

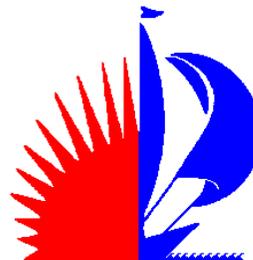
Management Review

of

Follow-up on Report of Audit No.
03/04-XX-09 Review of CH2M Hill's
Internal Controls Used Over the
WaterWorks 2011 Program dated
April 28, 2004

Report of Audit 05/06-XX-07

July 7, 2006



MEMORANDUM NO. 06-47

DATE: July 7, 2006

TO: Director of Public Works/Albert Carbon

SUBJECT: *Management Review of Follow-up on Report of Audit No. 03/04-XX-09 Review of CH2M Hill's Internal Controls Used Over the WaterWorks 2011 Program dated April 28, 2004*

Enclosed is the "subject" Final Report of Audit.

Allyson C. Love
Director, Office of Management and Budget

Attachment - Final Report of Audit 05/06-XX-07

c: City Commission
City Manager/George Gretsas
Assistant City Manager/David Hebert
Assistant City Manager/Kathleen Gunn
Assistant City Manager/Stephen Scott
Director of Finance/Betty Burrell

ACL/vf

REPORT OF AUDIT NO. 05/06-XX-07

DATE: March 31, 2006

TO: Public Works Director/Albert Carbon

VIA: Assistant Internal Audit Director/Renee Foley/5851

FROM: Financial Management Analyst/James Hamill

SUBJECT: *Follow-up on Report of Audit No. 03/04-XX-09 Review of CH2M Hill's Internal Controls Used Over the WaterWorks 2011 Program dated April 28, 2004*

BACKGROUND/SCOPE

Internal Audit completed a follow-up of the subject audit report. Our overall objective was to determine if Management took corrective actions in response to all recommendations contained in the audit report and whether the actions taken eliminated the deficiencies noted to improve the quality and effectiveness of oversight provided by CH2M Hill. Judgmental sampling techniques were used to review transactions and documents for the period March 2004 through March 2006. The follow-up review was performed during the months of February and March 2006 and was performed according to generally accepted government auditing standards.

OVERALL EVALUATION

CH2M Hill has taken the necessary steps to fully implement 8 recommendations (1-5 and 7-9), partially implement recommendations 6 and 10, and did not implement recommendation 11 (**Schedule**). Recommendation 1 concerning the Direct Purchase Program was implemented; however, it is ineffective in terms of achieving significant program savings. CH2M Hill's Program Management Team (PMT) did not create a Supervisor of Inspection position with respect to recommendation 11.

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FINDING 1

CH2M Hill PMT's Direct Purchase process that applies to individual material and equipment purchases > \$500,000 is ineffective in achieving significant cost savings for the WaterWorks 2011 Capital Improvement Program (CIP).

Our follow-up review of recommendation 1 revealed since June 30, 2004, the PMT had made just one Direct Purchase¹ resulting in a program-wide total tax savings of only \$7,875. Subsequently, no more than one other project meeting the \$500,000 threshold had been identified.² However, the Change Control Board (CCB) decided to not apply the Direct Purchase process to the material for this project. The Design Manager, who prepared the memo for the CCB to assist them in evaluating the merits of using the Direct Purchase process, did not argue favorably for Direct Purchase on this project. Many of the arguments/issues presented by the Design Manager were not corroborated and possibly reflect bias against a Direct Purchase Program.

The CH2M Hill's Manager of Finance and Controls was unable to provide an updated valuation of the potential tax savings remaining through the end of the WaterWorks 2011 Program. The concept of Direct Purchase has not been supported by the PMT, nor proactive steps taken to develop and implement an effective Direct Purchase Program as an investment that will yield significant financial benefits now and in the future.

A significant opportunity to reduce overall construction costs for the expansive WaterWorks 2011 CIP program is lost by not taking proactive steps to develop and implement an effective Direct Purchase Program.

RECOMMENDATIONS AND MANAGEMENT COMMENTS

The *City's Program Manager* should require *CH2M Hill's PMT* to:

Recommendation 1. Immediately reduce the Direct Purchase dollar threshold for qualifying purchases to \$100,000 from the current \$500,000 to increase the number of qualifying purchases and generate greater tax savings for the Water Works 2011 program.

¹ Davie Blvd. 54" Force Main

² Project 10537 Repump Rehabilitation

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Recommendation 2. *In consultation with the Director of Procurement Services and the City Attorney, commit to the development and implementation of an effective Direct Purchase model that will harness the enormous savings opportunity a program like this represents. Risks should be identified and management strategies developed to control and minimize these potential exposures as follows.*

	Risk	Potential Mitigating Factor
1	Untimely delivery of material.	Material requirements planning and control system.
2	Risk of Loss for materials damaged or stolen after delivery.	Transfer risk through insurance or accept risk, but explore ways to secure materials (e.g., loss prevention techniques).
3	Audit by Florida Department of Revenue.	Request the Department of Revenue review and approve the proposed Direct Purchase Program.
4	Inability to enforce liquidated damages when delay attributable to the City.	Build adequate lead-time into the ordering function. Assess damages against the supplier for untimely delivery of required materials. Determine the extent the delay may have on completion of work along the critical path. If slack exists, delay may not extend duration of the contract.
5	City may not receive contractor quantity discounts.	City could make purchases through an existing state or federal contract, which may provide similar/same quantity discounts.

Recommendation 3. *Revise the Direct Purchase Decision Summary form provided to the CCB to quantify costs vs. anticipated tax savings to facilitate a meaningful cost benefit comparison.*

Management Comment. *Management nonconcurred with the finding and recommendations 1 through 3 and stated:* “We do not concur with Finding 1. As described in the documentation given to the Auditor, the PMT believes its decision reached with regard to the implementation of its Direct Purchase Policy is the correct one and will abide by this existing policy in accordance with Section 8.3.2 of the Program Manual. In addition to the two Projects mentioned in Finding 1, the Program has also entered into a contract for the direct purchase of the water treatment membranes (equipment) for the Peele-Dixie Water Treatment Plant (WTP) (P10454D, EPO2843 - \$1,045,000). The estimated payment for the membrane elements is 10/1/2006. Consistent with our previous correspondence with the Auditor, our current policy is based on the considerable knowledge and experience in the areas of construction procurement and management and the experience gleaned from the 5 years the Program has been in existence. Based on this experience, we believe the cost and risk of a more extensive pre-purchase undertaking would outweigh the benefit of actual tax savings for the majority of the WaterWorks 2011

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projects. The PMT will continue to evaluate future projects in the manner described in the aforementioned policy.” **This item is open.**

Recommendation 4. *Consult with the Supervisor of Construction Payments at the Broward County School Board³ to benchmark and determine best practices for a Direct Purchase Program based on the fact that the School Board recently implemented a Direct Purchase Program.*

Management Comment. *Management concurred with the finding and recommendation and stated:* “Contact with Broward County Schools has been initiated to obtain information on their Direct Purchase Program. We will evaluate Broward County’s practices in the context of the WaterWorks 2011 Program to determine if there is a need/opportunity to revise the existing policy. We expect to complete this evaluation by 10/1/06.” **Estimated completion date October 1, 2006.**

FINDING 2

CH2M Hill’s PMT did not create a Supervisor of Inspection position.

According to Control Elements per CH2M Hill’s Internal Control Work Plan/Contractor Payment Procedures: “The Program will create a Supervisor of Inspection position that will be dedicated to: (1) development and implementation of consistent inspection procedures on a program wide basis; and (2) review of inspector performance activities to ensure compliance with program policies and procedures.”

CH2M Hill opposed implementation of the recommendation to create a Supervisor of Inspection position and sought an alternative to establish an Internal Control Analyst position instead whose role will be to review compliance to WaterWorks 2011 policies and procedures. Internal Audit does not endorse this role since it’s broad in scope and not specific to the monitoring of Project Inspectors.

Proper oversight of the Project Inspectors by a Supervisor of Inspection will assist in the overall management of quality and effectiveness of the inspection program and minimize the chance for costly remedial work to correct deficiencies.

³ Ms. Pam Norwood (754) 321-0769.

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RECOMMENDATION 5

The City's Program Manager should require CH2M Hill's PMT to follow-through on their prior commitment and create a Supervisor of Inspection position to ensure effective and consistent monitoring/supervision of the project inspectors.

MANAGEMENT COMMENT

Management nonconcurred with the finding, however, concurred with the recommendation and stated: "We do not concur with the Finding 2 assertion that CH2M Hill opposed implementation of the recommendation to create a Supervisor of Inspection position. The concept of the Supervisor of Inspection position was initiated and developed by CH2M Hill's Manager of Finance and Control. The position description and Task Order requesting City Commission approval as written by CH2M Hill was previously supplied to Internal Audit. At no time has CH2M Hill opposed the establishment of this position. The decision not to implement the Supervisor of Inspection Position was made by the City's Program Manager due to workload and funding considerations at the time.

We concur with Recommendation 5, as follows: We are approaching a point in the program where construction is ramping-up to a level of activity that warrants additional consideration of this recommendation. As a result, the City's Program Manager has agreed to add a Supervisor of Inspection (or similar) position to assure that construction inspectors engaged on program activity are following appropriate construction inspection procedures, and in accordance with program policies and procedures. Action has not been taken previously due to adequate existing oversight, and in an effort to conserve program resources. Initiation of a number of major projects - specifically those projects included in the current General Construction Services contract valued at \$80 million - has been delayed. However, five General Construction Services contracts were recently awarded, and projects under those contracts will be starting within the next several months, so it is appropriate at this time to initiate implementation of the Supervisor of Inspection (or similar) role." **Estimated Completion date October 1, 2006.**

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ADDITIONAL MANAGEMENT COMMENTS

“Schedule 03/04-XX-09 Business Conduct/Code Of Ethics Policy - The PMT will revise the Business Conduct Policy to require all new Full-Time employees to receive the Policy as part of the new employee orientation package. We will have all current full-time employees re-sign the Code of Ethics Policy. Implementation date 8/1/06.”

EVALUATION OF MANAGEMENT COMMENTS

Management comments provided and actions taken and/or planned are considered responsive with the exception of recommendations 1 through 3 as follows.

The PMT does not concur because “based on the considerable knowledge and experience in the areas of construction procurement and management they believe the cost and risk of a more extensive pre-purchase undertaking would outweigh the benefit of actual tax savings for the majority of WaterWorks 2011 projects.” Consequently, the PMT is keeping the \$500,000 threshold that has been *ineffective* at generating substantial tax savings for the program.

The PMT’s assertion that the cost and risks exceed the benefits is entirely subjective because when asked they were unable to provide the necessary support to quantify the cost of materials that remain to be purchased through project completion. Furthermore, the PMT did not agree with recommendation 3 to update the Direct Purchase Summary form to quantify the anticipated tax savings for each direct purchase under consideration. It is apparent the PMT has not fully supported the implementation of an effective Direct Purchase Program that will yield significant benefits now and in the future.

**Results of Follow-up on Report of Audit 03/04-XX-09
Review of CH2M Hill's Internal Controls Used Over the WaterWorks 2011 Program**

Schedule

Rec. #	Recommendation	Management Response/Commitment	Status	Condition Found During Follow-up (Noted based on limited testwork to verify issue resolved/corrected)
1	The City's Program Manager should coordinate the implementation of a Direct Purchase Program with the City's Manager of Procurement and Materials Management, CH2M Hill's Program Management Team (PMT) and the City Attorney. A pilot project should be identified and tested to demonstrate a commitment to full implementation of a Direct Purchase Program.	Management concurred in principle and agreed to: Develop a process to evaluate Direct Purchase of material or equipment > \$500,000. Additionally, two specific projects were identified as initial candidates for Direct Purchase; (1) Davie Blvd 54" Force Main and (2) Peele-Dixie Water Treatment Membranes.	Implemented, but ineffective	A Direct Purchase policy and process was developed. However, the effectiveness of the current policy (>\$500,000 threshold) is questioned because only one direct purchase was identified/evaluated since 6/30/04. The potential savings on this project was \$68,250; however, it was not approved by the CCB for Direct Purchase. Project 1 was exempted from sales tax saving the City \$7,875 and Project 2 was deferred until 10/06.
2	The City's Program Manager should require CH2M Hill's Manager of Finance and Controls to conduct a test to ascertain the back-up recovery procedure is functioning as intended.	Management concurred in principle and agreed to: Perform a monthly back-up test using the software Beyond Compare version 2.1.2 and document the results.	Implemented	
3	The City's Program Manager should require CH2M Hill's Manager of Finance and Controls to create a differential record of Friday's transaction detail prior to writing the weekly full back-up tape to assure Friday's transaction detail will not be lost.	Management concurred in principle and agreed to: acquire a second tape drive to accomplish writing Friday's transaction detail prior to writing the weekly full back-up tape.	Implemented	
4	The City's Program Manager should require CH2M Hill's Manager of Finance and Controls to instruct the Network Analyst to store the owner's manual for each of the safes in a locked cabinet with restricted access.	Management concurred with the recommendation and stated the manuals would be stored in a locked cabinet with restricted access.	Implemented	
5	The City's Program Manager should require CH2M Hill's Manager of Finance and Controls to: The operating Procedure should be updated to delete the following reference: "The weekly back-up tapes are stored in CH2M Hill's Deerfield Beach Office." The replacement language should explain the weekly back-up tapes are stored in a locked fire safe in the computer room on the 6th floor of City Hall. Additionally, the procedure should indicated the daily differential tapes are stored in a locked fire safe in the Program Management Office, 3rd floor 200 N. Andrews Ave.	Management concurred with the recommendation and stated the wording of the procedure has been changed per the Internal audit Recommendation.	Implemented	

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Rec. #	Recommendation	Management Response/Commitment	Status	Condition Found During Follow-up (Noted based on limited testwork to verify issue resolved/corrected)
6	CH2M Hill's Program Management Team should strengthen internal controls to assure more efficient and timely processing of Contractor draws. Alternate processing Procedures should be developed to flag and expedite the processing of corrected, resubmitted Contractor draws to assure compliance with the Florida Prompt Payment Act.	Management disagrees with the finding that Internal Controls are not adequate to assure payments are efficiently and effectively processed and properly approved. The program has based its adherence to the Florida Prompt Payment Act on the criteria that the payment date is the date an invoice is officially submitted to the City's Finance Department for payment. Based on our analysis of sample invoices included in this audit and using the departments calculated Payment Due Date, 3 invoices (5.6%) could be categorized as being processed late. No evidence of Approval - While it is true that in a few cases signatures and dates were missing on the rejection/approval form itself, the underlying Progress Draw was signed by all who were required to do so.	Partially Implemented	This recommendation was tested for approval signatures documented on the Contractor's Payment Approval/Rejection form only. We found CH2M Hill is still not fully in compliance as 31.7 % of the required approvals and dates were missing from the 10 Contractor Progress Draws processed for contract 10171-A (Arrow). The testing for prompt payment was not completed because only 5% of the draws reviewed in the prior audit were late. Additionally, prompt payment testing is frustrated when date information is missing and we found 13 of 60 (21.67%) dates were missing.
7	The Contractor's Payment Approval/ Rejection form should be revised to include a signature line for the Internal Control Analyst (ICA) and the ICA should initial the Pay Request/Progress Draw to evidence the calculations that support the progress draw are correct.	Management concurred with the recommendation and stated: The Contractor's Payment Approval/Rejection form will be revised to include a signature line for the ICA.	Implemented	
8	The City's Program Manager should require CH2M Hill's Program Management Team to develop a risk tool and identify specific risk factors. The results of the risk assessment would be useful in planning and prioritizing internal control activities and in monitoring of control systems.	Management concurred with the recommendation and stated the Program will develop a risk assessment tool to assist in the identification and evaluation of specific risk factors.	Implemented	
9	The City's Program Manager should require CH2M Hill's Program Management Team to perform a Fraud Check up and establish a written fraud policy. The Policy should be clearly communicated to all employees to assist in the early detection and prevention of fraud.	Management concurred with the recommendation and stated the Program will develop a written fraud policy . A related fraud check-up list, tailored to the specific needs of this program, will be developed concurrently with this policy.	Implemented	

**Results of Follow-up on Report of Audit 03/04-XX-09
Review of CH2M Hill's Internal Controls Used Over the WaterWorks 2011 Program**

Schedule

Rec. #	Recommendation	Management Response/Commitment	Status	Condition Found During Follow-up (Noted based on limited testwork to verify issue resolved/corrected)
10	The City's Program Manager should require CH2M Hill's Program Management Team to establish a written policy to require employees, via signature, to evidence receipt of the Business Conduct Policy. Consideration should also be given to the establishment of an annual self-disclosure mechanism to report potential conflicts of interest.	Management concurred with the recommendation and stated the Program will require all employees to sign the Business Conduct Policy.	Partially Implemented	The list of employees who signed to acknowledge receipt of CH2M Hill's Business Conduct Policy has not been updated since 6/30/04. As a result, no evidence exists to show receipt of the Business Conduct Policy for any Program staff who have subsequently joined the WaterWorks 2011 Program Office.
11	The City's Program Manager should require CH2M Hill's Program Management Team to create a Supervisor of Inspection to assist in the overall quality of the inspection program.	Management concurred in principle and stated "As the Program enters it's peak construction period, we will be incorporating the concept of the Supervisor of Inspection position into the City Engineering Inspection Supervisor's responsibilities in the near future. This position will be titled Technology Lead for Resident Project Representatives and will place additional emphasis on independent oversight review for all RPRs and Inspectors. The Program will develop a list of responsibilities to incorporate into this position.	Corrective action <u>not</u> taken.	According to CH2M Hill's Manager of Finance and Controls, the Position of Field Inspection Audit Services was proposed; however, the item was not brought forward for Commission approval on the decision of the City Program Manager due to funding considerations at that time. As an alternative, the PMT proposed the position of Internal Control Analyst (effective 3/13/06) whose primary focus will be <u>review of compliance to WaterWorks 2011 policies and procedures</u> . The oversight to be provided through this new position is broad in scope and not specific to the monitoring of Project Inspectors. We believe the Supervisor of Inspection position is warranted.
Note:				
Follow-up to Recommendations 6-7 were tested in Report of Audit No. 05/06-XX-08 Review of Arrow Directional Boring, Inc. – Contract 10171-A -				
Force Main Replacement SW 4th Avenue Directionally Drilled River Crossing.				