



THE METROPOLITAN WATER DISTRICT  
OF SOUTHERN CALIFORNIA

**Report**  
Office of the General Auditor  
February 29, 2012

## **Internal Audit Report for February 2012**

### **Summary**

---

Three reports were issued during the month:

- **Major Construction Project - J.F. Shea Construction, Inc. Audit Report**
- **Consulting Agreements - Pure Technologies US, Inc.; Cornell, Howland, Hayes, Merryfield and Hill "CH2M Hill"; and Camp, Dresser & McKee "CDM" Audit Report**
- **KPMG Single Audit Report For Year Ended June 30, 2011**

### **Discussion Section**

This report highlights the significant activities of the Internal Audit Department during February 2012. In addition to presenting background information and the opinion expressed in the audit reports, a discussion of findings noted during the examinations is also provided.

---

## **Major Construction Project - J.F. Shea Construction, Inc. Audit Report**

### **Background**

The Weymouth Water Treatment Plant (Plant) was placed into service in 1941 to treat water received from the Colorado River. The Plant currently treats a blend of Colorado River and State Project water and delivers it to the Central Pool portion of the distribution system. Originally sized at a capacity of 100 million gallons per day (mgd), the Plant was expanded to its current capacity of 520 mgd in order to meet the increased demands from Member Agencies. In addition to these expansions, the Weymouth Plant has also had facility upgrades and improvements made throughout the years.

As part of these improvements, the Board authorized the upgrade of the aging electrical infrastructure to ensure plant reliability and the construction of two buildings containing electrical switchgear equipment to meet the demand of planned ozone facilities. This project must be completed prior to construction of the main Oxidation Retrofit Program (ORP) facility at the Plant.

Accordingly, Metropolitan entered into a \$25.13 million contract (No. 1689) in November 2009 with J.F. Shea Construction, Inc. (Shea). This contract consists of installation of an electrical distribution and grounding system, addition of an emergency generator, four unit power centers and ductbanks, and replacement of motor control centers and circuit breakers. The work also includes construction of the main plant switchgear facility and the ORP switchgear facility. As of January 2012, Shea has completed approximately 90% of the work, and Metropolitan paid \$22,688,611 including \$164,107 in approved extra work orders to Shea under this contract.

### **Opinion**

In our opinion, the accounting and administrative procedures over Major Construction Project - J.F. Shea Construction, Inc. (No. 1689) includes those practices usually necessary to provide for a satisfactory internal control structure. The degree of compliance with such policies and procedures provided effective control for the period November 2009 through January 2012.

### **Comments and Recommendations**

There were no material findings to report.

---

## **Consulting Agreements - Pure Technologies US, Inc. Contract 92665; Cornell, Howland, Hayes, Merryfield and Hill "CH2M Hill" Contract 97496; and Camp, Dresser & McKee "CDM" Contract 113123 Audit Report**

### **Background**

Metropolitan's water delivery system includes 800 miles of pipelines, of which 163 miles are pre-stressed concrete cylinder pipelines (PCCPs). These lines were installed between 1965 and 1985. These lines diameter range from 54 to 201 inches and are located in both dense urban areas and remote rights-of-way. PCCP is fabricated with tightly wound reinforcing wire that is prestressed to approximately 200,000 psi and covered by a cement mortar coating. The prestressing wire in PCCP is vulnerable to corrosion under adverse conditions such as corrosive soils or stray current interference. Corrosion is the major cause of prestressing wire breakage and potential failure of the pipeline. In addition, Metropolitan's member agencies have experienced a number of PCCP failures. Subsequently, Metropolitan initiated the PCCP Assessment Program in December 1996 to evaluate the condition of Metropolitan's PCCP lines, investigate state-of-the-art inspection methods, and to conduct internal inspections of those pipelines that warrant attention. In September 2004, the Board authorized an agreement for the use of electromagnetic inspection of all 163 miles of PCCP over a 3-year period. The results of the electromagnetic inspection have been used to identify distressed pipe sections and to assist in prioritizing repairs. In December 2007, the Board authorized an agreement with Pressure Pipe Inspection Company (USA), Inc. (Pressure Pipe) to perform electromagnetic inspections for an amount not to exceed \$1.68 million. In January 2011, Pressure Pipe name was changed to Pure Technologies US Inc., due to acquisition. Payments made to Pure Technologies for the period of November 2008 through April 2011 totaled \$1.1 million.

In July 2008, Metropolitan's Board authorized an agreement with CH2M Hill in an amount not to exceed \$2.25 million to provide on-site construction contract administration services, inspection and materials testing during construction of the Diemer Oxidation Retrofit Program (ORP). Diemer ORP, which will add ozonation as the primary disinfection process at the Diemer plant, will remove blend restrictions and substantially lower disinfection by-product levels for compliance with both Stage 1 and Stage 2 of the U.S. Environmental Protection Agency's

Disinfectants/Disinfection By-Products Rule. Ozone will also enhance Metropolitan's ability to treat water with variable source-water quality, and provide critical operational flexibility to meet varying treatment challenges resulting from periodic occurrences such as drought and State Water Project pumping limitations. Further, ozonation will provide the capability to control taste-and-odor causing compounds that may be present from time to time. Payments made to CH2M Hill for the period of October 2008 through November 2011 totaled \$1.3 million.

On March 9, 2010, Metropolitan Board of Directors authorized Memorandum of Understanding (MOU) with the Los Angeles County Sanitation Districts (LACSD), specifically County Sanitation District No. 2, to conduct the Joint Groundwater Replenishment Study (Study); and awarded CDM with two years term and maximum amount payable of \$1,000,000 to conduct the study. The objective of the Study is to evaluate the feasibility of developing a regional groundwater replenishment program to purify treated wastewater from the Joint Water Pollution Control Plant (JWPCP) in Carson, and deliver the purified water to Metropolitan's member agencies to meet their needs for groundwater replenishment and to meet their water quality objectives for the basins. Payments made to CDM for the period of August 1, 2010 through August 31, 2011 totaled \$685,000. However, LACSD reimbursed Metropolitan a total of \$342,500.

### **Opinion**

In our opinion, the accounting and administrative procedures over consulting agreements with Pure Technologies, CH2M Hill, CDM 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 October 2008 through November 2011.

### **Comments and Recommendations**

#### **COMPLIANCE TO TERMS AND CONDITIONS OF THE AGREEMENTS**

Compliance with contractual requirements is necessary to ensure accurate accounting records, proper supporting detail, and adequate control over the administration of the agreements. Compliance with the contractual terms and conditions also ensures that parties fully discharge their duties and obligations and exercise their legal rights associated with the agreement.

During our review of 31 selected invoices totaling \$2.1 million, we noted one of Pure Technologies invoices in the amount of \$59,400 was paid lump sum instead of fixed rates per mileage basis as stipulated in the agreement. As a result, this invoice is overpaid by \$297.

Failure to comply with the terms and conditions of the agreement could result in financial loss to Metropolitan due to erroneous, fraudulent or unauthorized transactions.

We recommend Engineering Services Management resolve the noted issue and remind personnel of the importance of compliance with terms and conditions of the agreements.

---

## **KPMG Single Audit Report for Year Ended June 30, 2011**

The Federal Single Audit Act of 1984, as amended by the Single Audit Act Amendments of 1996, requires state or local government units that expend \$500,000 or more of federal financial assistance in any one year to have an audit conducted for that year. Moreover, in the event that a so-called “Single Audit” report is required of Metropolitan for the year, the cost of such an audit is included as part of the required audit services provided by our external audit firm (KPMG) under our agreement with them.

Accordingly, due to the magnitude of federal sources and money expended during the fiscal year ended June 30, 2011, Metropolitan was required to have a Single Audit performed. KPMG performed the necessary auditing procedures in order to be able to issue:

1. Report on Internal Control over Financial Reporting and on Compliance and Other Matters Based on an Audit of Financial Statements Performed in Accordance with *Government Auditing Standards*.
2. Report on Compliance with Requirements Applicable to the Major Program and on Internal Control over Compliance with OMB Circular A-133.

We completed our assistance to KPMG in the performance of auditing procedures and have submitted to them all work performed. KPMG will provide their opinions and issue these reports by March 31, 2012.