Boston Fire Department Fire Prevention Division Chemist Office 115 Southampton Street Boston, Ma 02118 617-343-3527

FIRE COMMISSIONER RODERICK J. FRASER, JR. FIRE MARSHAL DEPUTY FIRE CHIEF PETER A. LAIZZA

## REGULATION OF MATTRESSES PORTABLE MATTRESSES AND MATTRESS PADS APRIL 3, 1996

This regulation is issued by the Fire Marshal of the City of Boston under the authority of the Boston Fire Prevention Code.

## **REGULATORY ACTION**

On the basis of recent fires involving furnishings and mattresses in the healthcare industry and the wellknown combustion characteristics of polyurethane foam, the following regulatory action is hereby established:

- 1. The mattress regulation of 1982 is revised to expand the applicable occupancies to include hospitals and nursing homes in addition to hotel and college dormitories which have been regulated.
- 2. Mattresses and mattress/box spring assemblies when tested in accordance with BFD IX-11 Mattress Fire Test (April 15,1991) shall have limited rates of heat release, mass loss, and carbon monoxide generation as follows:
  - The peak rate of heat release shall not exceed 150 KW
  - The total heat released in the test shall not exceed 30 MJ for the first 10 minutes.
  - The total mass loss shall not exceed the mass of the bedding used for the test.
  - The maximum concentration of carbon monoxide in the room fire test shall not exceed 1,000 ppm for more than 5 minutes.
- 3. The current regulation of foam cellular mattress pads is modified to exclude from use in hospitals and nursing homes any twin size mattress pads of more than two (2) pounds total weight of foam unless protected by approved flame barrier materials or manufactured from approved flame retardant neoprene or urethane foams.
- 4. The regulation of portable mattresses promulgated in 1987 is continued in force.
- 5. Although bedding is not controlled by this regulation, full scale tests of mattresses and bedding have shown that acrylic blankets once ignited can produce substantial rates of heat release. Accordingly, caution should be exercised in the use of acrylic blankets.
- 6. The regulations of furnishings and interior finish promulgated for over ten years under the authority of the Fire Prevention are reiterated for hospitals, nursing homes, hotels and college dormitories.

For Information Call 617-343-3527