

**WEST BASIN MUNICIPAL WATER DISTRICT****SEPTEMBER 12, 2005 – Water Resources**  
Little, Baker**SEPTEMBER 26, 2005 – Board Meeting**

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**ACTION CALENDAR****PHASE IV PLANT EXPANSION PROJECT OPERATIONAL STAFF REQUIREMENTS  
AND SEPARATION PROCESS, INC. (SPI) CONTRACT AMENDMENT****SUMMARY:****WaterReuse Association Award**

Each year during the National WaterReuse Symposium, awards are given that recognize excellent water reuse, reclamation, and recycling projects from around the country. This year, staff nominated the West Basin Water Recycling Facility, Phase IV Expansion Project for Large Project of the Year. Based on the unique partnering approach the project team has implemented, implementation of innovative recycled water treatment technologies, and leading the industry in supply of recycled water to a diversified customer base, West Basin was selected as the winner of the Large Project of the Year Award. The prestigious award will be presented at the Symposium in Denver, Colorado on September 19, 2005.

**Design-Build Construction Update**

Construction throughout the Plant has expanded with multiple facilities being worked on concurrently for both the Title 22 and Barrier Expansions. A summary of construction efforts to date are described below:

**Recently Completed Work:**

- Title 22 Pretreatment High-Rate Clarifier equipment installed and electrical building slab poured;
- Reverse Osmosis (RO) System structural steel and canopy erected; and
- Ultra-Violet (UV) System sub-grade electrical installed and equipment pad poured.

**Major Work in Progress:**

- Title 22 Pretreatment High-Rate Clarifier electrical;
- RO System piping and sump pump installation;
- UV System install UV trains and piping;
- Microfiltration (MF) System exterior piping and support installation; and
- Backwash Solids High-Rate Clarifiers structure wall pours.

**Title 22 Pretreatment Project Schedule**

The Pretreatment High-Rate Clarifier was a scope addition to the original Phase IV Project scope in June, 2004 to address deteriorated secondary effluent from Hyperion. The original schedule for completion of the Clarifier was May 26, 2005. Delays due to extensive rain conditions early in the year had delayed schedule completion to August 2, 2005. While the contractor is pressing to complete this work, along with all other contract schedule milestones, alterations to the project scope including design modifications, operational requirements, and shutdown limitations have impacted the contractor's ability to meet this schedule. Completion of the Pretreatment Clarifier is now anticipated for early October.

**SPI Contract Amendment**

SPI is under contract to provide engineering design and construction services for the Phase IV Barrier System. Services include providing support throughout the project by inspecting equipment for design compliance prior to coming on-site; review and comments on shop drawing submittals; and assistance with coordination of various plant activities, such as tie-in planning, shut-downs, and start-up work.

As noted in previous updates to the Board, the project schedule for the Barrier System completion has been revised due to the Title 22 Pretreatment System Scope addition, District requested change orders, and rain delays. The table below summarizes the Barrier System schedule milestone revisions to date.

<b>Barrier System</b>	<b>Milestone Date</b>	<b>Revised Milestone Date</b>
Change Order #1	June 21, 2005	September 7, 2005
Rain Delays	September 7, 2005	September 30, 2005
Change Order #2	September 30, 2005	November 23, 2005

SPI's contract was amended in December 2003 to include construction engineering services for the Project construction duration (\$182,500). Due to a total of 155 days being added to the overall Barrier System schedule, SPI's contract would need to be amended to provide for the additional time needed to maintain the original level of construction engineering services through completion of the Project. The cost for additional services through Project completion is \$62,900.

**Temporary United Water Services Staff Augmentation**

As part of the Phase IV construction effort, numerous process facilities will be launched, tested, and commissioned for operation. Commissioning and start-up activities for many of the major system processes will begin in early September and continue through mid-2006. To support this significant effort while maintaining existing plant operations, United Water has requested a temporary increase in staff. Additional staff required would include one (1) full-time Maintenance Mechanic and one (1) full-time Instrumentation & Control Technician for approximately nine months. Once the Phase IV Project has been completed and the plant is fully-operational, United Water Services would return to existing staffing levels, unless authorized by the District. A summary of additional efforts required by United Water staff during the upcoming Phase IV Project activities is provided below:

Pre Start-Up:

- Operations and Maintenance manual review and resubmit;
- Standard Operating Procedure review and update;
- New equipment identification, location, service, general information and data entry for Hanson system; and
- Scheduling of training sessions required by the contractor and West Basin staff.

Systems Start-Up:

- Plate and Frame Press;
- Title 22 Pre-Treatment Clarifier;
- Backwash Water High-Rate Clarifier;
- CMFS;
- RO No. 9;
- UV System;
- Lime Saturator;
- Barrier Pump Station;
- Solids Contact Clarifier;
- Converted Title 22 Filters (Existing Barrier Filters);
- Title 22 Storage Tank
- All new and updated chemical systems

Other Tasks:

- Review of as-built drawings;
- Coordination and assistance with facility tie-ins and shut downs;
- Repair of relocated existing equipment; and
- Integration of new equipment into existing DCS system.

The additional cost for two full-time staff over a nine-month period is estimated to be \$150,000. Payment of the additional operational staff cost is not included under the current operations budget and would need to be covered under the Phase IV Capital Budget.

FISCAL IMPACTS:

Payment for the additional United Water Services operational staff cost is not included under the current operations budget and would need to be covered under the Phase IV Capital Budget. As indicated in June 2004, additional funding for the Phase IV Project is available in the PAYGO account. Funding of the additional SPI contract amount would also be covered through the PAYGO account.

ENVIRONMENTAL COMPLIANCE:

Not required.

COMMITTEE STATUS:

This item was reviewed by the Water Resources Committee on September 12, 2005 and was recommended for approval at the September 26, 2005 Board meeting.

RECOMMENDED MOTION:

That the Board authorizes the Co-General Managers to:

1. Amend Agreement W1218 with Separation Processes, Inc. to include additional work needed to complete Phase IV Project services for an amount not-to-exceed \$62,900 for a total not-to-exceed contract amount of \$676,100; and
2. Authorize payment to United Water Services for additional staff required to cover start-up, testing, and commissioning efforts necessary for the Phase IV Project implementation up to an amount of \$150,000, from September 2005 through June 2006.

LIST OF EXHIBITS:

None.