

WEST BASIN MUNICIPAL WATER DISTRICT**OCTOBER 12, 2006 – Water Resources**
Little, Baker**OCTOBER 30, 2006 – Board Meeting**

Prepared by: Cheryl Ross

Submitted by: Paul Shoenberger

Approved by: Rich Nagel

ACTION CALENDAR

RESEARCH & DEVELOPMENT LABORATORY SERVICES CONTRACTSUMMARY:

Several large research and development (R&D) studies are ongoing or pending for the West Basin Municipal Water District (District) Seawater Barrier Water Conservation Project and the Ocean-Water Desalination Pilot Project. These studies require testing of constituents that must be conducted at an outside laboratory. The constituents include organics, inorganics, radioactivity, pharmaceuticals, and endocrine disruptors. The District's laboratory does not have the necessary equipment to perform these tests. The studies are summarized below:

Desalination Pilot Plant

- Evaluating corrosion potential in simulated ocean-water desalination plant distribution system materials (AWWARF is primary funder). Continuing from 2005, this project involves over 670 water quality samples over the next year for various inorganic constituents;
- Assess effects of stormwater runoff on desalination plant influent water quality (District-funded project) - continuation of this 2005 project evaluates dry weather and storm season influent water quality for organics, inorganics and radioactivity; and
- Evaluating source water and membrane efficiencies for the Ocean-Water Desalination Pilot Plant (District-funded project) -- continuation of a 2005 project to test for a wide variety of organic, inorganic, and radioactivity constituents. Evaluates warm water and cold water sources, and various locations in the treatment processes to provide baseline information for pilot plant operations and future demonstration scale plant.

Seawater Barrier Conservation Project

- Investigating rejection behavior of organic compounds using membranes (Environmental Protection Agency is primary grant funder; cooperative project with Orange County Water District, Sonoma County Water District and the District through the Desalination Research and Innovation Program, or D.R.I.P.). This project evaluates micro-pollutant rejection of a variety of membrane treatment processes; and
- Evaluate advanced treatment processes on removal of emerging contaminants (Department of Water Resources is main funder). Over 50 samples from various points in the microfiltration, reverse osmosis and UV treatment processes will profile removal efficiencies of pharmaceuticals, endocrine disruptors and emerging contaminants representative of those listed in The California Department of Health Services Draft Groundwater Recharge Regulations.

In addition, treatment process optimization at the Ocean-Water Desalination Pilot Plant and the West Basin Water Recycling Plant occasionally requires troubleshooting research that may include water quality testing for constituents that require an outside lab. The anticipated analyses under treatment optimization R&D is unknown at this time and was not included in the "Request for Bids" (RFB). Staff is estimating that approximately \$20,000 will be required for the next two fiscal years.

The RFB was mailed to seven full-service certified laboratories in a three-county area. Three bids were received and are summarized in Exhibit "A". Staff recommends the District contract with the low-bidder Weck Laboratories to perform outside laboratory services. Staff is satisfied with their previous work and customer service.

The bids excluded the \$20,000 for treatment optimization R&D.

FISCAL IMPACTS:

Funding is available in the West Basin Recycling Program Budget for FY 2006-07.

ENVIRONMENTAL COMPLIANCE:

Not applicable.

COMMITTEE STATUS:

This item was reviewed by the Water Resources Committee on October 12, 2006 and was recommended for approval at the October 30, 2006 Special Board meeting.

RECOMMENDED MOTION:

That the Board authorizes the General Manager enter into an agreement with Weck Laboratories for outside laboratory service in the amount of \$220,000 for the duration of the R&D programs for the Seawater Barrier and Ocean-Water Desalination Projects and treatment optimization R&D, plus a 10% contingency for a total not-to-exceed contract amount of \$240,000.

LIST OF EXHIBITS:

Exhibit "A" - Bid Results