



Office of the City Auditor

Audit of the Fire Department Operations

Report Date: December 20, 2018

Office of the City Auditor
2401 Courthouse Drive, Room 344
Virginia Beach, Virginia 23456
757.385.5870

"Promoting Accountability and Integrity in City Operations"



Office of the City Auditor

"Promoting Accountability and Integrity in City Operations"

Lyndon Remias, CPA
Tony Gonzalez, CPA, CIA, MBA

City Auditor
Senior Auditor

www.vbgov.com/cityauditor

Office of the City Auditor
2401 Courthouse Drive, Room 344
Virginia Beach, VA 23456
Telephone: 757.385.5870 Fax: 757.385.5875

Fraud, Waste, and Abuse Hotline 757.468.3330



Office of the City Auditor Transmittal Letter

Date: December 20, 2018
To: David L. Hansen, City Manager
Subject: Audit of the Fire Department Operations



I am pleased to present the report of our audit of Fire Department Operations. This audit addresses the effectiveness of operational internal controls over select functions of the Fire Department.

Findings considered to be of insignificant risk have been discussed with management. We completed fieldwork on December 7, 2018.

The Office of the City Auditor reports to City Council through the Audit Committee and is organizationally independent of all other City Departments. This report is intended solely for the information and use of the Audit Committee, City Council, Fire Department, City Attorney's Office, and Human Resources Department management. It is not intended to be and should not be used by anyone other than these specified parties. However, this report is a matter of public record and its distribution is not limited.

We would like to thank the management and staff of the Fire Department, the City Attorney's Office, and Human Resources for their cooperation and responsiveness to our requests during our audit and their receptiveness to questions, recommendations, and suggestions.

If you have any questions about this report, or any audit-related issue, I can be reached at 385.5872 or via email at lremias@vbgov.com.

Respectfully submitted,

Lyndon S. Remias, CPA
City Auditor

c: Audit Committee Members
Steven Cover, Deputy City Manager
David Hutcheson, Fire Department Chief
Mark Stiles, City Attorney
Regina Hilliard, Human Resources Director



Office of the City Auditor Table of Contents

Transmittal Letter	i
Purpose	1
Scope and Objectives.....	1
Methodology.....	1
Standards	2
Background	3
Results	8
Conclusion.....	13
Acknowledgements.....	14
Management’s Response.....	Attachment A



Office of the City Auditor Audit of the Fire Department Operations

Purpose

The purpose of this audit was to address the effectiveness of operational internal controls over select functions of the Fire Department.

Scope and Objectives

The scope of the audit was from July 1, 2015 to November 30, 2018.

The objectives of the audit were to:

1. Evaluate whether the design of the revamped process over live-burn training ensures the safety of citizens and firefighters.
2. Evaluate whether the design of the revamped Fire Captain Promotion process ensures integrity and fairness to all participants.
3. Determine whether the number of annual fire inspections of commercial properties performed by the Fire Prevention Bureau is adequate.
4. Determine the effectiveness of the internal controls over the procurement card process in detecting inappropriate transactions.

Methodology

We performed a variety of procedures to accomplish our objectives:

Live-Burn Training

- Met with the Deputy City Attorney and discussed the evaluation process plan and expected results.
- Obtained and reviewed supporting documents on Virginia Occupational Safety and Health (VOSH) citations from the Human Resources Department's Occupational Safety and Health Services (OSHS) Manager, who is the City's point of contact in its communications with VOSH.
- Conducted follow-up to determine if recommendations from the City Auditor's investigation were implemented.
- Obtained and verified documents of other live-burn training that were conducted in the past two years.

Fire Captain Promotion

- Obtained past and present policies and procedures to compare changes.
- Reviewed the request for proposal (RFP) for the revamped Fire Captain Promotion process.
- Met with the Human Resources Department's Staffing and Compensation Manager and discussed changes to the process.



Office of the City Auditor Audit of the Fire Department Operations

Fire Inspections

- Interviewed and obtained manuals and operational reports from management.
- Performed a walkthrough of the Fire Department site plan review process.
- Performed a “ride along” fire inspection with a fire inspector to observe how the process is conducted.
- Discussed a variety of potential improvements to increasing productivity and monitoring staff.

Procurement Card

- Extracted procurement card transactions for CY 2018 as of October 22, 2018 from the BOA Works®, Bank of America’s proprietary card and payments management system. The data extract returned eighteen Fire Department procurement cardholders that had 460 transactions totaling \$137,000.
- Identified each cardholder’s position and accessed supporting documents scanned in BOA Works®.
- Judgmentally selected transactions for analytical review, as individuals or together with other transactions, to identify those that are:
 - Excessive, overpriced, or abusive
 - Unusual for the cardholder’s responsibilities
 - Unusual for the Fire Department

Standards

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

The Office of the City Auditor reports to City Council through the Audit Committee and is organizationally independent of all City Departments. This report will be distributed to the City’s Audit Committee, City Council, and appropriate management within the City of Virginia Beach. This report will also be made available to the public.



Office of the City Auditor Audit of the Fire Department Operations

Background

The Virginia Beach Fire Department (Fire Department) is a public safety agency dedicated to protecting its communities, members, citizens, and visitors to foster the sense of safety through planning, mitigation, response, and restoration.

The Fire Department provides all fire, all-hazard response services to about 460,000 residents in the City's 497 square miles. All-hazard response includes: fire suppression; emergency

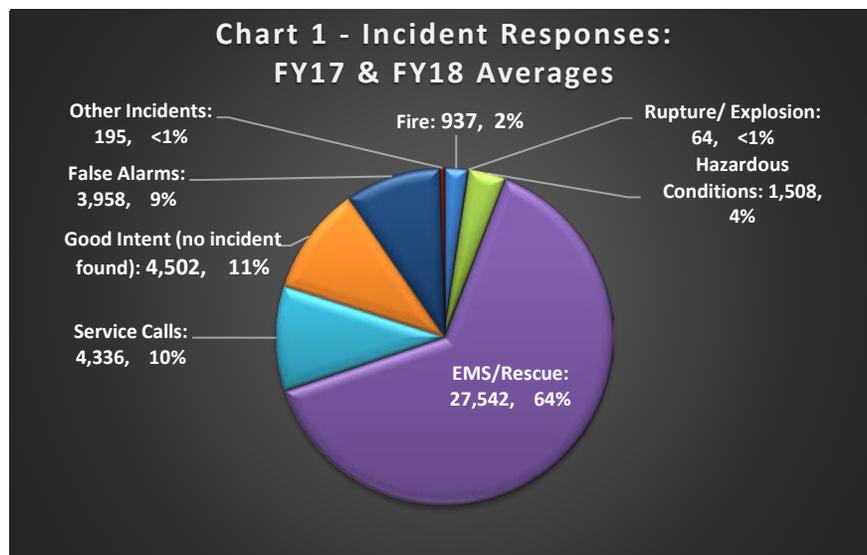


Fire Station 7 at Town Center

management; hazardous materials; technical rescue; fire inspections; fire investigations; life safety education; fire training; marine fire suppression and rescue; safety, health, and wellness; and disaster response through the Virginia Task Force 2, one of twenty-eight Federal Emergency Management Agency (FEMA) Urban Search and Rescue (USAR) task forces. In addition, the Fire Department is a member of the Virginia Beach Emergency

Response System and provides emergency medical technicians and paramedics to assist the Virginia Beach Department of Emergency Medical Services with providing Advanced Life Support response to the community.

The Fire Department responded to 43,750 and 42,330 incidents during fiscal years 2017 and 2018, respectively. See Chart 1 for the two-year averages.





Office of the City Auditor Audit of the Fire Department Operations

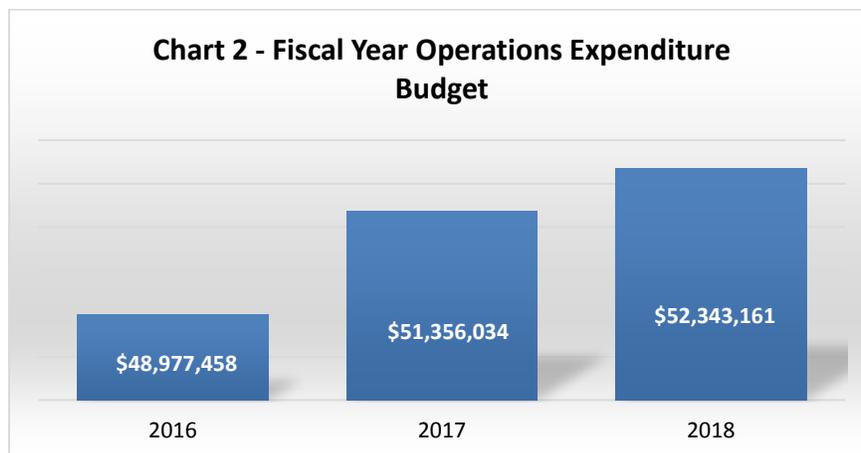
There are 19 strategically placed fire stations throughout the City. In addition, the Fire Department operates three fire boats tasked with responding to emergency operations in the 80 miles of inland waterways and 38 miles of shoreline in the City, as well as providing mutual aid responses with other local jurisdictions, including North Carolina and the Coast Guard.

The Administration Offices, where Fire Department management is located, are on the second floor of Fire Station 7. Staffing for fiscal year 2018 totaled 513 personnel, which increased from 489 in FY 2017 and 485 in FY 2016.

The Fire Department has an Accredited Agency status with the Commission on Fire Accreditation International (CFAI). This is an internationally recognized accreditation of achievement to best practices in the industry and accountability through an external peer review.

Funding for operations is derived from the City's general fund, services revenues, federal grants, and state grants. Services revenues primarily come from fire permits and fire inspection fees (see Table 1). Fee revenues help defray costs of those services. See Chart 2 for the operations expenditure budget.

Table 1 – Revenues from Services and Grants			
Type	FY 2016	FY 2017	FY 2018
Fire Permits & Administrative Fees	126,390	238,155	209,690
Fire Inspection Fees	244,770	364,698	370,975
Other Charges for Services	56,668	83,065	136,497
Other Revenues	133,425	80,395	62,201
Grants from Other Commonwealth Sources	1,420,208	1,471,346	1,479,846
Grants from the Federal Government	1,695,517	2,210,079	1,384,296
Transfers from Other Funds	2,767	(1,143)	485,124
Total	3,679,745	4,446,595	4,128,629





Office of the City Auditor Audit of the Fire Department Operations

We performed a preliminary survey of the different operational areas of the Fire Department and decided to review the integrity of the processes of the four areas noted above. Background information about them are as follows:

Live-Burn Training

One of the most effective ways in which the Fire Department trains firefighters is to conduct live-burn training on acquired structures, which are buildings borrowed from the City or from willing private property owners. Whenever possible, other agencies also conduct training in the structures, such as the Virginia Beach Police Department and the Federal Bureau of Investigations (FBI). While live-burn training provides an opportunity for conducting realistic firefighting scenarios, it also requires meticulous planning and obtaining complete documentation to ensure that it is safe and legal.



High Rise Live-Burn Training

The list of documentation required prior to conducting a live-burn training are as follows:

- Proof of Ownership (deed)
- Cut-off letter to all the utilities (i.e. electrical, cable, gas, water, sewer)
- Copy of Asbestos Report
- Copy of Demolition Permit

On April 2018, the Fire Department conducted a live-burn training on an old residential structure located on Princess Anne Road. It was later learned that the structure was not examined for asbestos. The Office of the City Auditor investigated the incident and issued a memo to the Fire Department Chief on May 31, 2018. The investigation offered six (6) recommendations. VOSH also investigated the incident and issued four (4) serious citations on September 18, 2018.

Fire Captain Promotion

To qualify for participation in the yearly Fire Captain Promotion process, employees must meet fitness requirements, years-of-service as a firefighter, years-in-grade service as a master firefighter, and minimum education requirements by the date the new eligibility list is established. The process consists of two phases: 1) a written exam on the departmental standard operating procedures, professional resource books, and City Human Resources policies and 2) assessment center exercises consisting of an interview and at least two additional job simulation/behavioral exercises evaluated by a panel of four to five assessors for each type of assessment.



Office of the City Auditor Audit of the Fire Department Operations

The process has recently been revamped because cheating was discovered in the May 2017 promotion process. The Fire Department collaborated with the Department of Human Resources to develop the revamped process.

Fire Marshal Inspection

The Fire Prevention Bureau, more commonly referred to as the Fire Marshal's Office, is a major pillar of the Fire Department that provides fire inspections, fire investigations, and life safety education to the public. It strives daily to connect and work collaboratively with the community to effectively reduce risks to life and property caused by fires.

Assisting the Fire Marshal in the Fire Inspections team are two Deputy Fire Marshal Captains, twelve Master Firefighter Inspectors, two full-time civilian inspectors, and five part-time civilian inspectors. They serve as the law and code enforcement arm of the fire service. Each has a National Fire Protection Association (NFPA) - 1031 certification, a basic requirement for inspectors and plan examiners recognized by the State of Virginia. Sixteen hours of recertification training every twenty-four months is required to maintain the certification. Additionally, new inspectors are provided with four weeks of "ride-along" time for exposure to a variety of occupancy types and inspector styles.

The Fire Inspections team is responsible for conducting fire inspections on 12,111 commercial properties. Its processes are critical components to fire prevention. They primarily consist of:

- Reviewing site plans in all phases of construction to ensure compliance with the Virginia Statewide Fire Prevention Code. It covers numerous areas, such as fire access roads that could readily accommodate large fire department vehicles, adequate site water access (hydrants, water mains), and proper building safety features (occupant load, exit doors).
- Conducting annual fire inspections and re-inspections for the purpose of assessing and mitigating potential fire and life safety hazards. The initial inspection is unannounced, and if the business did not pass, subsequent re-inspections are scheduled, as needed. A business permit is issued once the business passes inspection. Depending on the type of business, other permits may also be issued for materials used by the business. Some examples of materials that require permits are compressed gas storage, flammable liquids, and toxic solids.



Commercial Property Fire



Office of the City Auditor Audit of the Fire Department Operations

- Among its numerous responsibilities focused on fire prevention include, but are not limited to, the following:
 - Inspecting vendor set-ups and occupancy loads at special events.
 - Conducting fire watches.
 - Conducting life safety inspections on bars at night until 1:30 in the morning.
 - Inspecting fire hydrant operability.

Required fees for permits or inspections are levied in accordance with the amounts set in the Virginia Beach City Code. At the conclusion of each inspection, the Fire Inspector issues an invoice for fees payable to the City Treasurer. Since these fees are earned only when inspections are conducted, it is also important that they are conducted yearly to help defray fire prevention program costs.

Procurement Card



Fire Department Warehouse

A procurement card is a type of credit card used by organizations to pay for many different kinds of expenses. The City has established a procurement card program to streamline the acquisition and payment process for low-dollar value goods and for employees' City-related travel costs. The program is in accordance with established procurement regulations and City Travel Policy outlined in the City's Purchasing Manual. The City uses the Bank of America (BOA) Visa Corporate Purchasing Card. Each card is limited to \$15,000 in charges per monthly billing

cycle, and a single purchase transaction may not exceed \$5,000. City management can approve temporary credit limit increases on a case-by-case basis, depending on the needs of the City.

The Fire Department follows the procedures and internal controls outlined in the City Travel and Procurement Card Procedures Manual to ensure that transactions are accurate, completely supported, appropriate, and compliant with policies. Those internal controls include:

- Monthly, respective cardholder's supervisor reviews and approves transactions.
- Monthly, Fire Department Finance Office reviews transactions. It also requests the suspension or participation in the program for non-compliant cardholders, as needed. The frequency of the monthly review exceeds the quarterly review required by the City Finance Department.
- Monthly, the Fire Department Chief reviews the transactions.
- Yearly, the Fire Department Chief submits the required completed and signed procurement card assertion form to City Finance Department.



Office of the City Auditor Audit of the Fire Department Operations

Procurement cards issued for general Fire Department transactions are issued on a case-by-case basis as determined by Fire Department management. Procurement card issuance for FEMA USAR-related transactions are determined by the Battalion Chief in-charge of the FEMA USAR Bureau.

Results

Objective 1: Evaluate whether the design of the revamped process over live-burn training ensures the safety of citizens and firefighters.

Revamped Process is in Progress

We found that the Fire Department is in the process of developing a revamped process for live-burn training. It has ceased conducting live-burn training on acquired structures since April 2018 pending evaluation of the Office of the City Attorney.

The Deputy City Attorney started the evaluation and has met with managers from various departments and reviewed relevant documentation. At the conclusion of the evaluation, the Office of the City Attorney's recommendations could include the following:

- Create and update forms for use by the departments.
- Identify and validate legal ownership of the property.
- Ensure that forms provide complete information to owners regarding the process and their respective responsibilities before, during, and after the property is used for training.
- Ensure that the forms clearly state the City's responsibilities and include necessary liability disclaimers and releases by the owner.
- Establish an efficient and integrated process for the City and external agencies in coordinating the use of the property so that:
 - Responsibility for coordinating activities is agreed upon.
 - Effective communication is established.
 - Responsibilities of participants are defined.
 - Training sessions are identified and properly scheduled.

Meanwhile, the Fire Department has taken actions in addressing the deficiencies found in the April 2018 live-burn training:

- Provided a response to VOSH on September 26, 2018. VOSH accepted the response on October 2, 2018.



Office of the City Auditor Audit of the Fire Department Operations

- Begun to implement the recommendations made by the City Auditor in its May 31, 2018 investigation. The rest of the recommendations will be implemented upon resumption of live-burn training. See Table 2.

Table 2 – Status of Corrective Actions on the City Auditor’s Investigation		
	Recommendation	Status
1	Ensure that appropriate discipline is issued to all members that were involved in this incident.	Completed. Fire Department Chief gave verbal counseling to involved members.
2	Develop a protocol for live burns that includes communications between shifts.	In progress. Fire Department is working with the City Attorney’s Office to finalize the revamped process. Meanwhile, Fire Department developed the “Approval for Acquired Structure Training Form” which includes a list of nine (9) required documents that must be attached with the form. The form requires sign-offs from the Battalion Chief of Training, the District Chief of Personnel and Development, and the OSHS Manager prior to conducting live-burn training.
3	Develop and implement a system where there are two written approvals verifying that all the proper documentation is received before live-burn training.	
4	Administration should not be involved in the process of obtaining documentation or instructing live-burn without proper clearance from the Training Department.	
5	Consider having the HR Occupational Safety Manager present in live burns to act as the Safety Officer on behalf of the City, in addition to the Fire Department Safety Officer acting on behalf of firefighters, to ensure that safety practices are adhered.	
6	As discussed with the Public Safety Deputy City Manager and the Fire Chief, all firefighters present at the live-burn should be provided the opportunity to fill-out an exposure form.	In progress. This will be included in the process mentioned above.

We identified three findings concerning inadequate documentation from other past live burn trainings that we deemed to be insignificant. Management concurred with the findings and assured that our recommendations will be addressed.

Objective 2: Evaluate whether the design of the revamped Fire Captain Promotion process ensures integrity and fairness to all participants.

Revamped Process is Adequate

We determined that the design of the revamped process strengthened the integrity and fairness of the Fire Captain Promotion process. We identified the following material changes that support our opinion:

- All participants, subject-matter experts, and panel assessors involved in any part of the process are required to sign a non-disclosure and confidentiality agreement before given access to any information related to the process.



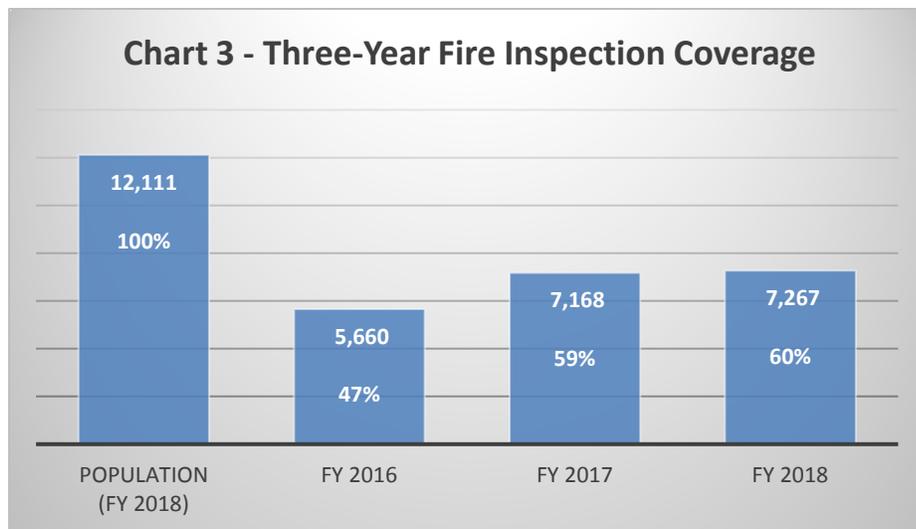
Office of the City Auditor Audit of the Fire Department Operations

- A new national services contractor has been engaged to provide administrative and consultative services over the process starting this year. Having a new contractor in the revamped process can further revive service quality.
- A new written examination and/or new structured assessment center exercises shall be developed in collaboration with the contractor.
- Written exams are not received from the contractor until the day before it is administered and are secured every night in a locked closet.
- Completed Scantron testing forms and other related materials are mailed to the contractor for grading through FedEx on the same day tests are completed.
- Assessment center panels are composed of four to five sworn fire personnel from another municipal fire department. Except for extenuating circumstances, such as illness or absence of a scheduled assessor, there may be no more than one Virginia Beach Fire Department officer serving as an assessor on any panel.
- Assessors are informed of the exercises starting only on the day of the first assessment, during a four-hour assessor training session.

Objective 3: Determine whether the number of annual fire inspections of commercial properties conducted by the Fire Prevention Bureau is adequate.

Finding: The Number of Fire Inspections can be Increased

We found that the number of annual fire prevention inspections of commercial properties in the past three completed fiscal years is well below the Fire Department's goal of 100% coverage within the year, averaging at 6,700 (55%) of 12,111 properties. See Chart 3 and Table 3.





Office of the City Auditor Audit of the Fire Department Operations

Table 3 - Three-Year Fire Inspection Coverage					
Use Group	Property Type	Population (FY 2018)	Annual Inspections		
			FY 2016	FY 2017	FY 2018
A1	Theatres, Civic Centers	60	7	49	56
A2	Restaurants	1,059	494	863	976
A3	Churches/Recreation Centers	468	168	326	324
A4	Arenas/Skating Rinks	1	-	-	1
A5	Amusement Park/Stadiums	-	-	-	-
B	Offices	6,273	2,494	3,272	3,548
E	Schools/Colleges	210	174	188	189
F1	Light Industry, Manufacturing	220	79	151	107
F2	Lumber Yard/Wood Shops	17	3	8	6
H2	Gas & Bulk Storage	36	12	34	12
H3	Misc. Hazards	14	6	13	6
I1	Assisted Living	4	2	4	4
I2	Hospitals, Nursing Homes	49	17	33	41
I3	Jails/Correctional Facilities	4	4	3	3
I4	Child Day Care/Adult Day Care	71	57	59	58
M	Mercantile	1,546	956	997	947
M1	Mercantile/Malls	200	148	162	167
R1	Hotel/Motel	114	104	111	42
R2	Multi-Family	313	109	256	119
R5	Residential Home (Request Only)	87	34	42	37
S1	Storage Moderate Hazard	820	443	343	401
S2	Storage Non Combustible	545	349	254	223
Total		12,111	5,660	7,168	7,267
Inspection Coverage			47%	59%	60%

Management attributes this to the following:

- High staff turnover of around 50% over the past three fiscal years. Productivity was hampered by vacancies and training time of new supervisors and inspectors.
- Inefficiencies with scheduling inspections. In particular, inspectors had to frequently drive across the City to inspect the type of property scheduled for the month (e.g. hotels and motels for January).
- Increasing demand for planning and conducting fire inspections in outdoor events held in the City in response to the heightening current political and social climate risks.

Although necessitating further improvement, management has markedly raised the annual inspection average in the recent two fiscal years due to the following:

- Staff has steadily been replenished to almost full, with training requirements completed for filled positions.
- The inspection schedule has been enhanced by assignment of inspectors to respective geographical areas. The close proximity of properties has significantly reduced inspector travel time, thereby increasing productivity and quality of inspections, reducing associated costs, and increasing permit and inspection fee revenues. Designating particular inspectors also helps improve communication and relations with customers.



Office of the City Auditor Audit of the Fire Department Operations

- Monitoring is increased by requiring inspectors to log-in their daily activities. Monthly staff meetings are held where inspectors are given a report of work accomplished and individual and team performance is addressed.

With the above improvements that began in October 2016, management expects to progress further and achieve 100% coverage by the 15th month (from October 2017 to January 2019). If achieved, this would significantly increase coverage, equivalent to 80% annual inspection rate. Management should continue striving for thorough and 100% or near 100% inspection coverage of businesses, as they are critical factors to fire prevention. Their absence, or lack thereof, can increase the risk of non-compliance with fire safety regulations.

Recommendations

To help achieve the goal of 100% coverage or near 100% coverage within one year and improve management and risk assessment, we recommend that management consider the following:

- 1.1 Explore ways to engage businesses in taking a more active role in compliance. Management informed us that it has already begun actions in this direction through research and subsequent discussions with a fire compliance reporting company that provides an internet-based inspection, testing, and maintenance reporting system for fire and life safety compliance.
 - The company tracks and notifies the participating business when testing, inspection, and maintenance of fire protection systems, such as sprinkler and fire alarm, is due. After the business has engaged a contractor to perform the needed services, the contractor submits the service report via the company's website to facilitate review, tracking, follow-up, and submission to the Fire Department. The contractor is responsible for paying the monthly subscription fee of \$8.00, and there is no cost to the City and the participating business.
 - Management believes that this would result in significant savings to the business and the City through increased compliance, reduced inspection time, up-to-date data, better inspection planning, and less administrative work.
- 1.2 Management should create and distribute an eye-catching and easy-to-follow postcard type leaflet that lists the most common fire inspection deficiencies that the businesses can quickly avoid, detect, and/or remedy. Encourage businesses to post it in visible areas, such as next to a fire extinguisher, and refer to it often. This is an inexpensive and easy way to promote fire prevention awareness and decrease noncompliance that could provide savings in time and money for both the businesses and the City.

This recommendation resulted from our data analysis and "ride-along" observation that showed an approximately 50% ratio of re-inspections to annual inspections. In our "ride



Office of the City Auditor Audit of the Fire Department Operations

along,” two (2) of the four (4) inspected businesses (50%) prompted re-inspections caused by minor deficiencies that could have easily been avoided (e.g. improper extension cords, unlit exit signs, inadequate fire extinguishers).

- 1.3 Logically subdivide large use groups to facilitate better risk assessment and management of time and resources. For example, Use Group B – Offices, one of among 22 use groups, has 6,273 properties, comprising 52% of the 12,111 total properties (see Table 3). The wide variety of sizes, types, number, and complexity of fire prevention systems aggregated in this exceptionally large group can make inspection planning and execution more difficult to manage, assess risks, and estimate progress.
- 1.4 Establish periodic inspection goals (e.g. monthly) for each inspector and add percentage-of-completion figures in the monthly staff meeting report to provide a better perspective of progress. Currently, inspectors are each given a list of businesses to inspect for the year, and the inspector has the latitude to establish an efficient plan to conduct his or her inspections. Providing progressive, quantifiable measures give managers and inspectors a better context of performance and remaining work.

Objective 4: Determine the effectiveness of the internal controls over the procurement card process in detecting inappropriate transactions.

Internal Controls are Effective

We determined that internal controls over the procurement card process are effective. We did not find any transaction or group of transactions that indicated abuse or the presence of irregularity.

Conclusion

We found that the Fire Department is still in the process of developing a revamped process for live-burn training. In the meantime, it has ceased conducting live-burn training on acquired structures since April 2018 pending evaluation of the Office of the City Attorney.

We deem that the design of the revamped Captain Promotion process strengthened the integrity and fairness of the Fire Captain Promotion process.

We found that the Fire Department’s fire inspections of commercial properties is well below the Fire Department goal of 100% coverage within the year, averaging at 6,700 (55%) of 12,100 properties. We offered management four (4) recommendations for improvement.



Office of the City Auditor Audit of the Fire Department Operations

We determined that internal controls over the procurement card process are effective. We did not find any transaction or group of transactions that indicated abuse or the presence of irregularity.

Acknowledgements

We would like to thank the management and staff of the Fire Department, City Attorney's Office, and Human Resources Department for their cooperation and responsiveness to our requests during our audit and their receptiveness to questions, recommendations, and suggestions.



City of Virginia Beach

VIRGINIA BEACH FIRE DEPARTMENT
757-385-8882 OFFICE
757-963-5822 FAX

VBgov.com

4817 COLUMBUS ST.
VIRGINIA BEACH, VA 23462

INTER-OFFICE MEMORANDUM

DATE: December 19, 2018

TO: Lyndon S. Remias, City Auditor

FROM: David W. Hutcheson, Fire Chief *D.W.H.*

SUBJECT: Audit Report Corrective Action Response

Thank you for the opportunity to examine our processes, this has led to constructive conversations about ways that we can enhance our operations. Attached you will find our Corrective Action Response to the Audit Report that your office provided to us on December 18, 2018. We will ensure that all operational enhancements are carried out as outlined in this document. Staff from my office will provide you with updates on the progress of our plan.

Virginia Beach Fire Department Audit Corrective Action Response

Objective 1: Evaluate whether the design of the revamped process over live-burn training ensures the safety of citizens and firefighters.

As of April 2018, the fire department has ceased conducting live-burn trainings on acquired structures. The process for how these trainings should be structured is currently being evaluated by the City Attorney's office. Upon completion of this evaluation, the fire department will work in conjunction with the City Attorney and other identified City partners to ensure compliance with all recommended best practices.

The Fire Department has completed 4 of the 6 corrective actions that were recommended by the City Auditor in May 2018. Upon completion of the review by the City Attorney's Office and the resumption of the live-burn trainings on acquired structures, the Fire Department will address the remaining 2 corrective actions:

- Consider having the HR Occupational Safety Manager present for live burns to act as the Safety Officer on behalf of the City, in addition to the Fire Department Safety Officer acting on behalf of firefighters, to ensure that safety practices are adhered.
- As discussed with the Public Safety Deputy City Manager and the Fire Chief, all firefighters present at the live-burn should be provided the opportunity to fill-out an exposure form.

We identified three findings concerning inadequate documentation from other past live burn trainings that we deemed to be insignificant. Management concurred with the findings and assured that our recommendations will be addressed. ***Below are the findings.***

1.0 The Fire Department should, without exception, obtain complete, proper, and timely documentation. Obtaining important pre live-burn documentation provides better risk assessment and planning to ensure the safety of the firefighters and the public.

Corrective Response: As outlined in ***Table 2 – Status of Corrective Actions on the City Auditor's Investigation***, The Fire Department developed the "Approval for Acquired Structure Training Form" which includes a list of nine (9) required documents that must be attached with the form. The form requires approval from the Battalion Chief of Training, the District Chief of Personnel and Development, and the Occupational Safety and Health Services (OSHS) Manager prior to conducting live-burn training.

Implementation Date: Completed as of 9/26/2018.

Person Responsible for Ensuring Implementation: Battalion Chief of Training and District Chief of Personnel and Development.

2.0 The Fire Department should maintain all pertinent paperwork in every phase of the training. Live-burn training is an exercise owned by and primarily for the benefit of the Fire Department.

Corrective Response: An electronic file for each live-burn will be kept by the Battalion Chief of training that includes the following documents:

- 1) Proof of Ownership (Deed), 2) Cut off letters from all utility companies, 3) Verification that collateral chemicals, substances, or other regulated materials have been cleared from the site, 4) Copy of Asbestos Report-annotating clearance for destruction, 5) Copy of Demolition Permit, 6) Proof of Notification of DEQ/EPA, 7) Incident Action Plan and Training Objectives, 8) Site Plan, 9) Safety Plan.

Implementation Date: Completed as of 9/26/2018.

Person Responsible for Ensuring Implementation: Battalion Chief of Training and District Chief of Personnel and Development.

3.0 The Fire Department should document the exact location where training was held in a structure found to have asbestos to provide assurance that the training was conducted safely. Consider including it in the Incident Action Plan (IAP), which is a formal document that details the goals, objectives, strategies, and other critical information about an exercise.

Corrective Response: The exact location of where the training is held within the structure will be documented on the Incident Action Plan.

Implementation Date: Completed as of 9/26/2018.

Person Responsible for Ensuring Implementation: Battalion Chief of Training and District Chief of Personnel and Development.

Objective 2: Evaluate whether the design of the revamped Fire Captain Promotion process ensures integrity and fairness to all participants

Revamped Process is Adequate

We determined that the design of the revamped process strengthened the integrity and fairness of the Fire Captain Promotion process.

No Corrective Response Required.

Objective 3: Determine whether the number of annual fire inspections of commercial properties conducted by the Fire Prevention Bureau is adequate.

- 1.1 Explore ways to engage businesses in taking a more active role in compliance. Management informed us that it has already begun actions in this direction through research and subsequent discussions with a fire compliance reporting company that provides an internet-based inspection, testing, and maintenance reporting system for fire and life safety compliance. The company tracks and notifies the participating business when testing, inspection, and maintenance of fire protection systems, such as sprinkler and fire alarm, is due. After the business has engaged a contractor to perform the needed services, the contractor submits the service report via the company's website to facilitate review, tracking, follow-up, and submission to the Fire Department. The contractor is responsible for paying the monthly subscription fee of \$8.00, and there is no cost to the City and the participating business.

Corrective Response: The Fire Marshall's Office will develop a plan to actively market the use of this company to businesses in the City of Virginia Beach.

Implementation Date: The Fire Department will need to work in collaboration with the City Attorney's Office and City of Virginia Beach Purchasing. The estimated completion date for this project is December 2019.

Person Responsible for Ensuring Implementation: Fire Prevention Bureau Battalion Chief.

- 1.2 Management should create and distribute an eye-catching and easy-to-follow postcard type leaflet that lists the most common fire inspection deficiencies that the businesses can quickly avoid, detect, and/or remedy. Encourage businesses to post it in visible areas, such as next to a fire extinguisher, and refer to it often.

Corrective Response: The Fire Marshall's Office will develop educational material for local businesses to assist them with ensuring that the most common fire inspection deficiencies are avoided. A plan will be developed for how to most efficiently deliver this educational material to local businesses. The Fire Department will work in collaboration with other City of Virginia Beach Departments that perform various inspections, such as Environmental Health Inspectors, who could also deliver the educational material. These Health Department staff members inspect all restaurants, nail salons, hair salons, tattoo establishments and hotels/motels.

Implementation Date: June 2019

Person Responsible for Ensuring Implementation: District Chief of Community Risk Reduction.

1.3 Logically subdivide large use groups to facilitate better risk assessment and management of time and resources. For example, Use Group B – Offices, one of among 22 use groups, has 6,273 properties, comprising 52% of the 12,111 total properties (see Table 3). The wide variety of sizes, types, number, and complexity of fire prevention systems aggregated in this exceptionally large group can make inspection planning and execution more difficult to manage, assess risks, and estimate progress.

Use Group	Property Type	Population (FY 2018)	Annual Inspections		
			FY 2016	FY 2017	FY 2018
A1	Theatres, Civic Centers	60	7	49	56
A2	Restaurants	1,059	494	863	976
A3	Churches/Recreation Centers	468	168	326	324
A4	Arenas/Skating Rinks	1	-	-	1
A5	Amusement Park/Stadiums	-	-	-	-
B	Offices	6,273	2,494	3,272	3,548
E	Schools/Colleges	210	174	188	189
F1	Light Industry, Manufacturing	220	79	151	107
F2	Lumber Yard/Wood Shops	17	3	8	6
H2	Gas & Bulk Storage	36	12	34	12
H3	Misc. Hazards	14	6	13	6
I1	Assisted Living	4	2	4	4
I2	Hospitals, Nursing Homes	49	17	33	41
I3	Jails/Correctional Facilities	4	4	3	3
I4	Child Day Care/Adult Day Care	71	57	59	58
M	Mercantile	1,546	956	997	947
M1	Mercantile/Malls	200	148	162	167
R1	Hotel/Motel	114	104	111	42
R2	Multi-Family	313	109	256	119
R5	Residential Home (Request Only)	87	34	42	37
S1	Storage Moderate Hazard	820	443	343	401
S2	Storage Non Combustible	545	349	254	223
Total		12,111	5,660	7,168	7,267
Inspection Coverage			47%	59%	60%

Corrective Response: The Fire Marshall’s Office will subdivide property types that consist of a wide variety of businesses into smaller groups that will be broken down into three different risk categories: High, Medium and Low Risk. Factors such as the layout of the building, the kind of items stored there, type of fire prevention system in place and the amount of people typically present in the structure will all be taken into account when categorizing the business. This will assist our department with concentrating our resources where they are most needed.

Implementation Date: April 2019

Person Responsible for Ensuring Implementation: Fire Prevention Bureau Battalion Chief.

1.4 Establish periodic inspection goals (e.g. monthly) for each inspector and add percentage of-completion figures in the monthly staff meeting report to provide a better perspective of progress. Currently, inspectors are each given a list of businesses to inspect for the year, and the inspector has the latitude to establish an efficient plan to conduct his or her inspections. Providing progressive, quantifiable measures give managers and inspectors a better context of performance and remaining work.

Corrective Response: The Fire Marshalls Office with develop a more uniform approach to establishing inspection goals each quarter. Monitoring progress toward completing these goals will become a part of their weekly staff meeting.

Implementation Date: January 2019

Person Responsible for Ensuring Implementation: Fire Prevention Bureau Battalion Chief.

Objective 4: Determine the effectiveness of the internal controls over the procurement card process in detecting inappropriate transactions.

We determined that internal controls over the procurement card process are effective. We did not find any transaction or group of transactions that indicated abuse or the presence of irregularity.

No Corrective Response Required.