Preventable Fire Alarms or "False Alarms"

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The Seattle Fire Department (SFD) responds to over 7,000 "false" or preventable fire alarms every year. In fact, roughly 1 in 3 fire calls received by the Seattle Fire Department each year are false alarms, many related to a lack of proper system maintenance. Preventable alarms take first responders and fire engines out of service for other emergency calls. The large number of false alarms puts a heavy burden on the entire system and reduces our ability to protect property and preserve lives for all who live, visit, and work in Seattle.

For this reason, Seattle has a citation penalty for "false alarms" or preventable fire alarms. The intent is to encourage maintenance and needed modification of alarm systems and discourage careless acts that result in alarm activation.

This Client Assistance Memorandum provides more information on the causes of preventable alarms as well as strategies that building owners can use to reduce preventable alarms. The final page of this document provides information about the responsible party's obligations and the actions that must be taken if you receive a citation.

What is a Preventable Fire Alarm?

The Seattle Fire Code defines preventable alarms as follows:

- Any activation of a fire alarm system that results in notification to SFD of an event of fire that leads to a response by SFD when no such danger exists.
- All activations when there is no fire, when such activations are caused by mechanical failure or malfunction due to insufficient or improper testing and maintenance, accidental activation, malicious activation, or misuse, by any person, including

- persons who sell, install, maintain, test, or monitor fire alarm systems.
- Does not include activations caused by weather conditions, telephone line problems, water surges, water hammers, or natural disasters.

-part of a multi-departmental series on City services & permitting

Strategies for Building Owners to Reduce Preventable Alarms

Building owners and managers can play an active role in reducing the "false" or preventable alarms in their building. Here are key strategies:

Keep Up With Required Inspection, Testing and Maintenance

Have your fire alarm system inspected as required by fire code each year by a certified testing company. A list of companies employing technicians certified to work on fire alarms in Seattle can be found here: http://www.seattle.gov/fire/business-services/systems-testing

When problems or "deficiencies" with the fire alarm system are found during the inspection, by law it is the building owner's responsibility to have the deficiencies repaired promptly.

Avoid Standard Causes of Preventable Alarms

The following is a list of the most typical causes of preventable alarms, and steps building owners can take to reduce them. These strategies and more can be found in the National Fire Protection Association (NFPA) Fire Service Guide to Reducing Unwanted Fire Alarms, available for free download from www.nfpa.org/redgd.

Cooking is one of the leading causes of unwanted fire alarms.

- Ensure ancillary cooking equipment is located in proper places. Example: offices areas are not the proper locations for coffee pots and microwaves.
- Ensure hood ventilation fans are in operation during

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cooking.

 Switch out smoke detectors, where permitted, to a heat detector—talk with your fire alarm company for options.

Smoking is another common cause of preventable alarms.

- Do not allow designated smoking areas in close proximity to smoke detectors, and provide proper ventilation in designated smoking areas.
- Talk with your fire alarm company about changing smoke detectors to heat detectors in smoking areas where allowed.

Steam from showers and appliances also triggers unwanted alarms.

 Consider relocating smoke detection devices as permitted in fire code or replacing older devices with newer technology that detects multiple indications of fire and reduces preventable alarms.

Wood Stoves and Fireplaces can cause detection devices to alarm.

 Your system should be designed so that heat detectors and smoke detectors are located at appropriate distances from wood stoves and fireplaces. If you are experiencing frequent preventable alarms due to these appliances, consult your fire alarm company regarding appropriate placement of detection devices.

Construction projects can also be a source of preventable alarms.

Construction dust and "hot work" such as welding are primary causes of preventable alarms. For safety, you must follow the fire code which may include consulting with the Fire Marshal's Office before taking any detectors or systems out of service. When allowed, you can help reduce preventable alarms by covering detectors during the day while construction work is actively occurring—uncover them at times construction work is not occurring. Always have your building's detectors cleaned and check their sensitivity after construction is completed.

Incorrect fire alarm system programming can also cause preventable alarms.

 Fire alarm systems have three types of signals — "fire alarm", "supervisory", and "trouble". The system should be properly programmed to classify information from the detection devices as "trouble", "supervisory" or "fire alarm". Sometimes due to a programming error, too many conditions put the building into alarm and are relayed to the monitoring company/SFD as a "fire alarm". Your fire alarm company can ensure that the detection devices and monitored conditions are properly corresponding to fire alarm, supervisory and trouble signals.

Manual pulls can be a source of preventable alarms if people pull them when no fire emergency exists.

 Install approved protective covers over manual pull stations to prevent malicious or accidental activations.

Consider Updating Your Alarm System to Avoid Preventable Alarms

Depending on the nature of the preventable alarms you are experiencing, you may wish to discuss the situation with your fire alarm technician. Options may be available such as replacing older smoke detectors and other detection devices with newer devices that respond to a multitude of fire conditions, and mitigate false alarms.

Provide Tenant Education

If your building is experiencing repeated alarms caused by your tenants:

 Provide education to tenants and building employees. SFD has some educational materials you can use with your tenants and employees. Please see the multi-family residential handbook here: http://www.seattle.gov/Documents/Departments/Fire/Safety/MultiResidentialHandbook.pdf

Additional Assistance from the Seattle Fire Department

If you are experiencing frequent preventable alarms, please contact SFD. We will provide you with historical data on your specific building so you can analyze the type of "false" or preventable alarms that have occurred. This data may help you identify the type of problems you are encountering, to help you work with your fire alarm company to plan a solution. Send your data requests to:

SFD_FMO_SystemsTesting@seattle.gov.

What is a Citation and What Happens If I Receive One?

A citation is a non-criminal notice of violation that includes a monetary penalty.

There is no fee for the first preventable alarm during a calendar year quarter, for a total of up to four waived alarm penalties each year for every building. Thereafter, the following penalty may be charged: one penalty of \$373 for two to five violations in the same quarter of a calendar year, or one penalty of \$746 for six to eight violations in the same quarter of a calendar year, or one penalty of \$900 for nine or more violations in the same quarter of a calendar year. Citations will be written to the building owner.

Citations will be mailed to you or served in person. When you receive the citation, you must respond within 15 calendar days in one of three ways:

- 1. Pay the citation.
- Request a mitigation hearing to explain the circumstances. In some cases, a mitigation may result in a lower penalty. The mitigation hearing must be requested in writing using the citation form mailed/ served to you.
- Request to contest the citation, if you believe the cited violation did not occur or that the person cited is not responsible for the violation. The hearing to contest the citing must be requested in writing using the citation form mailed/served to you.

Please see also the information from the City of Seattle Hearing Examiner: https://www.seattle.gov/hearing-examiner/citations

Option to Invest in Upgrading Fire Alarm System in Lieu of Paying Citation Penalty

SFD's mission is to preserve lives and protect property. Our mission is served when property owners improve their fire alarm systems to help reduce future preventable alarms. If you wish to invest in improving your building's fire alarm system in lieu of paying the citation penalty, you may request that the City credit your expenditures on the fire alarm system to offset the citation penalty, dollar for dollar, up to the full penalty amount.

If you choose to invest in your system to reduce preventable alarms, SFD suggests that you work with your

fire alarm contractor to evaluate the following strategies. Please note that these changes may require a permit or other permission such as a code variance from the Fire Marshal: relocate detection devices; eliminate manual pull stations in fully fire sprinklered buildings; update fire alarm system programming to help avoid preventable alarms. Your contractor may also have other recommendations for your particular building and alarm system.

Contact SFD Fire Prevention Director at SFD_FMO_Data@seattle.gov within two weeks of the date of the citation if you would like approval to participate in the Invest in Lieu of Penalty program. You will still respond to the citation by sending the citation form back to the Hearing Examiner, however you will not send payment yet if you are approved to participate in Invest in Lieu of Penalty program.