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Reply to:

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March 14, 2001

Christine Bailey, Chief
Freshwater Standards Unit
Division of Water Quality
State Water Resources Control Board
P.O. Box 944213
Sacramento, CA 94244-2130

Dear Ms. Bailey:

**SUBJECT: COMMENTS ON DEVELOPMENT OF A STATE EFFLUENT DEPENDENT
AND/OR DOMINATED WATER BODIES POLICY**

We are writing on behalf of Tri-TAC, the California Association of Sanitation Agencies (CASA) and the Southern California Alliance of POTWs (SCAP) to provide comments and recommendations to the State Water Resources Control Board (SWRCB) in response to the recent request for comments on the development of a State Effluent Dependent and/or Dominated Water Body (EDW) Policy. CASA, SCAP and Tri-TAC are organizations of local public agencies responsible for wastewater collection, treatment, disposal and reclamation. Tri-TAC is an advisory group including representatives from CASA, the California Water Environment Association, and the League of California Cities. CASA's membership includes 92 agencies responsible for the operation of publicly owned treatment works (POTWs). SCAP's membership includes over 50 water and wastewater agencies serving more than 16 million people in southern California. Together, the constituent agencies of CASA, SCAP and Tri-TAC serve most of the sewered population of California.

Tri-TAC, CASA and SCAP applaud the SWRCB's decision to turn its attention to the much-needed and much-delayed development of an EDW Policy for California. We have long

advocated such a policy, and are pleased that the resources are now available to pursue this topic. Our major comments and recommendations are summarized below, and detailed comments addressing the topics outlined in the public notice are attached.

Overview

The issues associated with EDWs have been recognized for some time. The SWRCB's January 1990 draft FED for Inland Surface Waters of California contained the following issue description:

Streams that would be ephemeral in the absence of an NPDES-permitted discharge represent a unique situation that needs to be addressed separately from perennial streams. The level of aquatic life use that exists in these situations is a direct result of the wastewater discharge. If wastewater flows were curtailed, these streams would be dry except during storm runoff events. Water quality objectives for these streams need to protect the most sensitive beneficial use that has existed since 1975. Where aquatic life is the most sensitive beneficial use, the objectives may not need to be as restrictive as objectives developed for perennial streams. Therefore, applying the proposed aquatic life objectives. . . may be inappropriate. (p. 5-1)

U.S. EPA, too, has recognized the unique needs of EDWs or ephemeral streams. In response to comments on its proposed water quality regulations 15 years ago, "EPA expressly stated that uses should be designated for protection, based upon a case-by-case analysis of use attainability, for 'effluent dominated stream, streams in arid regions, or man-made water bodies'."¹ In addition, in 1992, EPA Region 9 published guidance to assist States in devising water quality standards appropriate to EDWs.

Recognizing the need to address EDWs in revised Water Quality Plans, one of the task forces convened by the SWRCB in 1995 focused exclusively on issues associated with water quality standards for these water bodies. A key recommendation of the Task Force was that appropriate beneficial use designations be made for EDWs, and that modified water quality criteria be developed to protect those uses. Many of our recommendations below are based on the Task Force's Report.

At this point in time, while we continue to believe that the ultimate key to addressing EDW issues is the development and application of beneficial use designations and water quality objectives that are appropriate to these water bodies, we also recognize the complexity of this task and the need for a practical and timely approach to resolving the issues. Hence, we propose a phased approach designed to focus on the most pressing problems first, with additional issues addressed in subsequent steps.

¹ 47 Fed. Reg. 49234, 29249 (Oct. 29, 1982) as cited in Sheila K. Vassey, Analysis of Legal Issues Raised by the San Joaquin River Basin Technical Committee ("San Joaquin Report"), as amended April, 1987.

Proposed Strategy

Task 1: Adopt Strategy for Interim EDW Discharge Permit Issuance

Tri-TAC/CASA/SCAP believe that the first element of the SWRCB's work must be the development of a strategy to address the permitting "train wreck" that is occurring in many regions as Regional Water Quality Control Boards (RWQCBs) attempt to implement the California Toxics Rule (CTR) criteria and Statewide Implementation Policy (SIP) before the SIP Phase II EDW Policy is adopted and implemented. Many of these permits are for discharges to effluent-dependent water bodies, and in these permits, the CTR criteria are being implemented as end-of-pipe limits. In some, the water body has been included on the 303(d) list for certain parameters, even though the beneficial uses and water quality objectives/criteria have never been reviewed to determine if these standards are really appropriate for an EDW (for instance, the drinking water supply or fish consumption uses). A number of these limits pose compliance problems for dischargers and will necessitate expensive end-of-pipe treatment, yet will yield little, if any, benefits (other than theoretical ones). The "train wreck" referenced above refers to the fact that, as permits containing unattainable effluent limits based on inappropriate water quality standards are issued, dischargers are likely to appeal these permits on a widespread basis. This has already begun to occur since the CTR and SIP went into effect in May 2000 (particularly for discharges to 303(d)-listed waters), and can only be expected to spread as more and more permits are issued based on the new rules.

Additionally, because most Regional Boards have not taken the EDW nature of waters into account when doing their water quality assessments, 303(d) listings may result in inappropriate requirements (i.e. Total Maximum Daily Loads (TMDLs) and resultant Waste Load Allocations (WLAs)) for EDWs. More specifically, EDWs may have been listed inappropriately, since the uses and/or objectives/criteria used as a basis for the assessment may be incorrect. Given that discharges to EDWs, by definition, comprise a major portion of the flow in the water body, it is reasonable to expect that a major portion of the load reductions will be assigned to them. Therefore, it is critical that these limits and WLAs not be put in permits prematurely before the EDW policy is adopted and implemented.

We believe that there is a sound legal basis for adopting such an approach. In *United States v. State Water Resources Control Board* (1986), the court acknowledged that "water quality objectives . . . may not always be readily enforceable. The statutory factors enumerated in [Water Code] section 13242, particularly the provisions for recommended actions and time schedule, reflect the Legislature's recognition that an implementing program may be a lengthy and complex process...."² Notably, the SWRCB's legal counsel cited this language in support of the SWRCB's position that, because water quality objectives must be established to reasonably protect beneficial uses, it may be proper not to set objectives that would result in removal of discharges from ephemeral streams due to the unattainability of the objectives.³ The analysis goes

² 182 Cal.App.3d 82, 122, cited in San Joaquin Report, p. 38.

³ San Joaquin Report, p. 34.

on to emphasize that the program of implementation may consider both the difficulty of enforcing stricter objectives and the "options readily available to dischargers to comply with the objectives."⁴ Thus, we believe that the SWRCB is obligated to reexamine the beneficial uses of EDWs to ensure that the uses are properly designated before the CTR criteria are applied. This is consistent with the SWRCB's own policy statements and the above-cited recommendations of the EDW Task Force.

Therefore, as the first step in addressing EDW issues, the SWRCB should adopt a strategy regarding the issuance of new or revised NPDES permits for discharges to EDWs in the interim period before the EDW policy is adopted and implemented. Components of the strategy should include, but are not limited to, the following:

- In light of the SWRCB Order issued March 7, 2001 (*In the Matter of the Review on its Own Motion of Waste Discharge Requirements for the Avon Refinery, Order No. 00-011, as amended by Order No. 00-056 [NPDES Permit No. CA0004961], and for the Rodeo Refinery, Order No. 00-015 [NPDES Permit No. CA0005053], Issued by the Californian Regional Water Quality Control Board, San Francisco Bay Region*), permits being issued to EDW discharges should recognize the SWRCB's findings regarding the development of permit limits in situations where the water body is included on the 303(d) list, before a Total Maximum Daily Load (TMDL) has been developed. Even in EDW waters, the TMDL process may affect the water quality-based effluent limitations that dischargers are required to meet; according to EPA's Water Quality Standards Handbook, an initial step in the TMDL process is a review of the water quality standard to determine its appropriateness for the water body. EDW permits should also reflect the SWRCB's Order with respect to mass effluent limits, the derivation of interim effluent limits, pollution prevention plans, and compliance schedules.
- RWQCBs should fully utilize the provisions of the SIP that provide flexibility and allow for the implementation of interim requirements while additional studies are being completed and/or additional data are being gathered. Specifically, RWQCBs should make findings of no reasonable potential if data are unavailable or insufficient to conduct the reasonable potential analysis under Section 1.3 of the SIP, per Step 8 of that section. (Based on information available to us, it appears to us that RWQCBs are interpreting and implementing Section 3 in a variety of ways, and they need to be informed of the correct interpretation.). Further, RWQCBs must allow interim schedules (until May 2003) for the collection of data to determine reasonable potential, to calculate a final limit, or to develop a site-specific translator (up to 2 years from the date of issuance of the permit). Thus, even if reasonable potential is found following the procedure in Section 1.3 of the SIP, final effluent limits should not be calculated for EDW discharges if data are insufficient to calculate the effluent limitation (per Section 1.4 of the SIP). Lastly, RWQCBs should grant exceptions from the SIP upon a showing that impending requirements will impede water recycling projects, consistent with the SWRCB's intent that the SIP not deter water reuse.

⁴ *Ibid*, p. 36.

- RWQCBs must discontinue the rote application of the so-called “tributary rule,” under which upstream waters are required to meet all of the requirements of the designated downstream waters, without regard to the past, present and probable future uses in the actual receiving water or the effects of the discharge on the downstream water. This so-called “rule” has never been adopted as a regulation by the U.S. EPA, and the blanket application of downstream uses to all upstream waters, regardless of their actual effect on the designated water, is contrary to the express language of some Basin Plans (e.g. the Central Valley Basin Plan.) In many cases, the pollutants actually reaching the downstream water from the discharge are *de minimis*, while the costs (and energy demand) to meet the very stringent end-of-pipe limitations are enormous. The SWRCB should instruct the RWQCBs that the uses of a receiving water not specifically addressed in the applicable Basin Plan may be determined at the time a permit is drafted.
- The RWQCBs should define the point of compliance with effluent limitations driven by MUN or REC designations as the point within the water body where the use occurs, rather than at the end-of-pipe. For example, if a discharge is to an EDW that is not used for drinking water, and effluent limitations are imposed to protect a downstream drinking water use, the discharger's compliance with those limitations should be measured in the downstream receiving water.
- RWQCBs should review the discharge situation to determine if the receiving water is truly a navigable water within the definition of a “water of the U.S.” (See *Solid Waste Association of Northern Cook Counties v. United States Corps of Engineers, U.S. Supreme Court Case No. 99-1178*). Under this recent U.S. Supreme Court decision, some EDW discharges may not be to navigable waters and, thereby, not to “waters of the U.S.” Thus, the CTR criteria may not apply to these waters. To assist the RWQCBs in this review, the Office of Chief Counsel should issue a supplemental memo to the January 25, 2001 memo titled, “Effect of *SWANCC V. United States* on the 401 Certification Program,” specifically addressing EDW issues.

Task 2: Differentiate Between “Probable Future” and “Potential” Beneficial Uses

Typically, beneficial uses that are not attained are dubbed “potential” uses in Basin Plans. They may not be attained because of impairment (i.e. lower water quality than that necessary to sustain the use), or they may not be attained for other reasons, such as urbanization, which may have supplanted a previous agriculture use. The Porter-Cologne Water Quality Act does not define or use the term “potential” when referring to possible beneficial uses. Instead, Porter-Cologne refers to “past, present and probable future uses.” (Cal. Water Code Section 13241) Regardless of the cause of nonattainment or the likelihood of future attainment, water quality requirements are now being implemented in permits to protect all designated beneficial uses, regardless of whether the use is considered an existing use or a potential use. As best we can tell, this is being done by most, if not all, RWQCBs, without regard to the Porter-Cologne reference to “probable future uses.” This blanket approach to beneficial use protection undermines the water quality management scheme contemplated in Porter-Cologne, and results in over-protection in some instances.

We recommend that the SWRCB adopt a new approach, in which probable future uses would be distinguished from potential uses, and CTR (or other water quality criteria) would not be applied to a water body until a potential use is actually proposed or planned (unless the use is an existing use). The status of the use would be reviewed at least every three years (through the Triennial Review process), with opportunities available to petition the RWQCBs to modify the designations at any time, for cause. Examples of use categories for which this approach would be particularly useful include MUN (*see additional comments below*), REC-1, and COLD. We believe that this approach offers a mechanism to reconcile the differing requirements of the Clean Water Act and the Porter-Cologne Act to ensure that the state is complying with both.

Task 3: Address Drinking Water Use Application to EDWs

In previous comments submitted to the Board by our organizations regarding the SIP (see for instance, letter to Gail Linck, December 17, 1999; letter to Gail Linck, February 16, 2000), we noted that many of the compliance problems faced by EDW dischargers are due to the human health criteria for water and organisms, particularly the criteria adopted for organic pollutants such as trihalomethanes, diethylhexyl phthalate, lindane, carbon tetrachloride, tetrachloroethylene, and acrylonitrile. Under the CTR, these criteria apply to any inland surface waters having the "MUN," or domestic drinking water supply, use designation, whether it be an existing or potential use. These criteria are especially low due to the combination of exposure assumptions used to derive them, which assume specified levels of both drinking water and fish consumption over the lifetime (70 years) of an exposed individual. Because the RWQCBs have been unsuccessful in addressing this issue on their own, we feel that addressing the application of the MUN use designation to EDWs is one of the highest priority items for SWRCB action.

Implementation of the distinction between potential and probable future uses recommended in Task 2 (above) would be one means to address this issue. Another option we propose is that the SWRCB clarify that the State Sources of Drinking Water Policy (State Board Res. 88-63), which was adopted to implement Proposition 65, does not apply to EDWs. Furthermore, the SWRCB should direct RWQCBs to modify beneficial use designations made as a result of this Policy by requiring them to identify which EDWs were incorrectly designated as potential sources of drinking water or MUN.⁵ This could either be done by

⁵ Federal regulations support our contention that these uses were not properly designated, as the RWQCBs did not conduct use attainability analyses (UAA). The regulations specify that the State must conduct a UAA whenever designating uses other than fishable/swimmable:

"A State must conduct a use attainability analysis as described in Sec. 131.3(g) whenever:

(1) The State designates or has designated uses that do not include the uses specified in section 101(a)(2) of the Act, or

(2) The State wishes to remove a designated use that is specified in section 101(a)(2) of the Act or to adopt subcategories of uses specified in section 101(a)(2) of the Act which require less stringent criteria." 40 C.F.R. §131.10(j) (emphasis added.)

See also Cohen, Gershon Eliezer, National Director of the Campaign to Safeguard America's Water, "Mixing Zones: Diluting Pollution under the Clean Water Act," 14 Tulane Env.L.J. 1, 6 (Winter 2000) (the addition of a designated use for a waterbody by a State must be accompanied by a UAA to determine the water's attainable uses).

clarifying the intent of the exceptions already contained in the Policy, or by modifying the Policy to add a new exception specifically for EDWs. Because some of the RWQCBs (e.g. Santa Ana) properly interpreted the Sources of Drinking Water Policy and did not apply the MUN use to EDWs, we believe it would be simplest and most practical to pursue the former option (i.e. clarifying the intent of the existing exceptions), through the issuance of a memo to RWQCBs by the Office of Chief Counsel.

We recognize that, where the potential MUN use was already designated based on the Policy and cannot be fixed by a correction to the Basin Plan, RWQCBs may have to take action to de-designate the use. The attempt to de-designate the MUN use for several water bodies by the Los Angeles RWQCB in 1998, and resulting 1999 Office of Administrative Law disapproval of that action, should be used to develop guidance to the RWQCBs as to how to accomplish any necessary de-designations, where required. Although that effort was unsuccessful, we believe that this use correction task is achievable if the RWQCBs receive clear guidance (as well as adequate resources) regarding the analyses necessary to meet state and federal regulatory requirements.

Task 4: Address Protection of the Groundwater Recharge Use

An additional, yet related, issue should be addressed by the SWRCB when focusing on the application of the MUN use. For discharges to soft-bottomed streams, also known as “live stream” discharges, the Groundwater Recharge (GWR) beneficial use designation may also apply. In some regions, protection of the MUN and GWR uses has been implemented in exactly the same manner (i.e. application of the same water quality objectives and same procedures for writing permit limits). In these cases, it is important for the SWRCB to advise the RWQCBs that it is not appropriate to apply the CTR human health criteria for water and organisms to protect this use. Rather, because of the filtering and dilution that occurs in the soil and aquifer, as well as the lack of fish consumption associated with a groundwater source, drinking water criteria (Maximum Contaminant Levels, or “MCLs,” adjusted to reflect actual filtering and dilution) should be applied. Indeed, because the recharge and pumping of the aquifer occur over a long period of time, it is appropriate for the MCLs to be applied on a 12-month rolling average basis. An example of where this has been done with concurrence of the Department of Health Services is the Montebello Forebay Groundwater Recharge Project, which has been in operation for nearly 40 years using tertiary-treated reclaimed water discharged to a surface water channel (used for conveyance to downstream spreading grounds) and blended with other sources of non-reclaimed water. Moreover, the Department of Health Services is currently in the process of developing regulations for the use of reclaimed water in groundwater recharge projects, and these should define the regulatory requirements that apply to protect the GWR use, consistent with Cal. Water Code Section 13523.

Task 5: RWQCBs Should Proceed with Watershed Planning Efforts for Additional Issues

We are aware that the Central Valley Regional Water Quality Control Board has recently initiated an effort to address EDW issues. Under their approach, the RWQCB is working proactively on the site-specific, watershed, and regional levels to develop Basin Plan

amendments, as applicable. Currently, it is our understanding that the RWQCB is working on site-specific Basin Plan amendments for Deer Creek for pH and turbidity, and that the RWQCB will subsequently work on Basin-wide amendments for both of these constituents, building on the site-specific work they have done for Deer Creek. We support efforts such as this, and recommend that the SWRCB encourage RWQCBs to pursue region- and watershed-specific efforts to address EDW issues. Many issues, such as the development of site-specific translators and water effects ratios, as well as the development of appropriate nutrient objectives, are best addressed at the watershed level. Local watershed-based stakeholder groups should be strongly encouraged to lead and/or participate in such efforts. The SWRCB should provide guidance to RWQCBs and watershed stakeholder groups on how to proceed with such efforts to ensure that applicable regulatory requirements are interpreted consistently throughout the state.

Finally, we recommend that the State Board carefully consider the impacts and interrelationships between the EDW Policy and energy demand, endangered species protection, and drinking water supplies in the state. Each of these important policy areas must be analyzed as the SWRCB moves forward in developing an EDW Policy.

Thank you very much for the opportunity to provide input on the development of the EDW Policy. We look forward to working with you as this effort progresses. If you have any questions about our comments, please contact Sharon Green at the address and telephone number indicated above.

Sincerely,

Roberta Larson, Director of Legal and Regulatory Affairs
California Association of Sanitation Agencies

Robert Ghirelli, Chair
SCAP Water Issues Committee

(Original signed for.....)
Phil Bobel, Chair
Tri-TAC

cc: Arthur G. Baggett, Jr., Chair, SWRCB
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