



**WEST BASIN MUNICIPAL WATER DISTRICT**  
17140 S. Avalon Blvd., Suite 210  
Carson, CA 90746

**AGENDA NO. 19**

**NOVEMBER 10, 2010 – Water Resources**  
Little (Chair), Gray  
**NOVEMBER 22, 2010 – Board Meeting**  
Prepared by: Christiana Daisy  
Submitted by: Wyatt Won  
Approved by: Rich Nagel

## ACTION CALENDAR

### EXXONMOBIL VALVE/ACTUATOR – CRITICAL REPLACEMENT

#### SUMMARY:

In September, four valves and activators required replacement and repair at the ExxonMobil satellite plant in Torrance. These valves and actuators help control flow through the Biofor and microfiltration process. Two related events caused the failure of this equipment. The biofors at the satellite plant had to be taken offline to clean the strainers. Typically, when these strainers clog, maintenance crews remove and replace the strainers with spare strainers and then clean the clogged strainers. Recently, the strainers have been clogging much more frequently and after investigating, staff determined that sodium hydroxide (a chemical used to manage the treatment process) was the culprit of the clogged strainers. In order to replace the strainers, isolation valves are used to prevent the flow from entering the strainers. Because the sodium hydroxide is contributing to calcium build-up, the isolation valves cannot seat properly, thus allowing high flows to pass making it very difficult to change out the strainers.

Microfiltration backwash water is a portion of the feedwater to the biofors. Because the biofors were offline, the microfiltration backwash water that would have been sent to the biofors was diverted to the waste tank. The backwash water overwhelmed the sump pumps and flooded the sump. The equipment that was damaged includes four concentrate flow control valves and actuators. United Water Services staff is able to run two trains normally in auto mode, one train can only be run in manual mode, and one train is out of service. Running a train in manual increases the potential to damage the membranes. None of the trains can be flushed in auto because of the damaged valves. Flushing is required when a train is taken offline.

Under Administrative Code Section 5-1.109 "Critical Repairs and Acquisition" of the Procurement Policy, staff solicited a quote from the existing valve manufacturer for replacement/repair of the valves and replacement of the actuators. The replacement/repair must be a sole-source procurement from the existing manufacturer, Industrial Valve & Automation, because using a different manufacturer would require modifying the existing piping. The total cost for the replacement and repair is \$63,125.05. It is critical that these items are replaced/repared as soon as possible so operation of the trains can return to normal. Staff has proceeded with the procurement process under the Administrative Code Policy and is requesting the Board ratify the purchase.

#### STRATEGIC BUSINESS PLAN IMPLEMENTATION:

Goal 4: Sound Financial and Resources Management – West Basin is committed to efficient business operations, financial planning and asset management.

FISCAL IMPACTS:

Funds are included in the Fiscal Year 2010-11 Capital Replacement Fund.

ENVIRONMENTAL COMPLIANCE:

Not applicable.

COMMITTEE STATUS:

This item will was reviewed by the Water Resources Committee on November 10, 2010 and recommended for approval at the November 22, 2010 Board meeting.

RECOMMENDED MOTION:

That the Board ratifies the General Manager's authority to purchase four replacement actuators, one new valve, and repair three valves in an amount not-to-exceed \$63,125.05.

LIST OF EXHIBITS:

None.