



DATE ISSUED: October 9, 2006

REPORT NO: 06-144

ATTENTION: Public Safety and Neighborhood Services Committee
Agenda of October 18, 2006

SUBJECT: Automatic Fire Sprinklers in Residential High-Rise Buildings

REQUESTED ACTION:

This is an informational item only. No action is required on the part of the Committee or the City Council.

SUMMARY:

The National Fire Protection Association reported 206 fires in high-rise structures in the United States between 1968 and 1988. These fires resulted in 540 deaths, including 20 firefighter fatalities. For the same period, available data indicated that no multiple fire deaths occurred in completely sprinklered buildings when they were properly maintained and operational. This data clearly indicates the need for an increased level of fire protection within high-rise buildings, which can only be achieved through the use of automatic fire sprinkler systems. Such systems have been required in high-rise buildings since 1979. When properly installed and maintained, they have provided a highly effective safeguard against the loss of lives and property from fire.

On 11/07/88 City Council passed Ordinance 17172 requiring the installation of automatic fire sprinklers in existing high-rise buildings. Exempted from these regulations were R-1 occupancies (apartments and condominiums), with the exception of hotels and motels. It should be noted that this ordinance affected approximately 35 buildings in the City of San Diego, but the R-1 exemption allowed approximately 17 additional high-rise's to remain un-sprinklered.

On 04/05/06, the San Diego County Grand Jury completed a report entitled "Fire Safety and Sprinklers." In its report, the Grand Jury found that between 07/01/75 and 06/30/91, the City of San Diego experienced 16 high-rise residential building fires in which no automatic sprinkler systems were installed, and resulted in three deaths. In addition, from 07/01/93 through 01/09/06, twenty-two fires occurred in non-sprinklered residential high-rise buildings, resulting in one death, three injuries and \$303,200 in property damage. To mitigate the threat to life and property, the Grand Jury recommended that existing high-rise buildings utilizing floors for human occupancy and located more than 75 feet above the lowest level of fire department access, be modified to require installation of automatic fire sprinkler systems.

In a letter to Presiding Judge Janis Sammartino dated 06/30/06, Mayor Sanders agreed with the Grand Jury's findings, and advised the judge that the recommendation to install automatic sprinkler systems in residential high-rise buildings had not yet been implemented, but would be in the near future. At that time, Mayor Sanders anticipated submitting a phased approach implementation plan to City Council in September 2006.

STAFF RECOMMENDATION:

As Fire-Rescue moves forward with the Mayor's implementation directive for a phased approach, staff is proposing that the 17 affected residential high-rise's be retrofitted pursuant to this ordinance, and be given one year to submit a work plan to the Fire Chief. This plan would consist of approved technical automatic fire sprinkler drawings and a timetable for complete installation within the established terms of the ordinance. To provide the greatest protection for these building's most vulnerable areas, staff would recommend that installation of the sprinkler systems be phased to cover the: 1) highest one-third gross square footage of the structure within the first time period; 2) middle one-third gross square footage of the structure within the second time period; and, 3) lower one-third gross square footage of the structure in the final time period.

An underground water storage tank would not be required. Also, it would be within the Fire Chief or Building Official's authority to make the following waiver or modification for facilitating these installations: a fire pump could be reduced and/or its installation eliminated, depending on the available water pressure to the building. It should also be noted that the existing fire alarm panel would need to be compatible with the new fire sprinkler system. If not, the owner/occupant would be required to upgrade or install a new fire alarm system.

Fire-Rescue staff believes the value of installing this proven fire protection feature far outweighs the cost and burden to high-rise building owners. Automatic extinguishing systems and fire detection aid in containing fires within their area of origin, thereby saving lives and property.

PREVIOUS COUNCIL and/or COMMITTEE ACTION:

City Council Ordinance 17172 was passed November 7, 1988.

COMMUNITY PARTICIPATION AND PUBLIC OUTREACH EFFORTS:

Met with Building Owners and Manager's Association (BOMA) to advise of possible ordinance.

KEY STAKEHOLDERS AND PROJECTED IMPACTS:

Stakeholders are owners, managers, and residents of the 17 residential high-rise buildings to be retro-fitted with automatic fire sprinkler systems. Cost of retro-fit and construction activity will impacts these stakeholders.

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