

SOUTH METRO FIRE DEPARTMENT

Fire Prevention Division

1650 Humboldt Avenue • West St. Paul MN 55118 Phone: (651) 552-4172 • FAX: (651) 552-4195 www.southmetrofire.com

Fire Alarm System Upgrade Policy

Scope: The guidelines in this administrative bulletin shall apply to existing buildings with existing fire alarm systems where a fire alarm control unit is proposed to be replaced.

Purpose: The purpose of developing comprehensive guidelines is to provide consistent methods to assist applicants in attaining rapid approval from all agencies involved in the review and inspection procedure.

Definitions:

- 1. **Emergency Replacement** When the fire alarm system is out of service due to a failure of a fire alarm control unit that cannot be repaired.
- 2. **Required Replacement** When expansion of the existing fire alarm system is required due to tenant improvement, elevator upgrade, etc., and the existing fire alarm system is not capable of supporting the required expansion.
- 3. **Voluntary Replacement** The replacement of an existing fire alarm control unit when the existing fire alarm system is still functioning as originally designed and installed (Not a required replacement).

Where Required:

The following is the policy of the South Metro Fire Department when a fire alarm control unit is proposed to be replaced:

- 1. If the new fire alarm control unit is listed to be compatible with all the existing initiation, notification and control devices, no further upgrade is required.
- 2. If the new fire alarm control unit is not listed to be compatible with all the existing initiation, notification and control devices, the fire alarm system must be brought up to the current edition of the Minnesota State Fire Code and shall meet the requirements of the current edition of NFPA 72 referenced in the Minnesota State Fire Code.

Intent:

- 1. Existing fire alarm control units that are failing and cannot be repaired, due to obsolescence, catastrophic failure, limited capacity, etc., must be replaced immediately to provide the building with a functional fire alarm system.
- 2. Where a required fire alarm system is out of service, a fire watch shall be required in accordance with Minnesota State Fire Code Section 901.7. Fire watch personnel and procedures shall be approved by the Fire Marshal and shall be in accordance with the aforementioned section.
- 3. Existing fire alarm systems which do not meet current building and fire codes, and are functioning as originally designed and installed, are not required to be upgraded to meet current codes. However, if these systems are out of service due to a fire alarm control unit failure, and the new fire alarm control unit is not listed to be compatible with the existing devices, the existing fire alarm system no longer functions as originally designed and installed, requiring a code compliant fire alarm system be installed. Since a new upgraded fire alarm system is now required, the South Metro Fire Department policy requires the new fire alarm system to meet current code requirements and properly notify all building occupants in the event of an emergency.

Additional information:

- 1. For a fire alarm control unit emergency replacement permit application, only the control unit is permitted to be replaced. Other FA system components such as initiating devices, notification appliances or control and monitor modules, are not permitted to be replaced nor to be added to the system.
- 2. When new additional smoke detectors are required to be installed for elevator recall purposes (upon elevator modernization work), they shall be connected to the existing fire alarm control unit if the building is provided with a required fire alarm system. These new detectors are required to be listed with the existing fire alarm control unit.
- 3. If the building is not required to be provided with a building fire alarm system, smoke detectors for elevator recall shall be connected to a dedicated fire alarm control unit.
- 4. If the building is provided with an existing required fire alarm system with a control unit that is not capable of supporting the additional elevator recall smoke detectors, unless otherwise approved, a dedicated function fire alarm control unit is not permitted to be installed and monitored by the existing fire alarm control unit. The existing fire alarm system must be brought up to the current edition of the Minnesota State Fire Code and shall meet the requirements of the current edition of NFPA 72 referenced in the Minnesota State Fire Code.
- 5. When the replacement of a fire alarm control unit requires that the entire system be upgraded to current code under the provisions outlined above, the building owner may be granted an extension of time to upgrade the system on a case by case basis. A written plan of action that is signed by the owner of the building and outlines the proposed timelines for installation (up to a maximum of three years depending on the size of the system) must be submitted to and approved by the South Metro Fire Department prior to issuance of the permit for fire alarm control unit replacement.