



**THE COMMONWEALTH OF MASSACHUSETTS
OFFICE OF THE INSPECTOR GENERAL**

**Maintenance and Repair Contracting
by the Boston Housing Authority**

**Robert A. Cerasoli
Inspector General
February 1997**



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His Excellency the Governor

The Honorable President of the Senate

The Honorable Speaker of the House of Representatives

The Honorable Chairman of the Senate Ways and Means Committee

The Honorable Chairman of the House Ways and Means Committee

The Honorable Chairman of the Senate Post Audit and Oversight Committee

The Honorable Chairman of the House Post Audit and Oversight Committee

The Directors of the Legislative Post Audit Committees

The Secretary for Administration and Finance

Members of the General Court

Omnibus ad quos praesentes literae pervenerint, salutem.

I am today releasing a report concerning the Boston Housing Authority's (BHA) contracting practices. This report documents major deficiencies in the procurement and oversight of 23 heating system maintenance and repair contracts awarded by the BHA between 1989 and 1996. This report also offers a series of recommendations aimed at promoting legal, competitive, and cost-effective maintenance and repair contracts.

Recently, the BHA has taken steps to improve its procurement and contracting practices. This Office supports the BHA's efforts to contract for maintenance and repair services in a manner that serves the public interest and reduces the BHA's vulnerability to fraud, waste, and abuse.

I appreciate the cooperation provided to my Office by BHA staff. The BHA's written response to a confidential draft of this report is included as an appendix to this report.

Sincerely,

Robert A. Cerasoli
Inspector General

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Executive Summary

Acting on allegations of illegal procurement practices by the Boston Housing Authority (BHA) in the purchasing of heating system maintenance and repair work, the Office of the Inspector General reviewed 23 heating system maintenance and repair contracts awarded by the BHA between 1989 and 1996. Office staff also interviewed officials from several BHA departments and received information from two confidential informants.

This Office made the following findings regarding the procurement and oversight of these BHA contracts:

- Finding 1. The BHA awarded seven contracts based on price quotations that appear to have been falsified.**
- Finding 2. The BHA approved a \$30,000 no-bid change order to a \$20,630 contract.**
- Finding 3. The BHA's lax contract oversight led to frequent contract overpayments on the Central Office contract.**
- Finding 4. The BHA failed to procure major repairs cost-effectively.**
- Finding 5. The BHA's contract specifications were too vague to permit vendors to bid realistic prices.**
- Finding 6. The BHA's lax contract oversight led to contract overpayments on the Fairmount and Gallivan contract.**
- Finding 7. The BHA used emergency procurement procedures to award six contracts that should have been advertised and bid.**

- Finding 8. The BHA did not fully comply with statutory emergency procurement procedures.**
- Finding 9. The BHA awarded six nearly identical \$25,000 emergency contracts, thereby avoiding legally mandated state approval.**
- Finding 10. The BHA's open-ended contract specifications prevented meaningful price competition.**
- Finding 11. The BHA obtained a \$26,535 quotation for repair work and then awarded the work through four purchase orders, thereby evading bidding requirements.**

The Inspector General's review yielded the following recommendations to the BHA and other public agencies, cities, and towns contracting for maintenance and repair work:

- Recommendation 1. Ensure that procurements are legal and competitive.**
- Recommendation 2. Issue clear and detailed contract specifications.**
- Recommendation 3. Solicit fixed-price bids for major repairs.**
- Recommendation 4. Institute a reliable, centralized record-keeping system for all contracts.**
- Recommendation 5. Institute effective contract oversight practices.**
- Recommendation 6. Prepare a multi-year facilities management plan for capital upgrades and replacement of heating systems.**

The BHA's written response to a confidential draft of this report is included as an appendix to this report.

Introduction

The Boston Housing Authority (BHA) is a public agency authorized under M.G.L. c.121B to develop and maintain housing for low-income families and individuals. The BHA currently operates approximately 13,500 units of housing for families and for the elderly and disabled. Since 1989, the BHA has operated under a form of governance established by Chapter 88 of the Acts of 1989. Pursuant to this act, the BHA is under the control of an Administrator who is appointed by, and serves under the direction of, the Mayor of Boston. The Mayor also selects, subject to City Council confirmation, a nine-member BHA Monitoring Committee. The Monitoring Committee serves in an advisory capacity to review BHA budgets, policies, and reports.

This Office surveyed the BHA's contracting practices for heating system repair and maintenance at various housing developments, the Kemp Street power plant in South Boston, and the BHA Central Office in downtown Boston. In addition to reviewing contracting and payments records, this Office interviewed staff from several BHA departments: Operations/Central Maintenance, Purchasing, the Contracts Office, and the Legal Department. Additionally, this Office received information from two confidential informants.

During the period from January 1, 1992 through May 31, 1995, the BHA spent approximately \$1 million per year on contracted services and supplies related to heating systems. This figure includes expenditures for boiler cleaning, chemicals and other supplies, and maintenance and repair contracts.

This Office selected 23 BHA heating system contracts for detailed review. This sample included:

- six boiler cleaning and one boiler repair contract for the Kemp Street power plant, totalling \$16,925.

- the three most recent two-year preventive maintenance and repair contracts for the BHA Central Office for 1989-1991, 1991-1993, and 1993-1995, valued at \$20,630, \$48,700, and 90,000, respectively;
- the three most recent two-year preventive maintenance and repair contracts for the Fairmount and Gallivan Boulevard housing developments for 1991-1993, 1993-1995, and 1996-1998, valued at \$90,736, \$90,000, and \$88,000 respectively;¹
- six maintenance and repair contracts for January 1995 through June 1995, covering six housing developments for elderly and disabled individuals, totalling \$150,000;
- four contracts for heating systems repairs performed from December 1994 through March 1995 at the Mary Ellen McCormack housing development, totalling \$26,535.

Our review found problems in procurement, record-keeping, and contract oversight that expose the BHA to fraud, waste, and abuse. This Office's findings and recommendations are presented here.

¹ At the conclusion of the time period covered by this review, the BHA had not awarded the 1996-1998 contract.

State Procurement Laws Applicable to the BHA

As a public housing authority, the BHA is subject to state bid laws. BHA heating system preventive maintenance and repair contracts that are estimated to cost more than \$25,000 are subject to M.G.L. c.149, §§44A - 44J. Contracts estimated to cost more than \$10,000, but not more than \$25,000, are subject to M.G.L. c.30, §39M.² Both of these statutes set out procedures for competitive sealed bids based on detailed plans and specifications. Contracts procured under these statutes must be awarded to the lowest responsible and eligible bidder.

The BHA is also subject to the Uniform Procurement Act, M.G.L. c.30B, which sets out procedures for the procurement of supplies and services, including boiler cleaning services. M.G.L. c.30B permits a streamlined process for soliciting price quotations from three vendors for small contracts costing between \$1,000 and \$10,000. Quotations from vendors may be solicited orally or in writing. Contracts for supplies or services that will cost \$10,000 or more must be procured on the basis of advertised, sealed bids or proposals.³

In the event of an unforeseen emergency where it is necessary to procure supplies, services or repair work without delay, the BHA may utilize emergency procurement provisions that waive advertised competition. Under M.G.L. c.149, the BHA must obtain approval of the emergency situation from the Division of Capital Planning and Operations (DCPO), and waiver of the advertising and bidding requirements, when making an emergency procurement.⁴ Under M.G.L. c.30B, the BHA must document the basis for

² Awarding authorities also have the option of using M.G.L. c.30B, §5 bid procedures for construction and repair contracts estimated to cost more than \$10,000 but not more than \$25,000. M.G.L. c.30, §39M(d)(4).

³ M.G.L. c.30B, §§5, 6.

⁴ M.G.L. c.149, §§44A(4), 44J(6).

determining that an emergency exists, and publish a record of the emergency procurement in the *Goods and Services Bulletin*.⁵

⁵ M.G.L. c.30B, §8.

Findings

I. Boiler Cleaning and Repair Contracts at the Kemp Street Power Plant

This Office reviewed seven BHA boiler cleaning and repair contracts with J.A. Cahill, Corp. (Cahill) for the Kemp Street power plant in South Boston. These contracts, which ranged from \$1,785 to \$3,940, were awarded on the basis of informal price solicitations.

Finding 1.

The BHA awarded seven contracts based on price quotations that appear to have been falsified.

According to BHA records, the BHA awarded Cahill six boiler cleaning contracts and one boiler repair contract, totalling \$16,925, between 1990 and 1992.⁶ BHA documents relating to the procurement of this work show that the same two vendors -- Hodge Boiler Works, Inc. (Hodge), and Northeast Boiler Insulation and Decking, Inc. (Northeast Boiler) -- submitted the competing price quotations on each job. BHA records contain price proposals typed on letterhead of the companies for the six boiler cleaning contracts. Records for the repair contract simply show vendor prices typed at the bottom of the BHA purchase requisition. BHA records indicate that BHA staff solicited price quotations from Hodge, Northeast Boiler, and Cahill, and that Cahill offered the lowest price quotation for all seven of these contracts.

At the request of this Office, Hodge's President reviewed the quotations submitted on his company's letterhead. He informed this Office that he had no knowledge of, and had not

⁶ This Office learned that the BHA also awarded Cahill at least two boiler cleaning jobs worth \$3,710 in 1989. The BHA was unable to produce any documentation concerning these procurements. According to BHA's records, J.A. Cahill has not received work from the BHA since 1992.

authorized, the quotations, nor did he recognize the signature that appeared on the letters from his firm. Moreover, he had never employed anyone by the name of the person who allegedly signed these letter quotations, and his company did not perform boiler cleaning or repair work.⁷ In addition, one of the Hodge quotations was typed on obsolete Hodge letterhead containing an address that the company no longer used at the time the bid was submitted.

This Office also investigated the validity of the quotations supposedly submitted by Northeast Boiler. This Office learned that Northeast Boiler was dissolved in bankruptcy in 1989, prior to the dates on the Northeast Boiler price quotations in issue. Northeast Boiler's trustee in bankruptcy told this Office that the company ceased to do business upon filing for bankruptcy.⁸

Based on the above information, this Office concluded that the Hodge and Northeast Boiler price quotations were likely falsified. The most troubling aspect of this finding is the probable complicity of one or more BHA employees in this apparent fraudulent scheme. The BHA records represent that BHA staff solicited these price quotations by contacting three vendors. The BHA employee or employees responsible for soliciting the quotations apparently falsely represented having obtained these quotations from Hodge and Northeast Boiler.

⁷ The 1990 quotations from Hodge are signed, with no typed name beneath the signature. The 1991 and 1992 quotations typed on Hodge letterhead are signed with the name "T. Donovan" typed beneath the signature. Hodge's president told this Office that Hodge never employed a T. Donovan, but that a "J. Donovan" was employed there and retired prior to 1991.

⁸ This Office also discovered that Cahill and Northeast Boiler were closely linked. Until 1988, the two companies shared a common president and treasurer. Additionally, 1989 bank records show the companies sharing the same East Boston address.

II. Heating System Preventive Maintenance and Repair Contracts for the BHA Central Office

The BHA Central Office is located at 52 Chauncy Street in downtown Boston. During the period covered by this review, the BHA procured repair and maintenance of the heating, ventilating, and air conditioning (HVAC) systems for the Central Office under a series of two-year contracts. The BHA prepared written specifications and advertised for sealed bids for each of these contracts, as required by law.

In September 1989, the BHA awarded a \$20,630, two-year contract for HVAC preventive maintenance and emergency repair for the Central Office to the sole bidder responding to the invitation for bids. The specifications required the contractor to inspect and perform specific preventive maintenance tasks on a quarterly basis. The specifications also included "all labor to make necessary repairs including installation of replacement parts to maintain maximum efficient operation." The solicitation for bids and the resulting contract made it clear that the contractor bore the risk for accurately estimating the amount of emergency repair work that the systems would require over the two-year period, and the contractor was required to bid a fixed price that included both scheduled maintenance and emergency service calls. The fixed price, under the terms of the contract, was to be paid on a quarterly basis.

The BHA also awarded two-year preventive maintenance and repair contracts for the Central Office HVAC system covering the periods 1991-1993 and 1993-1995. The specifications for these two contracts differed from the 1989-1991 contract in that they called for contractors to bid hourly rates for both emergency and scheduled repairs in addition to a fixed price for preventive maintenance. The BHA provided bidders with estimated hours for emergency and scheduled repairs, and required bidders to submit hourly rates for two categories of labor: HVAC mechanic and helper. The low bid was determined by multiplying the hourly rates by the estimated hours of repair work, and adding the bidder's fixed price for preventive maintenance. Like the 1989-1991 contract,

these contracts provided for quarterly payments of the fixed price for preventive maintenance.

The BHA received five bids for the 1991-1993 contract, and awarded a contract for \$48,700 to the low bidder. The BHA received only one bid for the 1993-1995 contract, and awarded a \$90,000 contract to the only bidder.⁹

Finding 2.

The BHA approved a \$30,000 no-bid change order to a \$20,630 contract.

Both the contractor and the BHA disregarded clear terms in the 1989-1991 contract that required the contractor to perform emergency repairs as well as preventive maintenance for the fixed price. Approximately nine months into the contract, a BHA staff member wrote a memorandum to the Operations Department requesting a change order. The memorandum stated that the BHA needed to add \$30,000 to the contract to pay for emergency repair work that had already been done and to meet expected upcoming expenses. At the time of this memorandum, the contractor had already billed the BHA \$16,000 for emergency repairs, over and above the \$20,630 contract amount. These charges were incurred even though the contract included no provisions that permitted billing for labor outside of the fixed schedule of quarterly payments. The memorandum erroneously stated that the contract did not cover repairs, except for parts reimbursement.

The BHA approved the \$30,000 change order, thereby increasing the contract price by 145 percent. Although the change order purported to make no changes to any other contract terms, BHA staff informed this Office that the additional funds were used to pay

⁹ The increased cost of the later contract was due to an increase in the estimated hours for repairs from 600 (for the 1991-1993 contract) to 1600 (for the 1993-1995 contract).

the contractor on a time and materials basis for emergency repairs. The contractor's hourly rate for labor was apparently negotiated since the contract contained no hourly rates. BHA records contain no evidence that BHA staff questioned either the magnitude of the increase or the change in contract terms. In essence, the contractor was awarded a \$20,630 fixed-price contract and then allowed to negotiate a different and far more lucrative contract that permitted billing on a time and materials basis.

Finding 3.

The BHA's lax contract oversight led to frequent contract overpayments.

The specifications for the 1991-1993 and 1993-1995 Central Office contracts required bidders to submit a competitive hourly rate for repair work that fell outside the scheduled preventive maintenance. Both of these contracts were awarded based on hourly bid rates of \$52.00 for the HVAC mechanic and \$26.00 for the helper. However, more than half of the 100 contract invoices provided to this Office by the BHA charged the BHA at higher rates than those specified in the contracts. The BHA approved and paid these higher rates: \$55.00 per hour for the HVAC mechanic and \$30.00 per hour for the helper. While the total dollar amount of the overpayments was not significant, their frequency raises serious concerns about the BHA's vulnerability to waste and abuse.

Furthermore, this Office found that BHA staff did not sufficiently protect the BHA from overpayment for parts and materials. The specifications provided that the BHA would reimburse the contractor for the direct cost of parts and materials, plus a percentage, with the exception of parts and materials incidental to the preventive maintenance program. To receive reimbursement, contractors were required to provide the BHA with documentation of the contractor's direct cost for parts. Under this reimbursement scheme, the more the contractor spent for parts, the more the contractor could charge the BHA. The contractor thus had no incentive to economize. Additionally, this method of payment required the BHA to have some means of verifying the contractor's original costs

for parts to protect against overcharges. The BHA staff member who managed the contract told this Office that he inspected and retained copies of the contractor's supplier invoices for parts costing over \$100. However, BHA files contained only one such invoice. The BHA was charged approximately twice the amount shown on this supplier's invoice.

Finding 4.

The BHA failed to procure major repairs cost-effectively.

The scope of services for the 1991-1993 and 1993-1995 Central Office heating system maintenance and repair contracts included both emergency and scheduled repair work. This Office found that major heating system repairs were performed on a time and materials basis under this contract rather than procured separately as fixed-price contracts. Procuring major equipment or repair work in this manner is not cost-effective. The problem is highlighted by looking at the installation of a system flow separator at the Central Office in January 1993. This work, which totalled \$13,588, was given to the maintenance and repair contractor, rather than bid separately. This Office was informed that this work was performed under the maintenance and repair contract because there was money in the contract budget to cover it. Similarly, in the spring of 1994, the maintenance and repair contractor was given the job of repairing the Central Office cooling tower, at a total cost of \$13,313. This work was also given to the maintenance and repair contractor on a time and materials basis rather than bid separately as a fixed-price contract.¹⁰

While there may be advantages to having a contractor who is familiar with the HVAC system perform repair work, there are also significant drawbacks to this method of

¹⁰ BHA records contain no evidence that work on either project was necessary to meet an emergency situation.

contracting. In the absence of a fixed price based on the specifications for a particular major repair, the BHA cannot be assured of obtaining the best price for the repair. Since the maintenance and repair contractor is billing by the hour, the contractor has no incentive to keep costs down by working efficiently. In fact, the opposite is true: the more hours on the job, the higher the contractor's bill to the BHA. In contrast, a contractor who submits a fixed price for the work has an incentive to offer a competitive price to the BHA. Furthermore, contracting for major repair work through a time and materials maintenance and repair contract may provide a disincentive to do quality work. If the contractor's work is unsatisfactory, the contractor will only receive further work orders to correct its own errors.

III. Heating System Preventive Maintenance and Repair Contracts for the Fairmount and Gallivan Boulevard Family Housing Developments

During the period covered by this review, the BHA awarded a series of two-year preventive maintenance and repair contracts for gas-fired heat and hot water systems located at the Fairmount and Gallivan Boulevard housing developments in Hyde Park and Mattapan. Each of these developments has over 200 individual heating units and hot water heaters. Until 1996, the preventive maintenance and repair contract for the Fairmount and Gallivan Boulevard developments was bid as a single contract. The BHA prepared written specifications and advertised for sealed bids for each of these contracts, as required by law.

The BHA used substantially the same specifications to bid the two-year maintenance and repair contracts for the periods 1991-1993 and 1993-1995.¹¹ These contracts were valued at \$90,736 and \$90,000, respectively. The scope of services included no-charge service calls, and listed replacement parts covered under the contract. The specifications also required annual preventive maintenance work, but failed to specify the required tasks or schedule. The bid forms required contractors to submit a single fixed price for the two-year contract, to be paid in monthly installments. Therefore, the contractor bore the risk of accurately estimating the amount of work required under the contract for both preventive maintenance and repairs. The BHA received only one bid on the 1993-1995 contract.¹² The number of bidders on the 1991-1993 contract is unknown, as the BHA

¹¹ The 1996-1998 contract was originally bid in November 1995 using these same specifications. The BHA received only one bid. At the conclusion of the time period covered by this review, the BHA had not awarded the contract. After receiving a confidential draft of this report, the BHA informed this Office that the bid was rejected. In July 1996, the BHA readvertised separate contracts for each development, with revised and improved specifications. The BHA received three bids on each of these contracts.

¹² This Office was told by BHA staff that the absence of competition for the 1991-1993 and 1993-1995 Fairmount and Gallivan Boulevard contracts was due to the lack of security in the housing projects at night. While this may have been a contributing factor, clear and informative specifications may have increased the likelihood of competition.

has lost the bidding records.

Finding 5.

**The BHA's contract specifications
were too vague to permit vendors to bid realistic prices.**

The specifications for the 1991-1993 and 1993-1995 contracts were too vague to enable bidders to realistically price the preventive maintenance work on a fixed-price basis. Unlike the Central Office contract specifications, which expressly defined the preventive maintenance tasks and schedule, these specifications contained only a general requirement that the contractor "[p]erform preventive maintenance annually on each gas fired appliance and make it ready for the heating season." A prospective bidder had no way of knowing exactly what tasks were required or what components of the systems were included. Furthermore, the BHA could not hold a contractor accountable for the performance of any specific preventive maintenance task.

Finding 6.

**The BHA's lax contract oversight
led to contract overpayments.**

This Office reviewed invoices submitted for repair work at these two housing developments and found several instances where the BHA paid for work that should have been covered under the maintenance and repair contract's fixed price. For example, invoices dated October 2, 1992 and October 15, 1992 indicated service calls requiring the contractor to relight a pilot light. Since the maintenance and repair contract included no-charge service calls, both of these calls should have been covered under the contract. In fact, the October 2, 1992 service call was performed under the contract at no charge, but

(.continued)

The improved specifications issued in July 1996 generated multiple bids for each contract.

the BHA paid separately for the October 15, 1992 service call. Similarly, there were several instances where the BHA paid for the installation of parts covered under the contract. The contract clearly stated that the contractor must repair and/or replace thermostats. Some invoices indicate that the contractor did not charge the BHA for thermostat replacement;¹³ however, other invoices show that the BHA made additional payments for this work.¹⁴ The dollar value of these overpayments was not substantial. Nevertheless, these examples show that BHA staff did not adequately review invoices to protect against overcharges for work that should have been covered under the maintenance and repair contract.¹⁵

¹³ Invoices dated October 26, 1992; October 31, 1992; April 27, 1992; and May 28, 1992.

¹⁴ Invoices dated October 22, 1992; December 1, 1993; February 1, 1994; February 6, 1995.

¹⁵ It is also notable that the contract terms also rendered the BHA vulnerable to overpayments. The specifications included a listing of covered parts, but did not establish what price would be paid for parts that were not covered under the contract. The contractor was apparently free to bill the BHA any amount that it chose for these parts.

IV. Heating System Repairs at BHA Housing Developments for the Elderly and Disabled

In October 1994, at the request of the Mayor's BHA Elderly Housing Task Force, the BHA surveyed the condition of the heating and hot water systems at 30 of its housing developments for elderly and disabled individuals. The survey found that the systems were at the end of, or beyond, their serviceable lives. Poor preventive maintenance had accelerated the deterioration of the equipment. The Task Force findings included numerous leaks of oil, steam, and water, leading to unworkable conditions in the boiler rooms, non-functioning controls, and damaged equipment. In addition, the presence of asbestos prevented needed repair work. The survey made specific findings and recommendations for each of the 30 developments.

In January 1995, in response to the Task Force report, the BHA procured six-month heating system maintenance and repair contracts for six of these developments: Foley, Holgate, J.J. Meade, J.J. Carroll, M.M. Collins, and Annapolis. The BHA estimated that each contract would cost \$25,000, for a total of \$150,000. The scope of services included 24-hour on-call service, twice weekly preventive maintenance service calls, and routine maintenance work. The specifications were practically identical for all six contracts.

Although each contract was estimated to cost \$25,000, the BHA did not advertise for sealed bids, as required by law. Instead, the BHA informally sought prices by contacting vendors for quotations. The Foley and Holgate contracts were awarded to one contractor, and the J.J. Meade, J.J. Carroll, M.M. Collins, and Annapolis contracts were awarded to a second contractor.

Finding 7.

The BHA used emergency procurement procedures to award six contracts that should have been advertised and bid.

State bid law requires the BHA to procure maintenance and repair contracts estimated to cost more than \$10,000 using advertised sealed bids. This Office asked BHA staff why the January 1995 contracts for heating system maintenance and repair were not bid. The BHA responded that for each housing development an emergency situation warranted procuring the services without advertised competition. The BHA also told this Office that the goal of the emergency procurements was to obtain the minimum level of service necessary to prevent failure of the heating systems during the remainder of the heating season.

The emergency procurement procedures of the state bid laws are intended to provide awarding authorities with a means to contend with unforeseen emergencies which, if not remedied, could endanger the health or safety of persons or property. The Task Force survey found that the problems that characterized these heating systems were the result of poor maintenance and failure to replace equipment over the years. The BHA was, or should have been, well aware of the poor condition of these heating systems -- conditions which took years to create. The problems detailed in this survey were by no means an unforeseen emergency. The BHA's failure to act until the need became critical did not meet the legal standard for emergency procurements.

This Office acknowledges that the BHA was under pressure to repair these heating systems. However, the BHA could, and should, have complied with the state bid laws. The BHA survey had already identified the specific remedial work needed for each development. Any situation that endangered the health or safety of people or property should have been addressed using the appropriate emergency procurement procedures, if necessary. Other repair work, as well as routine servicing and on-call emergency

service over a six-month period, should have been advertised and bid using normal procedures under the appropriate bid law.

Finding 8.

The BHA did not fully comply with statutory emergency procurement procedures.

Under M.G.L. c.30B, an awarding authority must document the basis for determining that an emergency exists and publish a record of the emergency procurement in the *Goods and Services Bulletin*.¹⁶ In this case, the BHA did not publish a record of any of the procurements, and the documentation of any emergency is absent in the records of four out of the six contracts. Furthermore, none of the specifications for the six contracts contain any reference to an emergency. In fact, the introductory sentence in each set of written specifications stated that the BHA was "soliciting bid proposals from qualified HVAC contractors for *routine servicing and continued on-call emergency service* of the boiler plants" at each development (Emphasis added).

Finding 9.

The BHA awarded six nearly identical \$25,000 emergency contracts, thereby avoiding legally mandated state approval.

M.G.L. c.149, §§44A-J applies to building maintenance and repair contracts estimated to cost more than \$25,000. Under M.G.L. c.149, awarding authorities must obtain approval of an emergency situation from the Division of Capital Planning and Operations (DCPO), and waiver of the advertising and bidding requirements, when making an emergency

¹⁶ Contracts for the repair of any building by a public agency estimated to cost more than \$10,000, but not more than \$25,000, may also be awarded under M.G.L. c.30, §39M, which includes its own emergency procurement provision. However, it is unnecessary to discuss this alternative because the BHA asserted that it opted to use c.30B emergency procurement procedures.

procurement.¹⁷ Rather than seek the required DCPO approval and waivers for the January 1995 heating system maintenance and repair contracts, the BHA split the work into six separate contracts, using practically identical specifications, estimated at \$25,000 each. Dividing the work into smaller contracts enabled the BHA to avoid seeking the legally mandated waiver from DCPO.

Finding 10.

The BHA's open-ended contract specifications prevented meaningful price competition.

This Office also found that the BHA used inadequate specifications to solicit these maintenance and repair contracts. The scope of services for all six of these contracts included, among other things, routine maintenance work. Specifications for two of the contracts described the routine maintenance work in only general terms. The other four contract specifications stated that the contractor was to perform, at a minimum, 17 tasks relating to this work. These tasks included cleaning, testing, checking, lubricating or replacing various boiler parts. However, these specifications also required contractors to propose an itemized scope of routine maintenance work in addition to the 17 tasks. All six of the contract specifications required contractors to:

[p]rovide a detailed proposal for recommended remedial repairs above and beyond what is part of the scope of the routine maintenance work described above. The intent of any remedial work must be to insure the continuous provision of heat and hot water throughout the ensuing heating season. The actual scope of any remedial repair work will be determined after consultation with the Authority, the consultant engineer and the selected contractor.

In essence, the BHA permitted each contractor to propose its own solution to the

¹⁷ M.G.L. c.149, §§44A(4), 44J(6).

problems in the boiler rooms. This "problem-oriented" approach to procurement does not satisfy the requirement of fair and open competition for public contracts. Since each contractor's price quotation applied to that contractor's proposed scope of work, the BHA had no meaningful basis for comparing the prices submitted by competing contractors.

V. Heating System Repairs at the Mary Ellen McCormack Housing Development

In December 1994, the BHA informally solicited prices from three contractors for heating system repairs in five buildings at the Mary Ellen McCormack housing development. On December 9, 1994, two contractors responded with price quotations for each of the buildings. Although the quotations were submitted together, the BHA issued four separate purchase orders totalling \$26,535 to the selected contractor over a three-month period, as shown in the following table:

Date of purchase order	Amount
December 16, 1994 ¹⁸	\$ 9,950
January 6, 1995	\$ 6,590
March 10, 1995	\$ 4,890
March 22, 1995	\$ 5,105
Total	\$26,535

¹⁸ This purchase order was for work in two of the buildings.

Finding 11.

The BHA obtained a \$26,535 quotation for repair work and then awarded the work through four purchase orders, thereby evading bidding requirements.

The BHA sought and obtained prices for \$26,535 in work. However, after receiving the prices, the BHA proceeded to divide the repair work into a series of under-\$10,000 purchase orders. This method of contracting creates the appearance of bid-splitting in order to avoid advertising for sealed bids.

Conclusions and Recommendations

The preceding findings document major deficiencies in the BHA's procurement and contracting practices. In reviewing 23 heating system maintenance and repair contracts awarded by the BHA between 1989 and 1996, the Office of the Inspector General found evidence that the BHA awarded contracts on the basis of apparently falsified price quotations, that the BHA violated and otherwise evaded state bid law requirements, that the BHA frequently overpaid its contractors, and that the BHA used emergency procedures to procure services that should have been advertised and bid. This Office's review also found that the BHA's contract specifications were often too vague and open-ended to permit fair competition, and that the BHA failed to procure major repair contracts cost-effectively. All of these findings raise serious concerns about the BHA's continued vulnerability to fraud, waste, and abuse.

Remedying the deficiencies outlined in these pages will require the BHA to reform its procurement and contracting practices. As essential first steps, the BHA must institute measures to ensure staff compliance with state bid laws and improve the quality of contract specifications and contract oversight. However, these measures will be insufficient to promote cost-effective contracting without a longer-term investment in planning. The BHA needs to develop a multi-year facilities management plan for upgrading and replacing its heating system equipment if it is to reduce its reliance on short-term repair and emergency contracts.

Accordingly, the Inspector General recommends that the BHA take the following actions to promote legal, competitive, and cost-effective maintenance and repair contracts. These recommendations are applicable to other public agencies, cities, and towns contracting for maintenance and repair work.

1. Ensure that procurements are legal and competitive.

The BHA should ensure that officials with procurement authority comply with legal requirements for advertised competition. Contract change orders should be approved only when necessary and only for work that is incidental to the scope of services covered by the contract. A change order should never be used to alter the basic business terms of a competitively procured contract. Emergency procurements should only include the work that is needed to address a genuine emergency situation and should comply with statutory emergency procurement procedures. Contracts should not be divided in a manner that creates the appearance of bid-splitting.

To safeguard BHA procurements from fraud and abuse, the BHA should institute some simple protective measures. The Purchasing Office should spot-check purchase requisitions for evidence of bid-splitting. In addition, the Purchasing Office should make random checks of informal quotations solicited for contracts under \$10,000 to ensure that the quotations are genuine.

2. Issue clear and detailed contract specifications.

The BHA staff should prepare clear, detailed specifications for all maintenance and repair contracts. Specifications for major repairs that are bid on a fixed-price basis should clearly describe the scope of the needed repair work. Preventive maintenance and repair contract specifications should specify the required preventive maintenance tasks and schedule for performance. The scope of service should also clearly delineate the repair work and parts to be included in the contract price. Bidders will then be able to realistically price the work, and the BHA will be able to hold the contractor accountable for a defined level of service.

Furthermore, the Contracts Office should conduct substantive reviews of all contract

specifications to ensure that they are sufficiently detailed to permit meaningful competition.¹⁹ The Contracts Office review of bidding documents and the final contract award focuses on form, rather than substance. The scope of the review is mainly concerned with whether the invitation for bids includes the required forms, and whether the winning bidder has properly completed them. There is little or no review of the maintenance and repair contract specifications prepared by Operations/Central Maintenance staff. In several instances, these specifications were too vague to put competitors on an even footing and permit meaningful competition.

3. Solicit fixed-price bids for major repairs.

While it may make sense to permit a maintenance and repair contractor to perform smaller repair jobs at an hourly rate, the BHA should consider seeking competitive bids for larger repair projects on a fixed-price basis. This method generates genuine competition and gives the contractor the necessary incentive to perform the work at the lowest cost to the BHA. It also allows the BHA to hold the contractor accountable for the quality of the work. If the contractor's work falls short of the specifications, the BHA can withhold payment or require the contractor to fix the problem at no additional cost. Procuring major repairs through a maintenance and repair contract, on a time and materials basis, offers none of these protections.

4. Institute a reliable, centralized record-keeping system for all contracts.

Good record-keeping is essential to efficient contract administration and oversight. At the time of this review, the BHA's record-keeping system for contracts consisted of an index

¹⁹ The Contracts Office is involved in contracts procured through formal, sealed bid processes. The Contracts Office is responsible for reviewing the specifications for compliance with the bidding laws, advertisement of the contracts, receiving and opening bids, and awarding the final contracts, following approval of the contracts by the BHA Executive Committee.

card file kept by the Assistant to the Contract Attorney of all contracts, active and inactive, and change orders. In addition, several of the Contracts Office files were missing one or more bidding documents, and one file was lost entirely. The BHA's manual record-keeping system does not permit a meaningful or thorough review of contracts. The BHA should institute sound record-keeping procedures and investigate computerization of its contract database.

5. Institute effective contract oversight practices.

Contracts that reimburse the contractor for allowable costs require close monitoring to ensure that the objectives of the contract are being met. BHA staff must adequately supervise the contractor's work and review the billings. At a minimum, the BHA should ensure that the contractor is billing at the hourly bid rate, and that the BHA does not pay for work that should have been covered under a maintenance and repair contract's fixed price. If the BHA chooses to reimburse contractors for parts, the BHA should verify the contractor's original costs before approving the reimbursement.

6. Prepare a multi-year facilities management plan for capital upgrades and replacement of heating systems.

The BHA's long-range plan should incorporate repair and maintenance schedules formulated for each building or group of buildings. The plan should also compare the costs and benefits of paying for minor equipment repairs with the costs and benefits of upgrading or replacing the same equipment. Such a plan should enable the BHA to reduce the number of emergency repairs performed in the middle of the heating season.

Appendix: The Boston Housing Authority's Response

This Office submitted a confidential draft of this report to the Boston Housing Authority (BHA) on December 20, 1996. The BHA submitted the attached response to this Office on January 24, 1997.²⁰ In its response, and in a subsequent communication, the BHA indicated that one of the contracts reviewed by this Office was rebid with revised specifications after the conclusion of the time period covered by this review. This Office noted that the revised specifications had been substantially improved and that the BHA's efforts produced increased competition for the contract. This information was incorporated into the final report.

²⁰ The original response letter has been scanned and reformatted for electronic publishing. However, the text of BHA's letter has not changed.

BOSTON HOUSING AUTHORITY
52 Chauncy Street
Boston, Massachusetts 021 11-02375

617-451-1250

January 24, 1997

Robert A. Cerasoli
Inspector General
One Ashburton Place
Boston, MA 02108

Attention: Lisa Price

Dear Mr. Cerasoli:

Thank you for providing this office with a draft report of the Office of the Inspector General's review of the Boston Housing Authority's (BHA) contracting practices for heating system repair and maintenance contracts. In this letter, the BHA would like to provide corrections to several statements in the draft report. In addition, the BHA has already implemented many of the recommendations contained in the draft report and would like these efforts to be documented in the final report. We request that you attach this written response as an appendix to your report.

Corrections of Fact

1. The BHA operates approximately 13,500 units of housing for families and for the elderly and disabled.

The 1996-98 contract for heating system preventive maintenance and repair at Fairmount and Gallivan family developments included specifications that were dramatically different from the specifications utilized in the 1991-1993 and 1993-1995 contracts. See BHA response to Finding #5 for more detail.

Responses to Findings

I. Kemp Street Power Plant

Finding #1: Price Quotations Appear to Have Been Falsified

The BHA has conducted an internal investigation of this matter. The individuals directly responsible for the procurements in question are no longer with the Authority.

Even the best regulated organization is vulnerable to this sort of employee malfeasance. The only way to protect against this is to call every vendor twice to

confirm bids. This would be time-consuming and unduly burdensome and therefore not cost-effective.

On purchase orders over \$5,000, however, the BHA is instituting a new audit process. The Purchasing Department staff will audit requisitions in excess of \$5,000 on a regular basis to verify quotations. This system will enable the BHA to discipline responsible employees appropriately.

II. Heating System Maintenance and Repair Contracts for BHA Central Office Finding #2: BHA approved a \$30,000 no-bid change order to a \$20,630 contract. Finding #3: Lax contract oversight led to contract overpayments.

Finding #4: BHA failed to procure major repairs cost-effectively.

The background memorandum prepared to justify the \$30,000 change order shows that the original \$20,600 contract was intended to cover preventative maintenance. The specifications detail a quarterly maintenance program including changing filters, checking belts, coils and other system parts. The \$20,600 was never intended to include the labor or materials costs of major repairs.

Two emergencies occurred during the first six months of the contract: the heat pump needed replacement and a flood in the basement necessitated extensive emergency work to repair heating boilers and pumps. The original \$20,600 contract did not contain adequate funds to pay for these emergency repairs. Under the circumstances, it seemed reasonable to use the existing contractor, who was familiar with the building and the systems, to make these repairs.

It is the BHA's policy to procure repair services on a fixed-price basis. In certain circumstances, however, time and materials procurements are more appropriate. In the two procurements discussed here, a review of BHA options indicated that a time and materials purchase order would be the most advantageous approach.

The decision to install a system flow separator in January 1993 resulted from a deliberate review of the options. In the three prior months, BHA had experienced a rash of compressor failures. On at least six occasions, a compressor failure resulted in a floor being without heat for three to five days. The total repair cost for compressor failures during those three months exceeded \$7,000. The original equipment manufacturer identified contamination of the water system as the source of the difficulties, and estimated that the requisite repairs would cost approximately \$12,000. The maintenance contractor provided those services for \$13,588.

In the spring of 1994, the pre-season inspection revealed a need for major repair or replacement in order to have it operate effectively. The responsible BHA employee requested quotations from several contractors for a replacement unit (American Air Conditioning Co., Fallon-Williams Service Co. and P.J.

Kennedy Co.). The bids exceeded \$25,000, plus extra rigging charges. Given limited available resources, the BHA elected to undertake the repairs, estimated at \$12,500, instead. The cooling tower has functioned well since that time.

The BHA is undertaking measures to seek to recover the overpayments made to the contractor.

III. Heating System Maintenance and Repair Contracts for Fairmount and Gallivan

Finding #5: BHA's contract specifications were too vague.

Finding #6: The BHA's lax contract oversight led to contract overpayments.

The Inspector General's comments on these contracts indicate that his Office did not review the specifications used in the final procurement of the 1996-98 contract. The comments do not reflect the specifications the BHA used in its most recent procurement. The new specifications are attached.

In the summer of 1996, the new Contracts Unit Manager re-wrote the specifications for this contract. The revised specifications:

1. Specify that the contract includes repairs as well as preventative maintenance. The contract requires that the contractor to provide a unit bid price that includes "service call backs to repair or replace parts that have failed and must be corrected for any reason including normal wear and tear, with the exception of damage or failure due to misuse or vandalism." (1A.01.A)
2. Limit reimbursement for labor and materials to occasions when the repairs were required as a result of misuse or vandalism. All other emergency repairs are considered part of the base contract: "In all other cases, the cost of such call outs shall be included in the contractor's preventive maintenance unit bid price." (1A.01.A.2).
3. Include a detailed list of equipment covered by the contract. (1.A.01.A.4).
4. Specify the dates by which preventative maintenance must be performed. (1.A.01.A.5).
5. Detail contractor's responsibilities with respect to fans and motors. (1.A.01.A.6).
6. Detail the basis of payment, including rates for calls at different times of day. The documentation supporting invoices is more extensive than in the old specifications. (Special Conditions, 1A.12)

In addition, the revised 1996-1998 specifications are for one site only. By dividing the contract into two contracts, the BHA intended to increase competition and the number of potential bidders. This effort was successful: in August 1996, the BHA received three bids for each contract; in 1993, only one firm submitted bids.

The BHA is examining options to recover any overpayment.

IV. Heating System Repairs at Elderly/Disabled Developments

Finding #7: BHA used emergency procurement procedures to award six contracts that should have been advertised and bid.

Finding #8: BHA did not fully comply with statutory emergency procurement procedures.

Finding #9: BHA awarded six nearly identical \$25,000 emergency contracts, thereby avoiding legally mandated state approval.

Finding #10: The BHA 's open-ended contract specifications prevented meaningful price competition.

These findings all relate to the BHA's procurement of emergency heating system repairs at several Elderly/Disabled developments. In the fall of 1994, it was determined that the conditions of the BHA's Elderly/Disabled developments constituted an emergency. Outside engineering firms confirmed that many of the boilers could not be relied upon to provide heat throughout the winter. The BHA believes that providing heat in buildings housing elderly and disabled residents is of utmost importance. When the gravity of the situation was recognized, in the fall of 1994, the BHA was not willing to risk the health and safety of several thousand elderly and disabled residents by undertaking a several-month procurement process that would leave us without outside contractors through the beginning of the winter. As a result, we believe that the Authority acted appropriately and responsibly in response to this serious threat to the health and safety of the elderly and disabled residents residing in these communities.

Following the identification of this emergency, the BHA proceeded to draft specifications for six purchase orders, one for each of the six sites in the worst condition, with a not-to-exceed limit of \$25,000. There were six separate scopes of work, one for each site, not one scope sub-divided to avoid state approval. The BHA generally procures services for developments individually. This is consistent with the BHA's general approach of development-based management.

The scopes of work attached to the bid documents identified the work contractors would be expected to perform. These specifications were not as detailed as the specifications on contracts for which the BHA has months to develop bidding documents, however given the speed with which contractors needed to be identified, the scope was adequate. Given that the magnitude of the emergency was not evident until October 15994, after the beginning of the heating season, an accelerated document preparation process was necessary. The bidding documents were prepared in under two days. The BHA invited more than three firms to visit each site and received competitive bids on the scopes of work.

As evidence of the improved systems developed since the emergency heating season detailed above, the BHA has not issued emergency purchase orders for heating emergencies. See the response to Recommendation #6 for a detailed description of the publicly bid capital work in the elderly/disabled program.

The BHA acknowledges that it failed to advertise in the Goods & Services Bulletin.

V. Heating System Repairs at Mary Ellen McCormack Development

Finding #11: BHA obtained prices of \$26,535 in work, and then awarded the work through four purchase orders.

At the time of the first purchase order (December 16, 1994), funding was not available to pay for all of the necessary work. The BHA elected to do the work on an as-needed basis, anticipating that not all of the contemplated work was necessary. As the heating season progressed the BHA repaired equipment when serious need arose. Each of the four purchase orders covers work in a separate equipment room. Three different individuals at the BHA were responsible for initiating the purchase orders. In addition, the BHA obtained quotes from a range of firms for each purchase order; firms that submitted quotes on certain scopes of work did not submit quotes on other purchase orders.

Responses to Recommendations

Recommendation #1: Ensure that procurements are legal and competitive.

A revised and expanded Authority wide procurement policy and procedure guideline will be issued within 60 days. All procurements in excess of \$10,000.00 are currently reviewed for appropriate procurement procedures. Non-emergency requirements are routed through the Contracts Unit for public bidding. Emergency procurements are to be reviewed by the Director of Procurement, in consultation with Counsel, for compliance with statutory requirements.

Buyers within the Purchasing department are assigned specific developments and departments. They are instructed to be vigilant for repetitive purchasing patterns that may give the appearance of bid splitting, and to assist requisitioners to obtain such procurements competitively. Buyers have recently been instructed to perform random audits on all procurements in excess of \$5000.00.

Recommendation #2: Issue clear and detailed specifications.

The BHA has undertaken a number of initiatives to ensure that specifications for maintenance and repair contracts are appropriately detailed. The revised specifications used for the 1996-1998 heating service contract at

Fairmount and Gallivan developments illustrate the BHA's current standards for specifications.

In 1995, a Contract Specifications writer created a library of specifications for common procurements, such as unit renovation and paving.

The recently created Contracts Unit has as one of its primary goals the review of contracts from a procurement point of view. Prior to the establishment of the Unit, the review process was conducted by BHA's Legal Department. This review focused on statutory procurement issues and contract form. The accuracy and functionality of the technical specifications were the responsibility of the originating department. The Contract Unit has added a second level of review in an effort to ensure that specifications are appropriately detailed and follow accepted procurement standards. The review undertaken in the case of the 1996 - 1998 Fairmount and Gallivan heating maintenance contract illustrate the effectiveness of the combined Legal Department and Contract Unit oversight function.

Recommendation #3: Solicit fixed-price bids for major repairs.

The BHA agrees that fixed-price bids are the appropriate procurement methodology for any contract where the scope of services and exact nature of required repairs can be identified and clearly communicated to prospective bidders. However, there are occasions when the use of time and material specifications are unavoidable due to the unforeseen nature of the work. It is the BHA's current policy to review any proposed time and material based specifications with the express view to determine if a fixed/unit price alternative can be substituted. If not practicable for a particular procurement, review will include the requirement that clear limits are included in the specifications to safeguard the Authority from abusive billing practices.

Recommendation #4: Institute a reliable, centralized record-keeping system for all BHA contracts.

The Contract Unit currently maintains complete contract files for all procurements processed since its inception. The documents on file in the Contracts Unit will include the full history of the procurement from advertising through project closeout. It is the intent of the Contract Unit to establish an automated database of key contract data for ready access by appropriate BHA personnel. Currently, the Contract Unit keeps automated records of planholders for each contract and tracks the status of each contract from initial receipt by the Unit through contract execution.

The BHA also employs a full-time archivist who has an advanced degree in Library Science. This individual is responsible for maintaining the BHA's archives.

Recommendation #5: Institute effective contract oversight practices.

With the increased focus on contract specifications and standards provided by the creation of the Contracts Unit comes the opportunity to standardize contract oversight procedures for BHA's ongoing maintenance contracts. As the Unit finalizes the execution of a contract it will prepare a contract payment approval form to be used by the party responsible for authorizing payments. The form will clearly state pertinent contract payment terms, and will include a check list requiring a review of invoice amounts against the contract terms. Supportive documentation for material costs will be summarized and attached. Before payment is processed Finance and/or Accounts Payable staff will be easily able to verify the accuracy of the calculations.

Recommendation #6: Prepare a multi-year facilities management plan for capital upgrades and replacement of heating systems.

The BHA's heating systems are 30-50 years old. Many of them need significant capital investment in order to function at desirable levels. However, as Congress and the State have reduced capital funding for public housing over the past several years, the BHA does not have the resources to make the investments that would be optimal for its systems. Nonetheless, the BHA has undertaken the development of a multi-year facilities management plan, as described below.

A. Elderly/Disabled Program?

1. Significant Capital Work

As the Inspector General's report states, the heating plants in the Elderly/Disabled Program were in need of substantial upgrades and repairs. Since the period examined by the Report, the Elderly/Disabled Program has undertaken following projects. *using Chapter 149 bidding and contracting processes:*

1. Replacement of boiler plants at Pond, Meade and Annapolis (work complete);
2. Significant upgrades to the Holgate and Foley heating plants (work complete);
3. Replacement of heating systems at Ausonia, Eva White and Codman (designs complete; to be bid late this winter);
4. Replacement of hot water systems at Rockland, Lower Mills and Walnut Park (in construction at Rockland and Walnut Park; contract just signed for Lower Mills);
5. Substantial repairs to Patricia White (design contract being signed now);
6. Replacement of the JJ Carroll heating plant (design contracts being signed now);
7. Other capital replacement projects for elevators, alarm systems, window and building envelop repairs are underway or in design.

In addition, replacement of all boilers at the Franklin Field Elderly Development is planned for 1997.

To date, all system replacements have replaced oil-fueled systems with natural gas fueled systems, eliminating some of the most difficult maintenance problems.

2. Capital Planning Efforts

In 1996, the Elderly/Disabled Program hired an outside firm completed a comprehensive assessment of all 34 federally funded elderly buildings through a publicly bid process. This results of this survey, which was publicly bid, form the basis for the Elderly/Disabled Program's new capital planning review process. This month, the Capital Program Manager for the

3. Improved Staffing Levels, Improved Routine Preventive Maintenance

The Elderly/Disabled Program has increased the number of staff assigned to care of the heating systems. The Capital Manager is overseeing the capital planning process. In addition, in January 1996, the BHA hired a Building Systems Manager to work exclusively in the Elderly/Disabled Program. The Heating Plant Engineer, also a new position, manages day to day heating plant work, creating a small maintenance unit focused on elderly/disabled heating systems. These individuals oversee the following routine preventive maintenance program:

1. Daily inspection and service of boiler rooms by Resident Custodians, implemented following training;
2. Weekly or more frequent inspection and service by the Chief Heating Plant engineer;
3. Annual boiler cleanings and inspections;
4. Annual burner cleaning and service by outside mechanical firms;
5. Routine replacement of parts and upgrading of system components, by both in-house staff and contractors on a planned and scheduled basis, with a particular emphasis on developments that will not undergo full replacement in the near future. This includes replacement of apartment valves as well as boiler room work scheduled for completion in summer months;
6. Private management companies are responsible for implementing their own preventive maintenance plan, which is subject to BHA approval.

B. Family Program

1. Strategic Management Plan (SMP)

The BHA has developed a new budgeting and planning process which requires development managers to develop comprehensive plans for the maintenance and management of their sites. As part of their SMP, site managers must outline a program for ongoing preventative maintenance and capital upgrades, contingent on funding liability. This effort has also engendered closer

cooperation between the Capital Design & Construction Department and the Operations Division.

2. Preventative Maintenance Manual

All managers of family developments are creating preventative maintenance plans for their developments. The purpose of this plan is to establish the guidelines for the routine maintenance of systems and building components and grounds in order to maximize operating efficiency and prolong the life of those systems and components in a cost effective manner. Preventive maintenance is a proactive approach to reduce the frequency and severity of breakdowns and service interruptions by identifying the maintenance needs for equipment, buildings and common areas. The scope of the plan includes inspection and testing, servicing and cleaning, repair and, if necessary, replacement. The plans include the follow:

1. Procedures and forms for building and grounds inspections;
2. Specification sheets, service activity reports and instructions as to daily, weekly and monthly maintenance tasks for heating plants and boiler rooms;
3. Procedures for electrical system inspections;
4. Specifications and procedures for servicing of emergency generators;
5. Specifications and procedures for elevators, as well as specific instructions for traction and hydraulic elevators and service contractor information;
6. Inspections and service procedures for fire alarm systems, fire extinguishers, smoke detectors and sprinkler systems;
7. Instructions on roof components and inspection procedures;
8. Exhaust fan inspection and service procedures;
9. Back flow prevention and contractor procedures;
10. Drain and refuse chute cleaning and contractor procedures, and
11. Small equipment maintenance procedures.

Draft plans were submitted in January 1997; the BHA will implement these plans after internal review.

3. Facilities Management Software

The local HUD office has issued a Request for Proposals for a firm to develop facilities management software for the BHA. Proposals were received in January and the Selection Committee is now reviewing them.

Thank you for bringing this matter to my attention. If you have any further questions, do not hesitate to contact me directly at (617) 988-4124.

Sincerely yours,

Sandra B. Henriquez
Administrator