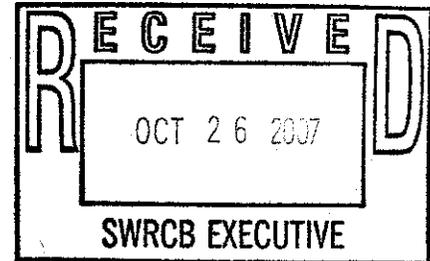


Via Electronic Mail and U.S. Mail

October 25, 2007

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

Subject: Draft Statewide Water Recycling Policy



Dear Chair Doduc and Members of the Board:

The City of Livermore (City) appreciates the opportunity to comment on the Draft Water Recycling Policy (Policy), specifically with respect to irrigation projects. The City provides water, wastewater and recycled water services to customers in the city of Livermore. The City also treats wastewater from the Ruby Hills development in the city of Pleasanton. Recycled water plays an integral water resource role for meeting water demands in the City. The significance of recycled water is increased in light of the current water supply emergencies in the State; recycled water helps to reduce dependence on the Delta.

It was with great interest that the City reviewed the Policy. It is not entirely clear how some of the comments the State Water Board received in March 2007 were addressed in the development of the Policy. It would have been helpful for the State Water Board staff to have prepared response to comments that addressed how comments were incorporated into the Policy. The City encourages State Water Board staff to prepare response to comments received on the Policy.

The City applauds the State Water Board for its efforts to promote the use of recycled water. As stated in the findings of the Policy, the "Legislature has declared its intent that the state undertake all possible steps to encourage the development of recycled water facilities so that recycled water may be made available to help meet the growing water requirements of the state." Also included is the finding that a "statewide approach that fosters a consistent application of requirements to the use of recycled water is desirable in order to encourage and broaden its usage. . . Uniform interpretation of these requirements is needed to reduce uncertainty in the design requirements for recycled water projects. This uncertainty has created an obstacle to achieving the full potential of water reuse."

Contrary to fostering the achievement of the full potential of water reuse, there are provisions in the Policy, as currently drafted, that have the potential to provide disincentives to the use of recycled water.

- The Policy should support and recognize locally-driven, basin-wide planning for management and sustainable use of groundwater as the correct and appropriate way to preserve groundwater quality.

The City encourages the State Water Board to incorporate approaches that have been successfully adopted in various regions of the State. For example, The San Francisco Bay Region Regional Water Board (Region 2) has adopted a Basin Plan that encourages and facilitates salt management as a way to protect groundwater quality and encourage water recycling.

The Policy should recognize and not supersede successful local programs already being implemented that promote management and sustainable use of groundwater. For example, the *Livermore Amador Valley Groundwater Basin Salt Management Plan* was approved by Region 2 in September 2004. Stakeholders including water and wastewater agencies participated in the development of the plan and are now participating in its implementation. The plan addresses salt loading from all sources, including potable water as well as recycled water irrigation.

- Requiring the development and implementation of a nutrient management plan for recycled water irrigation projects will discourage recycled water use.

To limit leaching of nitrate into groundwater, the Policy should specify that all irrigation and/or fertilizer and soil amendments are to be applied at agronomic rates. Nutrient management plans should be prepared on a watershed basis, involving all stakeholders. As currently drafted, the impacts from users who irrigate with potable water and use fertilizers are exempt from preparing nutrient management plans, even though they potentially contribute more nitrates to a watershed than recycled water users. The requirement that recycled water users prepare and implement nutrient management plans is a significant disincentive for using recycled water instead of potable water for irrigation.

- The 300 mg/L increment for TDS above source water is not workable and will preclude the City of Livermore's ability to continue to feasibly use and promote recycled water in its service area.

According to the Policy, the State Water Board finds that "through control of industrial discharges and self-regenerating water softeners, a recycled water producer can limit to 300 milligrams/liter (mg/l) the increase of TDS from a community's source water supply to its produced recycled water." The 300 mg/l increment appears to have been quite arbitrarily selected. The Draft Staff Report and Certified Regulatory Program

Environmental Analysis (Staff Report) states that the proposed 300 mg/L TDS increment was selected as "being a difference that the majority of recycled water producers can currently meet." What is the technical basis or justification for this increment? Has State Water Board staff prepared a salt study? Was an economic analysis prepared to determine the feasibility of increasing controls of industrial discharges and self-regenerating water softeners? What of the salts generated by the off-site water softener vendors? The Policy is shortsighted in concluding that off-site water softener vendors are the solution to the TDS issue. The salts must go somewhere and a provision promoting the export of salts from one POTW's service area to another POTW's service area is not the solution.

Also, the Policy over-estimates the TDS reductions that are available by eliminating self-regenerating water softeners, particularly in communities like Livermore that had previously banned softeners from the late 1960's until 1999, when the California Health and Safety Code was modified to limit local authority to prohibit softeners. Due to the resulting low number of self-regenerating softeners in the Livermore service area, the City would likely be unable to demonstrate that softeners are significantly contributing to a permit violation as required under the Health and Safety Code, and would therefore be unable to prohibit softeners.

The TDS reductions from imposing further controls on industrial dischargers from communities like Livermore are also limited. Industrial discharges make up less than 10 percent of the wastewater flow.

The Policy states that Regional Water Boards shall require "the monthly average TDS concentration in the recycled water to not exceed the monthly average TDS concentration of the source water supply, plus 300 mg/l." Whether irrigating with potable water and fertilizer, or irrigating with recycled water, the potential salt impacts on a groundwater basin would be similar. Unless there is very shallow groundwater or very porous soils, it would take long periods for any salts/percolate to reach the groundwater basin. There is no practical reason to require monthly monitoring of the potable water and recycled water TDS. The Policy further states that the "monthly average TDS concentration of the source water supply shall be the flow-weighted monthly average TDS concentration of the public water supply of the service area that generates sewage from which the recycled water is produced." For the city of Livermore, the determination of the flow-weighted monthly average would be a burdensome calculation. The recycled water is produced from wastewater from a service area where potable water is supplied by three separate agencies. The delivered potable water consists of different mixes of surface and groundwater that vary throughout the year.

Given the slow movement of salts/percolate and the range of characteristics of areas where irrigation projects could be located, the State Water Board should allow local agencies to have the opportunity to find other ways to mitigate potential salt impacts. Instead of setting a numerical incremental limit on recycled water TDS. It would be more

reasonable to require local agencies to participate in regional solutions, such as participation in regional salt management projects that address all salt loading, be it from potable water or recycled water irrigation. This was successfully done in the Livermore Amador Valley, the outcome of which was the Region 2-approved *Livermore Amador Valley Groundwater Basin Salt Management Plan*. Local agencies should have the opportunity to offset the salt loading in the most cost effective ways. Therefore, if the 300 mg/l TDS increment limit is retained in the final Policy, it must include an exemption for agencies that have already developed a more-comprehensive strategy to address salt loading.

- There is currently no distinction made as to whether a recycled water project will result in violations of groundwater objectives for salts.

Rather than a "one-size-fits-all" TDS requirement, the Policy needs to recognize that not all recycled water projects will affect groundwater objectives. For example, within the city of Livermore, the majority of recycled water irrigation sites are located over "fringe basins" that have poor quality groundwater. These fringe basins are not sources of groundwater that provide beneficial uses.

- The Policy should be explicit in stating that Regional Water Boards are to rely on the California Department of Public Health with regard to protection of human health.

As currently drafted, the Policy allows Regional Water Boards to establish their own human health based requirements. As stated in the Policy, the CDPH is responsible for establishing maximum contaminant levels for constituents in drinking water to protect the health of the public, and these levels are adopted through an extensive scientific and public review process. The Policy should not allow Regional Water Boards to establish their own MCLs or MCLs that are more stringent than those set by the CDPH, without undertaking the same extensive scientific and public review process to justify the MCLs as is conducted the CDPH.

- The reference to compliance with NPDES regulations in Provision 7 should be deleted.

This reference is confusing and may lend credence to those regional boards and stakeholders who believe that NPDES permits are required for recycling projects. According to the federal Code of Regulations, Chapter 40, Part 122, National Pollutant Discharge Elimination System, the NPDES program requires permits for the discharge of pollutants from any point source into "waters of the United States. Recycled water use does not constitute a discharge of pollutants into waters of the state and the Policy's reference to compliance with NPDES regulations is therefore inappropriate.

- Incidental runoff should be addressed as outlined in the State Water Board's February 24, 2004 memorandum to the Regional Board Executive Officers.

The Draft Staff Report indicates that "Incidental runoff is a federal National Pollutant Elimination System (NPDES) issue that involves interpretation of federal regulations. For this reason, staff plans to address it in a different process, most likely through the development of a statewide general NPDES permit for discharges of incidental runoff of recycled water."

The State Water Board is reminded of its February 24, 2004 memorandum to the Regional Board Executive Officers regarding incidental runoff of recycled water where it stated that the approach of treating incidental runoff as a discharge of treated wastewater requiring an NPDES permit "blurs the distinction between wastewater and recycled water that has been repeatedly recognized by the Legislature." The State Water Board provided guidance to the Regional Boards for incidental runoff from recycled water. See the attached February 24, 2004 State Water Board memorandum.

- The Policy contains provisions to address future responsibility and liability that are overly broad.

The policy should be revised to explicitly state that it neither expands nor limits liability.

- The Policy should more explicitly define the reasonable protection of beneficial uses to support the concept that limited degradation is acceptable with water recycling, as water recycling is an action to maximum benefit of the people. This would lead to more uniform interpretation of the anti-degradation policy by Regional Water Boards and facilitate the implementation of recycled water projects, yet still be protective of water quality.

The findings in the Policy state that "recycled water irrigation projects and groundwater recharge reuse projects provide benefits to the people of the state. . . 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."

- The Policy should define Best Practicable Treatment or Control.

Best practicable treatment or control (BPTC) should be defined as the use of economically feasible treatment and control technologies that most effectively prevent the introduction of pollutants into waste streams or that project the most amount of pollutant removal from them. Economically feasible should be interpreted from a general perspective, focusing on what is feasible for the majority of facilities in the applicant's industry. For irrigation projects, BPTC is defined in Title 22.

Jeanine Townsend
October 25, 2007
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Thank you for the opportunity to provide these comments to the State Water Board. The City looks forward to a final Policy that indeed supports the State's intent to encourage the development of recycled water facilities to achieve the full potential for water reuse, but that also adequately protects existing recycling projects from costly and unnecessary process modifications or source control efforts to meet an arbitrary 300 mg/L TDS increment requirement.

Sincerely,



Darren Greenwood
Water Resources Manager
Department of Public Works
(925) 960-8100
(925) 960-8105

cc: Daniel McIntyre

Enclosure

1. State Water Resources Control Board February 24, 2004 memorandum to Regional Board Executive Officers regarding "Incidental Runoff of Recycled Water"



Terry Tamminen
Secretary for
Environmental
Protection

State Water Resources Control Board

Executive Office

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Arnold Schwarzenegger
Governor

VIA EMAIL

TO: Regional Board Executive Officers

/s/

FROM: Celeste Cantú
Executive Director
EXECUTIVE OFFICE

DATE: February 24, 2004

SUBJECT: INCIDENTAL RUNOFF OF RECYCLED WATER

This memorandum transmits State Water Resources Control Board (State Board) staff recommendations regarding regulatory management of incidental runoff. Incidental runoff refers to small amounts of runoff from intended recycle water use areas, over-spray from sprinklers that drifts out of the intended use area, and overflow of ponds that contain recycled water during storms. This discussion is limited to recycled water that has received tertiary filtration for pathogen removal as specified under Title 22.

Background

The State Legislature established the California Recycled Water Task Force (Task Force) in 2001. The mission of the Task Force was to evaluate the current framework of State and local rules, regulations, ordinances, and permits to identify opportunities for and obstacles to the safe use of recycled water in California. The Task Force consisted of 40 members representing State and local regulatory agencies, water and wastewater utilities, environmental groups, and federal resource agencies. The chairman of the Task Force was Richard Katz, who is also a State Board member.

In June 2003, the Task Force completed its review and issued its final report, titled "Water Recycling 2030, Recommendations of California's Recycled Water Task Force." Recommendation 4.2.1 of the report states that the State Board should convene a committee to review the legal requirements of federal and State statutes and regulations that relate to the regulation of incidental runoff of recycled water to determine the regulatory and enforcement options that are available to the regional boards. A stakeholder committee was convened in December 2003 for this purpose. Many of the committee's recommendations are included in this memorandum.

Framework for Regulation of Incidental Runoff

California Environmental Protection Agency

The Water Code defines recycled water as "water, which, as a result of treatment, is suitable for a direct beneficial use or a controlled use that would not otherwise occur and is therefore considered a valuable resource" (Water Code section 13050(n)). A legislatively established objective is to use recycled water in place of fresh water to assist in meeting the future water requirements of the State. To implement this objective, the California Water Code has a stated goal of recycling one million acre-feet of water per year by 2010. The Water Code also states that the use of potable domestic water for non-potable uses, including, but not limited to, cemeteries, golf courses, parks, highway landscape areas, and industrial and irrigation uses, is a waste and unreasonable use of water if recycled water is available that meets specified conditions for its use.

In order to avoid nuisance problems, recycled water applied for irrigation is intended to remain on the irrigated areas. Nonetheless, while incidental runoff or over-spray of minor amounts of recycled water can be minimized, it cannot be completely prevented. Similarly, it is not possible to entirely prevent the runoff of rainwater from areas irrigated with recycled water or from decorative or storage ponds filled with recycled water, particularly during major storm events. The Task Force Report notes, however, that in some instances regional boards assume that any amount of incidental runoff requires the regional board to treat the runoff as a discharge of treated wastewater requiring an NPDES permit (referred to as the "one molecule rule").

This approach is problematic for several reasons. Most importantly, this permitting practice renders the use of recycled water undesirable for many parties. Customers are not willing to assume the cost and the potential liability associated with either securing an individual NPDES permit or ensuring that no incidental runoff will ever leave the permitted application area. Moreover, this approach does not properly acknowledge that recycled water quality is already regulated by both the regional boards and the Department of Health services, and must meet stringent requirements at the time it is applied to the site. Finally, the prohibition approach blurs the distinction between wastewater and recycled water that has been repeatedly recognized by the Legislature.

To further the goal of maximizing the use of recycled water, the water quality laws should be interpreted in a manner that is consistent with the intent of the Legislature to promote recycled water use. Consequently, incidental runoff from recycled water projects should be handled as follows:

1. Where reclamation requirements prohibit the discharge of waste to waters of the State and discharges are not expected to occur, occasional runoff should not trigger the need for either an individual NPDES permit or enforcement action.
2. If discharges from a reclamation project area occur routinely, such discharges can be regulated under a municipal storm water NPDES permit in most cases.
3. In limited cases, where necessary to address a water quality concern, discharges of recycled water to surface waters may be regulated under an individual NPDES permit.

An NPDES permit, however, should not be issued unless necessary to achieve water quality objectives.

Generally, parties using reclaimed water will want to operate in such a way as to avoid the need for an individual NPDES permit. The discussion below describes the framework for regulating incidental runoff from irrigation systems and from storage ponds without issuing such a permit.

Incidental Runoff Associated with Recycled Water Irrigation

Recycled water use facilities should be designed and operated to avoid runoff to waters of the State. The regional boards should work with recycled water users to help them achieve this goal. Nonetheless, incidental runoff is likely to occur at many facilities. Consequently, regional boards should include the following language in water recycling requirements.

The incidental discharge of recycled water to waters of the State is not a violation of these requirements if the incidental discharge does not unreasonably affect the beneficial uses of the water, and does not result in exceeding an applicable water quality objective in the receiving water."

The language is modeled after the language included in the Master Reclamation Requirements issued by the San Francisco Bay Regional Board.

Releases from Recycled Water Ponds

A principal water quality concern with recycled water ponds is the presence of locally added pollutants, such as fertilizers and algaecides. These same issues exist with potable water ponds.

Recycled water ponds should be designed and operated not to spill during dry months. Spills should be prohibited during these times. Generally, wet weather regulatory strategies that do not require individual NPDES permits fall within the following categories.

1. The recycled water pond is designed not to spill during wet months. Under this circumstance, spills that occur under extreme weather conditions or emergencies should not be considered for enforcement.
2. Recycled water ponds can be drained and refilled with potable water or flushed with potable water prior to the onset of the wet season. Flushing will not displace all of the recycled water but the water quality threat is minimal.
3. Recycled water ponds designed to spill recycled water during the wet season can be regulated under Phase 1 municipal storm water permits or under a general storm water permit. These permits require reduction of pollutants to the maximum extent practicable. The permits also incorporate receiving water limitations requiring the implementation of an iterative process for addressing any exceeding of water quality objectives.

Regional Board Executive Officers

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February 24, 2004

Thank you for your attention to this memorandum. If you have questions, please contact me at (916) 341-5615.

California Environmental Protection Agency

 Recycled Paper