

WEST BASIN MUNICIPAL WATER DISTRICT

JULY 9, 2003 – Water Resources
McDonald, Kwan

JULY 28, 2003 – Board Meeting

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Approved by: Darryl G. Miller

ACTION CALENDAR

REPLACEMENT OF REVERSE OSMOSIS ELEMENTS AT EXXON-MOBIL

SUMMARY:

West Basin provides high quality recycled water to Exxon-Mobil's boilers in Torrance. The recycled water is treated using microfiltration and reverse osmosis (RO) similar to Barrier Train No. 3 at the main plant in El Segundo. There are four RO trains at the Exxon-Mobil plant. The RO elements in Train Nos. 1 and 2 were replaced earlier this year and RO elements in Train Nos. 3 and 4, which have been in service since 1998, are in need of replacement.

The District has to meet certain water quality specifications for water delivered to Exxon-Mobil's boilers. One of the main constituents of concern is total dissolved solids as measured by conductivity. The maximum conductivity allowed under the agreement with Exxon-Mobil is 50 micro-mhos per centimeter. The District has met and is continuing to meet this level of conductivity with the blend of water produced from all four trains. The conductivity in Train Nos. 3 and 4 has increased over time and is now approaching 50 micro-mhos per centimeter. Additionally, the differential pressure across the membranes has increased significantly in five years of operation, indicating deterioration or fouling of the membranes.

Staff issued a "Request for Bids" to replace the RO elements in Train Nos. 3 and 4 with 40-inch long thin film composite membranes. Two bids were received and are summarized as follows:

Manufacturer	Unit Price	Total Price
Hydranautics	\$ 419	\$178,494
Koch Membrane Systems, Inc.	\$ 448	\$190,848

FISCAL IMPACTS:

Funds are available in the Facility Replacement Fund. The District has been collecting funds from Exxon-Mobil for replacement of the membranes.

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 MOTION:

Authorize the General Manager to enter into an agreement with Hydranautics to supply and deliver RO membrane elements for Exxon-Mobil Train Nos. 3 and 4 for a price not-to-exceed \$178,494 plus ten percent for contingencies for a total not-to-exceed amount of \$196,343.40.

LIST OF EXHIBITS:

None.

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