

STATE OF CALIFORNIA
STATE WATER RESOURCES CONTROL BOARD

In the Matter of the Petition of)
)
CALIFORNIA DENTAL ASSOCIATION,)
ET AL.)
)
For Review of Waste Discharge)
Requirements Order No. 94-127)
of the California Regional Water)
Quality Control Board, San)
Francisco Bay Region. NPDES)
Permit No. CA0037702. Our File)
No. A-935.)
_____)

ORDER NO. WQ 95-5

BY THE BOARD:

On September 21, 1994, the California Regional Water Quality Control Board, San Francisco Bay Region (SFBRWQCB), reissued a National Pollutant Discharge Elimination System (NPDES) permit¹ in Order No. 94-127 for a wastewater treatment plant, owned and operated by East Bay Municipal Utility District, Special District No. 1 (EBMUD). On October 21, 1994, the California Dental Association and its affiliates, the Berkeley Dental Society, the Alameda County Dental Society, and the Southern Alameda County Dental Society (referred to collectively as CDA or petitioner) filed a petition for review of Order

¹ NPDES permits are issued, pursuant to Section 402 of the federal Clean Water Act, Title 33, United States Code, Section 1251 et seq. (Clean Water Act or Act), to regulate the point source discharge of pollutants to surface waters. 33 U.S.C. § 1342. Under Section 402, permits may be issued either by the federal Environmental Protection Agency (EPA) or by states with approved programs. California has an approved program. In California, waste discharge requirements issued by a Regional Water Quality Control Board (RWQCB) or by the State Water Resources Control Board (SWRCB or Board) pursuant to Water Code, Division 7, Chapter 5.5, are equivalent to NPDES permits.

No. 94-127.² The petition filed by CDA focuses primarily on the effluent limitations for mercury contained in Order No. 94-127.

Several of the issues raised by CDA in its petition are addressed in detail in Order No. WQ 95-4, which the SWRCB is also issuing today. Order No. WQ 95-4 concerns an NPDES permit reissued by the SFBRWQCB for discharges from the City and County of San Francisco's Southeast Plant. To the extent that issues raised by CDA in this matter are already addressed in Order No. WQ 95-4, the Board will discuss these issues only briefly in this Order and will refer to our determinations in Order No. WQ 95-4.

For the reasons which are explained below, the Board remands Order No. 94-127, and the accompanying Fact Sheet, to the SFBRWQCB for action consistent with this Order.

I. BACKGROUND

On December 17, 1986, the SFBRWQCB adopted a water quality control plan for the San Francisco basin (1986 Basin Plan). This plan is currently in effect and is applicable to the EBMUD discharge. Table III-2A of the 1986 Basin Plan contains water quality objectives applicable to San Francisco Bay for a number of toxic pollutants, including mercury. The objectives for mercury are 0.025 micrograms per liter ($\mu\text{g}/\text{l}$) as a four-day average and 2.1 $\mu\text{g}/\text{l}$ as a one-hour average.

² CDA also requested a stay of Order No. 94-127. This request was denied without prejudice by letter dated March 6, 1995.

In 1991, this Board adopted the California Enclosed Bays and Estuaries Plan (Bays and Estuaries Plan).³ See SWRCB Resolution No. 91-33. Adoption of the Bays and Estuaries Plan was prompted by the addition of Section 303(c)(2)(B) to the Clean Water Act by the Water Quality Act of 1987, Pub. L. 100-4. 33 U.S.C. § 1313(c)(2)(B). Section 303(c)(2)(B) mandated that the states, in connection with their next triennial review of water quality standards,⁴ adopt numeric criteria for certain toxic pollutants listed in the EPA guidelines.⁵ Accordingly, the Bays and Estuaries Plan established water quality objectives, applicable to enclosed bays and estuaries throughout the State, for several toxic pollutants, including mercury. The water quality objective for mercury in the Bays and Estuaries Plan for the protection of human health was a 30-day average of 25 nanograms per liter, or 0.025 µg/l.

³ The SWRCB concurrently adopted the California Inland Surface Waters Plan, which applied to surface waters generally, excluding bays, estuaries, and the ocean. This plan, like the Bays and Estuaries Plan, was later rescinded by this Board.

⁴ Water quality standards, under Section 303(c) of the Clean Water Act, consist of the designated beneficial uses of a waterbody together with water quality criteria to protect these uses. 33 U.S.C. § 1313(c)(2)(A). Water quality criteria, for purposes of Section 303(c), are equivalent to water quality objectives under states law. Compare 40 C.F.R. § 131.3(b) with Water Code § 13050(h).

⁵ Section 303(c)(2)(B) provides, in pertinent part:

"Whenever a State reviews water quality standards...or revises or adopts new standards..., such State shall adopt criteria for all toxic pollutants listed pursuant to section 1317(a)(1) of this title [referred to as priority pollutants] for which criteria have been published under section 1314(a) of this title, the discharge or presence of which in the affected waters could reasonably be expected to interfere with those designated uses adopted by the State, as necessary to support such designated uses. Such criteria shall be specific numerical criteria for such toxic pollutants."

In March 1994, the Sacramento County Superior Court issued a final decision holding that the SWRCB had failed to comply with applicable state law in adopting the Bays and Estuaries Plan. The Board, therefore, on September 22, 1994, adopted Resolution No. 94-87 rescinding the plan.

On September 21, 1994, the SFBRWQCB adopted Order No. 94-127, regulating the discharge of secondarily treated effluent from EBMUD's Treatment Plant, located in Oakland, California, to Central San Francisco Bay. Effluent Limitation B.6., Table 1, of the Order establishes both interim and final effluent limitations, expressed as monthly and daily averages, for a number of toxic pollutants discharged from the plant. Mercury is included in Table 1 with a monthly average limitation of 0.21 µg/l and a daily average of 21 µg/l.

According to the permit findings, these limitations were based on "the plans, policies, and water quality criteria of the Basin Plan, Quality Criteria for Water (EPA/5-86-001, 1986; Gold Book), applicable Federal Regulations (40 C.F.R. Parts 122 and 131), and Best Professional Judgement." Order No. 94-127, Finding 10. The permit Fact Sheet contains identical language. In addition, the SFBRWQCB's response to the petition indicates that the monthly average effluent limitation for mercury in Order No. 94-127 was calculated from the "Water Quality Objectives for Enclosed Bays and Estuaries for Protection of Human Health." Memorandum, dated February 6, 1995, from Steven R. Ritchie, former Executive Officer of the SFBRWQCB, to Sheila K. Vassey, SWRCB Senior Staff Counsel, Attachment 11.

Petitioner CDA objects to the effluent limitations for toxic pollutants contained in Order No. 94-127 on several grounds. Petitioner's primary complaint, however, is with the limitations for mercury. In addition, petitioner contends that Order No. 94-127 is a water quality control plan and that, as such, the order must be adopted as a regulation. Petitioner's contentions are discussed below.

II. CONTENTIONS AND FINDINGS⁶

1. Contention: CDA contends that the SFBRWQCB erred in the adoption of Order No. 94-127 by failing to comply with Section 303(c)(2)(B) of the Clean Water Act and with guidance issued by EPA implementing Section 303(c)(2)(B). See "Guidance for State Implementation of Water Quality Standards for CWA Section 303(c)(2)(B)," December 12, 1988.

Finding: The SFBRWQCB was not required to comply with Section 303(c)(2)(B) and the implementing EPA guidance prior to the adoption of Order No. 94-127. Rather, the SFBRWQCB could legally rely on Title 40, Code of Federal Regulations, Section 122.44(d) in developing chemical-specific effluent limitations for toxic pollutants to implement the existing narrative toxicity objective in the 1986 Basin Plan. The SFBRWQCB could also develop numeric effluent limitations to implement numeric objectives in the 1986 Basin Plan. Petitioner's contention must, therefore, be rejected.

⁶ The Board finds that issues raised by CDA, which are not discussed in this section of the Order, are insubstantial and not appropriate for SWRCB review. See People v. Barry, 194 Cal.App.3d 158, 239 Cal.Rptr. 349 (1987); 23 C.C.R. § 2052.

As explained above, Section 303(c)(2)(B) requires that each state adopt numeric criteria, as a part of the state's water quality standards, for certain priority toxic pollutants in order to protect the beneficial uses of surface waters within the state. In California, these criteria, referred to as water quality objectives, can be adopted by either the SWRCB as part of a statewide water quality control plan or by an RWQCB as part of a regional water quality control plan (basin plan). See Water Code §§ 13170, 13240. Once numeric water quality objectives are adopted by either the SWRCB or an RWQCB, the objectives must be implemented through appropriate water quality-based effluent limitations in NPDES permits. See 33 U.S.C. §§ 1311(b)(1)(C), 1342(a)(1); Water Code §§ 13263, 13377.

Section 303(c)(2)(B) created an exception to the general rule that water quality criteria may be expressed in either numeric or narrative terms. See 40 C.F.R. § 131.3(b). See also Water Code § 13050(h). A typical narrative criteria consists of the statement: "No toxic pollutants in toxic amounts." Narrative criteria, like numeric criteria, must be enforced through the development of appropriate effluent limitations in NPDES permits. See 33 U.S.C. §§ 1311(b)(1)(C), 1342(a)(1). See also Water Code §§ 13263, 13377.

In order to assist the states in developing effluent limitations to implement narrative criteria, EPA promulgated Title 40, Code of Federal Regulations, Section 122.44(d)(1)(vi). This regulation requires the states to employ one of three options to translate narrative criteria into chemical-specific

effluent limitations in NPDES permits, where a chemical is present in wastewater at concentrations that cause, or have the reasonable potential to cause, an excursion above a narrative criterion. These options include establishing a specific numeric effluent limitation: (1) from a calculated criterion, such as a proposed state criterion, for the pollutant of concern; (2) on a case-by-case basis, using EPA's water quality criteria, supplemented where necessary by other relevant information; or (3) on an indicator parameter for the pollutant of concern.

Section 122.44(d) does not result in the creation of new water quality standards; "rather, it provides alternative mechanisms through which previously adopted water quality standards containing narrative criteria may be applied to create effective limitations on effluent emissions." American Paper Institute, Inc. v. United States Environmental Protection Agency, 996 F.2d 346, 351 (1993) (American Paper Institute). As the court observed in American Paper Institute, supra, Section 122.44(d) complements Section 303(c)(2)(B) of the Clean Water Act by allowing the states to put in place new chemical-specific effluent limitations through interpretation of existing narrative criteria until the states have had the opportunity to adopt specific numeric criteria (or water quality objectives in California) pursuant to Section 303(c)(2)(B). 996 F.2d at 353.

In sum, the states are not required to adopt chemical-specific numeric criteria for toxic pollutants prior to issuing NPDES permits containing effluent limitations for these constituents. Instead, the states may rely on Title 40, Code of

Federal Regulations, Section 122.44(d) in developing chemical-specific effluent limitations to implement existing narrative toxicity criteria as an interim measure until the states have formally adopted numeric criteria for these chemicals.

The 1986 Basin Plan contains a narrative toxicity objective.⁷ Therefore, the SFBRWQCB could appropriately develop chemical-specific toxic pollutant effluent limitations for inclusion in Order No. 94-127 in order to implement the existing narrative toxicity objective, where discharge of the pollutants had the reasonable potential to cause an excursion above the narrative objective. The SFBRWQCB could also base numeric effluent limitations on existing numeric objectives in the 1986 Basin Plan.

Contention: CDA further contends that the effluent limitations for mercury and other toxic pollutants in Order No. 94-127 are invalid because they were not derived from properly adopted water quality objectives. CDA alleges that, because the Bays and Estuaries Plan and a SFBRWQCB basin plan amendment implementing the Bays and Estuaries Plan⁸ are no longer in effect, there are no properly adopted water quality objectives

⁷ The narrative toxicity objective states, in part:

"All waters shall be maintained free of toxic substances in concentrations that are lethal to or that produce other detrimental responses in aquatic organisms...." 1986 Basin Plan, p. III-3.

⁸ In 1992 the SFBRWQCB adopted basin plan amendments, incorporating the toxic pollutant objectives from the Bays and Estuaries Plan into the 1986 Basin Plan. Subsequent to SWRCB approval of the amendments, the Bays and Estuaries Plan was rescinded. For this reason, the 1992 amendments implementing the Bays and Estuaries Plan were never submitted to the Office of Administrative Law for approval, pursuant to the Administrative Procedure Act, Government Code Section 11340 et seq., and, consequently, never became effective. See Gov't. Code § 11353(b)(5).

for certain toxic pollutants, including mercury, regulated under Order No. 94-127. Petitioner further maintains that, without such objectives, the SFBRWQCB could not derive numeric effluent limitations for these pollutants.⁹

Finding: Contrary to petitioner's assertion, the 1986 Basin Plan contains properly adopted water quality objectives, both numeric and narrative, upon which to derive chemical-specific effluent limitations for Order No. 94-127. The permit findings and Fact Sheet, however, do not adequately explain the basis for the toxic pollutant effluent limitations included in Order No. 94-127.

As the preceding discussion indicates, the 1986 Basin Plan contains a narrative objective for toxicity. In the absence of numeric objectives for the toxic pollutants of concern, the SFBRWQCB was required to develop appropriate chemical-specific

⁹ CDA also argues that the toxic pollutant effluent limitations in Order No. 94-127 are invalid because the SFBRWQCB failed to develop the limitations using one of the two methods discussed by this Board in Order No. WQ 94-8. In that order, the Board stated that an RWQCB, in the absence of applicable numeric objectives for a constituent, could develop chemical-specific effluent limitations implementing the narrative, as provided in Title 40, Code of Federal Regulations, Section 122.44(d). Alternatively, the RWQCB could develop a water quality objective on a permit-specific basis. See Water Code § 13263(a). Development of permit-specific objectives is rarely done by the RWQCBs.

Although the record is unclear, it appears that the SFBRWQCB did, in fact, consistently with Order No. WQ 94-8, develop numeric effluent limitations for a number of toxic pollutants for which there were no numeric objectives, as an interpretation of the narrative toxicity objective. With respect to mercury, the 1986 Basin Plan contains numeric objectives for this pollutant which are applicable to the EBMUD discharge.

CDA also contends that the SWRCB indicated in Order No. WQ 94-8 that a RWQCB must comply with Section 303(c)(2)(B) of the Clean Water Act if the RWQCB adopts a permit-specific objective. Contrary to petitioner's assertion, however, the SWRCB did not take this position in Order No. WQ 94-8. Section 303(c)(2)(B) applies generally to the development of water quality standards on a statewide or, presumably, a regional basis; it is inapplicable to individual permitting actions.

effluent limitations to implement the narrative toxicity objective, where discharge of the pollutants had the reasonable potential to cause an excursion above the narrative objective. See 33 U.S.C. §§ 1311(b)(1)(C), 1342(a)(1); 40 C.F.R. § 122.44(d); Water Code §§ 13377, 13263; 23 C.C.R. § 2235.2. Assuming that the SFBRWQCB derived numeric effluent limitations from an interpretation of the narrative toxicity objective, the SFBRWQCB did not, in so doing, adopt water quality objectives for these pollutants, but rather interpreted the existing narrative toxicity objective.

The 1986 Basin Plan also contains properly adopted numeric water quality objectives for mercury. See Section I of this Order, *supra*. The SFBRWQCB was required to develop effluent limitations implementing these objectives, unless the SFBRWQCB determined that more stringent limitations were necessary to protect beneficial uses or prevent nuisance. See discussion in Section II.3 of Order No. WQ 95-4.

Although the 1986 Basin Plan contains valid narrative and numeric water quality objectives, upon which the SFBRWQCB could base numeric effluent limitations, neither the findings in Order No. 94-127 nor the Fact Sheet adequately explain the basis for the toxic pollutant effluent limitations included in the permit. In this regard, the permit findings and Fact Sheet are too vague to enable the reader to discern whether individual chemical-specific effluent limitations developed by the SFBRWQCB were intended to implement the narrative toxicity objective, to implement numeric objectives in the 1986 Basin Plan, or to meet

other requirements, such as federal antidegradation standards. See 40 C.F.R. § 131.12. See discussion in Sections II.8 and II.9 of Order No. WQ 95-4.

With respect to the mercury effluent limitations, in particular, neither the permit findings nor the Fact Sheet explain the relationship between the effluent limitations and the 1986 Basin Plan objectives. See discussion in Section II.3 of Order No. WQ 95-4. The SFBRWQCB's response to the CDA petition compounds the uncertainty by indicating that the monthly average mercury limitation was derived from "Water Quality Objectives for Enclosed Bays and Estuaries" for the protection of human health. Presumably this reference is to the objectives in the Bays and Estuaries Plan, which has been rescinded.

For these reasons, Order No. 94-127 and the Fact Sheet must be remanded to the SFBRWQCB to correct the deficiencies in the permit findings and Fact Sheet, consistent with this Board's determinations in Order No. WQ 95-4. See, in particular, the discussions in Sections II.3, II.8, and II.9 of Order No. WQ 95-4, which address the mercury effluent limitations, permit findings and Fact Sheet.

3. Contention: Petitioner alleges that Order No. 94-127 is a water quality control plan and must be adopted in accordance with the provisions of the Administrative Procedure Act.

Finding: For the reasons explained in Section II.12 of Order No. WQ 95-4, the Board concludes that this contention is erroneous.

III. CONCLUSIONS

Based upon the above discussion, the SWRCB concludes as follows:

1. The SFBRWQCB was not required to comply with Section 303(c)(2)(B) and the applicable EPA guidance prior to adopting Order No. 94-127.

2. The 1986 Basin Plan contains properly adopted water quality objectives, both narrative and numeric, for toxic pollutants from which the SFBRWQCB could, legally, derive chemical-specific numeric effluent limitations.

3. The permit findings and Fact Sheet must be revised to adequately explain the rationale for the toxic pollutant effluent limitations included in Order No. 94-127 and to conform to this Board's determinations in Order No. WQ 95-4.

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4. Order No. 94-127 is not a water quality control plan and need not be adopted as a regulation under the Administrative Procedure Act.

IV. ORDER

IT IS HEREBY ORDERED that Order No. 94-127 and the Fact Sheet are remanded to the SFBRWQCB for action consistent with this Order.

IT IS FURTHER ORDERED that the petition of CDA is otherwise denied.

CERTIFICATION

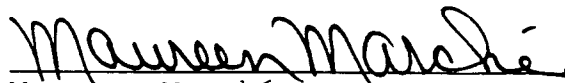
The undersigned, Administrative Assistant to the Board, does hereby certify that the foregoing is a full and correct copy of an order duly and regularly adopted at a meeting of the State Water Resources Control Board held on September 21, 1995.

AYE: John Caffrey
 Mary Jane Forster
 Marc Del Piero
 James W. Stubchaer
 John W. Brown

NO: None

ABSENT: None

ABSTAIN: None



Maureen Marché
Administrative Assistant to the Board

