

WEST BASIN MUNICIPAL WATER DISTRICT**OCTOBER 9, 2002 – Water Resources**
McDonald, Little**OCTOBER 28, 2002 – Board Meeting**

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ACTION CALENDAR

HYDROGEOLOGIC/GEOCHEMICAL SERVICES
RECYCLED WATER INJECTION OPERATIONS
WEST COAST BASIN SEAWATER BARRIER PROJECT

SUMMARY:

West Basin is planning to increase the amount of recycled water injected into the West Coast Basin Seawater Barrier. At present, West Basin is permitted to inject a mixture of 50% imported water and 50% recycled water into the Seawater Barrier. West Basin is planning to expand the capacity of the West Basin Water Recycling Plant's Barrier Treatment process and provide up to 100% recycled water to the Barrier (17.5 million gallons per day) in two phases. The proposed expansion also includes replacement of two existing pre-treatment trains (5 mgd) from lime clarification to microfiltration. All pretreated recycled water is then treated with reverse osmosis membranes followed by hydrogen peroxide addition and ultraviolet (UV) treatment.

As part of the environmental permitting process, West Basin has conducted several groundwater modeling efforts that have evaluated the fate and transport of imported water within West Basin. As part of the initial (1994) California Department of Health Services/California Regional Water Quality Control Board (DHS/RWQCB) approval process for the recycled water injection operations the CFEST groundwater model was used to determine the length of time recycled water would reach local groundwater production wells, and the percentage of recycled water once it reached a particular well.

In March, 2002 West Basin submitted an Engineering Report to DHS/RWQCB outlining the technical merits of increasing the recycled water injection operations to the West Coast Basin Seawater Barrier from 7.5 mgd to 17.5 mgd, and have received conceptual approval by DHS. Groundwater-related technical issues still pending approval by DHS are:

- Groundwater well monitoring program;
- Groundwater pathways;
- Identifying an "intrinsic" tracer in groundwater;
- Evaluating Redox potential in groundwater resulting from recycled water injection operations;
- Strategy for determining recycled water component (RWC) for the individual wells; and
- Verifying groundwater modeling results through the use of field measurements.

On September 18, 2002, District staff sent out a "Request for Proposals" (RFP) with cost estimates to twelve (12) consulting firms for the proposed project. A mandatory pre-proposal meeting was attended by seven (7) firms. The RFP's were due on October 8, 2002.

The proposal requested a brief task description along with the costs associated with providing the following services and/or deliverables:

- Evaluate West Basin's current groundwater monitoring compliance program, and determine whether the current program is appropriate for verifying recycled water pathways through the use of field measurements;
- Develop a groundwater monitoring compliance program that would address DHS/RWQCB public health and regulatory issues;
- Evaluate Redox potential in groundwater resulting from recycled water injection operations;
- Develop a strategy that would verify recycled water pathways within West Basin;
- Identify possible "intrinsic" tracer for recycled water, and how it could be incorporated into the groundwater compliance monitoring program; and
- Develop a strategy for determining RWC at a particular groundwater well.

Interviews, combined with evaluation of the RFP's will occur the week of October 14, 2002. The results of the evaluation will be provided to the Water Resources Committee Members prior to the October 28, 2002 Board meeting. A recommendation on October 28, 2002 based on the following criteria will be presented to the full Board.

- Completeness of Proposal;
- Project Approach and Understanding of Issues;
- Team Experience;
- Cost of Proposal, and
- Economic Outreach Goals.

The estimated costs for conducting the work will range between \$50,000 to \$75,000.

Staff will recommend that the Board authorize the General Manager to enter into a contract with the most qualified firm plus 10% contingency.

FISCAL IMPACTS:

Funds for CEQA/NEPA document preparation have been included in the FY 2001-02 budget.

ENVIRONMENTAL COMPLIANCE:

This memorandum requests approval to provide hydrogeologic services related to recycled water injection operations.

COMMITTEE STATUS:

This item was reviewed by the Water Resources Committee on October 9, 2002 and was adgendedized to the October 28, 2002 Board meeting for full Board consideration. The Committee will be presented with a recommendation to review prior to the Board meeting.

RECOMMENDED MOTION:

Staff will recommend that the Board authorize the General Manager to enter into a contractual agreement with (consulting firm pending) for an amount not-to-exceed (pending) plus 10% contingency. A revised recommended motion will be provided at the October 28, 2002 Board meeting.

LIST OF EXHIBITS:

Exhibit "A" – Consultant Tasks & Proposal Evaluation - (Handout)

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