

October 24, 2016

Public Comments  
Report to the Legislature on DPR  
Deadline:10/25/16 12:00 noon

Felicia Marcus  
Chair  
c/o Jeanine Townsend, Clerk to the Board  
State Water Resources Control Board  
P.O. Box 100  
Sacramento, CA 95812-0100



SENT VIA EMAIL: [commentletters@waterboards.ca.gov](mailto:commentletters@waterboards.ca.gov)

**Subject: Comment Letter – Report to the Legislature on DPR**

Dear Chair Marcus and Members of the Board:

The Santa Clara Valley Water District (District) thanks the State Water Resources Control Board (Water Board) for the opportunity to comment on the Draft Report to the California Legislature, “Investigation on the Feasibility of Developing Uniform Water Recycling Criteria for Direct Potable Reuse” (Report). The District also wants to reiterate its support for the comment letter submitted to your office by representatives of the Association of California Water Agencies, the California Association of Sanitation Agencies, the California-Nevada Section of the American Water Works Association, the California Urban Water Agencies, the California Water Environment Association, and WaterReuse California.

As the primary water resources agency for Silicon Valley, the District works to provide drinking water and protect the quality of groundwater and surface water in Santa Clara County. In cooperation with local partners, the District is also expanding the use of recycled water and has plans to expand the use of potable reuse. These efforts include building the Silicon Valley Advanced Water Purification Center (SVAWPC), which is the largest purification facility in northern California, and successfully operating this facility for the past two years. The SVAWPC supplements the capacity of the South Bay Recycled Water system in San José and enhances the quality of non-potable recycled water delivered by this system. The District’s future plans include the expansion of potable reuse in the county by expanding the capacity of the SVAWPC and by potentially constructing additional advanced water purification facilities in partnership with wastewater producers in the county, including San José / Santa Clara, the City of Palo Alto, the City of Mountain View, the City of Sunnyvale, and the City of Gilroy.

The District, as one of the potable reuse leaders in Northern California, is interested in pursuing Direct Potable Reuse (DPR) and supports the prompt development of statewide DPR regulations which would allow the delivery of a locally controlled, drought-proof water supply to Santa Clara County. The District has conducted extensive research for over two years at the SVAWPC as part of the Potable Reuse Demonstration Test Plan. The results of this study can be found at <http://www.valleywater.org/TestPlan>. In addition, we are available to participate in research to further the development of potable reuse regulatory criteria.

The District is pleased with the effort that the Water Board put into preparing the contents of the report, and, in particular, with the associated reports from the Expert Panel and the Advisory Group. The District found encouraging the Expert Panel conclusion that it is technically feasible to develop statewide DPR regulations that could incorporate a level of public health protection as good as or better than what is currently provided by conventional water supplies and indirect potable reuse (IPR).

We believe that the Report can however be clarified and strengthened in several areas and to that effect, the District appreciates your consideration of the following comments.

1. Timeliness of Implementation Plan

The District supports the Expert Panel's opinion that DPR regulations can be developed concurrently with additional research, and urges the development of DPR regulations in a reasonable timeframe. The District asks that the Division of Drinking Water (DDW) and the Water Board specify target dates for completion of each research and regulatory milestones listed in the implementation plan (Table 1 – pages 25-27). We request that the Water Board provide more detailed explanation of how the implementation plan will assist with development of criteria.

2. Clarity of Definitions and Terms

The Water Code definition of DPR and the Expert Panel's consideration of potable reuse with reduced retention time ("the Gap") should be reconciled.

Regarding Figure 8-1 (page 251 of Expert Panel Report), the District requests that the report include a scenario using recycled water upstream of water treatment plant, to coincide with the three types of DPR projects identified in page 18 of the Report.

Additional clarification on what kind of technology would provide "averaging" of chemical peaks mentioned in page 17 of the Report is needed.

3. Allow Case-by-Case Approval of DPR Projects as Regulations are Developed

The District asks the Water Board to allow for case-by-case approvals of DPR projects while the regulations are being developed. DPR projects that have an environmental barrier that does not meet groundwater recharge or surface water augmentation criteria, as well as projects that augment raw water supplies should be considered on a case-by case-basis while regulations are being developed.

4. Ask the Expert Panel for More Specificity on its Research Plan

As required in its charge, the Expert Panel suggested additional DPR research areas and said that the research could be conducted concurrently with criteria development. These recommendations are included in the report's implementation plan. However, some of the research items are fairly broad. The District requests that the Water Board ask the Expert Panel to identify realistic, achievable, and relevant research goals on each of its six research items, thus helping us to understand how that research can be completed in a timeframe that is also reasonable for criteria development. The District welcomes the opportunity to assist in building the knowledge base by using our SVAWPC for further research.

5. Ask the Water Board for More Specificity on Their Implementation Plan and Research Plan

Recommendations # 13 and 14 (page 28) address wastewater treatment plant optimization and source control. The District agrees that process optimization, source control, and pretreatment play a critical role in the quality of the feed water to an advanced water treatment facilities for DPR projects. The District supports implementation of wastewater treatment plant optimization and improved source control on a case-by-case basis. The District strongly supports source control monitoring and is willing to work with wastewater agencies to achieve improved source monitoring and control.

Recommendation #2 (page 25) suggests convening a “blue ribbon” panel to report on the current state of scientific knowledge regarding the risk of emerging constituents to public health. The District suggests that the Water Board, instead of convening a separate “blue ribbon” panel, consider taking advantage of the EPA’s Contaminant Candidate List (CCL) process to expand the body of knowledge of emerging constituents.

The Water Board has identified several research topics in Appendices C and D (pages 33 - 35). We request that the Water Board clarify how this research is tied to the Implementation Plan, what knowledge gaps it will fulfill, and in what timeline. In addition, Appendix C appears to only include WERF projects. However, there may be academic or independent projects that could also inform the development of criteria for DPR, particularly from international sources also investigating potable reuse.

The District supports the Water Board's research recommendations to improve log reduction credits for reverse osmosis (page 34), and to streamline treatment trains, for example with Membrane Bioreactors (page 35).

6. Wastewater Monitoring

Recommendation #4 (page 26) states that the Water Board will work with the Regional Water Quality Control Boards (RWQCBs) to include monitoring requirements for raw wastewater feeding potable reuse systems. We agree that better characterization of pathogens in the raw wastewater feeding a DPR system would be useful. The District is willing to work in partnership with wastewater agencies to support pathogen monitoring.

7. Remove Current Barriers for Experienced Operators on Potable Reuse Projects

We agree that “DPR systems should be operated by experienced and well-trained staff to ensure treatment processes function properly” (page 249 of Expert Panel Report). However, the current operator certification regulation limits operators holding water treatment operator certifications from counting their experience at advanced reuse treatment facilities. Currently, there are advanced treatment facilities, such as the District’s, where water treatment operators are not receiving any, or only partial, credit for their operational experience. This issue stemmed from a previous oversight where water treatment operators can technically operate recycled water facilities but the operator certification part of the regulations omitted counting experiences at these facilities for operators to both obtain and advance their water treatment operator certification. The largest IPR production plant in California is Orange County Water District’s (OCWD) Groundwater Replenishment System. OCWD employs only wastewater operators and has been able to avoid this certification issue. The District is the first agency to use water treatment operators for an IPR-like facility and after two and a half years of operation,

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is facing staffing challenges using water treatment operators at its plant. We ask the Water Board's support in resolving this current regulatory limitation. We have identified this issue as a "Technical, Operational, and Management Barrier" for current reuse facilities, and future DPR systems as discussed on page 251 of the Expert Panel Report.

#### Conclusion

We thank the Water Board and DDW, the Expert Panel and the Advisory Panel for its tremendous work in developing and issuing this draft report in a timely manner.

As mentioned by the Expert Panel, we believe DPR has the potential to be a safe, reliable, locally-controlled water supply that protects the environment, sustains economic growth, and provides a high quality of life for Californians. We look forward to working with you on refinements to this report and on building the knowledge base by using our very own SVAWPC. If you have any questions, please contact Mr. Jim Fiedler, Chief Operating Officer, at (408) 630-2736.

Sincerely,



Norma J. Camacho  
Interim Chief Executive Officer

cc: J. Fiedler, G. Hall, A. Cheung, K. Oven, H. Ashktorab, L. Sangines  
jf:ls