Out of service fire protection systems

About
The 2015 Minnesota State Fire Code (MSFC) contains provisions dealing with situations, preplanned or otherwise, in which a required fire protection system (e.g. fire alarm or fire sprinkler system) is out of service. Under such circumstances, the code specifies that either the building be evacuated or an approved fire watch be provided. Time is of the essence when a facility is affected by a fire or other emergency. When a required fire protection system is out of service, valuable early warning and fire suppression capabilities are severely compromised. A properly trained fire watch, coupled with an extra vigilant staff, can make a significant difference in determining whether or not a facility can continue to be occupied during such an impairment.

Notifications
MSFC 901.7 says when a required fire protection system is out of service for any length of time, the local fire code official (i.e. fire chief or fire marshal) must be notified immediately and, where required by the fire code official, the building must either be evacuated or an approved fire watch provided.

Notification of the fire code official needs to include information about implementation of a fire watch (or building evacuation, if that proves necessary), what's being done to correct the condition and when the system is expected to be restored to proper operation. Notification should also be made to the facility's insurance carrier in accordance with that carrier's requirements. For preplanned impairments, the facility's insurance carrier should be notified of the extent and expected duration of the impairment. In addition, tags should be placed at each fire department connection, sprinkler system control valve, fire alarm control unit and fire alarm annunciator indicating that the system, or part thereof, has been removed from service.

Additional safety measures
The following safety measures should be implemented immediately after a required fire protection system is out of service and should remain in place until the system has been restored:

- Notify all staff and the facility's fire alarm monitoring company that the system is out of service;
- Prohibit all smoking and work involving cutting or welding on the premises (unless such work has been preauthorized and is taking place in an area that is properly fire separated from the remainder of the facility);
- If the building’s fire alarm sounding devices are inoperative, devise a method to notify all staff in case of emergency (bells, whistles, bullhorns or similar devices could serve this purpose); and
- If the building’s fire alarm system is out of service:
  - Close all smoke and fire doors, and
  - Unlock all locked exit doors to allow for immediate egress in case of emergency.
Fire watch personnel
Fire watch duties may be performed by facility staff, or an outside agency (e.g. fire department, security company, etc.) can be hired to perform the service. In any case, persons serving as a fire watch may have no other duties assigned to them while the affected fire protection system is out of service.

Fire watch personnel should be specially trained in identifying and controlling fire hazards, detecting early signs of unwanted fire, the use of portable fire extinguishers, and in occupant and fire department notification techniques.

Fire watch duties
At a minimum, fire watch personnel should:

- Be provided with at least one approved means for notification of the fire department (e.g. 2-way radio or cell phone).
- Perform continuous tours of the building such that each portion of the building affected by the impairment is checked at not less than 30-minute intervals (more than one person may be needed to accomplish this). These tours need to be documented in a log. In addition to watching for and promptly reporting any incidents of fire, visible smoke or strong smell of smoke or other unwanted odors, the fire watch should also ensure while on tour that:
  - Portable fire extinguishers are in place, unobstructed and in proper operating condition;
  - Corridors and exits are free and clear of storage and all other obstructions;
  - Exit and stairwell doors are clear and fully operational;
  - EXIT signs are visible and properly illuminated;
  - Fire doors, smoke barrier doors and hazardous area doors are kept closed and latched (i.e. not tied, wedged or blocked open in any fashion);
  - Electrical hazards are promptly reported and remedied;
  - No smoking or work involving cutting or welding or the use of flammable/combustible liquids is taking place (unless such work has been preauthorized and is taking place in an area that is properly fire separated from the remainder of the facility); and
  - Trash and other unnecessary accumulations of combustibles are promptly removed from the building.

Remember that it’s important that fire watch personnel be given reasonable periodic rest breaks.

System(s) restored to service
Facility staff, the fire code official, and the facility monitoring company and insurance carrier should be promptly notified when the affected fire protection systems have been restored to proper operation. In addition, any tags placed on fire department connections, fire sprinkler system control valves, fire alarm control units and/or fire alarm annunciator panels should be promptly removed.
Fire watch policy
A sample fire watch policy has been developed to assist facilities in formulating their own policies. It is important to remember that each facility is unique and therefore is very difficult to develop a universal fire watch policy. The sample policy is, therefore, merely intended to serve as a guide that should be adapted as appropriate to the individual characteristics of your facility.

Fire watch log
Almost as important as conducting fire watch tours is documenting the fact that they occurred. A sample fire watch log has been developed to serve as a guide that you can use in creating your own log. A completed log is provided to serve as an example of how the log is expected to be filled out. It’s important that at least two people in your facility know where your fire watch logs are kept to increase the likelihood that they can be readily provided if requested during an inspection. It is recommended that these logs be maintained for at least three years.

Questions
Any questions related to this issue should be directed to the code specialist with the SFMD at 651-201-7221 or you can e-mail questions to fire.code@state.mn.us.