## STATE OF CALIFORNIA STATE WATER RESOURCES CONTROL BOARD

ORDER: WQ 2001-03

# In the Matter of the Petition of LAS VIRGENES MUNICIPAL WATER DISTRICT

For Review of Waste Discharge Requirements Order 99-142,
NPDES Permit No. CA0056014,
Issued by the
California Regional Water Quality Control Board,
Los Angeles Region

### SWRCB/OCC File A-1263

#### BY THE BOARD:

This matter involves the regulation of discharges from a publicly owned treatment works. On November 19, 1998, the State Water Resources Control Board (State Board or Board), in Order WQ 98-11, remanded Los Angeles Regional Water Quality Control Board (Regional Board) Orders 97-135 and 98-030 to the Regional Board for revisions consistent with the State Board's findings and conclusions. On December 9, 1999, the Regional Board issued a revised National Pollutant Discharge Elimination System (NPDES) Permit in Order No. 99-142 (permit), which corrected the deficiencies identified by the Board. Additionally, the Regional Board imposed a more stringent discharge prohibition and nitrate limit than it had in earlier Orders. On January 7, 2000, the State Board received a petition for review of the permit from the Las Virgenes Municipal Water District (District). For the reasons explained below, the Board amends Order 99-142 in accordance with the findings and conclusions of this Order.

### I. BACKGROUND

State Board Order WQ 98-11 (Order 98-11) contains a full background discussion, which is briefly summarized here. The District operates the Tapia plant in Los Angeles County. Effluent is discharged to Malibu Creek, which flows into Malibu Lagoon, and from there into the Pacific Ocean at Surfrider Beach. In the dry season, a sandbar typically forms between the lagoon and the ocean, thereby closing the lagoon. Malibu Lagoon is generally open during the wet season when increased flows, from storms and the District, cause the lagoon to breach. In Order 98-11, this Board (1) rejected the District's challenge of a flexible discharge prohibition imposed by the Regional Board from the later of May 1 or the first natural closure of the lagoon to October 31 of each year; (2) accepted, in part, the argument of environmental petitioners<sup>2</sup> that the Regional Board had not adequately addressed nutrient related problems by directing the Regional Board to either include protective nutrient limits for discharges from May 1 to October 31 or impose a fixed discharge prohibition during this period to ensure that the District would not contribute to observed violations of the narrative nutrient objective;<sup>3</sup> and (3) suggested that the Regional Board could consider a longer prohibition or year-round nutrient limits based upon evidence received during its proceedings on remand.4

In response to Order 98-11, Regional Board staff prepared a draft permit that proposed a fixed discharge prohibition covering the period of concern specified in Order 98-11 (May 1 to October 31). Regional Board staff did not propose year-round nutrient limits more stringent than the existing 10 mg/l nitrate limit based on the Basin Plan numeric objective<sup>5</sup> and

<sup>&</sup>lt;sup>1</sup> State Board Order WQ 98-11 at 18.

<sup>&</sup>lt;sup>2</sup> Natural Resources Defense Council (NRDC), Heal the Bay, and BayKeeper.

<sup>&</sup>lt;sup>3</sup> Order 98-11 at 19.

<sup>&</sup>lt;sup>4</sup> Ibid.

Waters shall not exceed 10 mg/l as nitrate-nitrogen. Water Quality Control Plan, Los Angeles Region, page 3-11.

the existing phosphate limits based on current performance. The Regional Board staff's proposed findings cited a lack of sufficient evidence to justify more stringent nutrient limits. At the hearing on the permit, the Regional Board accepted the staff proposal for a fixed discharge prohibition and also extended the dates of the prohibition two weeks into April and two weeks into November – resulting in a discharge prohibition from April 15 to November 15 of each year (hereinafter "the extended discharge prohibition"). The Regional Board also lowered the existing 10 mg/l year-round nitrate limit to 8 mg/l.

The District seeks relief from the 8 mg/l nitrate limit and the extended discharge prohibition.

## II. <u>CONTENTIONS AND FINDINGS</u><sup>7</sup>

## A. The 8 mg/l Nitrate Limitation

<u>Contention:</u> The District asserts that neither the evidence nor the Regional Board's findings support an effluent limit of 8 mg/l for nitrate.

Finding: The Regional Board's Basin Plan contains a numeric water quality objective of 10 mg/l, which is based on protection of human health. Water Code section 13263 specifies that discharge permits shall implement basin plans, including water quality objectives. The Regional Board's prior permit contained a 10 mg/l nitrate limit. Of course, a Regional Board may establish a more stringent limit where justified. The issue before us is whether an effluent limit of 8 mg/l is justified.

<sup>&</sup>lt;sup>6</sup> Adopted as final permit findings in Regional Board Order 99-142, Findings 9 and 10.

<sup>&</sup>lt;sup>7</sup> This order does not address all of the issues raised by petitioners. We find that the issues that are not addressed are insubstantial and not appropriate for State Board review. See *People v. Barry* (1987) 194 Cal.App.3d 158, 239 [Cal.Rptr. 349], Cal. Code Regs., tit 23, § 2052.

The 8 mg/l nitrate limit included in the permit is not supported by the findings. Consequently, the permit violates a basic principle of California law that "the agency which renders the challenged decision must set forth findings to bridge the analytic gap between raw evidence and ultimate decision or order." In other words, findings must explain the reasoning of the agency. They must explain how the law and facts justify the decision or order. The Basin Plan contains a narrative nutrient objective, which provides:

"Waters shall not contain biostimulatory substances in concentrations that promote aquatic growth to the extent that such growth causes nuisance or adversely affects beneficial uses."

The findings do not support a conclusion that the more stringent 8 mg/l limit is necessary to achieve the narrative objective. With respect to this narrative objective, the findings in the permit indicate that Regional Board staff could not identify a relationship between nitrate and algal levels and that consequently they could not recommend numeric limits for nitrate more stringent than the 10 mg/l numeric Basin Plan objective, which is based on protection of human health:

"analysis of the available data revealed that increasing concentrations of nitrates and phosphates did not correlate with a distinct effect and thus effects-based nutrient limits could not be recommended . . . [and because] there is no adequate information available to formulate nutrient limits based on effects, such as eutrophication and algal growth."

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<sup>&</sup>lt;sup>8</sup> See Topanga Assn. For a Scenic Community v. County of Los Angeles (1974), 11 Cal. 3d 506, 515, [113 Cal. Rptr. 836].

<sup>&</sup>lt;sup>9</sup> Water Quality Control Plan, Los Angeles Region, 1995.

<sup>&</sup>lt;sup>10</sup> Regional Board Order 99-142, Findings 9 and 10.

Nothing in the Regional Board's discussion at the hearing suggested that the Regional Board members disagreed with these conclusions of its staff. Further, Regional Board staff indicated at the hearing that:

"the scientific community is all in agreement that in dry weather, discharge of these higher levels of nutrients has that reasonable potential to cause an exceedance of that narrative standard . . . . But I think there's no evidence that those same high levels of nutrients, ten that we've been talking about, cause — have the reasonable potential to cause problems in the winter months when the lagoon is open."

Although the Regional Board is free to reach an opposite conclusion from its staff, it must make findings that identify substantial evidence in the record to support its conclusion. At the hearing, the Regional Board members discussed the fact that the District was required to meet an 8 mg/l effluent limitation for dry season discharges to the Los Angeles River and concluded that, if the District could meet the 8 mg/l effluent limit under these circumstances, it should be able to meet this limit for wet season discharges to Malibu Creek.

There are two problems with the Regional Board's reasoning. The first is that the Basin Plan nitrate objective for Malibu Creek is 10 mg/l, not 8 mg/l as it is for the Los Angeles River. As discussed above, Water Code section 13263(a) provides that waste discharge requirements shall implement the applicable Basin Plan objectives. The second problem is that the short-term measures employed by the District to meet the 8 mg/l limit for dry season discharges to the Los Angeles River do not appear to be feasible on a long-term basis in the wet season. Consequently, 8 mg/l does not represent the current performance of the Tapia plant. Therefore, we conclude that it was not appropriate to impose a year-round performance limit of 8 mg/l.

<sup>11</sup> Transcript of December 9, 1999 Regional Board meeting (hereinafter "Transcript") at 94.

## B. The Extended Discharge Prohibition

<u>Contention</u>: The District asserts that the extended discharge prohibition is not supported by the findings or the evidence.

Finding: The Water Code provides that a Regional Board may, in waste discharge requirements, prohibit the discharge of waste in certain areas. <sup>12</sup> All parties, including the District, the Regional Board, and environmental respondents, <sup>13</sup> appear to agree, and we find, that high concentrations of pathogens in the lagoon contribute to violations of California Ocean Plan bacterial objectives in the ocean at Surfrider Beach when the lagoon is open. <sup>14</sup> However, the parties disagree on the issue of whether discharges from the District contribute to keeping the lagoon open.

Although there is sufficient evidence in the record to support the extended discharge prohibition covering the period of April 15 to November 15, the permit is defective for the same reason discussed above for the 8 mg/l nitrate limit, i.e., the Regional Board failed to (1) include a written finding explaining the facts and law that justify the prohibition, or (2) adequately articulate its reasoning at the hearing. Although Regional Board discussion focused on evidence that significant water contact recreation occurs outside the May 1 to October 31 discharge prohibition period proposed by its staff, the Regional Board did not explain the threat posed by discharges from Tapia during the extended prohibition period.

We find that the evidence in the record shows relatively low creek flow in April and November and significant contributions from Tapia, in terms of percentage of total creek

<sup>&</sup>lt;sup>12</sup> See Water Code section 13243.

<sup>&</sup>lt;sup>13</sup> NRDC, Heal the Bay, and Baykeeper.

<sup>&</sup>lt;sup>14</sup> See Ambrose, 2000 at 8-17. See also An Epidemiological Study of Possible Adverse Health Effects of Swimming in Santa Monica Bay, Santa Monica Bay Restoration Project, May 7, 1996.

flow, in these months.<sup>15</sup> These contributions are comparable to those we found to be significant for the May 1 to October 31 period in Order 98-11. Los Angeles County lifeguard records show that the lagoon either (1) has in fact closed during the first two weeks of November and the last two weeks of April, or (2) was closed soon after April 15 or shortly before November 15.<sup>16</sup> We find that these records indicate that during the period of the extended prohibition the lagoon could reasonably be expected to close more often if the District were prohibited from discharging. This is a sufficient threat of harm to justify the extended prohibition. Furthermore, in light of Regional Board Order 00-046,<sup>17</sup> which permits the District to discharge to the Los Angeles River during the extended prohibition period, the extended prohibition should not present any significant compliance problems for the District.

Findings 6 and 7 of Order 99-142 discuss differences in the pattern of bacterial contamination between the lagoon, the breach in the lagoon that flows to Surfrider Beach, and Surfrider Beach. Finding 7 provides that these differences indicate the impact on Surfrider Beach from lagoon water flowing through the breach is less likely during dry weather. We find this discussion irrelevant and potentially misleading because, regardless of any such differences, pathogen contaminated water from the lagoon contributes to pollution in the ocean at Surfrider Beach and discharges from the District contribute to keeping the lagoon open from April 15 to November 15. Finding 8 recommends a fixed discharge prohibition because a "possibility exists a flexible [discharge prohibition] may not be protective" (emphasis added). This finding is too speculative to support the extended discharge prohibition imposed by the Regional Board. <sup>18</sup>

<sup>&</sup>lt;sup>15</sup> Environmental Respondent's response to Petition at 8-10.

<sup>&</sup>lt;sup>16</sup> See March 1997, April 1997, March 1998, and November 1999.

<sup>&</sup>lt;sup>17</sup> NPDES permit No. CA0064271.

<sup>18</sup> See Shepard v. State Personnel Board (1957) 48 Cal.2d 41, 46.

Consequently, Findings 6, 7, and 8 are inconsistent with the findings in this Order that support the extended prohibition.

Following the Board workshop on this item, the District proposed a modification to the seven-month fixed discharge prohibition. The District proposed a six-month prohibition from May 1 to October 30, with a flexible prohibition from April 15 to April 30 and November 1 to November 15 of each year. During the flexible prohibition period the District would be permitted to discharge if background flows in the creek exceed 10 cfs and the lagoon is open. Although there is not sufficient time to evaluate the District's proposal in these proceedings, the Regional Board should consider the District's proposal the next time it reissues the District's permit.

## III. CONCLUSIONS

Based upon the discussion above, we conclude that:

- The 8 mg/l nitrate limit and corresponding mass limit included in Order
   No. 99-142 are not supported by the Regional Board's findings.
- 2. The extended discharge prohibition is not supported by the findings in Regional Board Order 99-142. However, this prohibition is supported by the evidence in the record and by the findings in this Order. Since the Regional Board made no specific finding supporting the prohibition, the Regional Board upon reissuance of the District's permit should consider the District's proposed flexible prohibition discussed above. Furthermore, Findings 6, 7, and 8 of Order 99-142 are inconsistent with the findings in this Order that support the extended discharge prohibition.

## IV. ORDER

IT IS HEREBY ORDERED that Regional Board Order No. 99-142 is amended as follows:

1. Delete Section D, which changed the nitrate limit in Order 97-135 from 10 mg/l to 8 mg/l. By this action, we intend that the original nitrate limits of 10 mg/l and 884 pounds/day, set forth in Order 97-135 at Section I.B.2.a, will be reinstated until and unless the Regional Board, after making adequate findings and otherwise complying with law, establishes any such lower limitations which may be necessary to implement applicable water quality standards and protect beneficial uses in Malibu Creek and Lagoon.

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2. Delete Findings 6, 7, and 8. To the extent of any remaining inconsistency between the findings and requirements of this Order and Regional Board Orders 97-135, 98-030, and 99-142, the findings and requirements of this Order shall apply. To the extent of any such inconsistency between State Board Order WQ 98-11 and this Order, this Order shall apply.

## **CERTIFICATION**

The undersigned, Administrative Assistant to the Board, does hereby certify that the foregoing is a full, true, and correct copy of an order duly and regularly adopted at a meeting of the State Water Resources Control Board held on February 15, 2001.

AYE:

Arthur G. Baggett, Jr.

Mary Jane Forster John W. Brown Peter S. Silva

NO:

None

ABSENT:

None

ABSTAIN:

None

Maureen Marché

Administrative Assistant to the Board