CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

CEASE AND DESIST ORDER NO. 93-112

REQUIRING THE CITY OF PACIFICA, SAN MATEO COUNTY TO CEASE AND DESIST DISCHARGING WASTE FROM ITS OCEAN OUTFALL CONTRARY TO EFFLUENT LIMITATIONS IN ORDER NO. 89-118 (NPDES PERMIT)

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

1. The City of Pacifica (hereinafter called the Discharger) owns and operates a wastewater treatment plant which provides secondary treatment of domestic wastewater for the City of Pacifica.

2. On July 19, 1989, the Board adopted Order No. 89-118, NPDES Permit No. CA0037494, prescribing waste discharge requirements for the City of Pacifica wastewater treatment plant. Section 13301 of the Water Code authorizes the Board to issue a Cease and Desist Order when it finds that a waste discharge is occurring or threatening to take place in violation of requirements or prohibitions prescribed by the Regional Board or State Board.

3. Due to the extreme wet weather condition in December 1992, January 1993 and February 1993, the Discharger experienced many equipment failures which resulted in a great number of major effluent and permit violations. Specifically, the situation was extremely critical in January 1993. During the month of January, the effluent pump motor was burned out, and the primary tank chains and the secondary clarifier drive system broke down and were out of service for several days. As a result, the plant bypassed the secondary system with a portion of the flow for every day of the month. The plant also violated coliform standards for everyday of the month. Other violations reported during the period were chlorine residual, total suspended solids, and BOD.

4. The City's wastewater treatment plant was constructed in 1960 to provide primary sewage treatment only for the City's Sharp Park area prior to its incorporation. In 1973 the plant's capacity was increased to 6.0 million gallons per

day (mgd) average dry-weather flow to provide primary sewage treatment for the entire City of Pacifica. To comply with the Federal Water Pollution Control Act Amendments of 1972, the Discharger constructed an activated sludge secondary treatment facility which was placed into operation in 1978.

5. The wastewater treatment facility has numerous major problems affecting the ability to comply with the NPDES permit requirements.

A. System Reliability:

The treatment plant equipment varies in age from fourteen years to thirty years. The existing treatment system has practically no redundancy or backup system. The treatment system is extremely unreliable in responding to critical conditions without causing effluent violations. Violations typically occur whenever the plant experiences equipment failure or equipment is taken out for services or repairs.

Information available to the Board suggests that many of the existing equipment has reached the end of its useful life. The condition of the treatment plant can be summarized as follow:

1. Headworks: The four main comminuters (grinders) are completely worn out, the grit removal system is inadequate and rags and grit plague every process in the plant.

2. Primary System: The primary tanks are in workable condition. However, the piping system connecting the primary unit, the headworks and the secondary unit is in an advanced state of failure.

3. Secondary System: The system is hydraulically overloaded during peak flows. Significant levels of solids begin to wash out at 6 mgd.

4. Chlorination System: The system was improperly designed. In certain conditions, the system is unable to regulate proper chlorine dose in response to effluent flow changes.

5. Digesters: The digesters are 30 years old and need major structural repairs.

B. Inability to Treat Wet Weather Flows

Presently, the plant can treat a sustained flow of 6 mgd without washing out considerable levels of solids from the secondary system. In the wet weather, peak flows in excess of 6 mgd are automatically bypassed around the secondary system, and mixed with the secondary effluent at the chlorine contact basins prior to the effluent pumping to the outfall. The present wet weather peak flows could reach as high as 25 mgd.

C. Major Design Defect for Ocean Outfall

The City's ocean outfall is located on one of the roughest stretches of the west coast. Many of the materials selected for construction were inappropriate for long term exposure to the marine environment. For instance, inadequate concrete cover was provided for the prestressed, precast bridge sections and major concrete spalling and tendon erosion is occurring. Concrete cover over the reinforcing steel should have been at least 3 inches in the critical section but only 3/4 inch was provided. Extensive cracks in the ocean outfall have been detected. The outfall diffusers often plug with sand in the winter. The City's staff estimates that the offshore portions of the outfall probably will not last another 5 years.

6. Despite the many operational limitations, over the last few years the discharger has been able to keep effluent violations to a reasonable level. This is mainly attributable to the five year drought and the alertness of the City's treatment plant operators in responding to critical situations to minimize the extent of various permit violations. However, many of the existing equipment appears to have reach the end of its useful life. In January 1993, the plant has shown major signs of distress which resulted in a great number of permit violations.

7. The discharger is violating or threatening to violate the following discharge prohibitions and effluent limitations in Order No. 89-118:

<u>Discharge Prohibitions:</u>

A.1. The bypass or overflow of untreated or partially treated wastewater to waters of the State, either at the treatment plant or from the collection system or pump stations tributary to the treatment plant is prohibited.

A.5. The discharge of municipal and industrial waste sludge directly to the ocean, or into a waste stream that discharges to the ocean, is prohibited.

Effluent Limitations (B.1):

Parameter	Monthly Average	Weekly Average	Daily Maximum	Instantaneous Maximum
BOD (mg/l)	25	40	50	
Total Suspended Solids (mg/l)	30	45	60	
Total Chlorine Residual (mg/l)	--	--	--	0.0

8. The City of Pacifica's past permit violations are serious and further violations are a potential threat to water quality and public health. If the City fails to comply with the provisions and time schedules of this Order, the Board will consider amending this Order to include a prohibition on additional discharges to the sewer system pursuant to state regulations.

9. It is very important for the City to take all necessary measures to prevent any further permit violations during the construction period of new or upgraded facilities until a more reliable treatment plant is put into operation. If the City fails to comply with the provisions of this Order, the Board may also consider issuing a complaint for Administrative Civil Liability for any further effluent violations caused by the City of Pacifica and is reserving its jurisdiction regarding past permit violations pending a review of the City's compliance record with this Cease and Desist Order.

10. This enforcement action is being taken for the protection of the environment and, as such is exempt from the provisions of the California Environmental Quality Act (Public Resources Code, Section 21000 et seq.) in accordance with Section 15108, Chapter, Title 14, California Administrative Code.

11. The City and interested persons have been notified of the Board's intent to take this enforcement action, and have been provided an opportunity to submit written comments and appear at the public hearing. At a public meeting on September 15, 1993, the Board heard and considered all comments pertaining to the discharge.

IT IS HEREBY ORDER that, in accordance with Section 13301 of the California Water Code the City of Pacifica shall cease and desist from discharging wastes in violation of Order No. 89-118.

1. The Discharger shall cease and desist from discharging waste or threatening to discharge waste contrary to the effluent limitations cited in Finding 7 above in accordance with time schedule contained in this Order.

2. The discharger shall achieve compliance with the discharge prohibitions and effluent limitations of Order 89-118 according to the following time schedule. For each of the below listed tasks, a technical report acceptable to the Executive Officer shall be submitted on the required date, documenting completion of the task.

Task		Completion Date
a.	Select a final alternative to address effluent limit violations and overflows/bypasses and hydraulic capacity problems during wet weather	3/30/94
b.	Complete preliminary Engineering design of selected alternative	9/30/94
c.	Complete final engineering design of selected alternative	3/30/95
d.	Start Construction of selected alternative	6/30/95
e.	Complete construction	6/30/97
f.	Achieve full compliance	10/30/97

3. If, in the opinion of the Executive Officer, the City of Pacifica fails to comply with the provisions of this order, the Executive Officer is directed to take further enfocement action pursuant to findings #8 and # 9 above, or to request the Attorney General to take an enforcement action against the discharger, in accordance with Sections 13331, 13350, 13385, and 13386 of the California Water Code. This would include an injunction and civil monetary penalties, if appropriate.

4. The discharger shall submit quarterly status reports to the Board documenting status of completion with each of the above tasks. The 1st quarterly report shall be due on December 15, 1993 and following reports shall be due on March 15, June 15, and September 15 each year.

The report should describe progress toward compliance with schedules in this Order. If non-compliance or threatened non-compliance is being reported, the City should provide the reason for non-compliance and an estimated compliance date.

I, Steven R. Ritchie, 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 September 15, 1993.

STEVEN R. RITCHIE
Executive Officer

Date: 9/15/93