Performance Audit

ALLEGHENY COUNTY
SANITARY AUTHORITY
(ALCOSAN)

Report by the
Office of City Controller

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April 2009
April 1, 2009

To the Honorables: Pittsburgh Mayor Luke Ravenstahl, Allegheny County Executive Dan Onorato and Members of Pittsburgh City and Allegheny County Councils:

The Office of City Controller is pleased to present this performance audit of the Allegheny County Sanitary Authority conducted pursuant to the Controller’s powers under Section 404(c) of the Pittsburgh Home Rule Charter.

EXECUTIVE SUMMARY

The City Controller and the Allegheny County Controller jointly conducted this performance and fiscal audit of the Allegheny County Sanitary Authority (ALCOSAN). The City Controller assessed the Authority’s procurement practices for Construction/Purchase of Goods and Professional Services contracts focusing on compliance with internal contracting procedures and compliance with statutory procurement requirements. A sample of contracts awarded between January 1, 2007 and June 30, 2008 was selected for testing. Total dollar value of Professional Services Contracts and Construction Contracts tested was $14,223,091 and $12,883,373, respectively.

Findings and Recommendations

Compliance with Statutory Procurement Requirements

Finding: ALCOSAN’s Construction and Professional Services contract procedures are in substantial compliance with applicable statutory procurement requirements.
Finding: ALCOSAN’s Construction contract award process complies with the Municipality Authorities Act’s public notice and lowest responsible bidder requirements.

Finding: ALCOSAN’s Professional Services Evaluation and Recommendation Procedures do not fully comply with the Code. There is provision for negotiating Professional Services fees but not for explaining in writing why the recommended firm was determined to be best qualified.

Finding: Seven “Wet Weather Basin Facilities Planning Recommendations” proposal evaluations were found. These would satisfy the ‘determined in writing’ requirement. However, the auditors found no similar written proposal evaluations for the other Professional Services contracts in the testing sample.

Recommendation: To fully comply with State procurement requirements, all Professional Services contract award recommendations should specify in writing how the recommended firm meets the “evaluation factors set forth in the request for proposals”.

General Contract Organization

Finding: An easily accessible list of all Professional Services and Construction contracts awarded during this time period did not exist; the Executive Assistant had to compile a list for the auditors. Even though the Construction contracts had a numeric number for reference, one contract for a large construction project was missing from the listing. Professional Services contracts did not have any reference system.

Recommendation: A complete list of all contracts should be kept on a data base for easy access. A contract numbering or other identification system should be developed for Professional Services Contracts.

Finding: Professional Service contract documentation is not centrally located. The Executive Director explained that information was kept in different departments. Requested information had to be specified for different ALCOSAN staff to locate. Construction contracts are kept together in a storage vault.

Recommendation: Professional Service contracts should be kept in one location with individual files containing all documentation relating to the award process. A central location for all contracts (with one file for every contract) would provide easy access, not only for auditing purposes but for any questions relating to the contract.
Documentation verifying ALCOSAN’s written procurement processes was requested for each contract in the sample. The Executive Director provided an answer sheet with explanations about each document requested. Requested documents were referenced as attachments.

**Finding:** Some Professional Services Contract (PSC) attachments seemed as if they were prepared for the auditors from memory rather than retrieved from actual contract files. Other documents referred to as attachments were missing.

**Finding:** Many PSC documents provided by ALCOSAN had no letterhead, markings, dates or signatures as to when the documents were prepared or by whom.

**Recommendation:** Documents, whether prepared in-house or by the outside consultant, should be dated and include the name of the preparer, their position with the Authority or their firm. Documents prepared by outside consultants should be identified by company letterhead. Then, if questions arise about the document, the responsible person can be easily identified and contacted.

**Finding:** Answer sheets supplied for Construction contracts had more of the requested documents in the files.

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**Professional Services Contract Testing**

**Finding:** As written, the Authority’s internal procedures for awarding Professional Services contracts exceed statutory requirements. However, there was insufficient documentation for the Professional Services contracts in the testing sample to support compliance with all internal award procedures.

A July 25, 2000 memo from the Executive Director to the Professional Services Committee describes the “formal procedure used by the Authority to acquire professional service firms” yet states that “the various steps described in this procedure may be modified or waived as necessary depending on the specific service required”.

**Finding:** Missing documentation may have been due to steps in the award process being modified or waived. However, there was no evidence that such waiver or modification had occurred.

**Recommendation:** Any deviation from formal contracting procedures should be explained and documented.
**Recommendation:** All informal contract procedures should be documented as “Memo to File” and included in the contract.

**Finding:** Not all contracting steps are included on the Authority’s flowcharted award process. For example, the use of projected man-hours and cost estimates, and sending Request For Qualifications to select firms instead of advertising, are missing from ALCOSAN’s Professional Services flowchart.

**Recommendation:** ALCOSAN needs to update its flowchart to include all steps routinely used in the awarding of Professional Service Contracts.

**Finding:** Documentation verifying the contract award process was missing for many Professional Services Contracts.

Prior to reviewing submitted proposals, ALCOSAN staff or consultants estimate man hours and costs for the project. The projected man hours and cost estimates are used to assess the proposals scope and to negotiate a contract price with the selected firm.

**Finding:** Documentation for estimated projected man hours and costs was provided for only two of the sixteen Professional Services contracts in the new contract sample and for two of the nine contract extensions.

**Recommendation:** Estimated or projected man hours and costs are essential components of the Professional Services award process and should be included with all contracts.

The purpose of requesting Statements of Qualifications from interested firms is to determine which firms have the experience and capability to meet the objectives of the proposal at issue. Firms that meet this criteria are “short listed” and asked to respond to the Request for Proposal for the needed service.

**Finding:** Short List Assessment documents were provided for two contracts in the above testing sample. One document appears to be a check list of Staff Committee short list recommendations. One firm was short listed solely on the Executive Director’s recommendation.

**Finding:** The other contract had two short list assessment documents. One was an undated assessment of short listed and excluded firms. The other was a dated “final shortlist” of firms sent RFPs and firms sent non-selection letters.
**Recommendation:** To avoid appearances of favoritism, a rating system with objective rating criteria should be used to determine the qualifications of firms submitting Statement of Qualifications. Ratings of shorts listed and eliminated firms should be kept in all contract files.

**Construction Contract Testing**

Major construction contracts are bid as separate contracts for General Contractor, Plumbing Contractor, HVAC Contractor and Electrical Contractor.

**Finding:** Not allowing a general contractor to subcontract different phases of the project is a good way for ALCOSAN to ensure that all qualified contractors meet its requirements and allow the Authority to maintain better control over all aspects of the project.

**Finding:** A greater amount of documents were available for Construction contracts than Professional Service contracts.

**Finding:** Engineer’s estimates are used as a guide to assess bids for all work and estimates were found for 86% of the testing sample.

**Finding:** In one instance, a bidder was awarded a contract as lowest responsible bidder then subsequently rejected. The Executive Director obtained a copy of the bid rejection letter for the auditors. The letter was prepared by outside counsel and clearly explained why the firm’s licensing deficiencies were the reason for rejecting its bid.

**Recommendation:** If a bidder awarded a contract is later deemed not responsible, ALCOSAN must document the reasons for withdrawing the contract and include the rejection documents in the contract file.

**Finding:** Because some chemicals are critically needed for plant operation, ALCOSAN will contract with the second lowest bidder as a back up supplier in case there is a problem with the low bid supplier. The back up lime supplier charged $4.66 per ton more than the lowest responsible bidder.

**Recommendation:** To save money on critically needed plant supplies, ALCOSAN should try to negotiate a standby contract at the low bid rate. If the second lowest bidder refuses to amend its price, all other bidders should be given the opportunity to match the awarded contract price as a standby contractor.
We are pleased that ALCOSAN agrees with our recommendations and will review incorporating them into its professional service and construction procurement procedures.

Sincerely,

[Signature]

Michael E. Lamb
City Controller
INTRODUCTION

The City Controller and the Allegheny County Controller jointly conducted this performance and fiscal audit of the Allegheny County Sanitary Authority (ALCOSAN). The City Controller assessed the Authority’s procurement practices for Construction/Purchase of Goods and Professional Service contracts. The performance audit portion was conducted pursuant to section 404(c) of the Pittsburgh Home Rule Charter.

OVERVIEW

ALCOSAN is a joint City-County Authority created under the Municipality Authorities Act, 53 Pa. C.S. §5601, et seq. Located along the Ohio River on the North Side of Pittsburgh, the Authority is responsible for the collection, transportation, treatment and disposal of sewage and some limited industrial wastewaters within its service area. ALCOSAN provides wastewater treatment services for the City of Pittsburgh, 82 other Allegheny County municipalities and sections of communities in Washington and Westmoreland Counties. The Authority serves nearly 900,000 customers, treating approximately 200 million gallons of wastewater and storm water per day. ALCOSAN’s operations are supported solely by revenues generated through user fees; no tax monies are received.

ALCOSAN is governed by a seven member Board of Directors that serve staggered, five-year terms. Three members are appointed by Allegheny County, three by the City and one is jointly appointed by both. The Board meets monthly to discuss policy and to vote on resolutions. The meetings are open to the public. The Board is responsible for making all policy decisions regarding financial, operational and administrative procedures. ALCOSAN’s Executive Director is responsible for implementing the Board’s authorizations and policies and the Authority’s day-to-day operations.

ALCOSAN has five divisions each headed by a Director: Director of Finance & Administration, Director of Operations and Maintenance, Director of Environmental Compliance, Director of Engineering & Construction and a Director of Regional Conveyance. The Authority employs approximately 339 employees.
History

To assure supplies of clean drinking water, the State legislature passed the Purity of Waters Act in 1905. The Act’s standards for sewage disposal into state waterways applied to individuals, municipalities and corporations but exempted coal mines. However, municipalities still dumped raw sewage into rivers and nearby streams and large quantities of untreated industrial waste were discharged directly into rivers. In 1945, the State Sanitary Board, under the authority of the Federal Clean Streams Act of 1937, ordered municipalities and industries in Allegheny County to stop polluting waterways. As a result, ninety-six of the municipalities and 36 of the industries agreed to participate in a countywide collection and treatment system.

The Allegheny County Sanitary Authority (ALCOSAN) was chartered in March of 1946 to implement a plan for meeting the state mandate to control water pollution. In 1955, the City of Pittsburgh became a member of the Authority. With miles of intercepting sewers, tunnels, regulators, pump stations and ejector stations, ALCOSAN’s treatment plant was completed and began operation in 1959.

Sewage Treatment Process

ALCOSAN’s wastewater process consists of three steps: collection, conveyance and treatment. Each municipal collection system transports wastewater to ALCOSAN’s conveyance system. Some municipal sewer lines go directly to ALCOSAN. Other municipal sewer lines tap into the City’s sewer system. An analysis of these shared sewage lines can be found in the City Controller’s March, 2006 audit: PWSA- Outside Municipal Use of City Sewer System.

Wastewater is conveyed through ALCOSAN’s 90 miles of interceptors and 316 diversion structures until it reaches the Authority’s treatment plant. At the plant, after sludge is removed the wastewater is treated with chemicals and the purified water is released back into the river.

Approximately thirty percent (30%) of ALCOSAN’s service area have combined sewer systems in which sanitary and storm water flow through the same sewer main. During wet weather, ALCOSAN’s system becomes overloaded with the additional storm runoff from the combined sewers. This overload results in raw sewage water and storm runoff being discharged through a network of over 300 outfalls along the Allegheny, Monongahela and Ohio rivers.
Federal Consent Decree

These chronic combined sewer overflows (CSOs) put ALCOSAN in alleged violation of the Federal Clean Water Act. To resolve these alleged violations, on May 31, 2007, the Authority entered into a Consent Decree with the United States, State Department of Environmental Protection and Allegheny County Health Department. In signing the decree, the Authority agreed to make comprehensive system wide upgrades over the next twenty years that will greatly reduce sewage overflows and ensure compliance with the Clean Water Act.

Contracts

ALCOSAN employs different procurement procedures for Construction contracts, Purchase of Goods contracts and Professional Services contracts. Construction contracts include new construction and reconstruction of existing facilities. Professional Services contracts are specialized or skilled services such as engineering, architectural, consulting or construction management. Purchase of Goods contracts are used to obtain, goods and supplies needed for the day to day operations.

Construction and Purchase of Goods contracts where ALCOSAN will spend more than $10,000 must be competitively bid and awarded to the lowest responsible bidder. Professional Service contracts are not competitively bid. ALCOSAN’s Construction, Purchase of Goods and Professional Services Contract award processes are as follows:

Construction and Purchase of Goods Contracts >$10,000

ALCOSAN is currently in need of many construction projects to meet Consent Decree compliance requirements such as eliminating all Sanitary Sewer Overflows from the Conveyance and Treatment System. Changes must be made to the system to prevent overflows when it rains and to increase usage volume at the plant. A comprehensive plan must be developed and approved by the year 2012. Construction and Purchase of Goods contracts are administered through ALCOSAN’s Engineering & Construction and Purchasing Departments.

ALCOSAN flowcharts the Construction/Purchase of Goods Contract Award Process as follows: (A copy of their actual flowchart can be found in the Appendix.)

1. ALCOSAN Division Staff and the Design Consultant prepare Construction Plans and Specifications. Additionally the Design Consultant Separates Prime Contractors, DEP and Local Permits, Sealed by a Professional Engineer.
2. ALCOSAN Managers Review and Approve Bid Documents.
3. ALCOSAN Directors Review and Approve Bid Documents.
4. ALCOSAN Executive Director Reviews and Approves Bid Documents.
5. Board of Directors Authorizes Contract for Advertisement.
6. ALCOSAN Division Staff Advertises Contract for Competitive Bids—
   Advertises in the Pittsburgh Post Gazette and Pittsburgh Courier—allows 3 or
   4 week Bid Period.
7. ALCOSAN Staff Holds Pre-Bid Meeting Within 7 to 10 Days After
   Advertisement—Addendum(s) Issued for Clarification If Necessary.
8. ALCOSAN Division Staff Receives Sealed Bids at ALCOSAN Engineering
   Building Until Bid Submittal Deadline.
9. ALCOSAN Division Staff Opens Bids and Reads Them Aloud.
10. Design Consultant Reviews Bids for—Completeness—Cost—
    Qualifications—DBE Participation— Exceptions.
11. Construction Manager Reviews Bids (If Applicable).
12. ALCOSAN Division Staff Reviews Bids.
13. ALCOSAN Division Staff Prepares Bid Review Forms.
14. ALCOSAN Division Staff Determines Lowest Responsible Bidder.
15. ALCOSAN Division Staff Recommends Reward or Rejection of Contract to
    ALCOSAN Executive Director.
16. ALCOSAN Executive Director (With Opinion of Solicitor) Recommends
    Award or Rejection of Contract to ALCOSAN Board of Directors.
17. ALCOSAN Board of Directors awards Contract to Lowest Responsible
    Bidder.

Professional Services Contracts (PSC)

Professional Services contracts for design and construction management are
administered through the Director of Engineering & Construction and Administrative
Secretary. These types of services include engineering, architectural and construction
management. Other specialty consultant contracts are administered through the
Authority’s other respective operations directors.

ALCOSAN flowcharts the Professional Services Award Process as follows: (A
copy of this flowchart can be found in the appendix.)

1. ALCOSAN Division Staff Determines Need for Service.
2. ALCOSAN Division Staff Prepares and Issues Request for Qualifications
   (RFQ).
   a. Advertises in Local Newspapers,
   b. Allows for a 3 to 4 Week Response Time.
3. ALCOSAN Executive Director Forms Staff Review Committee (SRC).
   Includes Executive Director, Division Director, Division Manager, and
   Project Manager.
4. SRC Reviews Statement of Qualification (SOQ) Submittals.
5. SRC Develops Short-List of 3 to 5 Capable Firms.
   a. Based on Qualifications,
   b. Previous Experience and,
c. ALCOSAN Staff’s Knowledge of Firm’s Capabilities.
6. ALCOSAN Executive Director Submits Short-Listed Firms to Professional Services Committee.
7. ALCOSAN Division Staff Prepares and Issues Request for Proposals (RFP) to Short-Listed Firms.
8. ALCOSAN Division Staff Hold Pre-Proposal Meeting.
   a. Clarify Requested Scope,
   b. Review General Requirements,
   c. Provide Site Tour (When Necessary).
9. Staff Review Committee (SRC) Reviews Proposal Submittals.
   a. Technical Merit
   b. Project Understanding
   c. Overall Approach
   d. Staffing/Related Experience
   e. Ability to Meet Schedule
   f. MBE/WBE Utilization
   g. Management Plan Including QA/QC.
10. SRC Interviews Interested Firms.
11. SRC Meets and Discusses Proposals.
12. Executive Director Makes Recommendation to the Professional Services Committee.
13. Professional Services Committee Makes Recommendation to the Board for Action.
14. ALCOSAN Board of Directors Awards Professional Services and Authorizes Negotiations with Recommended Firm.
15. SRC Negotiates Acceptable Fee and Terms—Opens Preferred Candidate’s Cost Proposal.
16. Board of Directors Awards Service Authorization.

The Authority has another method of awarding Professional Service Contracts for smaller construction projects that could be handled in-house if Authority staffing constraints did not exist. These projects are awarded to one of five woman/minority firms. Awards are rotated. This process is not flowcharted or documented by ALCOSAN personnel.

Once a contract award is approved by the Board, a formal document is executed by the Authority’s Solicitor. A review of contract terms was beyond the scope of this audit.
OBJECTIVES

1. Assess ALCOSAN’S award process for Construction and waste disposal contracts.

2. Assess ALCOSAN’S bidding and selection procedures for Professional Service contracts, including engineering, architectural and construction management services.

3. Assess compliance with Authority award process procedures for Construction and Professional Service contracts.

4. Assess compliance with statutory procurement requirements.

5. Make recommendations for improvements.
SCOPE

The scope of the performance audit section is all ALCOSAN contracts in excess of $10,000 awarded from January 1, 2007 through June 30, 2008.
METHODOLOGY

The auditors toured ALCOSAN’s waste water treatment facility and attended power point presentations by ALCOSAN staff. Presentations covered the Federal Consent Decree and Overflows, Accounting Department, Procurement Methods Presentation and Change Orders. Also presented were ALCOSAN’s organizational chart, purchasing department and accounting department procedures. The purchasing presentation focused on processes needed for purchasing all items and services of different dollar amounts. Items or services purchased for more than $10,000 require a contract. Flowcharts documenting the awarding of contracts over $10,000 were explained. These included Professional Services, Construction and Purchase of Goods (Material) Contracts.

Attending the presentations were the Executive Director, Executive Assistant, Director of Operations and Maintenance, Director of Regional Conveyance, Director of Engineering and Construction, Deputy Executive Director and Director of Environmental Compliance, Director of Finance and Administration, Manager of Public Relations, and Manager of Purchasing. These individuals were available for interviews and questioning as needed.

The auditors tested ALCOSAN’s compliance with its flowcharted procedures for awarding Construction and Professional Services contracts. The auditors requested a list of all contracts awarded from January 1, 2007 through June 30, 2008 and separate lists of the Professional Services and Construction contracts. The auditors received fifty-two (52) PSCs and thirty-eight (38) other contracts: of which twenty-eight (28) were Construction and ten (10) were Materials (Purchase of Goods) contracts.

A random 50% sample of Professional Service contracts (PSC) was chosen. This yielded twenty-six (26) contracts. Complete contract files were requested for documentation review. A checklist was created for the auditors to document compliance with PSC award procedures.

ALCOSAN awards large construction projects as four separate contracts; one each for electrical, plumbing, general and HVAC. All four contracts share the same contract number. There were three large construction projects in the sample. One contract phase (plumbing) from one of the large construction projects was missing from the contact list provided by ALCOSAN.

The auditors chose 20 Construction contracts for review, representing a 71% sample of contracts awarded during the audit scope period. Projects were selected to include a sample of different types of work being performed. Later the missing plumbing contract from the large construction project was added for a total of 21 contracts.
The auditors requested documentation to verify compliance with ALCOSAN’s flowcharted Construction contracting procedures. A checklist was created for this purpose.

The auditors visited the vault where the Construction contracts were stored. The Professional Service contracts are not stored in a central location.

The requested Construction contract list included 10 Purchase of Goods contracts that follow the same award process as Construction contracts. Consequently, the auditors selected a 50% sample of these material contracts. A checklist was created for purchasing procedure compliance analysis.
FINDINGS AND RECOMMENDATIONS

Compliance with Statutory Procurement Requirements

Finding: ALCOSAN’s Construction and Professional Services contract procedures are in substantial compliance with applicable statutory procurement requirements.

Construction Contracts

As an authority created under the Municipality Authorities Act, 53 Pa. C.S. §5601, et seq., ALCOSAN is subject to Act section 5614, Competition in Award of Contracts. Section 5614 applies to all construction, reconstruction; repair or work whose labor and materials cost exceeds $10,000.

Contracts must “be entered into by the Authority with the lowest responsible bidder, upon proper terms, after public notice asking for competitive bids as provided in this section”.

Finding: ALCOSAN’s Construction contract award process complies with the Municipality Authorities Act’s public notice and lowest responsible bidder requirements.

The Authority’s Construction Contract Award Process requires advertising for competitive bids and awarding the contract to the lowest responsible bidder.

Professional Services Contracts (PSC)

The Municipality Authorities Act has no requirements for professional services contracts. However, in addition to being an authority under the Municipality Authorities Act, ALCOSAN is considered to be an independent agency of the Commonwealth. As such, ALCOSAN must follow the competitive selection procedures for professional service contracts applicable to all State agencies, departments, bureaus and other divisions. The controlling statute is 62 Pa. Cons. Stat. §518.

The only statutory requirement for awarding professional service contracts is that the “award shall be made to the responsible offeror determined in writing by the contracting officer to be best qualified based on the evaluation factors set forth in the request for proposals”. The fee for such services must be “fair and reasonable compensation…determined through negotiation”.

Finding: ALCOSAN’s Professional Services Evaluation and Recommendation Procedures do not fully comply with the Code. There is provision for negotiating
Professional Services fees but not for explaining in writing why the recommended firm was determined to be best qualified.

The Executive Director places the recommended firm on the Board of Directors meeting agenda for Board. Asking for Board approval implies that the contracting officer believes his/her recommendation to be the best qualified. However, the Code implies a more detailed explanation of how the nominee meets the “evaluation factors set forth in the request for proposals”.

Included with the requested documentation were seven “Wet Weather Basin Facilities Planning Recommendations”. These recommendations appear to be evaluations of the proposals submitted for ALSOSAN’s wet weather basin planning program. The evaluations included a short description of the firm’s relevant experience and planning approach. Five of the seven firms given a “recommended assignment” were awarded wet weather basin contracts.

**Finding:** These ‘recommendations’ would satisfy the ‘determined in writing’ requirement. However, the auditors found no similar written proposal evaluations for the other Professional Services contracts in the testing sample.

**RECOMMENDATION NO. 1**

To fully comply with State procurement requirements, all Professional Services contract award recommendations should specify in writing how the recommended firm meets the “evaluation factors set forth in the request for proposals”.

**General Contract Organization Findings**

**Finding:** An easily accessible list of all Professional Services (PSC) and Construction contracts awarded during this time period did not exist; the Executive Assistant had to compile a list for the auditors. Even though the Construction contracts had a numeric number for reference, one contract for a large construction project was missing from the listing. Professional Services contracts did not have any reference system.

**RECOMMENDATION NO. 2**

A complete list of all contracts should be kept on a data base for easy access. A contract numbering or other identification system should be developed for PSCs.
Finding: Professional Service contract documentation is not centrally located. The Executive Director explained that information was kept in different departments. Requested information had to be specified for different ALCOSAN staff to locate. Construction contracts are kept together in a storage vault.

RECOMMENDATION NO. 3

Professional Service contracts should be kept in one location with individual files containing all documentation relating to the award process. A central location for all contracts (with one file for every contract) would provide easy access, not only for auditing purposes but for any questions relating to the contract.

A list of documents specific to the award process was requested for each contract in the sample. The Executive Director provided an answer sheet with explanations about each document requested. Requested documents were referenced as attachments.

Finding: For PSCs some of these attachments seemed as if they were prepared for the auditors from memory rather than retrieved from actual contract files. Other documents referred to as attachments were missing.

Finding: Many PSC documents that were provided by ALCOSAN had no letterhead, markings, dates or signatures as to when the documents were prepared or by whom.

RECOMMENDATION NO. 4

Documents, whether prepared in-house or by the outside consultant, should be dated and include the name of the preparer, their position with the Authority or their firm. Documents prepared by outside consultants should be identified by company letterhead. Then, if questions arise about the document, the responsible person can be easily identified and contacted.

Finding: Answer sheets supplied for Construction contracts had more of the referenced documents in the files.

Despite the lack of identifying letterhead, dates and signatures, the auditors gave ALCOSAN the benefit of the doubt as to the accuracy of the information. In other words any type of document provided was counted but if a document did not exist to back up the Executive Directors answer sheet, then it was not counted.
Contract Sample Testing

Professional Services Contract Award Process

ALCOSAN awarded fifty-two (52) Professional Services contracts (PSC) during the audit scope period, January 1, 2007 through June 30, 2008. Twenty-six (26) of these contracts, representing a 50% sample, were selected for review. One contract was abandoned by ALCOSAN so it was eliminated, reducing the testing sample to 25 contracts.

The total dollar amount of 24 of the contracts in the testing sample was $14,223,091. The other contract had an hourly rate schedule.

Finding: As written, the Authority’s internal procedures for awarding Professional Services contracts exceed statutory requirements. However, there was insufficient documentation for the Professional Services contracts in the testing sample to support compliance with all internal award procedures.

A July 25, 2000 memo from the Executive Director to the Professional Services Committee describes the “formal procedure used by the Authority to acquire professional service firms” yet states that “the various steps described in this procedure may be modified or waived as necessary depending on the specific service required”.

Finding: Missing documentation may have been due to steps in the award process being modified or waived. However, there was no evidence that such waiver or modification had occurred.

RECOMMENDATION No. 5

Any deviation from formal contracting procedures should be explained and documented.

According to the Executive Director, Professional Service contracts procedures (especially the negotiation process) are sometimes done informally and not documented in the files or elsewhere. These could have occurred in the form of telephone conversations or e-mails, with no evidence of record.

RECOMMENDATION NO. 6

All informal contract procedures should be documented as “Memo to File” and included in the contract file.
Finding: Not all contracting steps are included on the Authority’s flowchart. According to the above referenced memorandum and conversations with the Executive Director, a projected man-hours and cost estimate is prepared by ALCOSAN staff or consultant and used as a guideline for selecting a firm and negotiating the final cost of the contract. This step is missing from ALCOSAN’s flowcharted award process.

The Executive Director stated that depending on the length of the project and the time needed for a response, Request for Qualifications (RFQ) can be advertised or sent directly to firms in the Authority’s database.

Finding: Sending RFQs directly to select firms is also missing from ALCOSAN’s flowchart.

RECOMMENDATION NO. 7

ALCOSAN needs to update its flowchart to include all steps routinely used in the awarding of Professional Service Contracts.

Professional Services Contracts Award Process Compliance

Of the 25 Professional Services contracts selected for testing, sixteen (16) were new contracts. The cost of these sixteen contracts totaled $9,901,270. The auditors tested for documented compliance with the Authority’s flowcharted and stated award process.

Fifteen (15) steps of the PSC award process were tested for compliance. The auditors requested documentation of: Projected Man Hours and Cost, RFQ Advertised, Names of Staff Review Committee, List of RFQ Respondents, Short List Assessment Process, Short List, Pre-Proposal Meeting, Staff Review Committee Interviews Firms, Directors Recommendation to Committee, Staff Review Committees Recommendation to the Board, Board Authorization to the Firm, Firms Acceptance, Service Agreement Signed, Service Authorization Approved, and the Negotiated Fee. Findings are found in Table 1.
## Table 1

### Professional Service Contract Process Compliance

**TOTAL:** 16 Contracts Examined

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<th>EVIDENCE OF:</th>
<th>Number Of Contracts That Had Documentation</th>
<th>Percent %</th>
<th>Number Of Contracts That Didn’t Have Documentation</th>
<th>Percent %</th>
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<td>Projected Man Hours And Cost</td>
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<td>81%</td>
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<td>Directors Recommendation to Committee</td>
<td>1</td>
<td>6%</td>
<td>15</td>
<td>94%</td>
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<td>56%</td>
<td>7</td>
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<td>Board Authorization to the Firm</td>
<td>12</td>
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<td>Firms Acceptance</td>
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</tr>
<tr>
<td>Service Authorization Approved</td>
<td>14</td>
<td>87%</td>
<td>2</td>
<td>13%</td>
</tr>
<tr>
<td>Negotiated Fees</td>
<td>9</td>
<td>56%</td>
<td>7</td>
<td>44%</td>
</tr>
</tbody>
</table>

**Finding:** The highest award procedure document compliance was provided for Board Authorization to the Firm, Service Authorizations Approved, Service Agreement Signed and Staff Review Committees Recommendation to the Board. The lowest areas of documentation concerned the Short List Assessment Process and the Directors Recommendation to Committee.

**Finding:** Documentation of a Negotiated Fees was found in 9 contracts. Five (5) negotiated fees were slightly higher than the contractor’s proposed fee; 4 negotiated fees were less than the contractors proposed fee. The higher negotiated fees seemed to be more of a ‘rounding up’ of the dollar amount than any great increase over the contractors proposed fee.
Projected Man Hours and Cost

Firms responding to Authority RFPs submit two proposals: one proposal is a response to the specific scope of work to be performed and the other is a sealed cost proposal. ALCOSAN selects a preferred firm based on its related experience and project comprehension and methodology. After the Board awards the contract, the winning firm’s cost proposal is opened for price negotiations.

Prior to reviewing submitted proposals, ALCOSAN staff or consultants estimate man hours and costs for the project. The projected man hours and cost estimates are used to assess the proposals scope and to negotiate a contract price with the selected firm.

Finding: Documentation for in-house or consultants estimated projected man hours and costs was provided for only two of the sixteen Professional Services contracts in the new contract sample for two of the nine contract extensions.

RECOMMENDATION NO. 8

Estimated or projected man hours and costs are essential components of the Professional Services award process and should be included with all contracts.

Statements of Qualifications Assessment

The purpose of requesting Statements of Qualifications from interested firms is to determine which firms have the experience and capability to meet the objectives of the proposal at issue. Firms that meet this criteria are “short listed” and asked to respond to the Request for Proposal for the needed service. Firms that do not meet the criteria are eliminated from the competition process.

Finding: Short List Assessment documents were provided for two contracts in the above testing sample. One document appears to be a check list of Staff Committee short list recommendations. One firm was short listed solely on the Executive Director’s recommendation.

Finding: The other contract had two short list assessment documents. One was an undated assessment of short listed and excluded firms. The other was a dated “final shortlist” of firms sent RFPs and firms sent non-selection letters.
RECOMMENDATION NO. 9

To avoid appearances of favoritism, a rating system with objective rating criteria should be used to determine the qualifications of firms submitting Statement of Qualifications. Ratings of shorts listed and eliminated firms should be kept in all contract files.

Professional Services Contract Extensions

Finding: There are two types of Professional Service contracts: new (as explained above) and extensions of existing contracts.

Of the 25 PS contracts selected for review, nine (9) were extensions of existing contracts. Eight of the contract extensions totaled $4,321,821 with the remaining contract based on an hourly rate schedule.

Professional Services contracts that are extensions of existing work are usually awarded to the same contractor that performed the prior work. The ALCOSAN Executive Director has indicated that this is because of the prior contractors’ familiarity with the project as well as the Authority’s familiarity with the contractor and satisfaction of prior completed project work. Contract extensions also help keep the project on schedule. No Request for Qualifications (RFQ) is advertised and the only contractor on the short-list is the contractor who did the original work.

The awarding of these PS extension contracts begins after the previous work is completed and more work is needed. Sometimes it’s “Phase II” of a 3 Phase project, or sometimes it’s a function that was overlooked in the original drawing scope, such as providing for the design for raising a door.

The nine extension contracts in the testing sample were for the following:

- New Truck Staging Building Door
- Phases II Plant Expansion
- Satellite Treatment Facilities Demonstration Program
- 43rd Street Access Shaft
- Construction Management Services of O & M Facilities
- CS & T building Design Services (a spin-off project of the O & M Facilities)
- Construction Management Services for CS & T Building
- Construction Management Services for CIP Plant Improvement
- Retained Consultant Services (set hourly rate)
Finding: The Contract extension process takes less time because ALCOSAN does not advertise for Request for Qualifications (RFQ) or prepare a short list of other firms to contact or send a RFP.

The Executive Director stated that the original contract (some dating back to 1994) did follow the PSC process. Verifying this statement was outside the scope of this audit.

Finding: For the nine extension contracts in the testing sample, the same consultant/engineer/architect was awarded the contract. They alone were contacted to provide a written bid for the new project.

Extension Contract Award Process Compliance

Finding: The process used to award Professional Services contracts depends on whether the contract is new or an extension of an existing contract. Contract extensions are awarded differently than new contracts. The auditors were not provided with a flowchart or other written description of the contract extension process.

RECOMMENDATION NO. 10

A step by step process for awarding Professional Services contract extensions should be flowcharted as are the other contract award processes.

According to the Executive Director, seven areas of the PSC award process are applicable for contract extensions. They are: Projected Man Hours and Cost, Staff Review Committees Recommendation to the Board, Board Authorization to the Firm, Firms Acceptance, Service Agreement Signed, Service Authorization Approved, And the Negotiated Fee. Documentation findings are found in Table 2.
Table 2 shows the highest award procedure document compliance was with Service Agreements Signed and Service Authorizations Approved. The lowest area of documented compliance was Negotiated Fees.

**Construction Contracts**

As noted in the Methodology, the auditors requested a list of all Construction contracts awarded during the audit scope period. The list comprised twenty-eight (28) Construction and ten (10) were Materials (Purchase of Goods) contracts.

A sample of 21 Construction contracts was chosen for testing. These contracts totaled $12,883,373 and included three large construction projects that were awarded as four separate contracts.

At ALCOSAN, larger projects are not awarded to one general contractor to sub-contract out to whoever they choose. Instead, major construction phases are put out to bid separately according to the specialized phase of work needed. These four separately bid phases are: General Contractor, Plumbing Contractor, HVAC Contractor and Electrical Contractor.
Finding: Not allowing a general contractor to subcontract different phases of the project is a good way for ALCOSAN to ensure that all qualified contractors meet its requirements and allow the Authority to maintain better control over all aspects of the project.

Construction Contract Award Process Compliance

Finding: The Executive Director stated that an estimate of cost is prepared by ALCOSAN staff or consultant to assess the reasonableness of bids. Like the projected man hours and cost estimate for Professional Services contract, this step is missing from ALCOSAN’s flowcharted award process for Construction contracts.

Eleven (11) steps of the Construction contract award process were tested for compliance. The auditors requested documentation of: Estimated Consultant Cost, Managers Review & Approval of Bid Documents, Board of Directors Authorization of Contract Advertisement, Copy of Advertisement, Date of Pre-Bid Meeting & List of Attendees, Names of Bidders and Bid Amounts, Checklist of Staff Reviewing Bids/Comments, Division Staff Recommendation to Executive Director, Executive Director’s Recommendation to Board, Contract Awarded to Lowest Bidder and Contract Signed. Findings are found in Table 3 below.

Finding: The majority of the requested documentation for the Construction contracts was provided.
The following chart summarizes the award process documentation found in the Construction contract files.

### TABLE 3

<table>
<thead>
<tr>
<th>EVIDENCE OF:</th>
<th>Number Of Contracts That Had Documentation</th>
<th>Percent</th>
<th>Number Of Contracts That Didn’t Have Documentation</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consultant’s Estimate of Cost</td>
<td>18</td>
<td>86%</td>
<td>3</td>
<td>14%</td>
</tr>
<tr>
<td>Number Over Cost Estimate</td>
<td>8</td>
<td>38%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number Under Cost Estimate</td>
<td>10</td>
<td>48%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Review &amp; Approval of Bid Documents</td>
<td>17</td>
<td>81%</td>
<td>4</td>
<td>19%</td>
</tr>
<tr>
<td>Board of Directors Authorization of Contract</td>
<td>21</td>
<td>100%</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>Advertisement</td>
<td>17</td>
<td>81%</td>
<td>4</td>
<td>19%</td>
</tr>
<tr>
<td>Date of Pre-bid Meeting and List of Attendees</td>
<td>20</td>
<td>95%</td>
<td>1</td>
<td>5%</td>
</tr>
<tr>
<td>Names of All Bidders With Dollar Amounts.</td>
<td>21</td>
<td>100%</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>List of Names Who Reviewed Bids</td>
<td>21</td>
<td>100%</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>Division Staff Recommendation to Executive Director</td>
<td>21</td>
<td>100%</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>Executive Director Recommendation to Board</td>
<td>21</td>
<td>100%</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>Contract to Lowest Responsible Bidder</td>
<td>21</td>
<td>100%</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>Contract Signed</td>
<td>20</td>
<td>95%</td>
<td>1</td>
<td>5%</td>
</tr>
</tbody>
</table>

TOTAL: 21 Contracts Examined
Table 3 shows the highest award procedure document compliance was with Board of Directors Authorization of Contract Advertisement, Names of All Bidders with Dollar Amounts, List of Names Who Reviewed Bids, Division Staff Recommendation to Executive Director, Executive Director Recommendation to Board, Contract to Lowest Responsible Bidder and Contract Signed. All had 100% compliance. The lowest area of document compliance was Review & Approval of Bid Documents and Copy of Advertisement. These ‘low’ rates of compliance were 81%.

**Finding:** A greater amount of documents were available for Construction contracts than Professional Service contracts.

A cost estimate is to be prepared by either ALCOSAN’s engineering staff or contracted consultant as a tool to help determine the lowest responsible bidder. Eight (8) contracts (38% of the sample) were awarded to companies whose bids were over ALCOSAN’s estimated cost. Ten (10) contracts (48% of the sample) were under the estimated cost. Three contracts (14%) had no cost estimate.

Contracts awarded over the estimated cost ranged from a low of 2% and a high of 76% over the estimate. In the case of the bid being 76% higher than the ALCOSAN engineer’s estimate, it was determined that the engineer’s estimate was substantially low in a number of areas and was adjusted accordingly.

**Finding:** Engineer’s estimates should be used as a guide to assess bids for all work and kept in the files. All discrepancies between cost estimates and final contract cost should be explained in writing, especially when they vary excessively.

**Finding:** In one instance, a bidder was awarded a contract as lowest responsible bidder then subsequently rejected. The Executive Director obtained a copy of the bid rejection letter for the auditors. The letter was prepared by outside counsel and clearly explained why the firm’s licensing deficiencies were the reason for rejecting its bid.

RECOMMENDATION NO. 11:

If a bidder awarded a contract is later deemed not responsible, ALCOSAN must document the reasons for withdrawing the contract and include the rejection documents in the contract file.

**Finding:** One contractor’s bid of $74,643 was significantly lower than the others bids which ranged from $193,678.95 to $529,689.50. To its credit, instead of rejecting this bid ALCOSAN investigated the contractor. It found that the contractor had a good reputation and was able to perform the work at this low bid by using creative approaches such as working during the night when the sewage flow is lowest.
Materials Contract Award Process Compliance

Materials contracts reviewed were for the purchase of chemicals needed for ALCOSAN’s plant operations. These contracts were bid as cost per unit prices and not as a total contract amount. Unit costs were bid according to how the chemical is sold, i.e., by the gallon, ton or pound.

ALCOSAN uses a large quantity of chemicals for sewage disposal and waste treatment. Contracts for these chemicals are awarded through the same process as Construction contracts, i.e., to the lowest responsible bidder. There were 5 Materials contracts in our sample. The following Table 4 summarizes the documentation for these Materials contracts. The same 11 steps examined in the Construction contract award process above were tested for compliance in the Materials contracts.

<table>
<thead>
<tr>
<th>TABLE 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>SUMMARY OF MATERIALS CONTRACTS</td>
</tr>
<tr>
<td>TOTAL: 5 Contracts Examined</td>
</tr>
<tr>
<td><strong>EVIDENCE OF:</strong></td>
</tr>
<tr>
<td>Review &amp; Approval of Bid Documents</td>
</tr>
<tr>
<td>Board of Directors Authorization of Contract Advertisement</td>
</tr>
<tr>
<td>Copy of Advertisement</td>
</tr>
<tr>
<td>Date of Pre-Bid Meeting and List of Attendees</td>
</tr>
<tr>
<td>Names of All Bidders With Dollar Amounts.</td>
</tr>
<tr>
<td>List of Names Who Reviewed Bids</td>
</tr>
<tr>
<td>Division Staff Recommendation to Executive Director</td>
</tr>
<tr>
<td>Executive Director Recommendation To Board</td>
</tr>
<tr>
<td>Contract To Lowest Responsible Bidder</td>
</tr>
<tr>
<td>Contract Signed</td>
</tr>
</tbody>
</table>
Finding: Because some chemicals are critically needed for plant operation, ALCOSAN will contract with a back up supplier in case there is a problem with the lowest responsible bidder. This was done with the lime supplier. The back up supplier was the second lowest responsible bidder charging $4.66 per ton more than the lowest responsible bidder.

RECOMMENDATION NO. 12:

To save money on critically needed plant supplies, ALCOSAN should try to negotiate a standby contract at the low bid rate. If the second lowest bidder refuses to amend its price, all other bidders should be given the opportunity to match the awarded contract price as a standby contractor.
APPENDIX
March 27, 2009

Michael E. Lamb
City of Pittsburgh Controller
First Floor – City County Building
414 Grant Street
Pittsburgh, PA 15219

Dear Mr. Lamb:

On behalf of the ALCOSAN Board of Directors and employees, I would like to thank you and your field audit team for the time and effort afforded this engagement. Their thorough investigation and assessments while rigorous have been extremely useful in identifying opportunities to strengthen the Authority’s procurement procedures, particularly with respect to professional services.

As noted in the first finding under Contract Sample Testing, page 13: “As written, the Authority’s internal procedures for awarding Professional Services contracts exceed statutory requirements. However, there was insufficient documentation for the Professional Services contracts in the testing sample to support compliance with all internal award procedures.” The audit process and report have highlighted a necessity for enhanced documentation of the processes and procedures presently in use by the Authority to procure professional services.

The Authority puts a great deal of time, effort and pride into the selection of best qualified professional service providers. Unfortunately while engaged in this process we have not effectively documented these labors. Ensuring the overall integrity and transparency of the process is just as important as ensuring quality of the service to be provided. ALCOSAN accepts the recommendations offered in the spirit of process improvement, and we look forward to implementation of an enhanced procurement documentation strategy.

Sincerely,

ALLEGHENY COUNTY SANITARY AUTHORITY

[Signature]
Arletta Scott Williams
Executive Director

ASW:saj
Attachment
cc: Harry Readshaw, Chairman
ALLEGHENY COUNTY SANITARY AUTHORITY

Response to City of Pittsburgh Controller’s Audit Report

FINDINGS AND RECOMMENDATIONS

Compliance with Statutory Procurement Requirements

Finding: ALCOSAN’s Construction and Professional Services contract procedures are in substantial compliance with applicable statutory procurement requirements.

Construction Contracts

As an authority created under the Municipality Authorities Act, 53 Pa. C.S. §5601, et seq., ALCOSAN is subject to Act section 5614, Competition in Award of Contracts. Section 5614 applies to all construction, reconstruction; repair or work whose labor and materials cost exceeds $10,000.

Contracts must “be entered into by the Authority with the lowest responsible bidder, upon proper terms, after public notice asking for competitive bids as provided in this section”.

Finding: ALCOSAN’s Construction contract award process complies with the Municipality Authorities Act’s public notice and lowest responsible bidder requirements.

The Authority’s Construction Contract Award Process requires advertising for competitive bids and awarding the contract to the lowest responsible bidder.

Professional Services Contracts (PSC)

The Municipality Authorities Act has no requirements for professional services contracts. However, in addition to being an authority under the Municipality Authorities Act, ALCOSAN is considered to be an independent agency of the Commonwealth. As such, ALCOSAN must follow the competitive selection procedures for professional service contracts applicable to all State agencies, departments, bureaus and other divisions. The controlling statute is 62 Pa. Cons. Stat. §518.

The only statutory requirement for awarding professional service contracts is that the “award shall be made to the responsible offeror determined in writing by the contracting officer to be best qualified based on the evaluation factors set forth in the request for proposals”. The fee for such services must be “fair and reasonable compensation...determined through negotiation”.

Finding: ALCOSAN’s Professional Services Evaluation and Recommendation Procedures do not fully comply with the Code. There is provision for negotiating Professional Services fees but not for explaining in writing why the recommended firm was determined to be best qualified.

The Executive Director places the recommended firm on the Board of Directors meeting agenda for Board. Asking for Board approval implies that the contracting officer believes his/her recommendation to be the best qualified. However, the Code implies a more detailed explanation of how the nominee meets the “evaluation factors set forth in the request for proposals”.

Included with the requested documentation were seven “Wet Weather Basin Facilities Planning Recommendations”. These recommendations appear to be evaluations of the proposals submitted for ALCOSAN’s wet weather basin planning program. The evaluations included a short description of the firm’s relevant experience and planning approach. Five of the seven firms given a “recommended assignment” were awarded wet weather basin contracts.

Finding: These ‘recommendations’ would satisfy the ‘determined in writing’ requirement. However, the auditors found no similar written proposal evaluations for the other Professional Services contracts in the testing sample.

RECOMMENDATION NO. 1

To fully comply with State procurement requirements, all Professional Services contract award recommendations should specify in writing how the recommended firm meets the “evaluation factors set forth in the request for proposals”.

Response

ALCOSAN accepts the recommendation and will review incorporation into an enhancement of our professional service procurement procedures.

While we do not believe the Authority can be considered an independent agency of the Commonwealth and as such does not fall under the guidelines cited by the Audit Team, there is no dispute that appropriate documentation is a necessity in the selection and award process. Clear representation of valid rationale for contract award recommendations is an integral part of the Authority’s professional service procurement process.

Presentation of this information takes place at a meeting of the Professional Services Committee. The Professional Services Committee is a committee of the ALCOSAN Board of Directors. These meetings have been duly advertised public meetings since December 2007. The project details and reasons for selection and recommendation of a specific firm are verbally provided to the Board Committee by the Executive Director. As noted under normal circumstances there is not a separate recommendation document
specifically directed to the Board Committee. The written recommendation generated from the internal staff review committee portion of the process is provided to the Board Committee for reference.

The concurrence of the Professional Services Committee, a brief summary of the project and the recommended firm's qualifications are verbally provided to the entire Board at the public Board meeting where the recommended award appears as an agenda item for the first phase of Board action. As noted, the first phase of Board action on a professional service contract is award of the service with authorization to negotiate a fee. The subsequent phase of Board action is award of the resulting negotiated fee.

The Authority will include written representation of the rationale for contract award recommendations into the presentation of professional service award recommendations to the Board of Directors.

**General Contract Organization Findings**

**Finding:** An easily accessible list of all Professional Services (PSC) and Construction contracts awarded during this time period did not exist; the Executive Assistant had to compile a list for the auditors. Even though the Construction contracts had a numeric number for reference, one contract for a large construction project was missing from the listing. Professional Services contracts did not have any reference system.

**RECOMMENDATION NO. 2**

A complete list of all contracts should be kept on a data base for easy access. A contract numbering or other identification system should be developed for PSCs.

**Response**

*ALCOSAN accepts the recommendation and will review incorporation into an enhancement of our professional service procurement procedures.*

*The Authority is in the process of establishing an independent numbering system for professional service contracts and delineating responsibility for creation, maintenance and management of a uniform database and tracking system with respect to these contracts.*

**Finding:** Professional Service contract documentation is not centrally located. The Executive Director explained that information was kept in different departments. Requested information had to be specified for different ALCOSAN staff to locate. Construction contracts are kept together in a storage vault.
RECOMMENDATION NO. 3

Professional Service contracts should be kept in one location with individual files containing all documentation relating to the award process. A central location for all contracts (with one file for every contract) would provide easy access, not only for auditing purposes but for any questions relating to the contract.

Response

ALCOSAN accepts the recommendation and will review incorporation into an enhancement of our professional service procurement procedures.

In keeping with the response to R – 2, the Authority is also in the process of establishing a centralized filing system for professional service matters similar to that noted by the Audit Team for construction contract documents.

A list of documents specific to the award process was requested for each contract in the sample. The Executive Director provided an answer sheet with explanations about each document requested. Requested documents were referenced as attachments.

Finding: For PSCs some of these attachments seemed as if they were prepared for the auditors from memory rather than retrieved from actual contract files. Other documents referred to as attachments were missing.

Finding: Many PSC documents that were provided by ALCOSAN had no letterhead, markings, dates or signatures as to when the documents were prepared or by whom.

RECOMMENDATION NO. 4

Documents, whether prepared in-house or by the outside consultant, should be dated and include the name of the preparer, their position with the Authority or their firm. Documents prepared by outside consultants should be identified by company letterhead. Then, if questions arise about the document, the responsible person can be easily identified and contacted.

Response

ALCOSAN accepts the recommendation and will review incorporation into an enhancement of our professional service procurement procedures.

Historically the Authority has utilized a note to file or note to the record memo format to manage miscellaneous information. We will examine the development of standardized forms and formats that can be utilized in the professional service procurement process to provide for better documentation of specific circumstances.
Finding: Answer sheets supplied for Construction contracts had more of the referenced documents in the files.

Despite the lack of identifying letterhead, dates and signatures, the auditors gave ALCOSAN the benefit of the doubt as to the accuracy of the information. In other words any type of document provided was counted but if a document did not exist to back up the Executive Directors answer sheet, then it was not counted.

Contract Sample Testing

Professional Service Contract Award Process

ALCOSAN awarded fifty-two (52) Professional Services contracts (PSC) during the audit scope period, January 1, 2007 through June 30, 2008. Twenty-six (26) of these contracts, representing a 50% sample, were selected for review. One contract was abandoned by ALCOSAN so it was eliminated, reducing the testing sample to 25 contracts.

The total dollar amount of 24 of the contracts in the testing sample was $14,223,091. The other contract had an hourly rate schedule.

Finding: As written, the Authority’s internal procedures for awarding Professional Services contracts exceed statutory requirements. However, there was insufficient documentation for the Professional Services contracts in the testing sample to support compliance with all internal award procedures.

A July 25, 2000 memo from the Executive Director to the Professional Services Committee describes the "formal procedure used by the Authority to acquire professional service firms" yet states that "the various steps described in this procedure may be modified or waived as necessary depending on the specific service required".

Finding: Missing documentation may have been due to steps in the award process being modified or waived. However, there was no evidence that such waiver or modification had occurred.

RECOMMENDATION No. 5

Any deviation from formal contracting procedures should be explained and documented.

Response

ALCOSAN accepts the recommendation and will review incorporation into an enhancement of our professional service procurement procedures.
The process described and flow charted depicts the most extensive full scale process for procurement of professional services used by the Authority. There are various reasons the procedure could be truncated. For example, requiring potential participants to engage in an elaborate process that requires significant preparation expense to be considered for a contract of nominal value is impractical. In this instance, it is more productive and credible to tailor the process to preserve maximum competition while generating the highest quality submissions. The Authority will develop standardized forms to provide for better documentation of specific deviations in the professional service procurement process.

According to the Executive Director, Professional Service contracts procedures (especially the negotiation process) are sometimes done informally and not documented in the files or elsewhere. These could have occurred in the form of telephone conversations or e-mails, with no evidence of record.

**RECOMMENDATION NO. 6**

All informal contract procedures should be documented as “Memo to File” and included in the contract file.

**Response**

*ALCOSAN accepts the recommendation and will review incorporation into an enhancement of our professional service procurement procedures.*

*As noted in the response to R – 4, the Authority will examine the development of standardized forms and formats that can be utilized in the professional service procurement process to provide for better documentation of specific circumstances.*

**Finding:** Not all contracting steps are included on the Authority’s flowchart. According to the above referenced memorandum and conversations with the Executive Director, a projected man-hours and cost estimate is prepared by ALCOSAN staff or consultant and used as a guideline for selecting a firm and negotiating the final cost of the contract. This step is missing from ALCOSAN’s flowcharted award process.

The Executive Director stated that depending on the length of the project and the time needed for a response, Request for Qualifications (RFQ) can be advertised or sent directly to firms in the Authority’s database.

**Finding:** Sending RFQs directly to select firms is also missing from ALCOSAN’s flowchart.

**RECOMMENDATION NO. 7**

ALCOSAN needs to update its flowchart to include all steps routinely used in the awarding of Professional Service Contracts.
Response

ALCOSAN accepts the recommendation and will review incorporation into an enhancement of our professional service procurement procedures.

Expediency, duration, size, value and nature are just a few of the factors that may be considered when determining whether a professional service contract should be advertised, proposals solicited from a pool of qualified candidates or the work assigned to the Authority’s retained consultant. For example, required work may be similar in nature to that which has been recently awarded. This coupled with time constraints may make it advantageous to approach firms who had been successfully short-listed on that previously awarded work. The Authority will endeavor to capture the most commonly used practices and document appropriately.

Professional Services Contracts Award Process Compliance

Of the 25 Professional Services contracts selected for testing, sixteen (16) were new contracts. The cost of these sixteen contracts totaled $9,901,270. The auditors tested for documented compliance with the Authority’s flowcharted and stated award process.

Fifteen (15) steps of the PSC award process were tested for compliance. The auditors requested documentation of: Projected Man Hours and Cost, RFQ Advertised, Names of Staff Review Committee, List of RFQ Respondents, Short List Assessment Process, Short List, Pre-Proposal Meeting, Staff Review Committee Interviews Firms, Directors Recommendation to Committee, Staff Review Committees Recommendation to the Board, Board Authorization to the Firm, Firms Acceptance, Service Agreement Signed, Service Authorization Approved, and the Negotiated Fee. Findings are found in Table 1.

Finding: The highest award procedure document compliance was provided for Board Authorization to the Firm, Service Authorizations Approved, Service Agreement Signed and Staff Review Committees Recommendation to the Board. The lowest areas of documentation concerned the Short List Assessment Process and the Directors Recommendation to Committee.

Finding: Documentation of a Negotiated Fees was found in 9 contracts. Five (5) negotiated fees were slightly higher than the contractor’s proposed fee; 4 negotiated fees were less than the contractors proposed fee. The higher negotiated fees seemed to be more of a ‘rounding up’ of the dollar amount than any great increase over the contractors proposed fee.
Projected Man Hours and Cost

Firms responding to Authority RFPs submit two proposals: one proposal is a response to the specific scope of work to be performed and the other is a sealed cost proposal. ALCOSAN selects a preferred firm based on its related experience and project comprehension and methodology. After the Board awards the contract, the winning firm’s cost proposal is opened for price negotiations.

Prior to reviewing submitted proposals, ALCOSAN staff or consultants estimate man hours and costs for the project. The projected man hours and cost estimates are used to assess the proposals scope and to negotiate a contract price with the selected firm.

**Finding:** Documentation for in-house or consultants estimated projected man hours and costs was provided for only two of the sixteen Professional Services contracts in the new contact sample for two of the nine contract extensions.

**RECOMMENDATION NO. 8**

Estimated or projected man hours and costs are essential components of the Professional Services award process and should be included with all contracts.

**Response**

*ALCOSAN accepts the recommendation and will review incorporation into an enhancement of our professional service procurement procedures.*

*As noted by the Audit Team, the projecting of man hours and establishing a basis for probable costs are basic elements and essential components of professional service procurement. While an integral facet of the Authority’s process, our documentation has not adequately preserved the attendant effort. The Authority will create a format to better capture the process, level of effort and provide for uniform record keeping of results.*

**Statements of Qualifications Assessment**

The purpose of requesting Statements of Qualifications from interested firms is to determine which firms have the experience and capability to meet the objectives of the proposal at issue. Firms that meet this criteria are “short listed” and asked to respond to the Request for Proposal for the needed service. Firms that do not meet the criteria are eliminated from the competition process.

**Finding:** Short List Assessment documents were provided for two contracts in the above testing sample. One document appears to be a check list of Staff Committee short list recommendations. One firm was short listed solely on the Executive Director’s recommendation.
Finding: The other contract had two short list assessment documents. One was an undated assessment of short listed and excluded firms. The other was a dated “final shortlist” of firms sent RFPs and firms sent non-selection letters.

RECOMMENDATION NO. 9

To avoid appearances of favoritism, a rating system with objective rating criteria should be used to determine the qualifications of firms submitting Statement of Qualifications. Ratings of short listed and eliminated firms should be kept in all contract file.

Response

ALCOSAN accepts the recommendation and will review incorporation into an enhancement of our professional service procurement procedures.

The short listing process typically occurs in an internal staff review committee setting. Having reviewed the submitted statements of qualifications or letters of interest, each committee member presents their assessments and rankings of the candidate firms. Although it is a fairly informal process, it is nonetheless thorough with participants vigorously affirming or challenging their colleague’s assertions; it is very much a collaborative process. To better capture this effort the Authority will create a standard format and record keeping for the professional service short listing process.

Professional Services Contract Extensions

Finding: There are two types of Professional Service contracts: new (as explained above) and extensions of existing contracts.

Of the 25 PS contracts selected for review, nine (9) were extensions of existing contracts. Eight of the contract extensions totaled $4,321,821 with the remaining contract based on an hourly rate schedule.

Professional Services contracts that are extensions of existing work are usually awarded to the same contractor that performed the prior work. The ALCOSAN Executive Director has indicated that this is because of the prior contractors’ familiarity with the project as well as the Authority’s familiarity with the contractor and satisfaction of prior completed project work. Contract extensions also help keep the project on schedule. No Request for Qualifications (RFQ) is advertised and the only contractor on the short-list is the contractor who did the original work.

The awarding of these PS extension contracts begins after the previous work is completed and more work is needed. Sometimes it’s “Phase II” of a 3 Phase project, or sometimes it’s a function that was overlooked in the original drawing scope, such as providing for the design for raising a door.
The nine extension contracts in the testing sample were for the following:

   New Truck Staging Building Door  
   Phases II Plant Expansion  
   Satellite Treatment Facilities Demonstration Program  
   43rd Street Access Shaft  
   Construction Management Services of O & M Facilities  
   CS & T building Design Services (a spin-off project of the O & M Facilities)  
   Construction Management Services for CS & T Building  
   Construction Management Services for CIP Plant Improvement  
   Retained Consultant Services (set hourly rate)

**Finding:** The Contract extension process takes less time because ALCOSAN does not advertise for Request for Qualifications (RFQ) or prepare a short list of other firms to contact or send a RFP.

The Executive Director stated that the original contract (some dating back to 1994) did follow the PSC process. Verifying this statement was outside the scope of this audit.

**Finding:** For the nine extension contracts in the testing sample, the same consultant/engineer/architect was awarded the contract. They alone were contacted to provide a written bid for the new project.

**Extension Contract Award Process Compliance**

**Finding:** The process used to award Professional Services contracts depends on whether the contract is new or an extension of an existing contract. Contract extensions are awarded differently than new contracts. The auditors were not provided with a flowchart or other written description of the contract extension process.

**RECOMMENDATION NO. 10**

A step by step process for awarding Professional Services contract extensions should be flowcharted as are the other contract award processes.

According to the Executive Director, seven areas of the PSC award process are applicable for contract extensions. They are: Projected Man Hours and Cost, Staff Review Committees Recommendation to the Board, Board Authorization to the Firm, Firms Acceptance, Service Agreement Signed, Service Authorization Approved, And the Negotiated Fee. Documentation findings are found in Table 2.
Response

ALCOSAN accepts the recommendation and will review incorporation into an enhancement of our professional service procurement procedures.

As noted the process supporting recommendation of extensions on professional service contracts includes estimating, evaluating and negotiating. Likewise, as noted by the Audit Team, there is no prescribed format for this process. The Authority will identify and appropriately document the most commonly used practices in managing professional service contract extensions in the issuance of supplemental service authorization awards.

Table 2 shows the highest award procedure document compliance was with Service Agreements Signed and Service Authorizations Approved. The lowest area of documented compliance was Negotiated Fees.

Construction Contracts

As noted in the Methodology, the auditors requested a list of all Construction contracts awarded during the audit scope period. The list comprised twenty-eight (28) Construction and ten (10) were Materials (Purchase of Goods) contracts.

A sample of 21 Construction contracts was chosen for testing. These contracts totaled $12,883,373 and included three large construction projects that were awarded as four separate contracts.

At ALCOSAN, larger projects are not awarded to one general contractor to subcontract out to whoever they choose. Instead, major construction phases are put out to bid separately according to the specialized phase of work needed. These four separately bid phases are: General Contractor, Plumbing Contractor, HVAC Contractor and Electrical Contractor.

Finding: Not allowing a general contractor to subcontract different phases of the project is a good way for ALCOSAN to ensure that all qualified contractors meet its requirements and allow the Authority to maintain better control over all aspects of the project.

Construction Contract Award Process Compliance

Finding: The Executive Director stated that an estimate of cost is prepared by ALCOSAN staff or consultant to assess the reasonableness of bids. Like the projected man hours and cost estimate for Professional Services contract, this step is missing from ALCOSAN’s flowcharted award process for Construction contracts.

Eleven (11) steps of the Construction contract award process were tested for compliance. The auditors requested documentation of: Estimated Consultant Cost,
Managers Review & Approval of Bid Documents, Board of Directors Authorization of Contract Advertisement, Copy of Advertisement, Date of Pre-Bid Meeting & List of Attendees, Names of Bidders and Bid Amounts, Checklist of Staff Reviewing Bids/Comments, Division Staff Recommendation to Executive Director, Executive Director’s Recommendation to Board, Contract Awarded to Lowest Bidder and Contract Signed. Findings are found in Table 3 below.

**Finding:** The majority of the requested documentation for the Construction contracts was provided.

Table 3 shows the highest award procedure document compliance was with Board of Directors Authorization of Contract Advertisement, Names of All Bidders with Dollar Amounts, List of Names Who Reviewed Bids, Division Staff Recommendation to Executive Director, Executive Director Recommendation to Board, Contract to Lowest Responsible Bidder and Contract Signed. All had 100% compliance. The lowest area of document compliance was Review & Approval of Bid Documents and Copy of Advertisement. These ‘low’ rates of compliance were 81%.

**Finding:** A greater amount of documents were available for Construction contracts than Professional Service contracts.

A cost estimate is to be prepared by either ALCOSAN’s engineering staff or contracted consultant as a tool to help determine the lowest responsible bidder. Eight (8) contracts (38% of the sample) were awarded to companies whose bids were over ALCOSAN’s estimated cost. Ten (10) contracts (48% of the sample) were under the estimated cost. Three contracts (14%) had no cost estimate.

Contracts awarded over the estimated cost ranged from a low of 2% and a high of 76% over the estimate. In the case of the bid being 76% higher than the ALCOSAN engineer’s estimate, it was determined that the engineer’s estimate was substantially low in a number of areas and was adjusted accordingly.

**Finding:** Engineer’s estimates should be used as a guide to assess bids for all work and kept in the files. All discrepancies between cost estimates and final contract cost should be explained in writing, especially when they vary excessively.

**Finding:** In one instance, a bidder was awarded a contract as lowest responsible bidder then subsequently rejected. The Executive Director obtained a copy of the bid rejection letter for the auditors. The letter was prepared by outside counsel and clearly explained why the firm’s licensing deficiencies were the reason for rejecting its bid.
RECOMMENDATION NO. 11

If a bidder awarded a contract is later deemed not responsible, ALCOSAN must document the reasons for withdrawing the contract and include the rejection documents in the contract file.

Response

ALCOSAN accepts the recommendation and will review incorporation into an enhancement of our construction contract procurement procedures

With the expectation that a rejection based on responsiveness or responsibility may result in a legal challenge, it is policy to refer the matter and have counsel research, document and prepare a response to the unsuccessful bidder. Heretofore the precipitating need for a rejection has been verbally referred to the solicitor. Although this is a rare occurrence, going forward the Authority will present preliminary concerns in writing and add same to the appropriate contract file to better capture and manage this information.

Finding: One contractor’s bid of $74,643 was significantly lower than the others bids which ranged from $193,678.95 to $529,689.50. To its credit, instead of rejecting this bid ALCOSAN investigated the contractor. It found that the contractor had a good reputation and was able to perform the work at this low bid by using creative approaches such as working during the night when the sewage flow is lowest.

Materials Contract Award Process Compliance

Materials contracts reviewed were for the purchase of chemicals needed for ALCOSAN’s plant operations. These contracts were bid as cost per unit prices and not as a total contract amount. Unit costs were bid according to how the chemical is sold, i.e., by the gallon, ton or pound.

ALCOSAN uses a large quantity of chemicals for sewage disposal and waste treatment. Contracts for these chemicals are awarded through the same process as Construction contracts, i.e., to the lowest responsible bidder. There were 5 Materials contracts in our sample. The following Table 4 summarizes the documentation for these Materials contracts. The same 11 steps examined in the Construction contract award process above were tested for compliance in the Materials contracts.

Finding: Because some chemicals are critically needed for plant operation, ALCOSAN will contract with a back up supplier in case there is a problem with the lowest responsible bidder. This was done with the lime supplier. The back up supplier was the second lowest responsible bidder charging $4.66 per ton more than the lowest responsible bidder.
RECOMMENDATION No. 12

To save money on critically needed plant supplies, ALCOSAN should try to negotiate a standby contract at the low bid rate. If the second lowest bidder refuses to amend its price, all other bidders should be given the opportunity to match the awarded contract price as a standby contractor.

Response

*ALCOSAN accepts the intent of this recommendation but disagrees with the remedy as proposed and on the advice of counsel will not be able to incorporate this recommendation specifically as offered.*

As noted by the Audit Team, the Authority currently utilizes a strategy of awarding a standby contract for critical plant supplies where warranted. When deemed necessary, the requirement for a standby contract is detailed in the bid specifications and a standby award is made to the second lowest responsible bidder. The standby award is made for implementation only in the event of default by the primary supplier. Should this be necessary, contract language can provide for recovery of the cost difference between the the defaulting supplier and the standby supplier. This coverage can be guaranteed via the defaulting supplier’s bid bond requirement. As bids for public works cannot be modified or negotiated after bid opening, the Authority will include explicit cost recovery language in all contract specifications with provision for a standby award. We believe this approach provides the best legally defensible protection and meets the intent of the recommendation.