THE METROPOLITAN WATER DISTRICT
OF SOUTHERN CALIFORNIA

Internal Audit Report for January 2018

Summary

Two reports were issued during the month:

1. **Software License Compliance and Tracking**
2. **Professional Services Contracting**

Discussion Section
This report highlights the significant activities of the Internal Audit Department during January 2018. In addition to presenting background information and the opinion expressed in the audit report, a discussion of findings noted during the examination is also provided.

Software License Compliance and Tracking Audit Report

Background

The Audit Department has completed a review of the administrative controls over Software License Compliance and Tracking as of November 30, 2017.

Our review consisted of evaluating the administrative controls over software license management including software acquisition, installation, tracking and maintenance. We compared software license records with installations over the Metropolitan and SCADA Networks and evaluated vulnerability management related to decommissioned software. Finally, we evaluated the adequacy of Software Management Policies and Procedures.

Computer software maintenance, licensing, and purchases account for a significant percentage of information technology expenditures and management is responsible for ensuring that these assets are in compliance with licensing agreements and are being used effectively. Accordingly, management initiated a software license management process to ensure that the legal agreements that come with procured software are adhered to and it ensures that only legally procured software are deployed on computer systems. Moreover, these tests also become an essential business practice to ensure that staff has the right type of software/licenses. That is, in some instances, users could find themselves over-licensed and/or employees could have unused applications installed on their personal computers. In other instances, staff does not have the required software to perform their job effectively. These processes, then, ensure that Metropolitan is able to identify software needs, budget for software more effectively, procure software at the best possible price and ensure compliance with licensing laws.

The Information Technology Group (ITG) helps ensure only authorized software resides on Metropolitan devices. To achieve this objective, the Information Security Team (IST) of ITG uses a Software Management Database (SMD) to record software purchases and track software installations

on Metropolitan devices. As of November 30, 2017, 1,669 software licenses were recorded in the database. For the fiscal year 2016/17, computer software purchases, licensing and maintenance account for an expenditure of $3.1 million.

Opinion

In our opinion, the administrative controls over Software License Compliance and Tracking 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 as of November 30, 2017.

Comments and Recommendations

SOFTWARE LICENSE MANAGEMENT DATABASE

Software management processes are designed to ensure compliance with software copyright laws that protect an entity from fines and penalties resulting from unlicensed software use. Metropolitan's Operating Policies I-02 (Use of Computer Resources), I-04 (Software Acquisition), and I-05 (Software Licensing Compliance) and ITG Software Management Policies require that ITG maintain such processes and that they maintain records of software use via a license tracking system. The Software Management Database (SMD) is the system repository for this information. Data such as installed software and the version identifier for each computer is captured and maintained. This system allows for the tracking of personal computers on which software is installed, tracing of each software item to the purchase records, and it identifies software needs. It also facilitates the re-assignment of unused software licenses.

During our exam, we scanned SCADA and business networks and compared installed software to the SMD. We noted the following software installations on the business networks were not recorded in the SMD:

#	Software Name	Number of Licenses	Scan/Confirmed
1	Adobe Acrobat DC	11	1/8/2018
2	SnagIt	16	1/8/2018
3	Primavera 6.x	11	1/8/2018
4	Quicken	2	1/8/2018

We also examined purchase documentation for a sample of 50 installations listed in the SMD and were unable to locate purchase documentation in two instances.

Failure to keep complete, accurate records of licensed software and to periodically scan networks for unauthorized software installations could result in the use of unlicensed software and non-compliance with Metropolitan policy.

We recommend that ITG perform periodic reconciliations of installed software to the SMD.

SOFTWARE MANAGEMENT POLICIES AND PROCEDURES

Policies and procedures should be periodically reviewed and updated to reflect organizational changes and operational needs. For software license management, policies and procedures govern software acquisition, installation, tracking and maintenance.

We reviewed Software Management Policies and Procedures and noted the following:
- Authorized software is required to be associated with a computer bar code, allowing the Information Security Team to track it to a specific owner and installation. We noted that computers on SCADA Networks are tracked using a unique reference number instead of the computer bar code.
- Software licenses used by the Engineering Department, such as Solidwork, RISA 3D, SP Column and SAP 2000, are not tracked on the SMD.

Inconsistent tracking procedures and failure to track all licensed software may result in unauthorized software going undetected.

We recommend that ITG review policies and procedures for effectiveness and consistency and revise as is appropriate. We also recommend that all licensed software be tracked on the SMD.

Professional Services Contracting Audit Report

Background

The Audit Department has completed a review of the accounting and administrative controls over Professional Services Contracting as of August 15, 2017.

Our review consisted of evaluating the professional services contract process, consultant evaluation and selection practices, and tracking and reporting activities. We also verified the validity and propriety of payments to consultants for compliance with contractual terms and conditions and for assurance that the amounts billed were properly calculated and adequately supported.

The Professional Services Contracting (PSC) Team, within the Contracting Services Unit and Administrative Services Section, is responsible for the acquisition of professional services. These contracts are made through the solicitation of qualifications and proposals in a competitive process, or are made as sole source non-competitive assignments.

The contracting process is initiated by an approved request which results in the creation of a request for qualifications or proposals and response from qualifying consultants. Competing responses are evaluated against predetermined criteria and a professional service contract is awarded. In sole source assignments, a contract may be awarded without competition as provided by the Administrative Code. The administrative code sections that serve as guidelines for professional service contracts include Administrative Code sections 8121c, 8140(h), and 2720 e(2).

Section 8121c grants authority to the General Manager to exercise without restriction the contractual powers conferred by Section 8121(b) regardless of subject matter, provided that the amount payable under any one contract for professional and technical services during any one year shall not exceed $250,000. Section 8140 requires that all contracts estimated to cost $75,000 or more shall be made upon a competitive procurement method; however, Section 8140(h) exempts contracts for services of a professional, artistic, scientific, or technical character. Section 2720 e(2) requires the General Manager to report quarterly to the Organization, Personnel, and Technology Committee the employment of any professional and technical consultant and on the exercise of any power delegated under Section 8121(c) for professional and technical services. Finally, Operating Policy G 05-Procurement of Goods and Services, Purchasing manual, and the Purchasing and Professional Services Contracting Procedures manual established the policies and procedures for the procurement of goods and services by Metropolitan staff.

The PSC Team tracks professional services agreements and issues reports to the Board on a quarterly and annual basis. As of August 15, 2017, there were 346 active professional service agreements (216 rollover agreements and 130 regular agreements), with a maximum payable of $1.2 billion. As of August 15, 2017, payments made on the active professional service agreement totaled $611.7 million.

The table below quantifies active professional services agreements by type as of August 15, 2017:

Solicitation Type	Number of Rollover Agreements	Number of Regular Agreements	Total All Agreements	Total Maximum Payable	Total Expenditures
Request for Qualifications	142	51	193	119,038,499	62,840,713
Small Purchase	31	39	70	2,513,729	1,231,114
Request for Proposal	21	15	36	1,071,799,497	525,111,560
Sole-Source	17	19	36	9,849,350	14,698,937
Government Agency	5	6	11	6,761,248	7,825,685
Grand Total	216	130	346	1,209,962,323	611,708,009

Opinion

In our opinion, the accounting and administrative procedures over Professional Services Contracting 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, 2013 through August 15, 2017.

Comments and Recommendations

AGREEMENT LENGTH

Purchasing and Professional Services Contracting (PPSC) Procedures state agreements will normally not exceed three years except in circumstances where solicitation time and costs, investments costs, or transition costs are prohibitive, or when significant savings can be had by entering into a longer duration agreement.
We performed an analysis of all 335 active services agreements reported in the Annual Report of Professional Services Agreements for Fiscal Year 2016/17. We noted the following:

1. Fifteen of 123 active regular agreements (totaling $38.2 million in expenditures) and 15 of 212 active rollover agreements (totaling $22.3 million in expenditures) have been active from 5 to 25 years without being rebid.
2. As of June 30, 2017, four regular agreements (totaling $4.1 million in expenditures) and eleven rollover agreements (totaling $2.2 million in expenditures) remained open 61 to 288 days after their expiration date.

The continuous renewal of agreements without rebidding may result in a lost opportunity for Metropolitan to reduce costs due to possible changes in the market place in terms of price or service level offered.

We recommend management review active agreements older than three years to determine if they should be re-bid or re-negotiated. We also recommend management close contracts at the expirations dates and conduct periodic reviews to ensure compliance.

POLICIES AND PROCEDURES

Policies and procedures should be established and documented to provide a framework for achieving Metropolitan's goals and objectives. Procedures provide management with guidelines for consistent performance of daily operations, assist management in the training of new employees, and provide a source of reference for experienced personnel. The Administrative Code and the Purchasing and Professional Services Contracting (PPSC) Procedures provide guidance for contracting professional services.

Our review of 28 of 346 active agreements revealed the following:

1. Current practices were not reflected in Purchasing and Professional Services Contracting (PPSC) Procedures. For example, the completion and signing of a Potential Conflicts of Interest form by respondents to RFP and RFQ solicitations is not addressed in the procedures.
2. Criteria for classifying agreements as "regular" are not documented.
3. We could not locate RFP documentation (RFP Proposal, Business Outreach Recommendation memo, Evaluation Summary, Recommendation to Award memo, and Agreement Request) for agreements 48305 and 48306 with Reams Asset Management Co. LLC and Hillswick, respectively. It should be noted that these agreements were processed and executed by the Chief Financial Officer Group in 2002, when the

       contracting function was decentralized.
4. We could not locate documentation showing efforts to locate a qualified small business enterprise (SBE) or disabled veteran business enterprise (DVBE) for two small purchase agreements, as required by PPSC Procedures.

We recommend management evaluate and update the PPSC Procedures to reflect current practices. We also recommend that management conduct periodic tests to ensure compliance with policies and procedures.