Legislation Details (With Text)

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Title: Actions pertaining to Fire and Life Safety Regulations in the Fresno Municipal Code:
1. Adopt the finding that this project is not subject to the requirements of the California Environmental Quality Act pursuant to CEQA Guidelines, Section 15061(b)(3) as the adoption of the 2019 California Fire Code or amendments will not have a significant adverse effect on the environment
2. RESOLUTION - Making and Adopting Express Findings that Modifications or Changes to the 2019 California Fire Code Are Reasonably Necessary Because of Local Climatic, Geological, or Topographical Conditions
3. BILL - (For Introduction) - Repealing and Adding Fire and Life Safety Regulations in the Fresno Municipal Code

Sponsors: Fire Department

Indexes:

Code sections:

Attachments: 1. 2019 Ordinance - Repealing and Adding Chapter 10 Art 5 Fire and Life Safety Regulation FINAL 110719.pdf, 2. Resolution- Making Express Findings to the 2019 California Fire Code.pdf, 3. Notice of Exemption - 2019 California Fire Code.pdf, 4. Documentation Supporting Findings.pdf

Date	Ver.	Action By	Action	Result
11/14/2019	1	City Council	adopted	Pass

REPORT TO THE CITY COUNCIL

November 14, 2019

FROM: KERRI L. DONIS, Fire Chief
Fire Department

SUBJECT

Actions pertaining to Fire and Life Safety Regulations in the Fresno Municipal Code:

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Fresno Municipal Code

RECOMMENDATIONS

It is recommended that Council:

1. Adopt the finding that this project is not subject to the requirements of the California Environmental Quality Act pursuant to CEQA Guidelines, Section 15061(b)(3) as the adoption of the 2019 California Fire Code or amendments will not have a significant adverse effect on the environment.

2. Consider and adopt the attached Resolution making express findings that modifications or changes to the 2019 California Fire Code are reasonably necessary because of local climatic, geological, or topographical conditions.

3. Adopt an Ordinance Bill incorporating and adopting express findings of necessity related to local climatic, topographical, and geological conditions, which make the City's amendments to the California Fire Code reasonably necessary, repealing Article 10 of Chapter 5, and adding Article 10 to Chapter 5 of the Fresno Municipal Code relating to fire and life safety regulations.

EXECUTIVE SUMMARY

Every three years, the California Building Standards Code (CBSC) is reviewed (and modified where applicable) then adopted by the California Building Standards Commission. In 2019, the Commission voted to adopt the 2019 edition of the CBSC which includes the 2019 edition of the California Fire Code. The CBSC will go into effect January 1, 2020. The City of Fresno Municipal Code contains these standards, which are adopted or modified as necessary to ensure the safety of the community. Staff is introducing the attached Resolution and Ordinance for adoption and is recommending approval.

BACKGROUND

The 2019 CBSC incorporates the 2018 edition of the International Fire Code, as amended with necessary California amendments. The 2019 CBSC will become effective on January 1, 2020, and is mandated by the California Building Standards Commission for statewide adoption and enforcement. The City of Fresno has the authority to make necessary modifications to the State Code. Modifications that are administrative in nature do not require express findings; however, non-administrative modifications to building standards in the California Fire Code must be supported by an express finding relating to local climatic, geological, or topographical conditions. Additionally, any modification to building standards and to other provisions of the California Fire Code adopted by the California State Fire Marshal cannot be less restrictive in the specific requirements of those provisions.

The express findings relating to local climatic, geological or topographical conditions, including an analysis of the modifications, may be found in the proposed Resolution and Ordinance. The

following is a brief summary of each of these local conditions, which make the amendments to the California Fire Code necessary.

Climatic Conditions

As documented in the 2025 Fresno General Plan and the Master Environmental Impact Report No. 10130 for the General Plan, during the summer months the City of Fresno experiences periods of extreme heat.

The last three years' worth of the "Local Climatological Data Annual Summary with Comparative Data" reports for 2016, 2017, and 2018 promulgated by the United States Department of Commerce, National Oceanic and Atmospheric Administration, National Climatic Data Center demonstrate this condition. In these reports, the mean daily maximum temperature for Fresno in the summer ranged from 91.3°F 102.8°F.

Though Health & Safety Code § 17958.7 does not require the local conditions to be unique to a particular jurisdiction, the temperature charts demonstrate that the temperatures experienced in Fresno are extreme when compared to temperatures experienced in other parts of California.

Because of the extreme heat Fresno experiences during the summer months, Fresno firefighters responding to fires and other incidents requiring the evacuation of a building are regularly exposed to temperatures in excess of 105ºF when accounting for their protective gear, exposing them to the probability of heat cramps, heat exhaustion and possibly heat stroke.

Geological Conditions

The Fresno Metropolitan area is arid area that receives small amounts of rainfall each year. In 2016 Fresno received 13.651 inches of water equivalent precipitation. In 2017, the City received only 11.50 inches and in 2015, only 8.65 inches. Furthermore, the Fresno City Metropolitan Area relies primarily on groundwater for its municipal water supply. According to the California Department of Water Resources, the Kings basin (our underground aquifer) is in a state of critical overdraft.

Due to the hot, dry summers in the Fresno area, domestic water demand substantially reduces the ability of the public water system to dependably meet the larger fire flow demand in many areas of the City.

Topographical Conditions

As a result of the San Joaquin Valley's climate and topography, the San Joaquin Valley Air Basin (SJVAP) is predisposed to poor air quality. High mountain ranges surrounding the Valley frequently create air layer inversions that prevent mixing of air masses. The large number of sunny days per year, and high temperatures in the summer favors the formation of ozone. The area receives so much sunshine that the City of Fresno was ranked the second highest major California city for sunshine, eighth in the nation, with an estimated 79 percent annual average of possible sunshine for more than a 30-year period. In the winter, inversions form that often trap particulate matter.

The Federal EPA and California Air Resources Board have classified the San Joaquin Valley Air Basin as severe non-attainment for Ozone and serious non-attainment (federal) non-attainment (state) for PM_{10}. Ozone is formed by a complex series of chemical reactions between reactive organic gases

(ROG), oxides of nitrogen and sunlight. PM_{10} is suspended particulate matter that is less than 10 microns in size. Given its small size, PM_{10} can remain airborne for long periods and can be inhaled, pass through the respiratory system, and lodge in the lungs. In general, non-attainment means that the federal standard has been exceeded more than twice per year.

Smoke is composed primarily of carbon dioxide, water vapor, carbon monoxide, particulate matter, hydrocarbons and other organic chemicals, nitrogen oxides, trace minerals and several thousand other compounds. Particulate matter is the principal pollutant of concern for the relatively short-term exposures (hours to weeks) typically experienced by the public. Particulate matter in wood smoke has a size range near the wavelength of visible light (.4-.7 micrometers). Because these particles can be inhaled into the deepest recesses of the lungs, they are thought to represent a greater health concern than larger particles. Another pollutant of concern during some events is carbon monoxide. The San Joaquin Valley Air Pollution Control District states "Emissions from burning include fine particulate, hydrocarbons, oxides of nitrogen, oxides of sulfur, carbon monoxide, and toxic air contaminants that contribute to our air quality problems."

Amendments to the Municipal Code

As set forth in detail in the attached proposed Resolution and Ordinance, each of the local amendments to the California Fire Code are reasonably necessary because of these climatic, topographical and geological conditions. The amendments may be generally characterized as relating to (1) fire sprinkler systems; (2) luminous exit markings; (3) additional regulation of recycling and waste handling facilities; and (4) additional regulation of locations of above-ground tanks, the amount of Class 1 and Class II liquids at farms and construction sites in above-ground tanks and basement storage of flammable liquids. Below is a brief summary of the reasons these amendments are necessary.

Fire Sprinkler Systems

These systems have proven extremely effective in suppressing and extinguishing unwanted fires using a small fraction of the water used by traditional fire suppression methods. This results in smaller fires or fires of shorter duration and thus produces far less toxic smoke that affects air quality. Because fire sprinklers limit the size and the duration of fires, fewer fire personnel are likely to be required to respond to said fires which reduce the number of fire personnel who would be exposed to the health risks associated with sustained exposure to high temperatures and smoke toxicity. Fire sprinklers also address the extended run times due to topography-related, low density growth patterns in Fresno, and require personnel to stay on scene for shorter periods of time. This allows personnel to be available for other calls for services at a higher rate. Finally, the lower consumption of water because of the installation of fire sprinklers preserves one of our City’s most valuable resources, and limits the amount of water effluent (which could be in the millions of gallons) that is treated.

The modifications proposed in this category maintain existing amendments approved by previous Councils that continue proactive fire sprinkler installation for community-wide fire protection that commenced in 1979, and expand protection to reduce demand on the City’s resources.

Photoluminescent Exit Markings

These markings greatly assist individuals in evacuating buildings without the use of fire personnel.

Accordingly, requiring these markings facilitate the unassisted evacuation of buildings. Therefore, fewer fire personnel will be needed at the scene of a fire to assist in the evacuation of a building in which photoluminescent exit markings have been installed. This modification continues an existing amendment first approved by Council in 2006.

Additional Regulation of Recycling and Waste Handling Facilities

These regulations will serve to reduce the possibility of spontaneous combustion of piles of waste materials and facilitate the suppression and extinguishing of fires at these sites. This will result in smaller amounts of pollutants being released into the air and in effluent water runoff, and result in fewer fire personnel having to respond to said fires. This may also shorten the time that fire personnel will be required to remain at the scene of the fire. These modifications are a continuation of requirements approved by Council in 2003, after the disastrous Crippen Fire in southwest Fresno.

Additional Regulation of Flammable Liquids.

Fresno's very hot, dry conditions make all combustible materials (grass, weeds, buildings, roof coverings, etc.) highly combustible, which increases the general community wide fire hazard. High temperatures also make all flammable and combustible liquids and gases much more volatile, increasing the fire hazard where they are present. Therefore, increased regulation of the storage of certain classes of fuels and gases is reasonably necessary to reduce the fire risk associated with the ignition of these materials. These modifications are a continuation of amendments approved by Council that date back to at least 1978, in an effort to control the risk of low flash point hazardous materials in our community.

ENVIRONMENTAL FINDINGS

Staff has conducted a preliminary environmental evaluation of this ordinance pursuant to the requirements of California Environmental Quality Act (CEQA) Guidelines, section 15061(b) (3) and has determined that the adoption of the 2019 California Fire Code or amendments will not have a significant adverse effect on the environment, as defined by CEQA Guidelines, section 15382.

LOCAL PREFERENCE

Local preference was not implemented because this item does not include an award of a construction or services contract.

FISCAL IMPACT

The approval of these text amendments will have no fiscal impact to the City’s budget.

Attachments:

1. Ordinance Repealing Article 10 of Chapter 5 and Adding Article 10 to Chapter 5 of the Fresno Municipal Code Relating to Fire and Life Safety Regulations

2. Resolution Making and Adopting Express Findings that Modifications or Changes to the California Fire Code and Reasonably Necessary Because of Local Climatic, Geological, and Topographical Conditions
3. CEQA, Notice of Exemption
4. Documentation Supporting Findings