

**Department of Water
Resources**
Keith DeVore, Director



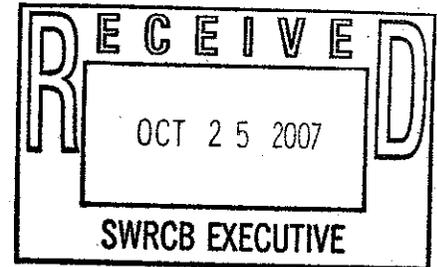
12/4/07 Bd. Mtg.
Water Recycling Policy
Deadline: 10/26/07 Noon

Including service to the cities of
Elk Grove and Rancho Cordova

SACRAMENTO COUNTY
WATER AGENCY

October 25, 2007

Ms. Jeanine Townsend
Acting Clerk to the Board
State Water Resources Control Board
1001 I Street, 24th Floor
Sacramento, CA 95814



SUBJECT: COMMENT LETTER – WATER RECYCLING POLICY

Dear Ms. Townsend:

Thank you for the opportunity to review the October 2, 2007 Proposed Water Recycling Policy (Policy). The Sacramento County Water Agency (SCWA) has several concerns about the proposed Policy, as discussed below.

THE PROPOSED POLICY

The Policy would impose certain requirements and standards on recycled water irrigation and groundwater recharge reuse projects. The State Water Board indicates that a statewide approach that fosters a consistent application of requirements to the use of recycled water is desirable to encourage and broaden water recycling, and that a uniform interpretation of the requirements specified in the Regional Water Quality Control Board's Water Quality Control Plans will help achieve the full potential for water reuse.

The proposed Policy intends to fulfill the provisions specified in Resolution No. 68-16 and supersede any conflicting provision contained in Resolution No. 77-1. Highlights of the Proposed Policy are summarized below.

Recycled Water Irrigation Projects:

- (a) Groundwater monitoring would be required if irrigated site conditions could increase potential to adversely affect public health or surface water quality.
- (b) Except under certain conditions, salt management measures for the basins where water quality objectives for salts are being or are threatening to be violated will not be required prior to January 1, 2018.

"Managing Tomorrow's Water Today"

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(c) Development of a Nutrient Management Plan for the proper application of nutrients, soil amendments, and manure shall be required. Implementation of a Nutrient Management Plan would represent best practicable treatment or salt control for recycled water and for the protection of air, water, and soil.

(d) Development of an irrigation system that will minimize the over-application of recycled water for the irrigated landscape or crops would be required.

(e) TDS concentration in the recycled water shall not exceed the flow-weighted monthly average TDC concentration of the source water supply, plus 300 mg/l.

Groundwater Recharge Reuse Projects Using Injection Wells or Spreading Basins:

(a) Effluent limitations for constituents of concern shall be established based on available MCLs established by the California Department of Public Health (CDPH).

(b) If an MCL is not available, effluent limitations may be established if all of the following conditions are met: constituent is present in the recycled water; adequate information is available to characterize the toxicity of the constituent; the constituent is likely to be persistent in groundwater in the recharge area; an approved analytical method(s) is available.

(c) A more stringent effluent limitation may be established if it is necessary to protect a designated beneficial use other than municipal or domestic use; i.e., agricultural use.

(d) Groundwater limitation may be required in lieu of an effluent limitation. Development of a groundwater limitation shall take into account soil attenuation factors, the vadose zone, or groundwater. Groundwater shall comply with the limitation at specified monitoring points identified in the WDR.

The Policy contains a disclaimer statement that compliance with this Policy does not exempt the discharger from liability for contamination of groundwater. To ensure the discharger's ability to bear such liability, the Regional Boards may require project owners to pass a financial means test or provide certain types of financial assurance, provided that such requirements are reviewed by the State Board.

SPECIFIC COMMENTS

1. The Policy indicates that the Regional Board may require groundwater monitoring for recycled water irrigation projects if site conditions such as shallow groundwater pose an increased potential to adversely affect public health or surface water quality (Resolution #8). The State Board believes that: (a) effective irrigation will delay the pollutant reaching groundwater, thereby limiting the effectiveness of groundwater monitoring; and (b) it is not reasonable to require groundwater monitoring for recycled water irrigation projects because recycled water generally poses a threat to water quality similar to surface water or groundwater, for which groundwater monitoring is not required.

Comment:

A. Although the development and implementation of certain fertilizer application plans or better irrigation methods by project owners may delay pollutants or chemicals migrating into the soil and/or groundwater, such methods do not eliminate the potential for pollutant migration and groundwater contamination. Consequently, groundwater monitoring would be the only means to allow for an early detection of any pollutant which may have migrated into groundwater.

B. Not all surface and/or groundwater pose a risk similar to recycled water: surface and groundwater in most parts of Central and Northern California are of good to excellent quality and are suitable for both potable and non-potable uses. In these areas, protection of groundwater quality from degradation should be a high priority.

The Proposed Policy may be more suitable to areas with little rainfall and where existing water resources, including imported surface water, are of limited and/or poor quality. Accordingly, SCWA suggests that the State Board may want to develop some form of exemption (e.g., "Presumptive Exemptions") from groundwater monitoring for those areas, provided that the recycled water projects do not pose a direct threat to human health or surface water supply. The State Board may want to develop a list of these areas for permit streamlining and clarification purposes.

2. The proposed requirement that "effluent limitation for a constituent of concern shall be established solely based on the corresponding MCL" may not provide sufficient protection. The Regional Board should be allowed to use the "Best Available Treatment Technology" or the established "Public Health Goals" to establish a lower effluent limitation so long as it is economically and technically feasible. For example, TCE can easily be treated to meet an effluent limitation of 0.8 ppb and the owners and operators who supply the recycled water should be encouraged to do so for the protection of public health and the environment.

3. In the absence of an MCL, the Policy indicates that establishment of an effluent limitation is not required unless the constituent of concern meets all of the following conditions: (i) constituent is present in the recycled water; (ii) adequate information is available to characterize the toxicity of the constituent; (iii) the constituent is likely to be persistent in groundwater in the recharge area; and (iv) approved analytical method(s) is available to measure the concentration of the constituent.

SCWA is concerned that such a broad and general exemption has the potential to cause extensive groundwater contamination. A case in point is the extensive perchlorate groundwater contamination found in the Rancho Cordova area (Sacramento County). Remediated water containing perchlorate was used for groundwater recharge prior to 1997. Effluent limits for perchlorate in the recycled water were not established prior to 1997 because adequate analytical methods were not available and because the health effects of perchlorate were largely unknown. The subsequent contamination has caused more than 13 drinking water wells to be taken out of service and hundreds of million dollars spent on cleanup, with remediation expected to last an estimated 240 years.

SCWA believes that promoting reclaimed water for groundwater recharge must take into account scientific limitations and uncertainties known to exist, and the cost of potential consequences to all parties involved.

4. Resolution #12 provides that "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." This assignment of authority over groundwater pumping is not acceptable – such authority must remain with the State Board.

CONCERNS

SCWA's concerns are summarized below:

1. The Policy may be a reasonable resolution for areas that are facing imminent water shortage and where recycled water is a viable option to meet water needs. Such areas may have limited rainfall, limited surface water availability, and limited and/or no groundwater supply that require protection. In addition, their imported surface water may be of poor-quality in comparison with recycled water, as suggested in the Policy. However, SCWA is concerned that application of the Proposed Policy in other parts of the State may do little to promote water recycling and may expedite the rate of groundwater degradation.

2. The Policy allows recycled water to meet less stringent standards that would otherwise not be allowed for discharge into a surface water body pursuant to the NPDES requirement. SCWA is concerned that the Policy will encourage recycling for disposal purposes.

3. SCWA does not believe that the Proposed Water Recycling Policy fulfills the provisions specified in Resolution No. 68-16 which mandates that "WHEREAS the quality of some waters of the State is higher than that established by the adopted policies and it is the intent and purpose of this Board that such higher quality shall be maintained to the maximum extent possible consistent with the declaration of the Legislature";

4. SCWA believes that allowing the Proposed Policy to supersede Resolution No. 77-1 is unwise. Resolution No. 77-1 requires that "the Board must concentrate its efforts to encourage and promote reclamation in water-short areas of the State where reclaimed water can supplement or replace other water supplies." Resolution No. 77-1 appears to be more reasonable and should be maintained by the State Board for the development of the recycled water policy.

5. Recital #3 claims that "the use of recycled water versus imported water often results in substantial energy savings and corresponding reduction in greenhouse gas emissions"; this statement is questionable, at least in the Sacramento region.

If you have any questions, please contact me at (916) 874-7172.

Sincerely,



Jean Young, P.E.,
Associate Civil Engineer
Sacramento County Water Agency
County of Sacramento

cc: John Coppola, Darrell Eck, Dave Underwood (SCWA)
Carl Lischeske, Chief, Department of Public Health
Ed Winkler, Robert Swartz, Sacramento Groundwater Authority
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Tom Gray, Fair Oaks Water District