

<b>SUBJECT:</b> <b>ALARM SIGNAL VERIFICATION</b>	<b>EFFECTIVE DATE:</b> October 23, 2014
<b>REFERENCES:</b> Seattle Fire Code Ch. 9 NFPA 72, 2013 Edition	<b>SUPERSEDES:</b> NONE – NEW RULE
	<b>FCAB REVIEW DATE:</b> September 16, 2014
<b>NOTICE:</b> Administrative Rules are established per Seattle Fire Code Section 104.1, and they are subject to the Administrative Sections 104.9 Alternate Materials and Methods, Section 104.8 Modifications, and Section 108.1 Appeals.	<b>APPROVED:</b>  _____ JOHN NELSEN, FIRE MARSHAL

**Section 1. SCOPE**

This rule specifies requirements for implementing monitoring service alarm signal verification to minimize fire department responses to chronic nuisance alarm prone fire alarm systems.

**Section 2. DEFINITIONS**

For the purposes of this rule the following words and terms have the meanings indicated below:

**Alarm Signal Verification.** A process by which an alarm signal received at the central supervising station can be verified by contacting authorized personnel at the protected premises prior to dispatching emergency response personnel.

**Central Supervising Station.** A supervising station that is listed for central station service and that also commonly provides less stringent supervising station services such as remote supervising services.

**Nuisance Alarm.** An alarm caused by mechanical failure, malfunction, improper installation or lack of proper maintenance, or an alarm activated by a cause that cannot be determined.

**Section 3. GENERAL**

The definition for “nuisance” alarm in the 2012 Seattle Fire Code includes a number of causes of fire alarm activations when there is no emergency. Every year the Seattle Fire Department responds to approximately five thousand of these types of unnecessary, non-emergency alarm activations, sometimes also called false alarms per year.

Nuisance alarms are a type of unwanted alarm caused by mechanical failure, malfunction, improper installation or lack of proper maintenance, or an alarm activated by a cause that cannot be determined. Nuisance alarms can result when some condition simulates a fire or other hazardous condition and activates smoke detectors and smoke alarms. The smoke detector or smoke alarm is doing its job responding to the condition or stimulus that it was designed to detect.

Additionally, nuisance alarms might be unintentional such as when a child activates a manual fire alarm box not knowing the consequences. Similarly, someone accidentally causing mechanical damage to an initiating device causing an alarm activation is also a nuisance alarm.

Often the problems can be corrected by ensuring the systems are maintained, serviced, and tested by a fire alarm service company. However, in some cases, the system problems may be attributed to aging for which suitable replacement parts are no longer available and the entire system or substantial portions of the fire alarm system must be replaced.

#### **Section 4. ALARM SIGNAL VERIFICATION**

The 2013 edition of NFPA 72 – *National Fire Alarm and Signaling Code* contains a new section that contains provisions for one method to help reduce the number of nuisance alarms for nuisance alarm prone fire alarm systems called “Alarm Signal Verification”. The purpose of this rule is to pre-implement the provisions of the 2013 edition of NFPA 72 since it is not the edition adopted/referenced in the 2012 Seattle Fire Code. Alarm signal verification is a process by which an alarm signal received at the central supervising station can be verified by contacting authorized personnel at the protected premises prior to dispatching emergency response personnel. The purpose of alarm signal verification is to identify nuisance alarms in order to reduce unnecessary dispatches.

Where alarm signal verification is required, one or more persons from the protected premises must be preauthorized to provide verification. When an alarm signal is received, verification will only be accepted from those personnel and only if they are currently within the protected premises.

Alarm signal verification should not be confused with the alarm verification feature, which is a feature that can reduce unwanted alarm signals from transient conditions that actuate smoke detectors. Alarm verification may be a function of an individual smoke detectors or it may be a feature of the fire alarm control unit to which the smoke detectors are connected. It is not intended as a means of reducing unwanted alarms due to the improper application of smoke detectors, such as installation in a location where they are exposed to unsuitable environmental conditions.

#### **Section 5. IMPLEMENTING ALARM SIGNAL VERIFICATION**

Fire protection systems that have produced five or more nuisance alarms in a calendar year shall be classified as chronic nuisance alarm prone systems. The fire code official is authorized to require alarm signal verification in accordance with this rule for chronic nuisance alarm prone systems. However, alarm signal verification will not be required for alarm signals from waterflow and manual pull stations for systems that provide distinct waterflow and manual pull station signals to the central supervising station. Where required, alarm signal verification implementation shall be as follows:

1. The fire code official shall provide documentation of the requirement for alarm signal verification to the central supervising station provider and the building owner. If the requirement for alarm signal verification is changed the fire code official shall notify the central supervising station and the building owner.
2. The alarm signal verification process shall not take longer than 90 seconds from the time the alarm signal is received at the central supervising station until the time that retransmission of the verified alarm signal is initiated.
3. Verification of the alarm signal can only be made by authorized personnel within the protected premises.
4. Verified alarm signals shall be immediately retransmitted to the communications center and shall include information that the signal was verified at the protected premises to be an emergency.
5. Alarm signals that cannot be verified shall be immediately retransmitted to the communications center within the 90 second time limit.
6. Alarm signals that are verified as nuisance alarms shall not be retransmitted to the communications center.
7. Verified nuisance alarm signals not reported to the communications center shall be reported to the fire department using the "Seattle Fire Department Verified Nuisance Alarm Report Form on a quarterly basis.
8. The fire code official is authorized to require the replacement of fire protection systems that cannot be serviced or repaired to eliminate system impairments or chronic nuisance alarms.