

GMC

STATE OF CALIFORNIA
STATE WATER RESOURCES CONTROL BOARD

In the Matter of the Petition of
East Cliff Sanitation District and
Capitola Sanitation District to
Review the California Regional Water
Quality Control Board, Central Coast
Region, Order No. 72-23

Order No. 72-23

On June 12, 1972, East Cliff Sanitation District and Capitola Sanitation District, hereafter petitioners, requested review by the State Water Resources Control Board of Order No. 72-23 of the California Regional Water Quality Control Board, Central Coast Region, adopted May 12, 1972, prescribing waste discharge requirements for East Cliff Sanitation District.

A. The State Board, having considered the petition and the records of the regional board, finds:

1. East Cliff Sanitation District discharges approximately 4.0 million gallons per day of municipal wastewater to Monterey Bay through a short outfall terminating in approximately five feet of water at Soquel Point within the Pleasure Point surfing area. Included within the discharge are wastewaters of Capitola Sanitation District.

2. Beneficial uses of ocean waters in the vicinity of the outfall include:

- a. Shellfishing
- b. Recreation
- c. Marine habitat

- d. Fishing
- e. Swimming
- f. Shipping and boating
- g. Aesthetics

3. East Cliff Sanitation District, Capitola Sanitation District, and the City of Santa Cruz have entered into a contract which, when implemented, will terminate the discharge of East Cliff Sanitation District and will provide for joint treatment and disposal of waste of said districts and of the City of Santa Cruz through an enlarged treatment plant of the City of Santa Cruz.

4. The proposed enlargement of the plant of the City of Santa Cruz had been approved by the State Board, construction funds had been allocated therefor by the State Board and by the Environmental Protection Agency (EPA), and the proposed project was ready to go to bid in December, 1971, when the project was halted by EPA pending an environmental impact study.

5. An environmental impact study is in progress, but the environmental impact statement provided for by the National Environmental Policy Act (Public Law 91-190) has not as yet been prepared.

6. Waste discharge requirements for East Cliff Sanitation District were originally adopted June 24, 1952. Revised and superseding requirements for East Cliff Sanitation District were adopted May 12, 1972 in Order No. 72-23. Insofar as relevant to the present petition, the changes in requirements effected by Order No. 72-23 are as follows:

| <u>Constituent</u> | <u>June 24, 1952 Requirements</u> | <u>May 12, 1972 Requirements</u> |
|--------------------|---|--------------------------------------|
| Settleable Solids | 0.5 ml/l in 90% of samples, not to exceed 1.75 ml/l | 0.5 ml/l |
| Suspended Solids | 75 ppm in 90% of samples, not to exceed 125 ppm | 100 mg/l |
| Coliform | 1,000 MPN/100 ml | 70 MPN/100 ml |
| pH | None | 6.5 - 8.5 |
| DO | None | 7.0 mg/l |

B. The only issue presented by the petitioners concerns the economic implications arising out of the revised requirements of Order No. 72-23 related to settleable solids, suspended solids, coliform, pH and DO. It is contended by petitioners that the cost of meeting the new requirements will amount to approximately \$100,000. Petitioners estimate a cost of \$70,000 to meet the new requirements on settleable and suspended solids, \$20,000 to meet the pH requirements, and \$10,000 to meet the coliform requirement. Petitioners contend that, in view of the expected termination of the discharge through the joint treatment of waste in the enlarged City of Santa Cruz plant, forced expenditure of \$100,000 for "a few months" on the East Cliff facilities constitutes a waste of public funds, particularly when these funds are needed to assist the petitioners in defraying their share of costs related to construction of the Santa Cruz facilities. Petitioners contend

that this is particularly true in view of the anticipated short duration of the East Cliff facilities, the fact that the East Cliff plant has not deteriorated, and that the new requirements "merely make unlawful that which had been considered lawful."

With respect to petitioners' contention, insofar as it pertains to prior plant operations and previous requirements, it should be noted that the previous requirements were established in 1952, and that water quality standards appropriate in 1952 are not necessarily appropriate to the needs of 1972. Requirements are to be reviewed and revised, from time to time, as necessary to protect water quality. (Water Code Sec. 13263(e)). Petitioners acquire no vested right to continue their discharge, regardless of its past or anticipated duration, and regardless of whether or not the discharge has complied with previous requirements. (Water Code Sec. 13263(g)). The regional board is required by law periodically to review waste discharge requirements, and to revise requirements, from time to time, as necessary to implement relevant water quality control plans and to protect beneficial uses of receiving waters. (Water Code Secs. 13263 and 13241).

Petitioners do not contend that the revised requirements contained in Order No. 72-23 are unreasonable in the sense that they are not necessary to protect the beneficial uses of the receiving waters. The sole thrust of their argument is that, due to the particular circumstances of this case and the anticipated short duration of the future discharge, the new requirements are economically unreasonable, i.e., that the cost of compliance for the limited period anticipated is not reasonably related to necessary protection of beneficial uses.

In connection with this contention, one preliminary factor requires comment. While petitioners allege that the discharge involved will continue for only "a few months", there is nothing in the record to support such an allegation. The required impact statement has not been completed, there is no assurance as to when it will be completed, and there is no assurance that when complete it will necessarily be favorable to the proposed enlargement of the Santa Cruz facilities so as to eliminate the existing East Cliff discharge. In any event, even assuming a favorable impact statement, we are obviously considering a discharge which will continue for considerably longer than "a few months" by virtue of the review procedure and the bidding and construction process.

Moreover, the economic considerations alleged by the petitioners were not presented to the regional board by the petitioners. We have reviewed the regional board records and the proceedings which occurred at the regional board meeting of May 12, 1972, and it appears that no evidence whatsoever was presented by the petitioners relating to alleged excessive costs arising out of the revised requirements on settleable solids, suspended solids, coliform, pH and dissolved oxygen. The State Department of Public Health did object to the proposed coliform requirement of 70 MPN per 100 ml., contending that this proposed requirement provided insufficient safeguards for the protection of public health, and that the appropriate parameter should be 2.2 MPN per 100 ml. The petitioners did state, with respect to this particular requirement, that it would cost approximately \$500,000 to meet a requirement of 2.2 MPN per 100 ml., but this was the

only concrete evidence which they chose to present to the regional board on alleged unreasonable economic cost associated with the new requirements. Obviously, the regional board did in fact consider the statement of petitioners on economic considerations actually presented to the board, for the regional board adopted the less restrictive staff recommendation on coliform.

Under the Porter-Cologne Act, it is the regional boards who have the initial, primary responsibility for the setting of appropriate discharge requirements. (Water Code Section 13263). If petitioners actually felt that the revised requirements on settleable and suspended solids, pH, and dissolved oxygen entailed any unreasonable expenditures on their part, it was their duty to present appropriate evidence to the regional board at the time that the requirements were set. The treatment plant, its capacity for treatment, and any modifications necessary to meet the new requirements were within the knowledge of petitioners, and the burden to present appropriate evidence on alleged excessive cost must accordingly fall on petitioners. There is no indication by the petitioners that the economic information which accompanies their petition to us was not available for presentation to the regional board. The record before us indicates that adequate time for review of the proposed requirements was afforded to these petitioners. The proposed requirements were made available to the parties concerned sometime prior to March 22, 1972, well in advance of the regional board meeting of May 12, 1972. Under the circumstances of this case, we do not find a valid justification for petitioners' failure to present available evidence to the regional board.

C. Economic considerations are only one aspect which must be considered by a regional board in determining the appropriate requirements

to be placed upon a discharger. The primary purpose of the Porter-Cologne Act is the regulation of activities affecting the quality of waters to attain the highest water quality which is reasonable. A regional board, and the State Board itself, must consider not just economics but the total values involved, beneficial and detrimental, economic and social, tangible and intangible. (Water Code Section 13000). Consequently, while the petitioners have not contended that the revised requirements in Order No. 72-23 are unreasonable in the sense of being unnecessary to protect the quality of the receiving waters involved, we have ourselves reviewed the requirements complained of to assure ourselves that they are reasonable and appropriate under the circumstances of this case. Our determinations relative to these requirements are as follows:

1. Suspended and Settleable Solids

(a) Water Quality Importance

Excessive settleable and suspended solids can cause sludge deposits which damage benthic organisms. The solids content of a waste may be visible in the area of discharge resulting in impairment of esthetic enjoyment. Solids are also undesirable in sewage discharges because they often contain toxic heavy metals and tend to act as protective cover for pathogenic organisms during the disinfection process. All of these detrimental aspects of waste solids are particularly important with respect to the East Cliff discharge due to the location

of the outfall in shallow waters of a popular recreational area. It is therefore imperative that solids content of the discharge be held to the minimum level attainable.

(b) Attainability

With normal quality of influent municipal sewage, a well designed and operated primary treatment plant can meet the 100 mg/l level of suspended solids specified in Order 72-23. The record before us does not indicate that the influent sewage in this case has any exceptional characteristics which would justify poorer effluent quality.

In evaluating the ability of the East Cliff treatment plant to meet the current waste discharge requirements, the facility's past performance is most relevant. Monitoring data collected during the past three years are summarized in Table 1.

The monitoring data shows that the performance of the East Cliff treatment plant deteriorated steadily from 1969 through 1971. Although the average flow did not change significantly during this period and was about equal to the design flow of the plant, the quality of the plant effluent decreased from an average of

88 mg/l suspended solids in 1969 to 114 mg/l suspended solids in 1971. Assuming the influent quality did not change significantly during this period, the decline in treatment effectiveness was apparently due to poor plant operation. Monitoring data for April, May and June 1972 show a significant improvement in performance with average effluent suspended solids concentration well below 100 mg/l and maximum suspended solids concentration approximately equal to the 100 mg/l limit set by the requirements of Order 72-23. Therefore it would appear that those requirements can be met by proper plant operation without the necessity for interim capital expenditures estimated by petitioner at \$70,000.

2. Coliforms

(a) Water Quality Importance

Presence of coliform organisms in water indicates a likelihood of presence of pathogenic microorganisms, which make shellfish cultures, fish and other aquatic life hazardous for human consumption and which may render waters unsuitable for recreational use. The receiving water discharge requirement of Order 72-23 is the same as that specified by the U. S. Public Health Service for shellfish harvest areas. The previous less restrictive requirement is

the one usually recommended by the California State Department of Public Health for body-contact-sport areas. Since clamming and shellfish harvesting are beneficial uses of waters in the discharge area the more restrictive shellfish coliform requirement of Order 72-23 is appropriate.

(b) Attainability

The specified coliform requirement is customarily attainable through properly controlled disinfection of adequately settled primary effluent. The record indicates that the discharge of the East Cliff plant occurs within a heavily used surfing area, and that protective coliform requirements are essential at all times.

3. pH

(a) Water Quality Importance

The pH relates to the possible polluttional effect of many other substances by influencing their degree of dissociation. Since the undissociated compounds are frequently more toxic than the ionic forms, pH is a significant factor in the impact of the effluent on receiving waters. Even slight receiving water pH changes affect the biota to some extent. It is, therefore, necessary to keep the pH of the discharge within a limited range and in that way minimize the changes.

(b) Attainability

pH values apparent from monitoring data of the East Cliff discharge are lower than the range 7 to 8.5 usually reported for municipal sewage.

pH of sewage depends entirely upon quality of the water supply and discharges to the collection system. The local water supply in the East Cliff area has a pH well above 7. The most likely source of low pH values in the community's raw sewage is wastes discharged to the local collection system. Identification of these discharges and effective source control should eliminate the low pH problem.

4. Dissolved Oxygen

The receiving water dissolved oxygen concentration specified in the Order 72-23 should be easily attained in the case of East Cliff treatment plant effluent, because of the relatively small volume of the effluent and the fact that the discharge is located in the surf zone where turbulence provides a high degree of reaeration of the receiving water.

D. The State Board, having considered the contention of the petitioners and the record before the regional board, concludes as follows:

1. The waste discharge requirements of Order No. 72-23 are reasonable and necessary for protection of beneficial uses of

waters of the State, and the action of the regional board in setting the requirements in Order No. 72-23 was appropriate and proper.


IT IS HEREBY ORDERED that:

1. The action of the California Regional Water Quality Control Board, Central Coast Region, in issuing Order No. 72-23 should be, and is hereby, affirmed.

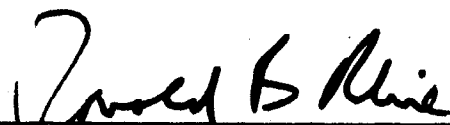
2. The relief requested by petitioners in their petition for review should be, and is hereby, denied.

Adopted as the order of the State Water Resources Control Board at a meeting duly called and held at Sacramento, California.

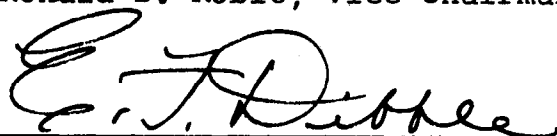
Dated: October 19, 1972



W. W. Adams, Chairman



Ronald B. Robie, Vice Chairman



E. F. Dibble, Member



Roy E. Dodson, Member



Mrs. Carl H. (Jean) Auer, Member

TABLE 1
 MONITORING DATA ON EAST CLIFF COUNTY
 SANITATION DISTRICT'S EFFLUENT*

| Year | Flow (MGD) | | | Suspended Solids (mg/l) | | | pH | | | Settleable Solids (ml/l) | | |
|------|------------|---------|---------|-------------------------|---------|---------|---------|---------|---------|--------------------------|---------|---------|
| | Maximum | Average | Minimum | Maximum | Average | Minimum | Maximum | Average | Minimum | Maximum | Average | Minimum |
| 1969 | 3.78 | 2.90 | 2.42 | 126 | 87.7 | 58 | - | - | - | 0.1 | 0.1 | 0.1 |
| 1970 | 4.77 | 3.95 | 3.35 | 121 | 100.0 | 68 | - | - | - | 0.3 | 0.147 | 0.1 |
| 1971 | 5.06 | 3.49 | 1.92 | 168 | 114.4 | 93.5 | 6.2 | 5.97 | 5.7 | 0.3 | 0.179 | 0.1 |
| 4/72 | 3.35 | 2.87 | 2.45 | 99 | 83.0 | 56 | 6.3 | 6.0 | 5.8 | 0.3 | 0.1 | 0.1 |
| 5/72 | 3.03 | 2.90 | 2.73 | 110 | 89.0 | 75 | 6.4 | 6.1 | 5.9 | 0.4 | 0.2 | 0.1 |
| 6/72 | 3.06 | 2.95 | 2.84 | 92 | 77.3 | 69 | 6.3 | 6.2 | 5.9 | 0.5 | 0.2 | 0.1 |

*Compiled from monitoring data submitted by the discharger to the regional board.