

City of Emeryville

MEMORANDUM

DATE: November 1, 2016

TO: Carolyn Lehr, City Manager

FROM: Charles S. Bryant, Community Development Director Victor Gonzales, Chief Building Official Bonnie Terra, Alameda County Fire Division Chief/Fire Marshal

SUBJECT: Adoption Of 2016 California Building Standards Code And Local Amendments

An Ordinance Of The City Council Of The City Of Emeryville Repealing Chapters 1, 1A, 2, 3, 4, 5, 7, 8, And 19 Of Title 8 Of The Emeryville Municipal Code, Renumbering Chapters 9 Through 22 Of Title 8 Of The Emeryville Municipal Code, Renumbering And Amending Chapter 6 Of Title 8 Of The Emeryville Municipal Code, And Adopting New Chapters 1, 2, 3, 4, 5, 6, 7, 8, 9 And 10 Of Title 8 Of The Emeryville Municipal Code, Entitled "Building Regulations", And Making Required Findings Relating To The Adoption And Amendment Of The California Building Standards Code; Exempt Pursuant to CEQA Guidelines 15061(b)(3) and 15378(b)(2)

An Ordinance Of The City Council Of The City Of Emeryville Repealing Chapter 5 Of Title 4 Of The Emeryville Municipal Code And Adopting A New Chapter 5 Of Title 4 Of The Emeryville Municipal Code, Entitled "Fire Code" And Making Required Findings Relating To The Adoption And Amendment Of The California Building Standards Code; Exempt Pursuant to CEQA Guidelines 15061(b)(3) and 15378(b)(2)

STAFF RECOMMENDATION:

Staff recommends that the City Council adopt the attached Ordinance repealing Chapters 1, 1A, 2, 3, 4, 5, 7, 8, and 19 of Title 8 of the Emeryville Municipal Code, renumbering Chapters 9 through 22 of Title 8 of the Emeryville Municipal Code, renumbering and amending Chapter 6 of Title 8 of the Emeryville Municipal Code, and adopting new Chapters 1, 2, 3, 4, 5, 6, 7, 8, 9 and 10 of Title 8, entitled "Building Regulations", and making required findings.

In addition, staff recommends that the City Council concurrently adopt the attached Ordinance repealing Chapter 5 of Title 4 of the Emeryville Municipal Code and adopting a new Chapter 5 of Title 4, entitled "Fire Code", along with amendments based on local conditions, and making required findings.

Both Ordinances would take effect on January 1, 2017.

BACKGROUND:

Title 8 of the Emeryville Municipal Code (EMC), entitled "Building Regulations", and Chapter 5 of Title 4, entitled "Fire Code", were last updated in December 2013. Staff recommends that the existing Title 8 and Chapter 5 of Title 4 be updated to reflect the current California codes.

Title 24 of the California Code of Regulations, the California Building Standards Code, (also known as the California Building Code or CBC) is published in its entirety every three years, with supplements and amendments published in intervening years. The California legislature delegated authority to the California Building Standards Commission to create building regulations to implement State statutes, and these building regulations have the same force of law. Earlier this year, the State of California adopted the 2015 International Building Code (IBC) with modifications¹. The IBC includes codes for building, residential, mechanical, plumbing, electrical, green building, property maintenance, and energy. As a result, the "2016 California Building Code (CBC)" as amended by the California Building Standards Commission, is now codified in Title 24 of the California Code of Regulations, which also includes the 2016 California Fire Code.

The most significant changes in the 2016 California Building Codes are as follows:

- "Five over two" construction (five levels of wood framing over a two-floor concrete podium) is now allowed without special approval.
- Amendments to the plumbing code affecting maximum water flow rates for water faucets and showerheads.
- Certain concrete standards were reorganized and rewritten.
- Codes regulating existing structures were relocated and conditions triggering rehabilitation were clarified.
- Mandatory measures for residential electric vehicle (EV) charging stations, locations, dimensions.
- The 2015 International Existing Building Code was adopted as the California Existing Building Code.

The 2016 Green Building Code incorporates construction waste and demolition requirements, so Chapter 19 of Title 8, which addresses these issues, is proposed to be repealed.

DISCUSSION:

¹ The International Building Code is used, with local amendments, in all 50 states.

Beginning January 1, 2017, local jurisdictions will be required to enforce the 2016 California Building Code. State law allows local jurisdictions to adopt amendments to the State Building Code when such amendments are reasonably necessary because of local climatic, geological, or topographical conditions specific to that jurisdiction. The local amendments must also be more restrictive than the State code provisions. This allows each jurisdiction to amend the California Building Code to address conditions unique to their local area. Staff recommends adoption of local amendments, as described below.

Staff is recommending amendments to the California Building Code to require an automatic fire extinguishing system (i.e. sprinklers): 1) in all new structures that are at least 3,000 square feet in floor area, 35 feet in height, or three stories tall irrespective of height; 2) in all existing buildings of 3,000 square feet or more if the building is subdivided into multi-tenant spaces or condominiums, or there is a change in use or occupancy; and 3) in all renovated buildings or condominium units if the value of the improvements is equal to or greater than 50% of the replacement cost of the building or condominium unit. Amendments are also recommended to the administration provisions to reflect Emeryville's local procedures and practices. Finally, amendments are recommended to ensure internal consistency between the various model codes that make up the CBC.

It should be noted that these local amendments have historically been adopted by the City of Emeryville. They are part of the current Emeryville Building Regulations, and staff proposes to continue their administration in conjunction with adoption of the 2016 CBC.

Evidence to support the findings necessary for these amendments include the following:

- (1) Emeryville is located between 2 and 4 kilometers from the North Hayward fault, considered to be an active earthquake fault, and in seismic design category (SDC) D, a very high-risk earthquake area. Buildings and other structures in SDC D can experience seismic damage which could have an adverse impact on Fire protection. Any earth movement which causes buildings to move creates cracking and warping of fire walls, smoke barriers, door frames etc., thereby negating the effectiveness of these structural elements which are intended to prevent fire and smoke from spreading within the building. In the event of a fire in a large building, fire and smoke conditions can reach a magnitude which is beyond control capabilities of the fire department, thus resulting in major fire damage.
- (2) Emeryville is bisected topographically by Interstates 80 and 580. As a result, the City is divided into discrete districts. To travel between districts emergency vehicles must travel under and over vehicular bridges. The City's heavy traffic congestion on the surface streets and overpasses could act as a barrier for timely arrival of emergency vehicles. In the event of an accident or overpass failure due to an earthquake, sections of the City may become isolated, or response time by

emergency vehicles may be significantly slowed so as to increase the risk or severity of injury or property damage.

(3) The amendments related to automatic fire extinguishing system (i.e. sprinklers) are more restrictive than the provisions in the State Building Code in that they require such systems in certain circumstances in which they are not required by the State Building Code. These amendments are necessary for the reasons cited above.

Given these conditions specific to Emeryville, staff proposes amendments to the state building code as described above which address these local geological and topographic conditions. The Alameda County Fire Department is concerned that the City's building stock warrants the continued administration of these provisions based on topographical and geographical conditions as discussed above. These structures could constitute an immediate threat to the health, welfare, and safety of the public without the benefit of these provisions.

It is staff's recommendation to locate the sprinkler provisions in one body of code, and staff feels that the City's Fire Code in Chapter 5 of Article 4 is the appropriate location for reference and administration. A cross-reference from the Building Code in Title 8 will ensure internal consistency.

It should be noted that the above findings concerning local conditions apply only to code amendments that establish building standards, and that any such amended standards must be equivalent to, or more restrictive than, the State standards. The proposed amendments regarding fire sprinklers establish building standards that are more restrictive than those of the State, and the findings discussed above apply to those proposed standards. Amendments that are procedural in nature do not require such findings. The attached ordinances contain numerous other local amendments to the Building, Residential, Mechanical, Plumbing, and Fire codes; however, these amendments are all procedural in nature and do not establish building standards. Therefore, these amendments are permissible without making any findings regarding local conditions.

Since the State's printing of the codes in July 2016, staff has been involved in numerous training sessions to become familiar with and understand the technical aspects of the new codes. Building Division staff has also been working closely with the Fire Department, Planning Division, other local building departments and local building industry groups, architects and the general public with the goal of establishing common application of the codes throughout the East Bay region. Staff expects to continue to provide information about the new codes to local architects, engineers, developers and the public to enhance awareness and minimize transitional issues.

Staff would also like to take this opportunity to renumber the chapters of Title 8 of the Municipal Code to create a more logical organization. The following table summarizes this proposed renumbering.

Chapter	Current Chapter Title	New Chapter Title
1	Building Code	Building Code
1A	Residential Code	[not used]
2	Mechanical Code	Historical Code
3	Plumbing Code	Existing Building Code
4	Electrical Code	Residential Code
5	Green Building Standards Code	Mechanical Code
6	Dangerous Buildings Code	Plumbing Code
7	Property Maintenance Code	Electrical Code
8	Energy Code	Green Building Standards Code
9	Building Official	Property Maintenance Code
10	Fire Zones	Energy Code
11	Sandblasting	Dangerous Buildings Code
12	Signs Adjacent to Landscaped Freeways	Building Official
12A	Board of Appeals	[not used]
13	Housing Advisory and Appeals Board	Fire Zones
14	Repealed	Sandblasting
15	Seismic Hazard Identification and Mitigation Program for Unreinforced Masonry Buildings	Signs Adjacent to Landscaped Freeways
16	Regulations for the Conversion of Commercial/Industrial Buildings to Live/Work Occupancies	Board of Appeals
17	Repealed	Housing Advisory and Appeals Board
18	Building Permit Fees for the Installation of Photovoltaic Solar Panels	Seismic Hazard Identification and Mitigation Program for Unreinforced Masonry Buildings
19	Construction Waste and Demolition Requirements	Regulations for the Conversion of Commercial/Industrial Buildings to Live/Work Occupancies
20	Floodplain Management	Building Permit Fees for the Installation of Photovoltaic Solar Panels
21	Safety Assessment Placards	Floodplain Management
22	Small Residential Rooftop Solar Energy Systems	Safety Assessment Placards
23	[not used]	Small Residential Rooftop Solar Energy Systems

KEY: Strike-through Type: Former chapter content is deleted.

Normal Type: Former chapter content is retained and chapter is renumbered. **Bold Type**: New 2016 CBC provisions are adopted without local amendments. **Bold Italic Type**: New 2016 CBC provisions are adopted with local amendments. Emeryville City Council Adoption of California Building and Fire Codes November 1, 2016 Page 6

FISCAL IMPACT:

Adoption of the updated Building and Fire Codes will have no direct fiscal impact on the City.

RECOMMENDATION:

Staff recommends that the City Council take the following actions for each Ordinance:

- 1. The Ordinance be introduced after a motion to read by title only;
- 2. Public testimony be taken regarding the Ordinance;
- 3. The City Council adopt the first reading of the Ordinance.

APPROVED AND FORWARDED TO THE CITY COUNCIL OF THE CITY OF EMERYVILLE:

Carolyn Achr

Carolyn Lehr, City Manager

Attachments:

- 1. Building Regulations Ordinance amending Title 8 of the Emeryville Municipal Code
- 2. Fire Code Ordinance amending Chapter 5 of Title 4 of the Emeryville Municipal Code