

# AUDIT REPORT



CITY OF NEW YORK  
OFFICE OF THE COMPTROLLER  
BUREAU OF MANAGEMENT AUDIT  
**WILLIAM C. THOMPSON, JR., COMPTROLLER**

## **Audit Report on Fire Department Controls over the Inspection of Fire Alarm Systems**

*MH07-063A*

**June 29, 2007**



THE CITY OF NEW YORK  
OFFICE OF THE COMPTROLLER  
1 CENTRE STREET  
NEW YORK, N.Y. 10007-2341

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WILLIAM C. THOMPSON, JR.  
COMPTROLLER

**To the Citizens of the City of New York**

Ladies and Gentlemen:

In accordance with the Comptroller's responsibilities contained in Chapter 5, §93, of the New York City Charter, my office has conducted an audit to determine whether the New York City Fire Department (FDNY) has adequate controls over the inspection of fire alarm systems to ensure that requests for inspections and results of inspections are properly recorded and reported, and that the inspections are performed in a timely manner.

The FDNY Bureau of Fire Prevention is responsible for conducting inspections of fire alarm systems at occupied residential and commercial properties throughout the City. Audits such as this provide a means of ensuring that City agencies comply with regulations to ensure the safety of the public.

The results of our audit, which are presented in this report, have been discussed with FDNY officials, and their comments have been considered in the preparation of this report. Their complete written response is attached to this report.

I trust that this report contains information that is of interest to you. If you have any questions concerning this report, please e-mail my audit bureau at [audit@comptroller.nyc.gov](mailto:audit@comptroller.nyc.gov) or telephone my office at 212-669-3747.

Very truly yours,

A handwritten signature in cursive script that reads "William C. Thompson, Jr.".

William C. Thompson, Jr.

WCT/ec

**Report:** MH07-063A  
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*The City of New York  
Office of the Comptroller  
Bureau of Management Audit*

**Audit Report on  
Fire Department Controls over the  
Inspection of Fire Alarm Systems**

**MH07-063A**

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**AUDIT REPORT IN BRIEF**

This audit determined whether the Fire Alarm Inspection Unit (Alarm Unit) of the New York City Fire Department (FDNY) has adequate controls over the inspection of fire alarm systems to ensure that requests for inspections and results of inspections are properly recorded and reported, and that the inspections are performed in a timely manner. FDNY's Bureau of Fire Prevention (the Bureau) is responsible for protecting occupied residential and commercial properties throughout New York City by enforcing local laws and regulations pertaining to fire protection. One of the Bureau's fire prevention activities is to conduct inspections of fire alarm systems at those properties. The Alarm Unit reported that it conducted a total of 5,601 fire alarm system inspections in Fiscal Year 2006, with an average of 467 inspections per month.

**Audit Findings and Conclusions**

The Alarm Unit of FDNY does not adequately ensure that requests for inspections of fire alarm systems and the results of inspections are properly recorded and reported, and that the inspections are performed in a timely manner to ensure that safety-related issues are identified and resolved. It should be noted that an audit conducted by our office more than 10 years ago identified some of the same findings. The major findings are as follows:

- The Alarm Unit has not developed formal procedures to follow when recording requests for inspections, tracking these requests, conducting inspections, and following up on inspections. As a result, inspections were not conducted in a timely manner and the Alarm Unit did not always follow up on Letters of Defect and Violation Orders. In those instances where the Alarm Unit did follow up, it did not generally do so within its own informal time frames.
- The Alarm Unit does not have a reliable system for tracking requests for inspections and actual inspections conducted by the Alarm Unit.

- The record-keeping practices of the Alarm Unit are inadequate: inspection documentation was lacking; requests for inspection documentation were scattered; and filing cabinets containing essential inspection files were unsecured.
- The Alarm Unit inaccurately reported the number of inspections conducted. This resulted in an inflated number of inspections being reported in the Alarm Unit's Productivity Report for Fiscal Year 2006 and *The Mayor's Management Report Fiscal 2006*.
- The Alarm Unit did not meet its informal target for auditing self-certified inspections.
- The inspectors of the Alarm Unit are not adequately supervised. As a result, Field Activity Reports were not always approved by Supervising Inspectors, and inspectors were not always working in the field as required.

### **Audit Recommendations**

Based on our findings, we make 17 recommendations, including that FDNY should:

- Immediately take steps to address the approximate 3,200 accounts for which Letters of Defect and Violation Orders were issued and never followed up to ensure that all safety-related issues that have been identified are resolved.
- Immediately take steps to reduce the backlog of outstanding inspection requests that are more than three weeks old to determine whether the fire alarm systems are operating as intended and are in compliance with City regulations.
- Develop and implement written procedures for the Alarm Unit to follow. The procedures should include the steps that the Alarm Unit needs to take to ensure compliance with the City Charter and City Administrative Code.
- Create a tracking system that would effectively monitor the inspection process for the Alarm Unit from the date inspection requests are submitted to the date inspections are conducted and Letters of Approval are issued. The system should also be set up to identify whether the Alarm Unit is adhering to established time frames.
- Ensure that the Alarm Unit develops a sound internal control structure over its record-keeping and storage practices. All records pertaining to the inspection process should be maintained accurately and in an organized manner.

- Ensure that the number of inspections conducted by the Alarm Unit is accurately reported in the Productivity Report and *Mayor's Management Report*. This number should include only those inspections that were actually conducted.

**FDNY Response**

In their response, FDNY officials agreed with 15 of the 17 recommendations. They disagreed with the recommendation to create a tracking system to monitor the Alarm Unit inspection process and the recommendation that cabinets containing the inspection files of Letters of Defect and Violation Orders be locked at all times.

## INTRODUCTION

### Background

The Fire Department's (FDNY's) Bureau of Fire Prevention (the Bureau) is responsible for protecting occupied residential and commercial properties throughout New York City by enforcing local laws and regulations pertaining to fire protection. One of the Bureau's fire prevention activities is to conduct inspections of bulk fuel, hazardous cargo, range hoods, and fire alarm systems at those properties. The Bureau uses a centralized computer system, the Fire Prevention Information Management System (FPIMS), to manage the inspections and the subsequent billing of inspection fees. This audit focuses only on FDNY controls over the inspection of fire alarm systems conducted by the Bureau's Fire Alarm Inspection Unit (Alarm Unit).

The Alarm Unit conducts initial inspections of commercial buildings (schools, hotels, factories, office buildings, theaters, nursing homes, and hospitals) and residential buildings (300 feet or more in height) that must have their fire alarm systems approved before opening or commencing operation. The Alarm Unit also conducts inspections of fire alarm systems in response to complaints made through the City's 311 Citizen Service Center or after modifications or repairs are made to existing fire alarm systems.

The inspection process begins when a building owner, or designee, submits a Request for Inspection Date B-45 Form (Request Form) along with: an approved Application for Plan Examination M-25-65 Form, which lists the fire alarm system to be inspected and which shows that the plan for the fire alarm system was approved by a designee of FDNY prior to being installed; the blueprint of the fire alarm system installed; and an Application A-433 Form, which indicates the electrical company that installed the fire alarm system and the company's license number.

The Deputy Chief Inspector of the Alarm Unit is responsible for receiving and reviewing the Request Form and all required documentation at the Bureau's Enforcement Unit (Intake Unit).<sup>1</sup> Once he has determined that all documentation submitted is complete, he reviews his scheduling book and assigns an inspection date and an inspector to conduct the inspection. Prior to the inspection, all relevant information regarding the request for the inspection—including the owner of the building and building address—is entered into FPIMS by a clerk of the Alarm Unit so that an account number can be assigned.<sup>2</sup>

During Fiscal Year 2006, there were 13 Alarm Unit inspectors who conducted inspections. In general, each inspector is required to conduct at least two inspections per day—a scheduled inspection in the morning with a building owner who requested an inspection and an

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<sup>1</sup> This procedure was initiated by the Alarm Unit at the end of September 2006, while the audit was in process.

<sup>2</sup> The Alarm Unit has had access to FPIMS only since November 2001.

unscheduled follow-up inspection, if time permits, in the afternoon. An inspection can result in a Letter of Approval, a Letter of Defect for deficiencies that need to be corrected within 90 days of issuance, or a Violation Order for more severe deficiencies that must be corrected within 30 days of issuance. A Letter of Defect or a Violation Order requires a follow-up inspection to ensure that the building owner has corrected the deficiencies within the allotted time period.

In addition, inspectors must account for their time by filling out Field Activity Reports of their daily inspections, which then must be reviewed and approved by Supervising Inspectors. Inspectors must also fill out Field Inspection Checklists while they conduct their inspections and an Inspection Report A-324 Form (Inspection Report), which is used to generate the billing. Using the Inspection Reports, an Alarm Unit clerk enters information regarding each inspection in FPIMS. FPIMS generates bills for each inspection based upon a fee of \$210 an hour.

According to the Alarm Unit's report *Inspection Production of Fire Alarm Inspection Unit Inspectors July 2005 through June 2006—FY 2006* (Productivity Report), the Alarm Unit reported that it conducted a total of 5,601 fire alarm system inspections in Fiscal Year 2006, with an average of 467 inspections per month.

### **Objective**

The objective of the audit was to determine whether the Alarm Unit of FDNY has adequate controls over the inspection of fire alarm systems to ensure that requests for inspections and results of inspections are properly recorded and reported, and that the inspections are performed in a timely manner.

### **Scope and Methodology**

The audit scope period was Fiscal Year 2006 (July 1, 2005, through June 30, 2006).

To obtain an understanding of the responsibilities, goals, and regulations governing the Alarm Unit, we reviewed:

- Chapter 19, §481-494, of the New York City Charter;
- Title 3 of the Rules of the City of New York;
- Titles 15 and 27 of the New York City Administrative Code;
- *The Mayor's Management Report Fiscal 2006*;
- Memos and correspondence issued to the Alarm Unit by the Director of the Alarm Unit and the Chief of the Bureau; and
- *FDNY Field Personnel Activity Reporting Oversight Requirements*.

We interviewed Alarm Unit officials, including the Director; the Deputy Chief Inspector; a clerical support staff member; Supervising Inspectors; and inspectors. We also interviewed the Director of the Bureau's Enforcement Unit. On November 14, 2006, we accompanied an Alarm Unit inspector on his inspections to obtain an understanding of how inspections are performed.

To obtain an understanding of FPIMS, we interviewed various Bureau of Technology Development and Systems officials, including the Computer Specialist; Deputy Director for Programming; and the Programming Manager.

### **Reliability of FPIMS Data for Alarm Unit**

FDNY initially provided us an Excel spreadsheet with data from FPIMS, which indicated that there were 4,253 inspections conducted by the Alarm Unit during Fiscal Year 2006. We also requested that FDNY provide us with all of the inspection data from FPIMS dating from the Alarm Unit's first access to the system in November 2001. An analysis of this data, including the elimination of entries that were not representative of actual inspections conducted, resulted in a population of 4,045 inspections conducted corresponding to 3,488 accounts.

To test the reliability of the 4,045 inspections in FPIMS, we performed the following tests:

- Randomly selected 15 accounts that contained Letters of Defect and Violation Orders issued during Fiscal Year 2006 from the Alarm Unit's cabinets and determined whether they were recorded in FPIMS;
- Randomly selected 15 accounts that contained Letters of Approval issued during Fiscal Year 2006 from the cabinets of FDNY Record Unit and determined whether they were recorded in FPIMS; and
- Randomly selected 50 inspections corresponding to 50 accounts from the 4,045 inspections in FPIMS and determined whether the information was adequately supported in the Alarm Unit hard-copy files.

We also determined whether the inspection information (such as inspection date, inspection result, name of inspector, and number of hours at inspection) from the inspection files for each of the above-mentioned sampled accounts matched information recorded in FPIMS.

### **Timeliness of Inspections**

To determine how inspections were scheduled, we observed the Deputy Chief Inspector schedule inspection dates for 58 requests for inspections that the Alarm Unit received during the period December 11 through 14, 2006.

In addition, for 21 of the 32 accounts randomly selected from FPIMS for which hard-copy files were found, we calculated the number of days between the dates on the Request Forms to the dates of the actual inspections during Fiscal Year 2006 that were indicated on the

Inspection Reports to determine whether requests for inspections were conducted in a timely manner by the Alarm Unit.<sup>3</sup>

We reviewed the inspection files for the 32 accounts randomly selected from FPIMS for which hard-copy files were found and determined whether any Letters of Defect and Violation Orders issued by the Alarm Unit received a follow-up by the Alarm Unit and, if so, whether the follow-up took place within the informal time period set by the Alarm Unit, i.e., after 90 days for Letters of Defect and after 30 days for Violation Orders. We also determined whether summonses were issued for those Violation Orders that were not corrected by building owners.

### **Documentation in Inspection Files**

For each of the 32 accounts randomly selected from FPIMS for which hard-copy files were found, we determined whether the inspection files contained all required documentation necessary (e.g., Request Forms; Application for Plan Examination M-25-65 Forms; blueprints of the fire alarm system installed; Department of Buildings (DOB) Plan/Work Approval Application PW-1 Forms) for the inspection process of fire alarm systems.

In addition, we obtained Field Activity Reports for inspections that were conducted during Fiscal Year 2006 from the 62 randomly selected accounts. These included the 30 randomly selected accounts—15 from the Alarm Unit’s cabinets and 15 from FDNY Record Unit’s cabinets—and the 32 randomly selected accounts from FPIMS for which hard-copy files were found. We analyzed whether certain key information (such as inspection date, inspection result, name of inspector, and number of hours at inspection) from the inspection files of these accounts matched the information on the Field Activity Reports.

### **Analysis of Inspections Conducted and Supervision of Inspectors**

We judgmentally selected the month of November 2005 and reviewed 147 Field Activity Reports completed by 10 of the 11 inspectors who conducted inspections during this month.<sup>4</sup> (FDNY could not find the Field Activity Reports for one inspector.) We determined whether:

- The Field Activity Reports accurately reflected the number of inspections performed by inspectors and was accurately reported in the Productivity Report for inclusion in the *Mayor’s Management Report Fiscal 2006*.

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<sup>3</sup> Since the inspection files did not contain the Request Forms for 11 accounts, we were able to determine the timeliness for only 21 accounts.

<sup>4</sup> For purposes of our analysis, we did not include Field Activity Reports that indicated that inspectors were on leave, out on a holiday, or at the Department of Buildings approving Application for Plan Examination M-25-65 Forms.

- Inspectors maximized their time in the field performing inspections. We analyzed the amount of time spent in the field traveling between inspection sites and in the office. We noted whether any inspectors left early on any given day (without using leave time), thereby forgoing the opportunity to conduct more inspections.
- Supervising Inspectors approved each of the Field Activity Reports, as required, and whether the Field Activity Reports were detailed and clear, as required.

In addition, we randomly selected 20 inspections (two inspections per inspector) from the Field Activity Reports and requested the actual inspection files from the Alarm Unit. Our purpose was to determine whether the inspections recorded on the Field Activity Reports by the inspectors were in fact inspections.

To determine whether Supervising Inspectors monitored the performance of the inspectors assigned to them by conducting oversight inspections, as required, we obtained and reviewed the Oversight Inspection Record Forms that were prepared during Fiscal Year 2006.<sup>5</sup>

### **Qualifications of Inspectors**

We requested 18 personnel files, but were able to review only 14, since four were not initially provided despite repeated requests. The 14 personnel files we reviewed included those for 10 inspectors; two Supervising Inspectors; the Deputy Chief Inspector; and the Director of the Alarm Unit employed during Fiscal Year 2006. Our purpose was to determine whether these employees were qualified for their job on the day they started working with FDNY and for any promotions that they received. To do so, we reviewed their title specifications, which we obtained from the Classification Unit of the Department of Citywide Administrative Services, and checked whether the personnel files contained the necessary credentials.

Later during the audit—three months after our initial request of the personnel files and prior to the exit conference—FDNY officials advised us that the additional four files would be made available to us for our review upon a written request. We decided, however, that there was no need to review these four files based on the inconsequential deficiencies found with the 14 files already reviewed.

### **Backlog of Inspections**

During the course of the audit, we found a significant number of requests for pending inspections scattered throughout the Alarm Unit office around the desks of the Deputy Chief Inspector, and on the desks of the clerical support staff and the inspectors. We inventoried all of the request documents and calculated a total of 552 requests for inspections. To determine the length of time that requests for inspections were pending, we calculated the number of days between the dates that the documents were stamped as received to the dates of our review

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<sup>5</sup> Oversight inspections can either include a supervisor accompanying an inspector on an inspection or a supervisor following up with a building owner or designee within 72 hours on an inspector's previous inspection and obtaining feedback.

(October 4, or 5, 2006). We eliminated from our analysis a total of 234 requests since they were not date-stamped. Thus, we reduced our population for this test to 318 requests.

We also inventoried the inspection files containing Letters of Defect and Violation Orders that had not yet received a follow-up and that were filed in 10 cabinets at the Alarm Unit; we calculated that there were approximately 3,200 inspection files. We judgmentally selected 14 building inspection files (two buildings from Staten Island, one from Brooklyn, two from the Bronx, six from Manhattan, and three from Queens) and reviewed them (October 4, 2006) to determine how long the Letters of Defect and Violation Orders had been waiting for follow-up by the Alarm Unit.

A prior audit conducted by the Comptroller's Office, *Audit Report on the Inspection Units of the New York City Fire Department's Bureau of Fire Prevention*, issued on May 7, 1991, (No. MA 89-203) was also reviewed to determine whether there were any recurring issues.

The results of our testing, while not projected to their respective populations, provided a reasonable basis to satisfy our audit objectives.

This audit was conducted in accordance with generally accepted government auditing standards (GAGAS) and included tests of the records and other auditing procedures considered necessary. This audit was performed in accordance with the audit responsibilities of the City Comptroller as set forth in Chapter 5, §93, of the New York City Charter.

### **Discussion of Audit Results**

The matters covered in this report were discussed with FDNY officials during and at the conclusion of this audit. A preliminary draft report was sent to FDNY officials and was discussed at an exit conference held on May 22, 2007. On June 1, 2007, we submitted a draft report to FDNY officials with a request for comments. We received written comments from FDNY officials on June 18, 2007. FDNY officials agreed with 15 of the 17 recommendations. They disagreed with the recommendation to create a tracking system to monitor the Alarm Unit inspection process and the recommendation that cabinets containing the inspection files of Letters of Defect and Violation Orders be locked at all times.

FDNY officials stated that the audit was helpful in identifying areas where improved controls are needed to ensure that the Alarm Unit carries out its mission and documents its performance in a timely and reliable manner. They added that they "look forward" to implementing many of the measures included in the audit report as quickly as possible. FDNY officials also stated that:

"To further increase BFP's operational efficiency, the FDNY has contracted with IBM to automate and standardize the management of inspections and the compliance process. The Field Activity Routing and Reporting Mobile Solution . . . will include the use of hand-held devices by inspectors allowing digital inspection data to be uploaded into the Fire Prevention Information System (FPIMS), providing real time management metrics and reports, and decreasing errors associated with manual data entry from paper forms."

The full text of the FDNY response is included as an addendum to this report.

## FINDINGS AND RECOMMENDATIONS

The Alarm Unit of FDNY does not adequately ensure that requests for inspections of fire alarm systems and the results of inspections are properly recorded and reported and that the inspections are performed in a timely manner to ensure that safety related issues are identified and resolved. It should be noted that an audit conducted by our office more than 10 years ago identified some of the same findings. The major findings (which are discussed in greater detail in the following sections of the report) are as follows:

- The Alarm Unit has not developed formal procedures to follow when recording requests for inspections, tracking these requests, conducting inspections, and following up on inspections. By not having formal FDNY procedures to guide it, the Alarm Unit did not conduct inspections in a timely manner and did not always follow up on Letters of Defect and Violation Orders. In those instances that the Alarm Unit did follow up, it did not generally do so within its own informal time frames.
- The Alarm Unit does not have a reliable system for tracking requests for inspections and actual inspections conducted by the Alarm Unit. As a result, there is no way for management to: monitor the total population of requests for inspections that come in each fiscal year; ensure that all requests for inspections are being worked on; verify that inspections are scheduled and conducted in an orderly and timely manner; and identify the number of completed inspections.

For example, officials informed us that they consider FPIMS their tracking system to record inspection information for the Alarm Unit. However, we concluded that FPIMS Alarm Unit inspection data is unreliable because we cannot be assured that all requests for inspections were entered in FPIMS. Two (7 percent) of the 30 accounts we randomly selected from FDNY's cabinets were not found in FPIMS and were never assigned account numbers. Further, in many instances we could not use FPIMS to track the timeliness of inspections for the Alarm Unit because the dates that the requests were received were not entered in the system. We reviewed the FPIMS data containing the 4,045 inspections conducted by the Alarm Unit during Fiscal Year 2006 and found that the accounts for 2,159 (53 percent) of these inspections were created either on or subsequent to the inspection dates.

- The record-keeping practices of the Alarm Unit are inadequate: inspection documentation was lacking; requests for inspection documentation were scattered; and filing cabinets containing essential inspection files were unsecured.
- The Alarm Unit inaccurately reported the number of inspections conducted. This resulted in an inflated number of inspections being reported in the Alarm Unit's Productivity Report for Fiscal Year 2006 and *The Mayor's Management Report Fiscal 2006*.

## **The Alarm Unit Has Not Developed Formal Procedures**

The Alarm Unit has not developed formal procedures to follow when recording requests for inspections, tracking these requests, and conducting the inspections and follow-up inspections. The lack of such procedures has led to Alarm Unit officials not having a clear understanding of their responsibilities nor of the steps necessary to ensure that the rules governing FDNY contained in Titles 15 and 27 of the New York City Administrative Code and Chapter 19 of the New York City Charter are being followed.

According to Alarm Unit officials, the procedures they follow are contained in the City Administrative Code and the City Charter. However, these statutes merely contain general guidelines; they do not contain the detailed procedures necessary for officials to carry out their responsibilities. For example, the statutes do not contain procedures that govern the length of time it should take to conduct inspections from the date inspections are requested, or the process for following up on issued Letters of Defect and Violation Orders. Consequently, the responsibility falls to FDNY to develop and promulgate appropriate and specific procedures. However, this has not occurred.

As stated in Comptroller's Directive #1, "Principles of Internal Controls": "Internal control must be an integral part of agency management in satisfying the agency's overall responsibility for successfully achieving its assigned mission and assuring full accountability for resources." It further states that internal control activities help ensure that management's directives are carried out, such as the timely inspections of fire alarm systems. Controls are the policies, procedures, techniques, and mechanisms used to enforce management's directions. The controls must be an integral part of an agency's planning, implementation, review, and accountability and are vital to its achieving the desired results. Directive #1 also states that control activities include approvals, authorizations, verifications, performance reviews, security evaluations, and the creation and maintenance of related records that provide evidence of the execution of these activities.

Management's failure to promulgate written procedures to guide the Alarm Unit's activities and thereby establish effective controls contributed to the overall lack of direction and numerous control weaknesses we observed during this audit. Such an environment inhibits management's ability to measure whether the Alarm Unit is successfully achieving its intended goal. The following are two examples that illustrate the need for procedures to ensure that the Alarm Unit successfully achieves its intended goal.

### **No Procedures for Timeliness of Conducting Inspections**

FDNY never developed any formal procedures governing the length of time it should take to conduct inspections from the date inspections are requested. As a result, it is unable to ensure that inspections are conducted in a timely manner.

We reviewed the inspections conducted during Fiscal Year 2006 for 21 accounts that were randomly selected to determine whether they were conducted in a timely manner. Since there were no written guidelines, for testing purposes, we used three weeks as the standard—this

is the period that constitutes “good customer service,” according to the Deputy Chief Inspector. We calculated the number of days between the dates of the Request Forms to the dates of the actual inspections on the Inspection Reports and found that the number of days ranged from 7 days to 143 days (more than four months). Twenty (95 percent) of the 21 accounts reviewed exceeded the informal three-week standard.

A prior audit performed by the Comptroller’s Office, *Audit Report on the Inspection Units of the New York City Fire Department’s Bureau of Fire Prevention*, issued on May 7, 1991, identified the same finding, that inspections were not being conducted in a timely manner causing a backlog of inspections. It is apparent that FDNY has not corrected this issue.

Overall, the absence of formal procedures presents the danger that officials may not be working together to ensure that the Alarm Unit is operating as intended and opens a potential for worse outcomes—including the abuse of authority or corruption. Moreover, the lack of timely inspections of fire alarm systems and the lack of follow-up for outstanding deficiencies noted in written orders issued by the Alarm Unit may put the safety of the public at risk.

### **No Procedures for Following Up on Letters of Defect and Violation Orders**

Title 15 of the City Administrative Code states that FDNY may issue written orders (Letters of Defect and Violation Orders) directing owners to correct deficiencies identified during fire alarm inspections, and that such correction must occur within a reasonable period of time. An owner’s failure to comply is to result in a fine.

According to officials of the Alarm Unit, the general practice has been that when Letters of Defect are issued, building owners are to correct the deficiencies within 90 days of issuance and inspectors are to follow up thereafter to ensure compliance by either physically going to the premises or by allowing building owners to have licensed electricians or professional engineers attest to the proper operation of the fire alarm systems (known as self-certifications). If the deficiencies on the Letters of Defect are not corrected, Violation Orders are then issued to the building owners and need to be corrected within 30 days of issuance and followed up by inspectors thereafter to ensure compliance. When more severe deficiencies are found, inspectors do not issue Letters of Defect but immediately issue Violation Orders which are to be corrected within 30 days and followed up by inspectors thereafter to ensure compliance. If the deficiencies on the Violation Orders are not corrected, summonses are then issued to the building owners.

However, FDNY has not established a time frame for within which follow-up should take place. In some instances, the Alarm Unit follows up within the time frame given to owners to correct deficiencies, while in other instances the Alarm Unit does not follow up at all.

We found that 25 of the 32 accounts in our sample resulted in 34 Letters of Defect (one account could have several Letters of Defect) issued by the Alarm Unit. Our analysis of the 34 Letters of Defect revealed that:

- Nine (26 percent) were followed up within the 90 days that building owners are allowed to make corrections.

- Twenty-three (68 percent) were followed up after the informal time period of 90 days to make corrections had elapsed, with periods ranging from 118 days to 3,816 days (more than 10 years).
- Two (6 percent) were never followed up as of January 5, 2007. The number of days that elapsed since the Letters of Defect were issued ranged from 301 days to 424 days.

In addition, 13 of the 32 accounts in our sample resulted in 23 Violation Orders (one account could have several Violation Orders). Our analysis of the 23 Violation Orders revealed that:

- One (4 percent) was followed up within the 30 days that building owners are allowed to make corrections.
- Only 6 (26 percent) were followed up after the informal time period of 30 days to make corrections had elapsed, with periods ranging from 153 days to 441 days.
- Sixteen (70 percent) were never followed up as of January 5, 2007. The number of days that elapsed since the Violation Orders were issued ranged from 190 days to 534 days.

When we brought this finding to the attention of Alarm Unit officials, they were not surprised and in fact showed us 10 cabinets containing approximately 3,200 inspection files of Letters of Defect and Violation Orders, some dating back to the 1980s that still needed follow-up by the Alarm Unit. For example, for account number 138362, the Alarm Unit initially inspected a school in Manhattan on July 17, 1990, and issued a Letter of Defect. The Alarm Unit followed up on October 20, 1994—four years later—and issued a Violation Order. It has been 12 years since then, and the Alarm Unit has not gone back to the school to follow up on the Violation Order.

### **Recommendations**

FDNY should:

1. Immediately take steps to address the approximate 3,200 accounts for which Letters of Defect and Violation Orders were issued and never followed up to ensure that all safety-related issues that have been identified are resolved.

***FDNY Response:*** “AGREE. The FDNY had already planned to add an additional clerical position to the Fire Alarm Inspection Unit (FAIU). A priority assignment for this new hire will be to compile a list of these 3,200 accounts for comparison with data in the Fire Prevention Information Management System (FPIMS) to determine the current status. An oversight committee consisting of members from FAIU, Public Safety and

Quality Assurance will be convened to oversee the project, review each account, and immediately address any unresolved Notices of Violation.”

2. Immediately take steps to reduce the backlog of outstanding inspection requests that are more than three weeks old to determine whether the fire alarm systems are operating as intended and are in compliance with City regulations.

***FDNY Response:*** “AGREE. The Department intends to increase inspection staffing to address the backlog. One new inspector has been selected and is currently being processed. Interviews for two additional positions, funded in the FY08 budget, are underway. The Department anticipates that these positions will be filled sometime in July 2007.”

3. Develop and implement written procedures for the Alarm Unit to follow. The procedures should include the steps that the Alarm Unit needs to take to ensure compliance with the City Charter and City Administrative Code. Among the procedures should be steps (with established time frames) for recording requests for inspections, tracking these requests, conducting inspections, and following up on inspections that resulted in Letters of Defect and Violation Orders.

***FDNY Response:*** “AGREE. An FAIU Policy and Procedures Binder has been developed and will be distributed to all FAIU staff. Soon after distribution, FAIU staff will participate in weekly drills intended to improve awareness, reinforce timely processing requirements, and update unit procedures when necessary. In addition, the importance of entering inspection records into FPIMS in a timely manner will also be stressed. The Department expects that these steps will enhance reporting effectiveness and in turn allow for increased performance monitoring. Additional training will also be provided to all supervisory staff.”

### **FDNY Does Not Have a Reliable System for Tracking Inspections**

The Alarm Unit does not have a tracking system to monitor the inspection process, from receipt of inspection requests by the Alarm Unit to the conduct of inspections by the Alarm Unit and the issuance of Letters of Approval. As a result, FDNY management is hindered in its ability to monitor the inspection process and ensure that inspections are performed in a timely manner.

Officials informed us that they consider FPIMS their tracking system to record inspection information for the Alarm Unit. Relevant information is entered in FPIMS to create an account and to assign an account number. Inspection dates and inspection results are also entered in FPIMS.

However, we cannot be assured that all requests for inspections for the Alarm Unit were entered in FPIMS. We randomly selected 30 accounts—15 from the Alarm Unit’s cabinets that contained Letters of Defect and Violation Orders issued during Fiscal Year 2006 and 15 from FDNY Record Unit’s cabinets that contained Letters of Approval issued during Fiscal Year 2006. Two (7 percent) of the 30 accounts were not found in FPIMS and were never assigned account numbers. The clerk of the Alarm Unit stated that she never entered these two accounts in FPIMS because she had not received the inspection documentation.

Furthermore, in many instances we could not use FPIMS to track the timeliness of inspections for the Alarm Unit because the dates that the requests were received were not entered in the system. We reviewed the FPIMS data containing the 4,045 inspections conducted by the Alarm Unit during Fiscal Year 2006 and found that the accounts for 2,159 (53 percent) of these inspections were created either on or subsequent to the inspection dates.

From December 11 through December 14, 2006, we performed unannounced observations of the Deputy Chief Inspector while he reviewed Request Forms and scheduled inspections. (It should be noted that the Deputy Chief Inspector who reviews the Request Forms and related inspection documentation for completeness is also the person responsible for scheduling inspections. Comptroller’s Directive #1 states that “key duties and responsibilities need to be divided or segregated among different staff members to reduce the risk or error or fraud.”) During that period he received 58 inspection requests. However, based on our verification with the clerk of the Alarm Unit on April 4, 2007—four months after our observations were conducted—25 (43 percent) of the 58 requests for inspections had not been entered in FPIMS; the buildings relating to 8 of them had already been inspected. Furthermore, of the remaining 33 requests for inspections that were entered in FPIMS, 4 were entered the same date as the inspection dates. In such an environment, it is very possible that some inspection requests could be misplaced and left in limbo.

FDNY should ensure that the Alarm Unit creates a tracking system to monitor the inspection process effectively. The tracking system should include, but not be limited to, the following: the account number, the date of the request, the address of the building, whether all required inspection documentation has been submitted with the request (and any attempts to obtain any lacking documentation). Once an inspection has been conducted, the system should track the name of the inspector, the date of the inspection, the results of the inspection, whether follow-up is required, and the date that the follow-up must take place.

Without a tracking system, there is no way for management to: monitor the total population of requests for inspections that come in each fiscal year; ensure that all requests for inspections are being worked on; verify that inspections are scheduled and conducted in an orderly and timely manner; identify the number of completed inspections; and verify that Letters of Defect and Violation Orders are followed up within established time frames.

## **Recommendations**

FDNY should:

4. Create a tracking system that would effectively monitor the inspection process for the Alarm Unit from the date inspection requests are submitted to the date inspections are conducted and Letters of Approval are issued. The system should also be set up to identify whether the Alarm Unit is adhering to established time frames.

**FDNY Response:** “DISAGREE. The FDNY agrees that the tracking system must effectively monitor the inspection process, and when properly utilized, the FPIMS system meets this requirement. The Department will ensure that all FAIU supervisors and staff continue to be trained on the FPIMS requirements and that these requirements are enforced.”

**Auditor Comment:** If FDNY officials plan to utilize FPIMS as their tracking system to monitor the inspection process for the Alarm Unit, then they must use this system effectively. As previously stated, the tracking system should include, but not be limited to, the following: the account number, the date of the request, the address of the building, whether all required inspection documentation has been submitted with the request (and any attempts to obtain any lacking documentation). Once an inspection has been conducted, the system should track the name of the inspector, the date of the inspection, the results of the inspection, whether follow-up is required, and the date that the follow-up must take place.

5. Ensure that the Alarm Unit creates accounts in FPIMS as soon as requests for inspections are received. Information resulting from inspections should also be entered in FPIMS in a timely manner.

**FDNY Response:** “AGREE. It is mandatory that all requests for inspections and inspection results be processed through FPIMS. The requirement that all inspection requests and results be processed expeditiously through FPIMS has been reinforced and will be regularly monitored. An additional clerical member has been added to the FAIU staff to assist with FPIMS data entry.”

6. Segregate the duties of reviewing Request Forms and related inspection documentation and scheduling inspections amongst different staff members.

**FDNY Response:** “AGREE. The FDNY will review and update the current position descriptions and their tasks and standards by August 15, 2007 to ensure the proper segregation of duties and internal controls.”

### **Inadequate Record-keeping Practices of the Alarm Unit**

Supporting documentation for requests of inspections and for completed inspections was not maintained in an organized manner and was not properly secured. These poor record-keeping

practices were a result of management's failure to institute proper controls over the Alarm Unit operations. These practices also raise the possibility that errors could occur and go undetected within the Alarm Unit. The following are examples of inadequate record-keeping practices:

### **Lack of Inspection Files and Field Activity Reports**

FDNY could not find the inspection files for 18 (36 percent) of the 50 accounts we randomly selected from FPIMS. Therefore, for the 18 accounts, we were unable to determine the length of time it took the Alarm Unit to conduct inspections requested; the length of time it took the Alarm Unit to follow up on any Letters of Defect or Violation Orders and whether this time period was within the informal one set by the Alarm Unit; and whether the inspection files contained all required documentation necessary for the inspection process of the fire alarm systems. In addition, FDNY could not provide us with the inspection files for 16 (80 percent) of the 20 inspections we randomly selected from the November 2005 Field Activity Reports. As a result, we were unable to determine whether the 16 inspections recorded on the Field Activity Reports by the inspectors actually took place.

FDNY also could not provide us with the November 2005 Field Activity Reports for one of the 11 inspectors in our sample. Therefore, we were unable to determine the number of inspections conducted by the inspector in November 2005 and verify whether he had conducted 48 inspections, as reported in the Productivity Report.

### **Inspection Files Lacked Required Documentation**

Twenty-five (78 percent) of the 32 accounts in our sample in which inspection files were found lacked one or more of the required documents necessary for the inspection process of fire alarm systems. Some of those required documents included the following: FP-46 Card, which details the history of inspections conducted at premises (lacking in 21 files); Type of Fire Protection A-438 Form, used by an inspector to attest to the fire alarm system being inspected (lacking in 12 files); a Field Inspectional Checklist, used by inspectors while conducting inspections (lacking in 9 files); and the Application for Plan Examination M-25-65 Form, which lists the fire alarm system to be inspected and shows that the plan for the fire alarm system was approved by a designee of FDNY prior to being installed (lacking in 9 files).

### **Requests for Inspection Documentation Scattered**

During our unannounced observations of the Alarm Unit, we found scattered throughout the office a total of 552 requests for inspections that had either not yet been scheduled or that had been scheduled but were canceled and pending new inspection dates. These requests fell into various categories, such as: overtime inspections (either after 4:30 p.m. or on weekends); follow-ups to initial inspections that had resulted in either Letters of Defect or Violation Orders; and initial inspections.

Of the 552, only 318 of the inspection documentation was date stamped by the Alarm Unit. For these 318, we compared the receipt dates stamped on the request documents by the Alarm Unit to the dates of our review (October 4, or 5, 2006). The number of days between the

stamped receipt dates and the dates of our review ranged from 6 days to 1,590 days (more than four years). Of the 318 requests for inspections, 287 (90 percent) exceeded the Alarm Unit’s three-week standard, as shown in Table I, below.

**Table I**

Range of Days 318 Requests Were Pending Inspections

<b>Range of Days</b>	<b>Number of Requests for Inspections</b>	<b>Percentage of Total Requests for Inspections</b>
One day through 21 days	31	10%
22 through 60 days	101	32%
61 through 120 days	84	26%
121 through 180 days	34	11%
181 or more days	68	21%
<b>Total</b>	<b>318</b>	<b>100%</b>

In one instance, a request for an overtime inspection was date stamped on August 25, 2005. As of the date of our review, October 5, 2006—406 days (more than a year) later—this building still had not been scheduled for an inspection.

As stated in a previous section, a prior audit in 1991 also identified the same finding, that inspections were not being conducted in a timely manner causing a backlog of inspections. It is apparent that FDNY has not corrected this issue.

**Unsecured File Cabinets Containing Essential Inspection Files**

The 10 cabinets of the Alarm Unit containing approximately 3,200 inspection files of Letters of Defect and Violation Orders requiring follow-up were unsecured and easily accessible to everyone. During our meetings with Alarm Unit officials and during observations, we noted that officials, including inspectors, the Deputy Chief Inspector, and the clerk, perused or removed inspection files in these cabinets without a system to keep track of the files.

No one was designated by the Alarm Unit to record and track inspection files taken out of these cabinets. Furthermore, we observed on and underneath the desks of various inspectors piles of inspection files that were removed from these cabinets. As long as inspectors are free to rummage through the cabinets without a file-tracking system, there is no accountability for these inspection files, and there is a potential for the misplacement, intentional or otherwise, of these essential inspection files.

We were informed that as a result of the feedback we gave during the audit, on February 9, 2007, the Director of the Alarm Unit issued a memo to all Supervising Inspectors, which indicated that the cabinets are to be locked and that only three officials—the Director, the Deputy Chief Inspector, and a Reinspection Coordinator (RC)—is to have access to them. In addition, the memo indicated that the RC is now responsible for recording and distributing to each inspector all inspection files relating to the scheduled morning inspections and also for assigning,

recording, and distributing the inspection files relating to the unscheduled follow-up inspections conducted in the afternoon. On March 6, 2007, we conducted an observation of this new practice. The RC was performing the responsibilities as outlined in the memo. However, the cabinets remained unlocked. The RC informed us that the cabinets are locked only on Fridays when inspectors come into the office to perform their administrative work. Thus, it appears that the Alarm Unit is not following the new procedures to secure the cabinets.

The Alarm Unit's inadequate record-keeping practices can result and has resulted in inspectors conducting inspections with inaccurate and incomplete inspection files. For example, on November 14, 2006, we accompanied Alarm Unit Inspector ID # 122 on an unscheduled follow-up inspection to a building in Manhattan (account number 25164682) to determine whether the deficiencies noted in a Violation Order issued on November 14, 2005, had been corrected. Upon arrival, a designee of the owner of the building informed the inspector that another Alarm Unit inspector had already visited the premises seven months previously on April 1, 2006, to follow up on the Violation Order and had dismissed it. The inspector then contacted the clerk of the Alarm Unit, confirmed that indeed another inspector had already taken care of the Violation Order that was issued, and left.

Subsequently, we requested the inspection file for this building to verify what had reportedly transpired. We were informed that the inspection file could not be found. We then obtained from the clerk all of the data for the building that was entered in FPIMS. Indeed a Violation Order was issued on November 14, 2005, and was dismissed on April 1, 2006. However, when the Violation Order was dismissed, a Letter of Defect was also issued and should have been followed up by Inspector ID #122.

We could not determine why Inspector ID #122 did not follow up on the Letter of Defect and only on the Violation Order. Since we could not examine the inspection file, we could not determine whether the Letter of Defect was mistakenly not in the file to begin with and therefore not followed up by the inspector, or whether the Letter of Defect was in the file but for whatever reason was ignored or overlooked by the inspector.

At the exit conference and in a letter dated May 24, 2007, FDNY officials stated that they had investigated this matter. Again, they informed us that the inspection file for the building that we requested in November 2006 was misplaced, but added that as a result of our audit it has now been found—six months later. The Director of the Alarm Unit and the Assistant Chief of the Bureau of Fire Prevention stated that a “charge card system is being implemented in relation to the recordkeeping” of the inspection files, which should prevent this from happening again.

They also stated that the inspector overlooked the required follow-up for this Letter of Defect because he left to conduct the inspection without having the entire inspection file. The inspector only had information concerning the Violation Order. They added that there was no impropriety in this instance.

Further, when officials found the entire inspection file, they discovered that the building's deficiencies had been self-certified as corrected on July 13, 2006, in response to the Letter of Defect that was issued on April 1, 2006. However, since the inspection file was misplaced, no

one was aware of this self-certification. The Director informed us that the Alarm Unit has recently reviewed the self-certification and approved it, 10 months after its receipt. He subsequently provided us with data from FPIMS which indicated that on May 18, 2007—after the issuance of the preliminary draft report—the Alarm Unit issued a Letter of Approval and has dismissed the Letter of Defect.

### **Recommendations**

FDNY should ensure that:

7. The Alarm Unit develops a sound internal control structure over its record-keeping and storage practices. All records pertaining to the inspection process should be maintained accurately and in an organized manner.

**FDNY Response:** “AGREE. The FDNY has charged the FAIU Reinspection Coordinator with responsibility for inspection records and to introduce and enforce a policy of utilizing Charge-Out-Cards similar to those used in libraries whenever a file is removed from its storage space. This policy will be in effect Bureau-wide by June 30, 2007.”

8. The cabinets containing the inspection files of Letters of Defect and Violation Orders be locked at all times and be accessible only to a limited number of officials in accordance with its procedures.

**FDNY Response:** “DISAGREE. FDNY believes locked files during normal business hours will impede access by our personnel and unnecessarily limit the productivity. However, FDNY will reissue security procedures and require the FAIU Director, Reinspection Coordinator, or Deputy Chief Inspector to ensure files are securely locked at the close of business or whenever the work area is left unattended. Because of the frequency of access, locking and unlocking cabinets during the business day is unduly burdensome. Please note that FAIU’s file storage area is within a secured work environment, requiring card access for entry onto the floor. In addition, the reception area is staffed and visitors are required to sign in, are announced, and escorted to their intended party.”

**Auditor Comment:** We agree that the public cannot freely gain access to the file cabinets since card access for entry onto the floor is required for security. However, the fact remains, as evidenced by our audit, that the Alarm Unit’s own staff members, such as inspectors, perused or removed inspection files from the cabinets. Therefore, we stand by our recommendation that the cabinets containing the essential inspection files of Letters of Defect and Violation Orders be locked at all times—not only at the close of business or whenever the work area is left unattended. This procedure would prevent unauthorized staff members, such as inspectors, from rummaging freely through the files, possibly causing inspection files to be misplaced intentionally, or not. We believe that the benefits of the added security measure of locking file cabinets at all times far

outweigh the associated costs involved with locking and unlocking cabinets during the business day.

9. Prior to an inspection, the accuracy and completeness of an inspection file is reviewed by someone other than the inspector assigned to the inspection. In addition, information contained in the inspection file should be compared to the information recorded in FPIMS. Any discrepancies should be investigated.

**FDNY Response:** “AGREE. The scheduling supervisor is responsible for ensuring that all documentation is current and accurate and that it is recorded accurately and completely in FPIMS. The FAIU manager will review tasks and standards with individual employees to ensure compliance.”

### **Inspection-Tracking Data Entered in FPIMS for the Alarm Unit Is Not Reliable**

Inspection-tracking data entered in FPIMS for the Alarm Unit is not reliable. We did not conduct a technical review of the features of FPIMS. However, we became concerned about the reliability of the inspection-tracking data for the Alarm Unit recorded in FPIMS when we found that two reports generated from FPIMS and provided to us by FDNY had different totals for the number of inspections conducted by the Alarm Unit during Fiscal Year 2006—one had a total of 4,253 inspections and the other a total of 5,387 inspections. Thus, we cannot be assured that we identified the entire population of inspections conducted by the Alarm Unit and cannot conclude that the inspection-tracking data for the Alarm Unit is reliable.

FDNY initially provided us an Excel spreadsheet with data from FPIMS that indicated there were 4,253 inspections conducted by the Alarm Unit during Fiscal Year 2006 corresponding to 4,253 accounts. Upon our review, we found indications that this data may not be complete or accurate. For example, when we reviewed the data for “expdt” and “dtpaymclr” (two of the data fields in the spreadsheet), we found that the same date, January 1, 1970, was repeated in both fields for many of the 4,253 inspections.

Therefore, to assess the reliability of this data, we had FDNY provide in an Excel spreadsheet all of the inspection data from FPIMS dating from the Alarm Unit’s first access to the system in November 2001. We sorted this data by inspection date to determine the number of inspections conducted during Fiscal Year 2006 and arrived at a total of 5,387 inspections. Of these, we found that the data contained duplicate entries for 1,342 accounts. Officials stated that these duplicate entries were not representative of actual inspections conducted. We thus eliminated these entries and arrived at a new total of 4,045 inspections corresponding to 3,488 accounts. FDNY officials could not explain why this differed from the 4,253 accounts that they initially provided to us.

Additionally, when we sorted by inspector identification number the spreadsheet containing the 4,045 inspections, we identified 18 unrecognizable inspector identification numbers corresponding to 30 inspections. Officials stated that these inspections were conducted by inspectors who were not part of the Alarm Unit. Thus, these 30 inspections including non-

Alarm Unit inspectors should not have been included in the 4,045 inspections that FDNY provided to us.

As noted previously, in many instances we could not use FPIMS to track the timeliness of inspections conducted by the Alarm Unit because the dates that the requests were received were not entered in the system (i.e., 53 percent were created either on or subsequent to the inspection dates). Furthermore, other tests of the inspection data for the Alarm Unit recorded in FPIMS disclosed the following: FDNY could not find the inspection files for 18 (36 percent) of the 50 accounts we randomly selected from FPIMS, and two (7 percent) of the 30 accounts we randomly selected from FDNY's cabinets were not found in FPIMS and were never assigned account numbers. Therefore, we conclude that FPIMS data cannot be relied upon for the purposes of tracking inspection information of the Alarm Unit. Further, since FPIMS is used to generate the billing for inspections conducted by the Alarm Unit, the billing function for this unit may also be unreliable or inaccurate.

### **Recommendation**

10. FDNY should review the Alarm Unit capabilities and use of FPIMS to increase data reliability and to ensure that it can be used to monitor the inspection process.

**FDNY Response:** "AGREE. The FPIMS System, when properly utilized, meets FDNY's requirements. The Department has reviewed FAIU capabilities and will work with the Unit to ensure FPIMS data reliability."

### **Inaccurate Reporting of Inspections Conducted by the Alarm Unit**

The Director of the Alarm Unit did not accurately report the number of inspections conducted by his inspectors on the Alarm Unit's Productivity Report for Fiscal Year 2006. These numbers were also used for inclusion in the *Mayor's Management Report Fiscal 2006*. Specifically, we determined that a total of 341 inspections were conducted by 10 inspectors for the judgmentally selected month of November 2005. However, a total of 415 inspections were reported on the Productivity Report, resulting in an overstatement of 74 inspections for this month, as shown below in Table II, below.

**Table II**

Comparison of Number of Inspections Conducted  
According to the Auditor's Calculations and the Productivity Report  
During the Month of November 2005

(A) Inspector Identification Number/Title	(B) Number of Inspections Conducted According to Auditor's Calculations	( C ) Number of Inspections Conducted Reported in Productivity Report	( D ) Difference between Auditor's Calculations and Productivity Report ( C -B)
#076	21	40	19
#127	30	45	15
#064	25	35	10
#128	34	42	8
#060	47	54	7
Office Staff	0	8	8
#061	28	34	6
#025	22	26	4
#122	21	21	0
#044	66	66	0
#097	47	44	(3)
<b>Total</b>	<b>341</b>	<b>415</b>	<b>74</b>

The Director informed us that the number of inspections he reports in the Productivity Report is obtained from reviewing Field Activity Reports. However, we found that upon our review of the Field Activity Reports that the overstatement of 74 inspections was largely due to the Director's incorrectly including 48 inspections that were projected but were not actually conducted by inspectors for reasons noted on the Field Activity Report as follows: "canceled," "no access," "no time," or "no person in charge."

For example, on November 30, 2005, Inspector Identification #076 was projected to conduct four inspections. On his Field Activity Report, he reported contradicting information; he indicated that he conducted four inspections yet also indicated that for one inspection he was unable to gain access into the building and for another inspection he had the wrong address. Therefore, he actually conducted only two inspections.

The Director of the Alarm Unit agreed that he includes inspections that were projected but were not actually conducted since he believes that even though inspectors did not conduct the inspections, they nonetheless attempted to do so and spent time traveling. However, this number should not be included as actual inspections conducted. Rather, they should be evaluated and reported separately.

Moreover, 8 (11 percent) of the 74 inspections lacked adequate supporting documentation so we were unable to verify the information reported on the Productivity Report. The Director of the Alarm Unit stated that these 8 inspections were not conducted by his regular inspectors.

Rather, they were conducted by “office staff,” which he defined as either “Supervising Inspectors or inspectors assigned to administrative support.” The Director further stated that the inspections in question often “have a high priority” and are not recorded on Field Activity Reports. Rather, the sites of these inspections and the names of the inspectors assigned are recorded in the scheduling book of the Deputy Chief Inspector. Once an inspection has been completed, only the address and number of hours at the site are to be recorded on a Kronos Attendance Punch Slip Form. However, a Field Activity Report must nevertheless be prepared. According to the FDNY manual *Field Personnel Activity Reporting Oversight Requirements*, all personnel performing inspections are to ensure that Field Activity Reports are used to accurately reflect time use and the dispositions of field activity that has been completed, and that they are submitted to the supervisors for review and approval. For the remaining 18 of the 74 inspections that were overstated, we could not determine why the Director included them in the Productivity Report from our review of the Field Activity Reports.

We were informed by FDNY Director of Management Analysis and Planning that the 5,601 inspections the Alarm Unit reported it conducted during Fiscal Year 2006 and reported in the Productivity Report were part of the 186,551 inspections reported in the *Mayor’s Management Report*. Since the numbers reported by the Alarm Unit in the Productivity Report for the month of November 2005 were overstated, the number reported in the *Mayor’s Management Report* may also be overstated.

A 1991 audit performed by the Comptroller’s Office also stated that FDNY was overstating the inspection productivity of the Bureau. It is apparent that FDNY still has issues reporting inspection productivity.

### **Recommendations**

FDNY should ensure that:

11. The number of inspections conducted by the Alarm Unit is accurately reported in the Productivity Report and *Mayor’s Management Report*. This number should include only those inspections that were actually conducted.

**FDNY Response:** “AGREE. With the reinforced usage of FPIMS, the accuracy of productivity reporting will improve. The FDNY has standardized inspection reporting and will now generate data solely from FPIMS. This will ensure that completed inspections will be correctly reported in the *Mayor’s Management Report*. The Department will make a change in the recording of inspections in that the number of incomplete and ‘no access’ inspection stops will now appear as a footnote on monthly statistical records to account for all inspection efforts.”

12. All inspections conducted by each inspector, including those of high priority, are recorded on Field Activity Reports as required.

**FDNY Response:** “AGREE. Fire Prevention staff will be retrained in proper completion of the Field Activity Routing and Reporting (FARR) forms. As noted in the cover letter, the Department has a long-term plan to issue hand-held devices to inspectors, which will

also help address this issue. These devices will also be designed to connect with a centralized database and upload digital data associated with the individual inspector's activity."

### **Alarm Unit Did Not Meet Its Informal Target for Auditing Self-Certified Inspections**

Only 20 (2 percent) of the 852 self-certified fire alarm system inspections conducted by building owners that had been approved by the Alarm Unit during Fiscal Year 2006 were audited by the Alarm Unit, far short of its 20 percent informal annual goal.<sup>6</sup> Again, this lack of verification by audit is a result of FDNY management's failing to institute proper controls over its Alarm Unit's operations.

If a building owner chooses to self-certify that it corrected the conditions identified in a Letter of Defect, a Certification of Correction of Electrical Defects Form (Correction Form) must be submitted to the Alarm Unit for review. One of the Alarm Unit's Supervising Inspectors is responsible for reviewing the Correction Form; if he approves it, then the building owner will be issued a Letter of Approval.

The Director of the Alarm Unit stated that there are no written guidelines governing self-certifications. However, he stated that the procedure the Alarm Unit follows regarding self-certifications is similar to the procedures followed by the Department of Buildings, namely, that 20 percent of all self-certifications that have been approved are expected to be audited. However, instead of auditing 170 (20%) of the 852 self-certified inspections for Fiscal Year 2006, the Alarm Unit audited only 20 (2%). Of the 20 audited self-certified inspections, 5 (25 percent) failed the audit; that is, the deficiencies had not all been corrected despite licensed electricians attesting that the deficiencies had been corrected. Without sufficient oversight by the Alarm Unit regarding self-certifications, the potential exists that building owners may be inclined to self-certify without actually having the deficiencies corrected, putting the safety of the public at risk.

The Director of the Alarm Unit stated that a shortage of staff has caused the Supervising Inspector to take on more responsibilities, which has prevented him from performing more audits of self-certified inspections. However, we believe that better supervision of inspectors could help to increase productivity and compensate for the stated staff shortage. This issue is discussed further in the following section of this report.

### **Recommendation**

13. FDNY should develop and implement formal procedures governing self-certifications and ensure that a system is in place to monitor adherence to its established guidelines.

**FDNY Response:** "AGREE. The FDNY has been working to develop formal procedures governing self-certification and expects this to be finalized by July 1, 2007.

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<sup>6</sup> A total of 947 self-certified inspections were conducted by building owners and submitted to the Alarm Unit during Fiscal Year 2006; 95 were disapproved, and 852 were approved.

These procedures will require routine audits intended to achieve an annual audit goal of 5% of the self-certified fire alarm inspections submitted by building owners.”

**Auditor Comment:** We are pleased that FDNY expects to develop formal procedures governing self-certifications by July 1, 2007. However, FDNY should reconsider whether having an annual audit goal of five percent of the approved self-certifications is adequate, given the fact that 25 percent of the audited self-certified inspections that FDNY officials conducted during Fiscal Year 2006 failed the audit—that is, the deficiencies had not all been corrected despite licensed electricians attesting that the deficiencies had been corrected. FDNY officials might want to consider auditing a percentage higher than five percent of the self-certifications and then decrease this percentage over time, depending on the results.

Nevertheless, we repeat that without sufficient oversight by the Alarm Unit regarding self-certifications, the potential exists that building owners may be inclined to self-certify without actually having the deficiencies corrected, putting the safety of the public at risk.

### **Inadequate Supervision of Inspectors**

The inspectors of the Alarm Unit are not adequately supervised. As a result, Field Activity Reports were not always detailed and clear, as required, and were not always approved by Supervising Inspectors; supervisory oversight inspections were not always performed; and inspectors were not always working in the field as required.

#### **Field Activity Reports Not Always Detailed, Clear, and Approved**

Forty-nine (33 percent) of the 147 Field Activity Reports reviewed (for the month of November 2005) were not approved by a Supervising Inspector, as required. According to the FDNY manual *Field Personnel Activity Reporting Oversight Requirements*, inspectors are to ensure that Field Activity Reports accurately reflect time use and the dispositions of field activity that has been completed, and that they are submitted to the supervisors for review and approval.

A supervisor’s signature is a representation that the Field Activity Report has been reviewed for the validity and accuracy of the reported inspections (including hours spent at an inspection, results of an inspection, and travel in between inspections). Without a supervisor’s signature documenting a review, we could not be certain that the inspections listed as having taken place actually took place.

In addition, 36 (24 percent) of the 147 Field Activity Reports reviewed were not completed by inspectors in a detailed and clear manner, as required. It was often very difficult for us to understand the information written on these reports. We discussed this matter with the Supervising Inspectors as well as the Deputy Chief Inspector who confirmed that these Field Activity Reports were unclear and difficult to read.

According to *Field Personnel Activity Reporting Oversight Requirements*, all of the fields on the Field Activity Reports are to be filled out completely by inspectors. It further describes in

detail how the Field Activity Reports are to be filled out using legible handwriting. Unclear and difficult-to-read Field Activity Reports hinders the ability of supervisors to oversee inspectors' work adequately and increases the risk that issues needing follow-up will be overlooked.

### **Supervisory Oversight Inspections Not Always Performed**

Supervisory oversight inspections were not always performed during Fiscal Year 2006, as required. Oversight inspections performed by supervisors can either include a supervisor accompanying an inspector on an inspection or a supervisor following up with a building owner or designee within 72 hours of an inspector's inspection and obtaining feedback. The results of these inspections are to be recorded on Oversight Inspection Record Forms. According to *Field Personnel Activity Reporting Oversight Requirements*, a minimum of six oversight inspections is required each month for units with more than 10 employees.

The Alarm Unit conducted only 10 (14 percent) of the required 72 supervisory oversight inspections during Fiscal Year 2006. These 10 oversight inspections were conducted for only seven of the 13 inspectors. As a result, supervisors are hindered in assessing the quality and integrity of inspectors' performance. The Director and Supervising Inspectors of the Alarm Unit agreed that more supervisory oversight inspections should have been conducted to meet the requirements. The Director stated that due to a shortage of inspectors, the Supervising Inspectors have taken on more responsibilities, which prevent them from performing more oversight inspections. However, we believe that better supervision of inspectors could help to increase productivity and compensate for the stated staff shortage.

### **Inspectors Not Conducting a Sufficient Number of Inspections**

Inspectors did not maximize their time in the field performing inspections—a great deal of time was spent in the office for unreported reasons. Specifically, we found that 30 (20 percent) of the 147 Field Activity Reports indicated that inspectors were either not in the field all day performing inspections Monday through Thursday, as required, or were not in the field for at least part of the day on Fridays performing inspections, as required. Additionally, there were nine instances in which Field Activity Reports were not available. However, based upon our review of other supporting documentation, we determined that in these nine instances inspectors spent time in the office rather than in the field performing inspections.

According to Alarm Unit officials and various memos and correspondence issued to the Alarm Unit by the Director, inspectors are required to work five days a week from 9:00 a.m. to 4:30 p.m., with a half hour lunch break, for a total of seven hours. They are to be out in the field performing inspections Monday through Thursday. As of November 4, 2005, Fridays are designated for inspectors to perform their administrative work in the office between the hours of 9:00 a.m. to 1:00 p.m., and then are to perform inspections in the field for the remainder of the day.

For 26 of the 39 instances (occurring Monday through Thursday), inspectors either arrived at the office first before going out to conduct inspections, left the field early to return to the office, or stayed in the office the entire day without going at all to the field to conduct

inspections. (The reasons for coming into the office were not indicated on the Field Activity Reports or other supporting documentation.) Additionally, for 13 of the 39 instances, inspectors did not perform inspections in the field for at least part of the day on Fridays, as required. For example, on Thursday, November 10, 2005, Inspector ID # 064 first arrived at the office at 9:00 a.m. and remained until 1:45 p.m.; he did not arrive in the field to conduct his first inspection until 3:00 p.m. (his workday ended at 4:30 p.m.).

### **Recommendations**

FDNY should ensure that:

14. Supervising Inspectors of the Alarm Unit are familiar with their responsibilities regarding oversight of inspectors as outlined in the FDNY manual *Field Personnel Activity Reporting Oversight Requirements*.

**FDNY Response:** “AGREE. This information is included in the FARR refresher session(s) scheduled for this summer. The FAIU Manager will monitor employee compliance with these standards.”

15. Inspectors of the Alarm Unit completely and clearly record information on the Field Activity Reports.

**FDNY Response:** “AGREE. This information is included in the FARR refresher session(s) scheduled for this summer. The FAIU Manager will monitor employee compliance with these standards.”

16. Supervising Inspectors adequately review and approve all Field Activity Reports.

**FDNY Response:** “AGREE. While the Quality Assurance Unit will continue to receive sheets as they are filed with the units, the FAIU Manager or his designee will monitor to ensure that these forms are being adequately reviewed, endorsed, and maintained.”

17. Inspectors do not spend an inordinate amount of time in the office rather than in the field performing inspections. If an inspector is required to come to the office outside the normal time set aside for administrative duties, this should be documented on the Field Activity Reports and approved by a supervisor.

**FDNY Response:** “AGREE. FAIU management will more closely monitor scheduling, time usage, and reporting. This will help to ensure that FAIU inspectors spend no more time than necessary in the office and accurately record administrative times and duties on Field Activity Reports. Supervisors will receive refresher training designed to reinforce their responsibilities to ensure productivity and enforce the inspectors’ reporting requirements. It should be noted that inspectors are often required to return to the office to view or discuss building plan issues with supervisors. However, they are expected to record this administrative time on the Field Activity Reports.”



**FIRE DEPARTMENT**  
9 METROTECH CENTER BROOKLYN, N.Y. 11201-3857



NICHOLAS SCOPPETTA  
*Fire Commissioner*

June 14, 2007

Mr. John Graham  
Deputy Comptroller  
Audits, Accountancy & Contracts  
Office of the Comptroller  
1 Centre Street  
New York, NY 10007-2341

Re: Audit Report on Fire Department Controls over the Inspection of Fire Alarm Systems  
MH 07-063A

Dear Mr. Graham:

I write in response to the draft "Audit Report on Fire Department Controls over the Inspection of Fire Alarm Systems," dated June 1, 2007. The Department found the audit report and recommendations helpful in identifying areas where improved controls are needed. Please thank your staff for the time and diligence that they put into this audit. The Department appreciates their efforts.

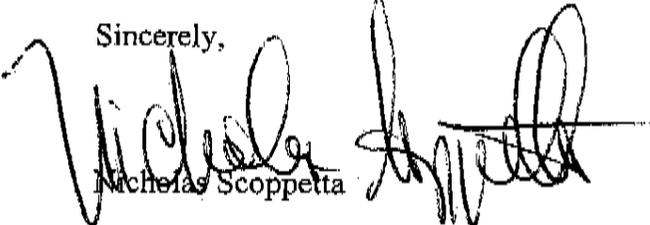
As detailed in the attached document, FDNY's response and Agency Implementation Plan, we agree with the majority of the recommendations. The Department had previously recognized some of these same issues and began to develop solutions, outlined in the FDNY Strategic Plan for 2004-2005. As a result, the Department has already taken steps to implement some of the suggested changes throughout the Bureau of Fire Prevention (BFP).

As you may know, the FDNY Fire Alarm Inspection Unit (FAIU) is one of 20 inspection units within the BFP. While this Unit's staffing level over the years has remained relatively constant at approximately 10 inspectors (out of a total of more than 260 BFP inspectors), they have managed to double revenues during the last five years, to more than \$2.1 million in 2006 from only \$1.0 million in 2002. To further increase BFP's operational efficiency, the FDNY has contracted with IBM to automate and standardize the management of inspections and the compliance process. The Field Activity Routing and Reporting Mobile Solution ("Automated FARR") will include the use of hand-held devices by inspectors allowing digital inspection data to be uploaded into the Fire Prevention Information System (FPIMS), providing real time management metrics and reports, and decreasing errors associated with manual data entry from paper forms.

The Automated FARR is a longer-term initiative which will help the FAIU and all of BFP build upon its accomplishments. Nevertheless, we understand -- and your report makes clear -- that improved controls must be implemented now to ensure that the FAIU carries out its important mission and documents its performance in a timely and reliable manner. We look forward to implementing many of measures included in the audit report as quickly as possible.

Thank you in advance for considering our responses to the report. If you have any questions please contact our Chief Compliance Officer, Ray Saylor, at (718) 999-1728.

Sincerely,



Nicholas Scoppetta

Attachment: Agency Implementation Plan Audit #: MH 07-063A

cc: Salvatore Cassano, Chief of Department  
Thomas Jensen, Chief of Fire Prevention  
Ray Saylor, Chief Compliance Officer

**FDNY Agency Implementation Plan**

**Audit #:** MH 07-063A

**Audit Report Issued:** June 1, 2007

**Audit name:** Audit Report on Fire Department Controls over the Inspection of Fire Alarm Systems

**Rec. #**  
**01**

**Recommendation**

Immediately take steps to address the approximate 3,200 accounts for which Letters of Defect and Violation Orders were issued and never followed up to ensure that all safety-related issues that have been identified are resolved.

**FDNY Response**

AGREE. The FDNY had already planned to add an additional clerical position to the Fire Alarm Inspection Unit (FAIU). A priority assignment for this new hire will be to compile a list of these 3,200 accounts for comparison with data in the Fire Prevention Information Management System (FPIMS) to determine the current status. An oversight committee consisting of members from FAIU, Public Safety and Quality Assurance will be convened to oversee the project, review each account and immediately address any unresolved Notices of Violation. It is estimated that most (65%) of these are Letters of Defect issued for deviations from the proposed plan. They are typically non-safety violations of the Building Code, e.g. fire alarm pull stations a few inches higher or lower than shown on the plan. In most cases a Letter of Defect is issued due to a technical discrepancy between the approved plan and the actual installation. Once these discrepancies are reconciled on the "As Built" building plans they are dismissed.

**02**

**Recommendation**

Immediately take steps to reduce the backlog of outstanding inspection requests that are more than three weeks old to determine whether the fire alarm systems are operating as intended and are in compliance with City regulations.

**FDNY Response**

AGREE. The Department intends to increase inspection staffing to address the backlog. One new inspector has been selected and is currently being processed. Interviews for two additional positions, funded in the FY08 budget, are underway. The Department anticipates that these positions will be filled sometime in July 2007. Please note that the FAIU currently monitors all initial installation tests. In many cases these requests may not accurately reflect an actual backlog since some systems classified as "backlogged" may not be ready for testing.

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**03 Recommendation**

Develop and implement written procedures for the Alarm Unit to follow. The procedures should include the steps that the Alarm Unit needs to take to ensure compliance with the City Charter and City Administrative Code.

**FDNY Response**

AGREE. An FAIU Policy and Procedures Binder has been developed and will be distributed to all FAIU staff. Soon after distribution FAIU staff will participate in weekly drills intended to improve awareness, reinforce timely processing requirements and update unit procedures when necessary. In addition, the importance of entering inspection records into FPIMS in a timely manner will also be stressed. The Department expects that these steps will enhance reporting effectiveness and in turn allow for increased performance monitoring. Additional training will also be provided to all supervisory staff.

**04 Recommendation**

FDNY should create a tracking system that would effectively monitor the inspection process for the Alarm Unit from the date inspection requests are submitted to the date inspections are conducted and Letters of Approval are issued. The system should also be set up to identify whether the Alarm Unit is adhering to established time frames.

**FDNY Response**

DISAGREE. The FDNY agrees that the tracking system must effectively monitor the inspection process, and when properly utilized the FPIMS system meets this requirement. The Department will ensure that all FAIU supervisors and staff continue to be trained on the FPIMS requirements and that these requirements are enforced.

**05 Recommendation**

FDNY should ensure that the Alarm Unit creates accounts in FPIMS as soon as the requests for inspections are received. Information resulting from inspections should also be entered in FPIMS in a timely manner.

**FDNY Response**

AGREE. It is mandatory that all requests for inspections and inspection results be processed through FPIMS. The requirement that all inspection requests and results be processed expeditiously through FPIMS has been reinforced and will be regularly monitored. An additional clerical member has been added to the FAIU staff to assist with FPIMS data entry.





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**12 Recommendation**

FDNY should ensure that all inspections conducted by each inspector, including those of high priority, are recorded on Field Activity reports as required.

**FDNY Response**

AGREE. Fire Prevention staff will be retrained in proper completion of the Field Activity Routing and Reporting (FARR) forms. As noted in the covering letter, the Department has a long-term plan to issue hand-held devices to inspectors, which will also help address this issue. These devices will also be designed to connect with a centralized database and upload digital data associated with the individual inspector's activity.

**13 Recommendation**

FDNY should develop and implement formal procedures governing self-certifications and ensure that a system is in place to monitor adherence to its established guidelines.

**FDNY Response**

AGREE. The FDNY has been working to develop formal procedures governing self-certification and expects this to be finalized by July 1, 2007. These procedures will require routine audits intended to achieve an annual audit goal of 5% of the self-certified fire alarm inspections submitted by building owners. The self-certification process only applies to Letters of Defect, which typically are non-safety technical discrepancies in the Building Code as described earlier in our response to Recommendation #1.

**14 Recommendation**

FDNY should ensure that Supervising Inspectors of the Alarm Unit are familiar with their responsibilities regarding oversight of inspectors as outlined in the FDNY manual *Field Personnel Activity Reporting Oversight Requirements*.

**FDNY Response**

AGREE. This information is included in the FARR refresher session(s) scheduled for this summer. The FAJU Manager will monitor employee compliance with these standards.

Rec. #: MH 07-063A

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15

**Recommendation**

FDNY should ensure that Inspectors of the Alarm Unit completely and clearly record information on the Field Activity Reports.

**FDNY Response**

AGREE. This information is included in the FARR refresher session(s) scheduled for this summer. The FAIU Manager will monitor employee compliance with these standards.

16

**Recommendation**

FDNY should ensure that Supervising Inspectors adequately review and approve all Field Activity Reports.

**FDNY Response**

AGREE. While the Quality Assurance Unit will continue to receive sheets as they are filed with the units, the FAIU manager or his designee will monitor to ensure that these forms are being adequately reviewed, endorsed, and maintained.

17

**Recommendation**

FDNY should ensure that Inspectors do not spend an inordinate amount of time in the office rather than in the field performing inspections. If an inspector is required to come to the office outside the normal time set aside for administrative duties, this should be documented on the Field Activity Reports and approved by a supervisor.

**FDNY Response**

AGREE. FAIU management will more closely monitor scheduling, time usage and reporting. This will help to ensure that FAIU inspectors spend no more time than necessary in the office and accurately record administrative times and duties on Field Activity Reports. Supervisors will receive refresher training designed to reinforce their responsibilities to ensure productivity and enforce the inspectors' reporting requirements. It should be noted that inspectors are often required to return to the office to view or discuss building plan issues with supervisors. However, they are expected to record this administrative time on their Field Activity Reports.