

Fire Protection System Impairments

Supervision of impairments to fire protection systems is an essential part of sound loss control management.

What is a System Impairment?

When automatic fire detection, suppression, or alarm systems, including sprinkler systems, are partially or completely out of service, an impairment exists. Your property may not be adequately protected. There is an increased danger to life and property.

Impairments Add to Loss Severity

Most failures of fire protection systems are as a result of an impairment. The largest single cause of impairments is a closed valve!

Impairments Occur in Three Ways

1. Preplanned impairment: Systems are turned off for routine maintenance, repair or other planned activity.
2. Emergency impairment: Protection is impaired due to sprinkler leakage, interrupted water supply, or other failure.
3. Unknown impairment: Protection is turned off mistakenly, or on purpose without authorization of building management. This may include systems that are not properly restored after repair.

How to Control Impairments

The sage advice “an ounce of prevention is worth a pound of cure” has never been more appropriate. Routine maintenance, inspection, and testing should be conducted on all protection systems. The frequency for this varies by type of equipment (example: Sprinkler valves should be inspected weekly if not locked or monitored by an alarm). The services of a qualified outside contractor should be obtained if required.

Supervision

Management should appoint a responsible employee to supervise fire protection systems and to be in charge in impairment situations. Ideally this person should be knowledgeable in this area. Written authorization from the person in charge should be required before any work is performed on systems.

Planning

1. Notify the fire department so that they may take proper actions in the event of a fire.
2. Reduce Hazards. Shut down hazardous processes. Prohibit smoking.
3. Keep as much protection in service as possible. Consider temporary connections, section control valves to isolate main breaks, or hose lines to

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- supply water to impaired systems.
4. Notify management of the affected area. Personnel should increase their vigilance for fire hazards.
 5. Reduce the time that systems are impaired. Have all personnel and materials ready before protection is shut off. Restore protection during idle periods.
 6. In emergencies, work continuously to restore systems. Maintain 24-hour contractor phone number.
 7. Schedule work when hazard is least (nights, weekends, etc.).
 8. Provide a fire watch. Continuously observe the unprotected area.
 9. Tag the shut valve or device. Post a highly visible sign or tag on the valve or switch controlling the impaired system. This will serve as a reminder to restore the system when work is complete.
 10. Notify alarm company and/or guard supervisory service.
 11. When systems are restored conduct a functional test of the system. Notify all parties previously contacted.
 12. For new construction, protection, detection, and alarm systems should be placed in service as work progresses.

The loss prevention information and advice presented in this brochure are intended only to advise our insureds and their managers of a variety of methods and strategies based on generally accepted safe practices, for controlling potentially loss producing situations commonly occurring in business premises and/or operations. They are not intended to warrant that all potential hazards or conditions have been evaluated or can be controlled. They are not intended as an offer to write insurance coverage for such conditions or exposures, or to simply that Great American Insurance Company will write such coverage. The liability of Great American Insurance Company is limited to the specific terms, limits and conditions of the insurance policies issued.
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