

BUILDING STANDARDS COMMISSION

2525 Natomas Park Drive, Suite 130
Sacramento, California 95833-2936
(916) 263-0916 FAX (916) 263-0959



February 15, 2011

Stephan Kiefer, Chief Building Official
City of Livermore
1052 South Livermore Ave.
Livermore, CA 94550

Dear Mr. Kiefer:

This is to acknowledge receipt of the City of Livermore submittal pertaining to Ordinance No. 1925 with findings on December 1, 2010. As the law states, no local modification or change to the California Building Standards Code (Code) shall become effective or operative for any purpose until the finding and the modification or change have been filed with the California Building Standards Commission.

It appears that your submittal includes amendments to energy efficiency standards. Local amendments exceeding energy efficiency standards are not enforceable until a finding is made by the California Energy Commission pursuant to Public Resources Code Section 25402.1(h)(2) and Title 24, Part 1, Section 10-106. A copy of this letter is being sent to the Energy Commission for their information. The remainder of your submittal has been filed in our office as of the date noted above.

As a reminder, local modifications are specific to a particular edition of the Code. They must be readopted and filed with the Building Standards Commission in order to become effective when the next triennial edition of the Code is published. In addition, should you receive Fire Protection District ordinances for ratification, it is required to submit the ratified ordinances to the Department of Housing and Community Development [H&SC Section 13869.7(c)], attention State Housing Law Program Manager, rather than the Building Standards Commission.

This letter attests only to the filing of these local modifications with the Building Standards Commission, which is not authorized by law to determine the merit of the filing. The filing of the energy efficiency standards portion of this ordinance will not be complete without the approval of the California Energy Commission. If you have any questions or need any further information, you may contact me at (916) 263-0916.

Sincerely,

A handwritten signature in black ink, appearing to read "Enrique M. Rodriguez", is written over a horizontal line.

Enrique M. Rodriguez
Associate Construction Analyst

cc: Joe Loyer, California Energy Commission
Chron
Local Filings



December 1, 2010

Building Standards Commission
2525 Natomas Park Drive, Suite 130
Sacramento, CA 95833

RE: FILING OF LOCAL AMENDMENTS

On behalf of the City of Livermore, and in accordance with Health & Safety Code Section 17958.7(a), I am submitting a copy of Livermore Ordinance 1925. This ordinance contains local amendment findings for the city's newly-adopted Building, Fire, Electrical, Mechanical, Plumbing, Residential and Green Building Standards Codes.

If you have any questions, please feel free to contact me.

Sincerely,

A handwritten signature in black ink that reads "Stephan A. Kiefer".

Stephan Kiefer
Chief Building Official
(925) 960-4414
sakiefer@ci.livermore.ca.us

2010 DEC 01 AM 11:22
CITY OF LIVERMORE
BUILDING STANDARDS COMMISSION

ATTACHED: Ordinance 1925

City Hall

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IN THE CITY COUNCIL OF THE CITY OF LIVERMORE, CALIFORNIA

AN ORDINANCE REPEALING CHAPTERS, 15.02 (BUILDING CODE), 15.04 (PROPERTY MAINTENANCE CODE), 15.06 (FIRE CODE) 15.08 (ELECTRICAL CODE), 15.10 (MECHANICAL CODE), 15.12 (PLUMBING CODE), 15.14 (SWIMMING POOLS AND SPAS), 15.76 (COMMERCIAL AND RESIDENTIAL GREEN BUILDINGS); AND ADOPTING NEW CHAPTERS 15.02 (BUILDING CODE), 15.04 (PROPERTY MAINTENANCE CODE), 15.06 (FIRE CODE) 15.08 (ELECTRICAL CODE), 15.10 (MECHANICAL CODE), 15.12 (PLUMBING CODE) AND 15.14 (RESIDENTIAL CODE) AND 15.26 (GREEN BUILDING STANDARDS CODE) OF THE LIVERMORE MUNICIPAL CODE BY ADOPTING AND AMENDING THE 2009 EDITIONS OF THE INTERNATIONAL BUILDING, PROPERTY MAINTENANCE, FIRE, AND RESIDENTIAL CODES, 2009 EDITIONS OF THE UNIFORM MECHANICAL AND PLUMBING CODES, AND THE 2008 EDITION OF THE NATIONAL ELECTRICAL CODE, AND THE 2010 CALIFORNIA GREEN BUILDING STANDARDS CODE, AS AMENDED AND PUT FORTH IN THE CALIFORNIA BUILDING STANDARDS CODE.

Health and Safety Code Sections 17958 and 17958.5 allow the city, by ordinance, to make modifications or changes to the State Building Standards Code and other regulations adopted pursuant to Health and Safety Code Section 17922.

Health and Safety Code Section 17958.5 requires that such changes be determined to be reasonably necessary because of local climate, geographical, or topographical conditions.

Health and Safety Code Section 17958.7 requires that the city, before making any modifications or changes pursuant to Health and Safety Code Sections 17958 and 17958.5, make an express finding that each such modification or change is needed.

Such findings must be made available as a public record and a copy thereof with each such modification or change shall be filed with the California Building Standards Commission.

The City Council hereby determines that the proposed ordinance establishes requirements greater than those set forth in the 2010 edition of the California Building Standards Code, Title 24 of the California Code of Regulations, as adopted by the City of Livermore and set forth in chapters 15.02, 15.06, 15.12, 15.14, and 15.26 of the Livermore Municipal Code.

The amendments of the 2009 International Building Code, the 2009 International Fire Code, the 2009 Uniform Plumbing Code, the 2009 International Residential Code and the 2010 California Green Building Standards Code are necessary to serve the public interest by reducing the risk to life and property of the citizens of Livermore because of the following conditions:

1. Average yearly rainfall for the City is approximately 16"-18". This rainfall normally occurs from October to April. During the summer months, there is generally no

measurable precipitation. Temperatures for this dry period average from 80° to 100° Fahrenheit and are frequently accompanied by light to gusty westerly winds. The City is surrounded by 2300 acres of grasslands, which, in conjunction with the dry and windy climatic conditions, create a hazardous situation that has led to extensive grass and brush fires in recent years. With more development extending from the urban core into these grass covered areas, wind driven fires could lead to severe consequences, as has been the case on several occasions in similar areas of the State. Therefore, additions to the Livermore Building and Fire Codes are necessary.

2. Uniquely for a city of its size, the City is bisected by several topographical features, including two major creeks (Arroyo Las Positas and Arroyo Mocho), one railroad line (Union Pacific) and Interstate 580. As a result, the City is divided into discrete districts, such as the Springtown area north of the freeway and the residential area southwest of the Arroyo Mocho. Traffic between these districts is channeled into several major thoroughfares which must cross the creeks, railroad tracks and freeway by means of bridges, overpasses or underpasses. Heavy traffic congestion on the City's major streets already acts as a barrier to timely response for fire equipment and emergency services. In the event of an accident or other emergency at one of the key points of intersection between a road and creek or freeway, sections of the City could become isolated or response time could be sufficiently slowed so as to increase the risk of substantial injury or damage. For example, a routine accident at Holmes Street bridge or First Street overpass would greatly reduce response times to the northeastern or southwestern portions of the City. With the inability of emergency services to guarantee rapid response to various sections of the City, it is necessary to mitigate this problem by requiring additional built-in automatic fire protection systems, which will provide for early detection and initial fire control until the arrival of the firefighting equipment and other emergency services.

3. The Livermore Valley is subject to ground tremors from large seismic events on the San Andreas, Hayward and Calaveras faults, the major active faults in the San Francisco Bay Area. In the Valley itself, and adjacent to the City of Livermore, is the active Greenville Fault. The largest recorded earthquake in this immediate area occurred on the San Andreas Fault on October 17, 1989, a 7.1 magnitude. The area also had a sequence of earthquakes on the Greenville Fault in January and February of 1980; these earthquakes had a magnitude of from 5.5 to 5.9 on the Richter Scale. The Mount Diablo thrust fault is also a potentially active fault in the northern end of the valley. Several smaller faults in or around the City include the Las Positas Fault, the Tesla Fault and the Livermore Fault. The U.S. Geological Survey (USGS) has identified a 70% probability of a major earthquake occurring in the region within the next 30 years. Recent earthquake damage studies, including the 1994 Northridge earthquake, have indicated the lack of adequate design and detailing as a contributing factor to damages that reduced the protection of the life-safety of building occupants.

The potential for earthquakes influences fire protection planning in several ways. First, a major seismic event would create a city-wide demand on fire protection service which would be beyond the response capacity of the fire department. This potential

problem can be mitigated by requiring initial fire control through the installation of automatic fire protection systems.

Second, the City is adjacent to the Lawrence Livermore National Laboratory and Sandia Laboratory; two facilities engaged in nuclear, energy and scientific research. Because of the presence at both sites of radioactive and other hazardous materials, the Fire Department's energy in the wake of an earthquake would have to be focused on stabilizing any problems at these facilities.

This also supports the need for other structures in the City to be capable of at least initial fire suppression capacity. Finally, as demonstrated above, structural damage to the overpass or bridges connecting the City's various areas would seriously delay emergency vehicle access to these areas.

4. Livermore is located in the Livermore Valley, which has local topographic conditions effecting air quality. The Livermore Valley is a sheltered inland valley near the eastern border of the Bay Area. The western side of the valley is bordered by hills of 1,000 to 1,500 feet in elevation with two gaps connecting the valley to the central Bay area, the Hayward Pass and Niles Canyon. The eastern side of the valley is also bordered by hills of 1,000 to 1,500 feet in elevation with one major passage to the San Joaquin Valley at the Altamont Pass and several secondary passages. To the north lie the Black Hills and Mt. Diablo. A northwest to southeast channel connects the Diablo Valley to the Livermore Valley. The south side of the Livermore Valley is bordered by mountains approximately 3,000 to 3,500 feet high. Maximum summer temperatures in the Livermore Valley range from the high-80s to the low-90s, with extremes in the 100s. Winter maximum temperatures range from the high-50s to the low-60s, while minimum temperatures range from the mid-to-high 30s, with extremes in the high teens and low-20s.

The Livermore Valley does have violations of federal and state air quality standards based on these local topographic conditions, as well as local climatic conditions. These local topographic and climatic conditions, combined with the local environmental condition as forth in the Climate Change Element of the Livermore General Plan (2009), adopted herein by this reference, are the basis for the amendments to the California Building Standards Code. These conditions contribute to the Bay Area's status as a "nonattainment area" under the federal Clean Air Act for ozone and particulate matter and therefore, these air quality considerations require additional Green Building measures as applicable, to improve indoor air quality, reduce energy usage, and decrease greenhouse gas emissions.

5. Section 609.3 of the 2009 International Plumbing Code is amended to prohibit the installation of water distribution piping under concrete floor slabs within buildings, due to the corrosive nature (on this piping) of the soil within various areas of the city.

NOW, THEREFORE, for the above reasons, taken individually and cumulatively, the Council of the City of Livermore finds that there are building and fire hazards, as well as environmental considerations, peculiar to Livermore that require the increased fire protection, structural design and green building standards set forth in this Ordinance.

THE CITY COUNCIL OF THE CITY OF LIVERMORE DOES ORDAIN AS FOLLOWS:

Section 1. The following chapters of the Livermore Municipal Code are repealed: 15.02 (Building Code), 15.04 (Property Maintenance Code), 15.06 (Fire Code), 15.08 (Electrical Code), 15.10 (Mechanical Code), 15.12 (Plumbing Code), and 15.14 (Swimming Pools and Spas).

Section 2. A new Chapter 15.02 (Building Code), is added to read as set forth in Exhibit A, attached hereto.

Section 3. A new Chapter 15.04 (Property Maintenance Code), is added to read as set forth in Exhibit B, attached hereto.

Section 4. A new Chapter 15.06 (Fire Code), is added to read as set forth in Exhibit C, attached hereto.

Section 5. A new Chapter 15.08 (Electrical Code), is added to read as set forth in Exhibit D, attached hereto.

Section 6. A new Chapter 15.10 (Mechanical Code), is added to read as set forth in Exhibit E, attached hereto.

Section 7. A new Chapter 15.12 (Plumbing Code), is added to read as set forth in Exhibit F, attached hereto.

Section 8. A new Chapter 15.14 (Residential Code), is added to read as set forth in Exhibit G, attached hereto.

Section 9. Chapter 15.76 (Commercial and Residential Green Buildings) is hereby repealed and a new chapter 15.26 (Green Building Standards Code) is adopted to read as set forth in Exhibit H, attached hereto.

Section 10. Environmental. The passage of this ordinance is not a project according to the definition in the California Environmental Quality Act and, therefore, is not subject to the provisions requiring environmental review.

Section 11. Severability. If any part of this ordinance is declared invalid by a court, such invalidity shall not affect any of the remaining parts.

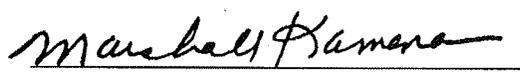
Section 12. Publication. This Ordinance or a comprehensive summary thereof shall be published once in a newspaper of general circulation in the City of Livermore within fifteen days after its adoption and shall take effect and be in force thirty days after its adoption.

The foregoing ordinance was introduced by the following vote at the meeting of the City Council of the City of Livermore held on November 8, 2010, by the following vote:

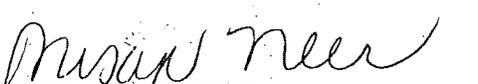
AYES: Councilmembers Leider, Marchand, Williams, Vice Mayor Horner, Mayor Kamena
NOES: None
ABSENT: None
ABSTAIN: None

The ordinance was adopted at the regular meeting of the City Council held on November 22, 2010, by the following vote:

AYES: Councilmember Marchand, Vice Mayor Horner, Mayor Kamena
NOES: None
ABSENT: Councilmembers Leider, Williams
ABSTAIN: None


MAYOR, CITY OF LIVERMORE

ATTEST & DATE:


CITY CLERK
SUSAN NEER

APPROVED AS TO FORM:


ASSISTANT CITY ATTORNEY
JASON ALCALA

DATE: November 23, 2010

EXHIBIT A

Chapter 15.02 BUILDING CODE

Sections:

- 15.02.010 Title for Citation.
- 15.02.020 Documents adopted by reference.
- 15.02.030 Amendments to International Building Code.
- 15.02.040 IBC Chapter 1, Division II, Title Block amended – Title block.
- 15.02.050 IBC Chapter 1, Division II, Section 101 amended – General.
- 15.02.060 IBC Chapter 1, Division II, Section 103 amended – Building and Safety.
- 15.02.070 IBC Chapter 1, Division II, Section 105.2 amended – Work exempt from permit.
- 15.02.080 IBC Chapter 1, Division II, Section 106 amended – Floor and Roof Design Loads.
- 15.02.090 IBC Chapter 1, Division II, Section 109 amended – Fees.
- 15.02.100 IBC Chapter 1, Division II, Section 110.3.5 amended – Lath and gypsum board inspections.
- 15.02.110 IBC Chapter 1, Division II, Section 110.3.7 amended – Energy efficiency inspections.
- 15.02.120 IBC Sections 903 and 904 amended – Fire Protection Systems.
- 15.02.130 IBC Section 1505.1 amended – Fire Classification, Roof coverings.
- 15.02.140 IBC Section 1613.8 amended – Modify ASCE 7 equation 12.8-16.
- 15.02.150 IBC Section 1704.4 amended – Concrete Construction, exception 1.
- 15.02.160 IBC Section 1908.1.8 ACI 318, Section 22.10 amended.
- 15.02.170 Residential building permits issuance limitations.

15.02.010 Title for citation.

This chapter shall be known as the "Building Code," may be cited as such and will be referred to in this chapter as "this code."

15.02.020 Documents adopted by reference.

The International Building Code, 2009 Edition, as amended and set forth in the California Building Standards Code, Title 24 of the California Code of Regulations, published by the International Code Council is hereby adopted, together with Appendices Chapters C and J, except as set forth in this chapter.

15.02.030 Amendments to International Building Code.

The International Building Code (IBC) adopted in this chapter by reference is amended by the following additions, deletions and amendments thereto as set forth in this chapter. Reference numbers herein are taken from the 2010 California Building Code.

EXHIBIT A

15.02.040 IBC Chapter 1, Division II amended – Title block.

IBC Chapter 1, Division II, Title block shall be amended to read:

CHAPTER 1, DIVISION II

LIVERMORE BUILDING CODE ADMINISTRATIVE PROVISIONS

15.02.050 IBC Chapter 1, Division II, Section 101 amended – General.

IBC Chapter 1, Division II, Section 101 is amended to read:

SECTION 101 GENERAL

101.1 Title. These regulations shall be known as the Livermore Building Code, hereinafter referred to as “this code.”

101.2 Scope.

The provisions of this code shall apply to the construction, alteration, movement, enlargement, replacement, repair, equipment, use and occupancy, location, maintenance, removal and demolition of every building or structure or any appurtenances connected or attached to such buildings or structures.

Exception: Detached one-and two-family dwellings and multiple single-family dwelling (townhouses) not more than three stories above grade plane in height with a separate means of egress and their accessory structures shall comply with the California Residential Code.

101.2.1 Appendices.

Provisions in the appendices shall not apply unless specifically adopted.

101.3 Intent.

The purpose of this code is to establish the minimum requirements to safeguard the public health, safety and general welfare through structural strength, means of egress facilities, stability, sanitation, adequate light and ventilation, energy conservation, and safety to life and property from fire and other hazards attributed to the built environment and to provide safety to fire fighters and emergency responders during emergency operations.

101.4 Referenced codes.

The other codes listed in Sections 101.4.1 through 101.4.9 and referenced elsewhere in this code shall be considered part of the requirements of this code to the prescribed extent of each such reference.

101.4.1 Electrical.

EXHIBIT A

The provisions of the Livermore Electrical Code shall apply to the installation of electrical systems, including alterations, repairs, replacement, equipment, appliances, fixtures, fittings and appurtenances thereto.

101.4.2 Gas.

The provisions of the Livermore Plumbing Code shall apply to the installation of gas piping from the point of delivery, gas appliances and related accessories as covered in this code. These requirements apply to gas piping systems extending from the point of delivery to the inlet connections of appliances and the installation and operation of residential and commercial gas appliances and related accessories.

101.4.3 Mechanical.

The provisions of the Livermore Mechanical Code shall apply to the installation, alterations, repairs and replacement of mechanical systems, including equipment, appliances, fixtures, fittings and/or appurtenances, including ventilating, heating, cooling, air-conditioning and refrigeration systems, incinerators and other energy-related systems.

101.4.4 Plumbing.

The provisions of the Livermore Plumbing Code shall apply to the installation, alteration, repair and replacement of plumbing systems, including equipment, appliances, fixtures, fittings and appurtenances, and where connected to a water or sewage system and all aspects of a medical gas system.

101.4.5 Property maintenance.

The provisions of the Livermore Property Maintenance and Building Codes shall apply to existing structures and premises; equipment and facilities; light, ventilation, space heating, sanitation, life and fire safety hazards; responsibilities of owners, operators and occupants; and occupancy of existing premises and structures.

101.4.6 Fire prevention.

The provisions of the Livermore Fire Code shall apply to matters affecting or relating to structures, processes and premises from the hazard of fire and explosion arising from the storage, handling or use of structures, materials or devices; from conditions hazardous to life, property or public welfare in the occupancy of structures or premises; and from the construction, extension, repair, alteration or removal of fire suppression and alarm systems or fire hazards in the structure or on the premises from occupancy or operation.

101.4.7 Energy.

The provisions of the California Energy Code, Title 24, part 6 shall apply to all matters governing the design and construction of buildings for energy efficiency.

101.4.8 Residential buildings

EXHIBIT A

The provisions of the California Residential Code, Title 24, part 2.5 shall apply to all matters governing the design and construction of detached, one- and two-family dwellings, townhouses not more than three stories with separate means of egress, and structures accessory thereto.

101.4.9 Green Building Standards

The provisions of the California Green Building Standards Code, Title 24, Part 11 shall apply to all matters governing the "green building" related planning, design construction, operation, use and occupancy of newly constructed buildings.

15.02.060 IBC Chapter 1, Division II, Section 103 amended – Building and Safety.

IBC Chapter 1, Division II, Section 103 is amended to read:

SECTION 103 BUILDING AND SAFETY DIVISION

103.1 Creation of enforcement agency.

The Building and Safety Division is hereby created and the official in charge thereof shall be known as the building official.

103.2 Appointment.

The building official shall be appointed by the city manager.

103.3 Deputies.

In accordance with the prescribed procedures of this jurisdiction and with the concurrence of the appointing authority, the building official shall have the authority to appoint related technical officers, inspectors, plan examiners and other employees. Such employees shall have powers as delegated by the building official.

15.02.070 IBC Chapter 1, Division II, Section 105.2 amended – Work exempt from permit.

IBC Chapter 1, Division II, Section 105.2 is amended to read:

Delete all reference to Electrical, Gas, Mechanical, and Plumbing repairs, appliances and fixtures. These items are addressed in the Livermore Electrical, Mechanical and Plumbing Codes.

Delete section 105.2.2 - Repairs

15.02.080 IBC Chapter 1, Division II, Section 106 amended – Floor and Roof Design Loads.

IBC Chapter 1, Division II, Section 106 is deleted.

EXHIBIT A

15.02.090 IBC Chapter 1, Division II, Section 109 amended – Fees.

IBC Chapter 1, Division II, Section 109 is amended to read:

Fees are to be set by resolution of the Livermore City Council.

All permit fees, development fees and other city fees, including, but not limited to, the tax on construction and traffic impact fees, may be waived for any permit issued for the repair of any structure as required by Chapter 15.64 (Unreinforced Masonry Building Hazard Reduction Program). Fees may be waived for reconstruction of any building removed in accordance with Chapter 15.64 when such building is replaced to replicate the structure to be removed.

15.02.100 IBC Chapter 1, Division II, Section 110.3.5 amended – Lath and gypsum board inspections.

IBC Chapter 1, Division II, Section 110.3.5 is amended to read:

109.3.5 Lath and gypsum board inspection.

The Exception is deleted.

15.02.110 IBC Chapter 1, Division II, Section 110.3.7 amended – Energy efficiency inspections.

IBC Chapter 1, Division II, Section 110.3.7 is amended to read:

110.3.7 Energy efficiency inspections.

Inspections shall be made to determine compliance with Title 24, Part 6 and shall include, but not be limited to, inspections for: envelope insulation R and U values, fenestration U value, duct system R value, and HVAC and water-heating equipment efficiency.

15.02.120 IBC Sections 903 and 904 amended – Fire Protection Systems.

Sections 903 and 904 are amended as amended in sections 903 and 904 of the Livermore Fire Code (LMC Chapter 15.06).

15.02.130 IBC Section 1505.1 amended - Fire Classification, Roof coverings.

Section 1505.1 is amended by adding the following paragraph:

Roof covering shall be fire retardant minimum Class B or higher for all building regardless of type of construction.

EXHIBIT A

15.02.140 IBC Section 1613.8 amended – Modify ASCE 7 equation 12.8-16.

Section 1613.8 is added to read:

1613.8 ASCE 7, Section 12.8.7. Modify equation 12.8-16 as follows:

$$\theta = \frac{P_x \Delta l}{V_x h_{sx} C_d} \quad (12.8-16)$$

15.02.150 IBC Section 1704.4 amended – Concrete Construction, exception 1.

Section 1704.4, exception 1 is amended to read:

1. Isolated spread concrete footings of buildings three stories or less above grade plane that are fully supported on earth or rock, where the structural design of the footing is based on a specified compressive strength, f'_c , no greater than 2,500 pounds per square inch (psi) (17.2Mpa).

15.02.160 IBC Section 1908.1.8 ACI 318, Section 22.10 amended.

Section 1908.1.8 is amended to read:

1908.1.8 ACI 318, Section 22.10. Delete ACI Section 22.10 and replace with the following:

- 22.10 - Plain concrete in structures assigned to seismic design category C, D, E or F.
- 22.10.1 - Structures assigned to Seismic Design Category C, D, E or F shall not have elements of structural plain concrete, except as follows:

- (a) Isolated footings of plain concrete supporting pedestals or columns are permitted, provided the projection of the footing beyond the face of the supported member does not exceed the footing thickness.

Exception: In detached one and two-family dwellings three stories or less in height, the projection of the footing beyond the face of the supported member is permitted to exceed the footing thickness.

- (b) Plain concrete footing supporting walls are permitted, provided the footings have at least two continuous longitudinal reinforcing bars. Bars shall not be smaller than No. 4 and shall have a total area of not less than 0.002 times the gross cross-sectional area of the footing. A minimum of one bar shall be provided at the top and bottom of the footing. Continuity of reinforcement shall be provided at corners and intersections.

EXHIBIT A

Exception: In detached one and two-family dwellings three stores or less in height and constructed with stud bearing walls, plain concrete footings—with at least two continuous longitudinal reinforcing bars not smaller than No. 4 are permitted to have a total area of less than 0.002 times the gross cross-sectional area of the footing.

15.02.170 Residential building permits issuance limitations.

The following language is inserted in accordance with the provisions of a voter-approved initiative ordinance, dated April 11, 1972.

- A. The people of the city find and declare that it is in the best interest of the city, in order to protect the health, safety, and general welfare of the citizens of the city, to control residential building permits in the said city. Residential building permits include single-family residential, multiple residential, and trailer court building permits within the meaning of this code. Additionally, it is the purpose of this initiative measure to contribute to the solution of air pollution in the city.
- B. The specific reasons for the proposed petition are that the undersigned believe that the resulting impact from issuing residential building permits at the current rate results in the following problems mentioned below. Therefore, no further residential building permits are to be issued by the said city until satisfactory solutions, as determined in the standards set forth, exist to all the following problems:
 - 1. Educational facilities. No double sessions in the schools or overcrowded classrooms as determined by the California Education Code;
 - 2. Sewage. The sewage treatment facilities and capacities meet the standards set by the Regional Water Quality Control Board; and
 - 3. Water supply. No rationing of water with respect to human consumption or irrigation and adequate water reserves for fire protection are existing.

EXHIBIT B

Chapter 15.04 PROPERTY MAINTENANCE CODE

Sections:

- 15.04.010 Title for citation.
- 15.04.020 Documents adopted by reference.
- 15.04.030 Amendments to the International Property Maintenance Code.
- 15.04.040 IPMC Chapter 1 amended.
- 15.04.050 IPMC Chapter 2 amended.
- 15.04.050 IPMC Chapter 3 amended.
- 15.04.060 IPMC Chapter 4 amended.
- 15.04.070 IPMC Chapter 5 amended.
- 15.04.080 IPMC Chapter 6 amended.

15.04.010 Title for citation.

This chapter shall be known as the "property maintenance code," may be cited as such and will be referred to in this chapter as "this code."

15.04.020 Documents adopted by reference.

The International Property Maintenance Code, 2009 Edition published by the International Code Council is hereby adopted. Where this chapter is inconsistent with state law then in that instance the provisions of the state law shall prevail.

15.04.030 Amendments to International Property Maintenance Code.

The International Property Maintenance Code (IPMC) adopted in this chapter by reference is amended by the following additions, deletions and amendments thereto as set forth in this chapter.

15.04.040 IPMC Chapter 1 amended.

Chapter 1 is amended as follows:

Sections 102.3, 102.7, 103, 107.6, 108.4, 108.5, 109.4, 109.5, 109.6, 110 & 111 are deleted.

Each reference to the International Fuel Gas and International Plumbing Codes is replaced by the Uniform Plumbing Code. Each reference to the International Mechanical Code is replaced by the Uniform Mechanical Code. Each reference to the International Zoning Code is replaced by the Livermore Development Code.

15.04.050 IPMC Chapter 2 amended.

EXHIBIT B

Chapter 2 is amended as follows:

Each reference to the International Fuel Gas and International Plumbing Codes is replaced by the Uniform Plumbing Code. Each reference to the International Mechanical Code is replaced by the Uniform Mechanical Code. Each reference to the International Zoning Code is replaced by the Livermore Development Code.

15.04.060 IPMC Chapter 3 amended.

Chapter 3 is amended as follows:

Sections 302.4, 302.8, 304.14, 304.18, and 309 are deleted.

Section 303.2 is amended to read:

Every person in possession of land within the city, either as owner, purchaser under contract, lessee, tenant or licensee, upon which is situated a private or public swimming pool or spa, shall at all times maintain an enclosure and safety device in accordance with section 3109.4.4 (private swimming pools) or chapter 31B (public swimming pools) of the California Building Code.

15.04.070 IPMC Chapter 4 amended.

Chapter 4 is amended as follows:

Sections 404.6 and 404.7 are deleted.

15.04.080 IPMC Chapter 5 amended.

Chapter 5 is amended as follows:

Each reference to the International Plumbing Code shall be replaced with the Uniform Plumbing Code.

15.04.090 IPMC Chapter 6 amended.

Chapter 6 is amended as follows:

Each reference to the International Mechanical Code is replaced by the Uniform Mechanical Code.

EXHIBIT C

Chapter 15.06 FIRE CODE

Sections:

- 15.06.010 Title for citation.
- 15.06.020 Documents adopted by reference.
- 15.06.030 Amendments to the International Fire Code.
- 15.06.040 CFC Chapter 1, Division II, Table 105.6.8 amended – Permit Amounts for Compressed Gases.
- 15.06.050 CFC Chapter 1, Division II, Table 105.6.10 amended – Permit Amounts for Cryogenic Fluids.
- 15.06.060 CFC Chapter 1, Division II, Section 105.6.16.3 amended – Flammable and combustible liquids.
- 15.06.070 CFC Chapter 1, Division II, Section 105.6.20.1 added – Permit Amounts for Hazardous Materials, Flammable and Combustible Liquids and Gases at Residential Occupancies.
- 15.06.080 CFC Chapter 1, Division II, Table 105.6.20 amended – Permit Amounts for Hazardous Materials.
- 15.06.090 CFC Chapter 1, Division II, Section 105.6.47 amended – Radioactive Materials.
- 15.06.100 CFC Chapter 1, Division II, Section 108 deleted – Board of Appeals.
- 15.06.110 CFC Chapter 1, Division II, Section 114 added – Unauthorized Discharges.
- 15.06.120 CFC Section 504.1.1 added – Guardrails for firefighter safety.
- 15.06.130 CFC Section 506.1 amended – Where required.
- 15.06.140 CFC Chapter 6, Section 603.4 amended – Portable unvented heaters.
- 15.06.150 CFC Chapter 6, Section 605.11 added – Immersion Heaters.
- 15.06.160 CFC Chapter 6, Section 608.6.4 added – Failure of Ventilation System.
- 15.06.170 CFC Chapter 9 amended – Fire Protection Systems
- 15.06.180 CFC Chapter 18, Section 1802 deleted – Definition, Continuous Gas Detection System.
- 15.06.190 CFC Chapter 18, Section 1802 deleted – Definition, Workstation.
- 15.06.200 CFC Chapter 27 amended – Hazardous Materials – General Provisions.
- 15.06.210 CFC Section 3007.3 added – Liquefied carbon dioxide.
- 15.06.220 CFC Section 3102 amended – Definition, Corrosive.
- 15.06.230 CFC Section 3404.2.7.5.8 amended – Exception.
- 15.06.240 CFC Chapter 37 amended – Highly Toxic and Toxic Materials.
- 15.06.250 CFC Section 4105.4 added – Pyrophoric gas distribution systems.
- 15.06.260 CFC Section 4603.4 amended – Existing commercial or industrial buildings or structures.
- 15.06.270 CFC Appendix D Fire Apparatus Access Roads

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15.06.010 Title for citation.

This chapter shall be known as the "Fire Code," may be cited as such and will be referred to in this chapter as "this code."

15.06.020 Documents adopted by reference.

The International Fire Code, 2009 Edition, as amended and set forth in the California Building Standards Code, Title 24 of the California Code of Regulations, published by the International Code Council is hereby adopted, together with Appendices D, E, F and H, except as set forth in this chapter.

15.06.030 Amendments to the International Fire Code.

The International Fire Code (IFC) adopted in this chapter by reference is amended by the following additions, deletions and amendments thereto as set forth in this chapter. Reference numbers herein are taken from the 2010 California Fire Code.

15.06.040 CFC Chapter 1, Division II, Table 105.6.8 amended – Permit Amounts for Compressed Gases.

Table 105.6.8 is amended to read:

Type of Gas	Amount (cubic feet at NTP)
Corrosive	200
Flammable (except cryogenic fluids and LPG)	200
Highly Toxic	Any amount
Inert and Simple Asphyxiant	200
Moderately Toxic	Any amount
Oxydizing (including oxygen)	200
Pyrophoric	Any amount
Toxic	Any amount
All other gases subject to HMBP reporting (per material)	200

15.06.050 CFC Chapter 1, Division II, Table 105.6.10 amended – Permit Amounts for Cryogenic Fluids.

Table 105.6.10 is amended to read:

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Type of Cryogenic Fluid	Cubic feet at NTP
Corrosive	Any Amount
Flammable	Any Amount
Inert	200
Oxidizing (including oxygen)	200
Physical or health hazard not indicated above	Any amount
All other materials subject to HMBP requirements (per material)	200

15.06.060 CFC Chapter 1, Division II, Section 105.6.16.3 amended – Flammable and combustible liquids.

Section 105.6.16.3 is amended to read:

To store, handle or use Class II or Class IIIA liquids in excess of 25 gallons except for fuel oil in the fuel tanks of portable equipment.

15.06.070 CFC Chapter 1, Division II, Section 105.6.20.1 added - Permit Amounts for Hazardous Materials, Flammable and Combustible Liquids and Gases at Residential Occupancies.

Section 105.6.20.1 is added to read:

Storage of flammable and combustible liquids and flammable gases at Group R occupancies are limited as follows:

1. Outside storage of flammable liquids (including gasoline) is limited to 30 gallons.
2. Outside storage of combustible liquids (including diesel and kerosene) is limited to 55 gallons.
Exception: Emergency generators used for life safety purposes.
3. Outside storage of compressed and liquefied flammable gas is limited to 15 gallons or 540 cubic feet.
Exceptions:
 - a. Emergency generators used for life safety purposes.
 - b. Facility gas supply for occupancies not provided with natural gases services. Amounts over 1,000 gallons must be approved by the fire official.
4. Manufacture of Biodiesel and Methanol at Residential Occupancies. The manufacture of biodiesel and methanol is prohibited in Residential Occupancies and in U Occupancies associated with Residential Occupancies both inside and outside buildings.

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15.06.080 CFC Chapter 1, Division II, Table 105.6.20 amended – Permit Amounts for Hazardous Materials.

Table 105.6.20 is amended to add:

Moderately toxic gas	20 cubic feet
Other materials subject to California Health and Safety Code Chapter 6.95 Hazardous Materials Business Plan requirements	55 gallons (liquids) 500 pounds (solids)

15.06.090 CFC Chapter 1, Division II, Section 105.6.47 amended - Radioactive Materials.

Section 105.6.47.4 is added to read:

4. Radioactive Materials. To store or handle more than one micro curie (37,000 Becquerel) of radioactive material not contained in a sealed source or more than 1 mill curie (37,000,000 Becquerel) of radioactive material in a sealed source or sources, or any amount of radioactive material for which a specific license from the Nuclear Regulatory Commission is required.

15.06.100 CFC Chapter 1, Division II, Section 108 deleted - Board of Appeals.

Section 108 is deleted.

15.06.110 CFC Chapter 1, Division II, Section 114 added – Unauthorized Discharges.

Section 114 is added to read:

Unauthorized Discharges. The Fire Department may charge fees to recover the cost of response to incidents involving the discharge or the threatened discharge of a hazardous (or suspected hazardous) material.

15.06.120 CFC Section 504.1.1 added – Guardrails for firefighter safety.

Section 504.1.1 is added to read:

Guardrails for firefighter safety. Approved guardrails, barriers or other similar safeguards shall be installed when, in the opinion of the Fire Chief, such safeguards are required to protect firefighter safety during emergency operations.

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15.06.130 CFC Section 506.1 amended - Where required.

Section 506.1 is amended to read:

Where required. Where access to or within a structure or an area is restricted because of secured openings or where immediate access is needed for life-saving or fire-fighting purposes, the fire code official is authorized to require a key box to be installed adjacent to the front or main entrance or other acceptable location/s to facilitate emergency entry. Key box mounting height shall be 4 foot minimum above grade to 6 foot maximum or as approved by the fire code official.

15.06.140 CFC Section 603.4 amended - Portable unvented heaters.

Section 603.4 is amended to read:

Portable unvented fuel-fired heating equipment shall be prohibited in occupancies in Groups A, E, I, R-1, R-2, R-2.1, R-3, R-3.1 and R-4. Use of portable unvented heater in other occupancies shall be approved by the fire code official.

[Balance to remain the same]

15.06.150 CFC Section 605.11 added – Immersion Heaters.

Section 605.11 is added to read:

605.11 All electrical immersion heaters used in dip tanks, sinks, vats and similar operations shall be provided with approved over-temperature controls and low liquid level electrical disconnects. Manual reset of required protection devices shall be provided.

15.06.160 CFC Section 608.6.4 added – Failure of Ventilation System.

Section 608.4 is added to read:

608.4 Failure of the ventilation system shall automatically disengage the charging system or other suitable fail-safe operation acceptable to the fire code official.

15.06.170 CFC Chapter 9 amended – Fire Protection Systems.

Section 903.2 is amended to read:

Approved automatic fire extinguishing systems in new buildings and structures shall be as provided in all new occupancies and locations.

Exception: Group U occupancies that do not exceed 200 square feet of floor area.

Section 903.3.1.2 is amended to read:

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NFPA 13R sprinkler systems. Automatic sprinkler systems in Group R occupancies up to and including four stories in height shall be permitted to be installed throughout in accordance with NFPA 13R as amended in Chapter 47 and the following; Sprinklers shall be provided in all attic areas. Fire sprinklers shall be spaced a maximum 130 square feet per sprinkler and over all furnaces, water heaters, etc. Attic sprinklers shall be intermediate rated residential sprinklers.

Section 903.3.1.3 is amended to read:

NFPA 13D sprinkler systems. Automatic sprinkler systems installed in one- and two-family dwellings and townhouses shall be installed in accordance with NFPA 13D and the following;

1. Attic shall be provided intermediate rated residential fire sprinklers for detection coverage and located at a spacing equivalent to 30 feet by 30 feet centers and maximum of 15 feet from outside walls.
2. Fire sprinklers shall be provided in garages. Fire sprinklers shall be intermediate rated, quick response, with a maximum coverage of 130 square feet per sprinkler.

Section 903.3.1.3.1 is added to read:

Existing residential dwellings may be reviewed on a case by case basis and shall be provided with an automatic fire extinguishing system conforming to the most current requirements of the 2010 California Building Code, California Fire Code, the National Fire Protection Association (NFPA) 13D when;

1. Additional units as a result of a lot division or any change to existing conditions of approval resulting in more than two R-3 occupancies or alteration affecting fire department access in accordance with the California Fire Code Section 503.
2. Additions to residential structures creating an area exceeding the existing infrastructure of the public utilities for fire-flow and flow duration for residential dwellings in conformance with CFC Section B105.1 and B105.2
3. Changes to the existing property lines or addition of structures encroaching upon property line setbacks affecting fire department operational area or egress to public way of occupants.
4. Changes to the occupancy classification of the residential use including Institutional type care facilities, daycare facilities above or below grade level, home based business of a higher fire hazard classification in conformance with California Fire Code.

Section 903.3.1.3.2 is added to read:

Sprinkler systems in a large one- and two- family dwellings (Group R-3) greater than 7,500 square feet in size shall be installed in accordance with NFPA 13D and the following;

1. The number of design sprinklers shall include all sprinklers within a compartment to a maximum of four sprinklers.

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2. Pilot sprinklers shall be located at all heat and fire sources including furnaces, hot water heaters, above kitchen ranges, etc.
3. Attic shall be provided intermediate rated residential fire sprinklers for detection coverage and located at a spacing equivalent to 30 feet by 30 feet centers and maximum of 15 feet from outside walls.
4. Fire sprinklers shall be provided in garages. Fire sprinklers shall be intermediate rated, quick response, with a maximum spacing of 130 square feet per sprinkler.
5. Fire sprinklers shall be provided in extensions over porches, balconies, breezeways and entryways. Fire sprinklers shall be intermediate rated.

15.06.180 CFC Section 1802 deleted – Definition, Continuous Gas Detection System.

Section 1802, definition for Continuous Gas Detection System is deleted.

15.06.190 CFC Section 1802 deleted – Definition, Workstation.

Section 1802, definition for Workstation is deleted.

15.06.200 CFC Chapter 27 amended – Hazardous Materials – General Provisions.

Section 2701.1, Exception 5 is amended to read:

Refrigeration systems - Sections 2701, 2702, and 2703 apply to refrigeration systems. Sections 2704 and 2705 do not apply to refrigeration systems (see Section 606).

Section 2701.2.2 is amended to read:

The material categories listed in this section are classified as health hazards. A material with a primary classification as a health hazard can also pose a physical hazard.

1. Highly toxic, toxic and moderately toxic.
2. Corrosive materials.

Section 2703.2.2.1.7 is added to read:

Secondary containment or equivalent protection from spills shall be provided for piping for liquid hazardous materials where a spill is determined to be a plausible event and where such an event would endanger people, property or the environment and for highly toxic, toxic, and corrosive gases above threshold quantities listed in Tables 3704.2 and 3704.3. Secondary containment includes, but is not limited to double walled piping.

Exceptions:

1. Secondary containment is not required for corrosive gases if the piping is constructed of inert materials.
2. Piping under sub-atmospheric conditions if the piping is equipped with an alarm and fail-safe-to-close valve activated by a loss of vacuum.

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Section 2703.2.2.1.8 is added to read:

Low melt point materials, such as plastic, shall not be used for oxidizing materials, flammable materials, combustible liquids, pyrophoric materials, toxic gases, highly toxic gases, or moderately toxic gases.

Exception: Facility specific systems approved by the Fire Chief.

Section 2703.2.2.2 is amended to read:

Supply piping and tubing for gases and liquids having a health hazard ranking of 3 or 4 in accordance with NFPA 704 shall be in accordance with ASME B31.3 and the following:

1. Piping and tubing utilized for the transmission of toxic, highly toxic, moderately toxic gases or highly volatile corrosive liquids and gases shall have welded, or brazed connections throughout except for connections within an exhausted enclosure if the material is a gas, or an approved method of drainage or containment is provided for connections if the material is a liquid.
2. Piping and tubing shall not be located within corridors, within any portion of a means of egress required to be enclosed in fire-resistance-rated construction or in concealed spaces in areas not classified as Group H Occupancies.
Exception: Piping and tubing within the space defined by the walls of corridors and the floor or roof above or in concealed space above other occupancies when installed in accordance with Section 415.8.6.3 of the California Building Code as required for Group H, Division 5 Occupancies.
3. All primary piping for toxic, highly toxic and moderately toxic gases shall pass a helium leak test of 1×10^{-9} cubic centimeters/second where practical, or shall pass testing in accordance with an approved, nationally recognized standard. Tests shall be conducted by a qualified "third party" not involved with the construction of the piping and control systems.

Section 2703.2.10 is added to read:

Biodiesel and methanol manufacturing/processing equipment shall be listed or approved. Such equipment shall at a minimum adequately address electrical system, materials of construction, ventilation, seismic and process control and shut-down safety issues.

Section 2703.5.2 is added to read:

Product conveying ducts for venting hazardous materials operations shall be labeled with the hazard class of the material being vented and the direction of flow.

Section 2703.5.3 is added to read:

In "H" occupancies, all piping and tubing may be required to be identified when there is any possibility of confusion with hazardous materials transport tubing or piping. Flow direction indicators are required.

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Section 2703.9.8 is amended to read:

Separation of incompatible materials. Incompatible materials in storage and storage of materials that are incompatible with materials in use shall be separated. When the stored materials are in containers having a capacity of more than 5 pounds (2 kg) or 0.5 gallon (2 L), separation shall be accomplished by:

1. Segregating incompatible materials in storage by a distance of not less than 20 feet (6096 mm) and in an independent containment system, if secondary containment is required.

[the balance of this section is un-amended]

Section 2703.9.11 is added to read:

Combustible and non-combustible workstations which dispense, handle or use hazardous materials shall be protected by an approved automatic fire extinguishing system in accordance with Section 1803.10

Exception: Internal fire protection is not required for Biological Safety Cabinets that carry NSF/ANSI certification where quantities of flammable liquids in use or storage within the cabinet do not exceed 500ml.

Section 2703.13 is added to read:

Systems that automatically fill hazardous materials. Liquid tanks shall be equipped with approved overfill protection, that sends an alarm signal to a location that is normally occupied during normal business hours and immediately stops the filling of the tank. The alarm signal and automatic shutoff shall be tested in a manner acceptable to the fire code official on an annual basis and records of such testing shall be maintained on-site for a period of five (5) years.

Exception: Emergency generator tanks.

Section 2703.14 is added to read:

Required Systems. When emergency alarms, detection or automatic fire extinguishing system is required by this code due to the storage, use or handling of hazardous materials, such systems shall comply with Sections 2704.9 and 2704.10.

Section 2704.10 is amended to read:

Supervision. Required emergency alarm, detection and automatic fire-extinguishing systems shall be supervised by an approved central, proprietary or remote station service.

15.06.210 CFC Section 3007.3 added – Liquefied carbon dioxide.

Section 3007.3 is added to read:

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3007.3 Liquefied carbon dioxide. Storage, use and handling of liquefied carbon dioxide shall comply with this section.

3007.3.1 Storage, use and handling. Storage, use and handling of liquefied carbon dioxide shall comply with NFPA Standard 55, Chapter 13.

3007.3.2 Fill bibs. Approved, outside fill bibs shall be provided when containers are filled on-site when required by the fire code official.

15.06.220 CFC Section 3102 amended – Definition, Corrosive.

Section 3102 Definition is amended to read:

Corrosive. A chemical that causes visible destruction of, or irreversible alterations in, living tissue by chemical action at the point of contact. A chemical shall be considered corrosive if, when tested on the intact skin of albino rabbits by the method described in DOT 49 CFR 173.137, such

1. chemical destroys or changes irreversibly the structure of the tissue at the point of contact following an exposure period of 4 hours. This term does not refer to action on inanimate surfaces.
2. a liquid with a pH of 2 or less or 12.5 or more, except for foodstuffs and medicines.
3. any hazardous waste defined as corrosive by applicable hazardous waste regulations

15.06.230 CFC Section 3404.2.7.5.8 amended – Exception.

Section 3404.2.7.5.8, Exception, is amended to read:

Exception: Outside aboveground tanks with a capacity of 100 gallons (378 L) or less.

15.06.240 CFC Chapter 37 amended – Highly Toxic and Toxic Materials.

Section 3701.3 is added to read:

Moderately Toxic gases shall comply with the requirements for Toxic gases in Section 3704 of this Chapter. Section 2701.3 Performance-based design alternative shall be used for refrigeration systems.

Section 3702.1, the following definition is added to read:

Moderately Toxic Gas. A chemical or substance that has a median lethal concentration (LC50) in air more than 2000 parts per million but not more than 5000 parts per million by volume of gas or vapor, when administered by continuous inhalation for an hour, or less if death occurs within one hour, to albino rats weighing between 200 and 300 grams each.

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Section 3704.1.4 is added to read:

Automatic shut-off valve. An automatic shut-off valve, which is of a failsafe to close design, shall be provided to shut off the supply of highly toxic gases for any of the following:

1. Activation of a manual fire alarm system.
2. Activation of the gas detection system.
3. Failure of emergency power.
4. Failure of primary containment.
5. Seismic activity.
6. Failure of required ventilation.
7. Manual activation at an approved remote location.

Section 3704.1.5 is added to read:

Maximum threshold quantity. Toxic gases stored or used in quantities exceeding 810 cf. the maximum threshold quantity in a single vessel per control area or outdoor control area shall comply with the requirements for highly toxic gases of this Chapter. This does not apply to moderately toxic gases.

Section 3704.1.6 is added to read:

Reduced flow valve. All containers of materials other than lecture bottles containing Highly Toxic material and having a vapor pressure exceeding 29 psia shall be equipped with a reduced flow valve when available. If a reduced flow valve is not available, the container shall be used with a flow-limiting device. All flow limiting devices shall be part of the valve assembly and visible to the eye when possible; otherwise, they shall be installed as close as possible to the cylinder source.

Exception: When the process use rate is approximately equal to the maximum flow rate of the cylinder/tank valve.

Section 3704.1.7 is added to read:

Annual maintenance. All safety control systems at a facility shall be maintained in good working condition and tested not less frequently than annually. Maintenance and testing shall be performed by persons qualified to perform the maintenance and tests. Maintenance records and certifications shall be available to any representative of the Livermore- Pleasanton Fire Department for inspection upon request.

Section 3704.1.8 is added to read:

Fire extinguishing systems. Buildings and covered exterior areas for storage and use areas of materials regulated by this Chapter shall be protected by an automatic fire sprinkler system in accordance with NFPA 13. The design of the sprinkler system for any room or area where highly toxic, toxic and moderately toxic gases are stored, handled or used shall be in accordance with Section 2704.5.

Section 3704.1.9 is added to read:

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Local gas shut off. Manual activation controls shall be provided at locations near the point of use and near the source, as approved by the fire code official. The fire code official may require additional controls at other places, including, but not limited to, the entry to the building, storage or use areas, and emergency control stations. Manual activated shut-off valves shall be of a fail-safe-to-close design.

Section 3704.1.10 is added to read:

Exhaust ventilation monitoring. For gases exceeding threshold quantities, a continuous monitoring system utilizing a low switch shall be provided to assure that the required exhaust ventilation rate is maintained. The monitoring system shall initiate a local alarm. The alarm shall be both visual and audible and shall be designed to provide warning both inside and outside of the interior storage, use, or handling area.

Section 3704.1.11 is added to read:

Emergency Response Plan. If the preparation of an emergency response plan for the facility is not required by any other law, responsible persons shall prepare, or cause to be prepared, and filed with the fire code official, a written emergency response plan. If the preparation of an emergency response plan is required by other law, a responsible person shall file a copy of the plan with the Fire Chief.

Section 3704.1.12 is added to read:

Emergency response liaisons. Responsible persons shall be designated and trained to be liaison personnel for the Livermore Pleasanton Fire Department. These persons shall aid the Fire Department in preplanning emergency responses, identifying locations where regulated materials are stored, handled and used, and be familiar with the chemical nature of such material. An adequate number of personnel for each work shift shall be designated

Section 3704.1.13 is added to read:

Emergency drills. Emergency drills of the on-site emergency response personnel and liaisons shall be conducted on a regular basis but not less than once every six months. Records of drills conducted shall be maintained.

Section 3704.1.14 is added to read:

Cylinder leak testing. Cylinders shall be tested for leaks immediately upon delivery and again immediately prior to departure. Testing shall be approved by the fire code official in accordance with appropriate nationally recognized industry standards and practices, if any. Appropriate remedial action shall be immediately undertaken when leaks are detected

Section 3704.1.15 is added to read:

Inert gas purge system. Gas systems shall be provided with dedicated inert gas purge systems. A dedicated inert gas purge system may be used to purge more than one gas, provided the gases are compatible. Purge gas systems inside buildings shall be located in an approved gas cabinet unless the system operates by vacuum demand. Backflow prevention shall be provided.

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Exception: Refrigeration systems.

Section 3704.1.16 is added to read:

Seismic shutoff valve. For other than lecture bottles, an automatic seismic shut-off valve, which is of a fail-safe to close design, shall be provided to shutoff the supply of highly toxic, toxic and moderately toxic gases with an LC50 less than 3000 parts per million upon a seismic event within 5 seconds of a horizontal sinusoidal oscillation having a peak acceleration of 0.3G (1.47m/sec²) and a period of 0.4 seconds

Section 3704.1.17 is added to read:

Emergency Alarm. When toxic gases exceeding 10 cu. ft. and any amount of highly toxic compressed gases are transported through corridors or exit enclosures, there shall be an emergency telephone system, a local manual alarm station or an approved alarm-initiating device at not more than 150-foot (45720 mm) intervals and at each exit and exit-access doorway throughout the transport route. The signal shall be relayed to an approved central, proprietary or remote station service or constantly attended on-site location and shall also initiate a local audible alarm.

Section 3704.2.2.7 is amended to read:

Treatment systems. The exhaust ventilation from gas cabinets, exhausted enclosures, gas rooms and local exhaust systems required in Sections 3704.2.2.4 and 3704.2.2.5 shall be directed to a treatment system. The treatment system shall be utilized to handle the accidental release of gas and to process exhaust ventilation. The treatment system shall be designed in accordance with Sections 3704.2.2.7.1 through 3704.2.2.7.5 and Section 505 of the California Mechanical Code.

Exceptions:

1. Highly toxic, toxic and moderately toxic gases storage. A treatment system is not required for cylinders, containers and tanks in storage when all of the following are provided:
 - 1.1. Valve outlets are equipped with gastight outlet plug or caps.
 - 1.2. Hand wheel-operated valves have handles secured to prevent movement.
 - 1.3. Approved containment vessels or containment systems are provided in accordance with Section 3704.2.2.3.

Section 3704.2.2.10.1 is amended to read:

Alarms. The gas detection system shall initiate a local alarm and transmit a signal to a constantly attended control station when a short-term hazard condition is detected. The alarm shall be both visual and audible and shall provide warning both inside and outside the area where the gas is detected. The audible alarm shall be distinct from all other alarms.

Section 3704.3.3 is amended to read:

Outdoor storage weather protection for portable tanks and cylinders. Weather protection in accordance with Section 2704.13 and this section shall be provided for portable tanks and cylinders located outdoors and not within gas cabinets or exhausted

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enclosures. The storage area shall be equipped with an approved automatic sprinkler system in accordance with Section 903.3.1.1

15.06.250 CFC Section 4105.4 added – Pyrophoric gas distribution systems.

Section 4105.4 is added to read:

4105.4 Pyrophoric gas distribution systems.

4105.4.1 Ventilation. Cylinders in use and non-welded or brazed connections shall be provided with approved, local ventilation. Failure of the ventilation system (as determined by air flow measurement) shall automatically shut down the distribution system at the source.

4105.4.2 Automatic shutdown. Pyrophoric gas distribution systems shall be provided with an approved release detection system at points of use and non-welded or –brazed connections. Upon activation, the detection system shall automatically shut down the distribution system at the source.

15.06.260 CFC Section 4603.4 amended – Existing commercial or industrial buildings or structures.

Section 4603.4 Sprinkler systems An automatic fire sprinkler system shall be provided in existing commercial buildings in accordance with Section 4603.4.1, Section 4603.4.2 and as follows;

1. Additions to any commercial or industrial building creating a 50% or more increase of floor area, or an addition of any size creating a total area exceeding 8,000 square feet.

Exception: Additions not greater than 500 square feet in area to an existing non-fire sprinklered building providing accessory storage space or solely for the purpose of providing accessibility shall not be required to be provided with automatic fire sprinklers.

2. When a change in occupancy classification results in an increased fire hazard or risk to business operations or life safety hazard of the occupants.
3. Any detached or attached structure added to a parcel of land already containing automatic extinguishing system protected buildings.

15.06.270 CFC Appendix D Fire Apparatus Access Roads

Section D103.4 is amended to read:

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Section D103.4 Dead Ends. Dead-end fire apparatus access roads in excess of 150 feet shall be provided with width and turnaround provisions in accordance to Livermore-Pleasanton Fire Department Standards of Operations and as approved by the fire code official.

Section D103.5.8 is deleted.

Section D103.5.9 is deleted.

Section D106 is deleted.

Section D107.1 is deleted.

EXHIBIT D

Chapter 15.08 ELECTRICAL CODE

Sections:

- 15.08.010 Title for citation.
- 15.08.020 Documents adopted by reference.
- 15.08.030 Amendments to the National Electrical Code.
- 15.08.040 Connection to energy source – Conditions.

15.08.010 Title for citation.

This chapter shall be known as the "electrical code," may be cited as such and will be referred to in this chapter as "this code."

15.08.020 Documents adopted by reference.

The National Electrical Code, 2008 Edition, as amended and set forth in the California Building Standards Code, Title 24 of the California Code of Regulations, published by the National Fire Protection Association is hereby adopted.

15.08.030 Amendments to the National Electrical Code.

The National Electrical Code adopted by reference is amended by the following additions, deletions and amendments thereto as set forth in this chapter. Reference numbers herein are taken from the 2010 California Electrical Code, Title 24 of the California Code of Regulations.

15.08.040 Connection to energy source – Conditions.

- A. It is unlawful for any person, firm or corporation to make connection from a source of electrical energy or to supply electrical service to any electrical wiring or equipment, for the installation of which a permit is required, unless authorized by the building official.
- B. When the electrical wiring and equipment is found to be in conformity with the provisions of this code, the building official shall indicate such approval by signing and dating the permit card and, if the building or premises containing the electrical installation has been approved by the building official for occupancy, he shall notify the serving electrical utility of such approval and shall authorize the connection of the installation to the source of supply.
- C. When a building has not been approved for occupancy, the building official may authorize temporary connection of approved electrical installation, or portions thereof, to a source of energy for purposes of testing equipment, providing light to facilitate completion of such building, or similar purposes, provided the owner has filed a statement with the building official certifying that the building will not be occupied for purposes other than doing work necessary to complete the building.

EXHIBIT E

Chapter 15.10 MECHANICAL CODE

Sections:

- 15.10.010 Title for citation.
- 15.10.020 Document adopted by reference.

15.10.010 Title for citation.

This chapter shall be known as the "mechanical code," may be cited as such and will be referred to in this chapter as "this code."

15.10.020 Document adopted by reference.

The Uniform Mechanical Code, 2009 Edition, as amended and set forth in the California Building Standards Code, Title 24 of the California Code of Regulations, published by the International Association of Plumbing and Mechanical Officials is hereby adopted.

EXHIBIT F

Chapter 15.12 PLUMBING CODE

Sections:

- 15.12.010 Title for citation.
- 15.12.020 Document adopted by reference.
- 15.12.030 Amendments to Uniform Plumbing Code.
- 15.12.040 Disconnection.
- 15.12.050 UPC Section 609.3 amended - Water distribution piping installation.

15.12.010 Title for citation.

This chapter shall be known as the "plumbing code," may be cited as such and will be referred to in this chapter as "this code."

15.12.020 Document adopted by reference.

The Uniform Plumbing Code, 2009 Edition, as amended and set forth in the California Building Standards Code, Title 24 of the California Code of Regulations, published by the International Association of Plumbing and Mechanical Officials, is hereby adopted, except as hereinafter amended in this chapter.

15.12.030 Amendments to Uniform Plumbing Code.

The Uniform Plumbing Code adopted herein by reference is hereby amended by the following additional deletions and amendments thereto as set forth in this chapter. Reference numbers herein are taken from the California Plumbing Code, Title 24 of the California Code of Regulations.

15.12.040 Disconnection.

The building official is authorized to order discontinuance of utility service to any buildings or structure which has been declared by the building official to be unsafe to occupy. No person, firm or corporation shall reconnect or supply service to such building without first having received express authorization from the building official.

15.12.050 UPC Section 609.3 amended - Water distribution piping installation.

Section 609.3 is amended by adding the following sentence:

Water distribution systems shall not be installed under a concrete floor slab within a building.

EXHIBIT G

Chapter 15.14 RESIDENTIAL CODE

Sections:

- 15.14.010 Title for citation.
- 15.14.020 Document adopted by reference.
- 15.14.030 Amendments to International Residential Code.
- 15.14.040 IRC Section R403.1.3 amended – Seismic reinforcing.
- 15.14.050 IRC Table R602.10.1.2(2) amended – Bracing requirements based on seismic design category.
- 15.14.060 IRC Section R602.10.2.1.1 amended – Limits on methods GB and PCP.
- 15.14.070 IRC Section R902.1 amended - Roofing covering materials.

15.14.010 Title for citation.

This chapter shall be known as the "Residential Code," may be cited as such and will be referred to in this chapter as "this code."

15.14.020 Documents adopted by reference.

The International Residential Code, 2009 Edition, as amended and set forth in the California Building Standards Code, Title 24 of the California Code of Regulations, published by the International Code Council is hereby adopted.

15.14.030 Amendments to International Residential Code.

The International Residential Code adopted herein by reference is hereby amended by the following additional deletions and amendments thereto as set forth in this chapter. Reference numbers herein are taken from the California Residential Code, Title 24 of the California Code of Regulations.

15.14.040 IRC Section R403.1.3 amended – Seismic reinforcing.

The first paragraph of Section R403.1.3 is amended to read:

R403.1.3 Seismic Reinforcing. Concrete footings located in Seismic Design Categories D₀, D₁ and D₂, as established in Table R301.2(1), shall have minimum reinforcement of at least two continuous longitudinal reinforcing bars not smaller than No. 4 bars. Bottom reinforcement shall be located a minimum of 3 inches (76 mm) clear from the bottom of the footing.

15.14.050 IRC Table R602.10.1.2(2) amended – Bracing Requirements based on seismic design category.

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Table R602.10.1.2(2) is amended by adding the footnote d designation to the title block, and adding footnote d to the bottom of the table.

TABLE R602.10.1.2(2)^{a,b,c,d}

- d. In Seismic Design Categories D₀, D₁, and D₂, Method GB is not permitted and the use of Method PCP is limited to one-story single family dwellings and accessory structures.

15.14.060 IRC Section R602.10.2.1.1 amended – Limits on methods GB and PCP.

Section R602.10.2.1.1 is added to read:

R602.10.2.1.1 Limits on methods GB and PCP. In Seismic Design Categories D₀, D₁, and D₂, Method GB is not permitted for use as intermittent braced wall panels, but gypsum board is permitted to be installed when required by this Section to be placed on the opposite side of the studs from other types of braced wall panel sheathing. In Seismic Design Categories D₀, D₁, and D₂, the use of Method PCP is limited to one-story single family dwellings and accessory structures.

15.14.070 IRC Section R902.1 amended - Roofing covering materials.

Section R902.1 is amended to read:

Roof coverings. Roofs shall be covered with materials as set forth in Sections R904 and R905. A minimum Class A or B roofing shall be installed in Livermore. Roofing shall be tested and listed in accordance with UL790 or ASTM E 108.

EXHIBIT H

Chapter 15.26 GREEN BUILDING STANDARDS CODE

Sections:

- 15.26.010 Title for citation.
- 15.26.020 Document adopted by reference.
- 15.26.030 Amendments to California Green Building Standards Code.
- 15.26.040 GBSC Section 301.1 amended – Scope.
- 15.26.050 GBSC Section 304.1.2 added – Alternate methods.
- 15.26.060 GBSC Section 4.106.1 amended – General.
- 15.26.070 GBSC Section A5.106 amended – Storm water design.
- 15.26.080 GBSC Section A5.106.2.1, A5.106.2.2, A5.106.3, A5.106.3.1 & A5.106.3.2 deleted.
- 15.26.090 GBSC Section 4.408.1 amended – Construction waste reduction of at least 50 percent.
- 15.26.100 GBSC Section 5.408.1 amended – Construction waste diversion.
- 15.26.110 GBSC Sections A4.602 and A5.7 amended – Checklists.

15.26.010 Title for citation.

This chapter shall be known as the "Green Building Standards Code," may be cited as such and will be referred to in this chapter as "this code."

15.26.020 Documents adopted by reference.

The Green Building Standards Code, 2010 Edition, as set forth in the California Building Standards Code, Title 24 of the California Code of Regulations, published by the State of California is hereby adopted.

15.26.030 Amendments to the Green Building Standards Code.

The Green Building Standards Code adopted herein by reference is hereby amended by the following additional deletions and amendments thereto as set forth in this chapter.

15.26.040 GBSC Section 301.1 amended – Scope.

Section 301.1 is amended to read:

Scope: Building shall be designed to include the green building measures specified as mandatory and Tier 1 in the application checklists contained in this code. Except as amended herein, measures identified as Tier 1 shall be required. Tier 2 voluntary green building measures are also included in the design and construction of structures covered by this code however, are not required.

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15.26.050 GBSC Section 304.1.2 added – Alternate methods.

Section 304.1.2 is added to read:

Alternate Methods. As an alternative to achieving Tier 1 requirements, a project may instead achieve compliance through; (i) the United States Green Building Council's Leadership in Energy and Environmental Design (LEED), (ii) Build It Green's Green Point Rating System; or (iii) another recognized and approved third party green building standards and rating system. Equivalency to Tier 1 requirements shall be evaluated, detailed and certified by the design professional.

15.26.060 GBSC Section 4.106.1 amended – General.

Section 4.106.1 is amended to read:

General: Preservation and use of the available natural resources shall be accomplished through evaluation and careful planning to minimize negative effects on the site and adjacent areas. Preservation of slopes, management of storm water drainage and erosion controls shall comply with this section, and the provisions of the Stormwater Management and Control Program (Municipal Code chapter 13.45).

15.26.070 GBSC Section A5.106 amended – Storm water design.

Section A5.106 is amended to read:

A5.106.2 Storm water design. Design storm water runoff rate and quantity in conformance with state and regional requirements, and the city's Stormwater Management and Control Program (Municipal Code Chapter 13.45).

15.26.080 GBSC Section A5.106.2.1, A5.106.2.2, A5.106.3, A5.106.3.1 & A5.106.3.2 deleted.

Delete sections A5.106.2.1, A5.106.2.2, A5.106.3, A5.106.3.1 & A5.106.3.2.

15.26.090 GBSC Section 4.408.1 amended – Construction waste reduction of at least 50 percent.

Section 4.408.1 is amended to read:

Construction waste reduction of at least 50 percent. "Regulated projects" as defined in Municipal Code Chapter 15.28 shall comply with the provisions of that chapter. Projects not regulated by said chapter shall comply with the provisions of this section.

15.26.100 GBSC Section 5.408.1 amended – Construction waste diversion.

Section 5.408.1 is amended to read:

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Construction waste diversion. "Regulated projects" as defined in Municipal Code Chapter 15.28 shall comply with the provisions of that chapter. Projects not regulated by said chapter shall comply with the provisions of this section.

15.26.110 GBSC Sections A4.602 and A5.7 amended – Checklists.

Sections A4.602 (Residential Occupancies Application Checklist) and A5.7 (Application checklist for BSC) may be administratively amended by the Building Official as appropriate, to incorporate the provisions of this chapter.