



CVCWA

Central Valley Clean Water Association

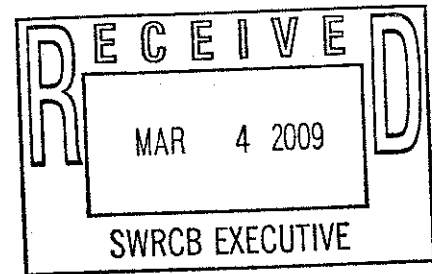
Representing Over Sixty Wastewater Agencies

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March 4, 2009

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Clerk to the Board
State Water Resources Control Board
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Re: CVCWA Response to Proposed Order on Petition of WDRs Order No. R5-2007-0036 (NPDES No. CA0079154) and TSO No. R5-2007-0037 for City of Tracy (SWRCB/OCC File A-1846(a) and A-1846(b)) – March 17, 2009 Board Meeting

Dear Chair Doduc and Board Members:

The Central Valley Clean Water Association (CVCWA) appreciates the opportunity to submit comments on the State Water Resources Control Board's (State Water Board) proposed order *In the Matter of the Petition of Environmental Law Foundation and California Sportfishing Protection Alliance for Review of Waste Discharge Requirements Order No. R5-2007-0036 (NPDES No. CA0079154) [Permit] and Time Schedule Order No. R5-2007-0037 (Proposed Order)*. The Central Valley Regional Water Quality Control Board (Regional Water Board) adopted this National Pollutant Discharge Elimination System (NPDES) Permit and time schedule order on May 4, 2007, to regulate discharges of treated effluent from the City of Tracy Wastewater Treatment Plant (Tracy WWTP) to Old River.

CVCWA is a non-profit association of public agencies that own and operate municipal wastewater treatment facilities throughout the Central Valley Region. The facilities operate under waste discharge requirements and NPDES permits that must comply with any applicable water quality control plan and federal law. The Proposed Order rejects the Permit's approach to regulate electrical conductivity (EC) ostensibly based on the *Water Quality Control Plan for the San Francisco Bay/Sacramento-San Joaquin Delta Estuary (Bay-Delta Plan)* and federal law. The Proposed Order also questions the Permit's approach to regulate bis(2-ethylhexyl)phthalate and dilution credits related to human health for priority pollutants. As such, CVCWA's member agencies have an interest in the State Water Board's review of this Permit.

CVCWA respectfully disagrees with the Proposed Order to the extent it holds that the Permit does not comply with the Bay-Delta Plan's water quality objectives for EC, federal or state law or constitute a proper exercise of the Regional Water Board's discretion.¹ Substantial evidence supports the Permit provisions at issue. Tracy and interested parties submitted data to the Regional Water Board, which exercised professional judgment to adopt a reasonable approach to address complex water quality issues and protect beneficial uses. For the reasons provided herein and in the letter sent by the City of Tracy, CVCWA urges the State Water Board to dismiss the petitioners' claims and uphold the challenged Permit requirements. CVCWA also urges the State Water Board to revise the Proposed Order as described below with regard to dilution.

A. The Permit's EC Requirements Are Consistent with the Bay-Delta Plan, Federal Law and Prior State Water Board Orders

The Bay-Delta Plan establishes water quality objectives for EC to protect agricultural beneficial uses. The EC objectives at issue are for Old River in the Southern Delta and include 700 $\mu\text{mhos/cm}$ between April and August and 1,000 $\mu\text{mhos/cm}$ between September and March. (Bay-Delta Plan at p. 13.) To implement these objectives, the Permit requires the Tracy WWTP's discharge not to exceed a monthly EC average equivalent to the objectives. (Permit at pp. 9, F-43.) These limits take immediate effect if, among other things, Tracy fails to submit and implement a Salinity Plan in accordance with the Permit. (*Id.* at p. 9.) The Permit also includes an interim mass limit for total dissolved solids (TDS) that requires the Tracy WWTP's EC concentration to decrease as the discharge increases. (*Id.* at pp. 12, F-46.)

Tracy had six months from the Permit's issuance to submit the Salinity Plan for the Regional Water Board to approve. (Permit at p. 9.) The Permit requires the Salinity Plan to establish a schedule for Tracy to: (1) take all reasonable steps to obtain alternative, lower salinity water supply sources; (2) develop and implement a salinity source control program to identify and reduce salinity from residential, commercial, industrial, and infiltration sources to meet the interim salinity goal of a maximum 500 $\mu\text{mhos/cm}$ EC increase over the weighted average EC of Tracy's water supply; and (3) participate financially in the Central Valley Salinity Management Plan's development. (*Ibid.*) The Regional Water Board was required to circulate the Salinity Plan for public review and comment and make any appropriate revisions prior to approval. (*Ibid.*) If Tracy fails to comply with the approved Salinity Plan, the numeric final effluent limits for EC take immediate effect. (*Ibid.*)

The Proposed Order rejects this approach to implement the EC objectives. The Proposed Order finds that the salinity controls are not enforceable or designed to implement the EC objectives and implementation of an approved Salinity Plan would not result in a numeric final effluent limit for EC. (Proposed Order at p. 7.) For these reasons, the Proposed Order concludes that the EC provisions are inconsistent with the federal regulations and prior State Water Board decisions. (*Id.* at pp. 7-8.) CVCWA respectfully disagrees. These authorities and federal guidance allow for narrative effluent limits or best management practices (BMPs) in lieu of numeric effluent limits in this case. Further, if the 2006 amendments to the Bay-Delta Plan merely clarify the objectives as the Proposed Order claims, the rationale of *In the Matter of the Petition of City of Manteca*, Order WQ 2005-0005 (Manteca Order) is sound and appropriate here

¹ CVCWA agrees with the proposed dismissal of the anti-degradation claims. Their review would require a comprehensive review of anti-degradation issues, which is beyond the scope of this proceeding. The State Water Board should address such issues in a more appropriate public forum.

even though that decision was deemed not precedential. However, if the 2006 amendments expand the objectives' applicability, then these amendments violate Water Code sections 13241 and 13242.

1. The Tracy WWTP's Discharge Does Not Have Reasonable Potential to Cause or Contribute to Violations of the EC Objectives and Thus Water Quality Based Effluent Limits (WQBELs) for EC Are Unnecessary

Under the federal regulations, where "a discharge causes, has the reasonable potential to cause, or contributes to an in-stream excursion above the allowable ambient concentration of a State numeric criteria within a State water quality standard for an individual pollutant, the permit must contain effluent limits for that pollutant." (40 C.F.R. § 122.44(d)(1)(iii).) To determine whether a discharge has reasonable potential, the Regional Water Board must use procedures that account for various factors. (40 C.F.R. § 122.44(d)(1)(ii).) Such factors include existing controls on point and nonpoint sources of pollution and dilution of the effluent in the receiving water where appropriate. (40 C.F.R. § 122.44(d)(1)(ii).) The Regional Water Board may use the USEPA's Technical Support Document for Water-Quality Based Toxics Control (March 1991) (TSD) as guidance to determine whether a discharge of a non-priority pollutant has reasonable potential.² (*In the Matter of the Petition of Yuba City*, Order WQO 2004-0013 (Yuba City Order) at p. 6.) Under the TSD, whether a discharge has reasonable potential depends in part on assimilative capacity. (TSD at pp. 93, 98.)

The nearest compliance point is about four miles downstream of the Tracy WWTP's discharge. (Permit at p. F-43.) Under some conditions, Old River has assimilative capacity. (*Id.* at p. F-44.) Delta Simulation Model II (DSM2) established that even under worst-case conditions, the Tracy WWTP has little to no impact on salinity in Old River or compliance with the EC objectives. (*Id.* at pp. F-46-F-47.) If the Tracy WWTP ceased to discharge treated effluent altogether, the river's salinity problems would continue. (*Id.* at p. F-48.) The salinity problems result mainly from low flows and discharges of the saline drainage water. (*Id.* at p. F-44.) This is why Revised Water Rights Decision 1641 (D-1641) and the Bay-Delta Plan made the Department of Water Resources and United States Bureau of Reclamation responsible for meeting the salinity objectives. (*Ibid.*; see D-1641 at pp. 83-88; Bay-Delta Plan at pp. 3, 27.)

For these reasons, that the Tracy WWTP's discharge does not have reasonable potential to cause or contribute to violations of the EC objectives. Indeed, the Regional Water Board itself questioned whether the Permit should include effluent limits for EC. (See Response to Written Comments for City of Tracy Wastewater Treatment Plan Tentative NPDES Permit and Tentative Waste Discharge Requirements (Regional Water Board meeting May 3/4, 2007) at p. 28.) Therefore, the Permit need not include WQBELs for EC.

2. Numeric Effluent Limits for EC Are Neither Required Nor Reasonable for the Tracy WWTP's Discharge of Treated Effluent

Even if the Tracy WWTP's discharge may cause or contribute to an in-stream excursion above the numeric EC objective for Old River, the Permit includes a permissible alternative to

² The SIP does not directly apply to EC. However, the Regional Water Board may use the SIP as guidance to determine reasonable potential for EC. (Yuba City Order at p. 6.) As explained herein, in this case, the Regional Water Board did not properly consider whether Tracy's discharge in fact causes or contributes to an exceedance of the EC objectives.

numeric final effluent limits. While the permit for a discharge that has reasonable potential must contain effluent limits, they need not be numeric. (*Communities for a Better Environment v. State Water Resources Control Board* (2003) (CBE Tesoro) 109 Cal.App.4th 1089, 1091 (“[A] WQBEL does not have to be numeric in all cases.”); *In the Matter of the Petition of Citizens for a Better Environment*, Order No. WQ 91-03 (CBE) at p. 48 (“[T]here is no legal requirement that effluent limitations be numeric” under section 122.44(d)(1).) The term “numeric” does not appear in federal regulation that requires WQBELs. (40 C.F.R. § 122.44(d)(1)(iii).)

Indeed, the Clean Water Act (33 U.S.C. § 1251 et seq.) and federal regulations define “effluent limitation” broadly to allow narrative effluent limits in lieu of numeric effluent limits. Under the Act, an “effluent limitation” is:

[A]ny restriction established by a State or the Administrator on quantities, rates, and concentrations of chemical, physical, biological, and other constituents which are discharged from point sources into navigable waters, the waters of the contiguous zone, or the ocean, including schedules of compliance. (33 U.S.C. § 1362(11).)

Under the federal regulations, “effluent limitation” means “any restriction imposed by the Director on quantities, discharge rates, and concentrations of ‘pollutants’ which are ‘discharged’ from ‘point sources’ into ‘waters of the United States,’ the waters of the ‘contiguous zone,’ or the ocean.” (40 C.F.R. § 122.2.) Moreover, the Act allows WQBELs to include “alternative effluent control strategies” that may constitute narrative limits. (33 U.S.C. § 1312(a); CBE at p. 40.) The federal regulations specifically authorize NPDES permit to include BMPs where reasonably necessary to achieve water quality objectives or numeric effluent limits are infeasible. (40 C.F.R. § 122.44(k); CBE Tesoro, 109 Cal.App.4th at 1104.)

Thus, numeric effluent limits are not the only permissible limits on effluent discharges. Rather, a flexible approach that includes alternative effluent control strategies (such as narrative effluent limits or BMPs) is appropriate where a numeric WQBEL is not feasible or appropriate. (CBE Tesoro, 109 Cal.App.4th at 1105.) The State Water Board recognized this flexibility *In the Matter of the Review of Own Motion of Waste Discharge Requirements for Los Coyotes and Long Beach Wastewater Reclamation Plan*, Order WQO 2003-0012 (Los Coyotes). Los Coyotes held that the NPDES permit issued to two wastewater reclamation plants inappropriately included numeric final effluent limits for chronic toxicity. (*Id.* at p. 9 (“[T]he issue we will explore is whether the use of numeric effluent limitations for chronic toxicity is appropriate.” Emphasis in original.)) The ruling rested on the federal regulations and guidance from the United States Environmental Protection Agency on how to establish narrative effluent limits. (*Ibid.*) The ruling also rested on the fact that interested parties questioned the propriety of including numeric limits in NPDES permits for publicly owned treatment works (POTWs). (*Ibid.*) The State Water Board determined that a public forum broader in scope than the review of the permit should resolve the issue and replaced the permit’s numeric effluent limit with a narrative limit. (*Id.* at p. 10, 17-18.)

Consistent with these authorities, the Regional Water Board found that numeric effluent limits for EC are infeasible or inappropriate in this case. (Permit at p. F-48.) The Permit acknowledges the ongoing process of the water boards and interested parties to develop a new policy to regulate salinity in the Central Valley. (*Id.* at p. F-45.) The Regional Water Board made clear that it will continue to regulate discharges in the interim with reasonable approaches that control salt discharges and encourage all stakeholders to participate in salt management. (*Id.* at

pp. F-45, F-48.) The Permit cites evidence in the record to find that final effluent limits that require the Tracy WWTP to meet the EC objectives would require reverse osmosis and not be reasonable. (*Ibid.*)

Accordingly, the Permit uses alternative control strategies to restrict the quantity, rate and concentration of EC that the Tracy WWTP may discharge. These strategies include the Salinity Plan, which Tracy must implement after a public review process and approval (with any changes) by the Regional Water Board. (Permit at p. 9.) If Tracy fails to implement the Salinity Plan, the numeric effluent limits take immediate effect. (*Ibid.*) In addition, Tracy must comply with the interim mass limit for TDS. (*Id.* at p. 12.) This means that the EC concentration of the discharge must decrease as the discharge volume increases. (*Ibid.*) These salinity controls are enforceable and permissible alternative control strategies to numeric effluent limits under federal and state law. (40 C.F.R. § 122.41(a); Wat. Code, §§ 13372(a), 13377; see also Permit at p. 9.)

3. The Rationale In the Manteca Order Is Sound and Applicable

The Proposed Order relies upon the Permit's reference to the Manteca Order to discount the Permit's finding that the use of reverse osmosis is not reasonable in this case. (*Id.* at p. 8.) The Proposed Order claims that since the Manteca Order, the State Water Board "re-affirmed the salinity objectives applicable to the southern Delta, without changing the objectives applicable to the discharge at issue here." (*Id.* at p. 10.) If the 2006 amendments to the Bay-Delta Plan merely reaffirmed the existing EC objectives, the Manteca Order's rationale remains sound and should apply.

The Proposed Order attempts to distinguish the Manteca Order on the grounds that Manteca's discharge met the 1,000 $\mu\text{mhos/cm}$ objective, but not the 700 $\mu\text{mhos/cm}$ objective. (Proposed Order at p. 8.) The Proposed Order notes that in this case, the Tracy's discharge does not meet either objective. (*Id.* at p. 9 n.13.) This distinction is inconsequential. Similar to this case, the Regional Water Board found that Manteca's discharges could contribute to a violation of the EC objectives for Old River. (Manteca Order at p. 11.) Also similar to the Proposed Order, the Manteca Order recognizes that the Delta's salinity problems are complex:

[T]he salinity problems in the southern Delta are the result of many inter-related conditions, including water diversions upstream of the Delta, water diversions within the Delta for export and local use, high levels of salinity in irrigation return flows discharged to Delta waterways and tributaries, groundwater inflow, seasonal flow variations, and tidal conditions. (Manteca Order at p. 10; see Permit at pp. 5, 10.)

The State Water Board further observed the marginal effect of Manteca's discharge on Old River and that POTW's are not part of the Bay-Delta Plan's program to implement the objectives:

[R]equiring the City to comply with an effluent limitation of 700 $\mu\text{mhos/cm}$ EC would not significantly change the EC of water in the southern Delta area. In addition, the State Board's 1991 and 1995 Delta Plans, Revised Water Right Decision 1641, and State Board Resolution No. 2004-0062 all establish that the intended implementation program for meeting the 700 $\mu\text{mhos/cm}$ EC objective was based primarily upon providing increased flows, possible construction of

salinity barriers, and reducing salt loading entering the San Joaquin River from irrigation return flows and groundwater. (Manteca Order at p. 13.)

Here, the Regional Water Board relied upon DSM2 modeling by stakeholders (including California Sportfishing Protection Alliance) to find that even under worst-case conditions, the Tracy WWTP's impact on overall salinity in Old River is minor. (Permit at p. F-46.) Consistent with the rationale in the Manteca Order, the Permit recognizes the complexity of the salinity issues involved and that the Bay-Delta Plan relies primarily upon flow requirements to implement the EC objectives. (*Id.* at p. F-44-F-48; see Bay-Delta Plan at pp. 3, 27; D-1641 at pp. 83, 88.) If the Proposed Order is correct that the EC objectives remain unchanged since the 2005 Manteca Order, its rationale remains sound.

The Proposed Order also attempts to distinguish this case from the Manteca Order on the grounds that the Tracy Permit contains no numeric final effluent limit—"only a requirement to submit and implement a plan to reduce salts, with no back stop to implement the numeric water quality objectives." (Proposed Order at p. 9.) As previously explained, applicable law does not require a numeric limit in this case. Moreover, the Permit's salinity controls are enforceable and designed to implement the EC objectives. Tracy may be subject to enforcement action for failure to comply with the interim TDS limit or numeric final effluent limits for EC as applicable. Further, the salinity controls require the Tracy WWTP to reduce its salt load to Old River. (Permit at p. F-48.) For example, Tracy must reduce salinity in its influent or meet the EC limitations that are set equal to the EC objective.

In addition, the Proposed Order questions whether reverse osmosis is necessary for Tracy to meet the numeric limits or EC objectives. (Proposed Order at p. 9.) This is inconsistent with the rationale of the Manteca Order where Manteca contended that it would need to use reverse osmosis to comply with the 700 $\mu\text{mhos/cm}$ EC effluent limit. (Manteca Order at p. 12.) In the Manteca Order, the State Water Board found:

(1) [A]ssuring compliance with the 700 $\mu\text{mhos/cm}$ EC limitation in the City's permit for April through August would *probably* require construction and operation of a reverse osmosis treatment plant for at least a portion of the City's effluent at a very large cost; and (2) *because of the relatively high salinity of the receiving water and the relatively small portion of flow provided by the City's discharge, the City's use of reverse osmosis would have relatively little effect on the EC of water in the river.* (*Ibid.*, emphasis added.)

Further, "previous actions establish that the State Board intended for permit effluent limitations to play a limited role with respect to achieving compliance with the EC water quality objectives in the southern Delta." (Manteca Order at pp. 13-14.) The State Water Board took official notice that the use of reverse osmosis would produce highly saline brine that requires acceptable disposal. (*Id.* at p. 12.) In addition, the State Water Board found that Manteca's use of lower salinity surface water for water supply and other control measures would implement the EC objective. (*Id.* at p. 14.) The State Water Board further found that it would likely revise the EC objectives during the periodic review of the Bay-Delta Plan. (*Id.* at p. 14 n.24.) For these reasons, the Manteca Order held: "Construction and operation of reverse osmosis facilities to treat discharges from the City's WQCF, prior to implementation of other measures to reduce the salt load in the southern Delta, would not be a reasonable approach." (*Ibid.*)

With at least the same degree of certainty and evidence applicable to the Manteca Order, the Regional Water Board determined that numeric final effluent limits would require Tracy to use reverse osmosis. (Permit at p. F-45.) Similar to the Manteca Order, the Regional Water Board also found that use of reverse osmosis would have little effect on EC in Old River because of Old River's high salinity and the amount of the Tracy WWTP's flow. (*Id.* at pp. F-46-F-47.) If the 2006 amendments to the Bay-Delta Plan merely reaffirmed the Plan as it related to the existing EC WQOs, POTWs play a limited role in implementing the objectives. To require the costs of reverse osmosis given the marginal benefits that would result is squarely inconsistent with this role.

Finally, review of the Bay-Delta Plan is likely to result in revised EC objectives and/or water rights. (See Bay-Delta Plan at p. 6.) The Bay-Delta Plan memorializes that the State Water Board committed to work with the Regional Water Board to address salinity issues in the Delta and develop a comprehensive salinity management plan. (*Ibid.*) As part of this effort, the State Water Board is to review: (1) the salinity requirements of the beneficial uses of water in the Southern Delta; (2) the causes of salt loading in the Southern Delta; (3) practices that could reduce the salt loading; (4) flow and salt load reduction measures to implement the salinity objectives; and (5) the timeline to implement these measures. (*Ibid.*) The State Water Board already initiated a public process to review and potentially update the Bay-Delta Plan, water rights and water quality regulation.³ This further evinces that the construction and operation of reverse osmosis facilities to treat the Tracy WWTP's effluent would not be a reasonable approach.

B. If the Permit's Salinity Controls Are Impermissible Under the Bay-Delta Plan, Its 2006 Amendments Violate Water Code Sections 13241 and 13242

The Proposed Order maintains that "in 2006, [the State water Board] revisited the Bay-Delta Plan, and readopted the salinity objectives without change." (Proposed Order at pp. 8 n.12.) "Further, the 2006 update to the Bay-Delta Plan removed any ambiguity that the EC objectives applied throughout the southern Delta water bodies."⁴ (*Ibid.*) Despite these statements and the similar facts between the Manteca Order and this case, the Proposed Order suggests that the 2006 re-adoption and clarification compel a different outcome for the Tracy WWTP. Under the rationale and holding of the Proposed Order, the 2006 amendments to the Bay-Delta Plan expand – rather than reaffirm – the water quality objectives at issue and/or their implementation. Such an expansion violates Water Code sections 13241 and 13242.

Water Code section 13241 requires the State Water Board to adopt water quality objectives to "ensure the reasonable protection of beneficial uses and the prevention of nuisance." Water Code section 13241 "recognize[s] that it may be possible for the quality of water to be changed to some degree without unreasonably affecting beneficial uses." The factors that the State Water Board must consider when it adopts water quality objectives include:

³ www.waterrights.ca.gov/baydelta/default.htm. CVCWA requests that the State Water Board take official notice under section 648.2 of title 23 of the California Code of Regulations of the fact that the State Water Board initiated the ongoing public process to review the Bay-Delta Plan.

⁴ In 2006, the State Water Board amended the Bay-Delta Plan to include the following language: "Unless otherwise indicated, water quality objectives cited for a general area, such as for the southern Delta, are applicable for all locations in that general area and compliance locations will be used to determine compliance with the cited objectives." (Bay-Delta Plan at p. 10.) This new language applies to the EC objectives for Old River at issue in this case and the Manteca Order.

- (a) Past, present, and probable future beneficial uses of water.
- (b) Environmental characteristics of the hydrographic unit under consideration, including the quality of water available thereto.
- (c) Water quality conditions that could reasonably be achieved through the coordinated control of all factors which affect water quality in the area.
- (d) *Economic considerations.*
- (e) The need for developing housing within the region.
- (f) The need to develop and use recycled water. (Wat. Code, § 13241, emphasis added.)

The Water Code thus imposes a mandatory duty on the State Water Board to adopt water quality objectives that are reasonable. (Memorandum to Regional Water Boards from W. R. Attwater, Office of Chief Counsel, State Water Board (Jan. 4, 1994) p. 3.) “[E]conomic considerations are a necessary part of the determination of reasonableness.” (*Ibid.*) This requires an assessment of the costs of an objective’s adoption or amendment based upon: (1) whether the objective is being attained; (2) what methods are available to achieve compliance with the objective if not it is not being attained; and (3) the costs of those methods. (*Id.* at p. 1.) The State Water Board must consider any information on economic impacts provided by the regulated community and other interested parties. (*Ibid.*) If the potential economic impacts are significant, the State Water Board must articulate why the objective is necessary to protect beneficial uses in a reasonable manner despite the adverse consequences. (*Ibid.*) Where an amended objective is at issue, the associated staff report or resolution may address the economic considerations. (*Id.* at pp. 1-2.)

When the State Water Board adopts new or modified water quality objectives, it must include a program of implementation to achieve the objectives. (Wat. Code, § 13242.) An implementation program describes the actions necessary to achieve the objectives, including recommendations for appropriate action by any public or private entity. (Wat. Code, § 13242(a).) The Bay-Delta Plan relies primarily upon flow requirements to implement the EC objectives in the Southern Delta. For example, the State Water Board observed:

[A]lthough discharge of treated wastewater to the Delta or its tributaries under an NPDES permit can affect EC in the southern Delta, previous State Board decisions and water quality control plans do not discuss treated effluent discharges as a source of salinity in the southern Delta. Similarly, previously adopted implementation programs for complying with the EC objectives in the southern Delta have focused primarily on providing increased flows and reducing the quantity of salts delivered to the Delta and its tributaries by irrigation return flows and groundwater. The record also establishes that the implementation date for actions to implement the 0.7mmhos/cm EC objective for April through August has been repeatedly postponed and that the State Board recently adopted a report recommending review of southern Delta EC objectives. Revised Water Right Decision 1641 places primary responsibility for meeting the EC objectives on

the Department of Water Resources and the Bureau of Reclamation (Manteca Order at pp. 10-11, emphasis added.)

As previously mentioned, the Bay-Delta Plan memorializes the State Water Boards commitment to review (and likely amend) the EC water quality objectives and implementation program for Old River. The State Water Board already initiated a public process to conduct such a review and update the Bay-Delta Plan, water rights and/or water quality regulations. Moreover, the Bay-Delta Plan states with regard to the subject EC objectives: "These objectives are unchanged from the 1991 Bay-Delta Plan." (Bay-Delta Plan at p. 11.) Thus, to the extent that the Proposed Order relies upon the Bay-Delta Plan to require stricter EC controls on POTWs (e.g., reverse osmosis) since the 2005 Manteca Order, the Proposed Order violates Water Code sections 13241 and 13242. In accordance with these sections, the State Water Board must consider cost and other factors associated with requiring POTWs to employ stricter controls to implement the objectives. Based on the Manteca Order, record for the 2006 amendments to the Bay-Delta Plan, and the Bay-Delta Plan itself, the State Water Board did not fulfill these statutorily-mandated duties.

C. Based on the Evidence, the Regional Water Board Had Discretion to Require Monitoring and No Effluent Limit for Bis(2-ethylhexyl)phthalate

If adopted, the Proposed Order would remand the Permit to the Regional Water Board to re-evaluate existing and additional sampling data to determine whether the Tracy WWTP's discharge has reasonable potential for bis(2-ethylhexyl)phthalate so as to require an effluent limit. (Permit at p. F-32.) CVCWA submits that such a remand is inappropriate. The Regional Water Board found that the estimated detection concentrations are insufficient to determine whether the discharge has the reasonable potential to exceed the California Toxics Rule (CTR) criterion of 1.8 µg/L for human health. (*Ibid.*) The estimated detection concentrations do not exceed the state or federal maximum concentration levels for bis(2-ethylhexyl)phthalate. (*Ibid.*)

The Regional Water Board appropriately chose not to include effluent limits in the Permit for bis(2-ethylhexyl)phthalate derived from insufficient data. Instead, the Regional Water Board required additional monitoring of bis(2-ethylhexyl)phthalate with grab samples⁵ to determine whether the Tracy WWTP's discharge exhibits reasonable potential. Specifically, the Permit requires Tracy to monitor its discharge monthly for bis(2-ethylhexyl)phthalate for the 12 months that immediately follow the Permit's effective date. (Permit at pp. E-5-E-6 n.8, F-32.) Tracy must use a method detection limit equal to or less than the CTR criterion of 1.8 µg/L. (*Id.* at p. E-6.) Tracy also must use sample and collection techniques to reduce the possibility of contamination. (*Id.* at p. E-6 n.8.) If no detectable concentrations exceed the CTR criterion of 1.8 µg/L after one year of monthly monitoring, Tracy still must monitor for bis(2-ethylhexyl)phthalate annually. (*Id.* at pp. E-6 n.8, F-32.) If detectable concentrations of bis(2-ethylhexyl)phthalate exceed the CTR criterion during the first year of monitoring, the Regional Water Board must reopen the Permit to include an effluent limit for the constituent. (*Id.* at p. F-32.)

The Permit's approach to regulate bis(2-ethylhexyl)phthalate is reasonable and appropriate. A Regional Water Board must exercise discretion and judgment to determine the permit terms necessary to achieve water quality objectives. (*In the Matter of the Petition of*

⁵ The Permit requires grab samples instead of composite samples. Plastic tubing (which contains bis(2-ethylhexyl)phthalate) is more likely to contaminate composite samples and produce erroneous test results due to contact time with the tubing. (See Permit at p. F-32; Proposed Order at p. 17.)

Collier Carbon and Chemical Corp. (Aug. 18, 1977) Order No. WQ 77-20 at p. 11; *Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California* (SIP) at p. 5.) This extends to whether any data are inappropriate or insufficient to use to implement toxics standards. (*Ibid.*) Indeed, section 1.2 of the SIP reads:

When implementing the provisions of this Policy, the RWQCB shall use all available, valid, relevant, representative data and information, as determined by the RWQCB. The RWQCB shall have discretion to consider if any data are inappropriate or insufficient for use in implementing this Policy. Instances where such consideration is warranted include, but are not limited to, the following: evidence that a sample has been erroneously reported or is not representative of effluent or ambient receiving water quality; questionable quality control/quality assurance practices; and varying seasonal conditions. (SIP at p. 5, emphasis added.)

Moreover, the SIP requires the Regional Water Board to include monitoring in lieu of WQBELs when there is insufficient data. (SIP at p. 7.) The Regional Water Board's approach in the Tracy Permit is appropriate as the Regional Water Board properly exercised its discretion in accordance with the SIP. Therefore, the State Water Board should dismiss the petitioners' claims related to bis(2-ethylhexyl)phthalate or, at the very least, uphold the Permit's bis(2-ethylhexyl)phthalate requirements as a proper exercise of Regional Water Board discretion.

D. The Proposed Order Is Inconsistent with the SIP with Respect to Dilution Credits

The SIP lists tracer studies, dye studies, modeling studies and monitoring upstream and downstream of the discharge as possible means to evaluate the available mixing and appropriate dilution credits for a discharge. (SIP at p. 17.) This case appropriately involved the DSM2 model to determine the critical flow rate appropriate with regard to human health dilution. (Permit at pp. F-24, H-1-H-4.) Table 3 of the SIP specifies how to calculate the dilution ratio—i.e. the upstream receiving water flow rate divided by the effluent flow rate. (*Id.* at p. 16.) The dilution ratio is the dilution hydraulically available at the appropriate critical condition.

The SIP categorizes discharges into completely-mixed and incompletely-mixed. (SIP at p. 16.) For completely-mixed discharges, the effluent is well mixed through a cross section within a short distance from the outfall. Unless site-specific conditions require further dilution study, a completely-mixed discharge only needs demonstration of becoming well mixed within two river widths of the discharge. If the discharge is incompletely-mixed, the SIP classifies the discharge as such and additional study is generally required. The Proposed Order incorrectly links Table 3 to the completely-mixed discharge condition, where the dilution ratio calculated in Table 3 will occur when the receiving water and effluent are completely well mixed. (*Id.* at p. 12.) For an incompletely-mixed discharge the dilution calculated in Table 3 of the SIP will occur, but more than two-river widths downstream of the discharge.

The Proposed Order states that for an incompletely-mixed discharge, the Regional Water Board must determine any dilution credit based on an appropriate mixing zone study using site-specific data, and the credit can provide only the necessary assimilative capacity—not all the available assimilative capacity. (Proposed Order at p. 12.) However, no regulation or guidance supports this statement in the Proposed Order. Nothing limits an incompletely-mixed discharge to dilution credits less than the dilution ratio listed in Table 3 of the SIP. The SIP states that for

completely-mixed discharges, the dilution credit may be equal to the dilution ratio unless site-specific conditions require a smaller credit. (SIP at p. 16.) The SIP does not limit the dilution credit. Generally, the Regional Water Board determines the appropriate size of a mixing zone, and the mixing at the edge of the zone defines the appropriate dilution. The size of the human health mixing zone may be considerably larger than the zone that the Regional Water Board could reasonably allocate for aquatic life criteria or objectives. The Regional Water Board should evaluate site-specific conditions and the subject beneficial uses to determine the extent to reduce the dilution credits from the available dilution ratio.

To the extent that the size of the mixing zone is not determined in the Permit, the State Water Board should remand the Permit to the Regional Water Board for clarification. Additionally, the State Water Board should direct the Regional Water Board to clarify the DSM2 modeling performed to determine the critical flows used to ascertain the human health dilution was appropriate for determining the applicable dilution.

CVCWA appreciates the State Water Board's consideration of these comments. We respectfully request that you dismiss the petitioners' claims and/or modify the Proposed Order as described above with regard to the Permit provisions for EC, bis(2-ethylhexyl)phthalate and dilution.

Sincerely,



Debbie Webster
Executive Officer

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