ORDINANCE NO. 2010-06

AN ORDINANCE OF THE ALBANY CITY COUNCIL AMENDING
CHAPTER XI, FIRE PREVENTION
OF THE ALBANY MUNICIPAL CODE
TO INCLUDE REGULATIONS FOR
SMOKE ALARMS AND SMOKE DETECTORS

WHEREAS, the City of Albany has adopted a Fire Prevention Regulations in
the form of Chapter XI of the Albany Municipal Code; and

WHEREAS, smoke alarms and smoke detectors serve a vital role in
preventing property damage, injury or death caused by structure fires;

WHEREAS, there are two types of smoke detection technologies commonly
used in smoke detectors;

WHEREAS, “ionization” detectors uses a very small amount of radioactive
material to detect invisible particles generated by flame;

WHEREAS, “photoelectric” detectors uses a light-source to detect the
presence of smoke;

WHEREAS, the vast majority of smoke detectors installed in residences in
Albany use the ionization technology;

WHEREAS, ionization detectors generate more nuisance alarms that result in
occupants disabling smoke detectors;

WHEREAS, studies have concluded that ionization detectors respond slowly
to smoldering fires that generate heavy smoke but initially little flame; and

WHEREAS, proposed regulations are necessary because of local climatic,
geological or topographical conditions, including the fact that Albany is a high-
density community with older structures;

WHEREAS, on July 6, 2010 the Albany City Council held a duly noticed
public hearing on the draft ordinance to amend Chapter XI regarding Smoke Alarms
and Smoke Detectors.

NOW, THEREFORE, THE ALBANY CITY COUNCIL DOES HEREBY
ORDAIN AS FOLLOWS:

Section 1: Purpose
Chapter XI of the Albany Municipal Code is hereby amended to include a new Subsection 11-4 titled “Smoke Alarms and Smoke Detectors” to consist of the following text:

“Smoke alarms and smoke detectors serve a vital role in preventing property damage, injury or death caused by structure fires. The purpose of these regulations is to adopt regulations that require smoke alarms and smoke detectors that generate fewer nuisance alarms and react more quickly to smoldering fires that generate heavy smoke but initially little flame.”

Section 2: Definitions

Chapter XI of the Albany Municipal Code, Section 11-4.1 titled “Definitions” is hereby amended to include the following text:

a. Smoke alarm – a self-contained battery operated device that both detects the presence of smoke and produces an audible and/or visual alarm.

b. Smoke detector – a device connected to the building electrical system and other building alarms that is designed to detect the presence of smoke and produce an audible and/or visible alarm.

c. Ionization type smoke detector or alarm - a device that uses a small amount of radioactive material to detect invisible particles generated by flame.

d. Photoelectric-only type smoke detector or alarm - a device that uses a light-source to detect the presence of smoke.

e. Dual type smoke detector or alarm - a device that uses both photoelectric and ionization methods.

f. Required location – Locations for smoke detectors or smoke alarms that are required by California Fire Code, the California Building Code, or other codes or standards adopted by the City of Albany.

Section 3: Exemptions

Chapter XI of the Albany Municipal Code is hereby amended to include a new Subsection 11-4.2 titled “Exemptions” to consist of the following text:

The requirements of this section shall not apply to projects that have an active building permit application on or before the effective date of the ordinance.
Section 4: Smoke Alarm/Smoke Detector Requirement

Chapter XI of the Albany Municipal Code is hereby amended to include a new Subsection 11-4.3 titled “Smoke Alarm Smoke Detector Requirement” to consist of the following text:

a. Any construction that is required to install an additional smoke alarm or smoke detector under the California Fire Code, the California Building Code, or other codes or standards adopted by the City of Albany, shall be required to upgrade all required devices in the building to photoelectric-only type devices in all required locations.

b. Any renovation of existing habitable space that exceeds a threshold established by the City Council shall be required to upgrade all required smoke alarms or smoke detectors in the building to photoelectric-only type devices in all required locations.

c. Prior to the sale of any real property, a property owner shall upgrade the smoke alarm/smoke detector system to photoelectric-only type devices.

d. Prior to the issuance of a home occupation permit, a property owner shall upgrade the smoke alarm/smoke detector system to photoelectric-only type devices.

e. Multi-family residential structures containing three housing units or more are required to maintain photoelectric-only smoke alarm/smoke detector system.

f. Property owners are responsible for testing the effectiveness of existing smoke alarms or smoke detectors per manufacturer’s instructions. Required smoke alarms or smoke detectors that are determined to be ineffective shall be replaced with photoelectric-only type smoke devices.

g. All required smoke alarms and smoke detectors shall be replaced upon the expiration of the warranty period of the installed device. Replacement devices must be photoelectric-only type devices.

h. Dual type smoke alarms or smoke detectors are prohibited in required locations.

i. Installed devices must comply with requirements of UL 217, NFPA 72, and manufacturer instructions.

j. Nothing in this ordinance shall prohibit or discourage the additional use of ionization or dual type alarms in additional locations.
Section 5. Implementation Procedures

Chapter XI of the Albany Municipal Code is hereby amended to include a new Subsection 11-4.4 titled “Implementation Procedures” to consist of the following text:

The Fire Chief may establish policies and procedures for public education, review of permit applications, and performance of inspections associated with implementation of this section, including issuance of a certificate of compliance prior to the sale of any property certifying that the smoke alarm/smoke detector system has been upgraded to photoelectric-only type smoke devices.

Section 6. Hardship or Infeasibility Exemption.

Chapter XI of the Albany Municipal Code is hereby amended to include a new Subsection 11-4.5 titled “Hardship or Infeasibility Exemption” to consist of the following text:

a. Exemption. If an Applicant for a non-exempt project believes that circumstances exist that make it a hardship or infeasible to meet the requirements of this Section, they may apply for an exemption or reduction in requirements as set forth below. In applying for an exemption, the burden is on the Applicant to show hardship or infeasibility.

b. Application. If an Applicant for a non-exempt project believes such circumstances exist, the Applicant may apply to the Fire Chief for an exemption at the time of application submittal.

c. Granting of Exemption: The granting of an Exemption shall be made by the Fire Chief. If an exemption is granted, the Applicant shall be required to comply with this Chapter in all other respects.

d. Denial of Exemption. If the Fire chief determines that it is possible for the Applicant to fully meet the requirements of this Chapter, they shall so notify the Applicant in writing.

Section 7. Severability.

If any section, subsection, sentence, clause or phrase of this ordinance is for any reason held to be invalid, such decision shall not affect the validity of the remaining portions of the ordinance, and each section, subsection, sentence, clause or phrase thereof, irrespective of the fact that any one or more sections, subsections, sentences, clauses or phrases be declared invalid.
Section 8: Publication and Effective Date.

This ordinance shall be posted at three public places within the City of Albany and shall become effective thirty days after the date of its posting.

[Signature]
Joanne Wile
Mayor
ATTACHMENT 1

Findings Relating to Local Fire and Building Code Modification

The following sections depict specific local conditions that are justification for modification in the local fire and building codes. The local conditions that directly affect such modifications are climatic, geographic and topographical. These conditions are described below.

Local Conditions:

Local conditions will have a tremendous impact on the ability of existing codes to adequately prevent loss of life and property. In some cases, as in the City of Albany, there are existing factors that require special attention to accomplish more effective prevention of: 1) major fire loss, 2) major earthquake damage, 3) loss of life and property damage in general. In order to provide for these conditions it is necessary to modify and strengthen the existing State Fire and Building Standards Code.

The City of Albany has a population of approximately 17,000 with a relatively high urban density, located within a bounded area of about 1 square mile. Although a small geographic area, the City is exposed to a number of natural hazards, as described in the next sections.

1. CLIMATIC:

A. Precipitation: Precipitation within the city varies as it does throughout the East Bay. Using the Alameda County numbers as a guide, the city receives an average of 20 inches per year. The majority of the rainfall occurs during the months of November through April. Albany has experienced both drought and flooding conditions over the years, and must prepare for both extremes.

B. Relative Humidity: Humidity ranges from 60% during the day to 80% at night. During summer and early fall months, it may drop to 20% or lower.

C. Temperature: Albany temperatures are moderated by the San Francisco Bay and fog conditions. Variation between day and night temperatures can be significant. Average lows are in the low 50's and average highs are in the high 60's. During some periods in the summer and early fall, temperatures can climb into the 90's.

D. Wind: Prevailing winds are from the southwest, although winds are experienced from almost every direction at some point in the year. Average wind speeds are from 5 to 20 mph, although occasionally there may be gusts of up to 30 mph or greater. While the city experiences the cooling effects of the fog and the Bay, there are periods when the city experiences "Diablo" type winds. Diablo winds come from the northeast and are comparable to the "Santa Ana" winds of the LA Basin area of the State.

E. Summary: These climatic conditions have a direct impact on the intensity, size, and
acceleration of fires in the community. Periods in which there is little rainfall, low humidity, and high winds create conditions that are conducive to conflagration-type fires, particularly when considerations are made for the high-density nature of housing, as well as the existence of some wildland interface, as described in the next section.

2. GEOGRAPHIC AND TOPOGRAPHIC:

A. Geographic Location: The City of Albany is the northern-most city of Alameda County. It is bounded by Berkeley on the south and east, El Cerrito and Richmond to the north. The Albany/El Cerrito/Richmond border is also the county line separating Alameda County and Contra Costa County. The runs the Hayward Fault is between one-quarter and one-half mile to the east of the city boundary. USGS scenarios have predicted the Northern segment of this fault system can produce earthquakes as large as magnitude 7.5, and currently this segment has the highest probability in the Bay Area of producing the next large earthquake. Albany periodically experiences small to moderate earthquakes, with epicenters all around the bay area.

B. Topography: The city has a unique topographic feature known as "Albany Hill," which rises prominently along the East Bay Shoreline. A large section of the hill has been dedicated as an open space preserve with heavy vegetation. Other sections of the hill have high-density housing, including several high-rises on the northwestern face of the Hill. Other areas have narrow winding roads that make emergency response access difficult.

C. Transportation Corridors and Emergency Access: Albany has Interstates 80 and 580 within its boundaries, along with 2 rail-lines and 2 large diameter underground fuel pipelines from the Chevron Refinery. San Pablo Avenue (SR 123) bisects the city running north/south, and the BART system also bisects the city, with a stop just across the Albany border to the north in El Cerrito. With expected damage from an earthquake, access to the city may be difficult, which will directly impact any assistance that is requested from the county or other emergency mutual aid agreements.

CONCLUSION:

The local climatic, geographical and topographical conditions described above must be taken into consideration when examining the adequacy of existing fire and building code standards. From the information provided above, it is clear there are conditions that will potentially create higher risks for property and life, in terms of fire prevention and suppression efforts, the frequency, spread, acceleration and intensity of fires involving either structures or open space. These conditions provide the necessary justification for changing or otherwise strengthening the fire and building codes as they relate to improving life safety and the reduction of property damage with regard to fire prevention.
STATE OF CALIFORNIA
COUNTY OF ALAMEDA ss
CITY OF ALBANY

I, JACQUELINE L. BUCHOLZ, City Clerk of the City of Albany, California, do hereby certify that the whole number of members of the City Council of said City of Albany is five and that the foregoing is a true and correct copy of Ordinance No. 2010-06 which was passed and adopted by the said City Council, approved and signed by the Mayor of said City, and attested by the City Clerk of said City, all at a regular meeting of the said Council on the ___19th___ day of July ___2010___ A.D., and that the same was so passed and adopted by the following votes and duly published or posted according to State law.

AYES: Council Members Atkinson, Lieber, Thomsen, Vice-Mayor Javandel & Mayor Wile

NOES: None

ABSENT: None

In witness whereof, I have hereunto set my hand and affixed the official seal of the City of Albany, this ___20th___ day of July __________, 2010.

JACQUELINE L. BUCHOLZ, CMC
CITY CLERK