



THE CITY OF SAN DIEGO

M E M O R A N D U M

DATE: September 4, 2012

TO: Natural Resources & Culture Committee - Agenda of September 19, 2012

FROM: Roger Bailey, Director of Public Utilities

SUBJECT: Monthly Update on the Indirect Potable Reuse/Reservoir Augmentation Demonstration Project

The Public Utilities Department reports monthly to the Natural Resources & Culture Committee on the progress of the individual tasks budgeted within the Indirect Potable Reuse/Reservoir Augmentation Demonstration Project, also referred to as the Demonstration Project. The last update occurred on July 25, 2012 (ITEM-6). Due to council recess in August, the September memo will also include information from August.

Public Outreach & Education

- During this rating period, the Advanced Water Purification (AWP) Facility tour program achieved a major milestone when it welcomed its 2,500th visitor. The achievement was quickly followed by the 200th tour milestone which coincided with an International Symposium on Global Environmental Challenges. Notable guests during this reporting period included Assemblymember Toni Atkins, a San Diego County Water Authority mentorship group, NR&C Committee Consultant Kevin Smith, Eastern Municipal Water District staff serving South Riverside County, and representatives from the Coalition of Neighborhood Councils.
- CBS 8's Larry Himmel visited the AWP Facility on August 6 to film a news segment about the Demonstration Project. In a lighthearted look at the Demonstration Project, the segment explained the purpose of the pilot program, showcased the facility components, and encouraged viewers to tour the facility. The segment originally aired during the 5 p.m. broadcast on August 6 and repeated the next day on the morning news broadcast. The clip is available on Larry Himmel's "In the Neighborhood" web page at <http://www.cbs8.com/story/19210248/wade-in-the-water>.
- A new public opinion poll commissioned by the San Diego County Water Authority was conducted in July by Rea & Parker Research. Eight hundred and sixteen adult San Diego County residents were surveyed on their opinions regarding water supply diversification

efforts, water conservation, and recycled water. As in years past, an additional set of questions regarding behavior toward advanced water purification technology and the City's Water Purification Demonstration Project, were also part of the survey. Dr. Parker, from Rea Parker Research, is available to present city research findings to the Natural Resources & Culture Committee later this year, if so desired.

Operation of Advanced Water Purification Facility

- A review of the Quarterly Testing Report No. 3 was completed in August. The water quality data reflects results from 1,300 microbial tests, and more than 6,000 laboratory tests to measure the concentration of 330 chemical contaminants in the water. Eight online continuous monitoring instruments were used to verify the performance and integrity of each of the treatment steps (membrane filtration, reverse osmosis, advanced oxidation).

The water quality testing included all regulated drinking water contaminants, all contaminants under consideration for regulation, constituents of emerging concern (CECs) and microbial contaminants. The purified water produced at the AWP Facility met all applicable drinking water regulations. Water quality results have been consistent throughout the nine-month test period.

Roger S. Bailey
Director of Public Utilities

MAS/ar



RON CHAPMAN, MD, MPH
Director & State Health Officer

State of California—Health and Human Services Agency
California Department of Public Health



EDMUND G. BROWN JR.
Governor

September 7, 2012

Roger S. Bailey
Director, Public Utilities Department
City of San Diego
9192 Topaz Way, MS 901
San Diego, CA 92123

Marsi Steirer
Deputy Water Department Director
City of San Diego
600 B Street, 13th Floor
San Diego, CA 92101

Dear Mr. Bailey and Ms. Steirer:

CITY OF SAN DIEGO SAN VICENTE RESERVOIR AUGMENTATION CONCEPT

The California Department of Public Health (CDPH) has reviewed the March 22, 2012, City of San Diego Water Purification Demonstration Project, Proposal to Augment San Vicente Reservoir with Purified Recycled Water (Report) and the City of San Diego San Vicente Reservoir Augmentation Concept Summary. The purpose of this letter is to respond to the City's request for CDPH review and approval of the project concept.

The City of San Diego's (City) proposed project for surface water augmentation (SWA) using advance treated recycled water would be the first planned project of its type in California. To obtain CDPH approval for an actual SWA project, the City must provide an adequate basis for CDPH to make a finding that the SWA project "poses no significant threat to public health", as required in the Health & Safety Code (H&S Code), Section 116551. CDPH has authority to condition a permit (H&S Code Section 116540) "as it deems necessary to assure a reliable and adequate supply of water at all times that is pure, wholesome, potable, and does not endanger the health of consumers." Nothing in this letter is intended to waive CDPH's authority.

The final design, engineering report, operations plan, contingency plan, response plan, and water quality monitoring plan for this project have not yet been developed; all of these are required prior to being issued a permit.

Based on CDPH's review of the City's March 22, 2012, submittal, CDPH has concluded that the project, as conceived, when properly designed, constructed, and operated, will not compromise the quality of the water derived from the San Vicente Reservoir. Therefore, CDPH approves the San Vicente Reservoir Augmentation Concept.

In order for CDPH to permit the project and make the finding that the project poses no significant threat to public health, the City will need to provide the additional information outlined above, including, but not limited to, the final design, engineering report, operations plan, contingency plan, response plan, and water quality monitoring plan.

CDPH staff will continue to be available to your staff for technical discussions and to answer questions on CDPH's requirements for SWA projects. If you have any questions on these comments or would like to discuss them, please contact me at (916) 449-5577.

Sincerely,



Leah Godsey Walker, P.E., Chief
Division of Drinking Water and Environmental Management

cc:

Tom Richardson, P.E.
Principal Engineer
RMC Water and Environment
2290 North First Street, Suite 212
San Jose, CA 95131

Jeff Mosher
Executive Director
National Water Research Institute
18700 Ward Street
PO Box 8096
Fountain Valley, CA 92728-8096

George Tchobanoglous, Ph. D, P.E., NAE
Independent Advisory Panel Chair
University of California, Davis
662 Diego Place
Davis, CA 95616-0123

David Gibson
Executive Officer
RWQCB – San Diego Region
9174 Sky Park Court, Suite 100
San Diego, CA 92123

Bob Morris
Senior Water Resource Control Engineer
RWQCB – San Diego Region
9174 Sky Park Court, Suite 100
San Diego, CA 92123

Anthony Van
Project Manager, Public Utilities Department
City of San Diego
600B Street, 6th Floor, MS 906
San Diego, CA 92101

Mark McPherson
Chief, Land and Water Quality Division
County of San Diego Department of Environmental Health
5201 Ruffin Road, Ste. C
San Diego, CA 92123



California Regional Water Quality Control Board

San Diego Region



Matthew Rodriguez
Secretary for
Environmental Protection

Over 50 Years Serving San Diego, Orange, and Riverside Counties
Recipient of the 2004 Environmental Award for Outstanding Achievement from USEPA

Edmund G. Brown Jr.
Governor

9174 Sky Park Court, Suite 100, San Diego, California 92123-4353
(858) 467-2952 • Fax (858) 571-6972
[http:// www.waterboards.ca.gov/sandiego](http://www.waterboards.ca.gov/sandiego)

October 24, 2011

In reply refer to:
244506:JCOFRANCESCO

Ms. Marsi A. Steirer
Deputy Director, Public Utilities Department
City of San Diego
600 B Street, Suite 600, MS 906
San Diego, CA, 92101

Dear: Ms. Steirer

SUBJECT: ADOPTION OF RESOLUTION NO. R9-2011-0069, A RESOLUTION IN SUPPORT OF THE CITY OF SAN DIEGO'S SAN VICENTE RESERVOIR AUGMENTATION PROJECT

Thank you again for coming to the San Diego Water Board meeting on October 12, 2011. The information that you provided to the Board Members demonstrate the City's efforts to bring more sustainable local water to our region. The San Diego Water Board's adoption of Resolution No. R9-2001-0069 and their comments during the meeting show that they are in support of the City's efforts and look forward to the possibility of indirect potable reuse in the San Diego Region. My staff and I will continue to work closely with the City to resolve any remaining water quality requirements related to the San Vicente Reservoir Augmentation Project.

Enclosed is a copy of the adopted resolution for your records. Please do not hesitate to contact myself or my staff (Joann Cofrancesco at 858-637-5589 or jcofrancesco@waterboards.ca.gov) regarding this project.

Respectfully,

DAVID W. GIBSON
Executive Officer

DWG:dtb:rwm:jlc

cc: (by email): Anthony Van, City of San Diego, Associate Engineer-Civil, AVan@sandiego.gov
Enclosures: Resolution No. R9-2011-0069

California Environmental Protection Agency

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD

SAN DIEGO REGION

RESOLUTION NO. R9-2011-0069

A RESOLUTION IN SUPPORT OF THE CITY OF SAN DIEGO'S SAN VICENTE RESERVOIR AUGMENTATION PROJECT

WHEREAS, the California Regional Water Quality Control Board, San Diego Region (hereinafter, San Diego Water Board), finds that:

1. California Water Code section 13510 states, *the people of the state have a primary interest in the development of facilities to recycle water containing waste to supplement existing surface and underground water supplies and to assist in meeting the future water requirements of the state.*
2. The Strategic Plan Update 2008-2012 for the Water Boards includes a priority to increase sustainable local water supplies available for meeting existing and future beneficial uses.
3. The City of San Diego (City) has prepared a water recycling plan entitled, City of San Diego, Recycled Water Master Plan Update 2005 (Master Plan), which identifies non-potable reuse opportunities for recycled water. Subsequently the City prepared the Water Reuse Study Final Draft Report, March 2006, which includes the Master Plan and identifies opportunities for indirect potable reuse (IPR). In October 2007, the San Diego City Council recognized San Vicente Reservoir Augmentation as their preferred IPR strategy.
4. To determine the feasibility of a full-scale reservoir augmentation project, the City of San Diego is currently evaluating the use of advanced water purification technology to provide safe and reliable water. Should this evaluation prove successful, the City plans to construct a full-scale advanced water treatment plant to supplement the current treatment processes at its North City Water Reclamation Plant and a 23-mile pipeline to transport the advanced treated recycled water to San Vicente Reservoir, where it would blend with imported untreated water and reside for several months (per state health regulation) prior to being sent to water treatment plants for additional treatment and distribution as potable water.
5. The San Diego Water Board has a long history of taking actions in support of beneficial water recycling projects in the Region. These actions included amending the *Water Quality Control Plan for the San Diego Basin* (Basin Plan) in 1996 to provide an exception to the prohibition for recycled water discharges to a lake or reservoir used for municipal water supply.

Resolution No. R9-2011-0069
October 12, 2011

6. On September 22, 2011, this item was publicly noticed in the Meeting Notice and Agenda, which was posted on the San Diego Water Board's website and distributed to interested persons via the ListServ Management System.
7. On October 12, 2011, the San Diego Water Board conducted a public hearing on tentative Resolution No. R9-2011-0069.

NOW THEREFORE, BE IT RESOLVED THAT, the San Diego Regional Water Quality Control Board:

1. Supports the efforts to develop the Reservoir Augmentation Project at the San Vicente Reservoir as a means to reduce reliance on imported water, increase the use of recycled water, and to implement goals in California Water Code section 13510 and the 2008-2012 Strategic Plan Update for the Water Boards.
2. In accordance with implementation provisions of the Basin Plan, the San Diego Water Board will regulate San Diego Region recycled water reservoir augmentation projects through the issuance of project-specific NPDES Permits.
3. Reservoir augmentation NPDES permits issued by the San Diego Water Board will incorporate requirements established and the provisions recommended by California Department of Public Health.

I, David W. Gibson , Executive Officer, do hereby certify the foregoing is a full, true, and correct copy of a resolution adopted by the California Regional Water Quality Control Board, San Diego Region, on October 12, 2011.



David W. Gibson
Executive Officer