

WEST BASIN MUNICIPAL WATER DISTRICT

JULY 9, 2003 - Water Resources

McDonald, Kwan

JULY 28, 2003 - Board Meeting

Prepared by: Uzi Daniel

Submitted by: Richard Nagel

Approved by: Darryl G. Miller

ACTION CALENDAR

WEST BASIN WATER RECYCLING PROGRAM RESEARCH AND DEVELOPMENT
DESALINATION RESEARCH INNOVATION PARTNERSHIP (DRIP) RESEARCH PROJECT
INVESTIGATION OF THE REJECTION BEHAVIOR OF TRACE ORGANIC COMPOUNDS
USING ADVANCED SEPARATION MEMBRANE PROCESSES

The District is an active member of the Desalination and Research Innovation Partnership (DRIP) whose main purpose is to evaluate new and innovative technologies for salinity removal and disinfection of various source waters (Colorado River, Brackish Groundwater, Municipal Wastewater, etc.). DRIP has been funded by the California Energy Commission, the United States Environmental Protection Agency, and the Department of Water Resources. The District approved a number of separate research and development (R&D) projects under the DRIP program in the past.

These R&D projects are in various stages, from initial contract negotiation to near completion. All of the projects have been funded through DRIP, and West Basin has or will contribute additional funds for subcontractor support.

One R&D project entitled "Investigation of the Rejection Behavior of Tracer Organic Compounds Using Advanced Separation Membrane Processes" was included in the development of the R&D budget for the current fiscal year 2003-04. Contract number 52372 has been reviewed by West Basin and Central Basin Legal Counsel and has been signed by the Metropolitan Water District(MWD).

The Project with MWD and the EPA is being conducted at a bench scale by Orange County Water District, at a pilot scale by Sonoma County Water District, and finally on full scale by the West Basin. The total budget for this project is \$1,124,356. As one of three partners in this innovative study, West Basin will contribute \$196,600 in services (in kind and reimbursable) with \$98,000 being reimbursed to the District resulting in over a 10 to 1 leveraging of funds for project participation.

Following bench and pilot-scale studies conducted at other facilities, the Project would implement full-scale spiked testing at the West Basin Water Recycling Facility with the following objectives:

- Determine the rejection behavior of advanced membrane separation processes for tracer organic compound;
- Identify physical and chemical properties as they related to membrane rejection; and
- Develop predictive models to correlate RO rejection based on specific compound properties.

FISCAL IMPACTS:

West Basin will use project funds to subcontract the technical work to conduct analytical services required on this project.

Funds for this effort have been included in the fiscal year 2003-04 Water Recycling Operations Research and Development Program budget.

ENVIRONMENTAL COMPLIANCE:

Not applicable.

COMMITTEE STATUS:

This item was reviewed by the Water Resources Committee on July 9, 2003 and recommended for approval at the July 28, 2003 Board meeting.

RECOMMENDED MOTIONS:

Authorize the General Manager to enter into a contracts with the Metropolitan Water District and other subcontractors for an amount not-to-exceed \$98,600 to conduct the full scale research studies at the West Basin Water Recycling Facility.

LIST OF EXHIBITS:

Exhibit "A" - "Scope of Work"

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