

STATE OF CALIFORNIA  
STATE WATER RESOURCES CONTROL BOARD

In the Matter of the Petition  
of Southern California Edison  
Company and San Diego Gas and  
Electric Company for Review of  
Order No. 76-11, NPDES Permit  
No. CA0001228, California Regional  
Water Quality Control Board, San  
Diego Region. Our File No. A-143(a).

Order No. WQ 78-13

BY THE BOARD:

On June 14, 1976, the California Regional Water Quality Control Board, San Diego Region (Regional Board) adopted Order No. 76-11 (NPDES Permit No. CA0001228), prescribing waste discharge requirements for the Southern California Edison Company and San Diego Gas and Electric Company, San Onofre Nuclear Generating Station, Unit 1, San Diego County. Pursuant to Water Code Section 13320, the Southern California Edison Company and San Diego Gas and Electric Company (petitioner) filed with the State Water Resources Control Board (State Board) a petition dated July 13, 1976, and an amended petition dated February 8, 1977. This petition sought review of Order No. 76-11 but did not request a hearing. On May 21, 1978, a notice was mailed to the petitioner allowing 20 days to file additional arguments and comments. The petitioner's response, dated June 1, 1978, indicated that the petitioner would submit the matter for resolution by the Board based on the existing record.

I. BACKGROUND

The petitioners operate San Onofre Nuclear Generating Station, Unit No. 1, located on the U. S. Marine Corps Base, Camp Pendleton, San Diego County. The petitioners had operated under waste discharge requirements Regional Board Order 74-93, adopted December 9, 1974, which expired in June, 1976, and Order No. 76-11, which is the subject of this petition, was adopted by the Regional Board to effect renewal of the existing permit.

The NPDES permit and waste discharge requirements provide for the discharge to the Pacific Ocean of elevated temperature wastes from the steam electric generating plant. The discharge follows a once-through salt water cooling system. The report of waste discharge submitted by the petitioner describes the existing discharge as follows:

Discharge 001 - Combination of 001A: once-through cooling water derived from the Pacific Ocean; 001B: Steam Generator Blowdown; 001C: low volume wastes; 001D: secondarily treated domestic sewage; and 001E: yard drains.

Point of discharge: Latitude  $33^{\circ}21'43''$  north  
Longitude  $117^{\circ}33'46''$  west

Average flow rate:

001 Combined discharge - 461.1 million gallons  
per operating day ( $20.2 \text{ m}^3/\text{sec}$ )  
001A Cooling water - 447.7 million gallons per  
operating day ( $19.61 \text{ m}^3/\text{sec}$ )

001B Steam generator blowdown - 21,600 gallons  
per operating day (0.00095 m<sup>3</sup>/sec)

001C Low volume wastes - 13.3 million gallons  
per operating day (0.58 m<sup>3</sup>/sec)

001D Secondarily treated domestic sewage -  
17,500 gallons per operating day (0.000 77 m<sup>3</sup>/sec)

001E Yard drains - 87,000 gallons daily average  
(0.0038 m<sup>3</sup>/sec)

Average temperature: 80.0°F (26.7°C) winter  
92.3°F (33.5°C) summer

pH: minimum 7.5; maximum 8.5.

## II. CONTENTIONS AND FINDINGS

The contentions of the petitioner and our findings relative thereto are as follows:

1. Contention: The petitioner asserts that the discharge requirements are improper in that they "impose federal effluent limitations applicable to public owned treatment works" upon the facility, which is privately owned, and that the requirements are more restrictive than those set forth in the Ocean Plan without a factual or evidentiary showing that such restrictive requirements are necessary for the protection of beneficial uses of the ocean.

Findings: The specific requirements of Order No. 76-11 which give rise to petitioner's contentions is Effluent Limitation A.4. which imposed the following limits on discharge 001D (Treated Domestic sewage):

"After July 1, 1977, the discharge of an effluent in excess of the following is prohibited:

<u>Constituents</u>	<u>Units</u>	<u>Monthly Average</u>	<u>Weekly Maximum</u>
Biochemical oxygen demand, 5 day 20°C	mg/l	30	45
	kg/day	1.99	2.98
	lbs/day	4.38	6.57

<u>Constituents</u>	<u>Units</u>	<u>Monthly Average</u>	<u>Weekly Maximum</u>
Total suspended solids	mg/l	30	45
	kg/day	1.99	2.98
	lbs/day	4.38	6.57
pH	--	within the range of 6.0 to 9.0."	

The Comprehensive Water Quality Control Plan Report San Diego Basin (9), adopted by the Regional Board on March 17, 1975, and approved by the State Board on March 20, 1975, established water quality objectives for the coastal waters of the Pacific Ocean.

Beneficial uses established in the Basin Plan for the Coastal Waters of the Pacific Ocean are:

- (a) industrial service supply,
- (b) navigation,
- (c) water-contact recreation,
- (d) nonwater-contact recreation,
- (e) ocean commercial and sportfishing,
- (f) preservation of areas of special biological significance,
- (g) preservation of rare and endangered species
- (h) marine habitat

- (i) fish migration
- (j) shellfish harvesting

On October 8, 1974, the Environmental Protection Agency promulgated effluent guidelines and standards for discharges from stream-electric power generating plants.

It is true that the EPA guidelines do not require secondary treatment for domestic wastes generated and discharged in connection with the operation of a steam-electric generating station. However, treatment facilities are now in place (Aeroflow package treatment plant model 5-500-67-10 manufactured by Clow Corp.) that will, according to information received from the manufacturer, treat to secondary standards 100,000 gallons per day, or over five times the flow of domestic wastes listed in the report of waste discharge. Standard Provision 6 (which is included in the Regional Board Order by reference in Provision C.9) provides as follows:

"The discharger shall maintain in good working order and operate as efficiently as possible any facility or control system installed by the discharger to achieve compliance with the waste discharge requirements."

Inclusion of such a provision is in conformance with federal regulations contained in Title 40 Part 124 Section 124.45(f), Code of Federal Regulations. If the existing facilities are operated at anything close to a proper level, compliance with

the requirements contained in the Regional Board Order should be assured.

It is readily apparent therefore that Order No. 76-11 does not place an onerous burden upon the petitioner, since the petitioner can achieve compliance merely by proper operation of the facilities already in place.

2. Contention: The petitioner contends that the provisions of Section B(1) - (5) of the order are improperly framed in that the use of the terminology "discharge" instead of the term "discharge of waste" constitutes imposition of water quality objectives more restrictive than those set forth in the ocean plan.

Findings: The receiving water limitations set forth in provisions B(1) through (5), inclusive, are as follows:

B. RECEIVING WATER LIMITATIONS

1. The discharge shall not cause the following limits to be exceeded outside of the initial dilution zone:

<u>Constituents</u>	<u>Units</u>	<u>Concentration Not To Be Exceeded More Than</u>		<u>Maximum</u>
		<u>50% of Time</u>	<u>10% of Time</u>	
Grease and oil	mg/m <sup>2</sup>	10.0	20.0	

<u>Constituents</u>	<u>Units</u>	<u>Concentration Not To Be Exceeded More Than</u>		
		<u>50% of Time</u>	<u>10% of Time</u>	<u>Maximum</u>
Floating Particulates	mg dry wt/m <sup>2</sup>	1.0	1.5	
Toxicity	Toxicity Units	--	--	0.05
Radioactivity		Not to exceed the limits specified in Title 17, Chapter 5, Subchapter 4, Group 3, Article 5, Section 30269 of the California Administrative Code.		

2. The discharge shall not cause concentrations of coliform organisms within a zone bounded by the shoreline and a distance of 1,000 feet from the shoreline or the 30-foot depth contour, whichever is further from the shoreline, and in areas outside of this zone used for body-contact sports, to exceed a most probable number of 1,000 per 100 ml (10 per ml) in more than 20 percent of the samples at any sampling station in any 30 day period; or a most probable number of 10,000 per 100 ml (100 per ml) in any single sample when verified by a repeat sample taken within 48 hours.

3. The discharge shall not cause the concentration of total coliform organisms in any areas where shellfish may be harvested for human consumption to exceed a median most probably number of 70 per 100 ml, with not more than 10 percent of the samples exceeding a most probable number of 230 per 100 ml.

4. The discharge shall not cause:

- (A) Floating particulates or grease and oil to be visible at any location;

(B) Aesthetically undesirable discoloration on the ocean surface at any location;

(C) The mean of the transmittance of natural light outside of the initial dilution zone to be reduced by more than one standard deviation from the mean determined for unaffected waters during the same period;

(D) The dissolved oxygen concentrations of waters outside of the initial dilution zone to be depressed more than 10 percent from concentrations which occur naturally;

(E) The pH outside of the initial dilution zone to be changed more than 0.2 units from the pH which occurs naturally;

(F) The rate of deposition of inert solids and the characteristics of inert solids in ocean sediments to be changed such that benthic communities are degraded;

(G) The dissolved sulfide concentration of waters in and near sediments to be increased by more than one standard deviation from the mean determined under natural conditions;

(H) The concentrations of heavy metals, cyanide, phenolic compounds, total identifiable chlorinated hydrocarbons and radioactivity in sediments to be increased by more than one standard deviation from the mean determined under natural conditions;



(I) The concentrations of organic materials in marine sediments to be increased above those which could degrade marine life;

(J) Nutrient materials in concentrations that would cause objectionable aquatic growths or degrade indigenous biota;

(K) Marine communities including vertebrate, invertebrate, and plant species to be degraded; or

(L) Alteration of natural taste, odor, and color of fish, shellfish or other marine resources used for human consumption.

5. The discharge shall not cause clearly visible discoloration in the receiving waters resulting from particulate entrainment. A time schedule for compliance with this requirement will be developed at a later date.

Petitioner argues that the failure of Order No. 76-11 to modify the word "discharge" with the words "of waste", constitutes the imposition of water quality objectives contrary to law. Petitioner states that it should not be penalized for pollutants which may be discharged which it did not add to the water; and that the resulting waste discharge requirements are enforceable on a gross basis rather than a net basis, thus not allowing the petitioner credit for pollutants which it did not introduce into the intake water in its industrial process. Petitioner argues in support of this theory that the Clean Water Act merely "prohibits only the addition of any pollutant to navigable waters from a point source".

Even if we assume arguendo that the petitioner's statement of the federal law is correct, the argument of petitioner fails.

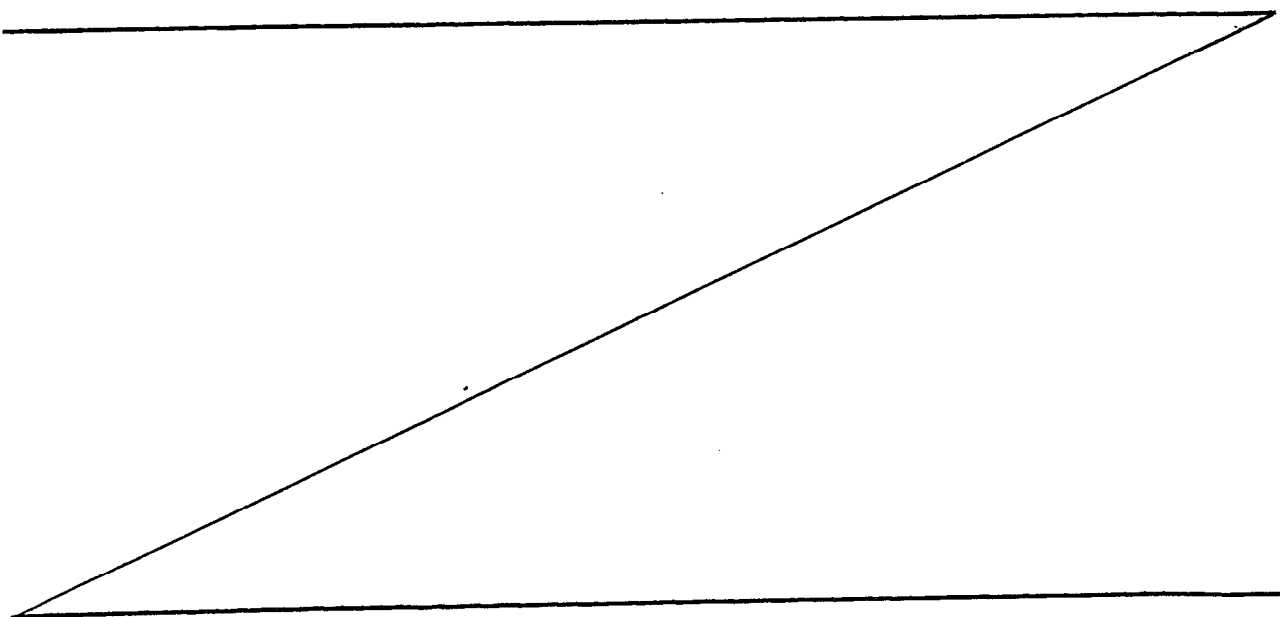
It is well established that the states which have the authority to enforce the NPDES permit regulations may, within their discretion, impose more stringent standards than those established by EPA regulations or the Clean Water Act. It is equally well established that the Regional Boards when issuing waste discharge requirements must implement the relevant water quality control plans. Petitioner suggests that the Regional Board should have based its requirements on the chemical quality of the waste discharged limited to increments in excess of the concentrations found for the same constituents in the water supply, with no maximum limits on such constituents.

We addressed this question in the Rancho Caballero decision, Order No. 73-4, wherein we pointed out that this was an inappropriate and improper method of implementing a water quality control plan. Although the facts in the two cases are dissimilar, nonetheless as we stated in the cited decision, "The incremental approach does not provide assurance that water quality objectives will be met and that the water quality control plan will be implemented. The inability of the incremental limits to function adequately stems primarily from the fact that they do not provide a means of placing maximum limits on

the quality of the water discharged. As a result, the use of a poor quality water as a source of supply will result in an even poorer quality of waste discharge." The petitioner offers no evidence that the particular limits imposed on petitioner's discharges are not necessary to adequately protect receiving water quality and has not argued that there are any constituents in its water supply in levels which would render it difficult for the petitioner to comply with its requirements. It has raised solely the argument that it is not legal to place gross constituent limits in waste discharge requirements. We find that the petitioner's argument is without merit.

### III. CONCLUSIONS

After review of the record, and for the reasons heretofore expressed we conclude that the action of the Regional Board in adopting Order No. 76-11 was appropriate and proper.



IV. ORDER

IT IS, THEREFORE, ORDERED, that the petition of Southern California Edison Company and San Diego Gas and Electric Company be denied.

Dated: JUL 20 1978

/s/ John E. Bryson

John E. Bryson, Chairman

/s/ W. Don Maughan

W. Don Maughan, Vice Chairman

/s/ W. W. Adams

W. W. Adams, Member

/s/ B. J. Miller

B. J. Miller, Member