



Metropolitan St. Louis Sewer District

Emergency Contracts

February, 2018

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INTRODUCTION AND SCOPE

This engagement was part of the FY '17 audit plan. The overall objective of the engagement was to review the District processes for procuring, executing and managing Emergency Contracts. The need for Emergency Contracts occurs when a *“situation or condition exists that may vitally affect the life, safety, health and/or welfare of employees and/or citizens of the District or their property. An emergency shall also include those situations or conditions in which the supplies, materials, equipment, property, and real property of the District are likely to be lost or severely damaged, or the condition may result in disruption of District operations or cause the District not to be in compliance with the Consent Decree”* – **per Ordinance # 13537, adopted December 13, 2012.**

Late in December of 2015, specifically December 26th through the evening of December 28th, the District's service area received historic amounts of rain causing severe flooding. As a result the Grand Glaize and the Fenton Waste Water Treatment plants were both rendered inoperative. The Fenton Plant, in particular, suffered significant damage. In addition, the Missouri River Wastewater Treatment Plant was damaged by the flood waters but remained “on-line”.

Since the damage was so severe and two treatment plants were completely inoperative (interruption of District operations), it was necessary for the District to declare an emergency and take very quick action. As such, the District enlisted the services of two construction contractors to provide facility construction services. In addition, the District enlisted the services of an engineering consultant to provide construction management services.

The following ordinances were presented by Management and adopted by the District's Board of Trustees:

- 1/14/16 - # 14321: Initial appropriation - \$10 million
- 1/14/16 - # 14322: Contract with Kennedy Associates/Architects, Inc. – design/construction management services
- 1/14/16 - # 14323: Contract with KCI Construction Company – construction/repairs at Fenton Plant
- 1/14/16 - # 14324: Contract with Goodwin Brothers – construction/repairs at Grand Glaize Plant
- 2/11/16 - # 14325: Supplemental appropriation - \$2.5 million
- 3/10/16 - # 14339: Supplemental appropriation - \$2.5 million

Scope

The scope of this engagement focused on the District's processes for identifying emergency situations, making emergency declarations, and procuring, executing and managing Emergency Contracts. There was a specific focus on the processes utilized for the December, 2015 flood event.

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OBJECTIVES

Objectives

The overall objectives of this engagement were to:

- Verify compliance with District ordinance and policy guidelines AND to ensure the procedures around emergency events and emergency contracts are adequately designed and implemented. Specific process areas included:
 - Identifying and declaring an emergency event or condition.
 - Procuring and executing emergency contracts.
 - Contractor selection process
 - Contract management and monitoring.

- Ensure the structure of each emergency contract is adequately designed, incorporating provisions or mechanisms that adequately control costs and/or protect the District.
 - District stakeholder interests are protected.
 - Costs are reasonable.

- Ensure the billings submitted by the contractors:
 - Are prepared accurately (mathematically).
 - Are supported by appropriate documentation.
 - Are prepared using appropriate rates and are prepared in accordance with the terms of the contract.
 - Costs are reasonable and allowable per the provisions of the contract.
 - Contain overhead amounts that are accurately and properly calculated using rates that were reviewed and/or agreed to by the District (**cost-plus contracts ONLY**).
 - Are priced accurately and consistently for portions of work performed by subcontractors.
 - Do not contain costs already absorbed (paid by) by the District.

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METHODOLOGY

Methodology

To accomplish the above objectives, Internal Audit (IA):

- Obtained and reviewed District documentation:
 - Ordinance # 13537 (Purchasing Ordinance)
 - *The Method and Procedures of Payment for Emergency Work* (Procedural Document)
 - Ordinances declaring emergency conditions, appropriating funds, and approving contracts (ordinances are listed at page 2)

- Held discussions with personnel from Engineering to gain an understanding of the procedures utilized for emergency events/conditions, such as:
 - Identifying and documenting events
 - Formally declaring an emergency
 - Selecting contractors for emergency work
 - Developing and executing contracts
 - Managing contracts and related billings

- Obtained and reviewed the structure and provisions of the contracts for the three prime contractors:
 - Two contracts for structural construction services
 - One contract for construction management services

- Performed detail testing of invoice billings from the aforementioned contractors.
Reviewed for:
 - Mathematical accuracy, reasonableness, and overall propriety
 - Adequacy of the supporting documentation
 - Compliance with contract terms
 - Billing methodology
 - Pricing
 - Accuracy, consistency, and propriety of amounts pertaining to subcontractors

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OVERALL CONCLUSION AND RESULTS

In the opinion of Internal Audit, in all significant respects, the controls and procedures utilized for emergency events and the resulting emergency contracts complied with established policies and are effectively designed and implemented. However, IA did note a few items that are opportunities for strengthening the overall process. These items are discussed in detail in the *Opportunities for Improvement* section of this report.

Initial Inherent Business Process Risk: Moderate Risk [#]
Overall Assessment of Engagement Results: Satisfactory ^{}**

^DEFINITIONS

How Results Are Assessed

^{**} Engagement results are evaluated as *Satisfactory*, *Generally Satisfactory* or *Unsatisfactory*.

- **Satisfactory** (*clean opinion*) – No significant engagement findings² or material weaknesses³ were noted. Engagement findings¹ may have been noted.
- **Generally Satisfactory** (*qualified opinion, i.e. “except for”*) – Results contain significant engagement findings². No material weaknesses³ were noted.
- **Unsatisfactory** (*adverse opinion, immediate Management attention required*) – Significant engagement findings² and/or material weaknesses³ were noted.

Types of Findings

1. Engagement Finding ([#]Low Risk): An engagement finding is a condition that could adversely affect the organization but is less severe than a significant engagement finding or significant deficiency. Classification includes process or control deficiencies that are not significant deficiencies as well as includes other low risk or low impact conditions.

2. Significant Engagement Finding ([#] Moderate to High Risk): A significant engagement finding is a condition that could adversely affect the organization. Definition includes all types of findings, such as irregularities, waste, ineffectiveness, conflicts of interest, illegal acts, errors, and significant deficiencies in internal control over financial reporting as well as other significant internal control weaknesses. From a financial reporting perspective, a significant deficiency is defined as a deficiency, or a combination of deficiencies, in internal control over financial reporting that is less severe than a material weakness, yet important enough to merit attention by those charged with governance.

3. Material Weakness ([#]High Risk): A material weakness is a deficiency, or a combination of deficiencies, in internal control, such that there is a reasonable possibility that a material misstatement of the financial statements will not be prevented or detected and corrected in a timely basis. For internal audit purposes, the definition also includes material and/or severe irregularities, waste, ineffectiveness, conflicts of interest, illegal acts, errors, and other material control weaknesses, etc.

(The term “material weakness” should be thought of as a serious category of significant engagement findings and/or significant deficiencies. However, not all significant engagement findings and significant deficiencies are material weaknesses.)

[^] - Definitions are based on guidance from the IIA Standards, GAAS, and the PCAOB.

[#] - Risk is assessed at the District (Entity) Level. (Risk to the District as a whole)

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OPPORTUNITIES FOR IMPROVEMENT

Issue 1 – Contract Language for Emergency Contractors

Condition:

When reviewing the contract documentation for the three emergency prime contractors, IA noted the following:

- I. No “Not-to-Exceed” language or provision was included. Such language is required by Ordinance #13537 (section 5.2) for “Immediate Need” and “Emergency Procurement” contracts.
- II. Language addressing “flow-down” provisions to the subcontractors was not included in the agreements. Potential areas for “flow-down” provisions include:
 - Overall mark-up percentages
 - Tool factor thresholds
 - Retainage
- III. The language regarding the prime CM (construction management) contractor’s mark-up of the subcontractor costs was ambiguous and confusing. The language could be interpreted as follows: *prime is allowed to apply a Fixed Fee of 12% on top of a 5% markup on sub-contractor costs*. However, after an additional review of the billings by IA, it was determined that the 12% was not actually applied to the 5%. Strictly a 5% mark-up of subcontractor costs was applied by the prime.

Recommendation:

To improve the clarity and effectiveness of the language of these types of contracts, IA recommends that the District take the following steps as they pertain to Emergency/Immediate Need contracts:

- I. Include “Not-to-Exceed” language within each contract.
- II. To improve consistencies in billing provisions and methodologies between the Prime and the Subs, include language addressing “flow-down” provisions to the subcontractors. Areas to be addressed by “flow-down” provisions include:
 - Overall mark-up percentages
 - Tool factor thresholds
 - Retainage provisions
- III. Improve and clarify the language regarding the prime CM (construction management) contractor’s mark-up of subcontractor costs. The language should be improved so that it is clear to the reader that a mark-up of strictly 5% is to be applied to subcontractor costs.

OPPORTUNITIES FOR IMPROVEMENT

Issue 1 – Contract Language for Emergency Contractors (Cont'd)

Risk Rating at District (Entity) Level: Low
Risk Rating at Business Process Level: Moderate

Process Owner Response:

Recommendation I – “Not-to-Exceed” language

The following language was incorporated in the General Project Specifications in December 2016.

13. ENGINEER’S ESTIMATE OF THE COST OF THE WORK:

The Engineer’s Estimate of the cost of the work is \$_____. The Contractor shall not perform Work that exceeds the Engineer’s Estimate without prior written notice from the District that sufficient funding has been secured to pay for Work in excess of this amount.

Recommendation II – “Flow Down Provisions”

Article 2 of the Emergency Contract lists “The Method and Procedures of Payment for Emergency Work” as one of the contract documents. In February 2017, clarifying language was added in Section VI, Paragraph 4 relative to subcontractor costs and rates.

Recommendation III – CM contract language regarding application of fixed fee and subcontractor 5% mark-up

The clarifying language was incorporated into the Consultant Emergency Contract Cost-Plus-Fixed Fee contract language in January 2017 following a review of the language change by the Legal Department.

Date of Implementation: Completed

OPPORTUNITIES FOR IMPROVEMENT

Issue 2 – Mark-up of Labor Charges Combined with Equipment Charges

Condition:

During the review of construction invoices it was noted that one of the contractors and its' subcontractor applied a 25% mark-up on a rates that combine charges for labor **and** equipment costs.

Per the contract, mark-ups are to be applied as follows:

- 25% mark-up on labor costs (wages, FICA taxes, work. comp. insurance, etc.)
- 12.5% mark-up on cost of materials, equipment (owned, rented), etc.

Based on the contract, it is not appropriate to charge a 25% mark-up on the equipment portion of the combined rate mentioned above. A 12.5% mark-up should have been used for the equipment portion of the rate.

It should be noted that, in this particular instance, large dollar amounts were not involved with this issue. IA identified approximately \$1,000 in excess mark-ups. However, in future contracts it is possible that larger dollar amounts could be involved.

Recommendation:

To improve efforts to control costs, the District should avoid or disallow the usage of rates that combine costs from two mark-up cost categories.

This should be addressed in the initial contract and the supporting rate schedules.

Risk Rating at District (Entity) Level: Low

Risk Rating at Business Process Level: Moderate

Process Owner Response:

The District's current emergency contract documents specify that the contractor is to submit separate rates for labor and equipment and the contract administrator for the audited project should not have accepted the combined rates as submitted by the subcontractor.

In order to minimize the potential for a similar error being made in the future, the wording of Section VI, Paragraph A.4 has been modified to specifically state that combined labor and equipment rates will not be accepted by the District. In addition District staff responsible for the review and acceptance of the contractor's proposed labor and equipment rates on future emergency work will be provided with additional training with regard to this matter.

Date of Implementation:

January, 2018

OPPORTUNITIES FOR IMPROVEMENT

Issue 3 – Administrative Items

Condition:

Regarding the administrative process for the emergency event and the related contracts, IA noted the following:

1. Two signatures were missing on each of the Emergency Declaration Status Forms for Grand Glaize and Fenton. (Missouri River WWTP form contained all required signatures.)
2. The Emergency Declaration Status Forms refer to a superseded ordinance. (The forms should refer to Ordinance # 13537.)
3. No Incident Reports were prepared and maintained on file as required by the District's procedural guide for emergency work (The Method and Procedures of Payment for Emergency Work).

The items above did not appear to have a material or any type of real impact on the overall process. Items appear to be minor administrative oversights:

1. The missing signatures pertain to personnel that were in attendance at the meetings to discuss and approve the Emergency Declaration
2. The currently effective Ordinance is followed by the District. However, the Declaration Form should be accurate and refer to the correct Ordinance.
3. The majority of this information is also captured on the Emergency Declaration Status Forms. (Completing Incident Reports may have been somewhat duplicative in nature.)

Recommendation:

IA recommends that Management take steps to ensure the process for Emergency Contracts is adequately documented and the administrative steps are properly performed and completed. Steps include ensuring:

1. Documentation is properly signed and approved.
2. The forms utilized for the process are periodically reviewed and appropriately updated.
3. Completion of all required forms as outlined in the District's procedural document, The Method and Procedures of Payment for Emergency Work.

Risk Rating at District (Entity) Level: Low

Risk Rating at Business Process Level: Low

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OPPORTUNITIES FOR IMPROVEMENT

Issue 3 – Administrative Items (Cont'd)

Process Owner Response:

Staff agrees that the Incident Form needs to be updated to reference the current Purchasing Ordinance.

With regard to the other recommendations, it is a standard practice of the Engineering Department staff to perform a “lessons learned” evaluation following each emergency event and to modify procedures, forms and contractual documents as deemed appropriate.

In November 2016, the “Workflow for Emergency Events” was updated to better reflect the processes and protocol that must be followed, including those steps referenced above. At the same time, “The Method and Procedures of Payment for Emergency Work” and the associated forms were updated. In addition workflow process diagrams were updated to 2016 includes the recommended process steps

Date of Implementation:

The Incident Form was updated in December 2017 to reflect the current Purchasing Ordinance.

Engineering Department staff review of processes and procedures will be conducted after each emergency event to identify areas of process improvement.

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Internal Audit Engagement Team:

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