

Joseph C. Reichenberger, P.E., BCEE

(6/3/14) Board Meeting
General Order for Recycled Water Use
Deadline: 5/27/14 by 12:00 noon

Board Certified Environmental Engineer
Consulting Civil and Environmental Engineer
Registered Professional Engineer: CA, NV, NM, AZ, HI

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May 15, 2014



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

Subject: Comment Letter – General Order WDRs for Recycled Water Use and/or
Negative Declaration and Initial Study.

Dear Ms. Townsend:

As someone who has been involved with recycled water over most of my 50 year career in civil engineering, I laud the Board for this bold action. Water recycling for the typical uses of irrigation, cooling tower makeup, and toilet flushing is safe and well regulated through the Title 22 Engineering Report process and the state and local Departments of Public Health. There should be few, if any, other barriers standing in the way of implementing these projects quickly. The General Order WDR is a step forward.

However, I do have one comment. I would like to see the Board go even further and include, in this proposed General Order, satellite water reclamation plants that act as “skimming plants” and that have a sewer system of adequate capacity as their point of emergency disposal in the event of malfunction of the treatment or reclamation process. Plants which are included would be package membrane bioreactor plants. Inclusion would encourage the construction of these facilities and promote water recycling in major commercial developments, office buildings, large scale residential development etc. The process is proven, the risk of failure is very low and there is the presence of a fail-safe point of disposal – the sewer. These plants are not subject to upsets that commonly occur in plants with secondary clarifiers. If the Board deems this a reasonable consideration, and I hope they do, but are uncomfortable with a complete blanket approval, maybe a limit on the size of the facility, e.g., 100,000 or 200,000 gallons/day, is appropriate.

I am currently involved with a project at the San Ysidro Land Port of Entry (SYLPOE); the Title 22 Engineering Reports are complete (dual plumbed building, industrial cooling reuse, and the irrigation and treatment plant) and the local and state Department of Public Health have signed off on the project and witnessed the cross-connection test. The project even has a large underground cistern to capture and reuse site rainfall runoff and blend it with the recycled water from the site for reuse. The project is fully constructed and can be started up within the next few weeks were it not for the Waste

Discharge Permit for the 50,000 gallon/day membrane bioreactor treatment plant in the basement of one of the main buildings. We have a failsafe discharge to the City of San Diego's Sewer System in addition to some amount of on-site storage. If my suggestion were included, this project would fall under the General Orders and could be made operational as soon as the General Orders are approved.

I thank you for the opportunity to comment.

Sincerely,

A handwritten signature in black ink, appearing to read "J. C. Reichenberger", written in a cursive style.

Joseph C. Reichenberger P.E., BCEE