

RESOLUTION NO. 22-13

A RESOLUTION OF THE NORTH CENTRAL FIRE PROTECTION DISTRICT BOARD OF DIRECTORS MAKING AND ADOPTING EXPRESS FINDINGS THAT MODIFICATIONS OR CHANGES TO THE CALIFORNIA FIRE CODE ARE REASONABLY NECESSARY BECAUSE OF LOCAL CLIMATIC, GEOLOGICAL AND TOPOGRAPHICAL CONDITIONS

WHEREAS, the State of California has adopted the 2021 edition of the International Fire Code, with amendments, which was entitled the 2022 California Fire Code. The 2022 California Fire Code has been incorporated into Title 24, Part 9 of the California Code of Regulations and will take effect on January 1, 2023; and,

WHEREAS, California Health & Safety Code Section 13869.7(a) authorizes the District, by ordinance, to make changes or modifications to the requirements contained in the provisions of the California Fire Code and other regulations adopted pursuant to California Health & Safety Code Sections 17958.7 and 18941.5 that result in more stringent local requirements; and,

WHEREAS, California Health & Safety Code Sections 17958.7 and 18941.5 requires more stringent local requirements be supported by express findings made by a fire protection district that such modifications or changes are “reasonably necessary because of local climatic, geological or topographical conditions”; and,

WHEREAS, the Board of Directors of the North Central Fire Protection District intends this Resolution to fulfill the requirements of the California Health & Safety Code regarding modifications or changes to the California Fire Code including express findings of reasonable necessity because of local climatic, geological or topographical conditions.

NOW, THEREFORE, BE IT RESOLVED that the North Central Fire Protection District Board expressly finds each of the various proposed modifications or changes to the California Fire Code, which are enumerated below, are reasonably necessary because of local climatic, geological and topographical conditions in the area encompassed by the North Central Fire Protection District, as follows:

A. LOCAL CONDITIONS:

Pursuant to Health and Safety Code, Sections 17958.7 and 18941.5, local climatic, topographical, or geological conditions make the amendments to the California Fire Code reasonably necessary. The District is contiguous with the City of Fresno as well the City of Kerman metropolitan area and has nearly identical climate, geology, and topography. The District’s water supply for firefighting is provided exclusively from pumped ground water sources. The local conditions for the findings for both the District as well as, the City of Fresno, and City of Kerman are very similar.

Pursuant to Health and Safety Code, Sections 17958.7 and 18941.5, local climatic, topographical or geological conditions make the amendments to the California Fire Code reasonably necessary.

1. CLIMATIC – EXTREME TEMPERATURES

1.1 As documented in the 2035 City of Fresno General Plan and the City of Fresno Master Environmental Impact Report No. 10130 for the General Plan, during the summer months the City of Fresno, along with the District experiences periods of what can only be described as 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 the 2018 summary, the mean daily maximum temperature for Fresno in June, July, August and September is: 95.6°F, 102.3°F, 98.3°F and 91.5°F respectively. In 2015 the same information is noted as: 96.4°F, 101.2°F, 98.6°F and 94.6°F and in 2016 was: 96.8°F, 96.8°F, 97.1°F and 92.4°F. The District experiences similar conditions to that of metropolitan Fresno.

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

2. GEOLOGICAL – LIMITED WATER SUPPLY AND WATER PRESSURE

2.1 The North Central Fire Protection District area is arid area that receives small amounts of rainfall each year. In 2020, the District received only 6.17 inches of water equivalent precipitation. In 2021, the District received only 10.38 inches and in 2022, only 1.85 inches. Furthermore, the District relies primarily on pumped groundwater for its water supply. According to the California Department of Water Resources, the Kings basin (the District's underground aquifer) is in a state of critical overdraft.

2.2 Due to the hot, dry summers in the District, domestic, agricultural and industrial water demand substantially reduces the ability of the water system and aquifer to dependably meet the larger fire flow demand in many areas of the District.

3. CLIMATIC/TOPOGRAPHICAL – POOR AIR QUALITY CAUSED BY TOPOGRAPHY OF SAN JOAQUIN VALLEY AIR BASIN, LARGE NUMBER OF SUNNY DAYS AND INVERSIONS THAT FORM DURING WINTER MONTHS

3.1 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, favor the formation of ozone. The area is so sunny the City of Fresno was ranked the second highest major California city for sunshine, with an estimated 79% annual average of possible sunshine for more than a forty-year period. In the winter, inversions form that often trap particulate matter.

3.2 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 PM₁₀. Ozone is formed by a complex series of chemical reactions between reactive organic gases (ROG), oxides of nitrogen and sunlight. PM₁₀ is suspended particulate matter that is less than 10 microns in size. Given its small size, PM₁₀ can remain airborne for long periods and can be inhaled, pass through the respiratory system, and lodge in the lungs. In general, nonattainment means that the Federal standard has been exceeded more than twice per year.

3.3 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 from some 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). Since 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."

4. TOPOGRAPHICAL – DEVELOPMENT PATTERN

4.1 Due to the relatively low-density growth pattern in the District, its six fire stations are spaced over four miles apart resulting in an above average of a running distance for the designated first-in engine company. This above average travel distance increases the response time to fires, which result in an increase in the size and intensity of fires.

B. REASONABLE NECESSITY

As set forth in detail in the attached proposed Resolution, 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) luminous exit markings and (2) recycling and waste handling facilities. Below is a brief summary of the reasons these amendments are necessary.

2. PHOTOLUMINESCENT EXIT MARKINGS

2.1 Photoluminescent exit markings greatly assist individuals in evacuating buildings without the use of fire personnel. Accordingly, requiring these markings will facilitate the unassisted evacuation of buildings. Therefore, fewer fire personnel will be needed at the scene of the fire to assist in the evacuation of a building in which photoluminescent exit markings have been installed. This modification continues an existing amendment previously approved by the Board.

3. ADDITIONAL REGULATION OF RECYCLING AND WASTE HANDLING FACILITIES

3.1 These additional 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 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 fires.

PASSED and ADOPTED at a regular meeting of the Board of Directors of the North Central Fire Protection District, held this 15th day of December, 2022 by the following vote:

AYES:

NOES:

ABSENT:

ABSTAIN:

APPROVED:



Ken Abrahamian, Board Chair

ATTEST:



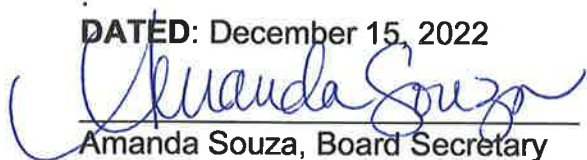
Amanda Souza, Board Secretary

CERTIFICATE

STATE OF CALIFORNIA)
COUNTY OF FRESNO) ss.
CITY OF KERMAN)

I, Amanda Souza, Board Secretary of the North Central Fire Protection District, do hereby certify the foregoing Resolution of the Board of Directors of the North Central Fire Protection District was duly passed and adopted at a Regular Meeting of the Board of Directors on December 15, 2022

DATED: December 15, 2022


Amanda Souza, Board Secretary