



THE METROPOLITAN WATER DISTRICT
OF SOUTHERN CALIFORNIA

Report
Office of the General Auditor
November 30, 2012

Internal Audit Report for November 2012

Summary

Four reports were issued during the month:

- **Operational Safety and Environmental Services Audit Report and Management Response**
- **Bay Delta Initiatives Audit Report**
- **Quarterly Consulting Contracts Report Review**
- **End User Security Review**

Discussion Section

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

Operational Safety and Environmental Services Audit Report

Background

The Operational Safety and Environmental Services (SES) Section, which is part of the Water System Operations (WSO) Group, is responsible for identifying new safety and environmental regulations affecting the WSO Group operations (e.g., U.S. Environmental Protection Agency, Department of Toxic Substances Control, and Department of Transportation) and disseminating the requirements data to program management to establish controls, policies, and procedures to ensure compliance. The SES Section also tracks and reports incidents such as chemical or waste spills, in accordance with associated rules and regulations and records external inspections in the EVENT database. In addition, the SES Section maintains permit information for certain types of equipment such as pressure valves, generators, and elevators in the PERMITS system. Furthermore, the SES Section administers Metropolitan's safety and environmental training programs, and coordinates with management to ensure that employees receive applicable training and testing for their job duties. Finally, the SES Section administers vendor agreements for waste removal activities, both hazardous and industrial waste, and consulting agreements for various environmental services (hazardous waste and materials management, and training).

Opinion

In our opinion, the accounting and administrative controls over the SES Section activities provide for a less than satisfactory internal control structure. This opinion is primarily the result of recommendations related to noncompliance with contractual terms and conditions. We also noted that policies and procedures in the Hazardous Materials Programs have not been kept up-to-date.

Further, we noted incomplete tracking and internal reporting of spills and releases of hazardous materials and of permit information. Finally, we noted that SES Section management did not take advantage of vendor discounts of \$121,631. Our review consisted of SES Section activities from January 1, 2009 through August 31, 2012. Management has initiated remedial actions in response to our concerns, and we will assist in the evaluation of solutions addressing these internal control weaknesses.

Comments and Recommendations

REVIEW AND APPROVAL OF TRANSACTIONS (REPEAT RECOMMENDATION)

Review and approval controls are designed to verify the accuracy of billings for services, provide assurance as to the propriety of transactions, confirm compliance with contractual terms and conditions, and ensure that follow-up procedures for exceptions exist. For the waste services and consulting agreements, the SES Section should review expenditures listed on the invoices for propriety and agree them to the source documents to ensure the accuracy and completeness of transactions. These efforts also provide for adequate control over the administration of the agreements and ensure that parties fully discharge their duties and obligations and exercise their legal rights associated with the agreements.

We reviewed 50 invoices selected from six consulting agreements, and two hazardous waste removal agreements that were processed between January 2009 and August 2012. Our review revealed:

1. Consulting Agreements - 12 Winefield and 8 Network Environmental Systems, Incorporated (NES) invoices totaling \$227,116:
 - a. Invoices did not comply with the Audit and Billings and Payments Sections of the agreements:
 - We could not locate documentation supporting labor hours, subconsultant charges and travel expenditures for 18 of 20 invoices tested. Of the remaining two invoices, one invoice (Winefield Invoice 8708 totaling \$9,979) did not include the itemized description of labor charges.
 - None of the 20 invoices tested include the Maximum Amount Payable or Labor Classification.
 - Fifteen invoices did not include Total Amount Previously Invoiced. In addition, none of the Winefield invoices include beginning and ending billing dates.
 - Seventeen invoices were paid from 34 to 368 days after the due date. The agreements require payment within 30 days from the invoice date.

- b. The Compensation Section of the agreement stipulates that “no payment will be made for expenses or other charges not included in the Fee Schedule.” However, we noted that Metropolitan paid \$1,339 to NES (\$269 for 2 percent communication fees, \$935 for administrative support, and \$135 for per diem) that were not stipulated in the Fees Schedule.
 - c. Consultants billed labor rates that were higher than contract rates on 5 of 20 invoices tested (1 Winefield and 4 NES invoices). As a result, Metropolitan overpaid \$576. It should be noted that SES Section management took immediate action to review all NES invoices and obtained a credit memorandum for \$3,048.37 in August 2012 that included other overcharges.
 - d. Metropolitan reimbursed the consultants between \$0.63 and \$0.70 per business mile instead of the Internal Revenue Service rate of \$0.50 for calendar year 2010. This oversight resulted in an overpayment of \$148.
2. Hazardous Waste Removal Agreements (15 Ecology Control Industries (ECI) and 15 PSC invoices totaling \$485,009):
- a. Metropolitan did not take advantage of vendor discounts of 2 percent for ECI and 5 percent for PSC for payments made within 20 days of invoice date. Over the term of these two agreements from May 2008 through May 2012, Metropolitan lost savings opportunities of \$121,631.
 - b. The agreements stated, “There shall be no payment on charges invoiced 90 days or longer from the date of occurrence.” However, we noted that Metropolitan paid \$25,474 on three invoices for activities occurring during the previous 98 to 134 days.
 - c. PSC invoiced Metropolitan twice for the 15 percent freight surcharge. This resulted in an overpayment of \$71 on Invoice 52105.

We recommend that SES Section management review all hazardous waste and environmental services invoices for compliance with contractual requirements and for duplicate payments. Additionally, where appropriate, we recommend that SES Section management request a refund for all excess billings identified. Finally, we recommend that SES management conduct periodic reviews of invoices paid to ensure proper review and compliance with the terms and conditions of the agreements.

POLICIES AND PROCEDURES

Operational policies and procedures should be established and documented to provide a framework for achieving Metropolitan goals and objectives. Procedures assist management in the training of new employees, provide guidance for consistent performance of daily responsibilities, and provide a source of reference for staff.

We acknowledge that a substantial effort has been made to revise and update the Health, Safety, and Environmental Compliance Policy and the Health, Safety, and Environmental Manual (HSEM). However we could not locate documentation in support of the elimination of certain HSEM subsections, nor could we identify target dates for the completion of the manual. We noted:

1. Six of ten subsections of the Hazardous Materials Program Manual (Manual) have not been completed or were removed from the Manual without explanation. They were: Methylene Chloride Management Procedure; Silica; Polychlorinated Biphenyls; Fluorosilicic Acid; Coal Tar; and Biological Hazards.
2. References in the Hazardous Material Program of the Health and Safety Section of the Manual were removed without explanation. They were Evaluation of Hazardous Materials Procedures, and the Methylene Chloride Management Procedures. The Evaluation of Hazardous Materials Procedure was incorporated into the Hazard Communications Program, but not explained in the Manual. The Manual should be revised accordingly.
3. Procedures for Section 122 - Indoor Air Quality and Ventilation have not been finalized since November 2005.

We recommend that SES Section update the Manual to reflect current procedures. We also recommend that management provide related training to employees. Further, we recommend that management conduct periodic reviews to ensure compliance with these procedures.

EVENT DATABASE

Metropolitan's procedures require environmental coordinators to document spills, releases of hazardous materials, and regulatory agency inspections in the EVENT Database. This database contains data entry fields for the identification of spill materials, quantity, and reason for the spill, as well as the name of the regulatory agency/inspector, result of the inspection, and any required follow-up. We could not locate the reasons for the spills on 44 of 361 spill reports. We noted that the cost function that accumulates charges for hazardous spills and releases was not being utilized.

We recommend that SES Section management remind staff of the importance of accurate and complete data entry in the EVENT Database. We also recommend that management consider using the cost function to capture expenditures associated with spills and releases of hazardous materials.

PERMITS DATABASE (REPEAT RECOMMENDATION)

The SES Section uses the PERMITS Database (Database) to record permit or license information such as renewal dates, fees, and status for equipment that requires operating permits. Information contained in the Database should be complete, accurate and current. During our review, we selected 190 of 655 permits and noted:

1. Permits for 11 pressure vessels and 7 pieces of equipment were shown as active in the Database, although further review revealed that this equipment was salvaged or was no longer in operation.
2. The Database currently does not track permit fees for operating equipment. We were unable to verify whether permit payments have been made on five pieces of equipment (93-60048, W-395775, W-325945, W-493784, W-492975). These pieces of equipment require annual renewal payments, but do not have expiration dates.

We recommend that SES Section management identify what information should be captured in the Database, communicate the data input requirement to staff, and conduct periodic reviews to ensure records are properly maintained and updated.

Bay-Delta Initiatives Audit Report

Background

The Bay-Delta (Delta) region is located within the Sacramento and San Joaquin watersheds of California and encompasses over 38 million acres. The size and location of this estuary makes it one of the most important in the nation, as it provides drinking water for some 23 million people and irrigation to four million acres of farmland. The region supported by this system generates over \$400 billion in annual economic activity. The Delta region is also a critical component of the State Water Project (SWP), and crucial in assisting the SWP in achieving its goals of effective water storage and delivery. Metropolitan, as a SWP contractor, is concerned with factors that may impact the Delta, including water supply reliability and water quality.

In June 2007, Metropolitan's Board approved a Bay-Delta Action Plan (Plan) that provided a framework for actions to build a sustainable Delta, and reduce conflicts between water supply conveyance and the ecosystem. The Plan includes immediate and near-term Delta actions, including emergency response actions, habitat restoration, operational actions, and actions to address other stressors to Delta fish species. In addition, the Plan includes a framework to develop a comprehensive long-term solution for the Delta.

In recent years, a seismic stability analysis of the Delta levees and the decline in native fish species has elevated the need to resolve issues regarding the conveyance of water through the Delta and Delta ecosystem health. In providing solutions to these issues, Metropolitan is participating in a joint state and federal effort known as the Bay Delta Conservation Plan.

As part of the overall improvement strategy, Metropolitan issued Request for Qualifications 947 (RFQ 947) in May 2010 for respondents to provide proposals for professional and technical services to address water resource and quality, and ecosystem issues associated with supporting near-term actions and long-term solutions. Following a selection process, 19 consultants were awarded ongoing professional services agreements with an aggregate maximum amount payable of \$3.6 million per year.

The scope of our audit covers four of these agreements entered with Systech Water Resources Incorporated (Systech); Cardno Entrix; Harrington, Needles, Tammen, Bergendorf Corporation (HNTB); and R2 Resource Consultants, Incorporated (R2). Under the terms of the agreements, the consultants are to provide written reports, computer modeling analyses, economic evaluations, biological and ecosystem studies, briefing materials and presentations relating to water resource, water quality analyses, and other expertise identified under RFQ 947. Payments made to these consultants, as of October 31, 2012 totaled \$351,418. The breakdown of these payments was \$209,258 to Systech; \$64,109 to Cardno Entrix; \$65,139 to HNTB; and \$12,912 to R2.

Opinion

In our opinion, the accounting and administrative procedures related to the consulting agreements identified above provide for over a generally satisfactory internal control structure. The degree of compliance with such policies and procedures provided effective control for the period between March 2011 and August 2012.

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.

Our review of 15 consultant invoices totaling \$224,647: 4 Systech totaling \$117,390; 3 Cardno Entrix totaling \$51,047; 4 HNTB totaling \$46,217; and 3 R2 totaling \$9,993 revealed that three of four (75 percent) Systech invoices were submitted to Accounts Payable 65 to 113 days after the invoice date. As a result, these invoices were paid late between 20 to 68 days. This is in contrast to the Payments and Billings Section of the agreement.

We recommend that management remind the consultant to comply with Metropolitan's established procedures for the submission of consultant invoices and adhere to the terms and conditions of the agreement.

Quarterly Consulting Contracts Report Review

Scope and Purpose of Review

We reviewed the quarterly report for consulting and professional service agreements (Quarterly Report) published by the Professional Services Contracting Team for the fourth quarter (Annual) FY 2011/12. The purpose of this review is to gain reasonable assurance that information included on the quarterly report is accurate, complete, timely, and in compliance with the Administrative Code.

Background

Administrative Code Section 2720(a) requires that the General Manager report to the Engineering and Operations Committee on the employment of any professional and technical consultant, the extension of any professional and technical consulting agreement, and on the exercise of authority under Sections 8121(c) and 8122(h), during the preceding calendar quarter. The report covering the last calendar quarter of the year may be combined with and included in the annual report. Each report shall indicate when a consultant is a former employee of Metropolitan. During FY 2011/12, the amount paid for consulting and professional services totaled \$45 million. This amount includes \$41.2 million paid on agreements administered by the Department of the General Manager, and \$3.8 million paid on agreements administered by the Legal Department. The General Manager reported 440 active agreements with 119 terminations, and the Legal Department reported 54 active agreements with 7 terminations.

Testing Procedures Performed

Our procedures included cursory review of the reasonableness of professional services expenditures and consultants with multiple active agreements, to determine whether an agreement was split into smaller contract amounts to override the established approval authority limits. Finally, we evaluated whether statistics in the report were adequately supported.

Testing results

Our review did not reveal any contracts which appeared to be unreasonable or split to avoid established approval authority limits. In addition, our review did not reveal any material differences between the reported amounts and supporting documentation.

End User Security Review

Scope and Purpose of Review

We reviewed the risks related to five emerging technologies, along with an analysis of the methods by which Metropolitan may assess its exposure to these risks. We assessed the use of: smart devices, web and mobile applications installed on these units, access to sensitive data via this equipment, business partner security associated with their use of such devices, and the impact of social media on workplace information security. Our study and evaluation made for the limited purpose described in the preceding paragraph would not necessarily disclose all material weaknesses in the system. Accordingly, we do not express an opinion on the internal control structure over the use of these technologies.

Background

Over the past two decades, we have witnessed significant technology advances in mobile devices from the Personal Data Assistants of the late 1990s and early 2000s, to the ubiquitous and multifunctional smart phones of today. These advances have extended the virtual boundaries of the enterprise, blurring the lines between home and office, and coworker and the public by providing constant access to email, enabling new mobile business applications, and allowing the access to and storing of sensitive company data.

Although our review was focused on the risks associated with the five emerging technologies noted in the first paragraph, we also reviewed the means by which these risks are mitigated by Metropolitan through technical device controls, third-party software, and organizational policy. We believe that these control components contribute to an enterprise-grade mobility management program that serves as a guide in this rapidly evolving mobile environment.

We appreciate the cooperation of the Information Technology Section (IT) Information Security (InfoSec) staff for their assistance in gathering information regarding the use of mobile devices, in identifying key concerns, and for their aid in discussing the control elements utilized to mitigate these risks.

Testing Results and Comments

Our review revealed that InfoSec staff has performed an assessment of the risks associated with mobile computing and has initiated action plans to address these issues. Specifically, we note that InfoSec staff has established policies on the employee use and control over smart devices, web and mobile applications, and on the use of these devices by business partners. Moreover, InfoSec staff has limited employee access to social media sites on Metropolitan computers based on justified business reasons. Additionally, efforts are underway to develop a social media policy.

However, we believe that the combination of more mobility, increased social access to information and outsourcing to the cloud requires a change in traditional information security paradigms. The “outsiders are now the insiders,” meaning people and organizations outside the borders of the traditional corporate environment play a role in helping to achieve information security objectives, but can also pose a risk to protecting information. Therefore, a comprehensive IT risk management program must focus on technology, processes, and people to address information throughout its life cycle, wherever it resides.

In response to this dynamic, we believe that the focus in information security should shift from a technology-only approach to a technology and people approach. We believe that this change is necessary to acknowledge the fact that information security has become a function of which all employees have a responsibility to understand, adhere to, and monitor for compliance.

Accordingly, clearly defined and communicated security policies and practices on the use of new technology need to be provided to staff. In addition, periodic security primers should be conducted in order to inform staff on changes in the End User Security profile. While we believe that InfoSec has established adequate data security and intrusion controls, we recommend that they develop employee training programs that heighten security awareness and underscore the importance of the employee’s role in securing data.



THE METROPOLITAN WATER DISTRICT
OF SOUTHERN CALIFORNIA

Date: November 30, 2012

To: Gerald C. Riss, General Auditor

From: Bart Koch, Section Manager, Operational Safety and Environmental Services

Subject: Response to Operational Safety and Environmental Services Activities Audit Report

Below are responses to the recommendations contained in the Operational Safety and Environmental Services (SES) Activities Audit Report.

REVIEW AND APPROVAL OF TRANSACTIONS

Findings: Review and approval controls are designed to verify the accuracy of billings for services, provide assurance as to the propriety of transactions, confirm compliance with contractual terms and conditions, and ensure that follow-up procedures for exceptions exist. For waste services and consulting agreements, Operational Safety and Environmental Services (SES) Section should review expenditures listed on the invoices for propriety and agree them to source documents to ensure the accuracy and completeness of transactions. These efforts also provide for adequate control over the administration of the agreements and ensure that parties fully discharge their duties and obligations and exercise their legal rights associated with the agreements. It was found that some invoices did not comply with the "Audit" and "Billing and Payments" section of the agreements, and some payments were not as stipulated in the agreements.

Recommendations: We recommend that SES management review all hazardous waste and environmental services invoices for compliance with contractual requirements and for duplicate payments. Additionally, where appropriate, we recommend that SES management request a refund for all excess billings identified. Finally, we recommend that SES management conduct periodic reviews of invoices paid to ensure proper review and compliance with the terms and conditions of the agreements.

Response: SES agrees with the recommendation that procedures for invoice review must ensure that payments are commensurate with the service provided and as listed in the contracts. At this time, it is not possible to resolve the overpayments noted in the audit (\$148 and \$71) because the contracts have been closed. SES has revised the invoice checklist (effective November 19) to provide a comprehensive review of each invoice. Management will review a portion of the invoices to ensure proper and timely payment. The report noted several invoices that included charges that were not stipulated in the contract fee schedule. Contracting Services has indicated

that additional charges can be approved if reasonable and/or issued through a task order. SES will work with Contracting Services to formalize this in a memo (by February 2013) and include language changes in future contracts. Staff will document any approved charges considered reasonable. While reviewing a portion of the invoices, management will ensure that those charges considered reasonable are appropriate.

POLICIES AND PROCEDURES

Findings: Operational policies and procedures should be established and documented to provide a framework for achieving Metropolitan goals and objectives. Procedures assist management in the training of new employees, provide guidance for consistent performance of daily responsibilities, and provide a source of reference for staff. Failure to maintain up-to-date policies and procedures could diminish the effectiveness of SES Programs and prevent Metropolitan from achieving its safety and environmental goals and objectives. Lack of updated written procedures could result in potential liabilities or losses to Metropolitan due to injuries or non-compliance with applicable laws and regulations. Several procedures were removed from the Health, Safety and Environmental Manual (HSEM), some references in procedures were incorrect, and some procedures needed updates.

Recommendations: We recommend that SES management update the HSEM to reflect current procedures. We also recommend that management provide related training to employees. Further, we recommend that management conduct periodic reviews to ensure compliance with these procedures.

Response: SES generally agrees with the recommendations to revise the HSEM. SES had placed procedure titles ((1) Methylene Chloride Management Procedure, (2) Silica, (3) Polychlorinated Biphenyls, (4) Fluorosilicic Acid, (5) Coal Tar, and (6) Biological Hazards) in the HSEM as place holders for pending regulations. These regulations never occurred nor are they slated for future promulgation. Therefore, these placeholders have been removed from the HSEM. SES recognizes that references in the procedures must be accurate. SES will review and revise the high priority procedures annually and the other procedures tri-annually. The Indoor Air Quality and Ventilation procedure will be revised by March 1, 2013. SES agrees with the recommendation to provide training to ensure tasks are performed according to the HSEM procedures. SES will provide training updates (through scheduled classes or weekly toolbox sessions) as procedures are revised and will ensure that individual employee training plans are reviewed annually.

EVENT DATABASE

Findings: Metropolitan's procedures require Environmental Coordinators to document spills, releases of hazardous materials, and regulatory agency inspections in the EVENT database. This database contains data entry fields for the identification of spill materials, quantity, and reason

for the spill, as well as the name of the regulatory agency/inspector, result of the inspection, and any required follow-up. We could not locate the reasons for the spills on 44 of 361 spill reports. Moreover, we noted that the cost function that accumulates charges for hazardous spills and releases was not being utilized. Failure to collect and input complete spill information could result in management making business decisions based on incomplete or untimely information.

Recommendations: We recommend that SES management remind staff of the importance of accurate and complete data entry in the database. We also recommend that management consider using the cost function to capture expenditures associated with spills and releases of hazardous materials.

Response: SES generally agrees with recommendations to input accurate and complete data into the database. SES is in the process of implementing a new enterprise software system (Enviance) to replace existing software systems and databases (e.g., Event Database). During the development and design, the consultant and staff are determining the critical fields for data entry. The Enviance system is expected to be deployed by October 2013. SES recognizes the importance of capturing the cause of chemical spills. Very small spills (i.e., classified as “Level 3 in the Event Database) with no impact on operations or regulatory compliance do not require investigation of cause. A memo will be prepared (by February 2013) to establish the investigation and internal reporting requirements for each. SES recognizes the importance of capturing the cost of spill cleanup. However, many times the costs of spills are not separable from the other costs bundled on the invoice. A memo will be prepared (by February 2013) that will describe when costs can and cannot be captured.

PERMITS DATABASE

Findings: The SES Section uses the Permits database to record permit/license information (e.g., renewal dates, fees and status) for equipment that require operating permits. Information contained in this database should be complete, accurate and current. Failure to maintain accurate and complete permit information could result in equipment not being licensed or renewed timely. This could also result in unnecessary fines or operating inefficiencies when renewing equipment permits. Several permits were listed as active when the equipment was actually salvaged and some permits did not effectively track permit fees.

Recommendations: We recommend that SES management identify what information should be captured in the Permits database, communicate the data input requirement to staff and conduct periodic reviews to ensure records are properly maintained and updated.

Response: SES generally agrees with the recommendations to identify the appropriate information for inclusion in the Permits database, communicating the data input requirements to staff and conducting periodic reviews. SES recognizes the importance of maintaining an accurate database for equipment permits. During the development and implementation of the

Gerald C. Riss
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new Enviance system, staff will review the data field requirements and the accuracy of all existing permits. SES also recognizes the importance of tracking critical information (e.g., permit expiration dates, permit fees). The Enviance system will provide compliance tracking tools (e.g., compliance task assignments) to ensure that critical deadlines (e.g., permit application renewals, and permit fee payments) are met. The Enviance system is expected to be deployed and fully operational by October 2013 and written procedures will establish data reporting requirements. SES will conduct annual reviews (effective November 2012) of permits in the database to ensure accuracy of the information and that compliance tracking is based on accurate information.

We appreciate the Audit Department's thorough review of the SES accounting and administrative controls over hazardous waste and environmental service agreements, hazardous spills and permits management, and employee safety training. Please contact me if you have any questions concerning our response.



Bart Koch

BK:reg

cc J. E. Clark
B. Coffey J
O. K. Perez
J. Green
D. Guillory
D.M.T. Phan