



THE METROPOLITAN WATER DISTRICT
OF SOUTHERN CALIFORNIA

Report
Office of General Auditor

Internal Audit Report for July 2020

Summary

Two reports were issued during the month:

- 1. Quarterly Consulting and Services Contracts Review Report for Period Ending March 31, 2020**
- 2. Dam Rehabilitation and Safety Program Audit Report**

Discussion Section

This report highlights the significant activities of the Internal Audit Department during July 2020. 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.

Quarterly Consulting and Services Contracts Review Report for Period Ending March 31, 2020

We reviewed the Report of Professional Services Agreements (Professional Services Report) and the Report of Contracts for Equipment, Materials, Supplies, and Routine Services of \$250,000 or Above Contracts (Contracts Report) for the Third Quarter of fiscal year 2019/20, issued by the Chief Administrative Office. The purpose of this review is to gain reasonable assurance that information included in these reports is accurate, complete, timely, and in compliance with the Metropolitan Water District Administrative Code.

PROFESSIONAL SERVICES AGREEMENTS REPORT

Background

Administrative Code Section 2720(e)(2) requires that the General Manager report to the Organization, Personnel and Technology 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 Administrative Code also requires the Professional Services Report to indicate when a consultant is a former Metropolitan employee. Administrative Code Sections 2721-2723 require the General Counsel, General Auditor, and Ethics Officer to report quarterly to their respective committee concerning any expert or professional service agreements executed pursuant to their authority under the Administrative Code.

The Professional Services Report is prepared on a quarterly and annual basis to comply with these Administrative Code requirements and identify those contracts administered by the General Manager, General Counsel, General Auditor, and Ethics Officer.

During the quarter ending March 2020, the Professional Services Report disclosed that \$56.8 million was paid for consulting and professional services. It should be noted that totals reported under the General Counsel's authority exclude payments related to the San Diego County Water Authority litigation, which is accounted for under the Self-Insurance Retention Fund.

For the quarter ending March 2020, 42 of 402 agreements were sole-source agreements totaling \$2,650,976, representing 5% of year-to-date expenditures for fiscal year 2019/20. We also noted that 106 of 402 agreements were small purchases of less than \$74,999, totaling \$1,377,599, representing 2% of year-to-date expenditures for fiscal year 2019/20. See the tables below for detail:

Fiscal 2019/20

Year-to-Date Q3	General Manager	General Counsel	General Auditor	Ethics Officer
Contract Expenditures	\$56,347,999	\$193,916*	\$456,685	\$23,988
Active Agreements	372	114	1	1
Agreements Terminated	28	13	-	-

* For agreements with transactions during the current fiscal year.

Govt. Agencies	RFP	RFQ	Small Purchases	Sole Source	Total**
\$449,341	\$32,356,041	\$19,994,715	\$1,377,599	\$2,650,976	\$56,828,672
13	42	199	106	42	402
1%	57%	35%	2%	5%	100%

** Does not include General Counsel's Expenditures

Testing Procedures Performed

Our procedures included a cursory review of the reasonableness of the professional service expenditures and analysis of consultants with multiple active agreements, to determine whether agreements were split into smaller contract amounts to circumvent established approval limits. We also evaluated whether statistics in the Professional Services Report were adequately supported and assessed the timeliness of board reporting.

Testing results

Our review did not reveal any agreements that appeared to be unreasonable or split to override established approval limits. In addition, our review did not reveal any material differences between the reported amounts and supporting documentation. Finally, we noted the Professional Services Report was issued to the Board on June 9, 2020.

CONTRACTS FOR EQUIPMENT, MATERIALS, SUPPLIES, AND ROUTINE SERVICES OF \$250,000 OR ABOVE REPORT

Background

Administrative Code Section 2720(e)(2) requires that the General Manager report to the Organization, Personnel and Technology Committee on the execution of any contract authorized under Section 8122(g) – Contracts for Equipment, Materials, Supplies and Routine Services. This code section states that the General Manager may execute contracts for the purchase of materials, supplies, and other consumable items such as fuels and water treatment chemicals generally identified in the budget regardless of dollar value, provided that sufficient funds are available within the adopted budget for such purchases.

The Contracts Report is prepared quarterly to report on contracts that comply with these Administrative Code requirements. During the quarter ending March 31, 2020, the Contracts Report disclosed seventeen contracts that fit these criteria. We noted the total maximum amount payable for these contracts was \$22.8 million. Nine of these contracts were awarded as a result of competitive bidding under Administrative code section 8140 – Competitive Procurement, two were cooperative agreements, whereas the remaining six were sole-sourced.

Testing Procedures Performed

Our procedures included a cursory review of the reasonableness of expenditures. We also verified that all contracts of \$250,000 or more for specified items were included in the Contracts Report and adequately supported. Finally, we assessed the timeliness of board reporting.

Testing results

Our review did not reveal any discrepancies between contracts and amounts shown in the Contracts Report and supporting documentation. We also noted that the policies and procedures for competitive bidding and sole source agreements are in place. Finally, we noted for the quarter ending March 31, 2020 Contracts Report was issued to the Board on June 9, 2020.

Dam Rehabilitation and Safety Program Audit Report

The Audit Department has completed a review of the administrative and accounting controls over the Assessment of Dam Structures at Lake Mathews and Lake Skinner and the Dam Safety Management Program as of March 30, 2020.

Scope

This audit consisted of a review of two related Dam inspection programs; one by the California Department of Water Resources Division of Safety of Dams (DSOD), and the other by

Metropolitan's Safety of Dams (SOD) Team. Our work was limited to the documentation associated with periodic inspections to ensure compliance with established schedules and timetables. We also assessed the completeness of documentation, reviewed final reports, and examined management's response to noted findings.

We also reviewed the controls over equipment procurement and professional service contracts associated with the Dam Safety Management Program and the Assessment of Dam Structures at Lake Mathews and Lake Skinner. Specifically, we evaluated the administration of the procurement agreement with Allen Instruments and Supplies (#175051) and the professional services agreement with AECOM Technical Services, Inc, (AECOM) (#177534). We reviewed project authorization, vendor bidding and qualification, project planning, and execution. We tested compliance with terms and conditions of the agreements and evaluated invoice payments for assurance that the amounts billed were valid, appropriately invoiced, and adequately supported. Finally, we reviewed internal labor hours charged for reasonableness and appropriateness to budget and project forecasts.

Background

The State of California has regulated dams since 1929 to prevent failure, safeguard life, and protect property. The California Water Code entrusts regulatory power over dam safety to the Department of Water Resources (DWR), who delegates that authority to the Division of Safety of Dams (DSOD). DSOD provides oversight to the design, construction, and maintenance of approximately 1,250 jurisdictional dams in California, including 24 within Metropolitan's distribution system.

The DSOD classifies dams into four hazard categories: extremely high, high, significant, and low. The assigned classifications do not relate to the condition of a dam or its appurtenant structures, but rather to the impact on life and property should the dam fail when operating with a full reservoir. Assembly Bill 1270, signed into law in 2018, requires the DSOD to inspect jurisdictional dams that have one of the top three downstream hazard classifications once every fiscal year (July 1 to June 30). In contrast, inspections for low-hazard dams must occur at least once every two fiscal years. As of March 30, 2020, Metropolitan owned and operated eight dams classified as extremely high, nine rated high, two valued as significant, and one assessed as a low hazard dam.

Metropolitan's dams, constructed of various materials such as earth, earth and rock, and concrete, are between 18 and 80 years old. They range in height from 15 to 285 feet with capacities of 18 to 810,000 acre-feet. The Engineering Services Group Safety of Dams Team (SOD) inspects dams monthly and semi-annually; on-site staff members augment these inspections with routine visual checks. Additionally, Metropolitan monitors groundwater levels and seepage, and measures surface deformation of dam embankments and structures using geodetic deformation monitoring equipment. Such equipment, required by the DSOD operating permit, is critical to assess potential damage after an earthquake.

SOD inspections over the years revealed the gradual deterioration of monitoring equipment. Accordingly, in September 2017, the Board awarded a \$748,354 contract to Allen Instruments & Supplies to replace monitoring equipment at Diamond Valley Lake (DVL). As of March 30, 2020, Metropolitan paid Allen Instruments and Supplies \$705,381 under this contract.

In July 2017, the DSOD required Metropolitan to conduct detailed evaluations of appurtenant dam structures, including hydraulic capacity, geotechnical stability, structural integrity, and potential erosion from spillway releases at Lake Matthew and Lake Skinner. Internally performed inspections revealed that monitoring systems used to provide early warning of dam distress were outdated and required replacement. As such, in December 2017, the Board awarded a \$1,530,000 agreement to AECOM Technical Services, Inc. The scope of work included geotechnical field investigations, hydraulic and structural analyses for the spillway evaluations, seismic assessments of the outlet works, and condition assessments of the existing dam monitoring systems at these two Lakes. As of March 30, 2020, Metropolitan paid \$1,417,974 to AECOM under this contract.

Opinion

In our opinion, the accounting and administrative controls over the Dam Safety Management Program include those practices usually necessary to provide for a generally satisfactory internal control structure. We do express concern about missing inspection reports, adherence to dam inspection schedules, and lack of documented follow-up on corrective action. The degree of compliance with such policies and procedures provided effective control for the period July 1, 2016, through March 30, 2020.

Comments and Recommendations

SAFETY OF DAMS (SOD) ROUTINE INSPECTIONS

The Engineering Services Group Safety of Dams Inspection Team (SOD) performs monthly and semi-annual dam inspections per Metropolitan policies. These guidelines require monthly exams on the Garvey Reservoir, Diamond Valley Lake, Diemer Finished Water Reservoir, Lake Mathews, Lake Skinner, Live Oak Reservoir, and the Palos Verdes Reservoir. Furthermore, the policy requires semi-annual exams on Cajalco Creek, Copper Basin Reservoir, Gene Wash Reservoir, Goodhart Canyon Basin, Mills Finished Water Reservoirs and Reclamation Basin, Skinner Finished Water Reservoir, and the Weymouth Finished Water Reservoir. The SOD team prepares post-inspection reports, which include summaries of the work performed, photographs of the areas inspected, and findings requiring further action. The results of these investigations, along with recommendations, are tracked for timely completion.

Our audit consisted of a review of inspection reports issued between July 1, 2017, and June 30, 2019. We noted that monthly inspection reports could not be located for 55 of the 159 instances examined. Additionally, we could not locate 37 of the 44 bi-annual inspection reports. We also noted that the timing of inspections did not always comply with established policies and schedules. Finally, documentation in support of communication, acceptance, and resolution of

findings by dam managers was not always clear nor conclusive. It should be noted that management subsequently provided 33 of the monthly and 24 of the bi-annual reports.

Failure to complete periodic inspections could result in regulatory fines to Metropolitan. Failure to resolve inspection findings on a timely basis could result in escalating structural, operational, or environmental mitigation repair costs.

Finally, failure to maintain thorough documentation of dam inspection reports, findings, and management's corrective action could result in the appearance of non-compliance to established policies and may result in improper regulatory fines.

We recommend that management remind employees of the importance of compliance with established procedures and conduct periodic reviews to ensure compliance.

CALIFORNIA DIVISION OF SAFETY OF DAMS (CDSOD) ACTION ITEMS

The California Water Code stipulates that the DSOD is to inspect jurisdictional dams that have a hazard classification of extremely high, high, and significant at least once per fiscal year and those with a low hazard classification at least once every two years. Upon receipt of a DSOD inspection report, the results of the exam, along with findings, should be recorded and tracked by the Issue Tracker system.

We randomly selected five dams for testing and obtained the DSOD inspection reports issued for these facilities for the period July 1, 2017, to June 30, 2019. The sample consisted of nine inspection reports that identified 29 actionable items. Our test work compared these reports to the Issue Tracker system and noted:

- The Issue Tracker did not include twelve corrective action items.
- The Issue Tracker did not indicate a completion date for four action items.
- Completed action items did not evidence supervisory review.

We also noted that DSOD documented the following repeat action items:

- Rodent and vegetation control at Diemer Finished Water Reservoir, Lake Skinner, Live Oak Reservoir, and Palos Verdes Reservoir
- Overdue Instrumentation and Surveillance reports for various locations, such as Cajalco Creek, Copper Basin, Gene Wash, Goodhart Canyon, and Henry Mills Reclamation Basin

We note that responses to action items involve the collaboration and coordination between SOD and the Water Systems Operation Group.

Failure to comply with DSOD requirements could result in fines or financial loss to Metropolitan due to non-compliance with regulatory requirements.

We recommend that management establish procedures to track, monitor, and complete all DSOD action items. Additionally, these procedures should ensure that Instrumentation and Surveillance reports are completed on a timely basis. For recurring findings, such as vegetation and rodent control, we recommend that management consider a district-wide solution to drive efficiency and effectiveness.

POLICIES AND PROCEDURES

Policies and procedures should be established and documented to provide a framework for achieving compliance with regulatory requirements and department goals and objectives. Procedures provide guidance for the consistent performance of daily operations, assist in the training of new employees, and provide a source of reference for experienced personnel.

Our review noted that written procedures for SOD practices had not been completed.

We recommend that the Safety of Dams Team management establish and document procedures that reflect Metropolitan operating practices and that align with DSOD requirements.

COMPLIANCE WITH TERMS AND CONDITIONS OF THE AGREEMENT

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

We examined three Allen Instruments & Supplies invoices totaling \$696,341 and twelve AECOM invoices totaling \$580,056. During our review, we noted that Metropolitan paid AECOM a \$418.50 mark-up, which was a pass-through cost from its sub-consultant, V&A Consulting Engineers. There was no provision for this charge in the fee schedule or task order, as stipulated in Section 7b of the agreement.

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

We recommend management remind staff and vendors of the importance of complying with agreement terms and conditions and for management to perform periodic reviews to ensure compliance.