SEATTLE FIRE DEPARTMENT	Administrative Rule 9.04.20

SUBJECT: **IMPAIRED FIRE PROTECTION SYSTEMS AND EMERGENCY RESPONDER RADIO AMPLIFICATION SYSTEMS**	EFFECTIVE DATE: February 1, 2020
REFERENCES: Seattle Fire Code NFPA 72 NFPA 25	SUPERSEDES: Administrative Rule 9.04.19, January 1, 2020 FCAB REVIEW DATE: January 7, 2020
NOTICE: 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.	APPROVED: TIMOTHY J. MUNNIS, FIRE MARSHAL/FIRE CODE OFFICIAL

Section 1. SCOPE

This rule specifies requirements for fire department notification and mitigation measures for impaired fire protection systems and shall apply to fire protection systems, emergency responder radio amplification systems and equipment as defined in the Seattle Fire Code, and any other systems as set forth by the fire code official.

Section 2. DEFINITIONS

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

Deficiency. A condition in which a system or portion thereof is damaged, inoperable, or in need of service, but does not rise to the level of an impairment.

Emergency Impairment. An abnormal condition where a system, component, or function is out of service due to an unexpected deficiency.

Fire Watch. A temporary measure intended to ensure continuous and systematic surveillance of a building or portion thereof by one or more qualified individuals for the purposes of identifying and controlling fire hazards, detecting early signs of unwanted fire, raising an alarm of fire and notifying the fire department.

Impairment. A condition where a fire protection system or unit or substantial portion thereof is out of service, and the condition can result in the fire protection system, unit or substantial portion thereof not functioning in a fire event.

Impairment Coordinator. The person responsible for the maintenance of a particular fire protection system.

Impairment Tag. A tag used to indicate that a system, or portion thereof, has been removed from service.

Planned Impairment. An abnormal condition where a system, component, or function is out of service due to work that has been planned in advance.

Section 3. GENERAL

The term impairment broadly encompasses a range of circumstances where a fire protection system, substantial portion of such a system, connection to central station monitoring, or a system component is not functioning properly for any number of reasons. Temporarily shutting down a fire protection system as part of performing the routine inspection, testing, and maintenance on that system while under constant attendance by qualified personnel, and where the system can be restored to service quickly, is not considered an impairment.

Additionally, fire alarm systems are routinely impaired in areas with automatic detection during construction or during theatrical performances involving pyrotechnics, smoke or flame effects as well as to conduct normal fire alarm system maintenance and testing. Such impairments can be limited to specific initiating devices and/or functions (e.g., disconnecting the supervising station connection during system testing), or they can involve taking entire systems or portions of systems out of service.

Impairments can be planned or may be of an emergency nature, in either case the impairment coordinator is responsible to implement several steps outlined in Chapter 9 of the Seattle Fire Code.

Addition of new fire alarm devices or appliances, reprogramming of system software, or revisions to the water supply or sprinkler system piping for an automatic fire sprinkler system are examples of planned impairments.

Physical damage to a control unit or wiring, an operated sprinkler or system leakage, interruption of water supply, frozen or ruptured piping, and equipment failure are examples of emergency impairments.

When fire protection systems that exclusively protect appliances such as kitchen ranges, spray booths, and other similar appliances are out of service or impaired, the protected appliances shall not be used until restored to normal operational condition. Because the appliance being protected by the impaired system shall not be used, fire watch is not required for these types of systems. In rare circumstances, an impairment mitigation plan may be submitted to the Fire Code Official and if approved, may allow the use of the appliance under specific conditions.

Fire watch requirements in this rule do not apply to emergency responder radio amplification systems. All other requirements in this rule apply to fire protection systems and emergency responder radio amplification systems.

Section 4. IMPAIRMENT COORDINATOR

The building owner shall assign an impairment coordinator to comply with the requirements of Chapter 9 of the Seattle Fire Code and this Administrative Rule. In the absence of a specific designee, the owner shall be considered the impairment coordinator.

Where the lease, written use agreement, or management contract specifically grants the authority for inspection, testing, and maintenance of the fire protection system(s) to the tenant, management firm, or managing individual, the tenant, management firm, or managing individual shall assign a person as impairment coordinator.

Section 5. IMPAIRMENT TAG

IMPAIRMENT (RED) TAG – Impaired System/System Out of Service
Fire protection system(s) that are impaired for any length of time shall be tagged with a red impairment tag.

The code requires the use of a clearly visible tag to alert building occupants and the fire department that all or part of the required fire protection system is impaired. The tag or label shall be clearly visible, weather resistant, of sufficient size (typically 4 inches x 6 inches) and be of the self-adhesive type or the wire-hanging type. The tag shall include the following information:

1. The words "**DO NOT REMOVE BY ORDER OF THE FIRE MARSHAL**."
2. Name, address and telephone number of the business or firm performing the testing.
3. Date that work was performed.
4. Printed name of person performing work.
5. Seattle Fire Department certification number of person performing work.
6. Description of work performed.
7. Name of impairment coordinator.

The following format should be used for all red impaired system tags and labels:

IMPAIRED SYSTEM			
DO NOT REMOVE By Order of the Fire Marshal	Date and Time Impairment Began	Anticipated Date and Time System Will Be Returned to Service	Impairment Type ☐ Planned ☐ Emergency
	Testing Firm		
	Address		
	Phone		
	Serviced by		
	Certificate No.		
	Impairment Coordinator		
Description of Impairment:			

Note: The Seattle Fire Department must be notified when a system is anticipated to be impaired for eight hours or more. See the separate section below regarding mandatory notification requirements for impairments.

Unless otherwise directed the impairment tag shall be posted at the following locations:

Table 5.1 Location of Impairment Tags for Fire Protection Systems and Emergency Responder Amplification Systems

System Type	Location of Red Impairment Tags
Alternative Extinguishing Systems (CO^2, clean agent, dry chem)	On the agent supply tank or pull device
Automatic Sprinkler Systems	On or adjacent to the sprinkler control valve, and at each fire department connection (FDC)
Emergency Alarm Systems (Haz Mat)	In a readily viewable location
Emergency Generators	On the control panel
Emergency Responder Radio Amplification Systems-BDA/DAS	On the fire alarm control panel
Fire Alarm Systems	Fire alarm panel/annunciator, and at Fire Command Center (FCC) if FCC present
Fire Escapes	SFD Administrative Rule 11.01
Fire Pumps	On the pump controller, and at Fire Command Center (FCC) if FCC present
Portable Fire Extinguishers	Replace Fire Extinguisher
Range Hood	Control valve of extinguisher or cylinder
Smoke Control Systems	On the manual control panel, or fire alarm control panel if no smoke control panel is installed, and at Fire Command Center (FCC) if FCC present
Standpipe Systems	On or adjacent to the lowest outlet, and at each fire department connection (FDC)
Standpipe Systems – Marinas	At each fire department connection (FDC) where multiple connections are present

Section 6. NOTIFICATION REQUIREMENTS FOR IMPAIRMENTS

Section 6.1 NOTIFYING THE SEATTLE FIRE DEPARTMENT

If a planned or emergency impairment is anticipated to take a system out of service for eight hours or more, the Seattle Fire Department must be notified. This notification allows the Department to assess the risks and make any operational decisions necessary to ensure response-readiness and the safety of building occupants and fire fighters.

Timelines for Notification

Planned Impairments When a system is anticipated to be out of service eight hours or more due to a planned impairment, the Seattle Fire Department shall be notified at least

five business days in advance, with longer notice being preferable to allow the Fire Department to assess risks. We recommend that you notify the Seattle Fire Department immediately upon beginning to plan for the impairment.

Emergency Impairments When a system is anticipated to be out of service for eight hours or more due to an emergency impairment, the Seattle Fire Department shall be notified immediately.

Notification Process The notification process has three mandatory steps:

1. Call the systems impairment hotline the Seattle Fire Department at 206-233-7219 and provide the following information:

   ✓Caller name, company name and phone number.
   ✓Name and address of the building affected.
   ✓Name of the building owner, or occupant and phone number, if known.
   ✓Nature of the impairment; specifically which system has problem (fire alarm, sprinkler, etc.) including details on system locations or zones affected.
   ✓Estimated time before it will be restored to service, if known.
   ✓Mitigation measures implemented, if known.

2. E-mail a copy of the SFD Impaired System Report Form (available here: http://www.seattle.gov/fire/business-services/systems-testing#impairedsystems) to SFD_Impairments@seattle.gov to provide written notification to the Seattle Fire Department.

3. In addition, standard documentation/reporting requirements related to system status remains in effect, as enumerated in Administrative Rule 9.02 Inspection, Testing, Maintenance and Reporting Requirements for Fire Protection Systems and Emergency Responder Radio Amplification Systems, which requires that the system test report shall be submitted to the Seattle Fire Department's third party vendor www.thecomplianceengine.com **before the end of the day of the test.**

Section 6.2 OTHER NOTIFICATIONS REQUIRED BY SEATTLE FIRE CODE

For impairments of any length, including impairments of less than eight hours, the following parties shall be notified:

✓Tenants and supervisors in the affected areas
✓the building owner/manager

In addition to notifying the Seattle Fire Department when impairments are anticipated to last eight or more hours, SFC section 901.7.4 and SFC section 901.7.5 require notification of the following parties for impairments of any duration:

✓the insurance carrier
✓the alarm company

The notification should include information about the extent and expected duration of the system impairment(s) and the areas of the building involved.

Section 7. FIRE WATCH

A dedicated fire watch, or other approved mitigation, is required for impairments to fire protection systems of any length, unless exempted by this rule or as determined by the fire code official. The owner, agent, or lessee shall provide one or more qualified persons, as required and approved, to be on duty as a dedicated fire watch. Fire watch personnel shall remain on duty during the times affected buildings are open for general occupancy, open to the public, or as otherwise required by the fire code official.

A dedicated fire watch shall continuously patrol all areas of the building where the fire protection system is impaired or as otherwise required by the fire code official, or the entire building if a fire alarm system is impaired.

Dedicated fire watch personnel shall be provided with an immediately accessible means of notifying the Fire Department (e.g. cellular telephone, land-line telephone, two-way radio to continuously staffed position).

A fire watch log shall be maintained at the facility and must be available for viewing by representatives of the Seattle Fire Department at all times during the fire watch. The log shall contain the following information:

- Address of the facility under fire watch.
- Description of fire watch duties (e.g. patrol route, systems to check, hazards to check).
- Location of telephone or cellular phone to notify Seattle Fire Department.
- Running list of persons conducting patrol, including name, starting and ending time of patrol shift, and signature.
- Record of any communication to the Seattle Fire Department and/or central station monitoring company.

During periods when fire protection systems are impaired in buildings of the following occupancy types, a dedicated fire watch is required:

Table 7.1 Dedicated Fire Watch Required At All Times In Following Occupancy Types When Fire Protection Systems Are Impaired

Group/Division	Description
A	Assembly occupancies with posted occupant load is 50 or greater
R-1, R-2, and R-3	Hotels, apartments and congregate residences
I	Nursing homes, hospitals, day treatment centers, health care facilities providing care which render patients incapable of self-preservation, jails.
E	Schools through the 12th grade, preschools, day care centers with six or more children

Note: Fire watch patrols are limited to the building common areas and building facilities such as laundry, maintenance, and storage areas in residential (R) occupancies. Fire watch patrols are not expected to enter individual residential units.

In a mixed-use occupancy, if any portion of the affected building contains an occupied Group A, R-1, R-2, E or, I occupancy, dedicated fire watch requirements apply.

Example: A four story R-2 occupancy is located above a retail store (M occupancy). In the process of conducting a tenant improvement to the M occupancy, the fire alarm in the retail store is placed out-of-service. If a fire occurred in the M occupancy, residents in the R-2 occupancy would not receive notification of the fire. Therefore, a dedicated fire watch is required.

Building occupants performing their regular duties, including construction workers, are acceptable in lieu of a dedicated fire watch in occupancy types listed in the table below, **after the building occupants have been notified of the impairment and of their responsibility to call 9-1-1 in case of fire.** These conditions are required during the times affected buildings are open for general occupancy, open to the public, or as otherwise required by the fire code official.

Table 7.2 Fire Watch Required Whenever Buildings of the Following Occupancy Type Are Occupied (Dedicated Personnel or Personnel Also Performing Regular Duties)

Group/Division	Description
B	Offices Eating and drinking establishments with an occupant load less than 50
M	Stores accessible to the public
H	Occupancies containing hazardous materials
F-1,F-2,S-1,S-2,U	Moderate hazard factory, industrial, storage & miscellaneous occupancies

If you have questions regarding fire watch in a mixed-use occupancy, during business hours please contact the Seattle Marshal's Office Engineering Captain at 206-386-1449 or Systems Testing Captain at 206-233-7259.

FIRE WATCH LOG – EXAMPLE

DESCRIPTION OF BUILDING: Crestwell Arms Apartment Building – 4 story building
ADDRESS OF BUILDING: 12345 Main Street, Seattle WA
REASON FOR FIRE WATCH: Fire Alarm – Impaired throughout the building
NOTIFICATION TO SFD: Fire Department notified 4-23-2018 by email and hotline, see section 6 of this document.
Patrol Route: Start in the basement, check the elevator machinery room, laundry room, storage areas, proceed upward to floors 1 through 4 checking all common areas.
One time checks: Water pressure in sprinkler system

Monday, April 23, 2018

Date	Name	Fire watch Shift Start	Fire watch Shift End	Comments/ Assignment	Signature
4-23-18	Jane Doe	11:42 pm	2:00 am		
4-24-18	Jack Smith	2:00 am	6:00 am		
4-24-18	Ted Hall	6:00 am	10:00 am		
4-24-18	Jack Smith	10:00 am	10:30 am	Repair completed at 10:30 am by ABC Alarm Company. Fire Department notified.	

Section 8. RESTORING SYSTEMS TO SERVICE

When an impaired system is restored to normal working order, the impairment coordinator shall verify that necessary inspections and tests have been made and notification has been provided to the insurance carrier, the alarm company, the building owner/manager, and/or any supervisors or tenants in the affected areas.

When impairments last more than eight hours, the Fire Department shall also be notified of the impairment, and when the impaired system has been restored to normal working order, SFD shall be notified by sending an email message to SFD_Impairments@seattle.gov. Include building address, system type, and date/time system was restored to service. In addition, the red tag shall be removed and documentation of the corrected deficiencies shall be uploaded by the certified technician performing the maintenance to the Fire Department via the department's third party vendor's website, www.thecomplianceengine.com.

Occasionally a system impairment is significant enough that the system must be fully re-tested once it has been restored to service. If you are unsure whether the repairs performed on your system require a full re-test, please contact the Fire Prevention Division Systems Testing Team at SFD_FMO_SystemsTesting@seattle.gov or 206-386-1340.