STATE OF CALIFORNIA STATE WATER RESOURCES CONTROL BOARD

ORDER: WQ 98-11

In the Matter of the Petition of LAS VIRGENES MUNICIPAL WATER DISTRICT, NATURAL RESOURCES DEFENSE COUNCIL, ET AL., for Review of Waste Discharge Requirements Orders 97-135 and 98-030, NPDES Permit No. CA0056014, Issued by the California Regional Water Quality Control Board, Los Angeles Region

SWRCB/OCC Files A-1125 and A-1125(a)

BY THE BOARD:

On November 3, 1997, the Los Angeles Regional Water Quality Control Board (Regional Water Board) issued a revised National Pollutant Discharge Elimination System (NPDES) permit in Order 97-135 (permit) to the Las Virgenes Municipal Water District (District). The permit covers discharges from the District's Tapia Water Reclamation Facility (Tapia). On December 2, 1997, the State Water Resources Control Board (State Water Board or Board) received a petition for review of the permit from the Natural Resources Defense Council (NRDC), Heal the Bay, Santa Monica BayKeeper, and Dr. Jeff Harris (collectively NRDC). On December 3, 1997, the Board received a petition from the District.

On April 13, 1998, the Regional Water Board amended the permit in Order 98-030. On May 11 and May 12, 1998, the Board received amended petitions from the District and NRDC, respectively, seeking review of the permit as amended by Order 98-030. The petitions are legally and factually related, and have therefore been consolidated for purposes of review.¹ The District also requested a stay of Order 97-135. This request was denied by letter, dated August 7, 1998. For the reasons explained below, the Board remands Orders 97-135 and 98-030 to the Regional Water Board with directions to revise the orders in accordance with the findings of this Order.

I. BACKGROUND

The District operates the Tapia plant in Los Angeles County. Effluent is reclaimed for irrigation and the excess is discharged to Malibu Creek. The average reclaimed water flow during the relatively dry year of 1996 was 5.6 million gallons per day (mgd), and the average flow discharged to Malibu Creek was 2.0 mgd. In wet years the annual discharge to the creek can approach 5 mgd.² Malibu Creek flows year round except during extended drought periods when flows in the creek are minimal. Malibu Creek passes through the City of Malibu and Malibu Creek State Park, forming a lagoon at the ocean shore. Various agencies and advocacy groups have studied the creek and lagoon over the years. The most recent comprehensive study is the report on the *Enhanced Environmental Monitoring Program at Malibu Lagoon and Malibu Creek* by Dr. Richard Ambrose of UCLA, 1995 (Ambrose or UCLA study). The two major issues addressed in the revised permit are a dry weather discharge prohibition and nutrient limits.

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¹ See Cal. Code Regs., tit. 23, § 2054.

² Based on August 1997 - July 1998 Tapia monitoring reports. These monitoring reports, as well as the January 1997 - July 1997 monitoring reports, are hereby added to the record pursuant to Water Code §13320(b).

A. Discharge Prohibition

From 1969 to 1980, the Regional Water Board prohibited year-round discharge to Malibu Creek because of human health and nutrient concerns, requiring maximum use of District-owned spray irrigation fields.³ In 1984, a year-round discharge was permitted following the installation of effluent filters. However, the Regional Water Board did not address the historical nutrient concerns at that time, and nitrate and phosphate treatment processes were not installed.

The lagoon was historically closed by a sandbar during the dry season. Increased dry season flows from residential runoff and the Tapia plant have caused lagoon levels to rise during this period. The City of Malibu relies on septic tanks, some of which are located near the lagoon. As the lagoon level rises, it floods adjacent septic tanks, occasionally causing them to spill or "daylight." Until recently, the California Department of Parks and Recreation attempted to remedy this situation by artificially breaching the lagoon. When the lagoon is breached, the lagoon waters flow across the popular Surfrider Beach.

Besides septic tanks and discharge from Tapia, other sources of pollutants in the creek and lagoon include urban runoff, horse corrals, transient camps, and recreational use. In 1995, the Santa Monica Bay Restoration Project, a nonprofit organization funded in part by the State Water Board and U.S. EPA, conducted an epidemiological study that demonstrated an increased risk of illness among swimmers at Surfrider beach when the lagoon is breached.⁴ The lagoon drains rapidly when it is artificially breached, resulting in the loss of species that are either

³ Water Code § 13243 authorizes regional water boards to prohibit discharges of waste.

⁴ An Epidemiological Study of Possible Adverse Health Effects of Swimming in Santa Monica Bay, Santa Monica Bay Restoration Project, May 7, 1996.

stranded in the mud or incapable of surviving ocean salinities, including the endangered tidewater goby. Artificial breaches also allow seawater intrusion into the lagoon through tidal action, which produces drastic changes in lagoon salinity. This instability is believed to be a cause of low biodiversity in the lagoon.

Before 1996, the lagoon was frequently breached artificially during the dry season, sometimes as often as every two to three weeks. To protect both public health and endangered species, the Army Corps of Engineers prohibited artificial breaching in 1996. The U.S. Fish and Wildlife Service (FWS) and the California Department of Fish and Game (Fish and Game) support this prohibition. Nevertheless, unofficial and illegal breaching still occurs and state and local agencies have breached the sandbar under emergency conditions to prevent flooding of roads and septic tanks. In June of 1997, the Department of Parks and Recreation artificially breached the sandbar under such conditions. The high water level in the lagoon caused flooding of roads and properties and saturated the ground under the Cross Creek Shopping Center, which caused a septic tank to overflow. Local Resource Conservation District staff observed stranded tidewater goby and other species in some of the mud flat areas following the breaching.

County lifeguards have also expressed concern about lagoon breaching during the dry season because of a standing riptide current that develops around the breach in the sandbar and because they cannot drive emergency vehicles across the breach to provide emergency service to the west side of the beach. In response to all of these conditions, the Regional Water Board reinstituted a discharge prohibition in Order 97-135 from May 1 to October 31 of each year. The main purpose of the prohibition is to reduce flows in the creek and thereby obviate the need to breach the lagoon.

In Order 98-030, the Regional Water Board found that because unusually high rainfall had saturated the ground, the lagoon would likely remain open after May 1, 1998. Thus, the Regional Water Board modified the discharge prohibition such that the start date each year would be the later of May 1 or the first natural closure of the lagoon. The Regional Water Board's prediction proved to be accurate because the lagoon did not close until July 29, 1998. Order 98-030 provided an exception to the discharge prohibition, if necessary, to maintain minimal streamflow conditions in the creek to sustain endangered species, particularly the Southern California steelhcad trout. The Regional Water Board also required the District to submit an application to the National Marine Fisheries Service (NMFS) for an incidental take permit under the federal Endangered Species Act (ESA).

B. Nutrient Limits

Both the creek and lagoon are on the 1998 Clean Water Act section 303(d) impaired waters list due to nutrients, algae, and/or eutrophication. In an attempt to address nutrient concerns dating back to at least 1969, the Regional Water Board established a 10 mg/l nitrate limit in the November 1997 permit and limited phosphate concentrations to current levels of performance pending further study to determine how much removal would be necessary to slow the growth of nuisance algae in the creek and lagoon. The 3 mg/l monthly average phosphate limit is based on the average of Tapia effluent data from 1993-1996. The 6 mg/l daily maximum phosphate limit is based on the 95th percentile of these same data.

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C. Petitioners' Concerns

The District seeks relief from the discharge prohibition, the phosphate limits, and the incidental take permit application requirement. NRDC requests reinstatement of the fixed discharge prohibition and more stringent nutrient limits.

II. <u>CONTENTIONS AND FINDINGS</u>⁵

A. Discharge Prohibition

<u>Contention</u>: The District asserts that neither version of the discharge prohibition requirement is supported by the findings or the evidence. NRDC objects to the flexible discharge prohibition and requests reinstatement of the fixed prohibition.

<u>Finding</u>: The record documents the water quality problems that result from artificial breaching of the sandbar during the dry season. The record also supports a finding that dry weather discharges to the creek from Tapia contribute to the problem that have led to breaching in the past. Accordingly, the Board finds a discharge prohibition is appropriate.

Based on the Los Angeles County gauging station, Tapia's discharge during the dry season constitutes 15-25 percent of the flow in the creek. The District argues that Tapia's discharges only comprised 7.5 percent of the total creek flow in June 1997. As discussed above, on the 20th of that month, the most recent incident of flooding at the lagoon occurred, prompting an emergency breach of the lagoon. The District claims that the Regional Water Board's belief that Tapia caused the rising lagoon levels is unsupported. The Board need not resolve this issue because the prohibition is supported if Tapia's discharge presents a reasonable potential to

⁵ This order does not address all of the issues raised by petitioners. The Board finds that the issues that are not addressed are insubstantial and not appropriate for State Water Board review. See *People v. Barry* (1987) 194 Cal.App.3d 158, 239 Cal.Rptr. 349, Cal. Code Regs., tit 23, § 2052.

contribute to flooding of the lagoon.⁶ Although a 7.5 percent contribution to flood-inducing flows is sufficient to warrant a finding that Tapia contributes to the problem, the Board notes that Tapia discharged the bulk of its June effluent in the two weeks leading up to the flooding and emergency breach. And during this period of June 7 to June 20, Tapia's discharge comprised 12.7 percent of the total flow in the creek.

Furthermore, Tapia's discharge may have been even higher than 12.7 percent during this critical period. The weekly flow measurements reported by the District to the Regional Water Board generally agree with the county station at higher flows. But at lower flows, e.g., below 20 cubic feet per second (cfs), there appear to be significant differences, with the county gauge reading two to three times as high as weekly field measurements taken by District staff. Using these data, reported to the Regional Water Board in the District's Discharge Monitoring Reports (DMRs), Tapia contributed 43 percent of the total stream flow in the two weeks leading up to the flooding. State Water Board engineering staff inspected the county gauging station and concluded that it was designed for accurately measuring higher flows, particularly winter storm flows, and that modifications were being considered to improve low-flow accuracy. Nevertheless, even if Tapia's flows were only 12.7 percent, the Board finds that Tapia's discharge contributes to lagoon flooding.

Ambrose noted that lagoons with high freshwater inflow are *likely to close less frequently* than lagoons with low freshwater flows,⁷ and he further noted that "anthropogenic freshwater input from Tapia and other sources alters physical characteristics of Malibu Lagoon,

⁷ UCLA study at 97. Emphasis added.

⁶ In the Matter of the Petition of City of Stockton, Order WQ 96-09, State Water Board, 1996 at p. 10.

such as salinity, and *causes the lagoon to breach* when it otherwise would remain closed.⁹⁸ Based on this relationship between creek flow and the closure status of the lagoon, NRDC argues that the idea of a "natural" closure alternative to the May 1 discharge prohibition is erroneous. They reason that because the discharge from Tapia contributes towards keeping the lagoon open at the beginning of the dry season, the lagoon will not close when it otherwise naturally would. NRDC's argument has merit if the only concern were whether the lagoon was open or closed. But it is clear from the record that the Regional Water Board was also concerned with preventing the need for artificial breaching. Thus, the "natural" closure exception is a permissible way to address lagoon flooding because the lagoon must close before it can be artificially breached. However, in light of our conclusion that Tapia's discharge during the dry season may constitute between 15-25 percent of the flow in the creek on average (see supra at 6-7), the Regional Water Board also must consider whether the flexible, "natural" closure prohibition - as opposed to a fixed dry season flow prohibition - is an adequate step to address public health problems associated with an open lagoon.

The District also argues that the findings are unduly speculative and violate the requirement that agency action not be based on speculation.⁹ The Board agrees that the Regional Water Board must strengthen the permit findings to reflect our conclusion that unseasonable freshwater inputs from Tapia and other sources cause the lagoon to flood and/or breach when it otherwise would not. The following amendment to Finding 27, or one similar in effect, would correct the defect:

⁸ Id. at 94. Emphasis added.

⁹ Shepard v. State Personnel Board (1957) 48 Cal. 2d 41, 46.

"To minimize the contribution of Tapia's discharge to the excess freshwater flow into Malibu Lagoon, which may leads to elevated lagoon level and frequent breaching of the sandbar"

Finally, the District's argument against the flow prohibition is the same one it has raised in the context of nutrient regulation, discussed below. In protesting both the flow prohibition and the nutrient-limits, the District argues that the Regional Water Board cannot regulate its discharge because the creek and lagoon would be nutrient-impaired and flood-prone due to other sources even if Tapia ceased discharging. But if the rule were as the District would have it, every contributor could blame the other sources and problems would never get solved. Therefore, the Board rejects the District's argument as we have under virtually identical circumstances in the past.¹⁰

B. Nutrients

<u>Contention</u>: The District contends that the Regional Water Board adopted the 3 and 6 mg/l phosphate limits without any evidence or any finding that the phosphate content of Tapia's discharge adversely affected receiving water quality. The District further alleges that the limits will place the Tapia plant in violation 5 percent of the time until the District can make undetermined changes to its operation to improve phosphate removal. The Regional Water Board has not authorized a mixing zone for dilution of Tapia's effluent because of low flow conditions upstream of Tapia. NRDC asserts that with no available dilution, the 3 and 6 mg/l phosphate limits will contribute to receiving water concentrations far above the 0.1 mg/l

¹⁰ In Order WQ 96-09, the City of Stockton argued that effluent limits were too stringent because dissolved oxygen levels less than water quality objectives would occur even if the City did not discharge to the river. The Board concluded that effluent limits were nevertheless required because the City contributed to the violation. See *City of Stockton* at p. 10, *supra* at Note 5. The same conclusions follow in this case.

guidance level published by U.S. EPA,¹¹ or any other protective level mandated by the Clean Water Act¹² to implement the Regional Water Board's narrative objective for nutrients contained in its Basin Plan. The Regional Water Board's narrative nutrient objective (narrative objective) 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."¹³

Although NRDC has not directly challenged the adequacy of the 10 mg/l nitrate limit, which is a current basin plan objective for the protection of potential drinking water supplies, it notes that the permit findings provide that this level "may not be protective of the beneficial uses of the creek and lagoon."¹⁴ NRDC suggests that a 5 mg/l limit would be protective.¹⁵

<u>Finding</u>: The District argues that it does not contribute to the impairment because, in its estimation, the algae upstream of its discharge is just as bad as the algae downstream. This assertion is contradicted by the Department of Fish and Game, which reported that:

"Recent surveys of Malibu Creek above and below the discharge point of Tapia's facility indicate that the facility is the primary source of nutrient loading and the eutrophic stream conditions that exist below Tapia. The algal scum mat that covers most of the stream bottom below Tapia is noticeably absent above Tapia. The Department's fisheries biologist familiar with most coastal streams throughout Santa Barbara and Ventura Counties has not identified this species of algae except in all but severely degraded waters."¹⁶

¹¹ *Quality Criteria for Water*, U.S. EPA, 1986.

¹² See Clean Water Act § 301 (b)(1)(c) and 40 C.F.R. § 122.44.

¹³ Water Quality Control Plan, Los Angeles Region, 1995.

¹⁴ Order 97-135 at Finding 31.

¹⁵ NRDC cites a statement of Dr. Michael Josselyn that nitrate-N plus nitrite-N should not exceed 5 mg/l and phosphate levels should not exceed 0.2 mg/l. NRDC petition at p. 9.

¹⁶ July 31, 1997, Fish and Game comment letter from Patricia Wolf, Regional Manager, to Dennis Dickerson, Executive Officer of the Los Angeles Regional Water Board.

More importantly, as noted above, even if the creek and lagoon would be impaired without Tapia's contribution, the Regional Water Board is not precluded from regulating the largest point source in the watershed. And, as discussed below, the Clean Water Act mandates that, regardless of other sources, Tapia's permit must contain meaningful effluent limits if it contributes to the impairment. The District argues that it is inappropriate to establish water quality based effluent limits (WQBEL) for nutrients before the Total Maximum Daily Load (TMDL) study is complete. But in the preamble to the WQBEL regulations, EPA noted that a state's failure to complete TMDLs cannot be used as an excuse to defer the inclusion of WQBELs in permits as required by Clean Water Act section 301(b)(1)(C).¹⁷ U.S. EPA Region 9 has similarly advised the State Water Board's Executive Director of this requirement.¹⁸

Malibu lagoon is on the Clean Water Act section 303(d) list of impaired waters for eutrophication. The UCLA study documented numerous violations of the 5 mg/l dissolved oxygen objective ¹⁹ in the early morning during the dry season of May 1-October 31.²⁰ On some occasions Ambrose measured dissolved oxygen concentrations of less than 1 mg/l and noted the presence of dead fish in test traps. Besides these depressed oxygen levels, Ambrose cited the presence of large floating algal mats as further evidence of eutrophication.²¹ He noted that

¹⁹ Water Quality Control Plan, Los Angeles Region, 1995 at 3-11.

²⁰ UCLA study at 207.

²¹ *Id.* at 37 and 207.

¹⁷ 54 Fed. Reg. 23868, 23879.

¹⁸ December 30, 1993, letter from Harry Seraydarian, Director, Water Management Division, to Walt Pettit, Executive Director.

between July and October large algal mats were observed that were then washed out to sea as fall rains scoured the lagoon.²² He observed that the lagoon then remained clear of floating algal mats until the end of the study the following April. Besides the scouring effect of the storm flows, the lower wet season water temperatures and reduced photoperiod may also explain the reduced algal activity. The only suggestion that the lagoon may be impaired in the wet season is the algal blooms observed from October 2-30, 1993, and December 19, 1993, to January 21, 1994. But as Ambrose noted, by the end of October the algal mats had been washed out to sea by storm flow in the creek, and the December observations were probably highly unusual and a result of the use of nutrient-rich Phoschek to fight the November wildfire.

The UCLA study noted that at some locations in the lagoon, phosphate was the growth limiting agent while, at other locations, nitrate was limiting.²³ Since the lagoon is limited for each nutrient at various locations, overall, it is impaired due to both nutrients. Consequently, reductions in each are necessary to eliminate documented eutrophication in the lagoon during the dry season.

Federal regulations require the Regional Water Board to include effluent limitations in a permit to control all pollutants that have a reasonable potential to cause, or contribute to, violations of water quality standards, including narrative standards.²⁴ Each NPDES permit must include effluent limitations necessary to achieve water quality standards. The Regional Water Board has three options when developing effluent limitations to implement a narrative objective. These are: (1) Using a calculated numeric criterion for the pollutant derived from a state policy

²³ *Id.* at 27-28.

²² *Id.* at 38.

²⁴ 40 C.F.R. § 122.44.(d)(1)(i).

or regulation interpreting its narrative objective; (2) on a case-by-case basis, using EPA water quality criteria, supplemented where necessary by other relevant information; and (3) using an indicator parameter for the pollutant of concern.²⁵

Tapia discharged 48.2 million gallons of effluent into the creek in August 1993 when Ambrose detected depressed dissolved oxygen levels of less than the 5 mg/l objective throughout the lagoon and less than 1 mg/l at one monitoring station. During that month, Ambrose also noted that over 25 percent of the lagoon's surface was covered with floating algae, and that the percent cover was significantly higher in the upper lagoon, which was less subject to tidal flushing. Tapia, with an average nitrate concentration of 13 mg/l, contributed over 5,200 pounds of nitrate for the month. For phosphate, at an average concentration of 3.14 mg/l, Tapia discharged over 1,200 pounds. In October 1993, when Ambrose observed an algae bloom from the 2nd to the 30th, Tapia discharged 107 million gallons containing 11,600 pounds of nitrate and 2,800 pounds of phosphate.

Considering that Tapia discharges these amounts into a low flow stream, it is not surprising that the Regional Water Board's Draft Preliminary TMDL report indicates nutrient concentrations are:

".... [for nitrate-N] 1.5 mg/l just above Tapia. The discharge from Tapia appears to increase nitrate-N levels to as high as 4 or 6 mg/l.... Upper reaches have concentrations of phosphate around 0.2 mg/l but below Tapia the concentrations in the creek increase to near or over 1 mg/l."

Given these facts, there is no question that Tapia contributes to existing degraded conditions that violate the narrative objective during the dry season. Regional Water Board staff

²⁵ 40 C.F.R. § 122.44(d)(1)(vi).

appear to concur with this conclusion as indicated by a response to a comment by the District. The District argued that reasonable potential had not been established for nitrate. The Regional Water Board response noted that "there appears to be reasonable potential that Tapia's effluent contributes to in-stream 'exceedances.', "²⁶

The record clearly demonstrates that the lagoon is impaired for both nitrate and phosphate during the dry season. We have also concluded that the District contributes to violations of the narrative objective during this period. Therefore, it is apparent that the nutrient limits in the permit must be strengthened or other measures taken to ensure that the District is not contributing to violations of this objective.²⁷ There are two ways the District could address violations of the narrative objective. It could keep discharges out of the creek during the entire dry season or it could reduce the amount of nitrate and phosphate it discharges to the creek. To address the nutrient issue, the permit must be amended to either include more stringent nitrate and phosphate effluent concentration limits for dry season discharges or expand the discharge prohibition from the flexible start date to a fixed period of May 1 to October 31. Additionally, the Regional Water Board may consider a longer prohibition or year-round nutrient limits based upon evidence received during its proceedings. Of course, any additional limits may be accompanied by an appropriate time schedule for compliance.

The flexible, "natural" closure prohibition is inadequate as a meaningful nutrient effluent limit because such a limit would not have prevented Tapia from contributing to the eutrophic conditions documented by the UCLA study. Ambrose studied the lagoon in an above

²⁶ Regional Water Board Response to Comments on draft NPDES permit October 28, 1997.

²⁷ American Paper Institute v. USEPA, 996 F.2d 346, 351 (D.C. Cir. 1993).

average storm flow year, in which the lagoon only closed briefly on two days during the dry season. This proves that eutrophic conditions can develop even with an open lagoon during the dry season. And Ambrose warned that eutrophic conditions could be even worse in a dry year, with a predominantly closed lagoon.²⁸ A fixed flow prohibition is, in effect, an effluent limit of zero pounds per day for all pollutants and, as such, complies with applicable NPDES regulations.²⁹

If, in lieu of revising the permit to impose the fixed discharge prohibition, the Regional Water Board decides to keep the flexible prohibition in place and require concentration limits for nutrients on Tapia's effluent from May 1 until the lagoon closes, then the Regional Water Board must interpret its narrative objective to establish a protective level for the creek and lagoon as mandated by 40 Code of Federal Regulations, section 122.44. Considering the UCLA study, and the fact that these water bodies are on the 303(d) list for nutrients, algae, and/or eutrophication, it is clear that, at least during the dry season, existing concentrations observed in the creek and lagoon are too high.

Existing nutrient concentrations were documented by Ambrose before the Malibu fire in November of 1993, which degraded the lagoon further. He observed nitrate levels of 6-9 mg/l and phosphate levels of 0.23-0.59 mg/l in the upper lagoon. Given the observed impairment, the protective concentrations must at least be less than the average of each of these ranges. While it is up to the Regional Water Board to determine the appropriate concentrations, the Board finds that there is sufficient evidence in the record to justify a nitrate concentration in the range of

²⁸ UCLA study at 30.

²⁹ 40 C.F.R. § 122.44.

2-6 mg/l and a phosphate concentration of 0.1-0.4 mg/l as an interpretation of the narrative objective for Malibu lagoon. As the UCLA study demonstrated, for the dry season, the 10 mg/l nitrate limit is not low enough to prevent violations of the narrative objective. Similarly, the 3 and 6 mg/l phosphate limits in the permit do not ensure that Tapia will not contribute to violations of the narrative objective because these limits only hold Tapia, on average, to current performance. Although these limits may prevent further degradation, they will not ensure that Tapia is not contributing to existing dry season excursions above the narrative objective. The Regional Water Board finding that optimum levels of nutrients are unknown does not excuse compliance with the 40 Code of Federal Regulations, section 122.44, requirement to establish WQBELs using any of the three options provided by the regulations.

Whether the Regional Water Board selects concentration-based effluent limits or a fixed discharge prohibition as an effluent limit under 40 Code of Federal Regulations, section 122.44, the Regional Water Board must include a finding that the effluent limit(s) are derived from the narrative objective, and that the limitations are necessary because the District has the reasonable potential to cause, or contribute to, an excursion above this objective in the dry season. The findings must also explain the method chosen to ensure compliance (the discharge prohibition or nutrient limits).

There is an additional factor that impacts on both the discharge prohibition and nutrient limit issues: That factor, as discussed below, is whether NMFS or other agencies may direct the District to discharge imported water to the creek to maintain minimum flows in order to protect fish and wildlife.

C. Endangered Species Act

<u>Contention</u>: The District argues that the Regional Water Board exceeded its authority by requiring the District to apply for an "incidental take" permit from NMFS.

Finding: Although regional water boards have been granted broad powers under the Water Code to prevent conditions of pollution or nuisance or to protect beneficial uses,³⁰ the Board finds that the Regional Water Board exceeded its authority in requiring the District to apply for an incidental take permit. Such a requirement is properly within the jurisdiction of NMFS or FWS. An incidental take permit serves primarily to prevent enforcement action by NMFS or FWS. The only possible legal basis for requiring a discharger to apply for an incidental take permit would be that such permits often contain conditions designed to protect beneficial uses. Therefore, the Regional Water Board arguably has the authority to require a discharger to apply for one under the Water Code section 13377 authority to issue waste discharge requirements (WDR) necessary to protect beneficial uses. However, such protection is more appropriately achieved by considering the comments on this issue at the time of issuing or revising WDRs rather than requiring a discharger to invoke an optional process of another agency as a WDR requirement. Consequently, the requirement to apply for an incidental take permit must be deleted from the permit.

Furthermore, the Regional Water Board will have to reopen the District's permit if NMFS, FWS, and/or Fish and Game require the District to make discharges of imported water to the creck in the dry season to enhance natural flows. Whether there is legal authority for those agencies to require the District to make such discharges is beyond the scope of this order. Based

³⁰ See Water Code §§ 13377, 13263, and 13304.

on our review of the record, it appears that NMFS favors a 1 cfs minimum stream flow requirement. If such a level is established and if the District is required to help achieve it, Tapia will rarely be required to discharge and impairments may not be likely. Under such circumstances, the existing exception to the discharge prohibition appears reasonable. If discharges are required, the Regional Water Board will have to determine whether such discharges present a reasonable potential to contribute to violations of the narrative nutrient objective. Accordingly, the Regional Water Board should include a "reopener" provision in the permit should the District be required by NMFS, FWS, or Fish and Game to make dry season discharges to address endangered species concerns.

III. CONCLUSIONS

Based upon the discussion above, the Board concludes that:

1. The Regional Water Board was reasonable in concluding that Tapia's discharge contributes to lagoon flooding and that a discharge prohibition was appropriate. The "natural" closure exception was permissible to address lagoon flooding (see Order at 8, line 9) because the lagoon must close before it can be artifically breached. However, in light of our conclusion that Tapia's discharge during the dry season may constitute between 15-25 percent of the flow in the creek on average, the Regional Water Board also must consider whether the flexible, "natural" closure prohibition--as opposed to a fixed dry season flow prohibition--is an adequate step to address public health problems associated with an open lagoon.

2. The Regional Water Board must strengthen the permit findings to reflect our conclusion that unseasonable freshwater inputs from Tapia and other sources cause the lagoon to flood and/or breach when it otherwise would not. The following amendment to Finding 27, or one similar in effect, would correct the defect:

"To minimize the contribution of Tapia's discharge to the excess freshwater flow into Malibu Lagoon, which $\frac{may}{may}$ leads to elevated lagoon level and frequent breaching of the sandbar"

3. The lagoon is impaired for both nitrate and phosphate during the dry season (May 1-October 31). The Regional Water Board must revise the permit to include a finding to this effect. Tapia is a significant contributor to existing degraded conditions that violate the narrative nutrient objective. Thus, the Regional Water Board must include meaningful effluent limits in its NPDES permit to ensure that it is not contributing to violations of the narrative nutrient objective during the dry season. Such limits shall either include maximum nitrate and phosphate effluent concentration limits for discharges occurring in the dry season or a fixed discharge prohibition from May 1 to October 31. Additionally, the Regional Water Board may consider a longer prohibition or year-round nutrient limits based upon evidence received during its proceedings. Of course, any additional limits may be accompanied by an appropriate time schedule for compliance.

4. The 10 mg/l nitrate limit is not low enough to prevent violations of the narrative nutrient objective during the dry season. Similarly, the 3 and 6 mg/l phosphate limits in the permit do not ensure that Tapia will not contribute to violations of the narrative objective in the dry season.

5. Whether the Regional Water Board selects concentration-based effluent limits or a fixed discharge prohibition as an effluent limit under 40 Code of Federal Regulations, section 122.44, the Regional Water Board must include a finding that the effluent limit(s) are derived from the narrative nutrient objective, and that the limitations are necessary because the District has the reasonable potential to cause, or contribute to, an excursion above this objective in the

dry season. The findings must also explain the method chosen to ensure compliance (the discharge prohibition or nutrient limits).

6. The Regional Water Board exceeded its authority in requiring the District to apply for an incidental take permit, so the requirement to apply for such a permit must be deleted from the waste discharge requirements.

7. If the National Marine Fisheries Service determines that maintenance of minimum flows is necessary and if the District is required to make discharges to achieve these flows, the Regional Water Board must consider the impact of any such requirement on the discharge prohibition and nutrient limits.

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IV. ORDER

IT IS HEREBY ORDERED that Orders 97-135 and 98-030 are remanded to the Regional Water

Board for revision consistent with the findings and conclusions of this order.

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 November 19, 1998.

- AYE: John Caffrey James M. Stubchaer Marc Del Piero Mary Jane Forster John W. Brown
- NO: None
- ABSENT: None
- ABSTAIN: None

Maureen Marchél Administrative Assistant to the Board

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