



Issue Date July 21, 2010
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Audit Report Number 2010-BO-1005
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TO: Donna Ayala, Director, Office of Public Housing, Boston Hub, 1APH

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FROM: John A. Dvorak, Regional Inspector General for Audit, Region 1, 1AGA

SUBJECT: The Hartford Housing Authority's Plan To Replace Boilers Did Not Meet Recovery Act and Federal Efficiency Requirements

## **HIGHLIGHTS**

### **What We Audited and Why**

We audited the Hartford Housing Authority (Authority) because it was awarded a \$5 million Public Housing Capital Fund grant under the American Recovery and Reinvestment Act of 2009 (Recovery Act) and obligated the majority of the grant just before the required obligation deadline. Our objectives were to determine whether the Authority (1) had adequate management controls over its obligation process, (2) maintained support for obligations, and (3) obligated its grant funds for eligible projects.

### **What We Found**

Overall, the Authority had adequate controls over obligating and supporting its Recovery Act capital grant. However, it did not always obligate funds for eligible activities.

The Authority planned to use its Recovery Act funds to repair and federalize its State housing units. However, its plans changed when the full scope of the

required repairs and funds needed were determined. The Authority shortened the normal procurement time and executed site improvement and boiler replacement contracts for the full amount of the grant before the statutory deadline. The audit showed that most of the Authority's obligations were for eligible activities, properly procured, and adequately supported.

However, the Authority contracted to replace 224 boilers including 33 boilers that had not reached the end of their useful life with boilers that did not meet energy efficiency requirements. If this condition is not corrected, more than \$1 million in Recovery Act and annual capital funds may not be used effectively and in accordance the Recovery Act and HUD regulations.

### **What We Recommend**

We recommend that the Director of HUD's Boston Office of Public Housing ensure that the Authority stops its plans to replace boilers that have not reached the end of their economic life and reprograms \$137,850 in future annual capital funds; and ensures that boilers scheduled for replacement in years 2015-2018 are replaced with energy-efficient boilers thereby putting more than \$954,000 in Recovery Act funds to better use.

For each recommendation without a management decision, please respond and provide status reports in accordance with HUD Handbook 2000.06, REV-3. Please furnish us copies of any correspondence or directives issued because of the audit.

### **Auditee's Response**

The auditee's response, along with our evaluation of that response, can be found in appendix B of this report.

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## BACKGROUND AND OBJECTIVES

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The Hartford Housing Authority (Authority) is incorporated under the laws of the State of Connecticut and operates under a board of commissioners to provide safe and decent housing to low- and moderate-income families and elderly individuals. The Authority owns and operates more than 1,100 Federal public housing units under an annual contributions contract with the U.S. Department of Housing and Urban Development (HUD). It also manages more than 700 State housing units.

On February 17, 2009, President Obama signed the American Recovery and Reinvestment Act of 2009 (Recovery Act). This legislation included a \$4 billion appropriation of capital funds to carry out capital and management activities for public housing agencies, as authorized under Section 9 of the United States Housing Act of 1937. The Recovery Act requires that \$3 billion of these funds be distributed as formula funds and the remaining \$1 billion be distributed through a competitive process. On March 18, 2009, HUD awarded the Authority a formula grant of more than \$5 million.

The Recovery Act imposed additional reporting requirements and more stringent obligation and expenditure requirements on the grant recipients beyond those applicable to the ongoing Public Housing Capital Fund program grants. Recovery Act funds can be used to address deferred maintenance needs, including but not limited to (1) replacement of obsolete systems and equipment with energy-efficient systems and equipment that reduce consumption, (2) work items related to code compliance including abatement of lead-based paint, and (3) rehabilitation and modernization activities that have been delayed or not undertaken because of insufficient funds.

The Authority allocated its Recovery Act funds to repair and replace roofs and sidewalks, make site improvements, replace boilers, administer the grant, and prepare units for vacancy.

Our audit objectives were to determine whether the Authority (1) had adequate management controls over its obligation process, (2) maintained support for obligations, and (3) obligated its grant funds for eligible projects.

## RESULTS OF AUDIT

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### Finding 1: The Authority's Plan To Replace Boilers Did Not Meet Recovery Act and Federal Energy Policy Act Efficiency Requirements

The Authority contracted to replace boilers that had not reached the end of their useful life and did not meet Federal Energy Policy Act efficiency requirements. This condition occurred primarily because the Authority was not aware of Federal energy efficiency requirements. As a result, it did not fully evaluate whether the existing boilers should have been replaced before the end of their useful life or ensure that it purchased energy-efficient boilers as required. If this condition is not corrected, more than \$1 million may not be used effectively and in accordance Federal requirements.

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#### **The Authority Obligated Its Recovery Act Funds by the Deadline**

The Recovery Act provided the Authority with more than \$5 million for capital improvements on March 18, 2009, and required that the funds be obligated within 1 year to stimulate the economy. The Authority planned to use the funds to repair and federalize its State housing units. However, its plans changed when the full scope of the required repairs was determined. To meet the March 17, 2010, deadline, the Authority shortened its normal procurement time and executed contracts for site improvements and boiler replacements at its Federal units.

The audit showed that the obligations were properly and adequately supported, and most of the contracted items were eligible activities. However, two contracts included replacing boilers with boilers that would not meet the Recovery Act's and HUD's requirements for energy efficiency.

#### **Two Contracts Included More Than \$1 Million To Replace Boilers**

The Authority entered into two contracts that included more than \$1 million to replace boilers at its Federal scattered sites housing units.<sup>1</sup> The contracts were

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<sup>1</sup> Contract #1574-10 was executed on March 5, 2010, with total cost of site improvements and boiler replacements not to exceed \$1,025,225, of which \$434,100 was for boiler replacement; and contract #1576-10 was executed on March 10, 2010, with a total cost of site improvements and boiler replacements not to exceed \$2,514,147, of which \$658,225 was for boiler replacement (a total of \$1,092,325 for boiler replacement).

primarily funded with Recovery Act capital funds and some annual capital funds.<sup>2</sup> We questioned replacing the boilers because the Authority’s physical needs assessments showed that 190 boilers had 35 percent of their expected useful life remaining and 33 boilers had 60 percent of expected useful life remaining. In addition, the contracted boilers were only 82 percent efficient.<sup>3</sup>

Federal regulations allow for early replacement of obsolete energy systems. However, when purchasing energy-consuming products, grantees must purchase Energy Star products or Federal Energy Policy Act designated products, unless the purchase is not cost effective.<sup>4</sup> However, the Authority’s procurement policy did not require procurement of energy-consuming products that met Federal energy requirements because it was not aware of the requirements.

After discussions with HUD, we determined that replacing boilers with 60 percent of their useful life remaining would not be a reasonable and eligible use of Federal funds.<sup>5</sup> However, we determined that replacing boilers with 35 percent of expected useful life remaining may be an eligible use of Federal funds but only if the boilers are replaced with energy-efficient boilers.

### **The Authority Was Taking Steps To Procure Eligible Boilers**

The Authority was proactive during our audit and agreed not to replace boilers scheduled for replacement in 2023-2026. It had also met with its engineer and planned to purchase and install 85-percent-efficient boilers. In addition, the two contracts for site improvements and boiler replacements were structured to be flexible, allowing for increasing or decreasing the scope of these activities and/or the reprogramming of funds to allow changes in these activities.

### **Conclusion**

The replacement of boilers with a useful life with 35 percent of expected useful life remaining may be an eligible use of Federal funds but only if the boilers are

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<sup>2</sup>The contract included \$787,093 in Recovery Act funds and \$238,132 in future capital funds. The 33 boilers with 60% useful life were to be replaced using non-recovery act funds and were to be paid from the \$238,132 in future capital funds.

<sup>3</sup> Federal Energy Star and Energy Management Program efficiency requirements are 85 and 90 percent, respectively.

<sup>4</sup> The U.S. Housing Act of 1937, paragraph 9(d)(1)(c); The Energy Policy Act of 2005, Section 152; 24 CFR 905.10(k)(1)(iii); HUD Office of Public and Indian Housing (PIH) Notice PIH 2009-12; 24 CFR 965.306; and Notice PIH 2009-25.

<sup>5</sup> The Authority’s physical needs assessments recommended replacing boilers with 60 percent of expected useful life remaining in years 2023-2026.

replaced with energy-efficient boilers. The replacement of boilers with 60 percent of expected useful life remaining would not be an eligible use of capital funds. In addition, the Authority's procurement policy needs to be revised to ensure that procurements of energy-consuming products meet Federal energy requirements.

## Recommendations

We recommend that the Director of HUD's Boston Office of Public Housing ensure that the Authority

- 1A. Stops its plans to replace boilers identified for replacement in years 2023-2026 and reprograms \$137,850 in annual capital funds for other eligible activities.<sup>6</sup>
- 1B Ensures that boilers identified for replacement in 2015-2018 are replaced with boilers that meet Recovery Act requirements (i.e., are at least 85 percent efficient), thereby putting \$954,475 in Recovery Act funds put to better use. Any funds that are not used for eligible activities must be recaptured in accordance with the Recovery Act.
- 1C. Revises its procurement policy to include Federal energy requirements in future procurements of energy-consuming products.

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<sup>6</sup> These boilers were to be replaced in phase 3 of the scattered sites I contract using future non-Recovery Act Capital funds.

## SCOPE AND METHODOLOGY

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We conducted the audit in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

We conducted our audit between March and May 2010. We completed our fieldwork at the Authority's offices located at 180 Overlook Terrace, Hartford, CT. Our audit covered the period March 18, 2009, through March 17, 2010, and was extended as necessary to meet our audit objectives.

To accomplish our audit objectives, we

- Reviewed relevant laws and regulations, including
  - The United States Housing Act of 1937, Section 9;
  - Public Law 111-05, American Recovery and Reinvestment Act of 2009;
  - 24 CFR Part 905, The Public Housing Capital Fund Program;
  - 24 CFR Part 965, Subpart C, Energy Audits and Energy Conservation Measures;
  - Notice PIH 2009-12 (HA), Information and Procedures for Processing ARRA [Recovery Act] Capital Fund Formula Grants;
  - Notice PIH 2009-25 (HA), Energy Investment Guidance Under American Recovery and Reinvestment Act (Recovery Act) of 2009 (H.R. 1);
  - Ensuring Responsible Spending of Recovery Act Funds, issued by the White House, March 20, 2009; and
  - The Hartford Housing Authority ARRA Procurement Policy.
- Interviewed the Authority's staff to determine what controls were in place to ensure compliance with the Recovery Act and HUD's requirements.
- Reviewed the Authority's files and records to verify that Recovery Act obligations greater than \$50,000 were for eligible activities, properly procured, and adequately supported. We reviewed seven contracts totaling \$4,308,179 and the Authority's obligation of \$516,097 for administrative costs.
- Reviewed two contracts that included boiler replacement activities. Contract #1574-10 was executed on March 5, 2010, with total cost of site improvements and boiler replacements not to exceed \$1,025,225, of which \$434,100 was for boiler replacement; and contract #1576-10 was executed on March 10, 2010, with a total cost of site improvements and boiler replacements not to exceed \$2,514,147, of which \$658,225 was for boiler replacement (a total of \$1,092,325 for boiler replacement).

# INTERNAL CONTROLS

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Internal control is a process adopted by those charged with governance and management designed to provide reasonable assurance about the achievement of the organization's mission, goals, and objectives with regard to:

- Effectiveness and efficiency of operations,
- Reliability of financial reporting, and
- Compliance with applicable laws and regulations.

Internal controls comprise the plans, policies, methods, and procedures used to meet the organization's mission, goals and objectives. Internal controls include the processes and procedures for planning, organizing, directing, and controlling program operations as well as the systems for measuring, reporting, and monitoring program performance.

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## Relevant Internal Controls

We determined that the following internal controls were relevant to our audit objectives:

- Controls over staff experience, training, and work load
- Controls over selecting and approving eligible activities
- Controls over tracking and verifying Recovery Act administrative expenses
- Controls over maintaining accurate and timely accounting records
- Controls over timely obligation of Recovery Act capital funds
- Controls over contracting for activities in accordance with the Recovery Act

We assessed the relevant controls identified above.

A deficiency in internal control exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, the reasonable opportunity to prevent, detect, or correct (1) impairments to effectiveness or efficiency of operations, (2) misstatements in financial or performance information, or (3) violations of laws and regulations on a timely basis.

## Significant Deficiencies

Based on our review, we believe that the following item is a significant deficiency:

- Controls over contracting for activities in accordance with the Recovery Act (procuring energy-efficient systems - see finding 1)

## APPENDIXES

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### Appendix A

#### SCHEDULE OF FUNDS TO BE PUT TO BETTER USE

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Recommendation number	Funds to be put to better use <u>1/</u>
1A	\$137,850
1B	954,475

- 1/ Recommendations that funds be put to better use are estimates of amounts that could be used more efficiently if an Office of Inspector General (OIG) recommendation is implemented. These amounts include reductions in outlays, deobligation of funds, withdrawal of interest, costs not incurred by implementing recommended improvements, avoidance of unnecessary expenditures noted in preaward reviews, and any other savings that are specifically identified. For this audit, these amounts include avoiding \$1,092,325 in expenditures for potentially ineligible boiler replacements.

## Appendix B

### AUDITEE COMMENTS AND OIG'S EVALUATION

#### Ref to OIG Evaluation

#### Auditee Comments

Mr. John A. Dvorak  
Regional Inspector General for Audit  
U.S. Department of Housing and Urban Development  
Office of Inspector General for Audit, Region 1  
Thomas P. O'Neil, Jr. Federal Building  
10 Causeway Street, Room 370  
Boston, MA. 02222-1092

July 13, 2010

Dear Mr. Dvorak:

Enclosed for your review is the Housing Authority of the City of Hartford's (HACH) responses and corrections to the Office of Inspector General (OIG) findings in your Discussion Draft Audit Report dated June 30, 2010.

HACH will address each item in order as it appears in the Discussion Draft Audit Report:

**DIG comment** (page Draft 2) "What we found":

*"However, it did not always obligate funds for eligible activities"*

#### **Comment 1**

**HACH Response:** The activity depicted, replacement of 33 boilers in year 2023 to 2026 was not funded by ARRA funds. If replacement of these boilers was necessary, HACH would have used Annual Capital Funds.

**HACH Correction:** Remove the 33 boilers to be replaced in year 2023 to 2026 from the project and identify other capital needs depicted in HACH's (approved) five year agency plan. Please see the attached bid form and contract and how it was designed as a deduct item to eliminate boiler from the contract.

**DIG Comment** (page Draft 3 last paragraph) "What we found":

#### **Comment 1**

"boilers did not meet energy efficiency requirements".

**HACH Response:** Issue an addendum to the contract replacing existing boiler with 85% efficient boilers. Please see the specifications attached. The revised specifications have been sent to the Contractor. The Architect of Record is currently issuing a Change Order Directive.

Note: Auditee comments were recopied (typed) to make it compliant for Web Posting.

**Ref to OIG Evaluation**

**Auditee Comments**

**Comment 2**

**OIG Comment** (page Draft 3 last paragraph) "What we found":

*"If this condition is not corrected, more than one million dollars in Recovery Act and annual capital funds may not be used effectively and in accordance with Recovery Act and HUD Regulations".*

**HACH Response:** HACH has identified and depicted in Scattered Sites I, 50 boilers eligible for replacement from (year 2015 to 2016) for a value of \$195,968.00. Scattered Sites II & III has an inventory of 135 boilers to be replaced in year 2015 to 2016 for an estimated value of \$474,000.00.

Pursuant to the GIG's recommendations HACH is taking the corrective measures for the following:

- The 33 boilers identified to be replaced with Capital funds will be removed from the project (Phase III in the contract - please see attached). The Architect of Record will issue an addendum.
- All boilers replaced in years 2015 and 2016 will be replaced with 85% energy efficient boilers, thus putting funds to better use (please see specifications attached).
- HACH will clarify the current Procurement Policy by adding a separate line item in detail depicting energy conservation measures and Federal Energy requirements.

(HACH) is currently working with Honeywell, an energy savings company, and has conducted an assessment of its building systems to determine energy savings opportunities in HACH building systems.

Honeywell was on premise during the week of May 31,2010 visiting all of HACH's buildings. The information collected during the site visit is being processed by Honeywell. Upon the final report, HACH will develop an energy savings program with the intentions for advertising Request for Proposals.

This concludes our response to findings issued in your GIG Draft Audit Report dated June 30, 2010. If there are any questions please feel free to call David Siniscalchi, Director of Capital Improvements for the Housing Authority of the City of Hartford.

Sincerely,

Alan E. Green  
Executive Director

Cc: David Siniscalchi  
Roy Boling  
Tim Cifone

Note: Auditee comments were recopied (typed) to make it compliant for Web Posting.

## OIG Evaluation of Auditee Comments

**Note on the Authority's enclosure.** The Authority's response (enclosure) included an additional 165 pages of supporting documentation. We considered all the information in our evaluation of the auditee comments. However, the supporting documentation provided with the Authority's response was not included as an attachment to the final report because it was too voluminous but is available upon request.

### **Comment 1**

The report language has been modified in the last paragraph of "What We Found" to reflect that both ARRA Capital Fund and annual Capital Funds may not be used effectively. Since Authority's corrective action will remove the boilers ineligible for replacement from the contracts and use it Capital Funds for eligible activities and boilers that are at least 85% energy efficient, we consider the proposed actions responsive to our recommendation numbers 1 and 2. HUD will need to ensure the proposed actions are completed correctly.

### **Comment 2**

According to the bid and contract documents, the 33 boilers were to be replaced in phase 3 of the contract using future annual Capital Funds (non Recovery Act funds). There were 30 boilers at a bid cost \$126,000 and the three others at a bid cost \$11,850 (3 X \$3,950) or a total of \$137,850 in future annual capital funds. The remaining \$954,475 represents ARRA funding for boilers that need to be replaced with energy efficient boilers. Together, the future expenditures that will now be used on eligible activities (Funds Put to Better Use) total \$1,092,325. Therefore, we consider Authority's proposed actions to be responsive to our recommendation numbers 1 and 2.

In addition, we consider Authority's revision to its procurement policy to include Federal energy requirements in future procurements of energy-consuming products to be responsive to our recommendation number 3. HUD will need to ensure the proposed action is completed correctly.