

- **Board of Directors**
Engineering and Operations Committee

May 16, 2006 Board Meeting

8-3

Subject

Appropriate \$4.52 million; award a \$3.985 million construction contract to Brutoco Engineering & Construction, Inc. for the Weymouth Chemical System Upgrades; and authorize (1) an increase of \$0.05 million to the existing agreement with HDR, Inc.; and (2) \$1.285 million for Metropolitan force construction, construction inspection, all other support, and remaining budget (Approp. 15415)

Description

The F. E. Weymouth Water Treatment Plant was placed into service in 1941 with an initial capacity of 100 million gallons per day (mgd). The plant was expanded twice to its current capacity of 520 mgd. It delivers a blend of water from the Colorado River and State Water Project to Metropolitan's Central Pool portion of the distribution system.

Final designs have been completed for two projects at the Weymouth plant to upgrade the chemical systems: the first to construct roof structures over several chemical tank farms, and the second to construct fluoridation facilities. These two projects have similar elements of work, common work areas, and overlapping construction schedules. To increase overall project efficiency and provide for coordinated construction activities, staff has combined these two projects into a single construction contract (Specifications No. 1518A).

Award of Construction Contract**Weymouth Chemical Tank Farm Roof Structures - Construction (\$4.52 million)**

In December 2004, Metropolitan's Board authorized the final design of roof structures to cover chemical tank farms at the Weymouth, Jensen, and Mills plants. These roofs will limit the formation of contaminated liquids derived from rainfall captured within the tank farms, thereby reducing contaminated liquid handling and disposal costs. This project will construct roofs over the Weymouth plant's washwater reclamation (polymer) tank farm, the Oxidation Demonstration Plant's exterior chemical storage areas, and the new fluorosilicic acid tank farm. The roof structures will consist of structural steel framing, metal roofing, and siding panels. Award of a separate construction contract for a roof over the existing ferric chloride/alum tank farm at the Weymouth plant will be requested in a future board action.

Weymouth Fluoridation Facilities – Construction (Reimbursable – No Funds Required)

In February 2003, Metropolitan's Board adopted a policy to add fluoride at each of Metropolitan's five treatment plants. In December 2003, Metropolitan entered into an agreement with the California Dental Association Foundation (CDAF) whereby Metropolitan will be reimbursed up to \$5.5 million for capital costs incurred to implement fluoridation. Under the terms of Metropolitan's agreement with the CDAF, Metropolitan is reimbursed quarterly for eligible costs. No additional funds are required in this action for the work to proceed.

Construction of the Skinner, Diemer and Mills fluoridation facilities is currently underway. This project will construct fluoridation facilities at the Weymouth plant. A future board action is planned for award of a construction contract for the Jensen plant. Completion of fluoridation facilities at all of Metropolitan's treatment plants is on schedule for mid-2007, per the agreement with CDAF.

Construction Contract Award

Specifications No. 1518A for the F. E. Weymouth Water Treatment Plant Chemical System Upgrades was advertised on January 17, 2006. As shown in **Attachment 1**, three bids were received and opened on March 23, 2006. The low bid from Brutoco Engineering & Construction, Inc., in the amount of \$3.985 million, complies with the requirements of the specifications. The engineer’s estimate was \$4.35 million, which is approximately the mid-point of the three bids received. For this contract, Metropolitan requires Small Business Enterprise participation of at least 20 percent of the total construction bid. Brutoco Engineering & Construction, Inc. has committed to meet this requirement.

This action appropriates \$4.52 million in budgeted funds and awards a \$3.985 million construction contract to Brutoco Engineering & Construction, Inc. A portion of the contract (\$0.75 million) will be funded through Metropolitan’s agreement with CDAF. The appropriated funds also include \$0.06 million for Metropolitan force construction; \$0.4 million for construction inspection; \$0.3965 million for all other staff and consultant support; and \$0.4285 million of remaining budget. Support activities include project management, environmental monitoring, record drawing preparation, and technical support by the design consultants: MWH Americas, Inc. for the chemical tank farm roofs and HDR, Inc. for the fluoridation facilities. The two consultants will review submittals received from the contractor, respond to requests for information, advise inspection staff on technical issues as they may arise, and provide start-up assistance. MWH will perform this work under an existing professional services agreement authorized by the Board in June 2003. No amendment to the MWH agreement is required. Amendment of the existing HDR agreement to perform this work is described below. No additional funds are required in this action for HDR’s technical support, as costs are reimbursable under Metropolitan’s agreement with the CDAF.

Metropolitan staff will perform construction management and inspection of the contract. For this project, the anticipated cost of inspection is approximately 12 percent of the total construction cost. Engineering Services’ goal for inspection of projects with construction costs greater than \$3 million is 9 to 12 percent.

Work included in this construction contract has been budgeted within two capital programs: the All Facilities – Install Roofs for Chemical Tank Farms Program (Approp. 15415) and the (reimbursable) Fluoridation Systems Program. For budgeting purposes, the construction cost has been apportioned between the two programs based on the anticipated work breakdown from the engineer’s estimate. This apportionment will be refined by staff after receipt of the contractor’s cost breakdown, which is typically derived from the monthly pay estimates during construction.

An allocation of costs for the two projects between the two appropriations, and for the construction contract, is as follows:

Project	Roofs for Chemical Tank Farms Program		Fluoridation Systems Program	
	Amount Allocated to Approp. 15415	Amount Allocated to Construction Contract	Amount Allocated to Approp. 15414	Amount Allocated to Construction Contract
Fluoridation Facilities	\$ 0	–	\$0.89M **	[\$0.75 M] *
Tank Farm Roofs	\$4.52M	[\$3.235M] *	\$ 0	–
Total Appropriation Request	\$4.52M		\$ 0**	

[] = Components of construction contract

* Construction Contract Total = \$3.235M + \$0.75M = \$3.985M

** Reimbursable Grant – No Metropolitan funds required

Bids were previously opened on November 2, 2005, under Specifications No. 1518, for the Weymouth Chemical System Upgrades. All bids were rejected and the procurement was re-advertised under Specifications No. 1518A.

Technical Engineering Support – Amendment to Existing Agreement

HDR, Inc. was selected through a competitive process (Request for Qualifications No. 578) to perform fluoride-related design work, and authority to enter into a professional services agreement was approved by Metropolitan's Board in October 2003. HDR performed final design of the fluoridation facilities at the Diemer, Mills, Weymouth and Jensen plants. Staff recommends amending the existing HDR agreement to provide follow-up technical support during construction of the Weymouth fluoridation facilities. Amendment of the HDR agreement is consistent with the agreement's scope of work and with the planned approach for project implementation.

This action authorizes an increase of \$0.05 million to the existing agreement with HDR, for a new not-to-exceed total of \$0.912 million, to provide technical support during construction of the Weymouth fluoridation facilities.

These projects have been evaluated and recommended by Metropolitan's Capital Investment Plan Evaluation Team and funds have been included within the fiscal year 2005/06 capital budget for the Weymouth roof structures. See [Attachment 1](#) for the Abstract of Bids, [Attachment 2](#) for the Financial Statement, and [Attachment 3](#) for the Location Map.

The total program estimate to complete the Roofs for Chemical Tank Farms Program is \$15.08 million.

Project Milestones

April 2007 – Completion of Weymouth Chemical System Upgrades construction

Policy

Metropolitan Water District Administrative Code Section 5108: Capital Project Appropriation

Metropolitan Water District Administrative Code Section 8121: General Authority of CEO to Enter Contracts

California Environmental Quality Act (CEQA)

CEQA determinations for Option #1:

Weymouth Chemical Tank Farm Roofs

The project was previously determined to be categorically exempt under the provisions of CEQA and State CEQA Guidelines. The Weymouth Chemical Tank Farm Roofs were found to be exempt under Class 1, Section 15301 of the State CEQA Guidelines on December 14, 2004. A Notice of Exemption (NOE) was filed on the project at that time and the statute of limitations has ended. With the current board action, there is no substantial change proposed to the project since the original NOE was filed. Hence, the previous environmental documentation in conjunction with the project fully complies with CEQA and the State CEQA Guidelines. Accordingly, no further CEQA documentation is necessary for the Board to act with regards to the proposed action.

The CEQA determination is: Determine that the proposed action has been previously addressed in the 2004 NOE (Class 1, Section 15301 of the State CEQA Guidelines) and that no further environmental analysis or documentation is required.

Weymouth Fluoridation Facilities

The project was previously determined to be statutorily exempt under the provisions of CEQA and State CEQA Guidelines. The Weymouth fluoridation facilities were found to be exempt under CEQA Section 21080.26 and Section 15282(n) of the State CEQA Guidelines on February 13, 2003. A NOE was filed on the project at that time and the statute of limitations has ended. With the current board action, there is no substantial change proposed to the project since the original NOE was filed. Hence, the previous environmental documentation in conjunction with the project fully complies with CEQA and the State CEQA Guidelines. Accordingly, no further CEQA documentation is necessary for the Board to act with regards to the proposed action.

The CEQA determination is: Determine that the proposed action has been previously addressed in the 2003 NOE (CEQA Section 21080.26 and Section 15282(n) of the State CEQA Guidelines) and that no further environmental analysis or documentation is required.

CEQA determination for Option #2:

None required

Board Options/Fiscal Impacts

Option #1

Adopt the CEQA determinations and

- a. Appropriate \$4.52 million in budgeted funds;
- b. Award a \$3.985 million construction contract to Brutoco Engineering & Construction, Inc. for the Weymouth Chemical System Upgrades; and
- c. Authorize an increase of \$0.05 million to the existing agreement with HDR, Inc. for a new not-to-exceed total of \$0.912 million.

Fiscal Impact: \$4.52 million of budgeted funds under Approp. 15415

Option #2

Do not award the construction contract and re-advertise in an attempt to receive more favorable bids. Do not amend the HDR agreement.

Fiscal Impact: None. This option will delay completion of the Weymouth fluoridation facilities.

Staff Recommendation

Option #1


4/18/2006
Date

Gordon L. Johnson
for Roy L. Wolfe
Manager, Corporate Resources


4/21/2006
Date

Jeffrey Kightlinger
General Manager

Attachment 1 – Abstract of Bids

Attachment 2 – Financial Statement

Attachment 3 – Location Map

The Metropolitan Water District of Southern California

Abstract of Bids Received on March 23, 2006 at 2:00 P.M.

**Specifications No. 1518A
F. E. Weymouth Water Treatment Plant
Chemical System Upgrades**

The project consists of construction of a fluoridation storage and feed system; and roofs over the Weymouth washwater reclamation (polymer) tank farm, Oxidation Demonstration Plant's exterior chemical storage areas, and fluorosilicic acid tank farm.

Engineer's Estimate: \$4.35 million

Bidder and Location	Total \$	SBE \$	SBE %	Met SBE*
Brutoco Engineering & Construction, Inc. Fontana, CA	\$3,985,000	\$1,189,396	30%	Yes
Norman A. Olsson Construction, Inc. Orange, CA	\$4,287,000	N/A	N/A	N/A
Gantry Constructors, Inc. Clarkdale, AZ	\$4,833,000	N/A	N/A	N/A

* SBE (Small Business Enterprise) Participation set at 20 percent
N/A – Not Applicable

Financial Statement for All Facilities – Install Roofs for Chemical Tank Farms Program

A breakdown of Board Action No. 4 for Approp. No. 15415 is as follows:

	Previous Total Appropriated Amount (Mar. 2006)	Current Board Action No. 4 (May 2006)	New Total Appropriated Amount
Labor			
Studies and Investigations	\$ 184,000	\$ -	\$ 184,000
Final Design	68,000	-	68,000
Owner Costs (Program management, permitting, environmental monitoring)	380,683	265,500	646,183
Construction Inspection and Support	100,000	400,000	500,000
Metropolitan Force Construction	184,000	60,000	244,000
Materials and Supplies	125,000	50,000	175,000
Incidental Expenses	85,000	15,000	100,000
Professional/Technical Services	1,047,000	-	1,047,000
Montgomery Watson Harza Americas, Inc.	-	66,000	66,000
Equipment Use	55,000	-	55,000
Contracts	614,600	3,235,000	3,849,600
Remaining Budget	428,717	428,500	857,217
Total	\$ 3,272,000	\$ 4,520,000	\$ 7,792,000

Funding Request

Program Name:	All Facilities – Install Roofs for Chemical Tank Farms Program		
Source of Funds:	Revenue Bonds, Replacement and Refurbishment or General Funds		
Appropriation No.:	15415	Board Action No.:	4
Requested Amount:	\$ 4,520,000	Capital Program No.:	15415-R
Total Appropriated Amount:	\$ 7,792,000	Capital Program Page No.:	E-5
Total Program Estimate:	\$ 15,080,000	Program Goal:	R-Regulatory-Other

