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California Regional Water Quality Control Board San Francisco Bay Region

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Arnold Schwarzenegger
Governor

MEMORANDUM

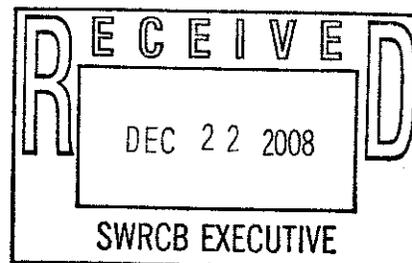
DATE: December 22, 2008

TO: Jeanine Townsend (via email: commentletters@waterboards.ca.gov)
Clerk to the Board
Executive Office
State Water Resources Control Board

Bruce H. Wolfe
Digitally signed by
Bruce Wolfe
Date: 2008.12.22
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FROM: Bruce H. Wolfe
Executive Officer
San Francisco Bay
Regional Water Quality Control Board

SUBJECT: Comments on the State Water Board's November 4, 2008, Revised Draft Recycled Water Policy



On November 4, 2008, the State Water Board released a draft statewide policy for recycled water. We offer the following comments on the draft policy.

General Comment

The policy aims to encourage and streamline permitting for recycled water projects. To meet the policy's quantitative goals specified for 2020 and 2030, the policy should require all POTWs to recycle their effluent unless they can demonstrate (as part of their application for WDRs, and subject to public review) that it is infeasible to recycle their effluent. In other words, the policy's basic presumption that recycling will not happen unless it is encouraged should be changed to one that recycling will happen unless it is demonstrated that it will cause a water quality problem.

Specific Comments

1. Goals and Mandates - Consistent and Clear Quantifications

The policy should use consistent units in describing its goals and mandates, and clearly state the benchmark values to be used for comparison of future accomplishments. The draft policy sets forth in the preamble several goals for increased uses of recycled water. Later, in section 4, similar objectives are restated as mandates. Both the goals and mandates include specific numeric quantities. The quantities are presented in different units in the goals than in the mandates section. In addition, the quantities in the preamble are given in terms of increases over current uses, but current use levels are not stated. These

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inconsistencies preclude clear understanding of the intended goals and mandates and will make it difficult to determine whether appropriate progress is being made in achieving the goals and mandates.

2. Implementation Resources

A statewide program for electronic submittal and management of recycled water data would improve the efficiency of Water Board work needed to implement the policy. Paragraph 4.b. assumes the Regional Water Boards will effectively implement regulatory streamlining in accordance with the policy. We concur with this assumption. However, policy implementation, and increased water recycling in general, will involve additional work load. Given that implementation of additional work will be difficult within the current level of staff resources, improved efficiency of existing resources could be achieved, to a certain degree, through use of modern tools for data management, such as a statewide program for electronic submittal, storage, review, and evaluation of recycled water project data.

3. Salt Management Plans

We recommend that the phrase on line number 222 be revised to read, "...that **may** adversely affect the groundwater quality." The qualifications in Paragraph 6.b.(1).(f) allows Salt Management Plans to address constituents other than salts and nutrients, "... that adversely affect the groundwater quality". This qualification is inappropriately definitive, as it implies application to only those constituents with defined adverse affect. Allowance should be made to address potential adverse impacts, so that proactive measures can be taken in advance of and hopefully prevent definitive adverse impacts to groundwater quality.

4. Landscape Irrigation Projects - Control of Incidental Runoff

The itemized practices under 7.a., given as items (1) through (4), need to be modified or deleted from the policy. Paragraph 7.a. addresses incidental runoff from landscape irrigation projects. The main body of the paragraph gives a definition and options for regulation. The third sentence leads into four itemized practices that are to be included in any landscape irrigation project. These itemized practices as given are inappropriate and lacking the context of other relevant requirements that collectively would provide appropriate management conditions for a project.

The more appropriate approach to reduce incidental runoff should start from water conservation. If citation of specific practices is desired, we recommend the policy refer to the best management practices (in particular BMPs for residential surveys, metering, and landscape) developed by California Urban Water Conservation Council (<http://www.cuwcc.org/3column.aspx?id=7794>).

Additional discussion of our concerns with the itemized practices is given below for each:

Item 7.a.(1), states that correction of a leak as much as 72 hours after learning about it or allowance of release of up to 1,000 gallons are acceptable practices. These allowances are inappropriate. Corrective actions should always be implemented as soon as possible, and the objective should always be to minimize unauthorized releases of water. For one, water is a precious resource. An objective of the policy is to improve water resource management. Explicit allowance to waste water is inconsistent with this objective. Furthermore, the given qualification is based solely on quantity and does not provide any

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accounting for the quality of the water, location of the discharge, the waterbodies affected or the beneficial uses potentially adversely impacted, which are all factors that would typically be considered in any enforcement of an unauthorized release. This qualification is inappropriate and should be removed. Item 7.a.(2), The language, "proper design and aim of sprinkler heads" is incomplete at best, is ineffectual in a policy, and should be removed.

Item 7.a.(3), The language, "Refraining from application during precipitation events", is ineffectual and inappropriate. A more appropriate approach would be to state this concept as a prohibition.

Item 7.a.(4), addresses management of and discharges from ponds. Pond design and management are important matters that need to be addressed in the context of comprehensive discharge requirements. The given policy language discusses only one particular design criterion—a 25-year, 24-hour storm event. There are many other factors that need to be considered in appropriate design and management of ponds. The relationship between incidental runoff and pond management is not described and is unclear. The given language requires "prior approval for the discharge by the appropriate Executive Officer." Such approval may not be legal. This condition is vague and incomplete, the means or legality of its implementation is unclear, and should be removed or revised.

5. Criteria for streamlined permitting

Paragraph 7.c.2 addresses two separate topics: the first sentence addresses irrigation application rates, and the second and later sentences address operations and management plans. Clarity would be improved by presenting these two topics in separate paragraphs.

The last sentence of Paragraph 7.c.2 includes the term "tiered rate structures". It is unclear what rates are being referred to here: water price rates, irrigation application rates, or some other rates? This term needs to be more clearly described.

6. Recycled Water Groundwater Recharge Projects

Paragraph 8.b.2 discusses monitoring practices. The last sentence describes monitoring for both "effluent" and "recycled water". It is unclear if these are one and the same, or different monitoring points. This information needs to be clarified.

Paragraph 8.e. discusses "Projects that utilize reverse osmosis for surface spreading..." However, the type of project is unclear. Reverse osmosis is a treatment technology. Surface spreading typically refers to a method of water discharge to land. The subject project intended to be referenced here needs to be clarified.

Paragraph 8.e, second sentence, states that CDPH and Regional Board "will prioritize review and approval of such projects." Again, the intent is unclear here. Prioritization simply means ranking in some fashion. If the intent is to identify that these are high-priority, then that should be stated.

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7. Antidegradation

Paragraph 9.c addresses, in part, the use of available assimilative capacity as a factor in evaluating potential groundwater impacts associated with groundwater recharge projects. This paragraph should be revised to indicate that, when dealing with recharge to a basin or a large scale groundwater source, geochemistry will play a very large role in assessing a basin's assimilative capacity. A basin's assimilative capacity may be particularly sensitive to or limited by any number of specific newly developed or newly found chemicals. It may not necessarily only pertain to the traditional suite of minerals. Furthermore, assessment of assimilative capacity based solely on either a volume or area is inappropriate and dangerous. Impacts to a local portion of a larger basin may be masked by the use of basin-wide average concentrations as benchmarks, but those impacts are, nevertheless, impacts to beneficial uses of that local water resource. Additionally, it should be specified that impacts to any portion of a larger basin will ultimately impact the entire basin and merit assessment.

8. Incentives for Use of Recycled Water

Section 11's inclusion of stormwater reuse and recharge projects seems inappropriate for a policy focused on recycled water. While we fully support and encourage stormwater reuse and recharge, their inclusion in a policy that provides direction on the reuse and recharge of treated wastewater may result in this section's direction being lost to those parties most able to implement stormwater reuse and recharge. However, if the State Board deems this section is the appropriate location for such direction, we offer the following comments:

Stormwater

At paragraph 11.b, we recommend the policy further specify the financial incentives the State and Regional Water Boards could provide as opposed to simply proposing undefined regulatory relief to encourage stormwater recharge and reuse. We recommend that the State Board consider stormwater permit fee credits and higher priority funding of loans and grants for stormwater reuse and low-impact development projects, particularly those that are supported by relevant local ordinances (e.g., water conservation), policies (e.g., green building), or plans (e.g., smart growth).

At the second sentence of paragraph 11.b, the policy encourages less stringent monitoring and requirements for stormwater treatment projects than for projects using untreated stormwater. This concept is contradictory to normal scientific methods and management practices. Typically, a system or project using an active control practice, such as a treatment process, requires *more* oversight and monitoring to ensure that it works as intended, versus a system or project using no treatment process. We recommend that the second sentence of this paragraph be deleted entirely, as the issue is better addressed through stormwater permitting.

TMDLs

Paragraph 11.c introduces the concept of using waste load allocations as an incentive for greater water recycling. While we have no objections to this concept, the policy would be more useful if it provided guidance or criteria about how such a concept might be implemented.



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