



**DATE:** November 1, 2016

**CATEGORY:** Public Hearing

**DEPT.:** Fire/Community Development

**TITLE:** **Ordinances Amending Chapters 8, 14, and 24 of the City Code and Adopt the 2016 California and 2015 International Codes, Incorporating by Reference Other Uniform Codes**

### **RECOMMENDATION**

1. Introduce an Ordinance Amending Chapter 8, Articles I, II, III, IV, and V, of the Mountain View City Code, Relating to the Adoption of the 2016 California Building Codes, Incorporating by Reference Other International and Uniform Codes, and Adoption of the 2015 International Property Maintenance Code (Attachment 1 to the Council report), to be read in title only, further reading waived, and set second reading for November 22, 2016.
2. Introduce an Ordinance Amending Chapter 14, Articles I and II, of the Mountain View City Code, Relating to the Adoption of the 2015 International Fire Code, Incorporating by Reference the Amendments Adopted by the State of California to Establish the 2016 California Fire Code (Attachment 2 to the Council report), to be read in title only, further reading waived, and set second reading for November 22, 2016.
3. Introduce an Ordinance Amending Chapter 24, Articles I and II, of the Mountain View City Code, Relating to Hazardous Materials (Attachment 3 to the Council report), to be read in title only, further reading waived, and set second reading for November 22, 2016.

### **BACKGROUND**

The State adopts new California Building Standards Codes (CBSC) every three years. The new 2016 State Codes go into effect on January 1, 2017. In order to maintain consistency with other cities in the State and region, staff proposes that the City of Mountain View adopt the 2016 CBSC, which consists of Building, Fire, Residential, Green Building, Electrical, Plumbing, and Mechanical Codes. In addition, staff proposes that the City adopt the 2015 International Fire Code and the updated 2015 International Property Maintenance Code (IPMC) by reference.

The State of California allows cities to amend the CBSC to make them more restrictive, provided required findings are made. The amendments must be necessary to address local climatic, geologic, environmental, or topographic conditions that affect the health, safety, and welfare of residents. Staff is proposing several local amendments as described in the next section of this report. Local amendments must be adopted before January 1, 2017.

## **ANALYSIS**

Staff is proposing the following amendments to the CBSC, International Codes, and City ordinances which include clean-up modifications and new City amendments. Pertinent new amendments are summarized in Attachment 4.

Staff is also providing information on the emerging industry of mobile-fueling as a prelude to possible future amendments to Mountain View City Code Chapter 14.

In an effort to establish uniformity in local building and fire code amendments throughout the Bay Area, staff participates in the ICC Tri-Chapter Uniform Code Committee and Santa Clara County Fire Marshals' Code Adoption Committees, a consortium of building and fire officials throughout the greater Bay Area that discuss local implications of the codes and amendments. These professional affiliations allow us to keep up-to-date with the State and local code developments which have been incorporated in this proposed code adoption.

1. Amendments to the California Building Code provisions on exceptions to special inspections for concrete footings. Special inspections are required except below a specified compressive strength (Attachment 5).
2. Amendment to the California Building Code to specify minimum reinforcing bar requirements for concrete footings (Attachment 6).
3. Amendment to the California Residential Code to prohibit use of gypsum board and limit use of cement plaster as wall bracing material (Attachment 7).

The three amendments address structural weaknesses found in poorly performing buildings in past earthquakes.

### City-Specific Amendments

Recommended amendments to Mountain View City Code Chapter 8, "Building," incorporate Electric Vehicle (EV) requirements in the Mountain View Green Building Code and a Dual Plumbing requirement in the California Plumbing Code for qualifying new construction.

EV Requirements: Environmental sustainability is one of the City Council's three major goals. The proposed EV amendment will require additional EV parking spaces to support the increasing number of EVs currently in Mountain View. Santa Clara County leads the country in EV sales. According to the California Center for Sustainable Energy, there are 7.38 EVs per 1,000 people in the County, with a total of 13,745 vehicles (June 2015). On a per-capita basis, Mountain View has the most EVs in the County at 12.32 EVs per 1,000 residents (July 2015), and has increased to roughly 14.9 EVs per 1,000 as of July 2016.

Staff introduced the Electric Vehicle Readiness Ordinance to the Environmental Planning Commission (EPC) on September 2, 2015. The EPC was supportive of increased EV infrastructure requirements because of Mountain View's position as a leader in EV usage and recommended that the proposed ordinance be amended to require 20 percent of parking spaces in all new construction to be installed with EV chargers. Following the EPC meeting, the State released the new 2016 Green Building Standards Code which requires up to 6 percent EV-ready parking spaces for future installation of Electric Vehicle Supply Equipment (EVSE) in commercial development and up to 3 percent EV-ready parking spaces for new multi-family dwellings with 17 or more units. These new code requirements in EV infrastructure are greater than previous requirements but lower than the EPC's recommendation.

While the new State Green Building Standards Code requires up to 6 percent EV-ready parking spaces, the State Code also contains an optional Tier 2 standard of roughly 10 percent. Staff is proposing that Council adopt the Tier 2 standards for the City with the amendment that the required spaces be installed with EVSE as opposed to EV-ready (as shown in the table below). Staff's recommendation is lower than that of the EPC after taking into consideration the fact that the new building code and a State law permits only actively charging EVs to park in designated spaces.

<b>TOTAL NUMBER OF ACTUAL PARKING SPACES</b>	<b>2016 CAL GREEN CODE NUMBER OF REQUIRED EV-READY SPACES (Table 5.106.5.3.3)</b>	<b>PROPOSED CITY MODIFICATIONS, TIER 2 NUMBER OF REQUIRED EV CHARGING SPACES (Table A5-106.5.3.2)</b>
0 to 9	0	1
10 to 25	1	2
26 to 50	2	4
51 to 75	4	6
76 to 100	5	9
101 to 150	7	12
151 to 200	10	17
201 and over	6 percent of total <sup>1</sup>	10 percent of total <sup>1</sup>

<sup>1</sup> Calculation for spaces shall be rounded up to the nearest whole number.

Dual Plumbing Requirements: Council has previously directed that staff prepare a dual plumbing ordinance. The proposed local amendments in the 2016 California Plumbing Code require dual plumbing infrastructure be installed in commercial buildings greater than 25,000 square feet in size. The proposed dual plumbing amendments will increase the use of treated, nonpotable water for toilet and urinal flushing and floor trap priming (plumbing valves) which will preserve the amount of potable water available for other uses in the City. The following City documents support this amendment:

- Council Goal 32—Incorporate dual plumbing in new construction as part of the triennial code adoption cycle;
- General Plan Policy INC 5.2—Citywide water conservation to reduce water waste and implement water conservation and efficiency measures throughout the City; and
- North Bayshore Precise Plan—Enhance environmental sustainability framework, water efficiency, and water conservation by reducing indoor water consumption through alternative water sources.

This requirement will apply to all new commercial buildings or groups of commercial buildings submitting for a building permit after January 1, 2017, where the total square footage of the building(s) is greater than 25,000 square feet. The structure shall incorporate dual plumbing in the design of the building to allow the use of recycled water, when it becomes available, for flushing toilets and urinals and priming floor

traps (plumbing valves). This ordinance does not apply to any structure that includes a residential occupancy.

New amendments to Mountain View City Code Chapter 14 are necessary to address local requirements and maintain uniformity in fire code amendments throughout the County.

New amendments to Mountain View City Code Chapter 24, "Hazardous Materials," incorporate several new reporting requirements and exemptions of Senate Bill 612 (Hazardous Materials), and clarify local hazardous materials business plan electronic reporting requirements.

### Statement of Findings

When a city makes a change to the model codes, it must make findings for each amendment, addition, or deletion based upon climatic, topographical, or geological conditions, including local environmental conditions as established by the City. The amendments to California Green Code and the California Plumbing Code are necessary due to local environmental conditions due to climate change issues. On November 3, 2009, in response to climate change, the City Council approved communitywide Greenhouse Gas Reduction Targets which aligned with the provisions of California Assembly Bill 197 (California Global Warming Solutions Act of 2006). Assembly Bill 197 and Senate Bill 32 were approved by the Governor on September 8, 2016, to be effective on or before January 1, 2017. The proposed California Green Code (MVGBC) and Plumbing Code amendments include provisions to administer and preserve natural resources, encourage the use of sustainable materials, manage waste, and reduce other direct and indirect causes of climate change.

The following findings fulfill the requirement for making local amendments to building standards: "The City of Mountain View experiences low humidity and warm temperatures during the summer months, creating conditions which are particularly conducive to the ignition and spread of grass, brush, and structure fires. Additionally, the City of Mountain View is geographically located in the most severe seismic zone, Seismic Zone 4, and situated near active earthquake faults capable of producing substantial seismic activity. Since the City of Mountain View is divided by major freeways and other transportation corridors, the occurrence of a major earthquake would significantly impact the ability of Fire Department personnel to respond to emergencies should one or more overpasses be substantially damaged or collapsed. Additionally, fire suppression capabilities could be severely limited should the water system be extensively damaged during a seismic event. Therefore, mitigation measures

are necessary such as: automatic fire suppression systems, communications systems, access to buildings, seismic protection, safety controls for hazardous materials, and other safeguards in an effort to minimize the risks to citizens, property, and fire suppression personnel.”

### Emerging Industry

On-demand mobile fueling of motor vehicles is an emerging service industry in many locations around the country, and is in high demand by individual consumers and businesses alike. While model fire codes have a history of allowing dispensing of diesel fuel and other combustible liquids that are difficult to ignite into vehicles located at commercial, industrial, governmental, or manufacturing establishments, the International Fire Code (IFC), Section 5706.5.4.4, prohibits the transfer of Class I flammable liquids (gasoline) from tank vehicles to motor vehicles, except for private vehicles on farms and rural areas, and at construction sites. In response to the emerging on-demand fueling industry, the Office of the State Fire Marshal convened a Mobile Fueling Task Force comprised of fire code officials, industry stakeholders, and interested parties to evaluate mobile fueling in compliance with current California laws and regulations and develop code requirements that allow for safe mobile dispensing of gasoline into motor vehicles.

Public hearings for the proposed code requirements were held October 22 and October 23, 2016, in Kansas City, Missouri. If the proposed regulations are approved by the Code Committee, they will be included in the 2018 IFC, which would be adopted by the State in 2019. Alternatively, these regulations could be adopted earlier if the State issues a supplement to the 2016 California Fire Code. In that case, these regulations could be effective in Mountain View in July 2017. Results of these hearings should be available before January 2017.

### FISCAL IMPACT

The degree of fiscal impact to the City is expected to be minimal. Funding for code books and associated staff training is provided for in the Fiscal Year 2016-17 Building Inspection Division and Fire Department budgets.

### ALTERNATIVES

1. Do not modify Chapters 8, 14, and 24 of the City Code or amend the 2016 State and 2015 International Codes and be preempted by State-adopted codes on January 1,

2017. Preemption by the State would eliminate the City's ability to enforce the proposed and existing amendments.

2. Do not adopt, or modify the local amendments as specified by City Council.
3. Provide other direction.

### **PUBLIC NOTICING**

Agenda posting in local newspaper and direct mail to selected businesses, architects, contractors, and developers.

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- Attachments:
1. Draft Ordinance, Chapter 8
  2. Draft Ordinance, Chapter 14
  3. Draft Ordinance, Chapter 24
  4. Summary List of Amendments to Chapters 8, 14, and 24 of the Mountain View City Code
  5. Tri-Chapter Uniform Code Committee Summary of Amendment 1
  6. Tri-Chapter Uniform Code Committee Summary of Amendment 2
  7. Tri-Chapter Uniform Code Committee Summary of Amendment 3
  8. [Council Report on Adoption of 2013 Codes](#)