



California Regional Water Quality Control Board

Los Angeles Region



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Cal/EPA Secretary

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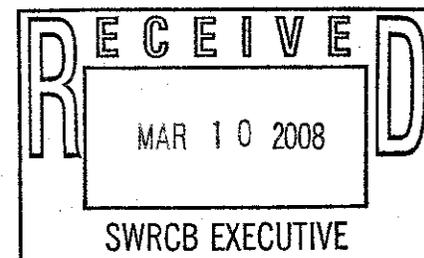
Arnold Schwarzenegger
Governor

3/18/08 Bd. Mtg. Item 13
Recycle Water Policy
Deadline: 3/10/08 by 12 p.m.

March 10, 2008

Ms. Dorothy R. Rice, Executive Director
State Water Resources Control Board
P.O. Box 100
Sacramento, CA 95814-0100

Attention: Jeanine Townsend, Acting Clerk to the Board



COMMENT LETTER - PROPOSED RECYCLED WATER POLICY

Thank you for your continued work on the development of a recycled water policy. We consider a well-balanced policy on recycled water to be critical in ensuring adequate water supplies and water quality to serve the people and environments of California into the future.

The Los Angeles Regional Water Quality Control Board (Regional Board) staff have reviewed the reformatted Draft Recycled Water Policy, released for public comment on February 15, 2008, and are only submitting comments on the new text, as instructed.

Specific Comments: The following comments identify specific language in the policy, which we either support, request modification, or suggest further clarification:

1. Regional Board staff support the following language that was added to Finding 8:

"...It is also appropriate for the Regional Water Boards to obtain information, under Water Code Section 13267 or other appropriate means, from dischargers of significant quantities of salts into these groundwater basins."

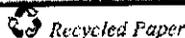
However, Regional Board staff request clarification as to what constitutes, "significant quantities of salts". Is it those discharges with TDS levels 550 mg/L greater than the potable water supply?

2. Finding 9 was revised as follows:

"The development and implementation of nutrient management practices or plans reduces the discharge of nitrogen to groundwater. Recycled water containing less than three milligrams/liter (mg/l) of total nitrogen contributes minimal additional nitrogen to the groundwater, therefore nutrient management practices are not justifiable for these discharges."

Regional Board staff request clarification on Finding 9. Is it acceptable for Regional Boards to conclude that nutrient management plans are not required for basins that

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have POTWs with Nitrification/Denitrification (NDN) treatment systems in place producing final effluent which have total nitrogen concentrations less than 3 mg/L? Regional Board staff request that the staff report's discussion of nitrogen management be expanded to explain the basis of the 3 mg/L total nitrogen concentration and to clarify whether NDN is considered the best available control technology for nitrogen?

Regional Board staff also request that the Policy include a definition for the "total nitrogen" term, to avoid any confusion.

3. Regional Board technical staff do not support the changes that were made to Finding 12 and the new Requirement III.B.1, which reads as follows:

Through control of industrial discharges and self-regenerating water softeners, a most recycled water producers can limit to ~~300~~550 milligrams/liter (mg/L) the increase of TDS from a community's source water supply to its produced recycled water.

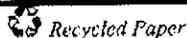
Regional Board staff believes that for some waterbodies, the TDS incremental concentration that will be allowed under the Policy Requirement III.B.1 conflicts with Policy Requirement I.A. The proposed approach may not be protective of groundwater objectives nor is it in line with the state's Antidegradation Policy (Resolution 68-16). For example, incoming water can be served as drinking water with a TDS concentration of 500 mg/L up to 1,500 mg/L (short term). The Policy would allow recycled water to contain concentrations between 1,050 to 2,050 mg/L. Groundwater basins in the Los Angeles Region typically have Basin Plan Objectives around 400-700 mg/L, and may have ambient groundwater concentrations well below the objective. Therefore high quality waters would not be protected. In addition, elevated TDS concentrations can typically be caused by high chloride concentrations. The Policy does not explain how the chloride Basin Plan Objectives will be implemented.

While we understand that the 550 mg/L TDS increase is intended to be a short-term "interim limit," we disagree with the "methodology" for determining the interim limit. Page 9 of the staff report explains that the interim limit was "the difference that most recycled water producers can currently meet". However, this is not consistent with the way that interim limits have been derived in past policies. According to Section 2.2.1 of the SIP, "Numeric interim limitations for the pollutant must be based on current treatment facility performance or on existing permit limitations, whichever is more stringent. If the existing permit limitations are more stringent, and the discharger is not in compliance with those limitations, the noncompliance under the existing permit must be addressed through appropriate enforcement action before the permit can be reissued, unless antbacksliding provisions are met." As an alternative, we would like to recommend that recycled water producers get interim limits based upon the 95th percentile of the concentrations of salts present in their plant's final treated effluent.

Regional Board staff request that the Policy be modified to allow the derivation of interim limits for chloride, sulfate, and boron, if need be.

4. Finding 21 was revised as follows:

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In 1996, CDPH and the State Water Resources Control Board (State Water Board) signed a memorandum of agreement on the use of recycled water that describes procedures for issuing water reclamation requirements and for resolving conflicts between CDPH and the Regional Water Boards. In the event that a conflict cannot be resolved under provision V.A of the MOA, the Regional Water Board would take action or not take action. Either this action or inaction could be petitioned to the State Water Board by CDPH, as specified in MOA provision V.B.

Regional Board staff suggest that the MOA be included as an attachment to the Recycled Water Policy or that it be made part of the staff report, so that members of the public can have access to it.

We also continue to highlight the fact that our agency has broader authorities than CDPH and ask that it be clear that the MOA conflict language only applies regarding the protection of drinking water per their authorities.

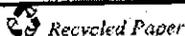
5. Finding 24 was revised as follows:

"For recycled water irrigation projects, discharges of salts to groundwater can be reasonably controlled by implementing a nutrient management plan practices, applying recycled water in an amount that does not exceed the amount needed for the landscape or crops, and controlling salt discharges to collection systems from industrial facilities and self regenerating water softeners. These actions represent best practicable treatment or control for controlling salts for recycled water irrigation projects during the interim period in which Regional Water Boards are developing a salt management plan for the affected groundwater basin. Projects that implement these actions and comply with this Policy during this interim period will not unreasonably affect beneficial uses of such water, and will not result in water quality less than prescribed in applicable water quality control plans or policies."

However, Regional Board staff request that such actions be referred to as examples of practices that could in some cases represent best practicable treatment and control, so as not to preclude other options. Best practicable treatment and control can be anything from treatment to source control; however, inaction is not considered BPT. Language should be added to encourage stakeholders and dischargers to come up with other alternative practicable treatment and controls. For example, the Calleguas Creek Watershed dischargers are embarking on a watershed-wide salt management project, which includes partial reverse osmosis treatment with brine disposal. Furthermore, implementing nutrient management practices should not be constrained to taking place only during the interim period. They should be implemented all of the time that irrigation is taking place, to the point that it becomes a customary part of doing business.

Regional Board staff remain concerned, because if groundwater monitoring is not allowed, how will we be able to establish a baseline and assess the effectiveness of the

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management practices or confirm that the discharges of salts to groundwater are being controlled.

6. Finding 26 was revised as follows:

"Recycled water irrigation projects and groundwater recharge reuse projects provide benefits to the people of the state. These benefits include extending the state's limited water supply to provide water to its growing population, reducing diversions of surface water, and reducing use of groundwater supply. These benefits outweigh the costs associated with lowering of water quality, as mitigated through best practicable treatment or control, that would be caused by a recycled water irrigation project, provided that the lowering does not cause a violation of a water quality objective. Therefore, any lowering of water quality will be consistent with maximum benefit to the people of the State."

Regional Board staff request that the staff report be expanded to include the cost/benefit analysis and/or any other evidence which demonstrates that the "benefits outweigh the costs associated with lowering of water quality."

Also, this statement ignores the key prong of national and state antidegradation policies which is to protect water quality of levels better than what is necessary for protection of the most sensitive beneficial use.

7. Section "I. Scope and Applicability" of the Policy is new.

However, we request that it be expanded as follows, so that it is consistent with the staff report:

E. "Nothing in this Policy authorizes the discharge of irrigation runoff to surface waters."

F. "This Policy does not apply to impoundments, or to industrial uses of recycled water."

8. Section "II. Definitions" of the Policy is new.

However, we request that it be expanded to include as follows:

Include a definition of "total nitrogen" as it pertains to the use of the term in section III.B.2 of the Policy. For example, "total nitrogen is the sum of"

9. Section "III. Salt Management B. Interim Requirements" of the Policy is new.

Regional Board staff are concerned about Requirement III.B.1, which sets an interim limit for TDS at "550 mg/L plus imported water supply concentration." Regional Board technical staff recommend that interim limits be based on site-specific conditions, because, the salt content of potable water varies depending upon the source of that water. Since the Policy's TDS interim limit will be applied as a monthly average,

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technical staff recommend that the TDS interim limit be set equal to the 95th percentile of current performance.

Regional Board staff request clarification as to how the interim limit and the compliance schedule will be implemented both for new and existing water recycling requirements (WRR)/ waste discharge requirements (WDRs). Will each WRR/WDR be reopened to include a 5-year compliance schedule and interim limits for adoption at a future board meeting? If so, this could present a problem, because some Basin Plans do not have compliance schedule provisions. Other Basin Plans only authorize compliance schedules for new water quality objectives or TMDL-based requirements. The Draft Compliance Schedule Policy will not address this issue either, because as it is written, it only applies to NPDES permits.

Regional Board staff request additional clarification regarding the significance of the 3 mg/L total nitrogen in Policy Requirement III.B.2. This is related to our questions with respect to Policy Finding 9.

We request a minor language change with respect to Policy Requirement III.B.3, so that an adverse affect of "groundwater quality" is included, as follows:

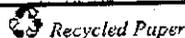
"For landscape irrigation projects, the Regional Water Boards shall defer groundwater monitoring until the applicable salt management plan as been approved, unless it determines that site conditions such as shallow groundwater could cause an increased potential for the irrigated site to adversely affect public health, groundwater quality, or surface water quality. Nevertheless, the Regional Water Board may require recycled water dischargers to monitor for salts, if necessary for salt management plan development and if similar informational burdens are imposed on other parties who may be contributing salt loadings to the underlying groundwater;"

10. Regional Board staff supports Policy requirement V.A., which reads as follows:
~~"For groundwater recharge reuse projects, if at the~~ Regional Water Board finds that attenuation of a constituent will occur within soil, the vadose zone, or groundwater, in lieu of establishing an effluent limitation, the Regional Water Board may establish a groundwater limitation for the constituent. If a groundwater limitation is established, the Regional Water Board shall require monitoring of the constituent in groundwater. The discharger shall ensure that the groundwater shall comply with the limitation at specified monitoring points specified by the Regional Water Board. ~~The discharger shall have legal control over the attenuation area between the discharge points and the monitoring points to prevent the use of domestic or municipal wells within the attenuation area."~~

However, we request that the requirement also be extended to cover recycled water irrigation projects. Also, the burden of proof should be on the Discharger to conduct appropriate studies to quantify and justify any attenuation factor that would be considered by the Regional Board.

11. Regional Board staff would like further clarification with respect to Policy Requirement V.B., because it is unclear as to how the "evaluation of the potential of a proposed

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groundwater recharge reuse project to change the geochemical equilibrium of an aquifer" should be conducted.

12. Regional Board staff request that the "degradation" term be retained instead of deleted from Policy Requirement V.B. in order to address both threats to violating water quality objectives and threats to protection of higher quality waters under the antidegradation policy:

"The Regional Water Board shall require the evaluation of the project's potential ~~of a proposed groundwater recharge reuse project~~ to change the geochemical equilibrium in an aquifer, thereby causing the dissolution of constituents, such as arsenic, from the geologic formation into groundwater. If this potential exists and it ~~could~~ threatens to cause a condition of ~~degradation~~, pollution or nuisance, the Regional Water Board shall establish requirements to ~~limit the degradation and to~~ prevent the project from causing violations of groundwater quality objectives."

Alternatively, Regional Board staff request that an exception provision be added, as follows: "An anti-degradation analysis may be conducted prior to the preparation of a salt management plan to protect groundwater basins which currently have exceptionally good water quality." Technical staff is making this recommendation, because for a high-quality groundwater basin which has a large assimilative capacity, the trigger for developing a salt management plan may not be switched on until the once pristine waterbody becomes "threatened".

Regional Board staff request that the Policy be revised to incorporate protection of high quality waters. Likewise, we request that the new Figure 1 – Salt Management Flowchart, on page 5 of the revised staff report, be revised to address protection of groundwater basins of exceptional water quality.

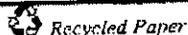
13. Regional Board staff believe there was a typographical error in the following section: "16-A. Except as provided in Section IV.B, Recycled Wwater recycling irrigation projects and groundwater recharge reuse projects that comply with this Policy, the Porter-Cologne Water Quality Control Act, the Clean Water Act and its implementing regulations, and the applicable Basin Plan, shall be considered to have met the requirements of State Water Board Resolution No. 68-16.

Regional Board staff request that section "V.B." be referenced, instead of section "IV.B", with respect to an Antidegradation analysis.

14. Regional Board would like clarification as to why the term "Liability" was replaced with "Responsibility," as follows, in Requirement VII.A.:

~~17. A. Compliance with requirements based, in whole or in part, on this Policy does not exempt a discharger from~~ Nothing in this Policy is intended to expand or limit liability responsibility for contamination or pollution of groundwater. If drinking water standards become more stringent after a Regional Water Board establishes requirements for a project, the discharger shall be ~~liable~~ responsible, under Water Code section 13304 or

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other applicable provisions of law, for any past or continuing discharge that has caused, is causing, or threatens to cause groundwater to violate the new or more stringent drinking water standard(s). This liability responsibility may include the provision of an alternative water supply or wellhead treatment to any affected parties.

Regional Board staff would like clarification as to how this requirement will be enforced.

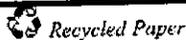
We appreciate having the opportunity to submit additional comments. Should you have any questions, please contact me at (213) 576-6605 or Deb Smith, Chief Deputy Executive Officer, at (213) 576-6609.

Sincerely,

 Chief Deputy E.O.
for

Tracy J. Egoscue
Executive Officer

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