd of municipal and industrial wastewater from the Vallejo area using innovative physical-chemical processes.
2. The treatment plant began operation in December 1977 but was shown to be incapable of meeting discharge requirements. Inadequately treated wastewater will continue to be discharged to Carquinez Straits, a water of the United States until new secondary treatment facilities are constructed.
3. The Board on June 20, 1978, adopted Order No. 78-44 (NPDES Permit No. CA0037099) reissuing waste discharge requirements to the District and establishing a compliance time schedule to require full compliance with the effluent limitations and all other provisions of the Permit.
4. The Board on September 16, 1981 adopted Cease and Desist Order No. 81-52 establishing a revised time schedule for constructing facilities and achieving compliance with the requirements of Order No. 78-44.
5. The discharger completed design of needed facilities but failed to award the construction contract by the September 30, 1982 compliance date established by Cease and Desist Order No. 81-52. The discharger attributed the failure in part to delays in securing federal and state grant funding.
6. The Board on July 20, 1983 adopted Order No. 83-24 reissuing basically unchanged waste discharge requirements for the District. The Board also adopted Cease and Desist Order No. 83-25 which again revised the time schedules for constructing facilities and required compliance with the requirements of Order No. 83-24 by April 1986.
7. The discharger failed to advertise for bids, award construction contract, and start construction by the November 1, 1983, February 1, 1984, and March 1, 1984 compliance dates established by Cease and Desist Order No. 83-25. These delays were attributed to EPA's failure to render a decision on the discharger's grant application.

8. EPA Headquarters recommended denying the discharger's grant application on April 20, 1984, claiming that the proposed facilities constituted a replacement of, not an addition to, the existing facilities and were therefore ineligible for funding.
9. The discharger appealed this decision in June 1984 to EPA Region IX. Region IX, supporting the discharger's position, requested that EPA Headquarters approve a deviation from the grant regulations given the unique circumstances surrounding the discharger's project.
10. To date EPA Headquarters has not ruled on the grant deviation request. It is not known when a decision will be reached. A negative decision could result in the discharger initiating legal action against EPA.
11. Review of self-monitoring data shows that the discharger has violated and is threatening to further violate the following limitations of Order No. 83-24:

"B. Effluent Limitations

1. Effluent discharged shall not exceed the following limits:

<u>Constituents</u>	<u>Units</u>	<u>30-Day Average</u>	<u>7-Day Average</u>	<u>Max. Daily</u>	<u>Inst. Max.</u>
...					
b. BOD	mg/l	30	45	60	-
c. Suspended Solids	mg/l	30	45	60	-
d. Oil & Grease	mg/l	10	-	20	-
...					

2. The arithmetic mean of the biochemical oxygen demand (5-day, 20° C) and suspended solids values by weight for effluent samples collected in a period of 30 consecutive calendar days shall not exceed 15 percent of the arithmetic mean of the respective values, by weight, for influent samples collected at approximately the same times during the same period (85 percent removal).

...

4. In any representative set of samples from the treatment plant before dilution, the waste as discharged shall meet the following limit of quality:

**TOXICITY:**

The survival of test organisms acceptable to the Board in 96-hour bioassays of the effluent shall achieve a 90 percentile value of not less than 50% survival."

12. The discharger has submitted self-monitoring reports that document the occurrence of raw sewage overflows from the collection system to Mare Island Strait and the Napa River. The discharger has also submitted reports from the County Health Department and others documenting the occurrence of raw sewage overflows to streets, public sidewalks, a park, a school playground, and similar locations in a manner that constitutes a public health hazard.
13. These overflows and bypasses occur when sewer system capacity is exceeded as a result of excessive inflow or infiltration of rainfall or rainfall runoff. Bypassing around the treatment plant during wet weather occurs due to inadequate hydraulic and treatment capacity at the plant.
14. The discharger completed a wet weather overflow monitoring study in January 1985 as required by Order No. 83-25. The study measured raw sewage overflows of approximately 500 million gallons to Mare Island Strait and the Napa River during the 1982-83 wet weather season. This represents about 10 percent of the total flow that is able to reach the treatment plant annually.
15. Preliminary estimates indicate that upwards of \$20 million may be required to correct the discharger's wet weather bypass and overflow problems. Additional studies are needed during 1985-86 to determine the most cost-effective means of complying with wet weather treatment requirements.
16. The Water Quality Control Plan for the San Francisco Bay Region (Basin Plan) contains the Board's recommended approach to controlling the seasonal degradation of water quality which results from wet weather overflows of wastewater from collection, conveyance, and treatment facilities. This Wet Weather Maintenance Level Approach allows for exceptions to Basin Plan discharge prohibitions for wet weather discharges such as the District's where an inordinate burden would be placed on the discharger relative to beneficial uses protected and an equivalent level of environmental protection can be achieved by alternate means.
17. The overflows and bypasses referred to in the Findings above constitute a violation and/or threatened violation of the following requirements in Order No. 83-24:

"A. Discharge Prohibitions

1. There shall be no bypass or overflow of untreated wastewater to waters of the State, either at the treatment plant or from the collection system.  
...
3. Discharge at any point at which the wastewater does not receive an initial dilution of at least 10:1 is prohibited.  
...

D. Provisions

...

7. The discharger shall comply with all items of the attached "Standard Provisions, Reporting Requirements and Definitions" dated April 1977.

(Standard Provision A.1 provides as follows:  
"Neither the treatment nor the discharge of wastes shall create a nuisance or pollution as defined in the California Water Code.")"

18. Said bypasses and overflows have adversely affected and threaten to continue to adversely affect water quality in waters of the State and threaten to adversely affect public health.
19. At its August 15, 1984 meeting, the Board implemented the California Compliance Policy and required the discharger to submit a Municipal Compliance Plan (MCP) by June 1985 to meet NPDES Permit requirements not later than July 1, 1988. An acceptable draft MCP was submitted by the discharger April 15, 1985.
20. A rate increase hearing was held by the discharger April 24, 1985. An increase is necessary to fund the biological secondary project.
21. The Board finds that 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.
22. On March 20, 1985 a panel of the California Regional Water Quality Control Board, San Francisco Bay Region, after due notice, held a public hearing under the provisions of Water Code Section 13301, regarding the discharge of waste and pollutants by the Vallejo Sanitation and Flood Control District. On April 30, at a public hearing, the full Board met and considered the panel's recommendation.

IT IS HEREBY ORDERED that the discharger cease and desist from discharging wastes contrary to requirements contained in Order No. 83-24 and listed in Findings 11 and 17 of this Order. Compliance shall be achieved according to the following specifications:

- A. The discharger shall comply with Effluent Limitations B.1.b (BOD), B.1.c (Suspended Solids), B.1.d (Oil & Grease), B.2 (85% Removal), and B.4 (Toxicity) of Order No. 83-24 according to the following time schedule:

<u>Task</u>	<u>Completion Date</u>
1. Adopt New Rate Ordinance and Financial Plan Adequate to Construct Biological Secondary Project without Grant Funds.	June 12, 1985
2. Submit Final Dry Weather MCP	June 1, 1985
3. Advertise for Construction Bids	Aug. 14, 1985
4. Complete Recarbonation Basin Conversion and Interim/Immediate Improvements	Sept. 1, 1985
5. Award Construction Contract	Nov. 13, 1985
6. Start Construction	Nov. 27, 1985
7. Complete Construction and Begin Start-Up	Jan. 1, 1988
8. Full Compliance for Dry Weather Flows	April 1, 1988

B. The discharger shall comply with Prohibitions C.1. (prohibition of untreated discharge), C.3. (10:1 minimum initial dilution), and Standard Provision A.1. (prohibition against creating public nuisance) according to the following schedule:

<u>Task</u>	<u>Completion Date</u>
1. Award Contract for Intensive Sewer System Evaluation Survey of Known and Suspected Problem Areas Based on Review of District Records	June 12, 1985
2. Submit Capacity Analysis of Treatment Plant and Collection System Relative to Conveying and Treating Maximum Feasible Wet Weather Flows	July 1, 1985
3. Submit Draft Wet Weather MCP	July 1, 1985
4. Submit Interim Operational Plan for Minimizing Frequency and Magnitude of Bypasses and Overflows and Maximizing Effluent Quality	Oct. 1, 1985
5. Submit Interim Wet Weather Flow Management Plan for Sewer Maintenance, Repair, and Replacement and Other Facility Construction to Reduce, Control, or Eliminate Excessive Wet Weather Flows, Bypasses, and Overflows, and Revised Financial Plan to Implement Necessary Improvements	June 1, 1986

<u>Task</u>	<u>Completion Date</u>
6. Submit Final Wet Weather MCP	July 1, 1986
7. Begin Construction of First Phase Treatment Plant, Major Interceptor, and Collection System Improvements Determined Necessary and Cost-Effective in Interim WWFM Plan for Minimizing Bypasses and Overflows	Aug. 1, 1986
8. Submit Draft Revised SSES, WWFM Plan, Facilities Plan, and Financial Plan Based on Results of 1986-87 Monitoring	June 1, 1987
9. Submit Final SSES, WWFM Plan, Facilities Plan, and Financial Plan. Begin Construction of Remaining Improvements Necessary to Comply with Wet Weather Treatment Requirements	Aug. 1, 1987
10. Submit Annual Progress Reports Quantifying Sewerage System Improvements and Their Impacts on Compliance, Wet Weather Flow Quantity, Overflow/Bypass Frequency, and Summarizing Actions for Coming Year	July 1 (each year from 1985 until full compliance is achieved)

C. With respect to Effluent Limitations B.1.b (BOD), B.1.c (Suspended Solids), B.1.d (Oil & Grease), B.2 (85% Removal), and B.4 (Toxicity), the following interim effluent limitations shall apply prior to April 1, 1988 or the completion of plant start-up, whichever is sooner:

	<u>Constituents</u>	<u>Units</u>	<u>30-Day Average</u>	<u>7-Day Average</u>	<u>Max. Daily</u>	<u>6-Month Average</u>
1.	BOD <sub>5</sub>	mg/l	120	140	160	-
2.	Suspended Solids	mg/l	60	80	100	-
3.	Oil & Grease	mg/l	20	-	30	-
4.	Toxicity Concentration	tu	-	-	2.5	1.5
5.	The arithmetic mean of the biochemical oxygen demand (5-day, 20° C) and suspended solids values by weight for effluent samples collected in a period of 30 consecutive calendar days shall not exceed 30 percent of the arithmetic mean of the respective values, by weight, for influent TSS (i.e. 70 % removal), and 60 percent for influent BOD samples (i.e. 40 % removal), collected approximately at the same times during the same period when influent concentrations exceed 200 mg/l.					

When influent concentrations are less than 200 mg/l due to infiltration and/or inflow, monthly average effluent concentrations shall not exceed 120 mg/l BOD and 60 mg/l TSS. Intentional dilution to achieve compliance is prohibited. Compliance shall be determined from influent samples uncontaminated by recycle or sidestream flows. Influent concentrations may be calculated by subtraction of known sidestream or recycle loadings upon approval of the Executive Officer.

D. Provisions

1. The discharger shall submit to the Board by the fifteenth of each month, beginning April 15, 1985, a report under penalty of perjury, on the progress toward compliance with this Order. If noncompliance is being reported, the reasons for such noncompliance shall be stated, including the corrective actions taken and an estimate of the date when the discharger will return to compliance.
2. The schedules in Section A contain the latest dates that the discharger may comply with said tasks. The discharger will accelerate subsequent actions accordingly if certain tasks are accomplished sooner than anticipated.
3. The Interim Effluent Limitations in Section C are average values predicted under conditions of average dry weather flow for an optimally operated and maintained, chemically assisted primary treatment plant. Extreme high and/or low flows may cause fluctuations in performance due to the limitations of primary treatment.
3. If the Executive Officer finds that the discharger has failed to comply with the provisions of Section A of this Order (dry weather time schedules), he is authorized, after approval of the Board Chairman, to issue a public notice and schedule another Cease and Desist Order hearing for consideration of a prohibition on additional discharges to the District's collection system.
4. If the Executive Officer finds that the discharger has failed to comply with provisions of this Order, he is authorized after approval of the Board Chairman, to request the Attorney General to take the appropriate enforcement action against the discharger, including injunction and civil monetary remedies, if appropriate, and/or to schedule a public hearing for Board imposition of civil monetary penalties.

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

6. Cease and Desist Order No. 83-25 is hereby rescinded.

I, Roger B. James, 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 April 30, 1985.

Roger B. James  
Executive Officer