## STATE OF CALIFORNIA STATE WATER RESOURCES CONTROL BOARD

In the Matter of the Petitions of the Las Virgenes Municipal Water District, Advocates for Balanced California Development, Inc., Monte Nido Valley Property Owners Association, and Laurence H. Frommhagen for Review of Order No. 80-9 of the California Regional Water Quality Control Board, Los Angeles Region. Our Files Nos. A-264, 266, 267, and 268.

Order No. WQ 80-19

#### BY THE BOARD:

On February 25, 1980, the California Regional Water Quality Control Board, Los Angeles Region (Regional Board), adopted Order No. 80-9 (NPDES No. CA0056014), prescribing revised waste discharge requirements for the Las Virgenes Municipal Water District's Tapia Water Reclamation Facility. Order No. 80-9 modified waste discharge requirements adopted by the State Water Resources Control Board (State Board) on March 2, 1978, in Appendix A of Order No. WQ 78-4, which was rescinded by Order No. 80-9. Order No. 80-9 allows a seasonal discharge, from mid-November through mid-March, of effluent from the Tapia Facility to Malibu Creek and a year-round discharge once filtration facilities are installed.

The State Board received petitions for review of Order No. 80-9 on March 17, 1980 from the Las Virgenes Municipal Water District (District), on March 25 from the Monte Nido Property Owners Association and from Laurence H. Frommhagen, and

on March 26 from Advocates for Balanced California Development, Inc., (ABCD).  $\frac{1}{}$  In addition, on March 4 and 17, 1980, the State Board received petitions for a stay of Order No. 80-9 from the District and ABCD, respectively.

On May 15, 1980, the State Board denied petitioners' request for a stay. A hearing was subsequently held by the State Board on June 30, 1980, in Los Angeles to receive evidence on the issues raised in the petitions for review. The hearing record was kept open until July 16, 1980, for the submission of additional written materials.  $\frac{2}{}$  A second hearing was held on November 5, 1980, to consider testimony on proposed revisions to the waste discharge requirements for the Tapia Plant (see Attachment A to this Order).

### I. BACKGROUND

### A. Tapia Plant

The Tapia Plant, located at 731 Malibu Road, Calabasas, California, provides secondary treatment, utilizing the activated sludge process with single-stage nitrification. The plant has a design capacity of 8.0 million gallons per day (mgd). Current sludge handling capability, however, is based on a flow of 4.0 mgd. During 1979 the maximum monthly average of daily dry weather flow was 5.455 million gallons; the yearly average was 5.1 mgd.

These petitions have been consolidated for review as provided in 23 C.A.C. §2054. See State Board Order No. WQ 80-11, p. 2, footnote 1.

<sup>2.</sup> Letters dated July 24 and 31, 1980, from the Los Angeles County Department of Health Services, have been included in the record, however, because they are considered to be amendments to the Department's July 9 letter.

The District is currently engaged under the Clean Water Grant Program in upgrading the plant. Improvements include expansion of the solids handling facilities from 4.0 to 8.0 mgd, the construction of new chlorination facilities, and the relocation of the electrical facilities and headworks. The disinfection facilities were recently completed, and the solids handling facilities and relocation work are scheduled for completion by November or December of 1981. The District is also proceeding with the design of 8 mgd capacity filters. Grant funding of the filters, however, is uncertain. The District anticipates that the filters will be completed by June of 1982.

At present, disposal methods utilized by the District for the reclaimed water from the Tapia Plant include discharge to Malibu Creek, disposal to percolation ponds and spray disposal to land. In addition, a small portion of the effluent is used for agricultural and landscape irrigation.

In the past, effluent from the plant has been in compliance with most of the limitations and standards contained in waste discharge requirements issued by the Regional Board to the District. For the past two years, however, the District has failed to consistently comply with its coliform limitations. Completion of the new disinfection facilities at the Tapia Plant is expected to bring the District into compliance.  $\frac{3}{}$ 

<sup>3.</sup> On November 26, 1979, the Regional Board adopted Cease and Desist Order No. 79-173, with a referral to the Attorney General for violations by the District of coliform limits contained in the District's waste discharge requirements and for a bypass of unchlorinated effluent.

The Tapia Plant has also been subject to upsets over the years due to its location in a floodplain. In February of this year, for example, the plant was out of operation from February 15 to February 28 due to the occurrence of a 100-year flood, which caused power outages at the plant. As indicated earlier, the District is currently relocating the electrical facilities and headworks at the plant out of the floodplain.

In the event of a plant upset, the District has limited available storage capacity--for a maximum of two days flow. The District can also divert a maximum of approximately 1/2 mgd to Los Angeles in the event of an emergency.

### B. Physical Setting

The Tapia Plant is located adjacent to Malibu Creek, which flows about five miles from the plant via Malibu Canyon to the ocean. Just across from and downstream from the treatment plant, the creek passes next to Tapia Park, which is owned and operated by the Los Angeles County Department of Parks and Recreation. At its mouth, Malibu Creek traverses a small alluvial plain and forms a lagoon at the ocean shore. This lagoon is generally closed by a sand bar during low flow months although during winter months the bar may be breached by sustained flow in Malibu Creek.

Public access to Malibu Creek is generally restricted to the areas adjacent to and immediately upstream and downstream of Tapia Park and to the area between Cross Creek Road and the lagoon. Recreational activities at these locations include some, or all, of the following: picknicking, hiking, fishing,

beachwalking, wading, and swimming. The remaining portions of Malibu Creek are relatively inaccessible, although some public use does occur, due both to the topography and to the private ownership of adjacent properties where access to the canyon is restricted.

Malibu Creek is an ephemeral stream with widely varying rates of flow. In dry years, the creek may dry up in portions of its reach or in its entirety. The State Department of Fish and Game has recommended the year-round discharge of treated effluent from the Tapia Plant to Malibu Creek for the purpose of stream augmentation to provide increased aquatic habitat both in the stream and the lagoon. The Department of Water Resources has also supported allowing discharge to Malibu Creek to augment stream flows.

## C. Reclamation Program

In 1969 the District began planning to expand the Tapia facilities from a capacity of 2 mgd to 8 mgd. The expanded facilities were designed to produce 6 mgd of reclaimed water, which the District planned to market. The expansion was completed in 1971, however, since that time the District has marketed only a relatively small quantity of reclaimed water.

The District recently completed construction, with the aid of approximately \$1.8 million in state and federal Clean Water Grant funds, of the Calabasas Reclaimed Water Line, having a capacity of 2 mgd. The line is presently serving the Calabasas Golf Course and various greenbelt areas. With construction of

the Calabasas line, the District now markets a total of approximately 1 mgd of reclaimed water.

The District also proposes to implement a dual water system to supply water for homeowner irrigation and toilet flushing. The State Department of Health Services has required both that the system be tested for one year on a "pilot project" basis for homeowner irrigation only, and that the reclaimed water be filtered. Consequently, full scale implementation of the dual water system would not be possible before June, 1983, at the earliest.

The District has also had a feasibility study prepared by Boyle Engineers entitled, "Draft Facilities Plan and Project Report for Las Virgenes Municipal Water District and Truinfo County Sanitation District on Reclaimed Water Distribution System for Las Virgenes Municipal Water District and Truinfo County Sanitation District Areas", which addresses the feasibility of distributing reclaimed water to the entire western portion of the District. The District has approved the report but has not taken final action on a decision regarding this alternative.

## D. Prior State Board Actions

The desirability of allowing a discharge to Malibu Creek has been a controversial issue and was the subject of previous State Board orders.  $\frac{4}{}$  In Order No. WQ 76-11, the State Board considered the propriety of the Regional Board's denial of the District's application for a year-round discharge to Malibu Creek

<sup>4.</sup> E.g., State Board Orders Nos. WQ 75-30, 76-11 and 78-4.

and concluded that the record before the State Board did not support the Regional Board's action. In this regard, the State Board made the following findings:

\* \* \*

- "2. The Regional Board may, under appropriate circumstances, prohibit a proposed discharge, and may also limit the flow of a proposed discharge.
- 3. A total prohibition on discharge, or a limit on discharge flow is justified where necessary:

(a) To implement properly an approved and relevant water quality control plan;

- (b) To protect water quality and beneficial uses, i.e., to prevent nuisance, pollution or contamination;
- (c) To protect adequately against environmental damage, to minimize adverse environmental impacts, or to insure long-term protection of the environment.
- 4. The present record does not justify a prohibition against the proposed year-round discharge of petitioner to Malibu Creek."

Id. at 16.

The State Board reached the same conclusion in Order No. WQ 78-4 after the District's application for a year-round creek discharge was again denied by the Regional Board.

In Order No. WQ 78-4, the State Board adopted waste discharge requirements for the District, Appendix A to Order No. WQ 78-4, which authorized a year-round discharge to Malibu Creek for a maximum study period of one year plus an additional six months for evaluation of the study results by the Regional Board staff. The requirements provided that at the conclusion of the evaluation, "permission to discharge will be reviewed and may be extended, modified, or terminated depending on the results of the evaluation".

Id., App. A, Discharge Limitation A.2.

In response to concerns raised by several intervening parties that if the District were permitted to discharge to the creek on a year-round basis, it would be impossible to require the District to cease discharging to the creek, the State Board in Order No. WQ 78-4 required the District to maintain its existing non-stream disposal facilities used for existing flows and to provide additional offstream disposal capability, if necessary, to dispose of any growth in wastewater flows to the Tapia Plant during the test period. Id. at 20-22; App. A, Discharge Limitation A.2. The Order further provided that if the District failed to comply with this mandate "for any reason whatsoever, the discharge to the Creek shall be prohibited in accordance with Regional Board Order No. 76-27 [which authorized only a seasonal discharge] until such capacity is available." Id. at 22.

In addition, in accordance with the recommendation of the State Department of Health Services, the requirements adopted by the State Board mandated filtration or an equivalent treatment process for discharges to the creek. <u>Id</u>., App. A, Discharge Limitations A.1 and 2, Effluent Limitations B.10. In the interim prior to the construction of a filtration system, the requirements authorized the discharge of effluent to the creek above Rindge Dam in order that the sands and gravels behind the Dam could provide some natural filtration to the wastewater.

# E. Regional Board Actions Subsequent to Adoption of State Board Order No. WQ 78-4.

On October 23, 1978, the Regional Board formally established the start of the one-year test discharge to

Malibu Creek, pursuant to State Board Order No. WQ 78-4,  $\frac{5}{}$  as July 29, 1978. The termination of the test period and study program was July 28, 1979, with the exception of the virus portion of the study program which was concluded on September 30, 1979.

On February 7, 1980, the District submitted to the Regional Board a report on the one-year Malibu Creek study, entitled "Malibu Creek Study, 1978-79", and an addendum entitled, "Enteric Virus Study-Progress Report, February 1980" to fulfill the requirements of State Board Order No. WQ 78-4. The Malibu Creek Study concluded that the Tapia discharge appeared to have no direct effect on fish populations, no affect on the algal populations or on the accumulation of trace elements in fish tissues or sediment downstream of the discharge site, and no adverse effects on the macroinvertebrate populations. The study also concluded that the discharge would not drastically change the populations of naturally occurring insects, and that any increase in riparian vegetation caused by the Tapia discharge could be readily controlled.

The virus portion of the one-year Malibu Creek Study, however, was determined to be invalidated due to the discovery by Regional Board staff in late September, 1979, of a bypass of unchlorinated secondary effluent at the Tapia Plant caused by a leaking valve. The bypass had existed for an unknown period

<sup>5.</sup> The Regional Board amended State Board Order No. WQ 78-4 on April 24, 1978, by making one minor technical change which is not in issue here.

of time. Consequently, Phase II of the virus study was commenced in December, 1979, and a final report was not available until September,  $1980.\frac{6}{}$ 

While the District was conducting its study, the Regional Board staff conducted a more limited study of the impacts of year-round discharge to Malibu Creek, the results of which were consistent with the District's study. The staff did not, however, study the effects of the year-round discharge on virus levels in the creek. On the basis of the District's study and the Regional Board investigation, the Regional Board staff concluded that the year-round discharge of high-quality effluent from the Tapia plant would not have a significant adverse impact on the creek or its beneficial uses. The staff, however, concurred in the recommendation of the State Department of Health Services and the Los Angeles County Department of Health that the Tapia effluent should be filtered prior to discharge in order to adequately protect the public health.

Therefore, the staff recommended to the Board that waste discharge requirements be adopted which would allow a year-round discharge by the District to Malibu Creek once filters are installed. Prior to that time, staff recommended that discharge be limited to: (1) the period between mid-November and mid-March following maximum reclamation and maximum use of all spray

<sup>5.</sup> The study is entitled "Enteric Virus Study, Final Report, September, 1980." It is interesting to note that the report concluded that the bypass had no impact on virus levels in the Tapia Plant effluent. Id. at 2-1.

disposal fields consistent with good management practices; and (2) those occasions during and immediately following periods of rain when spray fields or percolation areas could not be used. In addition, staff proposed a daily dry weather flow limitation of 5.55 mgd for the interim period prior to the construction of filters, because of the limited spray disposal areas available to the District. On February 25, 1980, the Regional Board, after a public hearing, adopted Order No. 80-9, in accordance with staff's recommendations. 7/

#### B. Effluent Limitations

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10. Wastes discharged to watercourses shall have received treatment equivalent to that of a filtered wastewater.

Footnote continued on page 12.

<sup>&#</sup>x27;. Order No. 80-9 provides, in pertinent part, as follows:

<sup>&</sup>quot;A. Discharge Limitations
1. Discharge Serial Nos. 001, 002 and 003\* - Wastes discharged after September 1, 1981, at these points shall be filtered or received equivalent treatment as specified in Requirement B 10, below. Prior to that date the discharge of wastes shall be limited to 003 during (1) those occasions during and immediately following periods of rain when spray fields or percolation areas connot be used; and (2) the period between mid-November and mid-March following maximum reclamation and maximum use of all spray disposal fields consistent with good management practices." The average daily discharge during this period (November 15 through March 15 for any calendar month) shall be limited to 5.55 mgd.

<sup>2.</sup> Dry weather discharges to surface waters (March 15 to November 15) shall be limited to flows in excess of those which can be reclaimed for beneficial use (see Provision D1, below). In addition, dry weather discharges to surface waters shall be limited to 4.5 mgd (30-day average).

### II. CONTENTIONS AND FINDINGS

Petitioners have challenged the propriety of Order No. 80-9 on numerous grounds. We have identified the following issues as the most significant:

1. Is a requirement of filtration or an equivalent treatment process for the Tapia Plant effluent appropriate and proper?

(Continuation of footnote #7 on page 11.)

Filtered wastewater means an oxidized, coagulated, clarified wastewater which has been passed through natural undisturbed soils or filter media, such as sand or diatomaceous earth, so that the turbidity as determined by an approved laboratory method does not exceed an average operating turbidity of 2 turbidity units and does not exceed 5 turbidity units more than 5 percent of the time during any 24-hour period.

For the purposes of this requirement, carbon filtration or microstrainers may be accepted if in the judgment of the Executive Officer it can be demonstrated to produce an equivalent quality wastewater.

Nothing herein shall be construed to prevent the use of any alternative treatment process(es) provided that they can be demonstrated to the satisfaction of the Executive Officer to achieve compliance with the effluent limitations and requirements."

<sup>\*001</sup> Direct discharge at Tapia Plant to Malibu Creek 002 Overflow from reclaimed water storage reservoir to Las Virgenes Creek 003 Discharge to area behind Rindge Dam on Malibu Creek.

<sup>\*\*&</sup>quot;Maximum reclamation" and 'maximum use of all spray disposal fields consistent with good management practices" were not defined in Order No. 80-9.

- a. If so, is a prohibition against discharge of effluent during the summer months, prior to the installation of filtration facilities, appropriate and proper?
- b. Or, should a compliance schedule be imposed upon the Las Virgenes Municipal Water District for construction of filtration facilities, which would allow the District to continue a creek discharge during the interim prior to completion of construction of the filters?
- 2. Is a flow limitation of 5.55 mgd for discharges to Malibu Creek during the winter months appropriate and proper?
- 3. Is a flow limitation of 4.5 mgd for discharges of filtered effluent to Malibu Creek during the summer months appropriate and proper?
- 4. What are the potential impacts, if any, of Order No. 80-9 on the economy and on the need for developing housing within the Los Angeles region?

### A. Filtration Requirement

The State Department of Health Services (Department) and the Los Angeles County Department of Health Services have consistently recommended that the Tapia Plant effluent be subjected to the chain of treatment specified in the Department's regulations for reclaimed water used as a source of supply in a nonrestricted recreational impoundment. Specifically, Section 60315 of the regulations provides as follows:

"Nonrestricted Recreational Impoundment. Reclaimed water used as a source of supply in a nonrestricted recreational impoundment shall be at all times an adequately disinfected, oxidized, coagulated, clarified, filtered wastewater. The wastewater shall be considered adequately disinfected if at some location in the treatment process the median number of coliform organisms does not exceed 2.2 per 100 milliliters and the number of coliform organisms does not exceed 22 per 100 milliliters in more than one sample within any 30-day period. The median value shall be determined from the bacteriological results of the last 7 days for which analyses have been completed." 22 C.A.C.

The Department recognizes, however, that Section 60315 does not mandatorily apply to the District's discharge to Malibu Creek because streams are not encompassed within the term "recreational impoundments". 9/ Nevertheless, the Department's "Uniform Guidelines for Sewage Disinfection", which address situations not covered by reclamation criteria, recommend disinfection criteria for discharges to ephemeral streams, "where the [Regional Board] has identified water contact recreation as a beneficial use", which are equivalent to those contained in

<sup>8. &</sup>quot;Filtered wastewater" is defined in the regulations as:

<sup>&</sup>quot;. . . an oxidized, coagulated, clarified waste-water which has been passed through natural undisturbed soils or filter media, such as sand or diatomaceous earth, to that the turbidity as determined by an approved laboratory method does not exceed an average operating turbidity of 2 turbidity units and does not exceed 5 turbidity units more than 5 percent of the time during any 24-hour period." 22 C.A.C. §60301(r).

<sup>9.</sup> Pages 178 and 184-187 of the Reporter's Transcript of the June 30 State Board hearing. (Hereinafter R.T.) Petitioner Frommhagen disputes the view that Malibu Creek does not constitute a recreational impoundment. Since the Department is the final arbiter of such issues, we follow the Department's position on this question. Cf. Nipper v. Cal. Auto, Assigned Risk Plan, 19 Cal.3d 35,45, 136 Cal. Rptr. 854, 560 P.2d 743 (1977).

Section  $60315.\frac{10}{}$  The Regional Board has, in fact, designated water contact recreation as a beneficial use of Malibu Creek which is an ephemeral stream.

As indicated previously, both State Board Order No. WQ 78-4, Appendix A, and Regional Board Order No. 80-9 include a requirement that the Tapia Plant effluent undergo filtration or an equivalent process, based upon the recommendation of the State and Los Angeles County Health Departments. The purpose of filtration is to provide an additional assurance of treatment reliability and to ensure virtually virus free effluent. Viruses are more resistant to control by chlorination than bacteria, particularly viruses which are contained in solids particles. The filtration process, by removing most of the solid particles, also removes most of the solids associated viruses.

Accessible drainage ways or ephemeral streams with little or no natural flow during all or part of the year.

Accessible drainage ways and ephemeral streams which received waste discharges are often attractive areas for planned or unplanned recreational activities involving water contact. Further, there is generally little dilution available during the summer recreational season. The recommended disinfection criteria are logically related to the degree of public exposure.

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(continued on page 16.)

<sup>10.</sup> See R.T. at 176-179, 188-189. The guidelines specify, in part:

Case II. Proposed Discharge is to:

c. A case II discharge occurs where the RWQCB has identified water contact recreation as a beneficial use and most, if not all, of the following conditions are met:

## 10. (continued from page 15.)

1. The discharge occurs in a residential area.

2. The discharge occurs in an area where there is ready access to the stream and exclusion of the public is not a realistic alternative.

3. Historical attempts to post the stream to warn and

exclude the public have been unsuccessful.

4. The recreation potential in the stream is high and justified because of weather, proximity to other recreation areas, etc.

5. Public interest has been identified and the resident population wants or expects body contact recreation

in the stream.

Recommendation: The effluent must be adequately disinfected, oxidized, coagulated and filtered wastewater. The wastewater shall be considered to be adequately disinfected if at some point in the treatment process the median MPN of the total coliform organisms does not exceed 2.2/100 ml.

The record supports the conclusion that conditions 2, 4, and 5 of Case II, c. of the guidelines are applicable to the Tapia discharge. Portions of Malibu Creek downstream from the point of discharge, such as at Cross Creek Road and Malibu Lagoon, are readily accessible to the public. In addition to access to the creek at Cross Creek Road, a trail, commencing above Malibu Lagoon near Cross Creek Road, follows Malibu Creek upstream for some distance. The trail is used extensively by hikers and horseback riders and is included within that portion of the Santa Monica Mountains National Recreation Area which is scheduled for acquisition by the National Park Service. Exclusion of the public from these portions of Malibu Creek is clearly not a realistic alternative

Secondly, the recreation potential of the Cross Creek Road area of Malibu Creek and Malibu Lagoon is high and is justified because of their proximity to the Pacific Ocean and their inclusion within the Santa Monica Mountains National Recreation Area. Although the evidence in the record is conflicting, the record indicates that significant public body contact recreation use occurs at Malibu Lagoon, especially by children wading, and more limited use in the Cross Creek Road area. In addition, the record reflects that Malibu Creek between the point of discharge by the Tapia Plant and Cross Creek Road, although access is difficult, is subject to limited body contact recreation use.

Finally, the hearings which we have held in this matter, convince us that there is significant public interest and that segments of the resident population expect body contact recreation in Malibu Creek.

We are of the opinion that a requirement of filtration or an equivalent treatment process is appropriate for the Tapia discharge. Portions of Malibu Creek and Malibu Lagoon are subject to significant body contact recreation use during the summer months, when ingestion is likely to occur. During the dry weather months, there is little dilution in the creek, and viruses are more prevalent in the general population.  $\frac{11}{}$  Studies have indicated that viruses can be isolated in secondary effluent which has been disinfected to meet the Department's coliform standard of 2.2 most probable number per 100 milliliters.  $\frac{12}{}$  Some of the viruses which are of particular concern from a public health standpoint, such as hepatitis and gastroenterites viruses, are not even detectable, however.  $\frac{13}{}$  Further, there is a dispute in the scientific community over whether or not there are infectious dose levels for viruses.  $\frac{14}{}$ 

<sup>11.</sup> Gelfend, H.M., "The Occurrence in Nature of the Coxsackie Echo Viruses", Journal-Progress in Medical Virology, p. 193, (1961).

<sup>12.</sup> Vaughn, J.M., Landry, E.F., Baranosky, L.T., Beckwith, C.A., Dahl, M.D., and Delihas, N.C., "Survey of Human Virus Occurrence in Wastewater - Recharged Groundwater on Long Island", Applied and Environmental Microbiology, 36:1:47, (July 1978). See also the District's "Enteric Virus Study, Final Report, September, 1980."

<sup>13.</sup> Chronicle of Viral Hepatitus, Bureau of Hygiene and Tropical Diseases, Volume 54, No. 11, pp. 1113-1135 (Nov. 1979).

<sup>14.</sup> Platkin, Stanley A. and Katz, Michael, "Minimal Infectious Doses of Viruses for Man by Viral Route", Symposium, Editor Gerald Berg, pp. 151-161 (1967).

Given these uncertainties, we believe that a conservative approach is absolutely necessary. 15/ We concur with the opinion of the state and local health officials that filtration or an equivalent treatment process is necessary for the Tapia Plant discharge in order to adequately protect public health.

Advocates for Balanced California Development, Inc., (ABCD) challenges the legality of the filtration requirement, however, on the ground that it conflicts with Water Code §13360. This section prohibits the State and Regional Boards from specifying in waste discharge requirements "the design, location, type of construction or particular manner in which compliance may be had" with the requirements. ABCD contends that the Regional Board must limit itself to setting standards, for example, for viruses, and give the District the opportunity to decide upon the most appropriate means of achieving the standards.

We are of the opinion that one of the major objectives of filtration, that is, ensuring a virtually virus free effluent, can be implemented by inclusion of an appropriate standard in

<sup>15.</sup> We follow the guidance of the Study Panel to the State Board, which prepared a report on recommended changes in water quality control for the California Legislature in March 1969, stating:

<sup>&</sup>quot;Conservatism in the direction of high quality should guide the establishment of objectives both in water quality control plans and in waste discharge requirements. A margin of safety must be maintained to assure the protection of all beneficial uses."

Final Report of the Study Panel to the California State Water Resources Control Board, Recommended Changes in Water Quality Control, prepared for the California Legislature, March 1969, pp. 3 and 15.

the waste discharge requirements for the Tapia Plant. Accordingly, the waste discharge requirements which we adopt as a part of this  $\operatorname{Order}, \frac{16}{}$  which modify Regional Board Order No. 80-9, contain a requirement that the Tapia Plant effluent be essentially pathogen free.  $\frac{17}{}$  By this we mean that the effluent must meet the existing limits in Order No. 80-9 for coliform organisms (2.2 most probable number per 100 ml) and for turbidity (2 turbidity units on a 30-day average). In addition, the effluent must be virtually virus free.

To implement the latter requirement, the waste discharge requirements which we adopt mandate filtration or an equivalent treatment process. We concur with the opinion of most experts in the health field that coagulation and filtration or an equivalent system, under the current state of the art, appears to be the best method for eliminating viruses.  $\frac{18}{}$ 

We do not agree that Water Code Section 13360 precludes the State or Regional Boards from specifying the manner

<sup>16.</sup> See Attachment A.

<sup>17.</sup> We note that the State Department of Health Services has proposed a change in its regulations, governing the use of reclaimed water for irrigation of parks, playgrounds, schoolyards and other areas, which would incorporate this standard. 22 C.A.C. §60313.

<sup>18.</sup> See, e.g., Merrill, Jr., J.C., Jopling, W.F., Bott, R.F., Katko, A., and Pintler, H.E., "The Santee Recreation Project, Santee, California - Final Report", Federal Water Pollution Control Administration, (1967); "Pomona Virus Study, Final Report", Sanitation Districts of Los Angeles County, February, (1977).

of compliance with waste discharge requirements in NPDES permits. The Porter-Cologne Water Quality Control Act, Division 7 of the Water Code, provides that, notwithstanding any other provision of the division, the State and Regional Boards shall issue NPDES permits as required or authorized by the Clean Water Act, 33 U.S.C. §§1251 et seq., to ensure compliance with the Federal Act. Water Code §13377.

Under the Clean Water Act, effluent limitations, effluent standards and prohibitions, and standards of performance promulgated by EPA are enforced through the issuance of NPDES permits. Prior to the adoption of such limitations, standards, and prohibitions, the Administrator of EPA is authorized by the Act to impose "such conditions as the Administrator determines are necessary" to carry out the provisions of the Act. 33 U.S.C. §1342 (a)(1); see NRDC, Inc. v. Costle, 568 F. 2d 1369 (DC Cir. 1977). In addition, EPA regulations adopted under the Clean Water Act authorize conditions in NPDES permits setting "best management practices" where numeric effluent limitations are infeasible or where reasonably necessary to achieve effluent limitations and standards or to carry out the purposes and intent of the Act. 40 C.F.R. §122.62(K). "Best management practices" are defined to include, for NPDES permits, "treatment requirements, operating procedures, and practices to control . . . sludge or waste disposal . . . . " 40 C.F.R. §122.3. (emphasis added).

Consequently, since the Clean Water Act authorizes the imposition of conditions including best management practices, in

NPDES permits where limitations and standards have not been promulgated, the Porter-Cologne Act gives the State and Regional Boards the same authority. To the extent that this authorization is inconsistent with the provisions of Water Code Section 13360, the authority of the State and Regional Boards to implement the provisions of the Clean Water Act under Water Code Section 13377 must prevail. See Water Code Section 13372.

At the present time, no effluent standards or limitations have been adopted by EPA for viruses. Further, we find that the imposition of numeric effluent standards for viruses is infeasible. As stated previously, some of the viruses of concern are not even detectable. A state of the art review of virus research indicates that no "indicator" viruses, analogous to the use of coliform bacteria as an indicator of bacterial pathogens, have as yet been selected. Further, we find that filtration or its equivalent is reasonably necessary in order for the District to achieve an essentially pathogen free effluent. 19/
Under these circumstances, the Regional Board acted properly in conditioning the District's permit on a requirement that the effluent be filtered or receive equivalent treatment.

<sup>19. &</sup>quot;The St. Petersburg Success Story - Spray Irrigation", by Flora Mae Wellings, Sc.D.; speech presented at the November 8, 1977 Annual Joint Meeting of the Florida Sections of the AWWA and WPCF.

Finally, we observe that this entire discussion appears to be academic because the District has adopted a resolution evidencing its intent to construct filters, regardless of grant funding. In any case, the District must install filters in order to implement the dual water system.

## B. Prohibition of Summer Discharge

The District and ABCD challenge the propriety of the ban on summertime discharge prior to the construction of filters on the ground that it is not supported by the findings in Order No. 80-9 nor by the record before the Regional Board. The District contends that the Regional Board continued its ban on a summertime discharge on the basis of health concerns, but that there was no evidence, as required by State Board Order No. WQ 76-11, to indicate that the discharge of unfiltered effluent during the summer months presents a threat to the public health. The District cites the testimony of Dr. Leong at the Regional Board hearing, at which Dr. Leong stated that, in his opinion, the risk of viral infection from the discharge of effluent to Malibu Creek was less than that from everyday person-to-person contact.

After reviewing the record, including the record of the State Board hearing on June 30, we conclude that a ban on summertime discharge until the District constructs filters or an acceptable pathogen free alternative is appropriate and proper. At the June 30 hearing, representatives from the State and Los Angeles County Departments of Health Services testified

that it was their recommendation, from a public health standpoint, that the summertime discharge of unfiltered effluent be prohibited.  $\frac{20}{}$  John Gaston, Chief of the Sanitary Engineering Section of the State Department of Health Services, in particular, testified that he felt that the discharge of unfiltered effluent was not safe from a public health standpoint due to the fact that viruses have been isolated in secondary effluent.  $\frac{21}{}$ 

Representatives of both agencies further testified, however, that, if the Regional Board were to allow the summertime discharge of unfiltered effluent, the Departments would not object to a proposal whereby the District would discharge only  $\frac{22}{\text{surplus}}$  unfiltered effluent to the creek during the interim prior to the construction of filters provided that: (1) waste discharge requirements for the District included a specification that the District post the creek to warn users against body contact recreation such as swimming; and, (2) discharge requirements mandated the construction by the District of

<sup>20.</sup> R.T., pp. 192-193, 202.

<sup>21.</sup> R.T., pp. 191-192.

<sup>22.</sup> See R.T., pp. 11-14 and the Internal Memo from Raymond Hertel, Regional Board Executive Officer, to the Los Angeles Regional Board members, dated June 12, 1980, discussing a Regional Board staff proposal whereby the District would be allowed to discharge only surplus effluent to Malibu Creek during the summer months prior to the construction of filters. Surplus effluent was considered to be only the excess flow remaining after full utilization by the District of its spray disposal areas and percolation ponds, maximum reclamation, and maximum use of the Los Angeles diversion.

necessary standby power or storage facilities, or both to provide alternate disposal capability in the event of a plant upset.  $\frac{23}{}$ 

We find that a proposal whereby Malibu Creek would have to be posted to warn against swimming and other forms of body contact recreation does not adequately protect the beneficial uses of Malibu Creek. In Order No. WQ 76-11, this Board stated that a prohibition on flow is justified where necessary to protect water quality and beneficial uses. 24/ We conclude that, in order to adequately protect the water quality and beneficial use of Malibu Creek for body contact recreation, a prohibition against the summertime discharge of effluent until the District constructs filters or their equivalent is appropriate and proper. We follow the recommendations of the State and County Departments of Health Services in this matter.

The District has raised a number of additional issues regarding the ban on summertime discharge of unfiltered effluent. The District contends, for example, that the Regional Board, by prohibiting a summer creek discharge, in essence mandated land disposal, in violation of Water Code Section 13360. This Board finds, however, that Pacific Water Con. Assn. v. City Council, 73 C.A.3d 546, 554, 140 Cal.Rptr. 812 (1977), is dispositive of this issue, and the District's contention is without merit.

<sup>23.</sup> R.T., pp. 186-192, 194-195, 201-203. The Los Angeles County Department of Health Services has, in a letter to the State Board dated July 24, 1980, modified its position on the latter requirement by recommending only a requirement that the District prepare contingency plans to handle long-term plant upsets or operational problems. The July 24, 1980 letter modified two prior letters submitted by the County.

<sup>24.</sup> See Water Code §§13263, 13241.

The District also argues that the ban on summertime creek discharge fails to implement the relevant water quality control plan (basin plan) for the area, which the District contends, mandates creek discharge of the Tapia Plant effluent.

The basin plan, however, contains no such mandate. The basin plan recommends creek discharge as the most practical and economical method to dispose of surplus effluent, i.e. effluent which is not being reclaimed or spray disposed on land, in the future. 25/

At the same time, the basin plan also recommends that the District continue its program and study on virus removal. 26/

This order, by prohibiting the summertime creek discharge of effluent on an interim basis until the District constructs filters or an acceptable pathogen free alternative, obviously does not preclude the future discharge of surplus effluent to the creek and is entirely consistent with the basin plan.

In addition, the District challenges the propriety of the ban on summer discharge on the ground that it conflicts with Water Code Section 13263. This section provides that a Regional Board shall consider the provisions of Section 13241 in adopting waste discharge requirements. Section 13241 provides, in part, as follows:

"Factors to be considered by a regional board in establishing water quality objectives shall include, but not necessarily be limited to all of the following: (a) Past, present, and probable future beneficial uses of water.

<sup>25.</sup> Water Quality Control Plan, Los Angeles, River Basin (48), page II-16-285.

<sup>26.</sup> Id.

- (b) Environmental characteristics of the hydrographic unit under consideration, including the quality of water available thereto.
- (c) Water quality conditions that could reasonably be achieved through the coordinated control of all factors which affect water quality in the area.
- (d) Economic considerations.
- (e) The need for developing housing within the region."

With respect to subsection (a), the District cites the positions of the Departments of Fish and Game and Water Resources with respect to flow augmentation of Malibu Creek. The District also contends that a creek discharge would dilute the naturally occurring concentrations of coliform bacteria in the creek and the relatively high TDS concentrations occurring in the summertime, thereby allowing for greater beneficial use of the receiving waters for irrigation.

It should be noted that the Department of Fish and Game has indicated its support for creek discharge of the Tapia Plant effluent "[i]f the public health issues can be satisfactorily resolved". 27/ This Board finds that a temporary prohibition against a summertime creek discharge, pending a demonstration by the District that the Tapia effluent has received treatment equivalent to that of a filtered wastewater, achieves an appropriate balance between protection of the creek for body contact recreation uses and protection and enhancement of the riparian habitat value and other beneficial uses of the creek.

With respect to subsections (d) and (e), the District maintains that a ban on summertime discharge will have dire

<sup>27.</sup> Memo, dated July 8, 1980, from the Department of Fish and Game to the State Board.

economic consequences and will severely impact the need for developing housing in the Las Virgenes area. These contentions will be addressed at a later point in this order.

For the above reasons, this Board finds that a temporary ban on summer discharge is appropriate. Conversely, we conclude that a compliance schedule, which would allow the District to continue its creek discharge pending construction of filtration facilities or an acceptable alternative, is not acceptable.

### C. Flow Limitations

Order No. 80-9 limits the average daily discharge to Malibu Creek during the winter months to  $5.55~\text{mgd}.\frac{28}{}$  The District contends that this limitation is really a connection ban in disguise and that such as action may be taken only in the context of a cease and desist order hearing under Water Code Section 13301.

This contention is without merit. In State Board Order No. WQ 76-11, discussed above, the State Board held that a Regional Board may, under appropriate circumstances, limit the flow of a proposed discharge. The order gives the following example of an appropriate flow limitation:

<sup>28.</sup> See footnote 7 supra. The order also includes a dry weather flow limitation of 4.5 mgd, which would become effective only after filtration facilities are installed, and after Order 80-9 expired. Therefore, there does not appear to be any real issue regarding this flow limitation. The requirements which we adopt in Attachment A also expire on March 31, 1982, prior to the expected completion date for construction by the District of filters. At that time, the propriety of a dry weather flow limitation should be addressed by the Regional Board.

"Assume, for example, a discharger proposing a discharge flow of 8 mgd with disposal facilities, including reclamation, spray disposal fields and percolation ponds, of a limited capacity of 4.5 mgd. Is there any real question that, under these circumstances, a Regional Water Quality Control Board would have any alternative except to limit the effluent flow to 4.5 mgd? (Footnote omitted)

The record indicates that the Regional Board included the flow limitation of 5.55 mgd in Order No. 80-9 because the District has limited lands available for the disposal of effluent; and, if the District were allowed to increase the flow of its winter-time creek discharge without purchasing additional land or taking other action, the District might have difficulty disposing of the effluent off-stream during the summer months. Under these circumstances, the flow limitation was proper.

The waste discharge requirements which we adopt as a part of this order, however, contain the following flow limitations:

- 1. A maximum of 6 mgd influent until the solids handling facilities upgrading project has been completed and the hydraulic capacity of the plant has been restored to its original condition, as determined by the Executive Officer of the Regional Board.
- 2. After the original hydraulic capacity has been restored, a maximum flow of 8 mgd.

This Board emphasizes that these flow limitations are maximums only, and that the District must comply at all times with the prohibition on summertime creek discharge until the District installs filters or an acceptable alternative. The requirements which we adopt obligate the District to submit

a plan to the Regional Board, which details how the District will keep its effluent out of the creek during the summer months. The plan must address acquisition of additional easements or lands, water reclamation, water conservation, control of infiltration/inflow, and any other measures deemed necessary by the District to ensure off-stream disposal. In developing this plan, the District must consult with Los Angeles and Ventura Counties and other agencies whose involvement would be required. Should the District fail to comply with the ban on summertime creek discharge, the State Board hereby directs the Regional Board to consider adoption of a cease and desist order with a connection ban.

## D. Effect of Order No. 80-9 on the Economy and on the Need for Developing Housing in the Area.

The District and ABCD contend that Order No. 80-9 is invalid because the Regional Board failed to make findings regarding the effects of its order on the economy and on the need for developing housing within the area. These factors must be considered in the adoption of waste discharge requirements under the provisions of Water Code Sections 13263 and 13241. The Regional Board record indicates that no findings were made on these issues apparently because no evidence was introduced on them.

Any error which might have resulted, however, has been cured by the State Board hearing on June 30 and subsequent submittals, at which the Board considered evidence introduced by ABCD and others on these issues, and this Order which contains findings on these issues.

The record indicates that the average daily dry weather flows into the Tapia Plant are now approximately 5 mgd, and that these flows are expected to reach 6 mgd by February,  $1982.\frac{29}{}$  At the June 30, 1980, State Board hearing, District representatives stated that, once the new disinfection facilities came on line, thereby restoring a regulatory reservoir, the District could dispose of its present flows of 5 mgd to land. Further, the District indicated that it could currently contain flows of up to 6 mgd (which would not be reached until February, 1982) on land, at least for short periods of time.  $\frac{31}{}$ 

The District has indicated that it currently can dispose of approximately 1 mgd through reclamation, .5 mgd to the percolation ponds, approximately 3 mgd to the spray disposal fields,

<sup>29.</sup> R.T., pages 37, 154.

<sup>30.</sup> R.T., pages 27, 28, 37.

R.T., pages 155; Report entitled, "Tapia Effluent Disposal 31. Capabilities", pp. 6-7; District's Second Supplement for Petition for Review, p. 6. Despite the District's testimony at the June 30 hearing, District representatives testified at the November 5 hearing and indicated in correspondence to the State Board that, in order to comply with the requirements in Attachment A, the District would incur additional annual operation and maintenance costs of \$500,000, in the interim prior to the construction of filters, for the additional necessary spray fields. These figures are based on the assumption that the District will need to acquire the right to dispose offstream of an additional 2 mgd of effluent. Letter, dated November 10, 1980, from the District to Shelia [sic] Vassey of the State Board, p. 2; Reporter's Transcript of the November 5, 1980 State Board hearing, pg. 47. This assumption appears to be clearly inconsistent with the District's testimony at the June 30 hearing and with correspondence from the District.

and .5 through a diversion to the City of Los Angeles.  $\frac{32}{}$  In addition, the District has authority to use about 20 acres of land, with a disposal capacity of .2 mgd, which are currently left dry and in reserve by the District. Costs of setting up this acreage for spray disposal on a routine basis are estimated at \$57,000.  $\frac{33}{}$ 

The District has also in the past utilized the fields at Sampo Rancho for disposal of effluent during periods of plant upset and predicts that this will remain a possibility in the future. The costs of acquiring the right to use the property, which has a spray disposal capacity of 1.4 mgd on a routine basis, for the two-year period prior to construction of filters, would include capital costs of from \$127,000 to \$200,000 and legal condemnation costs. In addition, the District anticipates that the annual operation and maintenance costs for this parcel of land would range from \$172,611 to \$229,500 per mgd. 34/

These costs, assuming that the District must purchase additional pipe and equipment and incur additional operation of maintenance and legal condemnation costs to enable the District to temporarily use the Sampo Rancho, do not appear to us to be excessive in light of the public health benefits to be obtained by a temporary ban on summer discharge.

<sup>32.</sup> R.T., pages 150-155; "Tapia Effluent Disposal Capabilities", pp. 4, 5, 6. The District anticipates, however, that permission to divert influent to Los Angeles on a routine basis will not be granted until next spring or summer.

<sup>33.</sup> Memo to H. W. Stokes from Jim Colbaugh, dated July 10, 1980, p. 3.

<sup>34. &</sup>lt;u>Id</u>. at p. 2. Letter, dated November 10, 1980, from the District to Shelia [sic] Vassey of the State Board, p. 2.

Further, we have reviewed the materials submitted by ABCD regarding the impacts of a connection ban on the economy and the need for housing in the Las Virgenes area, including a report prepared by Envicom Corporation, dated May, 1980, entitled "Analysis of the Impact on Housing and the Economy in the Las Virgenes Municipal Water District and the Triunfo County Sanitation District Resulting from the Discharge Requirements in Order 80-9 of the California Regional Water Quality Control Board, Los Angeles Region." The report assumes that the District will be unable to comply with a ban on summer discharge to Malibu Creek and that a sewer hook-up moratorium of either 15 or 20 months duration will be imposed by the Regional Board, and concludes that disastrous consequences will ensue.  $\frac{35}{}$  This Board finds these predictions to be speculative at best. The record indicates that the District has the ability now to dispose of its effluent in compliance with the requirements which we adopt as a part of this Order and has available options to enable it to continue off-stream disposal during the summer months until filters are installed. Even assuming that a sewer moratorium becomes necessary, however, this Board considers protection of the public health to be of paramount importance to prevention of a temporary delay in housing construction.

<sup>35.</sup> Materials in the record indicate that the approximate price of housing in the District ranges from \$120,000 to more than \$300,000, and that there are apparently no low income units available in the area. R.T., p. 246; ABCD's Response to Request by State Water Resources Control Board.

### III. ADDITIONAL FINDINGS

In addition to the above issues, a number of other contentions have been raised by the petitioners. A discussion of some of them follows. The State Board has determined that the remaining contentions fail to raise substantial issues which are appropriate for review.

### A. Jurisdiction

ABCD contends that Order No. 80-9 is invalid because it was in excess of the jurisdiction granted to the Regional Board by the State Board in Order No. WQ 78-4. ABCD argues that Order No. WQ 78-4 granted limited jurisdiction to the Regional Board to terminate a year-round discharge only if the Malibu Creek study results were contrary to the findings in Order No. WQ 78-4.

We do not think that a jurisdictional issue has been raised. The Regional Boards, in general, have jurisdiction to review and modify waste discharge requirements at any time.  $\frac{36}{}$ 

Whether or not the Regional Board complied with the provisions of State Board Order No. WQ 78-4 raises a different issue. Appendix A of the order clearly provided that the creek discharge would be permitted for a maximum period of 18 months, at which time "permission to discharge will be reviewed and may be extended, modified, or terminated depending on the results of the [Regional Board staff's] evaluation" of the Malibu Creek study.  $\frac{37}{}$  Given the fact that, at the conclusion of the study,

<sup>36.</sup> Water Code §§13263(d), 13372.

<sup>37.</sup> Discharge Limitation A.2.

the virus study was determined to be invalidated, we find that the Regional Board did not violate the provisions of Order No. WQ 78-4 by acting upon the recommendations of the appropriate health officials in temporarily banning a summer creek discharge.

### B. Coliform Sampling Point

Both Dr. Frommhagen and Monte Nido Property Owners' Association take the position that Order No. 80-9 is defective in not establishing the sampling point for coliform at the point of discharge to the Creek. Rather, the Order provides, in Effluent Limitation B.8, that "the wastes shall be considered adequately disinfected if the median number of coliform organisms at some point in the treatment process does not exceed 2.2 per 100 milliliters. . . . " (emphasis added)

The coliform sampling point was established "at some location in the treatment process" upon the recommendation of the State Department of Health Services. 38/ In general, the lowest total coliform counts are obtained as the effluent leaves the chlorine contact chamber; hence, this is the location that demonstrates maximum effectiveness of the disinfection process. If the sampling point were placed at the entry of the effluent to the creek, there would be ample opportunity for the addition of coliforms of non-sewage origin. Therefore, samples taken at that location might not be indicative of the number of coliform organisms emanating from the wastewater treatment plant.

<sup>38.</sup> R.T., pp. 181-182, 199; See also 22 C.A.C. §60315, pp. 13-14, supra.

We conclude that a requirement that coliform samples be taken at some point in the treatment process is proper.

### C. Threat of Flooding and High Water Tables

Dr. Frommhagen contends that, since the lagoon is closed by a sand bar during the summer months, the discharge of effluent during this time will cause high water levels in the lagoon and possible floods. In addition, he contends that the District prevailed upon Regional Board staff to eliminate from the scope of the one-year Malibu Creek study, a study of the water levels and tables in the area.

Although Finding 7 of Order No. 80-9 states that Malibu Lagoon is generally closed by a sand bar during low flow months, this statement applies to natural conditions. During 1978-79 the Los Angeles County Department of Beaches in cooperation with the Los Angeles County Engineer, maintained a regular schedule for breaching the sand bar during the summer months, that is, whenever it was not breached by natural flows. The Regional Boards anticipate that this activity will continue as part of the General Management Plan for Malibu Lagoon State Park. To provide additional assurance that a program for breaching the sand bar during the summer months is maintained on a regular basis, this Order directs the Regional Board to enter into a memo of understanding with the State Department of Parks and Recreation, the State Department of Health Services, and the District regarding this matter.

Dr. Frommhagen's latter contention is unsupported by any evidence in the record. According to the Regional Board staff, a study of water levels and water tables was deleted from the original Malibu Creek Study Plan after discussions between Regional Board staff, Dr. Frommhagen, District staff and Mr. John Mitchell of the Los Angeles County Flood Control District. 39/ It was the Regional Board's conclusion, with which we concur, that the measurement of groundwater levels in the area of Cross Creek Road and in the vicinity of the lagoon would serve no useful purpose since it would be impossible to isolate the effects of tidal infiltration from those of the discharge originating six miles upstream. The problem appears even less critical when one considers that, even with an 8 mgd flow addition to the creek during low flow summer months, the water level at Cross Creek Road would be raised only about one inch.

## D. Effect of Discharge Upon the Growth of Riparian Vegetation

Dr. Frommhagen maintains that the discharge of nutrientrich effluent from the Tapia facility will stimulate the growth
of riparian vegetation in the creek, particularly the growth of
willows, thereby increasing the threat of flooding. The District's
study on the effects of creek discharge on riparian vegetation,
Supplemental Report II of the Malibu Creek Study, showed that
there had been an increase in riparian growth below the points
of discharge of Tapia effluent to the creek, and an increase in

<sup>39.</sup> Regional Board's "Response to the Petition of Laurence H. Frommhagen", pp. 13-14.

foliage/twig concentrations of phosphorus and zinc was also noted. However, similar increases in these elements (plus nitrogen) above natural background were also found adjacent to newly urbanized areas and adjacent to old farm sites, as well as in the luxuriant willow growth along Topanga Creek where there is no effluent discharge. It was concluded that "whether there is a treatment plant or not, the riparian growth in [Malibu and Topanga Canyons] will show a high fertility input as long as there are sources of these elements extraneous to natural background, or specifically, human activity". 40/

The report indicates that the overall deleterious effects of increased willow growth on flood channel capacity due to effluent or other sources can be readily handled with only a modest program of willow-control on approximately 20 acres of the lower channel. 41/ The District has indicated its willingness to maintain such a program, if needed. Removal of riparian willows must be carefully controlled, however, in view of the Coastal Commission's requirement that the Los Angeles County Flood Control District replant willows which were removed during the dredging of Malibu Creek, between Cross Creek Road and Pacific Coast Highway, in late 1979.

## E. Finding 14 of Order No. 80-9

Monte Nido Property Owners' Association objects to Finding 14 of Order No. 80-9 which states that the quality of

<sup>40.</sup> SR II - 13 and 14.

<sup>41.</sup> SR II - 14.

the Tapia effluent is excellent and could provide enhancement of aquatic habitat in Malibu Creek if year-round discharge were permitted. This finding has been deleted from the requirements which we adopt in this Order. However, we note that the Malibu Creek Study and the record before the State Board support a conclusion that in dry years, when extensive reaches of the creek suffer dryouts, or extremely low flows, a limited augmentation of stream flow by the discharge could contribute to the maintenance of more stable fish and macroinvertebrate populations, as well as minimize problems caused by excessive proliferation of certain species of algae. In addition, the Department of Fish and Game continues to favor stream enhancement in the dry summer months.

### F. State Board Resolution No. 79-45

Dr. Frommhagen contends that Order No. 80-9 violates State Board Resolution No. 79-45 on wastewater discharges to streams. This resolution provides that wastewater should be discharged to streams only if there is an instream beneficial use, which does not preclude offstream reclamation/reuse alternatives. We find no violation of Resolution No. 79-45. Order No. 80-9 allows a year-round creek discharge, after filters are installed, of appropriately treated wastewater only in excess of flows which can be reclaimed for beneficial use. 42/

<sup>42.</sup> Discharge Limitations A.1. and A.2., footnote 7, supra.

### G. Wet Weather Discharge Dates

Monte Nido Valley Property Owners Association questions the propriety of specifying in waste discharge requirements for the Tapia discharge that creek discharge is permitted from November 15 through March 15.43/ Petitioner contends that the wet weather discharge period should be defined in terms of the natural flows in Malibu Creek, rather than by arbitrary dates. Petitioner's principle concern is that there may be no rainfall prior to November 15 and, consequently, insufficient stream flow to provide a large amount of dilution for the Tapia discharge after November 15.

The waste discharge requirements which we adopt in Attachment A allow a creek discharge during the November 15 through March 15 period only after maximum reclamation and maximum use of all spray disposal fields consistent with good management practices. 44/ Therefore, if properly administered, the discharge to the creek during this period should not exceed the amount that is absolutely necessary. Further, the discharge would occur during a time when body contact recreational use of the creek should be minimal.

The principle reason for the need for a discharge during this period is that, even though there may be no rainfall, evapotranspiration and evaporation from the land disposal areas are significantly reduced due to colder temperatures and shorter days.

<sup>43.</sup> Discharge Limitation B.1(c) of Attachment A.

<sup>44.</sup> Id.

The colder temperatures and shorter days both reduce the potential for evaporation and result in less vigorously growing plants and an attendant reduction in water need.

The exact determination of the November 15 to March 15 period was apparently based on an estimate by the Regional Board staff as to the time when such a discharge would most likely be necessary and appropriate. While this estimate may appear to be somewhat imprecise, since it is based upon the years of experience of the staff, it may actually be a better estimate than one which could be derived from evapotranspiration and stream flow data.

### H. Delegation to the Regional Board Executive Officer

Order No. 80-9 authorizes the Regional Board Executive Officer to approve alternative treatment processes which he determines are equivalent to filtration.  $\frac{45}{}$  Monte Nido Valley Property Owners Association contends that this constitutes an illegal delegation of authority by the Regional Board.

We do not agree that Order No. 80-9 illegally delegates authority to the Executive Officer. However, given the significant public interest in the Tapia Plant discharge, we conclude that it would be appropriate and desirable for the Regional Board to determine the equivalency issue at a regularly scheduled Board meeting. The requirements which we adopt in Attachment A, therefore, are worded accordingly.  $\frac{46}{}$ 

<sup>45.</sup> Effluent Limitation B.10.

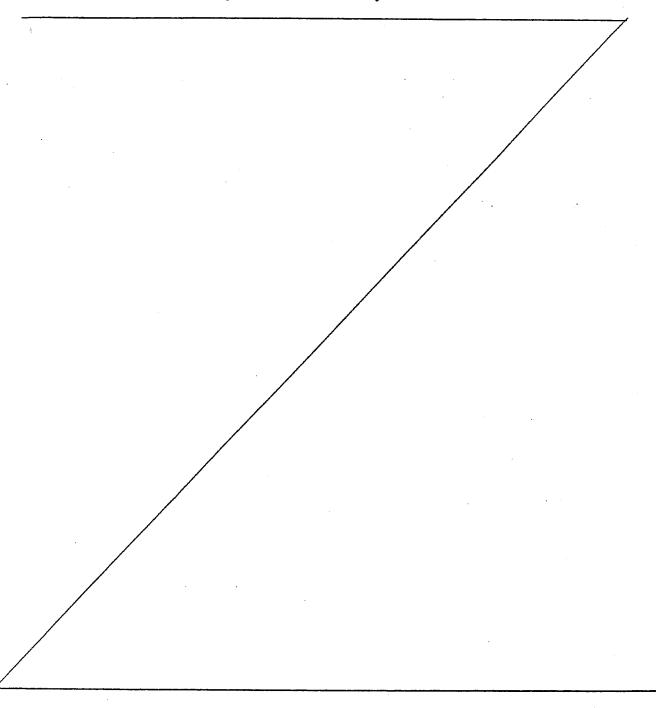
<sup>46.</sup> Discharge Limitation B.11, Attachment A.

### IV. CONCLUSIONS

After review of this matter, and for the reasons previously stated, we conclude that:

- 1. A requirement that the Tapia Plant effluent be essentially pathogen free is appropriate;
- 2. A requirement that the Tapia Plant effluent be filtered or receive equivalent treatment, in order for the District to achieve an essentially pathogen free effluent, is appropriate and proper;
- 3. A temporary ban on summertime discharge to Malibu Creek from the Tapia Plant, until the District complies with the requirement that the plant effluent be filtered or receive equivalent treatment is appropriate and proper.
- 4. Order No. 80-9 should be revised to include a flow limitation of 6 mgd, until the solids handling facilities upgrading project has been completed and the hydraulic capacity of the plant is restored to its original condition, as determined by the Regional Board Executive Officer; and, that thereafter, a flow limitation of 8 mgd is appropriate.
- 5. Protection of the public health is of paramount importance, giving due consideration to the potential effects on the economy and the need for developing housing of a temporary ban on summer discharge to Malibu Creek until the District achieves an essentially pathogen free effluent.

The Board further concludes that waste discharge requirements should be issued to the District, which modify Order No. 80-9 in accordance with this Order. The requirements which we adopt modify certain of the findings in Order No. 80-9 for purposes of clarity and consistency with this Order.



### V. ORDER

### IT IS HEREBY ORDERED THAT:

- 1. The waste discharge requirements contained in Attachment A of this Order, which modify Order No. 80-9, are hereby adopted.
- 2. The waste discharge requirements (Attachment A) are remanded to the Regional Board for all purposes including, but not limited to, all appropriate enforcement activities.
- 3. The Regional Board is directed to enter into a memo of understanding with the State Departments of Parks and Recreation and Health Services and the District regarding the maintenance of a program to breach the sand bar at Malibu Lagoon on a regular basis and, whenever necessary, during the summer months.

Dated: NOVEMBER 20, 1980

Carla M. Bard, Chairwó<del>man</del>

NO William J. Miller, Vice-Chairman

L. L. Mitchell, Member

July B. Dunlap, Member

F. K. Aljibury, Member