



City of Sunnyvale

Agenda Item-No Attachments (PDF)

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REPORT TO COUNCIL

SUBJECT

Public Hearing and Introduction of Ordinance Amending Chapter 16.52 of the Sunnyvale Municipal Code to Adopt by Reference the 2019 California Fire Code with Local Amendments and Related Findings and Find that the Action is Exempt from the California Environmental Quality Act

BACKGROUND

The International Fire Code (IFC) is a model fire code that regulates minimum fire safety requirements for new and existing buildings, facilities, storage and processes. The IFC is in use or adopted in 42 states and is published every three years by the International Code Council. In California, the California Building Standards Commission adopts the IFC with new statewide amendments every three years. This adopted code is known as the California Fire Code (CFC) and is found in Part 9 of Title 24 of the California Code of Regulations. Title 24 is commonly referred to as the California Building Standards Code.

The State of California adopted the 2019 California Fire Code which will be effective in January 2020 and published the documents on July 1, 2019. All local jurisdictions are required to adopt this code with appropriate amendments by January 1, 2020 or accept by default the version adopted by the State. Local amendments to the CFC must be supported with findings that are based on unique local climatic, geologic and topographic conditions.

The amendments and revisions set forth in the proposed Ordinance will establish the requirements of the 2019 Fire Code for the City of Sunnyvale.

EXISTING POLICY

Sunnyvale General Plan - Safety and Noise Sub-Element

Goal SN-1, Acceptable Levels of Risk for Natural and Human-caused Hazards

Ensure that natural and human-caused hazards are recognized and considered in decisions affecting the community and that land uses reflect acceptable levels of risk based on identified hazards and occupancy.

Goal SN-3, Safe and Secure City

Ensure a safe and secure environment for people and property in the community by providing effective public safety response, prevention, and education services.

Policy SN-1.5: Promote a living and working environment safe from exposure to hazardous materials.

ENVIRONMENTAL REVIEW

This action is exempt from the requirements of the California Environmental Quality Act (CEQA) pursuant to CEQA Guidelines Section 15308 (Class 8 - Actions by Regulatory Agencies for the

Protection of the Environment) and Section 15305 (Class 5 - Minor Alterations in Land Use Limitations) and Section 15061 because it can be seen with certainty that there is no possibility that the local amendments adopted will have a significant effect on the environment.

DISCUSSION

Our City and region confronts local fire hazards unique to our climatic, geologic, and topographic conditions. Therefore, some regional fire code amendments were developed in cooperation and coordination with other cities and fire districts in the region, as outlined below. The recommended local amendments are also discussed in detail in this section.

Cooperative Efforts at Regional Standardization

Many of the proposed amendments to the Sunnyvale Fire Code (Sunnyvale Municipal Code (SMC) Chapter 16.52) were developed in cooperation with other cities and fire districts within Santa Clara County in an effort to provide regulatory consistency throughout the county.

In early 2019, the Santa Clara County Fire Marshals began meeting monthly to focus on the new 2019 CFC. A two-step process was followed:

1. The new CFC was examined to identify areas where state standards have changed. Where changes in the new CFC duplicated existing local amendments, the local amendment was deleted.
2. Where the existing local amendment was more restrictive than the new state standards, these local amendments were identified and examined by the County Fire Marshals. These amendments were examined to see if the underlying assumptions or operational experience upon which the amendments were based were still applicable. If the basis for the amendment has not changed, the various options for local regulation were examined and agreement was reached on uniform wording for the amendment.

In addition, a task group to review hazardous materials was formed and is discussed in detail below.

Because the code is developed by such a diverse group of interests and regions, the CFC is considered a code of minimum standards. Different climates, topography, geology, and firefighting tactics, capabilities, and resources warrant different levels of built-in fire protection. For these reasons and others, cities and fire districts amend and adopt codes, which are more restrictive than the CFC or IFC.

Some of the proposed fire code amendments will be proposed for adoption by all fire jurisdictions in Santa Clara County. The changes have no impact on local zoning decisions. While many of the amendments are administrative, some substantive changes were deemed necessary based on the reasons stated in the “findings” section of the draft ordinance. These significant, substantive local amendments are explained in further detail below.

Significant Amendments to the California Fire Code and Sunnyvale Fire Code

1. Lithium ion (Li+) battery storage and handling - SMC Section 16.52.315.8.

The model code does not include regulations for safe storage and handling of lithium batteries, but given the number of research and development activities involving lithium batteries in Santa Clara County, most Santa Clara County jurisdictions have already implemented some type of meaningful

controls. Although Sunnyvale adopted local amendments to the 2016 California Fire Code to address storage of lithium batteries, the amendments proposed for 2019 are based on experience since that time and several code alternate applications that were approved after the adoption of the 2016 amendments. The proposed amendments for 2019 specify that where a threshold quantity of lithium batteries are stored or handled within a specific room or area, that room must have adequate built-in fire protection such as smoke detectors, flame detectors, and fire sprinklers. The proposed local amendment also allows for flexibility with lithium ion battery storage by essentially creating fire-rated “compartments,” where multiple areas in a single building may be separated by fire-resistive rated construction. This scheme is intended to ensure that DPS is provided very early warning of a fire where lithium ion batteries are stored and ideally contain the fire within a single area or “compartment.” Most Santa Clara County jurisdictions are proposing to adopt these amendments.

2. Additive manufacturing (3D printing) - SMC Section 16.52.321.

Additive manufacturing, better known as 3D printing, is a relatively new technology that is becoming more widely used in industrial and non-industrial settings. The 2021 edition of the IFC, which is scheduled to be adopted in 2024, contains fire safety regulations for additive manufacturing operations. Because these regulations are known and available, the local amendment proposed effectively adopts and pre-implements the 2021 IFC regulations. This section also proposes an additional provision to provide authority for a safety evaluation and certificate to certify the safety of the equipment and processes employed. Most Santa Clara County jurisdictions are proposing to adopt these amendments.

3. Emergency responder radio communication systems - SMC Section 16.52.510.

The Silicon Valley Regional Interoperability Authority (SVRIA) establishes guidelines specific to the design of the Silicon Valley Regional Communication System (SVRCS) to ensure sufficient radio coverage in the event of an emergency across the region. It is anticipated that the SVRIA will be making significant changes to their guidelines in the coming year. In light of the forthcoming changes to the SVRIA guidelines, a local amendment is proposed to provide sufficient flexibility to incorporate the forthcoming SVRIA guidelines and the existing amendments that directly affect the design of emergency responder radio coverage systems are proposed to be deleted. The provisions will be retained within a standards and policy document promulgated by the Department of Public Safety and aligned with Countywide standards. The intended goal is to allow for the standards and policy document to be modified as needed in response to anticipated revisions from SVRIA after adoption of this code.

4. Hazardous materials - SMC Sections 16.52.5003 and 16.52.6004.

Significant revisions to the existing local amendments in the hazardous materials sections noted above are proposed. Since the early to mid-1980's, Santa Clara County jurisdictions, including Sunnyvale, have adopted local regulations to control highly toxic, toxic, and moderately toxic gases and other health hazards, including but not limited to carcinogens, sensitizers, and irritants. Most of the local requirements were adopted as part of a Toxic Gas Ordinance and Hazardous Materials Storage Ordinance that pre-dated adoption of substantial updates to the model fire and building codes that now address fire and life safety hazards of hazardous materials. Moderately toxic gases and other health hazards are categories of hazardous materials that are not considered to present a fire or life safety hazard significant enough to be regulated by the model code. This year, the Santa Clara County Fire Marshals convened a task group to review the local regulations, which are considerably more restrictive than model codes, to better align with model code requirements and eliminate regulations deemed no longer necessary or overly restrictive. Given the diversity in the task

group and the varying levels of use of these materials across jurisdictions, not all jurisdictions agreed on the appropriate level of regulation. Generally, the local rules were relaxed across the County by raising the quantity threshold that establishes when controls apply. The amendments proposed here are consistent with the revised regulations for hazardous materials accepted by the countywide task group, except that moderately toxic gases and other health hazard materials are not included. Sunnyvale and the City of Santa Clara are proposing fire code amendments that eliminate these categories and San Jose has elected to propose amendments eliminating local regulation of other health hazards materials only. The remaining jurisdictions intend to retain local amendments regulating both categories of hazardous materials.

5. Propane heaters on exterior balconies and roofs - SMC Section 15.62.603.4.

In an effort to encourage a safer, alternative means of exterior heating, an amendment is proposed that will prohibit portable propane heaters on exterior balconies and roofs of buildings other than single family homes. Most Santa Clara County jurisdictions are proposing to adopt this amendment.

6. Mobile hydrogen fueling - SMC Section 16.52.5809.

The State of California has modified the IFC by adopting provisions to the CFC that allow for gaseous hydrogen-fueled motor vehicles to be fueled from mobile hydrogen fueling vehicles rather than requiring fueling at fixed fueling stations. The purpose of this California amendment is to encourage the sale of hydrogen vehicles to meet reduced emission goals. The proposed local amendment would limit mobile hydrogen fueling to an amount sufficient to reach a fixed hydrogen fueling station, and would not impact emergency roadside service. The safety controls and setbacks in the proposed amendment are similar to those required for mobile fueling of gas vehicles and the proposed Countywide amendment will require purveyors to obtain a site permit where ever they plan for hydrogen fueling to occur.

FISCAL IMPACT

No fiscal impact is expected. Updated fees associated with some of these changes may be necessary which will be brought for Council approval with other Department-wide fee adjustments. Additional training and fire code materials may be absorbed in existing budgetary allocations.

PUBLIC CONTACT

Public contact was made by posting the Council agenda on the City's official-notice bulletin board outside City Hall, at the Sunnyvale Senior Center, Community Center and Department of Public Safety; and by making the agenda and report available at the Sunnyvale Public Library, the Office of the City Clerk and on the City's website.

ALTERNATIVES

1. Introduce the Ordinance Amending Chapter 16.52 of the Sunnyvale Municipal Code to Adopt by Reference the 2019 California Fire Code with Local Amendments and Related Findings, and Find that the Action is Exempt from the California Environmental Quality Act under CEQA Guidelines Sections 15308, 15305, 15061.
2. Do not introduce the proposed ordinance.

STAFF RECOMMENDATION

Alternative 1: Introduce the Ordinance Amending Chapter 16.52 of the Sunnyvale Municipal Code to Adopt by Reference the 2019 California Fire Code with Local Amendments and Related Findings, and Find that the Action is Exempt from the California Environmental Quality Act (CEQA) under

CEQA Guidelines Section 15308, 15305, and 15061.

Prepared by: Lynne M. Kilpatrick, Fire Marshal

Reviewed by: Phan S. Ngo, Director, Department of Public Safety

Reviewed by: Teri Silva, Assistant City Manager

Approved by: Kent Steffens, City Manager

ATTACHMENTS

1. Proposed Ordinance Amending Sunnyvale Municipal Code Chapter 16.52 to Adopt by Reference the 2019 California Fire Code with Local Amendments and Related Findings