



• Internal Audit Report for September 2009

Summary

Four reports were issued during the month:

- **Consulting Agreements on the Bay Delta Audit Report**
- **Engineering Consulting Agreements - Less Than \$250,000 Audit Report**
- **Review of Facility Management – Mills Audit Report**
- **Consulting Contract with Johnson Controls, Inc. Audit Report**

Discussion Section

This report highlights the significant activities of the Internal Audit Department during September 2009. 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.

Consulting Agreements on the Bay Delta Audit Report

Background

The Sacramento Bay-Delta Estuary is 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 to the associated water quality. The seismic stability analyses 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 the Bay-Delta issues, Metropolitan participated in a joint technical effort with the Department of Water Resources (DWR), United States Bureau of Reclamation (USBR), and state/federal contractors to develop the necessary environmental, engineering, and financial information and agreements.

Accordingly, in February 2008, Metropolitan issued Request for Qualifications #853 for the respondents to provide proposals for professional and technical services for Bay Delta issues. These issues were categorized as follows: (1) Emergency Levee Preparedness; (2) Long-term Delta Water Supply and Quality Conveyance Modeling & Planning; (3) Aquatic Ecology & Biology; (4) Aquatic Stressors; (5) Ecosystem Restoration; (6) Restoration Engineering; (7) Cost-Effectiveness Analyses; (8) State and Federal Regulatory Processes; and (9) Permitting requirements and other engineering services for Bay Delta related activities. Following the selection process, nineteen consultants were awarded agreements. Each agreement has a maximum amount payable of \$240,000 annually. The scope of our audit covers six of these nineteen agreements.

Metropolitan entered into three-year agreements (in April 2008) with Cramer Fish Sciences (Cramer), Entrix, Inc. (Entrix), HDR Engineering, Inc. (HDR), Deepblu Studios (Deepblu), Byron Buck & Associates (Byron) and Moffatt & Nichol Engineers (Moffatt). Under the terms of the agreements, the consultants were to provide written support for reports, briefing materials and presentations relating to water resource and water quality analyses for the Sacramento Valley Water Management (SVWM) agreement. The SVWM agreement, which was executed in December 2002, serves as a guide in implementing short-term water management actions to meet local water supply needs and to make water

available to SWP and the Central Valley Project contractors. The parties to this agreement include DWR, USBR, Department of Fish and Game and the Bay Delta water users that include Metropolitan.

As of April 2009, Metropolitan paid a total of \$1.2 million for the six agreements reviewed. Specifically, Metropolitan paid \$161,900 to Cramer; \$209,700 to Entrix; \$157,700 to HDR; \$203,200 to Deepblu; \$182,200 to Byron; and \$240,000 to Moffatt.

Opinion

In our opinion, the accounting and administrative procedures over Consulting Agreements on the Bay Delta Issues provide for a less than satisfactory internal control structure. This opinion is the result of unsubstantiated billings for consultant labor charges totaling \$190,700. Subsequently, supporting documents was obtained for these charges. It should be noted that management has initiated remedial actions in response to our concern, and we will assist in the evaluation of solutions addressing these internal control structure concerns.

Comments and Recommendations

COMPLIANCE WITH 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 agreements.

Our review of 20 selected invoices totaling \$987,700 (four Cramer invoices-\$79,000; two Entrix invoices-\$207,200; three HDR invoices-\$141,500; three Deepblu invoices-\$203,200; five Byron invoices-\$116,800; and three Moffatt invoices-\$240,000) revealed:

1. Supporting documents on Deepblu's labor hours billed on three of 20 (15%) invoices totaled \$190,700 could not be located. Subsequently, Deepblu provided supporting documents for the billed labor hours in question. In addition, we noted that the consultant labor billings did not specify the name of consultants who worked for the project. These are in contrast to the Audit and Billings and Payments sections of Deepblu agreement that require the consultant to maintain all supporting documentation and to specify employee name in its invoices.
2. Two of 20 (10%) invoices tested (Deepblu invoice #001 and Moffatt invoice #44988) were overbilled by \$5,152. Deepblu overbilling consisted of overcharges on hosting and bandwidth (\$1,800) and server's monthly lease fee (\$3,200). Moffatt overbilling was for unallowable mileage charges of \$152. As a result of our inquiry, the agreement administrator contacted the consultants. Deepblu credited Metropolitan \$5,000 in its invoice #004. We understand that Moffatt will credit Metropolitan \$152 in its future invoice.
3. Although credit card receipts were provided for some meal expense reimbursements, we could not locate the itemized receipts for the meal expenses (total \$637) billed on five of 20 (25%) invoices tested. These invoices include Entrix invoice #39188 and Byron invoices #08-38, #08-39, #09-15 and #09-10.

4. Although the two selected Entrix invoices (#37893 and #39188) were authorized by the Agreement Administrator for payment within the required 30-day period, these invoices were paid from 22 to 26 days after their due dates. This is in contrast to the Billing and Payment section of the Entrix agreement that requires payment within 30 days after receipt of the invoice.
5. Three of 20 (15%) invoices tested (two invoices from HDR and an invoice from Deepblu) were not submitted on a monthly basis as required by the Billing and Payment section of the agreements.

We recommend the agreement administrator resolve the noted differences. We also recommend that the agreement administrator establish procedures to ensure compliance to the terms of the agreements and conduct periodic reviews to ensure compliance. Furthermore, we recommend that the consultant prepare and maintain adequate payroll documentation for labor charges billed to Metropolitan.

BAY DELTA MANAGEMENT REPORT

Management reports are designed to combine information into a meaningful form, in order that management can assess program's performance and develop strategic plans to achieve program goals and objectives. Management reports allow for analysis and tracking to take place without daily involvement from management and provide timely feedback on program activities. These reports can be informative (e.g. new laws, status of various processes, activities related to Bay Delta) or analytical (e.g. consultant fees).

We reviewed the Bay Delta Management Report and noted that it provides the status of various processes and activities of the Bay Delta project. However, we noted that the management report lacks the information regarding project expenditures such as consultant fees and other expenses paid.

We recommend that the Water Resource Management Group include expenditure information in the Bay Delta Management Report.

Engineering Consulting Agreements - Less Than \$250,000 Audit Report

Background

Engineering Services manages a complex and comprehensive capital improvements program that annually totals over \$350 million. These efforts require effective project management practices that ensure the successful completion of the project plan or business objective. These practices involve the exercise of responsibility and decision-making about a project, the authority to execute within the boundaries of the project, and the accountability to deliver the results of a project in the context of agreed-upon customer expectations, commitments and constraints. These expectations often require the project manager to supplement existing construction or consulting contracts with additional support services to ensure that the project is completed on time and within budgets. Accordingly, Engineering Services pre-qualifies consultants through the Request for Qualifications (RFQ) or Request for Proposal (RFP) process for consideration in those instances where the need for technical support is acute.

Pre-qualification does not guarantee a consultant an agreement and Metropolitan reserves the right to enter into agreements with one or more based upon its project needs. As needs are identified, Metropolitan selects the consultants from the list of pre-qualified consultants and executes roll-over agreements for up to five years with a maximum amount payable per agreement year. Administrative Code Section 8121(c) grants authority to the General Manager to execute professional and technical agreements without prior Board approval provided that the amount payable during any one agreement year does not exceed \$250,000.

In November 2005, Metropolitan issued Request for Proposal (RFP) # 765 to provide fabrication inspection services at procurement facilities throughout the United States and overseas. These services included the sampling, testing, and inspection of: fabricated materials, structural steel, fabricated steel pipe, mechanical and electrical equipment, and large diameter valves. The top three respondents to the RFP were On-Site Technical Services (On-Site), F.W. Kohl Industrial Group, Inc. (Kohl) and Moody International Inc. (Moody). Accordingly, Metropolitan entered into three-year agreements with these consultants effective July 2006. The On-Site and Kohl agreements are for \$240,000 per contract year, whereas the Moody agreement is for \$200,000 per contract year.

In November 2006, Metropolitan issued Request for Qualifications (RFQ) # 805 to provide engineering, benchmarking, and performance measuring support services. Specifically, the RFQ requested assistance on conducting value engineering and multi-agency benchmarking studies, in performing quality assurance/quality control reviews, and in developing engineering standards. Further, it requested assistance in completing engineering management studies/reports and in identifying performance measures. The top four respondents to the RFQ were Value Management Services, Inc. (VMS), CH2M Hill (CH2M), MWH Americas, Inc. (MWH) and Strategic Value Solutions, Inc. (SVS). Metropolitan entered into three-year agreements with VMS, MWH, and CH2M in the fall of 2007. Further, Metropolitan entered into a three-year agreement with SVS in September 2008. Each agreement has maximum amount payable of \$245,000 per contract year. As of June 2009, payments to the consultants under the seven agreements reviewed totaled \$1.2 million.

Opinion

In our opinion, the accounting and administrative procedures over Engineering Consulting Agreements-Less than \$250,000 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 2006 through June 2009.

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 agreements.

Our review of 16 selected invoices totaling \$378,900 revealed:

1. We could not locate the detailed supporting documentation for the meal expenses (total \$661) billed on eight of 16 (50%) invoices tested. These invoices involved Kohl, VMS, CH2M, and SVS.
2. One of 16 (6%) invoices tested (CH2M) was overbilled by \$400. CH2M overbilling consisted of overcharges on sub-consultant labor charges. As a result of our inquiry, the agreement administrator contacted CH2M for a credit.
3. Business Outreach Program section of the CH2M agreement requires submission of a Small Business Enterprise (SBE) Utilization report with each invoice to indicate SBE activity. However, we noted that SBE Utilization report was not submitted with each invoice as required.
4. Business Outreach Program section of MWH agreement requires SBE participation of 18%. However, we noted 0% SBE participation as of June 2009 (19 months after contract commenced).

We recommend the agreement administrators resolve the noted differences. In addition, we recommend the Agreement Administrators establish procedures to ensure compliance to the terms of the agreements and conduct periodic reviews to ensure compliance.

Review of Facility Management – Mills Audit Report

Background

The Mills Plant was placed into service in 1978 to supply treated State Project water to Eastern and Western Municipal Water Districts of Riverside County. The plant had an initial capacity of 75 million gallons per day (mgd) which was increased to 160 mgd in 2003, and now the plant is operating at an expanded capacity of 220 mgd. These changes were needed as a result of increased treated water demands in eastern Riverside County. Although the Mills plant is equipped with automated systems to treat and deliver water, plant operators must monitor and adjust systems to ensure effective and efficient plant operations. These automated systems also offer precise monitoring and surveillance capabilities that are used to anticipate local demands and to allow for the rapid response to emergency water situations. The Mills Plant workforce consists of one unit manager, five team managers, one planner/scheduler, seven electricians, twelve mechanics, eight control systems staff and four trainees.

Opinion

In our opinion, the accounting and administrative procedures over Facilities Maintenance at Mills 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 from July 2008 through May 2009.

Comments and Recommendations

MAINTENANCE CONTROLS

Maintenance is the care and servicing of equipment to ensure that it is in a satisfactory operating condition through the systematic inspection, detection and correction of failures either before they occur or before they develop into major defects. Maintenance efforts can be separated into preventive or

corrective categories. Preventive maintenance is intended to keep equipment in good working order and/or to extend the assets useful life. This category also includes regulatory maintenance which is needed to comply with local, state, and federal government regulations. Corrective maintenance, conversely, is conducted to get equipment working again. Together, these efforts are designed to avoid or mitigate the consequences of equipment failures. Within Metropolitan, preventive and corrective maintenance is the responsibility of the treatment plant management. To manage these efforts, maintenance work is detailed on individual work orders, entered into the MAXIMO Maintenance Management System (MAXIMO), and tracked for timely completion and reporting. These processes serve to monitor and record repair and maintenance efforts on plant equipment to ensure that these resources are functioning effectively and efficiently.

Our review of 1,746 preventive and 278 corrective maintenance work orders revealed:

1. Regulatory maintenance was not performed for fifteen of 1,746 (0.1%) preventive maintenance work orders reviewed. Regulatory maintenance is performed as scheduled to comply with the Riverside County, California Department of Public Health, Department of Safety of Dams, and Office of Safety and Health Administration regulations. Maintenance staff indicated that the failure to complete regulatory maintenance was due to staff shortage and a transition to a new version of MAXIMO.
2. Job plans were not prepared in MAXIMO for thirty-four of 1,746 (1.9%) preventive maintenance work orders reviewed. The job plan is a guide for staff when performing maintenance work.
3. Ten of 28 (36%) pieces of equipment tested have been removed, replaced or disposed of in prior years. However, they were still recorded in MAXIMO as if the equipment was still in place. Further, we noted that current work orders were issued for these items.

We also reviewed data accuracy for the work order records maintained in MAXIMO and noted:

4. Forty-six of 1,746 (2.6%) preventive maintenance work orders had zero labor hours charged to them. Maintenance staff indicated that the labor hours for these work orders could have been charged in error to other work orders or to the general maintenance category.
5. Five of 1,746 (0.3%) preventive maintenance work orders that were completed were incorrectly marked as "MISSED". A missed work order is a scheduled work order that had not been performed and closed by plant management due to workload constraints.
6. Eight of 278 (2.9%) corrective maintenance work orders were incorrectly classified as preventive maintenance.

We recommend that Mills management formalize procedures to ensure compliance with government maintenance regulations and completeness of work order supporting documentation. These procedures should be included in the maintenance manual currently being developed by WSO management. Further, we recommend that Maintenance management make data corrections to MAXIMO for the issues noted. Lastly, we recommend that Mills management conduct periodic in-house reviews to ensure compliance with maintenance regulations and data accuracy in MAXIMO system.

Consulting Contract with Johnson Controls, Inc. Audit Report

Background

In 2001, Metropolitan conducted a comprehensive physical security threat assessment of its facilities and systems. As a result, in June 2003 the Board authorized an agreement with Johnson Controls to design and install an integrated, enterprise-wide access physical security control and surveillance system (250 security cameras and 380 card readers). However, since this time significant modifications to Metropolitan facilities such as the Oxidation Retrofit Program have altered the facility perimeters and have impacted the related physical security requirements. Accordingly, in 2007 Metropolitan's Board authorized staff to expand the existing security system and to enter into a five year, \$7.8 million agreement with JCI. The scope of this engagement includes the design, procurement and installation of security system components for projects approved under the Metropolitan's Capital Investment Plan. As of July 2009, Metropolitan paid \$3.7 million to JCI under this agreement.

Opinion

In our opinion, the accounting and administrative procedures over Consulting Contract with JCI 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 2007 through March 2009.

Comments and Recommendations

REVIEW AND APPROVAL

Review and approval controls are designed to verify the accuracy of billings for goods and services, provide assurance as to the propriety of transactions, and ensure that follow-up procedures for exceptions exist. These controls should include a review to verify the recordation of transactions into the appropriate general ledger/project account.

We reviewed seven JCI invoices totaling \$893,974 and noted that a \$100k of an invoice totaling \$172,092 was incorrectly charged to Project No. 103196 (Diemer Solids Handling Facilities) instead of Project No. 103755 (Diemer ORP Chemical Tank). We understand that the Agreement Administrator has initiated the cost transfer process to correct this error.

We recommend that the Agreement Administrator complete the cost transfer process and ensure that all costs are recorded to appropriate project and general ledger accounts going forward.



THE METROPOLITAN WATER DISTRICT
OF SOUTHERN CALIFORNIA

Date: September 28, 2009
To: Gerald C. Riss, General Auditor
From: Stephen N. Arakawa, Manager, Water Resource Management
Roger K. Patterson, Assistant General Manager, Strategic Water Initiatives
Subject: Management's Response to General Auditor's review of Sustainability of Water Supply-Consulting Agreements on Bay-Delta Issues

This memorandum is in response to recommendations contained in the final audit report on Sustainability of Water Supply-Consulting Agreements on Bay-Delta Issues. Attached is a summary matrix that includes the audit recommendations and responses from Water Resource Management and the Office of the General Manager.

This audit review was valuable in identifying the need to refine our administrative processes.

If you have any questions, please call me at extension 76052.

Stephen M. Arakawa

Stephen N. Arakawa

Roger K. Patterson

RER:sv

o:\a\s\m\2009\RER_Bay Delta Audit Resp Memo.doc

Attachment

cc: G. L. Chan
R. D. Neudeck
R. E. Ryan
L. Tan
WRM Files

Internal Audit Report

Bay-Delta Comments and Recommendations

Review Area	Audit Recommendation	Response to Recommendation
COMPLIANCE TO TERMS AND CONDITIONS OF THE AGREEMENTS	Recommend the agreement administrator resolve noted differences, including meal receipts and payroll documentation for labor billed charges, as per auditor's report dated August 24, 2009.	<p><u>Agreement #95131 (Invoice #001 overbilling).</u> Consultant issued a credit of \$5,000.00 in their submitted invoice #004.</p> <p>The audited consultant submitted the requested employee/ subconsultant timesheets with employee names as requested under the audit.</p>
		<p><u>Agreement #95137 (Invoice #44988 overbilling).</u> Consultant issued credit invoice, CR44988, in the amount of \$151.50 to be applied in the next invoice submittal.</p>
		<p>Agreement administrator is reinforcing with all consultants the level of detail for meal receipts and payroll documentation for labor billed charges for all agreements. Consultants will be required to submit line item receipts for all meal expenses rather than just credit card receipts.</p>
	<p>Recommend agreement administrator establish procedures to ensure contract compliance and conduct periodic reviews.</p> <p>Recommend that the consultants prepare and maintain adequate payroll documentation for labor charges billed to Metropolitan.</p>	<p>In October 2009, all agreement administrators and administrative staff performing contract support functions will receive training regarding the processes to be followed for administering professional service agreements. Contract compliance issues identified in the auditor's report dated August 24, 2009 will also be covered. Staff from the Contracting Services Unit will complete compliance reviews of the remaining Bay-Delta agreements not included in this audit where expenditures have occurred and provide findings and recommendations to WRM Management. These reviews will begin in October 2009 and be completed by April 2010.</p> <p>For Bay-Delta agreements, in addition to the agreement administrator, a contract management administrator has</p>

Internal Audit Report

Bay-Delta Comments and Recommendations

		<p>been designated to be responsible for administrative aspects of the agreements such as reviewing invoices, monitoring expenditures, resolving contractual issues, and initiating amendments.</p> <p>In consultation with the Controller and Internal Auditor, a checklist will be developed and provided to small vendors on how to properly submit invoices and supporting documentation.</p> <p>All agreements will be periodically reviewed and reconciled as determined by WRM Management.</p>
BAY-DELTA MANAGEMENT REPORTING	Bay-Delta Management Report expenditure inclusion.	WRM Management will consult with Executive Management on form and content of expenditure information to be provided in board reports.