State Water Resources Control Board



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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 identity 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



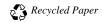
The Water Code defines recycled water as "water, which, as a result of treatment, is suitable for a direct beneficial use or a controlled use that would not otherwise occur and is therefore considered a valuable resource" (Water Code section 13050(n)). A legislatively established objective is to use 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.

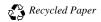
Releases from Recycled Water Ponds

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.

California Environmental Protection Agency



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