



July 3, 2012



Charles R. Hoppin, Chair and Members  
State Water Resources Control Board  
1001 I Street, 24th Floor  
Sacramento, CA 95814

Subject: Comments on the Amendment to the Recycled Water Policy

Dear Chair Hoppin 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 proposed amendment to the Recycled Water Policy to include monitoring for constituents of emerging concern (CECs).

The mission of the District is a healthy, safe and enhanced quality of living in Santa Clara County through watershed stewardship and comprehensive management of water resources in a practical, cost-effective and environmentally sensitive manner for current and future generations. Consistent with this mission, the District manages the Santa Clara and Llagas Subbasins which provide nearly half of the water used in Santa Clara County each year.

The District is also working to expand the use of recycled water in coordination with local recycled water producers. The District is completing a two-year effort to build the largest advanced treatment facility in Northern California. The Silicon Valley Advanced Water Purification Center will use membranes and ultraviolet disinfection to enhance the quality of water from the South Bay Water Recycling system. This nearly \$50 million facility underscores the District's commitment to expanding recycled water use while protecting water quality and the environment. The District appreciates your consideration of the following comments on the proposed amendment to the Recycled Water Policy.

### Comments on Recycled Water Policy Amendment

The District supports the regular review of the understanding of CECs by a diverse group of experts and related updates to the Recycled Water Policy monitoring provisions. The state of knowledge with regard to CECs is constantly evolving as scientific studies are completed and more advanced laboratory analyses are developed.

Since the adoption of the Recycled Water Policy in 2009, the District completed the Recycled Water Irrigation and Groundwater Study<sup>1</sup>, a multi-year study that included laboratory testing of soils irrigated with recycled water and a field study at a site using recycled water for irrigation. Findings from this study and subsequent monitoring of shallow groundwater indicate the presence of nitrosamines including N-Nitrosodimethylamine (NDMA) and N-Nitrosodiethylamine (NDEA).

<sup>1</sup> Available on the District website at <http://www.valleywater.org/Services/GroundwaterStudies.aspx>



NDMA was detected near the Notification Level and NDEA was detected above the Notification Level. In addition, low levels of perfluorochemicals (PFCs) were also observed. Analysis of recycled water samples at the irrigation site prior to application also suggests the formation of disinfection by-products within the distribution system. The District recommends that studies such as this one be considered in the periodic review of monitoring requirements for recycled water projects, including irrigation projects, to help guide the decision on which CECs to monitor and the appropriate monitoring locations.

### **Comments on Attachment A (Monitoring Requirements)**

#### CECs for Monitoring Programs (Section 1.1)

The District recommends the following italicized text be added to the first paragraph in this section:

*“This Policy provides requirements for monitoring CECs in recycled water used for groundwater recharge reuse. The Regional Water Boards shall not issue requirements for monitoring of additional CECs, beyond the requirements provided in this Policy, except when recommended by CDPH or when requested by the owner or operator of the groundwater recharge reuse project, or in accordance with an adopted regional salt and nutrient management plan.*

#### Evaluation of Health-Relevant CEC Results (Section 4.2)

Table 7 includes response actions based on health-relevant CEC results and the related Measured Concentration/Monitoring Trigger Level (MC/MTL) ratio. It should be clarified that these response actions apply to the monitoring results from either recycled water or groundwater. It is not clear if a single result would trigger the indicated response for Actions B through F and the District recommends the intent be clarified.

The District is concerned that many of the proposed response actions identified are not adequately protective of groundwater. For example, with a MTL of 10 parts per trillion (ppt), NDMA could be detected up to 1,000 ppt before an immediate resample would be required (Action D). This is well above the concentration at which the California Department of Public Health (CDPH) recommends source removal for NDMA (300 ppt) however no additional downstream monitoring is required to ensure drinking water quality is protected. Under Action E, the implementation of a source identification program and additional monitoring would only be required if NDMA was detected between 1,000 and 10,000 ppt. Immediate conference with the Regional Water Board and CDPH is not required until the MC/MTL is over 1,000, which for NDMA would correspond to a concentration over 10,000 ppt.

As some of these scenarios correspond to very high concentrations of CECs in groundwater, the District recommends that the response actions be reviewed to ensure they are adequately proactive, responsive, and protective of the beneficial uses of groundwater. For example, we recommend that additional downstream monitoring be required under Action D as this could correspond to CEC concentrations well above Notification Levels. Potential additional downstream monitoring locations should be identified prior to project startup to ensure timely access if needed. We also recommend that timely notification to the Regional Water Board and CDPH be required under Actions D and E.

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Thank you for the opportunity to provide comments on the proposed amendment to the Recycled Water Policy. If you have any questions, please contact Mr. Behzad Ahmadi, Groundwater Monitoring and Analysis Unit Manager, at (408) 265-2607 extension 2324.

Sincerely,



for Joan Maher  
Deputy Operating Officer  
Water Supply Management Division  
Santa Clara Valley Water District

cc: J. Fiedler, B. Ahmadi, H. Ashktorab, V. De La Piedra, P. John