STATE OF CALIFORNIA STATE WATER RESOURCES CONTROL BOARD

In the Matter of the Petition of the Malibu Canyon Property Owners Association for Review of Order No. 75-93 (NPDES Permit No. CA0056014) of the California Regional Water Quality Control Board, Los Angeles Region

Order No. WQ 75-30

BY BOARD MEMBER DODSON:

On August 21, 1975, the Malibu Canyon Property Owners Association (petitioner) petitioned the State Water Resources Control Board (State Board) requesting a review of Order No. 75-93 (NPDES Permit No. CA0056014) adopted by the California Regional Water Quality Control Board, Los Angeles Region (Regional Board) on July 21, 1975. Order No. 75-93 establishes waste discharge requirements for Las Virgenes Municipal Water District (District) at its Tapia Water Reclamation Facility, hereafter referred to as the Tapia Plant. An amended petition was filed by petitioner on September 30, 1975. Petitioner requested a stay of Order No. 75-93 pending review by the State Board.

On November 17, 1975, the State Board held a hearing for the purpose of receiving evidence relative to the appropriateness and propriety of adoption of Order No. 75-93 by the Regional Board and also for the purpose of receipt of evidence relative to the granting or denial of the stay requested by the petitioner.

I. <u>BACKGROUND</u>

The District operates the Tapia Plant which is an activated sludge treatment plant with nitrification. The design capacity of the Tapia Plant is 8 mgd, with present treatment flows slightly in excess of 4 mgd.

The District has been subject to waste discharge requirements for a number of years. The effluent from the Tapia Plant has been disposed of in a variety of ways. Portions of the effluent, approximately 10 percent to 15 percent, are reclaimed, primarily for agricultural and landscape irrigation. Other portions of the effluent are discharged to spray disposal areas.¹

In addition, the District has, at various times, discharged its effluent to Malibu Creek and Las Virgenes Creek, a tributary of Malibu Creek. Prior to the adoption of Order No. 75-93 by the Regional Board, the discharges to Malibu Creek were subject to the requirements of Order No. 74-362 (NPDES Permit No. CA0056014) adopted by the Regional Board on November 18, 1974.

Order No. 74-362 prohibited the discharge of waste by the District to surface waters or tributaries thereof except that treated effluent could be discharged "<u>during and immediately</u> <u>following periods of rainfall</u>" when the ground, i.e., the spray

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^{1.} The discharge of effluent by the District for reclamation purposes or to spray disposal areas are subject to waste discharge requirements separate from Order No. 75-93. These other waste discharge requirements are not in question in these proceedings.

disposal areas available to the District, were thoroughly saturated and would not absorb additional water.²

The District subsequently applied for revised waste discharge requirements resulting in Order No. 75-93. Under Order No. 75-93, the District may discharge to surface waters or tributaries thereof not only during and immediately after periods of rain, but up to 24 hours after such rain, and for even longer periods if the spray disposal areas are so saturated that they will not absorb additional water, "as determined by tensiometers installed in the spraying areas or by another effective method approved in advance by the Executive Officer."³

Order No. 75-93 also contained a number of other provisions which are discussed below.

Geographically, the Tapia Plant is located near Malibu Creek. Just downstream from the Tapia Plant, Malibu Creek passes through Tapia Park, a county park 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. Public access to Malibu Creek in the vicinity of the discharge is generally limited to the areas adjacent to and immediately upstream and downstream of Tapia Park and to the tidal prism area. This relative inaccessibility is principally

- 2. See Order No. 74-362, Discharge Prohibition A.
- 3. See Order No. 75-93, Discharge Limitations A.2.

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due to topography and private ownership of property which provides only limited access. Picnicking, hiking, fishing, beachwalkings, wading and surfing are generally limited to the areas of accessibility mentioned above. Beneficial uses of Malibu Creek and the lagoon are specified in the applicable water quality control plan and include water contact recreation and non-contact water recreation.

II. CONTENTIONS AND FINDINGS

The petitioner has raised a number of contentions related to Order No. 75-93. The contentions and our findings relative thereto are as follows:

1. <u>Contention</u>: Order No. 75-93 permits a discharge which is contrary to the requirements of the State Department of Health. Petitioner specifically claims that the discharge from the District must meet the reclamation requirements of Section 60315, Chapter 4, Article 5, Division 4, Title 22, California Administrative Code, which provides as follows:

> "60315. 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 23 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."⁴

^{4.} See Section 60301(n)(q)(r) and (s), Chapter 4, Article 5, Division 4, Title 22, California Administrative Code, for definitions of disinfection, oxidation, coagulation and filtration.

In summary, the petitioner contends that Section 60315 requires a treatment chain including at least an adequate process of disinfection, oxidation, coagulation, clarification and filtration, that Order No. 75-93 does not require these processes and that Order No. 75-93 is therefore improper and inappropriate.

<u>Findings</u>: It is true that Water Code Section 13523 provides as follows:

> "Each regional board, after consulting with and receiving the recommendations of the State Department of Health and after any necessary hearing shall, if it determines such action to be necessary to protect the public health, safety or welfare, prescribes water reclamation requirements for water which is used or proposed to be used as reclaimed water. Requirements may be placed upon the person reclaiming water, the user, or both. Such requirements shall include, or be in conformance with, the statewide reclamation criteria established pursuant to this article." The regional board may require the submission of a preconstruction report for the purpose of determining compliance with the reclamation criteria." (Emphasis added.)

However, at the hearing on November 17, 1975, both orally and in writing, the State Department of Health specifically indicated that its reclamation requirements set forth in Section 60315 did not apply to the discharge of the District to Malibu Creek or its tributary. The Department recognized that the criteria established by Section 60315 applied only to reclaimed water, and that the discharges covered by Order No. 75-93 did not

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^{5.} Water Code Section 13521 provides that the "State Department of Health shall establish statewide reclamation criteria for each varying type of use of reclaimed water where such use involves the protection of public health."

involve reclaimed water. The Department specifically stated in its letter of November 17, 1975, presented at the hearing:

"Regarding the discharge to Malibu Creek, we recognize that it is <u>not</u> water reclamation but specifically the disposal of waste water."

The Department went on to indicate that, while not legally obligated to do so by virtue of applicable reclamation criteria, the Department would certainly recommend that the requirements for the District require chemical coagulation and filtration or equivalent treatment for discharges to Malibu Creek.

The evidence at the hearing also indicated, however, that the Tapia Plant is an excellently operated and maintained treatment plant which produces an excellent effluent. As a matter of fact, the quality of the effluent actually exceeds the basic numerical parameter set forth in Section 60315, i.e., the effluent discharged from the Tapia Plant is consistently lower than the 2.2 MPN per 100 ml median criteria set forth in Section 60315. Order No. 75-93 specifically provides:

> "Wastes discharged to watercourses shall at all times have a median number of coliform organisms which does not exceed, at some point in the treatment process 2.2 per 100 milliliters, with a 90 percentile not exceeding 20 per 100 ml. The median value shall be determined from samples taken on seven sampling days each week, at least one sample per sampling day, collected at a time when wastewater flow and characteristics are most demanding on the treatment facilities and disinfection procedures."

It is obvious from the foregoing that Order No. 75-93 does not violate, either in form or in fact, applicable coliform requirements of the State Department of Health.

With respect to the health issue and Section 60315, petitioner, as already indicated, contends that the District must

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not only meet the numerical parameters of Section 60315, but also the treatment process specifications of Section 60315, i.e., disinfection, oxidation, coagulation, clarification and filtration. An obvious answer is the one already expressed, i.e., that the criteria expressed in Section 60315 admittedly do not mandatorily apply to the discharge of the District to Malibu Creek and its tributary.

However, the subject deserves some additional comment. The State Department of Health has again "recommended" that the treatment process specified in Section 60315 be imposed by the Regional Board. Generally speaking, the approach of the State Department of Health on the type of treatment processes which should be utilized in this case can best be described as processes which give the Department of Health a greater degree of "confidence" from a health standpoint.

Actually, however, at the hearing which took place on November 17, 1975, it appears that the State Department of Health concerns on treatment processes are related to the problem of turbidity in wastewater and the <u>possibility</u> that excessive turbidity may result in adverse health impacts due to viral dissemination. The substance of the evidence offered at the November 17th hearing on the question of turbidity indicated that the State Department of Health was that they would like to see turbidity of not more than 2 Jackson Turbidity Units (JTU) in discharges to Malibu Creek and its tributary.

Again, the evidence indicates that the turbidity parameter sought by the State Department of Health is, in fact, being

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met, and even exceeded, by the District in the subject discharges. Again, the requirements of Order No. 75-93 specifically prohibit the discharge of wastewater with turbidity greater than 2 turbidity units.⁶

In summary, although the District does not have a treatment process which at present utilizes coagulation, sedimentation, and filtration, it does produce an effluent which meets and even exceeds the basic constituent limits desired by the State Department of Health.

2. <u>Contention</u>: Order No. 75-93 will frustrate the purpose of an interagency monitoring committee which has been formed to study water quality problems in Malibu Lagoon.

<u>Findings</u>: The agency is in its formative stages only, the extent and nature of the study is not presently known, and there is no satisfactory evidence at the present time to support this contention. At least no such evidence was offered either before the Regional Board or at the November 17th hearing.

3. <u>Contention</u>: Order No. 75-93 violates federal law, specifically Section 201(d) of the Federal Water Pollution Control Act (P.L. 92-500), because the order does not require reclamation of all wastewater produced by the District.

<u>Findings</u>: While both Section 201 of the Federal Water Pollution Control Act and our own state law⁷ encourage reclamation

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See Order No. 75-93, Part B, Effluent Limitations 2a, b, and c.
See, for example, Water Code Section 13527.

of wastewater, neither existing federal law nor state law mandate reclamation as contended by petitioner. The evidence before us indicates that the District is making and intends to continue making maximum use of its wastewater for reclamation purposes.

III. ADDITIONAL FINDINGS

The hearing on November 17, 1975, did produce evidence on other subjects which are of considerable concern in this matter.

First, it appears that the District reads Order No. 75-93 as permitting a discharge of all of its wastewaters to Malibu Creek and its tributary, except for those wastewaters actually utilized for strictly reclamational purposes, e.g., agricultural irrigation, during the period mid-November to mid-March. The evidence before us indicates that approximately 10 percent to 15 percent of the District's wastewaters are utilized for such The District testified that their interpretation of purposes. Order No. 75-93 would not require further use of any spray disposal of wastewater, and that they were now permitted to discharge what would approximate 3.5 mgd of wastewater to Malibu Creek and its tributary during mid-November to mid-March. This interpretation was based upon that portion of Order No. 75-93 reading as follows:

"A. Discharge Limitations

The discharge of wastes by Las Virgines Municipal Water District to surface waters or tributaries thereto shall be limited to the following discharge conditions:

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1. Cold-weather discharge between mid-November and mid-March. This discharge shall be limited to flow in excess of that which can be reclaimed for beneficial use. (See Provision DL, below."

- "D. Provisions
 - 1. The Las Virgenes Municipal Water District shall encourage the use of reclaimed water for irrigation and other beneficial purposes."

From the evidence presented to us, the District did precisely what it considered that Order 75-93 permitted on November 15 and 16, 1975.

On the other hand, Mr. Ray Hertel, Executive Officer of the Regional Board, testified that this interpretation by the District of Order No. 75-93 was not proper and not the result intended by the Regional Board. His testimony indicated that discharge to Malibu Creek and its tributary was intended only as a "last resort", when all other methods of disposal, including spray disposal, had been exhausted. This interpretation is borne out by the agenda sheet prepared for the Regional Board at the time of their consideration of Order No. 75-93, which reads in part as follows:

> "Revised waste discharge requirements have been prepared. The principal changes made, based on the District's proposal and staff review, are the following:

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"Establishing new discharge limitations (Item A) relative to direct discharges to Malibu Creek allowing only excess wastewater, which cannot be reclaimed for irrigation or absorbed by spray disposal grounds, to flow to Malibu Creek during wet

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(rainfall and immediately thereafter) and coldweather (mid-November to mid-March) periods. The District will be required to install tensiometers in the spray disposal areas or utilize another effective and acceptable method to determine whether the spraying grounds are thoroughly saturated or not after rainfall periods."⁸

Obviously, there appears to be some inconsistency between the form of Order No. 75-93 and the apparent intent of the order which must be resolved.9

Secondly, there is at present very little factual data related to viral spread due to contact with wastewater. Various studies are underway at present which may provide some definitive answers in this area. From the testimony presented at the November 17, 1975, hearing concerning levels of treatment, the configuration of Malibu Canyon, and both air and water temperatures during the mid-November to the mid-March period, we must conclude that the dangers from virus due to the subject discharge are negligible.

- 8. See Page 2, Agenda Item 6.16, 181st Regular Meeting of Regional Board.
- The prime reason provided by the District to justify what it 9. considered the basis for its construction of Order No. 75-93 related to energy conservation and economics. The arguments of petitioner on this point are not particularly persuasive to us. The District claimed an approximate power cost of \$3,000 per month for pumping charges and monthly labor costs of approximately \$4,000 connected with reclamation uses and spray disposal. Admittedly, these figures must be adjusted by perhaps 15 percent for that portion of reclamation which will continue even under the District's interpretation of Order No. 75-93. With the adjustment, it appears that the District is relying upon an approximate monthly saving of approximately \$6,000, or a total saving of approximately \$24,000 for the period of mid-November to mid-March. The District's operating budget exceeds \$600,000, and whether there would be actual labor costs saved or whether labor activities would simply be redirected presents another question. In any event, while economics must and should be considered, it should be kept in mind that protection of water quality and beneficial uses of water constitute our prime concern.

Finally, there appears to be some inconsistency between some of the provisions of Order No. 75-93 related to coliform. As we have already pointed out, effluent limitation 9 requires that wastewater discharged to watercourses shall at all times have a median number of coliform organisms which does not exceed, at some point in the treatment process, 2.2 per 100 milliliters, with a 90 percentile not exceeding 20 per 100 ml. At the same time, effluent limitations 2a, b and c call for fecal coliform limits of 200 MPN/100 ml (30-Day Average) and 400 MPN/100 ml (7-Day Average).

IV. CONCLUSIONS

After review of the record, and for the reasons heretofore expressed, we have reached the following conclusions:

1. The contentions that Order No. 75-93 will frustrate the purpose of an interagency monitoring committee formed to study Malibu Lagoon or that Order No. 75-93 must require total reclamation or recycling of wastewater are without merit.

2. The apparent inconsistency between the effluent limitations of 2a, b and c and effluent limitation 9 related to coliform should be resolved.

3. Order No. 75-93 does not violate any applicable criteria of the State Department of Health.

4. Order No. 75-93, as apparently intended to be applied by the Regional Board, is not otherwise inappropriate or improper. The intent of the Regional Board relative to the circumstances under which the District may discharge to Malibu Creek and its tributary should be clarified.

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5. The request for a stay of Order No. 75-93 by petitioner is denied. Pending review of Order No. 75-93 by the Regional Board, discharges by District shall be subject to the following conditions:

A. Discharge Prohibition

The discharge of wastes by Las Virgenes Municipal Water District to surface waters or tributaries thereto is prohibited except that treated effluent may be discharged during and immediately following periods of rainfall when the ground is thoroughly saturated and will not absorb additional water.

B. Effluent Limitations

Wastes discharged to Malibu Creek and Las Virgenes Creek by Las Virgenes Municipal Water District shall be limited to treated municipal wastewater only, during and immediately after periods of rainfall.

V. ORDER

IT IS HEREBY ORDERED that the California Regional Water Quality Control Board, Los Angeles Region, shall review and revise Order No. 75-93 consistent with the provisions of this order.

Dated: December 18, 1975

We Concur

/s/ Roy E. Dodson Roy E. Dodson, Member /s/ W. W. Adams W. W. Adams, C girman

<u>/s/W. Don Maughan</u> W. Don Maughan, Vice Chairman

<u>/s/ Jean Auer</u> Jean Auer, Member

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