

CITY OF ALBANY
CITY COUNCIL AGENDA
STAFF REPORT

Agenda Date: 7/6/2010
Reviewed by: BP

SUBJECT: Ordinance No. 2010-06 Amendments to the Fire Prevention Chapter of the
Municipal Code related to Smoke alarms and Smoke Detectors

REPORT BY: Fire Chief Marc McGinn
Planning and Building Manager Jeff Bond

STAFF RECOMMENDATION

Adopt Ordinance No. 2010-06 Amendments to the Fire Prevention Chapter of the Municipal Code related to Smoke alarms and Smoke Detectors.

BACKGROUND

Currently, California building code and fire codes require smoke alarms in new construction and renovated structures. In addition, it is the City's practice to confirm the installation and function of smoke alarms as a part of the issuance of building permits and associated inspections. Currently any alarm approved by the Underwriters Laboratory (UL) and the National Fire Protection Association (NFPA) is allowed.

DISCUSSION

There are two types of smoke alarm technologies commonly available – “ionization” and “photoelectric.” Both types are approved by UL and NFPA. Ionization technology is about 50% less expensive than photoelectric, and thus have become the smoke alarm of choice.

Ionization technology uses a small amount of radioactive material, Americium 241, to detect invisible particle smoke. One of the problems with ionization technology is that it can over-react to small particles of invisible smoke that is prevalent from cooking. As a result, it is estimated that one quarter to one third of all ionization smoke alarms are disconnected by residents. The disconnection of smoke alarms (because of nuisance alarms) is responsible for at least 50% of the fire deaths in America, or 1,500 deaths per year. Paradoxically, the ionization technology is much slower in detecting smoldering smoke that is responsible for killing most people.

Photoelectric technology on the other hand, uses an environmentally friendly light beam to respond more quickly to larger smoke particles. This light beam allows small particles of invisible smoke to pass through its chamber without triggering a false or nuisance alarm. The photoelectric smoke alarm is superior in detecting the lethal smoke from smoldering fires, and rarely triggers a false alarm that leads to disabling the alarm.

The proposed ordinance would establish regulations that would require the use of photoelectric smoke alarms and smoke detectors in the City of Albany. The installation would be required when structures are expanded, when renovation construction exceeds an established threshold, or when a property is sold or when a home business is established. It also would require photoelectric systems

in multi-family apartments. Staff proposes that a construction value of \$5,000 be established as the threshold to trigger the upgrade requirement. The cost differential for property owners is approximately \$10 per alarm, with ionization alarms costing approximately \$10 each and photoelectric alarms costing approximately \$20 each.

As part of the implementation of the ordinance, staff will prepare documentation required by the California Building Standards Commission for local amendments to construction standards.

SUSTAINABILITY IMPACT

The protection of public safety and upgrade of existing buildings in a cost effective way is consistent with the City's green building practices.

FINANCIAL IMPACT

The proposed ordinance would modestly expand the scope of inspection responsibilities for the City Fire Marshal, and Community Development Department building inspector and permit technician.

Attachments

Proposed Ordinance 2010-06