

CITY AUDITOR'S OFFICE



AUDIT OF FIRE PREVENTION DIVISION

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CITY AUDITOR

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BACKGROUND

Fire Prevention is a division within the City of Las Vegas' Fire & Rescue Department (Fire & Rescue). According to Fire & Rescue's Strategic Business Plan, the purpose of Fire Prevention is to provide fire and life safety programs to the community so they can benefit from reduced risk of injury, death, and property loss due to fire and other hazards. Fire Prevention is led by the Fire Marshal who is also designated as a Deputy Fire Chief. The current Fire Marshal was promoted to his position in May 2008.

Fire Prevention is funded from the City's general fund. During fiscal year 2008, Fire Prevention had revenues of approximately \$1.07 million and expenditures of approximately \$4.52 million. Approximately 93% of the expenditures were salaries and benefits.

Fire Prevention is comprised of two sections including Fire Protection Engineering (Engineering) and Fire Code Enforcement (Code Enforcement). The function of fire and life safety education, previously a part of this division, has been transferred to Fire & Rescue's Office of Public Information and Education overseen by the Public Information Officer.

Fire Protection Engineering

The mission of Engineering is to "provide plan statement consultation, review, and permitting services to the construction community so they can have fire and life safety code compliant plans processed in a consistent and timely manner." Engineering reviews the following types of plans:

- Planning and zoning plans
- Site development plans
- Building plans
- Fire protection system plans

Engineering is led by a Fire Protection Engineer who currently oversees two Assistant Fire Protection Engineers (engineers). According to performance measurements tracked by Fire & Rescue, Engineering completed approximately 7,147 plan reviews during fiscal year 2008.

Fire Code Enforcement

The mission of Code Enforcement is to "provide consultation and inspection services to the development community, business owners, and residents so they can benefit from

reduced risk of injury death and property loss due to fire.” Code Enforcement completes the following types of inspections:

- New construction
- New business license applications
- Customer service requests
- Temporary use permits
- Work orders
- Annual renewable permits
- Annual inspections

Code Enforcement is led by two Deputy Fire Marshals. These management positions oversee a supervisor, 20 Fire Prevention Inspectors (inspectors), and an administrative staff. According to performance measurements tracked by Fire & Rescue, Code Enforcement completed approximately 26,594 inspections during fiscal year 2008.

Fire Prevention uses applications within the City’s asset management enterprise system known as Hansen for documenting their inspections and plan reviews.

Fire & Rescue is accredited by the Commission on Fire Accreditation International, Inc. (CFAI) and has the Insurance Service Office (ISO) Class 1 rating. During CFAI’s last peer assessment team review of Fire & Rescue in 2005, the following observation was made about Fire Prevention:

The Prevention Division programs are effectively administered and address the city’s identified fire and non-fire related hazards.

OBJECTIVES

The audit objectives were to:

- Evaluate the overall effectiveness and efficiency of the operations of Fire Prevention.
- Evaluate the adequacy of oversight of employees and the quality controls over fire plan reviews and fire inspections.
- Evaluate the adequacy of internal controls over fees, fee adjustments, and fee waivers.

SCOPE AND METHODOLOGY

The scope of this audit was limited to the Engineering and Code Enforcement operations of Fire Prevention. Detailed testing of records was primarily limited to transactions during fiscal year 2008. The last fieldwork date of this audit was February 13, 2009.

The scope of our work on internal control was limited to the controls within the context of the audit objectives and the scope of the audit.

Our audit methodology included:

- Research of applicable guidelines,
- Interviews of City personnel,
- Observations of work processes, and
- Analysis and detail testing of available data.

We conducted this performance audit in accordance with generally accepted government auditing standards except for the requirement for an external peer review every three years. 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.

The exception to full compliance is because the City Auditor's Office has not yet undergone an external peer review. However, this exception has no affect on the audit or the assurances provided.

CONCLUSIONS, FINDINGS, AND RECOMMENDATIONS

We identified the following issues during the audit of Fire Prevention:

Quality Control Program (Finding 1): Fire Prevention needs to create, document, and implement a formal quality control program to provide assurance that standards are being applied consistently and uniformly by its staff in conducting their plan reviews and inspections.

Customer Service Requests (Finding 2): Improvements are needed in how customer service requests are documented within the customer service request application and in the monitoring of the timeliness of response to these service requests.

Hazardous Materials Program (Finding 3): Fire Prevention needs to further evaluate how best to administer its hazardous materials program and document policies and procedures to be followed by its staff members.

Inspection Hierarchy (Finding 4): Fire Prevention needs to begin monitoring the inspection coverage achieved in total for each of the four occupancy code risk groups identified within its inspection hierarchy.

Interaction with Fire Suppression Personnel (Finding 5): Fire Prevention working with Fire Suppression needs to formalize expectations for interaction and communication between inspectors located at fire stations and the suppression personnel at these stations.

Post-Fire Evaluations (Finding 6): Following commercial fires, Fire Prevention needs to evaluate the adequacy of their procedures and the fire code and regulations by participating in the post-incident analysis with Fire Suppression personnel and reviewing reports compiled by fire investigators.

Conflict of Interest Monitoring (Finding 7): Fire Prevention needs to monitor outside employment information on its employees to identify and avoid conflicts of interest in their plan review and inspection assignments.

Fee Adjustments and Waivers (Finding 8): Fire Prevention needs to document policies and procedures to be followed in making fee adjustments and waivers. Fee adjustment and waiver reports need to be created and reviewed regularly by management independent of the transactions.

Management Reports (Finding 9): Fire Prevention needs to create desk procedures outlining the use of their standardized management reports for monitoring operations.

System Administration (Finding 10): One of the Deputy Fire Marshals administers the fire applications within Hansen and responds to system requests and problems as needed in addition to his official job responsibilities. Fire Prevention is in need of a contingency plan for the loss or extended absence of this Deputy Fire Marshal (e.g., increased system documentation, cross-training).

Further information is contained in the sections below. While other issues were identified and discussed with management, they were deemed less significant for reporting purposes.

1. Quality Control Program

Criteria

The following excerpts from the official job descriptions of the Deputy Fire Marshal, the Fire Prevention Inspection Supervisor, and the Fire Protection Engineer (management team) identify some of their responsibilities for monitoring the performance of their staff members:

Deputy Fire Marshal

- Plan, organize, administer, review and evaluate the activities and performance of staff.
- Prepare and conduct formal performance evaluations.
- Provide coaching for performance improvement and development.
- Review and assess staff training needs.
- Provide staff with continued technical support and training as required.

Fire Prevention Inspection Supervisor

- Plan, prioritize, assign, supervise and review the work of staff responsible for performing fire inspections including fire prevention and life safety inspections.
- Verify the work of assigned employees for accuracy, proper work methods and techniques, adherence to safe work practices and procedures and compliance with applicable standards and specifications.
- Prepare and conduct formal performance evaluations.
- Provide coaching for performance improvement and development.

Fire Protection Engineer

- Motivate and evaluate assigned staff.
- Review and evaluate work products, methods and procedures.
- Work with employees to develop short and long term goals, monitor accomplishments, establish performance requirements and personal development targets and provide coaching for performance improvement and development.

Condition

The twenty Code Enforcement inspectors are managed by an Inspection Supervisor and two Deputy Fire Marshals. Inspectors are assigned responsibility for inspections within specific geographic areas within the City. Over the past couple years, many of these inspectors have been assigned to work out of fire stations within their designated areas rather than out of Fire Station 1 near City Hall. Accordingly, these inspectors regularly work independently in fulfilling their inspection assignments. The Inspection Supervisor and Deputy Fire Marshals will typically assist in more complex assignments.

The Fire Protection Engineer currently manages the work of two Assistant Fire Protection Engineers and works in the same office area with them thereby allowing for regular interaction with his staff members.

As documented in the official job descriptions for the management positions within Fire Prevention, the Inspection Supervisor, Deputy Fire Marshals, and the Fire Protection Engineer have the responsibility for ensuring that the inspectors and engineers are conducting inspections and plan reviews in accordance with applicable standards (i.e., fire code and regulations) and for providing coaching and evaluations. These members of management are a key control in ensuring the consistency and quality of inspections and plan reviews.

While the management team regularly reviews various operational activity reports, discusses issues with their staff members, holds monthly meetings, and accompanies inspectors on more complex inspections, there is no formalized quality control program in place for monitoring and evaluating the quality of the performance of the inspectors and engineers as evidenced by the following:

- The Code Enforcement management team does not systematically accompany inspectors or shadow inspectors following inspections with the intention of evaluating their performance and providing feedback to the inspectors.
- The Fire Protection Engineer does not formally and systematically review the work of his engineers.
- There is no formal, systematic review of the adequacy of the paperwork being completed and submitted for scanning and the data being input into Hansen.
- There are no formal annual evaluations of the staff members.

Cause

- Lack of a formalized quality control program.

Effect

- Without a formal and organized quality control program, there is an increased risk of inconsistencies or deficiencies in how inspectors and engineers are enforcing and applying the fire code.

Recommendation

Fire Prevention management should create, document, and implement a formal quality control program to provide assurance that standards are being applied consistently and uniformly by its staff members in conducting plan reviews and inspections. This program should include at a minimum:

- Formal and systematic procedures for monitoring the quality of the work being performed by staff members in completing their inspections and plan reviews.

- Formal and systematic procedures for reviewing the adequacy of the paperwork being completed and submitted for scanning and the data being input into Hansen.

2. Customer Service Requests

Criteria

Effective monitoring of customer service requests includes reviewing the timeliness of responses to the requests.

The procedures by which data is entered into a system must be consistent to allow for effective activity monitoring.

Condition

Fire Prevention receives various types of customer service requests (service requests) over the phone and through the mail or email. A “hotline” phone number is also available for after-hours calls. These service requests include notifications of fire and life safety system issues from fire protection contractors as required by law and reports from the public of fire hazards.

The service requests are input into the customer service request application within Hansen and assigned to inspectors based on their respective geographical work areas. The inspectors are expected to respond to the service request within three working days. Service requests of a serious nature are to be addressed immediately. The service requests are classified into one of the following categories:

- Fire alarm, sprinkler or other life safety system issues
- Hazardous materials
- Fire hydrant problems
- Fire department access or fire lane issues
- Residential

During the period from October 1, 2007 through September 30, 2008, Fire Prevention received 831 service requests. Approximately 74% of these service requests were fire and life safety system issues with most of these being reports from fire protection contractors.

The following issues were identified in reviewing a sample of service requests and in discussions with management:

- Inspectors are not consistent in their use of the customer service request application within Hansen.
- Delays in closing out service requests were identified. However, the reason for the delays is not always evident in reviewing the data within the application due

to the lack of the identification of an initial inspection date or documented comments. This information is sometimes documented in a different inspection application (i.e., annual renewable inspection application, annual inspections) and therefore not readily available in reviewing the customer service request application.

- Current management reports do not adequately identify outstanding service requests.
- The established service request categories are not always being used in identifying the nature of the service request.
- There is no prioritization of the service requests.

Cause

- Inconsistencies in how service requests are being documented and closed out in Hansen.
- Inadequate monitoring of the timeliness of response to the customer service requests.

Effect

- Timeliness of service request responses cannot be easily and accurately monitored with the inconsistencies in data input.
- Potential of service requests not being timely addressed without detection.

Recommendation

Fire Prevention management should:

- Re-evaluate their customer service request processing and monitoring procedures in consideration of the issues identified.
- Clearly define and document the procedures to be followed in documenting and closing out customer service requests in Hansen.
- Create customer service request monitoring reports that will identify requests that have not been responded to and closed out in Hansen.
- Regularly monitor the customer service request response times and the adequacy of the data being input into Hansen.

3. Hazardous Materials Program

Criteria

An effectively managed hazardous materials program is an important function that can contribute to reducing the risk of hazardous material fires.

Condition

Businesses within the City of Las Vegas with hazardous materials (used, stored, manufactured, or manufactured for transport) are required to annually report information on their operations and their hazardous materials inventories to Fire Prevention. These businesses must also have the appropriate city hazardous materials permit(s) and pay the appropriate fees based on the amount of stored hazardous materials.

Fire Prevention processes the hazardous materials documentation including evaluating the nature of the materials and the fire protection system and storage requirements, updating the Hansen system, and determining whether all permits have been obtained. Hazardous material inspections are completed to verify the accuracy of the inventory reports and the adequacy of the storage of the materials.

The following issues were identified related to Fire Prevention's hazardous materials program:

- Code Enforcement has not formally documented how its hazardous materials program is to be administered and the policies and procedures to be followed by its staff members.
- Code Enforcement has experienced delays in the processing of the submitted hazardous materials documentation as the initial processing and research is very time consuming and is primarily being completed by one individual, a Deputy Fire Marshal.
- The hazardous materials information gathered by Fire Prevention and input into Hansen needs to be current and accurate as this information will soon be accessible by Fire Suppression when responding to fires.

Cause

- Lack of formally defined policies and procedures related to the hazardous materials program.
- Limited staffing for processing of hazardous materials documentation.

Effect

- Delays in the processing of hazardous materials documentation and updating information within Hansen.

Recommendation

Fire Prevention management should:

- Evaluate how the hazardous materials program can be most effectively administered considering the limited staffing resources and the varied skills of the

- inspectors. Consideration should be given to assignments or rotations of inspectors to help with processing the hazardous materials documentation.
- Document policies and procedures to be followed in administering the hazardous materials program.
 - Create standard reports that can regularly be reviewed to monitor the status of processing of hazardous materials documentation and completion of hazardous materials inspections.
 - Implement and document procedures for regularly reviewing these reports.
 - Evaluate what additional and reoccurring training may be needed for the hazardous materials program to operate effectively.

4. Inspection Hierarchy

Criteria

A significant measure of Fire Prevention's success is its effectiveness at inspecting higher risk occupancy locations on a regular basis.

Condition

Fire Prevention's inspection priorities include:

- new construction inspection requests
- business license application inspection requests
- customer service requests
- temporary use permits
- work orders
- annual renewable permits

The inspectors are also to complete annual fire inspections of existing businesses not included in any of the above categories. These inspections are to be completed in accordance with an inspection hierarchy created by Fire Prevention and outlined in their Standard Operating Procedure 770.10. The inspection hierarchy includes four risk groups of different fire code occupancy types (e.g., nursing home, motor fuel dispensing facility, high rise) with Group I identified as being the highest risk.

The following issues were identified relating to the monitoring of coverage of the inspection hierarchy groups:

- While Code Enforcement management monitors the completion of annual renewable permit inspections and inspections of select occupancy codes, they do not specifically track the total number and percentage of inspections completed within each inspection hierarchy group. This information would provide valuable information on Fire Prevention's performance in completing regular inspections of high risk businesses.

- The ability to monitor the date of the last inspection for occupancies within each risk group is hindered by inspections being tracked in two different applications within Hansen. A system user cannot query both applications for the last inspection date at a specific location.

Cause

- System obstacles to obtaining data on inspection coverage achieved in total for each of the four inspection hierarchy groups.

Effect

- Status of inspections by inspection hierarchy groups not readily available.
- Lack of ability to easily evaluate success in inspecting higher risk occupancies in total.

Recommendation

Fire Prevention management should:

- Evaluate the adequacy of the inspection hierarchy groups in relation to current risk methodology.
- Implement system enhancements that will facilitate improved tracking of inspection coverage provided within each of the four inspection hierarchy groups.
- Create standard reports that can be regularly run showing the inspection coverage achieved for each of the four hierarchy groups.
- Summarize the results periodically for review by the Fire Marshal.
- Evaluate whether these results should be added to Code Enforcement's established performance measurements.

5. Interaction with Fire Suppression Personnel

Criteria

Effective interaction between staff of different organizational divisions requires management support, effective communication, and documentation of roles and responsibilities.

Condition

Over the past couple years, many of the Code Enforcement inspectors have been assigned office space at fire stations within their designated geographical inspection areas for use when they are not out in the field completing inspections (typically at the beginning and

end of each day). The initial objective in assigning inspectors to specific fire stations was to get them closer to their designated inspection areas.

While inspectors have informally fostered relationships with the fire suppression personnel at the fire stations and have attempted to share with them how they can be of value to them with their expertise in the fire code and fire and life safety systems, no formal directives have been documented and given to Fire Suppression and Fire Prevention personnel outlining expectations for interaction between the two divisions.

Cause

- Initial objective of placing inspectors in fire stations did not extend beyond putting inspectors closer to their assigned areas.
- Lack of formal directives in this area to Fire Prevention and Fire Suppression personnel.

Effect

- Potential for differences in involvement of inspectors with Fire Suppression personnel.
- Potential for obstacles to sharing of valuable information between the divisions.

Recommendation

Fire Prevention management working with Fire Suppression management should provide documented directives to their personnel regarding their expectations for interaction between the Fire Suppression personnel and inspectors at the fire stations. Input on this directive should be sought from both Fire Suppression and Fire Prevention personnel. The following elements should be addressed in the directives:

- A declaration of support of the program from the Fire Chief and management from both Fire Suppression and Fire Prevention.
- Management's expectations for interaction between the personnel (i.e., meetings to attend, site visits to attend, etc.).
- Identification of useful information/documents to be shared between the personnel and how the information will be shared.
- Office area protocol (i.e., answering phones, use of fire station amenities, etc.).

6. Post-Fire Evaluations

Criteria

Post-fire evaluations of the performance of fire and life safety systems can help identify deficiencies in fire plan review and inspection procedures and the fire code and regulations.

Condition

Fire Prevention management has the responsibility to continually be evaluating the adequacy of their methods and procedures and the adequacy of the fire code and regulations. Fire Prevention management does not currently complete or participate in post-fire evaluations to identify deficiencies in their plan review and inspection procedures or the fire code and regulations. Without completing these evaluations following a commercial fire, Fire Prevention management cannot fully evaluate the adequacy of their methods and procedures and the adequacy of the fire code and regulations.

Cause

- Lack of requirement for Fire Prevention to complete or participate in post-fire evaluations of commercial fires.

Effect

- Deficiencies in work procedures or the fire code and regulations may not be identified.

Recommendation

Following commercial fires, Fire Prevention should evaluate the adequacy of their procedures and the fire code and regulations by participating in the post-incident analysis with Fire Suppression personnel and reviewing reports compiled by fire investigators.

7. Conflict of Interest Monitoring

Criteria

The potential for conflicts of interest by those in positions with opportunities to abuse their authority needs to regularly be evaluated by management using available information on outside employment.

Per Fire & Rescue Standard Operating Procedure 130.01, “All members [of Las Vegas Fire & Rescue] shall not engage in a conflict of interest to the department or use their position with the department for personal gain or influence.”

The following are excerpts from the City’s Operations Manual:

- City employees wishing to work, engage, or invest in outside employment, venture, or transaction who meet the criteria stipulated by the City’s Code of Ethics, the Personnel Policies Manual, Policy 3.12, and Article 29 of the CEA bargaining agreement shall complete an Outside Employment Request Form.
- Outside employment requests are required by all City employees to ensure that a second job does not create a conflict of interest with the employee’s position in the City.
- Required Authorizations (Signatures): Department Director, Human Resources Director
- The Personnel Services Division of the Human Resources Department distributes the form to the employee’s file, the initiating department, and the requesting employee.

Condition

As noted in Fire & Rescue’s policies, employees are prohibited from engaging in any activity where there is a conflict of interest with their work responsibilities or where they use their position for personal gain or influence. This is especially important for Fire Prevention personnel considering the nature of their work and the potential for abuse of their position of authority.

There are currently no formal procedures followed by Fire Prevention to track or review outside employment information. Fire Prevention management does not currently receive copies of the outside employment forms submitted by their inspectors and engineers to Human Resources or a summary of the information contained thereon. Without access to the outside employment forms or the information contained thereon, management cannot adequately evaluate potential conflicts of interest in making plan review and inspection assignments.

A greater risk of conflict of interest exists with those inspectors and engineers who fail to disclose outside employment or interests. Fire Prevention does not currently have any procedures to minimize this additional risk.

In conjunction with our audit, we reviewed outside employment forms submitted to Human Resources by Fire Prevention employees. We did not identify any outside employment that we believed would create a conflict of interest with their job responsibilities.

Cause

- Lack of readily available information on outside employment of inspectors and engineers for management evaluation of potential conflicts of interest.

Effect

- Lack of ability by Fire Prevention management to properly evaluate potential conflicts of interest in making assignments.

Recommendation

Fire Prevention management should implement procedures for evaluating potential conflicts of interest by their inspectors and engineers. The following elements should be included:

- Copies of all outside employment forms submitted to Human Resources by Fire Prevention personnel should be obtained and retained by Fire Prevention management.
- A summary of the information from these forms should be created for review by Fire Prevention management in monitoring inspection and plan review assignments.
- All inspectors and engineers should be required to keep Fire Prevention management aware of any changes to the status of their outside employment.
- Fire Prevention management should evaluate having all of its employees annually attest on a form as to whether or not they have outside employment or interests that could potentially be conflicts of interest with their assignments.

8. Fee Adjustments and Waivers

Criteria

Properly implemented internal controls over fee adjustments and waivers help ensure they are appropriate and authorized.

Condition

Adjustments are regularly made to fire permit and plan review fees. Many of these are routine adjustments made by Finance in conjunction with the billing and payment process. Fee adjustments are also made periodically by select employees within Code Enforcement and Engineering.

Fee waivers are granted to governmental agencies as authorized in Fire Prevention's permit and fee schedule:

Federal, state and local government entities are exempt from the payment of permit and plan check fees. Nonprofit organizations and special tax districts are not exempt from the payment of fees.

The following deficiencies were noted in our review of the controls over adjustments and waivers:

- There are currently no documented policies and procedures on the processing of Fire Prevention adjustments and waivers.
- Explanations for adjustments and waivers are not consistently documented within Hansen.
- Explanations for adjustments and waivers are not consistently documented within the same data fields within Hansen.
- While access to making fee adjustments and waivers is limited to a select number of employees, there is no independent employee reviewing the transactions.
- No management reports are regularly created summarizing adjustments and waivers for independent review.
- While the fee exemption clause for government agencies appears to be straightforward, there are sometimes questions as to which agencies are eligible for exemption (e.g., quasi-governmental agencies). There is no further documented guidance on how Fire Prevention applies this exemption clause and which agencies specifically should qualify for the exemption.
- Use permit fees are not generated within the Hansen system for governmental agencies identified with a contractor code of GOVT. There is currently no formal, periodic review of the agencies identified within Hansen with this code to ensure that the GOVT code is appropriate.

Cause

- Lack of formalized policies and procedures for processing and reviewing fee adjustments and waivers.
- Lack of documented guidance on how Fire Prevention applies the governmental agency exemption clause and which agencies specifically qualify for the exemption.

Effect

- Potential for inappropriate fee adjustments and waivers without detection.
- Potential for inconsistencies in the processing of fee adjustments and waivers.

Recommendation

Fire Prevention management should implement and document policies and procedures on the processing of fee adjustments and waivers including:

- Roles and responsibilities of Fire Prevention staff members in processing and reviewing fee adjustments and waivers.
- Identification of documentation to be retained on the fee adjustments and waivers.
- Identification of information required to be placed in Hansen and the location in Hansen where it should be recorded.
- Identification of authorizations required for fee adjustments and waivers.
- Identification of reports on fee adjustments and waivers to be run periodically for management review.
- Documented guidance on how Fire Prevention applies the governmental agency exemption clause and which agencies specifically qualify for the exemption.
- Requirement of periodic reviews of organizations identified within Hansen as being eligible for the exemption.

9. Management Reports

Criteria

Standard operating procedures (also known as desk procedures) address the key activities and processes of an organization, how they are performed, and by whom. They assist employees and management in performing the daily functions of an organization. These procedures formally establish employee accountability, provide orientation and reference material for employees, and document the institutional knowledge of existing staff in case of employee turnover or extended absences.

Condition

The Deputy Fire Marshals and the Fire Protection Engineer regularly create and review various management reports to monitor operational activity. While these reports are reviewed and retained by management, formalized procedures have not been created or documented identifying the standard management reports, how they are to be used for monitoring operations, how often they are to be created, and who should be reviewing them.

Cause

- Lack of documented procedures outlining the creation and use of standard management reports.

Effect

- Potential for inconsistencies in the review of operational activity.
- Potential for loss of institutional knowledge about the reports in the case of employee turnover or extended absences.

Recommendation

Fire Prevention management should create and document desk procedures outlining the following:

- Listing of standardized management reports.
- Position(s) responsible for creating the reports.
- Objective of reports and what should be reviewed.
- Identification of how often the reports are to be run and reviewed.
- Identification of how the results of these reports should be summarized.
- Report distribution listing.

10. System Administration

Criteria

Reliance on a single individual in an organization's operations creates a risk of loss of valuable information and technical expertise if that individual separates from employment or has an extended leave of absence from work.

The 2005 Accreditation report from the Commission on Fire Accreditation International, Inc. had the following recommendation:

Create an authorized position to manage the city's asset management enterprise system (Hansen) to ensure the system has dedicated department staff to manage the system.

Condition

Fire & Rescue is currently very reliant on one of the Deputy Fire Marshals for administering the fire and life safety system applications within Hansen and responding to daily operational issues requiring knowledge of the system. This Deputy Fire Marshal was involved in the creation of the applications and therefore, continues to act as the administrator for these applications in addition to his other responsibilities.

Fire & Rescue is at risk for loss of valuable technical expertise in the fire & life safety system applications within Hansen if the Deputy Fire Marshal was to separate from employment with the City or have an extended absence. There is currently no formalized contingency plan for the loss or extended absence of this Deputy Fire Marshal.

Cause

- Lack of a formalized contingency plan for loss of the Hansen fire prevention application administrator.

Effect

- Risk of loss of valuable technical expertise in the administration of the Hansen fire prevention application.

Recommendation

Fire Prevention management should develop and document a contingency plan for the administration of the fire applications within Hansen. The primary functions and responsibilities of the administrator should be documented for reference purposes. Reoccurring issues encountered by the administrator should also be documented. Consideration should be given to cross-training of other personnel in the primary functions of the administrator.

MANAGEMENT RESPONSE

1. Quality Control Program

Recommendation:

Fire Prevention management should create, document, and implement a formal quality control program to provide assurance that standards are being applied consistently and uniformly by its staff members in conducting plan reviews and inspections. This program should include at a minimum:

- Formal and systematic procedures for monitoring the quality of the work being performed by staff members in completing their inspections and plan reviews.
- Formal and systematic procedures for reviewing the adequacy of the paperwork being completed and submitted for scanning and the data being input into Hansen.

Management Action Plan:

Evaluation of field activities by Fire Prevention Inspection Supervisors and Deputy Fire Marshals will be more formalized through the following:

- Develop a standard by which all Fire Prevention Inspectors will be evaluated on.
- Develop a process that can objectively document the inspection process that is transparent to the Inspectors so there is no ambiguity in the standard being applied to them.
- Staff evaluation by a process of shadowing and field follow-up by having supervisors validate code violations identified by field staff.
- Document and publish a common practices (or lessons learned) manual for inspection staff to follow to increase consistency during the field inspection process.
- Reduce inconsistency of fire code enforcement through training and regular staff contact by field supervisors.
- Formal and systematic procedures for reviewing the adequacy of the paperwork being completed and submitted for scanning and the data being imputed into Hansen.

Fire Prevention will develop formal procedure for scanning of documents to:

- Eliminate inconsistencies on how documents are indexed in the records management system (eB).
- To insure that documents are properly indexed to the proper address by the Scan Center.
- To give guidance on what needs to be scanned and discarded in accordance with the records retention schedule.

Fire Prevention Inspection Supervisors will review Hansen input for accuracy and completeness by the following:

- Running reports on daily and weekly basis of Inspector activity to ensure the accuracy of data. This will also ensure that proper coding is used, violations are being correctly entered, and that inspection times are documented.
- Inspection staff will be corrected on an individual basis as needed, and staff directives will be written if group wide issues are identified.

Estimated Date of Completion:

The development of a Quality Control Program will take some time to develop and implement. The overall structure of the program will be outline by May 1, 2009, but the implementation and overall success may take up to 1 year. This program goes beyond just telling staff what is to be done or expected and the acceptance of oversight and monitoring will be needed to prevent motivational and performance issues.

2. Customer Service Requests

Recommendation:

Fire Prevention management should:

- Re-evaluate their customer service request processing and monitoring procedures in consideration of the issues identified.
- Clearly define and document the procedures to be followed in documenting and closing out customer service requests in Hansen.
- Create customer service request monitoring reports that will identify requests that have not been responded to and closed out in Hansen.
- Regularly monitor the customer service request response times and the adequacy of the data being input into Hansen.

Management Action Plan:

Complaints that are received by this department will be given a priority code based on the issue identified. Currently all CSINSPs are group together and require a 3 day response from Fire Prevention staff. There are times when immediate response is needed by Fire Prevention, such as exits chained for an assembly of people at an ongoing event, which would require immediate attention. This is shorter time period than the reports received by fire protection contractors about a painted fire sprinkler head which can be waited on for response.

The complaint process will be rewritten to formalize the prioritization of the issues received. Inspection staff will be given specific dates to take action on CSINSP received and Supervisors and DFMs will monitor progress of CSINSP through daily reports.

The monitoring of the status of complaints in the system has already been addressed and will be accomplished on a daily basis by both the Inspector and their immediate supervisor with the implementation of the Mobile Highways interface for the field input devices. Separate reporting means are also available to supervisors by running crystal reports of outstanding CSINSPs.

Estimated Date of Completion:

The priority codes for CSINSPs are already an available option in the Hansen software program. The SOP (770.10) for CSINSP will be modified by April 1, 2009 to reflect the clarification in prioritization of CSINSPs.

The implementation of Mobile Highways software program is expected to be complete by March 15, 2009.

3. Hazardous Materials Program

Recommendation:

Fire Prevention management should:

- Evaluate how the hazardous materials program can be most effectively administered considering the limited staffing resources and the varied skills of the inspectors. Consideration should be given to assignments or rotations of inspectors to help with processing the hazardous materials documentation.
- Document policies and procedures to be followed in administering the hazardous materials program.
- Create standard reports that can regularly be reviewed to monitor the status of processing of hazardous materials documentation and completion of hazardous materials inspections.
- Implement and document procedures for regularly reviewing these reports.
- Evaluate what additional and reoccurring training may be needed for the hazardous materials program to operate effectively.

Management Action Plan:

A standard operating procedure will be written on the collection and dissemination of hazardous materials documentation submitted to Fire Prevention. Fire Prevention will be determining the need for a specialize unit dealing with the data collection and inspection of facilities within the City of Las Vegas that store, handle, or use hazardous materials.

The Fire Prevention Division will create a Special Hazards Unit (SHU) to conduct compliance inspections of high-risk and hazardous materials occupancies to utilize their knowledge and abilities.

- The SHU will identify, inspect issue and modify existing use permits of occupancies storing and utilizing hazardous materials. Within this task the SHU will verify specific processes for code compliance associated to the operation.
- The SHU will utilize the database permitting system now in place to verify the existing hazardous materials inventory statements and plans, which are submitted to the fire department, with what is actually stored on-site.
- The SHU is to verify locations that have high-piled commodity storage configurations with the existing fire sprinklers design density to ensure adequate coverage of fire protection in the event of a fire.
- The SHU will assist area fire inspectors in assessing existing hazards with their expertise and identify potential deficiencies in fire protection systems installed in these high-risk occupancies.

The SHU will be supervised by a Grade 79 level person, either a Fire Prevention Inspection Supervisor, or Assistant Fire Protection Engineer. This will allow the person to give direction to Fire Prevention Inspectors on inspections required and procedures to be followed for inspections of identified facilities that hazardous materials associated with them. The SHU Supervisor can, as needed, assist inspectors within their respective inspection areas with large scale inspections and activities requiring multiple inspectors to accomplish. (Example: High-rise system code compliance testing). They may also attend construction meeting on major projects to assist the area inspector.

The hazardous materials compliance program will benefit by having the SHU by verifying the revenue recovered through permitting is accurately assessed and all sources are identified. The hazardous materials compliance program currently generates approximately \$400,000 in cost recovery fees for inspections conducted. A dedicated person to the SHU will lead to increase oversight of the program with the chance of increased cost recovery.

Estimated Date of Completion:

Benchmarks to be met:

Documentation review and revision by May 1, 2009.

Additional Position to be added - March 1, 2010?

4. Inspection Hierarchy

Recommendation:

Fire Prevention management should:

- Evaluate the adequacy of the inspection hierarchy groups in relation to current risk methodology.

- Implement system enhancements that will facilitate improved tracking of inspection coverage provided within each of the four inspection hierarchy groups.
- Create standard reports that can be regularly run showing the inspection coverage achieved for each of the four hierarchy groups.
- Summarize the results periodically for review by the Fire Marshal.
- Evaluate whether these results should be added to Code Enforcement's established performance measurements.

Management Action Plan:

The inspection hierarchy groups are a product of work from the accreditation process that the fire department used for developing a hazard and risk assessment for occupancies in the city based on fire department response and not the impact on any specific business owner or occupant.

The reassessment of occupancies based on hazard and risk will focus more on a specific occupancy types and the impact on the community if a fire or other emergency were to occur. This may result in more than four groups being monitored and having numerical hierarchy established for inspection frequency.

Based on the revised rating schedule for occupancies, reports can be produced for city management and the Fire Marshal to review and monitor the effectiveness of Fire Prevention Division. These changes will eventually be added as a performance measure to be reported indicating that the more hazardous occupancies are being inspected with established timelines

Estimated Date of Completion:

Completion of the hierarchal group reorganization should take place by May 1, 2009. This will include a standard methodology on how occupancies are evaluated and the inspection frequency required.

5. Interaction with Fire Suppression Personnel

Recommendation:

Fire Prevention management working with Fire Suppression management should provide documented directives to their personnel regarding their expectations for interaction between the Fire Suppression personnel and inspectors at the fire stations. Input on this directive should be sought from both Fire Suppression and Fire Prevention personnel. The following elements should be addressed in the directives:

- A declaration of support of the program from the Fire Chief and management from both Fire Suppression and Fire Prevention.

- Management's expectations for interaction between the personnel (i.e., meetings to attend, site visits to attend, etc.).
- Identification of useful information/documents to be shared between the personnel and how the information will be shared.
- Office area protocol (i.e., answering phones, use of fire station amenities, etc.).

Management Action Plan:

A policy will be drafted for the Fire Chiefs approval to outline the following items for fire department staff to follow when there is interaction between Fire Prevention personnel and those in other divisions:

Expectations for Fire Prevention Personnel assigned to Fire Stations and their interaction with fire station personnel.

Expectations for Fire Prevention personnel while at a scene of an ongoing emergency and their interaction with the incident commander.

Fire Preventions support for other Divisions within the fire department such as Training and Public Education.

Estimated Date of Completion:

Completion of this item will take place by August 1, 2009.

6. Post-Fire Evaluations

Recommendation:

Following commercial fires, Fire Prevention should evaluate the adequacy of their procedures and the fire code and regulations by participating in the post-incident analysis with Fire Suppression personnel and reviewing reports compiled by fire investigators.

Management Action Plan:

Considering the current state of the economy and our reduced workforce, it is only realistic to predict that we won't be able to perform this task within the next couple of years. At that time, we need to develop the exact procedures, levels and the scope of involvement. Evaluations of the second and third alarm commercial fires, and also residential fires that involve activation of the residential fire sprinkler systems might be a starting point.

Educational and training measures must be taken to prepare me and my staff in being able to perform those functions in future. Those include attending the Arson

Investigation classes at the National Fire Academy (NFA) and obtaining the necessary certifications.

Systematic interaction with our Fire Investigators would also be quite valuable to provide us not only with the hands on training, but also the necessary professional cooperative relationship.

Arrange for a monthly informative coordination meeting between the Deputy Chief/Fire Marshal and the Fire Investigation/Bomb Squad Supervisor.

Establish formal process for the Deputy Chief/Fire Marshal to receive and review the fire investigation report as soon as they are prepared and officially filed.

Estimated Date of Completion:

Establishing the review mechanism for the fire investigation report and arrange the monthly coordination meeting could be accomplished by April 1, 2009.

Training and certification of the Fire Protection Engineering staff could be accomplished by the end of 2010.

Actual participation of the Fire Protection Engineering staff in the Post Fire Evaluations could be initiated by the middle of 2011.

7. Conflict of Interest Monitoring

Recommendation:

Fire Prevention management should implement procedures for evaluating potential conflicts of interest by their inspectors and engineers. The following elements should be included:

- Copies of all outside employment forms submitted to Human Resources by Fire Prevention personnel should be obtained and retained by Fire Prevention management.
- A summary of the information from these forms should be created for review by Fire Prevention management in monitoring inspection and plan review assignments.
- All inspectors and engineers should be required to keep Fire Prevention management aware of any changes to the status of their outside employment.
- Fire Prevention management should evaluate having all of its employees annually attest on a form as to whether or not they have outside employment or interests that could potentially be conflicts of interest with their assignments.

Management Action Plan:

Outside employment and declaration is already addressed by Human Resources. The expectation is that Fire Inspection staff will not place themselves in a position of conflict or that would discredit the fire department. An annual request for declaration of outside employment will be requested and reviewed by the Fire Marshal before being forwarded to the Fire Chief. Additional oversight by fire prevention management would not have any added value to the process. All outside employment is required to be approved by the fire chief.

Estimated Date of Completion:

Already completed

8. Fee Adjustments and Waivers

Recommendation:

Fire Prevention management should implement and document policies and procedures on the processing of fee adjustments and waivers including:

- Roles and responsibilities of Fire Prevention staff members in processing and reviewing fee adjustments and waivers.
- Identification of documentation to be retained on the fee adjustments and waivers.
- Identification of information required to be placed in Hansen and the location in Hansen where it should be recorded.
- Identification of authorizations required for fee adjustments and waivers.
- Identification of reports on fee adjustments and waivers to be run periodically for management review.
- Documented guidance on how Fire Prevention applies the governmental agency exemption clause and which agencies specifically qualify for the exemption.
- Requirement of periodic reviews of organizations identified within Hansen as being eligible for the exemption.

Management Action Plan:

Fire Prevention will establish a list of organizations that will not be charged fees based on local intergovernmental agreements, the current fee schedule, or other applicable state statutes. This list will be reviewed or changed as necessary when agreements are changed, or additional direction is given by city management.

Fee waivers or adjustments will be made by City Finance after billing has occurred in consultation with Fire Prevention determining the validity of the request.

Fee waivers or adjustments as the result of incorrect data entry will be made by the designated person in Fire Prevention (non-billable), such as permit fees in Fire Engineering.

Estimated Date of Completion:

List of waivers and associated justifications to be completed by April 1, 2009.

9. Management Reports

Recommendation:

Fire Prevention management should create and document desk procedures outlining the following:

- Listing of standardized management reports.
- Position(s) responsible for creating the reports.
- Objective of reports and what should be reviewed.
- Identification of how often the reports are to be run and reviewed.
- Identification of how the results of these reports should be summarized.
- Report distribution listing.

Management Action Plan:

Fire Prevention Management staff has already standardized its reports for Performance Plus and those needed for monitoring inspection activity. These reports are categorized by the frequency on the time to be run. For example, reports are currently run on a daily, weekly, quarterly, and annually basis based on the need for information and level of monitoring. A separate distribution policy will be written to identify these reports and the frequency established for their need.

Estimated Date of Completion:

A majority of the reports are already written with the expectation that changes will be needed as new policies or performance measures are implemented. The policy for identifying these reports and timelines will be established by April 1, 2009.

10. System Administration

Recommendation:

Fire Prevention management should develop and document a contingency plan for the administration of the fire applications within Hansen. The primary functions and

responsibilities of the administrator should be documented for reference purposes. Reoccurring issues encountered by the administrator should also be documented. Consideration should be given to cross-training of other personnel in the primary functions of the administrator.

Management Action Plan:

To better understand the administration of the entire Hansen system, each part needs to be defined. There are two administration roles for the Hansen enterprise system:

1. The primary administration i.e. adding an application, verifying stages, status of inspections, inspection scheduling or basic Hansen administration or system functionality is documented at this time. (Fire Protection Engineering, Fire Inspection, and Fire Prevention Clerical staff).
2. The specialized administration of the system i.e. creating of applications, modifying applications, condition statements, custom detail tabs, fee formulas, creation of imbedded reporting, Interactive Voice Response, etc, needs to reside with one specific person or designee to prevent conflict with other city departments due to the enterprise nature of the software program. As an example, this person should have IT background to understand the relational database, how it functions across the different Hansen templates all residing within the City of Las Vegas. There is documentation in the form of needs assessment created at the initial time of implementation that details the processes of Fire Prevention and its relationship to other departments.
3. Many of the sub systems related to the Hansen system and applications (Mobile device and staff training, primary administration, functionality questions and verification of the Use type permits) have been disbursed to other staff in Fire Prevention. This includes the questions that arise day to day.

Estimated Date of Completion:

The documentation for the implementation of the Hansen Software program is already in place. This documentation can be used by a person familiar with the database management programs and the Hansen software program. This documentation will be categorized by June 1, 2009 to be available by any person to refer to if necessary.

A specific timeline can not be established for hiring a person to take over system administration due to the ongoing financial conditions facing the City of Las Vegas. The administration of the program will stay with the designated Deputy Fire Marshal until an alternative is obtained.