



Internal Audit Report for November 2011

Summary

Three reports were issued during the month:

- **Yuma Desalting Plant Pilot Run Program Audit Report**
- **Consulting Agreements on Bay-Delta Initiatives Audit Report**
- **Facilities Maintenance – Jensen Plant Audit Report**

Discussion Section

This report highlights the significant activities of the Internal Audit Department during November 2011. In addition to presenting background information and the opinion expressed in the audit reports, a discussion of findings noted during the examination is also provided.

Yuma Desalting Plant Pilot Run Program Audit Report

Background

The Yuma Desalting Plant (Plant) was constructed by the Bureau of Reclamation (Reclamation) under authority of the Colorado River Basin Salinity Control Act of 1974 to treat saline agricultural return flows from the Wellton - Mohawk Irrigation and Drainage District. The Plant, located adjacent to the Colorado River in Yuma, Arizona, was designed to produce treated water that was intended for inclusion in water deliveries to Mexico, thereby preserving a like amount of water in Lake Mead. Although construction was completed in 1992, the Plant has been in operation on only two occasions since it was put on-line. The Plant has been maintained, but largely not operated due to surplus conditions and sufficient reservoir storage levels on the Colorado River.

In recent years, steady increases in water demand on the lower Colorado River coupled with the effects of a prolonged drought over the entire Colorado River Basin prompted renewed interest in the Plant's operation. Accordingly, in 2009, Reclamation developed a plan for a Pilot Run of the Plant, as described in the project's environmental assessment. The Pilot Run was funded by Reclamation and a consortium of municipal utilities, which signed and finalized a funding agreement on October 29, 2009. Metropolitan's Board authorized participation in the Pilot Run and approved funding to a maximum of \$11.4 million in September 2009. Additionally, the Southern Nevada Water Authority (SNWA) and the Central Arizona Water Conservation District (CAWCD) were also signatories on the agreement and agreed to provide funding.

The Pilot Run utilized elements of the Intentionally Created Surplus (ICS) Program previously developed by Reclamation and the Colorado River Basin States. The ICS Program began with a

demonstration program to determine if developing a conservation program and creating “surplus” water in Lake Mead could be used as a long-term water management tool on the lower Colorado River. It allowed Metropolitan to leave conserved water in Lake Mead that would have otherwise been diverted and used. Under new guidelines for the coordinated operations of Lakes Powell and Mead, adopted by the Secretary of the Interior in December 2007, nonfederal participants of water supply projects such as the Pilot Run could receive ICS Program storage credits in Lake Mead in exchange for funding these projects. Metropolitan’s contribution to the Pilot Run represented 80 percent of the nonfederal operating costs and we received a proportionate share of the ICS Program storage credits. As of September 2011, Metropolitan has paid \$8,978,700 to Reclamation and 24,397 acre-feet of water have been stored in Lake Mead.

Opinion

In our opinion, the accounting and administrative procedures over Yuma Desalting Plant Pilot Run Program include those practices usually necessary to provide for a generally satisfactory internal control structure. The degree of compliance with such policies and procedures provided effective control for the period July 1, 2009 through September 30, 2011.

Comments and Recommendations

PERIODIC REVIEW OF BUDGET VERSUS ACTUAL EXPENDITURES

Reports on the comparisons between budgeted to actual expenditures and metrics concerning administrative costs should be completed on a periodic basis. This budget reconciliation process serves as a control to confirm that actual expenses incurred were authorized, accurate, and complete. Furthermore, it provides a basis for identifying budget shortfalls or overages; ensures that adequate financial resources are made available to complete a program; and assures effective cash flow.

Our review revealed that the Pilot Run’s actual vs. budget reconciliation was not available. Moreover, actual costs were significantly below the total budgeted amount, resulting in an “overfunding” position. This variance was due to significantly lower than projected power and chemical costs. Further review revealed that Reclamation intends to issue Metropolitan a refund of \$923,700 in January 2012. Following is a summary of budgeted versus actual expenditures for the Pilot Run:

Participants	Budget Cost	Actual Cost	Funds Advanced	Refund Due
Reclamation	\$9,182,900	\$6,453,000	\$0	\$0
Metropolitan	11,051,700	7,471,600	8,395,300	923,700
SNWA	1,477,700	1,098,900	1,214,400	115,500
CAWCD	1,477,700	1,098,900	1,214,400	115,500
Total	\$23,190,000	\$16,122,400	\$10,824,100	\$1,154,700

We recommend Metropolitan program management establish procedures to conduct periodic reviews of actual costs versus budget of a program. In addition, we recommend Metropolitan program management conduct reviews to ensure compliance with these procedures.

Consulting Agreements on Bay-Delta Initiatives Audit Report

Background

The Bay-Delta region, located in the Sacramento and San Joaquin watersheds of California, encompasses over 38 million acres and is one of the most important estuary systems in the nation. This area provides drinking water for more than 23 million people and irrigation water to four million acres of farmland. Moreover, the region generates economic activities estimated at over \$400 billion annually. The Bay-Delta region is also an integral component of the State Water Project (SWP).

As the largest contractor for SWP water, Metropolitan is interested in any impact to the Bay-Delta and SWP water supplies and water quality. The seismic stability analysis of Bay-Delta levees and the decline in native fish species have elevated the need to resolve issues regarding near-term and long-term conveyance of water through the Bay Delta. To provide solutions to Bay-Delta issues, Metropolitan participated in a joint technical effort with the Department of Water Resources, the United States Bureau of Reclamation, and state and federal contractors to develop the necessary environmental, engineering, and financial information and agreements.

In December 2002, the Department of Water Resources, the United States Bureau of Reclamation, the Department of Fish and Game, and the Bay-Delta water users executed the Sacramento Valley Water Management agreement. The agreement required the commitment to meet State Water Resources Control Board D-1641 flow-related standards and to provide for a collaborative process to develop projects meeting water supply, water quality, and environmental needs in the Sacramento Valley, Bay-Delta, and throughout California. Accordingly, Metropolitan issued Request for Qualifications #853 in February 2008 for respondents to provide proposals for professional and technical services to address water resource and quality issues associated with the Sacramento Valley Water Management agreement. Following a selection process, 19 consultants were awarded agreements with an aggregate maximum amount payable of \$4.6 million per year.

The scope of our audit covers four agreements entered in April 2008 with CB Environmental Consulting (CBEC); 34 North, Incorporated (34 North); Black & Veatch, Incorporated (Black & Veatch); and Resource Management Associates, Incorporated (RMA). We also reviewed one sole source three year-agreement with Curtis Schmutte (CS) entered in May 2010, with a maximum amount payable of \$735,000. Under the terms of the agreements, the consultants are to provide written reports, briefing materials, and presentations relating to water resource and water quality analysis.

Payments made to these consultants for the test period of May 1, 2009 through August 31, 2011 totaled \$2.1 million. The breakdown of these payments was \$293,300 to CBEC; \$405,100 to 34 North; \$237,000 to Black & Veatch; \$962,400 to RMA; and \$208,900 to CS.

Opinion

In our opinion, the accounting and administrative procedures over Consulting Agreements related to Bay-Delta Initiatives provide for a satisfactory internal control structure. The degree of compliance with such policies and procedures provided effective control for the period between May 2009 and August 2011.

Comments and Recommendations

There were no material findings to report.

Facilities Maintenance – Jensen Plant Audit Report

Background

The Jensen plant was placed into service in 1972 with an initial capacity of 400 million gallons per day (mgd), and was expanded in 1995 and 1996 to its current capacity of 750 mgd. In addition, in 2005 a major construction project was completed to implement ozone treatment at the plant. The Jensen plant receives water exclusively from the State Water Project and treats and delivers it to the Calleguas Municipal Water District, Las Virgenes Municipal Water District, City of Beverly Hills, City of Burbank, City of San Fernando, City of Santa Monica, and City of Los Angeles member agencies. Although the plant is equipped with many automated systems to aid in the treatment and delivery of water, plant operators must monitor and adjust systems to ensure effective and efficient plant operations. The Jensen plant workforce consists of one unit manager, three team managers, seventeen electricians, eleven mechanics, and five apprentices.

Opinion

In our opinion, the accounting and administrative procedures over Facilities Maintenance - Jensen include those practices usually necessary to provide for a generally satisfactory internal control structure. The degree of compliance with such policies and procedures provided effective control for the period July 2009 through December 2010.

Comments and Recommendations

MAINTENANCE CONTROLS

Maintenance is the care and servicing by personnel for the purpose of maintaining equipment and facilities in satisfactory operating condition by providing for systematic inspection, detection, and correction of incipient failures either before they occur or before they develop into major defects. Maintenance can be divided into planned (preventive) or condition-based (corrective or emergency). The goal of preventive maintenance is to keep equipment in good working order;

extend the asset's useful life; provide for safe operation; and comply with local, state, and/or federal regulations. Alternatively, corrective or emergency maintenance is conducted to repair equipment back to good working condition. To assist in controlling these efforts, maintenance work is detailed on individual work orders and job plans, entered into the Maximo Maintenance Management (MAXIMO) system, and tracked for timely completion and reporting. Effective maintenance records are essential to ensuring plant resources are being cared for appropriately.

During our review of summary reports detailing 3,536 preventive maintenance records in MAXIMO, we noted:

1. Job plans were not prepared for eleven regulatory maintenance work orders. A job plan is required on all regulatory maintenance and provides detailed instructions and resources needed for completing a work order.
2. Maintenance was not performed as scheduled on eight work orders of which four were regulatory required.
3. Eighteen work orders started between July 2006 and August 2010 still show as pending Team Manager's review in MAXIMO. This is contrary to procedures which require Team Manager's review and approval.
4. Material cost is not being tracked in MAXIMO. We understand that MAXIMO has the capability to capture this data under the 'Financial Information' field under the 'Work Order Detail' section.
5. Identification of the regulatory agency (local, state, or federal) that mandates compliance for certain preventative maintenance work is not recorded in MAXIMO.

We recommend that Jensen management remind staff of the importance of complying with regulatory requirements and of performing accurate and complete data entry in MAXIMO. We also recommend that management conduct periodic reviews to ensure compliance.