

City of Austin



**A Report to the
Austin City Council**

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Mayor Pro Tem
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Council Members
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Kathie Tovo
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AUDIT REPORT

Austin Fire Department Worker Safety Audit

December 2012



REPORT SUMMARY

While the Austin Fire Department (AFD) has implemented some components of a best practices safety program, it has not fully developed a comprehensive occupational safety program per National Fire Protection Association (NFPA) standards. Further, AFD cannot ensure that its protective clothing is maintained in accordance with mandated NFPA requirements and does not manage injury data in accordance with NFPA best practices.

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GOVERNMENT AUDITING STANDARDS COMPLIANCE

We conducted this performance audit in accordance with Generally Accepted Government Auditing Standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

AUDIT TEAM

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December 2012



Audit Report Highlights

Why We Did This Audit

This audit was conducted as part of the Office of the City Auditor's (OCA) FY 2012 Strategic Audit Plan.

What We Recommend

We recommend that AFD design, adopt, and implement a comprehensive safety program in accordance with applicable NFPA standards.



For more information on this or any of our reports, email oca_auditor@austintexas.gov

AUSTIN FIRE DEPARTMENT WORKER SAFETY AUDIT

Mayor and Council,

I am pleased to present this audit on Austin Fire Department (AFD) Worker Safety.

BACKGROUND

AFD's occupational safety programs are primarily administered by AFD's Safety Office and its Wellness Office with a combined budget of \$2.5 million in Fiscal Year (FY) 2012. For the last three fiscal years, the lost time injury rate for AFD, which is a standard performance measure used throughout the safety industry, has been below industry average and has been trending down. Also, AFD has not experienced any on-duty firefighter fatalities or life threatening injuries since at least 2007.

OBJECTIVE AND SCOPE

The objective of the audit was to assess the adequacy of safety management systems within AFD designed to prevent on-the-job injuries.

The audit scope included a review of AFD's current worker safety operations and worker injury data for the period October 1, 2009 to September 30, 2012.

WHAT WE FOUND

We found that while AFD has implemented some components of the National Fire Protection Association (NFPA) best practices safety program, the department:

- has not fully developed a comprehensive occupational and health safety program per NFPA standards;
- cannot ensure that its protective clothing is maintained in accordance with mandated NFPA requirements; and
- does not appropriately manage and analyze occupational safety injury data in accordance with NFPA best practices.

We issued one recommendation to address weaknesses identified during the course of this audit. We appreciate the cooperation and assistance we received from AFD staff during this audit.

Kenneth J. Mory, City Auditor

BACKGROUND

The mission of the Austin Fire Department (AFD) is the preservation of life and property. To achieve its mission, AFD provides fire response, medical first response, rescue services, hazardous materials response, and other mitigation services.

Safety-related functions are primarily administered within the Employee Safety and Wellness activities, which in Fiscal Year (FY) 2012 had a budget of approximately \$2.5 million. The total departmental budget for FY 2012 was \$137 million.

As shown in Exhibit 1 below, in the last three fiscal years, approximately 71% of the calls for which AFD is dispatched were medical-related, while fire-related calls account for approximately 6%.

EXHIBIT 1
AFD Dispatched Calls by Type

Type	FY 2010	FY 2011	FY 2012
Medical	52,735	57,216	61,678
Fire (Structure and Other)	3,990	5,490	3,926
Other Call Types ¹	18,949	19,276	18,869
Total	75,674	81,982	84,473

SOURCE: OCA summary of AFD dispatched calls (unaudited), November 2012.

For the last three fiscal years, the lost time injury rate for AFD, which is a standard performance measure commonly used throughout the safety industry, has been below industry average and has been trending down. Also, AFD has not experienced any on-duty firefighter fatalities or life threatening injuries since at least 2007.

¹ Call type classified as "other" includes categories such as hazmat, hazardous conditions, and rescues.

OBJECTIVE, SCOPE, AND METHODOLOGY

The Austin Fire Department Worker Safety Audit was conducted as part of the Office of the City Auditor's (OCA) Fiscal Year (FY) 2012 Strategic Audit Plan, as presented to the City Council Audit and Finance Committee.

Objective

The objective of the audit was to assess the adequacy of safety management systems within AFD designed to prevent on-the-job injuries.

Scope

The audit scope included a review of AFD's current worker safety operations and worker injury data for the period of October 1, 2009 to September 30, 2012.

Methodology

To accomplish our audit objectives, we performed the following steps:

- Interviewed key department personnel in AFD's Safety Office, Workers' Compensation, Training, Wellness, and Air Shop.
- Researched industry standards, best practices, laws and regulations, and department policies and procedures related to worker safety.
- Reviewed and analyzed relevant financial documentation.
- Observed firefighters safety techniques used in the field.
- Analyzed and tested data related to occupational injuries, protective clothing, training, and wellness program from various department tracking systems.
- Selected and tested a judgmental sample of 30 occupational injury claims reported in FY 2012 for which the amount paid by the City was \$500 or more (corresponding to 67 claims out of the total 329 claims processed in FY 2012).
- Selected and tested a judgmental sample of protective clothing sets assigned to 22 firefighters (out of 1,083) representing five stations (out of 45). In each station visited, there were four to eight firefighters on shift. We chose stations which were geographically dispersed and were located in four of the six battalion regions in which the City is divided.
- Considered risks related to information technology and fraud, waste, and abuse.

AUDIT RESULTS

While AFD has implemented some components of a best practices safety program, it has not fully developed a comprehensive safety program per the National Fire Protection Association (NFPA) standards, which limits its ability to effectively manage and minimize occupational safety risks. We also found that AFD protective clothing data is inaccurate and incomplete. As a result, AFD cannot ensure that its protective clothing is maintained in accordance with mandated NFPA standards, thus possibly exposing its firefighters to a higher risk of injury in the field. Lastly, we found that AFD does not manage and analyze occupational safety injury data in accordance with NFPA best practices, which limits AFD's ability to reduce injury occurrences and related costs.

Finding 1: While AFD has implemented some components of a best practices safety program, it has not fully developed a comprehensive safety program per NFPA standards, which limits its ability to effectively manage and minimize occupational safety risks.

The NFPA² provides guidelines³ for establishing, implementing, and managing a comprehensive safety and health program. While safety is a key component of its core operations, we found that AFD has not fully developed a comprehensive health and safety program, which encompasses all aspects of a fire department's operation, including administration, facilities, training, vehicle operations, protective clothing and equipment, and provides for coordination and communication amongst all these elements.

We found that AFD has implemented some components of a best practice safety program. For example, AFD has established a Safety Office, which is staffed 24 hours a day, 7 days a week, and, in addition to managing protective clothing, responds to any structural fire, water rescue, or hazmat call in order to provide on-scene risk mitigation. AFD has also implemented the Wellness Fitness Initiative (WFI), which established mandatory annual medical examinations as well as fitness assessments for all sworn personnel. The Wellness Office is responsible for conducting annual physical assessments of sworn personnel and conducting rehabilitation for personnel injured on-the-job. According to a recent independent review by the International Association of Fire Fighters and the International Association of Fire Chiefs, AFD is one of a few fire departments that has fully implemented all components of the WFI. Further, based on this review, AFD's Wellness Center and Wellness and Fitness programs are reported to be highly respected, well implemented, and well managed.

However, as shown in Exhibit 2, AFD has not implemented other key elements of a best practice safety program.

² National Fire Protection Association (NFPA) is an international nonprofit organization that develops, publishes, and disseminates more than 300 codes and standards intended to minimize the possibility and effects of fire and other risks.

³ NFPA 1500 Standard on fire Department Occupational Safety and Health Program outlines minimum safety requirements for an occupational safety and health program for a fire department.

EXHIBIT 2
Comparison of AFD Safety Program to NFPA Standard

NFPA 1500 Component	Requirement	Auditor's Observations
Risk Management Plan	Develop and adopt a written risk management plan, which should include an evaluation of risks related to all activities, both emergency and non-emergency, within a fire department (for example, administration, facilities, training, vehicle operations, protective clothing, and equipment)	AFD has not developed a comprehensive written risk management plan.
Safety and Health Policy	Adopt an official written departmental occupational health and safety policy, which should identify specific goals and objectives for the prevention and elimination of accidents and occupational injuries	While AFD does not have a specific Safety and Health policy, safety concepts are included in a number of AFD policies and safety-related department goals have been established.
Occupational Health and Safety Committee	Establish an Occupational Safety and Health Committee, which should conduct research, develop recommendations, and study and review matters pertaining to occupational health and safety within the fire department	AFD does not have a dedicated Health and Safety Committee, but management indicated that safety-related issues are routinely discussed by AFD executive team.
Audit of Safety and Health Program	Evaluate the effectiveness of the occupational safety and health program at least every three years and submit audit report and findings to Fire Chief and Safety and Health Committee	AFD has not conducted such reviews.

SOURCE: OCA analysis of AFD's safety program components, November 2012.

Based on our interviews, management and staff consistently referred to AFD as a best practice organization. This assertion extended to the AFD's safety programs, which include the Safety Office and the Wellness Fitness Initiative. However, this conclusion does not appear to be based on a formal assessment of its safety program, which is a NFPA best practice requirement. Overall, with only some components of a best practice system, and without a comprehensive approach to its health and safety program, AFD may not be able to effectively manage, minimize, or eliminate occupational safety risks.

Finding 2: AFD protective clothing data is inaccurate and incomplete; as a result, AFD cannot ensure that its protective clothing is maintained in accordance with mandated NFPA requirements, thus possibly exposing its firefighters to a higher risk of injury in the field.

Protective clothing plays an essential role in the protection and safety of firefighting personnel while in the field. Proper maintenance of protective clothing is aimed at maintaining its level of protection, as well as maximizing its performance, safety, and longevity. The NFPA has developed specific standards, which detail requirements for the selection, care, and maintenance of the protective

clothing. These standards were adopted as a mandate by the Texas Commission on Fire Protection (TCFP) in 2009.

NFPA standards⁴ require fire departments to compile and maintain records of its structural fire protective clothing, including protective clothing which are assigned on a temporary basis (loaner). Specifically, protective clothing, which includes coats, pants, hoods, helmets, gloves, and boots, should be:

- washed at least every six months;
- inspected a minimum of every 12 months;
- retired no later than 10 years from manufactured date; and then
- disposed of in a manner to ensure that clothing is not used in any firefighting, emergency activities, or live fire training.

AFD maintains records on its firefighting protective clothing in the Advanced Protective Tracking (APT) database, which is managed by the Safety Office. There are six pieces of protective clothing that should be assigned to each of the 1,083 firefighters. This data is used by the Safety Office to keep track of when a specific piece of clothing should be inspected or retired. Also, this data is used to demonstrate compliance with maintenance standards to the TCFP during their periodic compliance inspection.

Based on our review, we concluded that protective clothing data is not always accurate and reliable for key information such as manufacture date and inspection date. Without accurate, complete, and reliable information, AFD may not be able to ensure that protective clothing is tracked, washed, inspected, and retired in an adequate manner.

We tested coats, pants, hoods, helmets, gloves, and boots, which make up a set of protective clothing, assigned to 22 firefighters, matched the information from the label of the clothing to the data included in the APT database, and, as shown in Exhibit 3, found several discrepancies. For some other pieces of clothing, we were not able to find any corresponding information in the APT database. Further, AFD does not consistently track and monitor maintenance and disposal of those pieces of clothing that have been purchased at the firefighter expenses and that are referred to as “personal.” In addition, management and staff indicated that protective clothing is currently washed once a year, at the time of the inspection, unless requested.

⁴ NFPA 1851 Standard on Selection, Care, and Maintenance of Protective Ensembles for Structural Fire Fighting and Proximity Fire Fighting outlines minimum requirements for structural firefighting and proximity firefighting protective ensemble elements.

EXHIBIT 3
Discrepancies Between Data in the Field and in APT Database
For the 22 Sets of Protective Clothing Tested⁵

Discrepancy Type	Helmet	Coat	Pants	Boots
Manufacture date on label did not match date in APT or was not recorded in APT	6	6	8	5
Clothing associated with a different firefighter in APT or clothing is not assigned to any firefighter	0	2	2	6
Serial number on label did not match data in APT or was not recorded in APT	7	0	0	4
<i>Total exceptions by protective clothing type</i>	<i>13</i>	<i>8</i>	<i>10</i>	<i>15</i>

SOURCE: OCA analysis of selected protective clothing data, November 2012.

Although a label with a bar code including serial number and manufacture date is attached to each piece of protective clothing, the information associated with each piece of protective clothing is manually entered into APT database. AFD is in the process of outsourcing maintenance of protective clothing, including washing, inspecting, repairs, and data tracking. However, the current plan is to outsource maintenance of protective coats and pants only, leaving maintenance of the remaining protective clothing to AFD.

Currently, management of protective clothing is assigned to firefighters who are temporarily assigned to this role and may not have the necessary skills or specific training for this responsibility. During our review, we were unable to obtain documented job descriptions or job performance evaluations, which would detail needed skills, expectations, or accountability measures for the staff in charge of protective clothing maintenance. Also, we observed limited monitoring of this function.

Due to inaccurate data, we cannot determine whether AFD is maintaining its protective clothing in compliance with mandated NFPA standards. However, based on our test of the 22 sets of protective clothing, we have identified that one of the 22 pairs of boots and one of the 22 helmets were older than 10 years, therefore, should have been retired and disposed.

For the pieces of clothing sampled, we also tried to determine whether they had been inspected within the past 12 months. However, we experienced difficulties retrieving the information for specific pieces of equipment due to the manual data entry with backup documentation filed by inspection date and not by firefighter's name. We were able to retrieve inspection sheets for 8 firefighters and could not reconcile the majority of inspection dates to what was indicated in the APT database. For example, out of 8 helmets, only one had the same inspection date on the sheet as in the APT database or the date in APT was not available.

⁵ We also noted that AFD does not consistently track information on assigned hoods and gloves. AFD management indicated that until recently hoods and gloves were not tracked as this was not a requirement per TCFP and due to the difficulties of tracking this type of information in the APT system.

EXHIBIT 4

Examples of Discrepancies for Key Data

Manufacture Dates for a Sampled Coat		Inspection Dates for a Sampled Helmet	
Label	Dec-09	Inspection Sheet	Nov-10
APT	Mar-10	APT	Sep-08

SOURCE: OCA analysis of protective clothing data (field and in APT), November 2012.

In addition, as shown in Exhibit 5, we reviewed the APT database and summarized the number of active and loaner protective structural fire clothing, for which the database reflects a manufacture date within 10 years and an inspection date within 12 months, which would represent compliance with both age and inspection requirements.

EXHIBIT 5

Active and Loaner Protective Clothing in APT Database

	Active	Loaner
In compliance with age and inspection requirements	2,235 (50%)	412 (33%)
<i>Total protective clothing by type</i>	4,459	1,250

SOURCE: OCA analysis of information in APT database as of October 24, 2012.

Overall, we cannot provide assurance that AFD can properly manage and maintain its protective clothing, which in turn may potentially result in AFD exposing its firefighters to a higher risk of being injured in the field, as well as incurring financial penalties imposed by TCFP. Those penalties may amount to up to \$500 per violation, per day.

Finding 3: AFD does not appropriately manage and analyze occupational safety injury data in accordance with NFPA, which limits AFD’s ability to reduce injury occurrences and related costs.

According to NFPA⁶, a Safety Office should manage the collection and analysis of data related to all occupational injuries in order to identify actions that could contribute to firefighter injuries and identify ways to prevent these occurrences sustained during the performance of job-related duties. Specifically, the Safety Office should:

- Establish a data collection system and maintain permanent records of all injuries and illnesses that are job-related.
- Investigate all injuries involving fire department staff, vehicles, equipment, and facilities.
- Identify actions necessary to change or update any safety and health program and, if changes are identified, propose recommended actions.

AFD maintains occupational injuries information in the City’s vendor workers’ compensation database, regardless of whether they result in an official workers compensation claim. Based on our review, AFD does not manage the collection and analysis of injury data as recommended by NFPA

⁶ NFPA 1500 Standard on fire Department Occupational Safety and Health Program outlines minimum safety requirements for an occupational safety and health program for a fire department. NFPA 1521 Standard for Fire Department Safety Officer outlines minimum requirements for the assignment, duties, and responsibilities of a health and safety officer and an incident safety officer for a fire department.

standards. For example, AFD does not consistently track data on the actions that caused the injuries or consistently perform an analysis following emergency and non-emergency injuries.

As shown in Exhibit 6, based on our review of injury data for the period FY 2010 through FY 2012, approximately 48% (or 519 of 1,077) of the injuries did not include the injury type, which would indicate the cause or location of the injury and could provide valuable information to proactively manage recurrent types of injuries.

EXHIBIT 6
Injury by Type and Cost for FY 2010 to FY 2012

Incident Type	FY 2010	FY 2011	FY 2012	Total Injuries	Total \$ Paid	Total Days Lost
NO REASON/TYPE (blank)	128	110	281	519	\$1,052,025	3,093
Station/Office/Fitness	77	100	13	190	\$731,438	1,957
Medical Emergency	44	88	2	134	\$238,808	895
Fire-related	26	63	7	96	\$201,537	438
Training	36	11	18	65	\$185,807	427
Other ⁷	24	41	8	73	\$164,814	412
Grand Totals	335	413	329	1,077	\$2,574,429	7,222

SOURCE: OCA summary of workers compensation injury data (unaudited), November 2012.

While AFD reported having departmental policies to ensure initial injury forms were signed by the employee’s supervisor and reviewed by the Safety Office, we found that injuries are not always reviewed. Specifically, of the injury claims reviewed:

- 80% (or 24 of 30) of the claims were processed without the signature of the Safety Officer on the injury report or the injury report did not include the section completed and signed by the Safety Officer and
- 26% (or 8 of 30) of the claims were signed off by an employee who was not a supervisor.

Moreover, AFD management and staff indicated that while they investigate all on-duty firefighters’ collisions, they do not consistently investigate all occupational injuries. Further, based on our interviews, AFD does not routinely perform analysis of aggregate injury data, which, according to NFPA, is a key step to prevent future occurrences and provide information to management that can be used to update and revise departmental programs for hazard prevention and control. Also, in our analysis, we found that injury claims were often filed with incomplete or missing information, such as injury location, supervisor information, or even the injury report itself.

Based on our interviews, it appears that the Safety Office is focused on providing risk mitigation on the scene of a fire, but is not consistently managing administrative tasks for both emergency and non-emergency injuries. Further, during our review, we were unable to obtain documented job descriptions or job performance evaluations, which would clearly state job expectations or accountability measures related to all tasks.

⁷ Incident type classified as “other” includes the following categories: water rescue, hazmat spill, public assistance, physical assessment, and other non-emergency and emergency.

Without committed management enforcement, involvement of the Safety Office, monitoring, and periodic analysis of data, there is a significant risk that AFD may not be able to identify recurrent trends, pinpoint causes of injuries, or implement strategies to reduce the number of injuries and associated costs.

RECOMMENDATIONS

The recommendations listed below are a result of our audit effort and subject to the limitation of our scope of work. We believe that these recommendations provide reasonable approaches to help resolve the issues identified. We also believe that operational management is in a unique position to best understand their operations and may be able to identify more efficient and effective approaches and we encourage them to do so when providing their response to our recommendations. As such, we strongly recommend the following:

1. **The Fire Chief should assign resources to ensure that AFD designs, adopts, and implements a comprehensive safety program in accordance with applicable NFPA standards, including, but not limited to:**
 - **NFPA 1500 Standard on Fire Department Occupational Safety and Health Program;**
 - **NFPA 1521 Standard for Fire Department Safety Officer; and**
 - **NFPA 1851 Standard on Selection, Care, and Maintenance of Protective Ensembles for Structural Fire Fighting and Proximity Fire Fighting.**

MANAGEMENT RESPONSE: **Concur.** Refer to Appendix A for management response and action plan.

MANAGEMENT RESPONSE



TO: Finance and Audit Committee

FROM: Rhoda Mae Kerr, Fire Chief

DATE: December 10, 2012

SUBJECT: 2012 AFD Worker Safety Audit

The Austin Fire Department (AFD) appreciates the information provided in the audit as it provides us with an independent point of view regarding the safety of our workers. While we CONCUR with the Audit recommendation, AFD would like to assure Council, City Management, and the public that we don't believe there is an immediate and/or urgent risk to firefighter safety based on the audit findings. AFD has robust programs in Training, Fitness/Wellness, and Air Shops that significantly improves the safety of firefighters. We would be extremely concerned, for example, if the Air Shop was found to be non-compliant with the National Fire Protection Association's (NFPA) standards because firefighters would be at risk of breathing hazards or air pack failure. The audit provides a handful of positive feedback about Training, Fitness/Wellness and Air Shops, but it doesn't emphasize how those functions need to be a higher priority for us.

We consider the NFPA standards on Protective Gear and Safety Programs to be goals that many fire departments aspire to, but few have attained in a comprehensive manner. Checking with other fire departments of similar size would likely reveal that the NFPA standards are not yet benchmarks in the sense of being an industry standard. We base this observation, in part, on the feedback we got from the Texas Commission on Fire Protection (TCFP).

In December 2012, the TCFP did their bi-annual inspection of our safety functions and found us to be compliant in the vast majority of areas inspected. These inspections are unannounced and afterward the inspector wrote, "I also greatly appreciate your organization of the data required in the compliance inspection." The inspector also found hoods, face shields, and gloves that were not properly date-labeled and we are working to fix that as quickly as possible. More importantly, the inspector found 100 percent compliance on the breathing apparatus and air cylinders.

We have previously tried to address some of the issues identified in the audit, but we are limited by implementation delays of an asset management software system and budget constraints. AFD will make every effort to resolve the findings of this audit within one year, with the exception of hiring civilian personnel to assist with safety data analysis and inspections of gear; that could take longer depending on budget and funding availability.

ACTION PLAN

Austin Fire Department Worker Safety Audit

Recommendation	Concurrence and Proposed Strategies for Implementation	Status of Strategies	Proposed Implementation Date
<p>1. The Fire Chief should assign resources to ensure that AFD designs, adopts and implements a comprehensive safety program in accordance with applicable NFPA standards, including, but not limited to:</p> <ul style="list-style-type: none"> ▪ NFPA 1500 Standard on Fire Department Occupational Safety and Health Program; ▪ NFPA 1521 Standard for Fire Department Safety Officer; and ▪ NFPA 1851 Standard on Selection, Care, and Maintenance of Protective Ensembles for Structural Fire Fighting and Proximity Fire Fighting. 	<p>Concur</p> <p>While we concur with the Audit recommendation, AFD would like to assure the public that we don't believe there is an immediate and/or urgent risk to firefighter safety based on the audit findings. AFD has robust programs in Training, Fitness/Wellness, and Air Shops that significantly improve the safety of firefighters. We consider the NFPA standards on Protective Gear and Safety Programs to be goals that many fire departments aspire to, but few have attained in a comprehensive manner. We appreciate the insight provided by this audit, and AFD will work diligently to resolve the recommendation as funding and budget allows.</p> <p>AFD's strategy is to address the three findings from the audit as if they are three subareas of the recommendation:</p> <p>1a. Fully develop a comprehensive safety program per NFPA standards to effectively manage and minimize occupational safety risks.</p> <p>1b. Improve protective clothing data collection and accuracy.</p> <p>1c. Improve collection and analysis of occupational safety injury data to reduce injuries and related costs.</p>	<p>Planned</p>	<p>January 2014</p>

APPENDIX A

Recommendation	Concurrence and Proposed Strategies for Implementation	Status of Strategies	Proposed Implementation Date
	<p>1 a. Fully develop a comprehensive safety program per NFPA standards to effectively manage and minimize occupational safety risks:</p> <ol style="list-style-type: none"> 1. Establish a dedicated Health and Safety (H&S) Committee that reports to the AFD Executive Team. 2. H&S Committee develops a comprehensive written risk management plan that includes a cost analysis for implementation. 3. H&S Committee reviews policy to be sure it is consistent with the risk management plan. 4. H&S Committee routinely reviews safety data to look for patterns and issues. Committee provides recommendations to Executive Team on an annual basis. 5. H&S Committee works with Dept. grant coordinator to seek funding for an external review/audit of the worker's compensation program. 	Planned	12/30/13
	<p>1b. Improve protective clothing data collection and accuracy.</p> <ol style="list-style-type: none"> 1. Determine how the new maintenance contract for bunker gear will improve tracking and cleaning cycle. 2. Review inspection procedures used by Safety Office. Recommendations for process improvement will be presented to Executive Team. 3. Review Safety Office policies and procedures associated with the clothing loaner program. Recommendations for process improvement will be presented to Executive Team. 4. Continue to push for implementation of software solution for inventory tracking of clothing and equipment. 5. Seek funding for civilian personnel to manage and maintain protective clothing (in lieu of firefighters on temporary assignment). 	Planned	To be determined

APPENDIX A

Recommendation	Concurrence and Proposed Strategies for Implementation	Status of Strategies	Proposed Implementation Date
	<p>1c. Improve collection and analysis of occupational safety injury data to reduce injuries and related costs.</p> <ol style="list-style-type: none">1. Seek funding for an external review of the workers' compensation data collection process which includes information on emergency and non-emergency related injuries.2. Seek funding for a civilian Research Analyst to do quality checks and analysis on injury data.3. H&S Committee routinely reviews injury data to look for patterns and issues. Committee provides recommendations to Executive Team on an annual basis.	Planned	To be determined