

STATE OF CALIFORNIA
STATE WATER RESOURCES CONTROL BOARD

ORDER WQO 2003 - 0012

In the Matter of the Review of Own Motion

of Waste Discharge Requirements Order Nos. R4-2002-0121
[NPDES No. CA0054011] and R4-2002-0123 [NPDES NO. CA0055119] and
Time Schedule Order Nos. R4-2002-0122 and R4-2002-0124 for Los Coyotes and
Long Beach Wastewater Reclamation Plants

Issued by the
California Regional Water Quality Control Board,
Los Angeles Region

SWRCB/OCC FILES A-1496 AND 1496(a)

BY THE BOARD:

In July 2002, the Los Angeles Regional Water Quality Control Board (Regional Board) reissued waste discharge requirements (permits) and time schedule orders (TSOs) to the County Sanitation District of Los Angeles (District) for its Los Coyotes Water Reclamation Plant (Los Coyotes WRP) and its Long Beach Water Reclamation Plant (Long Beach WRP). The permit and TSO applicable to the Los Coyotes WRP are Order Nos. R4-2002-0121 and R4-2002-0122, respectively. The permit and TSO applicable to the Long Beach WRP are Order Nos. R4-2002-0123 and R4-2002-0124.

The District owns and operates an integrated network of facilities known as the Joint Outfall System, which includes seven treatment plants. Los Coyotes WRP and Long Beach WRP and four other plants (the upstream plants) are connected to the Joint Water Pollution Control Plant located in Carson. The system allows for the diversion of influent flows into or around each upstream wastewater plant when necessary. The Los Coyotes permit authorizes the District to discharge tertiary-treated effluent to Reach 1 of the San Gabriel River, 1,230 feet upstream of the Artesia Freeway above the San Gabriel River Estuary (Estuary). The Long Beach permit authorizes the District to discharge tertiary-treated effluent to Coyote Creek, 2,200 feet upstream from the confluence of Coyote Creek and the San Gabriel River. The District and

Santa Monica BayKeeper (BayKeeper) each filed petitions for review of the permits. The District's petition also seeks review of the TSOs. On July 16, 2003, the State Water Resources Control Board (State Board or Board) decided to review the permits and TSOs on its own motion. In this order, the State Board addresses several issues raised in the petitions and makes some modifications to the permits and to the TSOs. The remaining issues do not raise substantial issues appropriate for review.¹

I. BACKGROUND

The Los Coyotes and Long Beach WRPs are tertiary biological physical-chemical treatment facilities that provide primary sedimentation, activated sludge biological treatment, secondary sedimentation with coagulation, inert media filtration, chlorination, and dechlorination. The Los Coyotes WRP has a design capacity of 37.5 million gallons per day (mgd) and receives industrial, commercial and residential wastewater from an area with an estimated population of 321,500. The Long Beach WRP has a design capacity of 25 mgd and receives industrial, commercial, and residential wastewater from an area with an estimated population of 174,753.

The District discharges tertiary-treated effluent from the Los Coyotes WRP to Reach 1 of the San Gabriel River upstream of the Estuary. The Long Beach WRP discharges tertiary-treated effluent to Coyote Creek upstream from the confluence of Coyote Creek and the San Gabriel River. Both plants also recycle a portion of the treated effluent.²

Coyote Creek and Reach 1 of the San Gabriel River are in the southeastern section of Los Angeles County. They are tributaries to the Estuary, which opens to the Pacific Ocean between Long Beach and Seal Beach. Coyote Creek and portions of the San Gabriel River are engineered channels. The San Gabriel River is concrete-lined from the point of the Los Coyotes WRP discharge to where the Estuary begins. The lower San Gabriel River, which

¹ See *People v. Barry* (1987) 194 Cal.App.3d 158 [239 Cal.Rptr. 349]; Cal. Code Regs., tit. 23, § 2052(a)(1). On July 16, this Board also decided to consider the issue of numeric effluent limitations for chronic toxicity for the District's Whittier Narrows plant on its own motion. The discussion of that issue herein applies also to the Whittier Narrows plant.

² The Los Coyotes WRP recycles 16% of its effluent and the Long Beach WRP recycles 12% of its effluent. Recycled water is used for irrigation of various plantings and crops, and for oil zone injection. The application of recycled effluent is regulated by water reclamation requirements.

includes Reach 1, receives very little flow from the upper San Gabriel River, and is dominated by effluent from the municipal wastewater facilities and urban runoff. The Basin Plan for the Los Angeles Region states that beneficial uses in the lower reaches are impaired, as evidenced by ambient toxicity and bioaccumulation of metals in fish tissue. Coyote Creek, the San Gabriel River, and their tributaries are listed pursuant to Clean Water Act section 303(d) as being impaired for the following pollutants and stressors by point and nonpoint sources: (1) Coyote Creek to Estuary: abnormal fish histology, algae, ammonia, coliform, and silver in fish tissue; (2) San Gabriel River Reach 1: abnormal fish histology, algae, ammonia, coliform, and toxicity; and (3) San Gabriel River Estuary: abnormal fish histology and arsenic in fish tissue.³

The Regional Board adopted the permits and TSOs on July 11, 2002. The District and BayKeeper each filed timely petitions for review of the permits. The District also seeks review of the TSOs. The petitions have been consolidated for purposes of review.⁴ The District also requested a stay. The stay request was dismissed.⁵ The State Board held workshop meetings on April 1, 2003, April 30, 2003, and July 1, 2003, at which draft orders were discussed.^{6 7}

³ Section 303(d) of the Clean Water Act mandates that the states develop “total maximum daily loads” (TMDLs) for all listed waters. A TMDL is a water quality control strategy designed to address a water body impairment and to bring the water into compliance with water quality standards. (40 Code of Federal Regulations (C.F.R.) § 130.20, et seq.) Water quality standards for a water body consist of its beneficial uses, criteria to protect those uses, and an antidegradation policy. (40 C.F.R. part 131.) This Board has recently proposed revisions to the 303(d) list, including some additions and some deletions of pollutants for these waters.

⁴ See Cal. Code Regs., tit. 23, § 2054.

⁵ See letter, dated September 24, 2002, to Melissa A. Thorne and B. Richard Marsh, District counsel, from Celeste Cantú, State Board Executive Director. The District also sought judicial stays, which were denied by the Superior Court and the Court of Appeal. See also letter, dated July 21, 2003, from Craig M. Wilson, Chief Counsel, stating renewed request for stay is incomplete.

⁶ At the April 1 workshop meeting, the Regional Board and the District agreed that the Monitoring and Reporting Programs for the discharges should be revised so that monitoring reports are due three months after each monthly sampling period rather than two months later. We will make those revisions in this Order.

⁷ The District’s written comments on the first Draft Order included several attachments and a statement that several administrative records, monitoring data from the prior permits, and “all other submissions” by the District were incorporated by reference. At the April 1 workshop meeting, the Board ruled that it would not admit any additional evidence or documents into the State Board’s record. The District did not comply with the State Board’s regulation in making the requests. Cal. Code Regs., tit. 23, § 2066. At the April 30 workshop meeting, the Board agreed that it would take administrative notice of the Functional Equivalent Document for Statewide Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California (2000) (SIP). In its comments on the June 10 draft order, the District again attempted to incorporate lengthy provisions from documents that are not a part of the administrative record. At the July 1, 2003, workshop meeting, the chairman denied the (Continued on next page)

II. CONTENTIONS AND FINDINGS

A. District Petition

On August 12, 2002, the State Board received from the District a petition for review, including “preliminary” points and authorities in support thereof.⁸ The District raises 18 issues, many of which have been addressed in prior orders by this Board, or are not substantial. This order addresses the issues discussed below.

Contention: The District contends that the permits should not contain effluent limitations that are based on human health criteria in order to protect the beneficial use designation of water contact recreation (REC-1).⁹

Discussion: The permits include final effluent limitations for the following priority toxic pollutants: mercury, dibenzo(a,h)anthracene, indeno(1,2,3-cd)pyrene, gamma-BHC (Lindane), and bis(2-ethylhexyl)phthalate. The limitations were calculated from the human health criteria for the consumption of organisms. The Regional Board based its action on the need to protect the REC-1 beneficial use of the receiving water bodies. The District claims that these human health criteria should only apply to the beneficial use of Commercial and Sport Fishing (COMM), and that the REC-1 use only authorized the Regional Board to protect for “ingestion of water,” and not for “organisms intended for human health consumption.”

The Regional Board’s Water Quality Control Plan, Los Angeles Basin (Basin Plan), lists both Reach 1 and the Estuary as having existing beneficial uses that include REC-1. Coyote Creek is listed as having a potential beneficial use of REC-1. The Basin Plan attaches the following footnote to the REC-1 listings for Coyote Creek and Reach 1: “Access prohibited by Los Angeles County DPW in concrete-channelized areas.”¹⁰

The permits include the following finding, which is uncontested: “Although the Los Angeles County Department of Public Works post [sic] signs prohibiting access to the San

District’s request to include such documents into the record. Consistent with the ruling, the lengthy quotations from these documents contained in the District’s response are also stricken from the record.

⁸ The District did not amend its points and authorities document.

⁹ A portion of the discussion of this contention appears to be an attack on the California Toxics Rule (CTR), 40 C.F.R. § 131.38, which was promulgated by the United States Environmental Protection Agency (US EPA). This attack on an adopted federal regulation is frivolous.

¹⁰ Table 2-1, footnote m.

Gabriel River, its tributaries and estuary, the public has been observed fishing and wading across the river. There is public access to the San Gabriel River, its tributaries, and estuary through the bike trails that run parallel to the river. Since there is public contact in the receiving water downstream of the discharge, the quality of wastewater discharged to Coyote Creek and to the San Gabriel River Estuary must be such that no public health hazard is created.”¹¹ The evidence in the record supports the REC-1 listings. It shows that people were observed fishing and wading in areas of the San Gabriel River. Bike trails along the San Gabriel River provide access to the river and its tributaries.

The District claims that REC-1 does not include protection of people who eat the fish they catch in sport fishing, and that the limits on access to the river do not allow “full attainment” of the REC-1 beneficial use. A primary goal of the Clean Water Act is to achieve “water quality which provides for the protection and propagation of fish, shellfish, and wildlife and provides for recreation in and on the water.”¹² This goal is commonly referred to as the “fishable/swimmable” goal for all waters. Two of the beneficial uses listed in the Basin Plan refer to the use of waters for fishing: COMM and REC-1.¹³

The District’s argument is basically that the description of COMM in the Basin Plan specifically refers to “organisms intended for human consumption” while REC-1 refers specifically to “ingestion of water.” From this, we are to conclude that the Regional Board should not protect persons who consume fish that they catch in a river designated REC-1, even though “fishing” is a basis for that listing. We reject that reasoning.

Not only would the District’s reasoning present a danger to public health, it would be inconsistent with the goals of the Clean Water Act. For a water body to be fishable, it must be safe for people to eat their catch. Thus, the CTR states that the human health criteria for the consumption of organisms apply to all inland waters that have not been designated for municipal (MUN or drinking water) beneficial use.¹⁴ This requirement is also stated in the SIP,

¹¹ Los Coyotes WRP permit, finding 19; Long Beach WRP permit, finding 19. The findings are identical except the Los Coyotes WRP permit does not refer to Coyote Creek.

¹² Clean Water Act, § 101(a)(2).

¹³ COMM includes numerous commercial and recreational activities involving collection of fish, shellfish, and other organisms. REC-1 includes numerous recreational activities involving body contact with water, including “fishing.”

¹⁴ 40 C.F.R. § 131.38(b)(1), footnote t.

at 1.1. Thus, even if the Basin Plan did not designate the receiving water as REC-1, the criteria would still apply.¹⁵

Contention: The District contends that the effluent limitations for total inorganic nitrogen (TIN) are inappropriate and unlawful.

Discussion: In addition to the priority toxic pollutant effluent limitations discussed above, the permits include effluent limitations for conventional and non-conventional pollutants,¹⁶ including total inorganic nitrogen (nitrate + nitrite as nitrogen). The permits contain final effluent limitations of 8 milligrams per liter (mg/L) and 2,200 pounds per day (lbs/day)¹⁷ as a monthly average for the Los Coyotes WRP, and 8 mg/L and 1,700 lbs/day as a monthly average for the Long Beach WRP. The mass emission rates are based on the plants' design flow rates, and do not apply during wet-weather storm events in which the flow exceeds the design capacity.

In adopting the permits, the Regional Board found that the District may not be able to achieve compliance with the concentration-based effluent limitations without modifying or improving the treatment system, or conducting studies that lead to adoption of site specific objectives. Based on these findings, the TSOs establish interim effluent limitations of 10 mg/L. These interim effluent limitations were based on the performance of another of the District's plants, the Whittier Narrows Water Reclamation Plant (WRP). The TSOs also state that they may be revised if the plants are unable to achieve these interim limitations.

The District appears to concede that it will be able to meet the final effluent limitations when it completes construction of its nitrification/de-nitrification (NDN) facilities, and that the growth of algae in the receiving waters is a problem. Instead, it questions the need for these limitations in the permits, whether compliance with the final limitations will prevent the growth of algae, and whether the interim limitations should have been set at 10 mg/L. The essence of the District's argument is that there is no water quality standard that is the basis for

¹⁵ The District also argues that the beneficial use should not be "fully protected" since people may only fish "occasionally." We will not address this argument since the CTR requires application of the criteria regardless of actual fishing. Moreover, we reject the District's suggestion that the Regional Board should have adopted a less protective risk factor than did US EPA in adopting the CTR. In any event, the Regional Board could only do so by adopting a new water quality standard, which must be approved by US EPA.

¹⁶ These are pollutants not listed in the CTR.

¹⁷ The limitation of 2,200 lbs./day is clearly an error. The limitation should have read 2,500 lbs./day, and will be corrected in this Order.

the total inorganic nitrogen effluent limitations, and the limitations should not be included simply because the plants will be able to achieve them after completion of the NDN facilities. The District claims that the only possible water quality basis for limiting nitrogen would be to protect drinking water, and the permits state that the receiving waters are not designated for MUN use. While the fact sheets for the permits do point to the need to limit nitrogen to prevent the growth of algae, the District claims there is no evidence that nitrogen causes algae growth.¹⁸ The District also claims that the NDN facility is meant to meet the Basin Plan's ammonia water quality objective, and that this is unrelated to nitrogen.

The permits clarify that the discharges have reasonable potential to cause or contribute to exceedance of the narrative water quality objective for biostimulatory substances, including excess nutrients,¹⁹ and that the Estuary is on the Clean Water Act section 303(d) list (303(d) list) as impaired by algae. Coyote Creek and Reach 1 are both on the 303(d) list as being impaired due to algae. Algal blooms are often a result of excess nutrients, which include phosphorus and nitrogen. Pursuant to 40 Code of Federal Regulations section 122.44(d)(1)(vi)(C), the Regional Board was required to adopt numeric effluent limitations for nutrients in these permits.

Lacking conclusive evidence regarding whether the algae were caused by excess nitrogen or by excess phosphorus, the Regional Board appropriately considered available information and established performance-based numeric effluent limitations for nitrogen. The information available to the Regional Board showed that nitrogen is present in Coyote Creek and Reach 1, that the Los Coyotes WRP and Long Beach WRP are both major sources of nitrogen, that data for the District's proposed NDN treatment technology were available, and that the District planned to construct the new treatment technology and received funds from the State Board to do so.

¹⁸ The District's arguments also appear to be an attack on this Board's listing pursuant to Clean Water Act section 303(d). This is obviously not the correct forum to make that claim. Numerous other statements appear to be frivolous, including claims that algae is not a pollutant and that the Basin Plan objective for biostimulatory substances is invalid.

¹⁹ The water quality objective states: "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." It lists biostimulatory substances including "nutrients (nitrogen, phosphorus)." Basin Plan, at page 3-8.

The District's claim that its progress toward meeting the ammonia water quality objective by operating the plant in NDN mode has no connection to the TIN final effluent limitations is not correct. NDN consists of two biological processes to control nitrogenous residuals in effluent. The first process (nitrification) is accomplished by bacterial populations that sequentially oxidize ammonia to nitrate, with intermediate formation of nitrite. This should result in compliance with ammonia water quality objectives. The second process (denitrification) reduces nitrate to nitrogen gas, thus reducing the total nitrogenous content of the effluent.²⁰

The final effluent limitations for TIN were based on the average concentration achievable by the NDN technology proposed by the District. The average concentration for nitrate as N plus nitrite as N in the Whittier Narrows WRP was approximately 6.48 mg/L. The final effluent limitations used this number, plus 25 percent to account for fluctuations. Thus, it appears that the effluent limitations were based, in part, on the District's own claims that the NDN process would solve the nutrient problem in the receiving waters. The District appears to claim that even by meeting the final effluent limitation, the nutrient problems will continue. It was reasonable for the Regional Board to allow the District to complete its NDN facilities and determine whether its claims were correct, rather than impose more stringent water quality-based requirements.

Contention: The District claims the effluent limitations for chronic toxicity are improper.

Discussion: The permits contain effluent limitations with a daily maximum of 1.6 Toxic Unit chronic (TUC) and a monthly median of 1.0 TUC for chronic toxicity. These limitations are meant to implement the narrative water quality objective requiring that waters "be maintained free of toxic substances in concentrations that are toxic." We will not discuss the District's claims that the Regional Board cannot adopt numeric effluent limitations to implement the narrative toxicity water quality objectives in the Basin Plan. Such arguments have been

²⁰ In a letter, the District stated that the NDN system would allow it to achieve compliance with the ammonia objective and to reduce nitrogen as required by the 303(d) listing: "Since the treatment process chosen to comply with the 'ammonia' objective (nitrification/denitrification process) will also lower the 'nitrate and nitrite' concentrations, the Districts believe that removal of 'nitrate and nitrite' from the 303(d) list for the Santa Clara River and removal of 'nitrate as N' from the San Gabriel River is also warranted." (December 13, 2001, letter to Dennis Dickerson.)

rejected before.²¹ It is also clearly the law that NPDES permits must contain effluent limitations that will achieve compliance with water quality standards for pollutants that have the reasonable potential to cause or contribute to exceedance of water quality standards, including the narrative toxicity objectives.²²

The Regional Board found that the District’s effluent had the reasonable potential to cause or contribute to a violation of the Basin Plan’s narrative chronic toxicity objective. Under these circumstances, both the SIP and the applicable federal permitting regulations required that the Regional Board include effluent limitations for chronic toxicity.²³ While numeric effluent limitations are generally preferred,²⁴ NPDES permits can legally contain “best management practices” in lieu of numeric limitations where the permitting authority determines that numeric effluent limitations are not “feasible.”²⁵

In reviewing this petition and receiving comments from numerous interested persons on the propriety of including numeric effluent limitations for chronic toxicity in NPDES permits for publicly-owned treatment works that discharge to inland waters, we have determined that this issue should be considered in a regulatory setting, in order to allow for full public discussion and deliberation. We intend to modify the SIP to specifically address the issue. We anticipate that review will occur within the next year. We therefore decline to make a determination here regarding the propriety of the final numeric effluent limitations for chronic toxicity contained in these permits.²⁶

²¹ See, e.g., Order WQ 2001-16 (Napa Sanitation District).

²² Clean Water Act section 301(b)(1)(C); *City of Burbank v. State Water Resources Control Board* (2003) ___ Cal.App.4th ___; Order No. WQ 91-03 (Citizens for a Better Environment).

²³ SIP, at section 4; 40 C.F.R. § 122.44(d)(1)(v).

²⁴ 40 C.F.R. § 122.44(d)(1)(vi)

²⁵ 40 C.F.R. § 122.44(k); *Communities for a Better Environment v. Tesoro* (2003) 109 Cal.App.4th 1089; *Natural Resources Defense Council v. Costle* (D.C. Cir. 1977) 568 F.2d 1369; Order No WQ 91-03 (Citizens for a Better Environment).

²⁶ This administrative decision does not affect our conclusions, reached in other Orders, that Regional Boards may legally include numeric effluent limitations that are based on interpretation of narrative water quality objectives, despite the absence of promulgated numeric criteria or effluent limitations. We also emphasize that “feasibility” does not refer to the economic costs to comply with the effluent limitations. *City of Burbank, supra*. Rather, the issue we will explore is whether the use of numeric effluent limitations for chronic toxicity is appropriate. See *Tesoro, supra*, slip opn., p. 18.

Pending modification of the SIP, we will ensure that the permits contain adequate narrative effluent limitations.²⁷ The final numeric effluent limitations for chronic toxicity will be replaced by the following: “There shall be no chronic toxicity in the effluent discharge.” US EPA has also stated that if a narrative effluent limitation is used, the permits must also contain (1) numeric benchmarks for triggering accelerated monitoring, (2) rigorous toxicity reduction evaluation (TRE)/toxicity investigation evaluation (TIE) conditions, and (3) a reopener to establish numeric effluent limitations for either chronic toxicity or the chemical(s) causing toxicity. We find that the permits already contain a numeric trigger of 1 TUc for conducting accelerated monitoring and rigorous TRE/TIE conditions, but there is a need for a reopener. We will make that revision to the permits.²⁸ The addition of an enforceable narrative effluent limitation for chronic toxicity, along with the existing TRE/TIE requirements and the reopener for a numeric effluent limitation for chronic toxicity, if necessary, will ensure that the requirements to perform a TRE/TIE and to implement it to eliminate toxicity are clear and enforceable. We also expect that where the TRE/TIE indicates a pollutant is causing the toxicity, the Regional Board will reopen the permit to include numeric effluent limitations for that constituent.

Contention: The District contends that the effluent limitations for cyanide and nickel are unjustified and overly stringent.

Discussion: The permits include numeric effluent limitations for the priority toxic pollutants nickel and cyanide. The effluent limitations are expressed as both concentrations and mass, and as both daily maximum and monthly averages. The District challenges the monthly average effluent limitation of 4.2 micrograms per liter ($\mu\text{g}/\text{l}$) for cyanide and 70 $\mu\text{g}/\text{l}$ for nickel in the Los Coyotes WRP permit, and 4.3 $\mu\text{g}/\text{l}$ for cyanide in the Long Beach WRP permit.²⁹

The District states that the applicable CTR water quality criteria are 5.2 $\mu\text{g}/\text{l}$ for cyanide and 105 $\mu\text{g}/\text{l}$ for nickel, based on the statistical procedures set forth in the SIP.

²⁷ See letter from U.S. EPA, dated June 25, 2003, describing the requirements for narrative effluent limitations.

²⁸ We will also make a minor revision to the monitoring program for the permits to ensure consistency in the terminology.

²⁹ The cyanide limitations are final effluent limitations that are not in effect until June 10, 2007.

The Regional Board appropriately calculated the effluent limitations for cyanide and nickel. The limitations were calculated according to the procedures in section 1.4 of the SIP. To support its contention, the District refers to the following statement in the CTR: “Continuous Criteria Concentration (CCC) is the water quality criteria to protect against chronic effects in aquatic life and is the highest in stream concentration of a priority toxic pollutant consisting of a 4-day average not to be exceeded more than once every three years on the average.”³⁰ The District claims that because the CCC for cyanide is 5.2 µg/l, this statement means that effluent limitations should be set no lower than 5.2 µg/l.

As stated in the Regional Board’s response, the District is comparing apples to oranges. The statement in the CTR refers to water quality objectives in the receiving water, while the permit established effluent limitations. The objective is the maximum pollutant concentration allowed in the water body to protect its designated beneficial uses. An effluent limitation is the maximum pollutant concentration in the discharge that is necessary to meet the receiving water quality objective. Effluent limitation calculation takes into account effluent variability, receiving water dilution if available, sampling frequencies, and protection against acute and chronic impacts. The statement from the CTR refers to US EPA criteria (water quality standards) and to allowed exceedances of those criteria, not to effluent limitations.

While it might simplistically be said that an effluent limitation would not have to be set at a more stringent level than a water quality standard, in the real world of monitoring effluent and ensuring compliance, the situation is much more complex. Most discharges are not sampled continuously because the costs of such monitoring could be exorbitant. Instead, a series of sampling events occur, and together they essentially provide a series of “snapshots” of the effluent. Statistics are then used to fill in the full picture. Based on the variability of the sample results (coefficient of variation) and sampling frequency, uncertainty multipliers are calculated or determined using Effluent Concentration Allowance Multipliers for Calculating Long Term Averages³¹ and Long-Term Average Multipliers for Calculating Effluent Limitations.³² The multipliers in turn are used to derive a probability-based maximum effluent concentration,

³⁰ 40 C.F.R. § 131.38(c)(2), Note 2 to Table 4.

³¹ SIP, Table 1, at page 7.

³² SIP, Table 2, at page 9.

necessary to meet water quality standards. If the Regional Board had simply set the effluent limitations at the standards, criteria could be exceeded due to effluent variability, and the limitations would not have been in compliance with the SIP.

We do note what appears to be a minor error in the Long Beach WRP permit. The daily maximum final effluent limitations for cyanide are stated as 4.3 µg/l as a monthly average and 8.4 µg/l as a daily maximum. Attachment R to the permit is the Reasonable Potential Analysis Table, which includes the effluent limitations derived by application of the SIP. The monthly average effluent limitation shown there, which represents the calculations by the Regional Board staff, is 4.2 µg/l for cyanide. We will correct the permit by replacing the correct limitation.

Contention: The District claims that the Regional Board erred in not including a compliance schedule for constituents not included in the CTR in the permits and for not including a longer compliance schedule for CTR pollutants.

Discussion: The permits include compliance schedules and interim effluent limitations for some toxic pollutants that are included in the CTR. The Los Coyotes WRP permit includes interim limitations for mercury, nickel, cyanide, and Bis(2-Ethyhexyl)Phthalate. The Long Beach WRP permit includes interim limitations for mercury, cyanide, and Lindane (gamma-BHC). The final effluent limitations for all of these pollutants do not apply until June 10, 2007, the last date allowed in the compliance schedule incorporated into the CTR. In addition, the Regional Board adopted TSOs for several non-CTR pollutants: total inorganic nitrogen, total ammonia, and chronic toxicity. The TSOs include interim effluent limitations, and the final compliance date is set at October 1, 2003.

The District contends that the permits should have included later compliance dates for the CTR constituents. The District also contends that the Regional Board should have included a time schedule and interim limitations in the permit for the non-CTR constituents, rather than adopting separate TSOs.

For toxic priority pollutants, the CTR includes a provision allowing compliance schedules of no more than five years for the criteria listed therein.³³ The SIP also has provisions for compliance schedules for these pollutants, allowing up to 15 years for compliance with final effluent limitations.³⁴ The US EPA has not yet approved or disapproved the SIP's compliance schedule provision, however, and the Regional Board must therefore rely only upon the CTR's provision, which limits time schedules to five years.

The US EPA has adopted a regulation known as the "Alaska Rule," which provides that if a state submitted a water quality standard to US EPA before May 30, 2000, then the water quality standard is the applicable water quality standard, unless or until US EPA has promulgated a more stringent water quality standard for the state.³⁵ The more stringent US EPA standard is the applicable water quality standard until US EPA withdraws it.³⁶

The SIP was effective before May 30, 2000, but the five-year compliance schedule limitation in the CTR is more stringent than the provision in the SIP, which allows up to 15 years for compliance. US EPA has not approved the compliance schedule in the SIP and has not withdrawn the compliance schedule in the CTR. Therefore, for CTR pollutants, the Regional Board cannot include a time schedule longer than five years. It acted appropriately in establishing the five-year time schedules in the permits for mercury, nickel, cyanide, Bis(2-Ethyhexyl)Phthalate, Dibenzo(a,h)anthracene, Indeno(1,2,3-cd)pyrene, and Lindane (gamma-BHC).

The CTR only applies to priority toxic pollutants and, therefore, does not apply to TIN, total ammonia, or chronic toxicity. US EPA regulations allow states to use compliance schedules in NPDES permits, but only when the state has adopted specific authorization and implementation procedures in its water quality standards.³⁷ Federal law does not authorize schedules of compliance in a permit where the water quality standards do not specifically provide

³³ 40 C.F.R. § 131.38(e)(6).

³⁴ SIP, § 2.1, at p.19.

³⁵ 40 C.F.R. § 131.21.

³⁶ *Ibid.*

³⁷ 40 C.F.R. § 122.47. See *In re Star-Kist Caribe, Inc.*, 3 E.A.D. 172, 175, 1990 WL 324290 (E.P.A., Apr. 16, 1990).

for such schedules. The District also points to Water Code section 13260(c), which states that waste discharge requirements “may contain a time schedule,” and to the Regional Board’s Basin Plan, which states that an NPDES permit “generally includes . . . time schedules and interim reporting deadlines for compliance” (italics omitted). Neither the statute nor the Basin Plan expressly or impliedly authorizes schedules of compliance that allow delayed compliance with effluent limitations necessary to achieve water quality standards where the state water quality standards or implementing regulations do not provide for schedules of compliance.³⁸ The Regional Board acted appropriately in adopting separate TSOs for TIN, total ammonia, and chronic toxicity.³⁹

Contention: The District challenges the interim effluent limitations established for nickel and Bis(2-ethylhexyl)phthalate in the Los Coyotes WRP permit and for ammonia, TIN, and chronic toxicity in the TSOs. The District claims that while the interim limitations were intended to be based upon effluent performance data for the Los Coyotes and Long Beach WRPs, the calculations were not justified in the administrative record and do not provide adequate protection against violations because the confidence level should have been greater than 99%. Instead, the District claims, the interim limitations should have been based on the maximum detected concentrations (as monthly averages), or on the 99.87% confidence level, which is used by the San Francisco Bay Regional Board.

The SIP requires interim effluent limitations based on either current treatment facility performance, or existing permit limitations, whichever is more stringent.⁴⁰ The SIP does not specify the manner of determining current treatment facility performance. The Regional Board responds that it has discretion in calculating interim limitations, and that its staff used US EPA guidance⁴¹ to calculate these interim effluent limitations. A review of the record indicates that, in adopting the interim effluent limitations in this permit, the Regional Board either used a statistical method or, where appropriate, set the interim limit at the observed

³⁸ For an example of a Basin Plan that allows for compliance schedules in NPDES permits, see the San Francisco Bay Regional Board’s Basin Plan.

³⁹ This conclusion is consistent with the holding in *Burbank, supra*.

⁴⁰ SIP, Section 2.2.1.

⁴¹ Technical Support Document, App. E.

maximum effluent concentration (MEC). Where the available data sets allowed a statistical method, this was done in accordance with the Technical Support Document for Water Quality-Based Toxicity.⁴² The statistical method is the preferred method because effluent variability is accounted for.

Regional Boards have discretion in setting the percentile or the number of standard deviations when determining current performance.⁴³ The Regional Board calculated the daily maximum interim limitations at the 99% confidence level of the 99th percentile and the monthly average limitation at the 95% confidence level using the plant's own effluent performance data.

The District claims that the mean, plus three standard deviations, should be used in calculating interim effluent limitations because the San Francisco Bay Regional Board used that method. The District does not point to any error in the method used in these permits, and there is no requirement that the Regional Boards use the same method. Both methods are scientifically valid, and we will not reverse the Regional Board for exercising discretion in a manner that is supportable.

We do find, however, the tables listing the interim effluent limitations in the TSOs are confusing and should be revised. Each has a column labeled Daily Maximum, but in fact some of the limitations listed are monthly median limitations. We will correct that error.

B. Santa Monica BayKeeper Petition

Contention: The BayKeeper petition challenges the permits because they do not include some effluent limitations that existed in the prior permits for the Los Coyotes and Long Beach WRPs.⁴⁴ BayKeeper claims the permits therefore violate antidegradation and antibacksliding requirements.

Discussion: The BayKeeper does not challenge the Regional Board's determination that there was no reasonable potential for any of these pollutants to be discharged

⁴² US EPA, March 1991.

⁴³ State Board Order WQ 2001-06 (Tosco).

⁴⁴ For example, the pollutants that were in the prior Los Coyotes WRP permit and are not included in effluent limitations in the current permit include fluoride, MBAS, antimony, arsenic, barium, beryllium, cadmium, chromium VI, iron, lead, selenium, silver, zinc, lindane, halomethanes, tetrachloroethylene, and p-dichlorobenzene.

at levels that would cause or contribute to exceedance of water quality standards. Thus, the permits do not allow an increase in pollutants compared to the limitations in the prior permits; they simply do not include effluent limitation for constituents for which the Regional Board found there was no reasonable potential to cause or contribute to exceedance of water quality standards. The procedure followed by the Regional Board was consistent with the SIP.⁴⁵ It is not clear that the deletion of effluent limitations even falls under the antibacksliding rule, but if it does, it falls within an exception to the rule. Water quality-based effluent limitations may be relaxed in a later permit based on new information.⁴⁶ The new information consists of the monitoring studies conducted that showed a lack of reasonable potential. The absence of these effluent limitations also does not violate the antidegradation policies stated in State Board Resolution 68-16 and 40 Code of Federal Regulations section 131.12 since the permits will result in improved water quality because effluent limitations are more stringent for pollutants that do have the potential to affect water quality.

III. CONCLUSIONS

The Los Angeles Regional Water Quality Control Board acted appropriately and properly in adopting permits for the Los Coyotes and Long Beach WRPs. We question the propriety of numeric chronic toxicity effluent limitations in NPDES permits for publicly-owned treatment works that discharge to inland waters, and have decided to address that issue in modifications to the SIP. In the interim, we will replace the final numeric effluent limitations for chronic toxicity with narrative effluent limitations, and we will make other revisions to the permits to ensure that the permits adequately address chronic toxicity prior to revisions to the SIP. There are also several minor corrections we will make. The State Board's conclusions are summarized below:

1. The Regional Board appropriately established effluent limitations implementing human health criteria to protect the beneficial use of body contact recreation.

⁴⁵ SIP, at 1.3.

⁴⁶ 33 U.S.C. § 1342(o)(2)(B)(i).

2. The final effluent limitations for total inorganic nitrogen are appropriate and lawful, except that the final monthly average effluent limitation for TIN in the Los Coyotes WRP permit should be 2,500 lbs/day.

3. The propriety of final numeric effluent limitations for chronic toxicity should be assessed in the context of proposed revisions to the statewide implementation plan for priority toxic pollutants. In the interim, these will be replaced by a narrative effluent limitation and other revisions necessary to ensure adequate limitations on chronic toxicity.

4. The final effluent limitations for cyanide and nickel are appropriate and proper, except that the final monthly average effluent limitation for cyanide in the Long Beach WRP permit should be 4.2 µg/l.

5. The Regional Board acted properly in not including a compliance schedule for constituents not included in the CTR in the permits, and instead adopting a TSO, and in including in the permit compliance schedules for CTR pollutants limited to five years.

6. The interim effluent limitations established for nickel and Bis(2-ethylhexyl)phthalate in the Los Coyotes WRP permit and for ammonia and total inorganic nitrogen in the TSOs are appropriate and proper. The tables in the TSOs are confusing, however, and must be revised.

7. The Regional Board acted appropriately and lawfully in omitting effluent limitations for pollutants for which there is no reasonable potential of causing or contributing to violation of water quality standards.

IV. ORDER

IT IS HEREBY ORDERED that Order No. R4-2002-0123 is revised by changing the monthly average final effluent limitation for cyanide from 4.3 µg/l to 4.2 µg/l.

IT IS FURTHER ORDERED that Order No. R4-2002-0121 is revised by changing the monthly average final effluent limitations for total inorganic nitrogen from 2,200 lbs/day to 2,500 lbs/day.

IT IS FURTHER ORDERED that the permits are revised to delete Effluent Limitation 10.b. for chronic toxicity from Order No. R4-2002-0121 and from Order No. R4-2002-0123. These limitations are replaced with the following language: There shall be no chronic toxicity in the effluent discharge. The following provision is added as Effluent

Limitation 10.e.: This permit may be reopened to include effluent limitations for pollutants found to be causing chronic toxicity and to include numeric chronic toxicity effluent limitations based on direction from the State Water Resources Control Board or failure of the District to comply fully with the TRE/TIE requirements. Provision VI.D.2.e of the Monitoring and Reporting Programs for the permits is revised to substitute “the trigger in Effluent Limitation 10.c” for “the limitation.”

IT IS FURTHER ORDERED that Monitoring and Reporting Program Nos. CI-5059 and CI-5662 are revised by replacing “second” with “third” in I.A.

IT IS FURTHER ORDERED that Order No. R4-2002-122 is revised by replacing the table on the bottom of page 4 with the following:

Constituent	Units	Daily Maximum ^[1]	Monthly Average
Total ammonia	mg/L	17 ^[2]	
Total Inorganic Nitrogen (Nitrate-N + Nitrite-N)	mg/L		10 ^[3]

IT IS FURTHER ORDERED that Order No. R4-2002-124 is revised by replacing the table on the bottom of page 4 with the following:

Constituent	Units	Daily Maximum ^[1]	Monthly Average
Total ammonia	mg/L	18 ^[2]	
Total Inorganic Nitrogen (Nitrate-N + Nitrite-N)	mg/L		10 ^[3]

IT IS FURTHER ORDERED that the references to the final numeric chronic toxicity effluent limitations and the interim numeric chronic toxicity effluent limitations are deleted from finding 3 (including table), finding 11, finding 12, finding 13, requirement 2, requirement 4, requirement 5 in Order No. R4-2002-0122 and Order No. R4-2002-0124.

IT IS FURTHER ORDERED that finding 16, footnote 3 attached to the table in finding 3, footnote 4 attached to the table in requirement 1, and requirement 6(c) are deleted in their entirety in Order No. R4-2002-122 and Order No. R4-2003-124.

IT IS FURTHER ORDERED that Order No. R4-2002-122 and Order No. R4-2002-124 are revised by inserting the identifier “trigger” after the phrase “An exceedance of the 1 TUC effluent monthly median” in requirement 6(b).

IT IS FURTHER ORDERED that in all other respects the petitions in this matter are dismissed.

CERTIFICATION

The undersigned, Clerk 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 September 16, 2003.

AYE: Arthur G. Baggett, Jr.
Peter S. Silva
Richard Katz
Gary M. Carlton
Nancy H. Sutley

NO: None.

ABSENT: None.

ABSTAIN: None.


Debbie Irvin
Clerk to the Board