

STATE WATER RESOURCES CONTROL BOARD
RESOLUTION NO. 86-42

GRANTING A TEMPORARY EXCEPTION TO THE WATER QUALITY CONTROL PLAN, OCEAN WATERS OF CALIFORNIA, FOR NINE SOUTHERN CALIFORNIA ELECTRIC GENERATING STATIONS: HAYNES, HARBOR, SCATTERGOOD, ALAMITOS, EL SEGUNDO, LONG BEACH, MANDALAY, ORMOND BEACH, AND REDONDO BEACH

WHEREAS:

1. The State Board adopted a revised Water Quality Control Plan for the Ocean Waters of California (Ocean Plan) on November 17, 1983, which contains numeric water quality objectives for total chlorine residual adequate to protect all beneficial uses.
2. Exceptions to the Ocean Plan can be granted by the State Board provided that (a) the exception will not compromise protection of ocean waters' beneficial uses, and (b) the public interest will be served.
3. The Regional Water Quality Control Board, Los Angeles Region (Los Angeles Regional Board) has requested an exception to the Ocean Plan's method of calculation of total chlorine residual effluent limitations for the nine above-named facilities.
4. The Los Angeles Regional Board staff reviewed the support material submitted by Southern California Edison (SCE) and the Los Angeles Department of Water and Power (LADWP) and recommended approval of an exception to the Ocean Plan.
5. The Los Angeles Regional Board adopted Order No. 85-35 on June 24, 1985, which allows alternate total chlorine residual effluent limitations for the nine above-named facilities contingent on State Board approval.
6. An independent review of the supporting material for the exception supports the contention that the Ocean Plan method for calculating effluent limitations (page 7, equation 1 of the Ocean Plan) is overly restrictive in that it does not consider the reduction of chlorine to a non-toxic state which occurs during dilution.
7. Insufficient evidence exists to justify modifying the Ocean Plan at this time. However, sufficient evidence exists to demonstrate that the proposed alternate total chlorine residual effluent limitations should still result in meeting the numeric chlorine receiving water quality objectives at the edge of the zone of initial dilution allowed by the Ocean Plan. These objectives, by definition, are adequate to protect all beneficial uses.
8. The proposed alternate total chlorine residual effluent limitations and allowable discharge durations are more stringent than those previously applied to the nine above-named facilities.

9. Compliance with the total chlorine residual effluent limitations in the existing Ocean Plan would require large capital expenditures at the nine above-named facilities.
10. The public interest will not be served by requiring capital expenditures of the nine above-named facilities to meet total chlorine residual effluent limitations which are likely to be unnecessary to protect beneficial uses.
11. All nine of the above-named discharges are into highly stressed waters. While no direct evidence is available to indicate that these discharges are responsible, a bio-monitoring program is necessary to verify that special conditions do not exist in this area which make the alternate total chlorine residual effluent limitations inadequate to protect beneficial water uses.
12. It is in the public interest to acquire accurate scientific data regarding the discharge of chlorinated cooling water to the ocean and its effect on indigenous species.
13. Ocean Plan exceptions are not effective until approved by the U. S. Environmental Protection Agency, Region 9.
14. The approval of this exception to the Ocean Plan is exempt from the provisions of Chapter 3 (commencing with Section 21000) of Division 13 of the Public Resources Code pursuant to Title 14, California Administrative Code, Section 15301.

THEREFORE BE IT RESOLVED:

1. That the following maximum total chlorine residual effluent limitations are approved until October 30, 1989.

FACILITY NAME	DISCHARGE NUMBER(S)	INITIAL DILUTION	ORDER NUMBER	NPDES NUMBER	CHLORINE DURATION MIN/EVENT	DISCHARGE CONCENTRATION (mg/l)
HAYNES	001-002-003	4.5	84-109	CA0000353	20	0.413
HARBOR	001-002	3.1	84-110	CA0000361	12	0.377
SCATTERGOOD	002	9.7	84-111	CA0000370	40	0.436
ALAMITOS	001-002-003	4.5	84-112	CA0001139	15	0.453
EL SEGUNDO	001	18	84-113	CA0001147	30	0.820
	002	12			30	0.574
LONG BEACH	001	3.2	84-114	CA0001171	15	0.355
MANDALAY	001	2.6	84-115	CA0001180	10	0.365
ORMOND BEACH	001	6.5	84-116	CA0001198	20	0.399
REDONDO	001	11.5	84-117	CA0001201	20	0.633
	002	7.0			20	0.422

2. That SCE and LADWP, separately or jointly, shall comply with the following time schedule for conducting a bio-monitoring program.


<u>TASK</u>	<u>COMPLIANCE DATE</u>
Submit to State Board a plan of study for screening bio-monitoring organisms	July 15, 1986
Submit the results of the screening study and, if necessary, a proposed bio-monitoring program to the State Board for approval.	July 15, 1987
Submit final bio-monitoring report	July 15, 1989

The plans of study shall be submitted to the State Board's Executive Director for approval and shall include, at a minimum, (a) study location, (b) a list of organisms to be screened for sensitivity, and (c) detailed sampling and bioassay methods. The proposed bio-monitoring program shall (a) include, if possible, plant, mollusc, and fish species, (b) include sampling locations and frequencies selected to answer concerns about seasonal or site specific toxicity, and (c) include a detailed description of sampling location and sample handling procedures for each electrical generating station. The final report shall include a statistical analysis of the threshold dilution ratios obtained from each bioassay. The threshold dilution ratios are the lowest dilutions which produce no observable effect on the test organisms. The statistical analysis should attempt to demonstrate that the upper 95-percent confidence limit for the threshold dilution ratios is less than the initial dilution ratios achievable by the individual facilities and specified above.

3. Quarterly progress reports shall be submitted to the State Board beginning June 15, 1987.
4. These provisions shall be effective upon approval by the U. S. Environmental Protection Agency, Region 9.

CERTIFICATION

The undersigned, Executive Director of the State Water Resources Control Board, does hereby certify that the foregoing is a full, true, and correct copy of a resolution duly and regularly adopted at a meeting of the State Water Resources Control Board held on May 22, 1986.


Raymond Walsh
Interim Executive Director