



MEMORANDUM

DATE: November 19, 2019

TO: Christine Daniel, City Manager

FROM: Charles S. Bryant, Community Development Director

SUBJECT: **Adoption Of 2019 California Building Standards Code And Local Amendments**

An Ordinance Of The City Council Of The City Of Emeryville Repealing And Replacing 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 (CEQA Determination: Exempt Pursuant To CEQA Guidelines 15061(b)(3) And 15378(b)(2))

An Ordinance Of The City Council Of The City Of Emeryville Repealing And Replacing 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 (CEQA Determination: Exempt Pursuant To CEQA Guidelines 15061(b)(3) And 15378(b)(2))

STAFF RECOMMENDATION

Staff recommends that the City Council approve the first reading and introduction of the above-entitled Ordinances repealing and replacing Chapters 1, 2, 3, 4, 5, 6, 7, 8, 9 and 10 of Title 8 of the Emeryville Municipal Code, and repealing and replacing Chapter 5 of Title 4 of the Emeryville Municipal Code, entitled “Fire Code”, along with amendments based on local conditions, and making required findings. If approved by the City Council, both Ordinances would take effect on January 2, 2020.

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 2016. 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 force of law. Earlier this year, the State of California adopted the 2018 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 “2019 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 2019 California Fire Code.

Significant changes in the 2019 California Building Standards Code include the following:

California Administrative Code, Part 1:

- Clarifies when an addition is required to have a dedicated egress system.
- Revises project inspector certification examinee eligibility criteria to better recognize appropriate qualifying experience and/or education.

California Building Code, Part 2:

- Aligns engineering requirements in the building code with major revisions to national standards for structural steel and masonry construction, minor revisions to standards for wood construction, and support and anchorage requirements of solar panels in accordance with industry standards.
- Clarifies requirements for testing and special inspection of selected building materials during construction.
- Recognizes and clarifies design requirements for buildings within tsunami inundation zones.

California Mechanical Code, Part 4:

- Increases MERV (Minimum Efficiency Reporting Value) for air filters from 8 to 13.

California Green Building Code, Part 11:

- Requires electric vehicle charging infrastructure for new parking areas and additions to existing parking.
- Sets minimum requirements for use of shade trees to provide shade to surface parking areas as well as landscape and hardscape areas.

DISCUSSION

Beginning January 1, 2020, local jurisdictions will be required to enforce the 2019 California Building Code. State law allows local jurisdictions to adopt amendments to the State Building Code upon finding that such amendments are reasonably necessary because of local climatic, geological, or topographical conditions specific to that jurisdiction. The local amendments must 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.

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

Staff is recommending amendments to the California Building Code to include Standards for Construction Site Fire Safety. These standards are intended to prescribe minimum safeguards for new building construction projects in order to provide a reasonable degree of safety to life and property from fire during construction involving combustible materials.

Staff is also recommending amendments to the California Plumbing Code to require Gas Shut-Off Valves. Automatic gas shut-off valves installed either in compliance with the plumbing code, or voluntarily pursuant to a plumbing permit, are used as a safety device to shut off natural gas lines in the event of an earthquake. They generally are installed on the exterior of a residence or business in order to stop gas flow when an earthquake of significant magnitude occurs. This will decrease the chances of a fire or explosion and prevent damage to structures. This typical code provision has become common in the East Bay region for over the past 15 years, including Contra Costa County, Berkeley, Milpitas, Pittsburg and Alameda.

In addition, staff is recommending amendments to the California Building and Fire Codes 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. 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 Fire Code, and staff proposes to continue their administration in conjunction with adoption of the 2019 CBC.

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.

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. The proposed amendments to the Building Code address the local geological conditions in Emeryville.
- (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. The proposed amendments to the Building Code address the local topographical conditions in Emeryville.
- (3) The amendments related to Standards for Construction Site Fire Safety, Requirements for Gas Shut-Off Valves, and 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 proposed amendments address the local geological and topographical conditions in Emeryville.

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, which provides fire protection services to Emeryville, 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 2019, 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.

If the Council adopts the first reading of the proposed ordinances on November 19, 2019, with a second reading on December 3, 2019, the ordinances would take effect on January 2, 2020.

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.

PREPARED BY: Victor Gonzales, Chief Building Official

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



Christine Daniel, City Manager

ATTACHMENTS

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