

BUILDING STANDARDS COMMISSION

2525 Natomas Park Drive, Suite 130
Sacramento, California 95833-2936
(916) 263-0916 FAX (916) 263-0959



March 2, 2011

Michael Despain, Deputy Chief/Fire Marshal
Fire Prevention and Investigation Division
City of Fresno
911 H Street
Fresno, CA 93721-2510

Dear Mr. Despain:

This letter is to acknowledge receipt on January 10, 2011 of the City of Fresno submittal pertaining to Ordinance No. 2010-48 with findings and is acceptable for filing. Your filing attests to your understanding that according to Health and Safety Code Section 17958.7 no modification or change to the California Building Standards Code shall become effective or operative for any purpose until the finding and the modification or change have been filed with the California Building Standards Commission (the Commission).

This letter attests only to the filing of these local modifications with the Commission, which is not authorized by law to determine the merit of the filing.

As a reminder, local modifications are specific to a particular edition of the Code. They must be readopted and filed with the Commission in order to remain in effect when the next triennial edition of the Code is published. In addition, should you receive Fire Protection District ordinances for ratification, it is required to submit the ratified ordinances to the Department of Housing and Community Development [H&SC Section 13869.7(c)], attention State Housing Law Program Manager, rather than the Commission.

If you have any questions or need any further information, you may contact me at (916) 263-0916.

Sincerely,

A handwritten signature in black ink, appearing to read "Enrique M. Rodriguez".

Enrique M. Rodriguez
Associate Construction Analyst

cc: Chron
Local Filings



Micheal Despain
Deputy Chief/Fire Marshal

Fire Prevention and Investigation Division
911 H Street
Fresno, California 93721-2510
(559) 621-4181 FAX (559) 498-4323
www.fresno.gov

January 6, 2011

California Building Standards Commission
2525 Natomas Park
Sacramento CA 95833-2936

RE: CITY OF FRESNO LOCAL AMENDMENTS TO THE 2010 CALIFORNIA FIRE CODE

Dear Commission:

Enclosed with this correspondence is Ordinance Bill No. B-46 which adopted the necessary Finding to modify the 2010 *California Fire Code* to include local amendments modifying building standards. The actual local amendments related to building standards are located in tabbed Section 1 of the Ordinance commencing on page 13 of the Ordinance and have been highlighted for reference. The Finding is contained in tabbed Section 2 of the Ordinance Bill. This Bill will be codified as *Fresno Municipal Code, Article 10, Chapter 5*.

The other local amendments are related to sections of the *California Fire Code* addressing administrative and procedural matters which do not require the Finding related to local climatic, topographical and geological conditions.

The Fresno City Council introduced this Ordinance Bill at its meeting on November 18, 2010 and then adopted the Ordinance Bill at its meeting on December 2, 2010. As such, this Ordinance is scheduled to go into effect on or about January 3, 2011.

If after reviewing this correspondence or the attached Ordinance Bill you have any questions, please do not hesitate to contact the undersigned.

Sincerely,

Micheal Despain
Deputy Chief/Fire Marshal

MD:BB:amg
Enclosure

RECEIVED
FRESNO FIRE DEPARTMENT
JAN 10 11 10 AM '11



REPORT TO THE CITY COUNCIL

AGENDA ITEM NO.

COUNCIL MEETING 11-18-10

APPROVED BY

DEPARTMENT DIRECTOR

CITY MANAGER

November 18, 2010

FROM: JOEL L. ARANAZ, Fire Chief
Fire Department

SUBJECT: INTRODUCTION OF AN ORDINANCE BILL REPEALING AND REENACTING FIRE AND LIFE SAFETY REGULATIONS IN THE FRESNO MUNICIPAL CODE

RECOMMENDATIONS

It is recommended 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 there is clearly no possibility the adoption of the 2010 California Fire Code or amendments may have a significant adverse effect on the environment.
2. Consider and adopt the attached resolution making express findings that modifications or changes to the 2010 California Fire Code are reasonably necessary because of local climatic, geological, or topographical conditions.
3. Introduce 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 Mechanical 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 is reviewed and modified, where applicable, and adopted by the California Building Standards Commission. On January 12, 2010, the Commission voted to adopt the 2010 edition of the Code. The California Fire Code will go into effect on January 1, 2011, regardless whether the City formally adopts it. 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 to be considered for adoption on December 2, 2010.

BACKGROUND

The 2010 California Building Standards Codes incorporates the 2009 edition of the International Fire Code, as amended with necessary California amendments. The 2010 California Building Standards Code will become effective on January 1, 2011, 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, and summary of proposed administrative amendments

to the 2010 California Fire Code is attached to this Staff Report. However, non-administrative modifications to the California Fire Code must be based upon express findings of necessity relating to relating to local climatic, geological, or topographical conditions.

FINDINGS REGARDING LOCAL CLIMATIC, TOPOGRAPHICAL, AND GEOLOGICAL CONDITIONS

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 the local climatic, topographical, and geological conditions, which make the local amendments to the California Fire Code reasonably necessary, including extreme temperatures, limited water supply and pressure, poor air quality and sunny days, and lower density development facilitated by local topography.

CLIMACTIC CONDITIONS – EXTREME TEMPERATURES

As documented in the 2025 Fresno General Plan¹ and the Master Environmental Impact Report No. 10130² for the General Plan, during the summer months the City of Fresno experiences periods of what can only be described as extreme heat. For example, Exhibit 1 to the attached Resolution is a chart setting forth the high temperatures in Fresno, San Francisco, and San Diego for each day from July 1, 2006, through July 31, 2006, as reported by the National Weather Service. During this approximately 31-day period, the average high temperature in Fresno was 103.4 degrees, the average high temperature in San Diego was 81.2 degrees, and the average high temperature in San Francisco was 68.8 degrees. Furthermore, during this 31-day period, the average temperature in Fresno was 87.8 degrees, the average temperature in San Diego was 76.3 degrees, and the average temperature San Francisco was 61.7 degrees. Finally, during this 31-day period Fresno experienced 20 days where the maximum temperature exceeded 100 degrees, while neither San Diego nor San Francisco experienced such temperatures at any time during the 31-day period. Though Health & Safety Code Section 17958.7 does not require the local conditions to be unique to a particular jurisdiction, the temperature chart demonstrates the temperatures experienced in Fresno are extreme as compared to temperatures experienced in other parts of California.

Due to 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 105 degrees, when accounting for their protective gear, exposing them to the probability of heat cramps, heat exhaustion, and possibly heat stroke.

GEOLOGICAL – LIMITED WATER SUPPLY AND WATER PRESSURE

The Fresno Metropolitan area is arid area, which receives an average of 10 to 12 inches of precipitation per year occurring primarily in the winter months. Furthermore, the Fresno City Metropolitan Area relies primarily on groundwater for its municipal water supply. The underground aquifer is in a state of overdraft estimated at approximately 10,000-acre feet per year. Finally, local rainfall alone, even if fully captured, would meet only 20 percent of the Fresno Metropolitan Area's water needs.

¹ The 2025 Fresno General Plan at p. 166 states, "Fire Hazards. Fresno's high summer temperatures, intense sunlight, and low rainfall potentiate fires by drying and pre-heating combustible material and by fostering spontaneous combustion of flammable material. Fresno's estimated maximum wind speed (used to design structures) is 70 mph, which could fan blazes to a high intensity."

² Master Environmental Impact Report No. 10130 at p. states, "The climate of the FMA [Fresno Metropolitan Area] is characterized by hot, dry summers ... Temperatures in the FMA range from a mean monthly maximum of 97.9 [degrees] F in July to a mean monthly minimum of 36.3 [degrees] F in December."

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

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, which 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 that the City of Fresno was ranked the second highest major California city for sunshine, with an estimated 79 percent annual average of possible sunshine for more than a 40-year period.³ In the winter, inversions form that often trap particulate matter.⁴

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, non-attainment means the federal standard has been exceeded more than twice per year.⁵

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). 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.⁶ 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."

TOPOGRAPHICAL – FRESNO'S DEVELOPMENT PATTERN

Due to the relatively low density growth pattern in the Fresno area, 20 fire stations are spaced approximately four miles apart resulting in an average of a two-mile running distance for the designated first-in company. This average two-mile travel distance increases the response time to fires, which result in an increase in the size and intensity of fires.

FINDINGS REGARDING THE REASONABLY NECESSITY OF THE PROPOSED AMENDMENTS TO THE CALIFORNIA FIRE CODE GIVEN LOCAL CLIMATIC, TOPOGRAPHICAL, AND GEOLOGICAL CONDITIONS

As set forth in detail in the attached proposed Resolution and Ordinance, each of the amendments requiring express findings of necessity to the California Fire Code are reasonably necessary because of these local climatic, topographical, and geological conditions. The amendments may be generally characterized as

³ See <http://www.ncdc.noaa.gov/oa/climate/online/ccd/pctposrank.txt>

⁴ Master Environmental Impact Report No. 10130, 2025 Fresno General Plan, p. V-C1

⁵ Master Environmental Impact Report No. 10130, 2025 Fresno General Plan, p. V-C1-C3

⁶ Wildfire Smoke – A Guide for Public Health Officials (2001) Published by the Washington State Department of Health, p. 3.

Report to City Council

Introduction of an Ordinance Bill Repealing and Reenacting Fire and Life

Safety Regulations in the Fresno Municipal Code

November 18, 2010

Page 4

relating to (1) solar panel installation; (2) fire sprinkler systems; (3) luminous exit markings; (4) additional regulation of lumber yards, woodworking, recycling, and waste handling facilities; and (5) additional regulation of motor fuel dispensing and repair garages, 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.

SOLAR PANEL INSTALLATION

Local sunny conditions are conducive to a growing prevalence and use of solar panel arrays in the City of Fresno. The presence of solar panel arrays on the roofs of buildings present fire ground operational issues including restricted access points to the roof, delay in deploying ground ladders restricted locations for effective roof venting, and live direct current conductors on the roof and inside the attic. Solar panel placement done without regard to firefighter access and safety can result in additional working time on roofs, delay in fire suppression efforts, greater exposure by firefighters to health risks associated with exposure to sustained high temperatures, and increase in fire duration creating more smoke affecting air quality and requiring increased use of water. By establishing a layout for solar panel arrays that takes into account fire ground operation needs, fewer firefighters and less time will be needed to effect roof venting operations. This section incorporates Solar Photovoltaic Installation Guidelines promulgated by a California State Fire Marshal task force that included fire, building, and solar industry participation.

FIRE SPRINKLER SYSTEMS

Fire sprinkler systems have proven effective in suppressing and extinguishing structural fires using a small fraction of the water used with traditional fire suppression methods and resulting in the smaller fires or shorter duration and thus in the generation of far less smoke that effects air quality. Furthermore, because the fire sprinklers will limit the size and duration of fires, fewer fire personnel will be required to respond to said fires. This reduces the number of fire personnel who would be exposed to the health risk associated with sustained exposure to high temperatures and also addresses extended run time due to topography-related low density growth pattern in the Fresno. The modifications proposed in this category maintain existing amendments approved by Council in 2007, which continue a proactive fire sprinkler installation emphasis for community fire protection that commenced in 1979.

LUMINOUS EXIT MARKINGS

Luminous 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 first approved by Council in 2006.

ADDITIONAL REGULATION OF LUMBER YARDS, WOODWORKING, RECYCLING, AND WASTE HANDLING FACILITIES

These additional regulations will serve to reduce the possibility of spontaneous combustion of piles of wood and wood waste and facilitate the suppression and extinguishing of fires at these sites. This will result in less pollutants being released into the air and in fewer fire personnel having to respond to said fires and a shortening in the time fire personnel will be required to remain at the scene of the fires. These modifications are a continuation of requirements approved by Council initially in 2003 after the disastrous Crippen Fire in southwest Fresno.

Report to City Council
Introduction of an Ordinance Bill Repealing and Reenacting Fire and Life
Safety Regulations in the Fresno Municipal Code
November 18, 2010
Page 5

ADDITIONAL REGULATION OF MOTOR FUEL DISPENSING AND REPAIR GARAGES, LOCATIONS OF ABOVE-GROUND TANKS, THE AMOUNT OF CLASS I AND CLASS II LIQUIDS AT FARMS AND CONSTRUCTION SITES IN ABOVE-GROUND TANKS AND BASEMENT STORAGE OF FLAMMABLE LIQUIDS.

Fresno's very hot, dry conditions make all combustible materials (grass, weeds, buildings, roof, etc.) highly combustible, which increases the general fire hazard. High temperatures also make all flammable and combustible liquids and gases much more volatile, increasing the fire hazard. 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 fuel and gases. The modifications are a continuation of amendments approved by Council back to at least to 1978, which control the risk of low flash point hazardous materials in our climate.

SUMMARY

Local amendments proposed for adoption are limited to those felt essential to effectively administer Code responsibilities in daily operations and to maintain previous amendments approved by Council relating to fire and life safety. Staff recommends adoption of the standards as proposed.

FISCAL IMPACT

No financial impact.

ENVIRONMENTAL FINDING

Staff has conducted a preliminary environmental evaluation of this ordinance and resolution, and this project is not subject to the requirements of the California Environmental Quality Act pursuant to CEQA Guidelines, section 15061(b)(3) as there is clearly no possibility that the adoption of the California Fire Code or the amendments may have a significant adverse effect on the environment.

JLA:MD:BB:amg:mc 111010

Attachments:

2010 California Code Amendments Summary Sheet.

Notice of Exemption, dated November 10, 2010.

Ordinance Incorporating And Adopting Express Findings Of Necessity Related To Local Climatic, Topographical And Geological Conditions That 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.

Resolution Of The Council Of The City Of Fresno, California, 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.

2010 California Fire Code Administrative Amendments Summary Sheet

| FMC SECTION | TITLE | DESCRIPTION | REASON |
|---------------|---|--|--|
| 10-50100 | Adoption of the California Fire Code | Adoption language for the 2010 CFC | Administrative language |
| 10-50101.1 | Title | Existing FMC amendment regarding titles for legal purposes | Administrative language |
| 10-50101.1.1 | Fire Zones | Existing FMC amendment retaining defined fire zones for purpose of regulating specified hazards including flammable liquid, gas tanks, and explosives. | Definition is administrative |
| 10-50101.1.2 | Limits Established By Law | Existing FMC amendment specifies Code section where fire zone restrictions apply | Administrative language to ensure coordination between the provisions of the FMC |
| 10-50102.3 | Change of Occupancy | Existing FMC amendment coordinating occupancy changes with the Development and Resource Management Department | Administrative coordination of enforcement action within City department(s) |
| 10-50102.5 | Historic Buildings | Existing FMC amendment references the California State Historic Building Code | Administrative language |
| 10-50103.1 | General | Existing FMC amendment on establishment of a department of fire prevention | Administrative language |
| 10-50104.3.2 | Inspection Frequency | Adds sub-section clarifying that the Fire Chief can determine frequency of inspection | Frequency of inspections are administrative in nature |
| 10-50105.6 | Required Operational Permits | Adds language specifying permits are required only where a fee has been established in the MFS | Fees and permits are administrative issues |
| 10-50105.6.12 | Open Burning | Adds language on open burning permit requirements related to SJVAPC District | Coordinates with the San Joaquin Air Pollution Control District requirements; permits are administrative |
| 10-50105.6.13 | Exhibits, Trade Shows, and Special Events | Existing amendment adding "special events" to the operational permit section to recover costs | Cost recovery and permits are administrative issues |
| 10-50105.6.15 | Fire Hydrants | Existing amendment regarding use permits for fire hydrants; defers permit issuance to the City Water Division or Water District providing fire hydrant service | Fees and permits are administrative issues |

2010 California Fire Code Administrative Amendments Summary Sheet

| FMC SECTION | TITLE | DESCRIPTION | REASON |
|---------------|----------------------------------|--|---|
| 10-50105.6.48 | Exterior Storage | Existing FMC amendment for exterior storage permits; cost recovery for time spent on large outside storage area inspections | Fees and permits are administrative issues |
| 10-50105.7 | Required Construction Permits | Adds provision specifying construction permits are only required only where a fee has been established in the MFS | Fees and permits are administrative issues |
| 10-50105.7.1 | Automatic Fire Sprinkler Systems | Existing FMC amendment modifies language on when permits are required and enable a charge for witnessing five-year maintenance inspections | Fees and permits are administrative issues |
| 10-50105.7.10 | LP-Gas | Adds a minimum threshold where a construction permit is required for LPG tanks | Permits are administrative issues |
| 10-50108 | Board of Appeals | Existing FMC amendment coordinating appeals process administered by the Development and Resource Management Department | Administrative coordination of enforcement action within City department(s) |
| 10-50109.2.1 | Service | Existing FMC amendment section deleting requirement for certified mail delivery of notices | Methods for delivery of notices are administrative |
| 10-50109.3 | Violation Penalties | Existing FMC amendment with minor modification clarifying on code violation penalties | Coordinates and comports the administration of penalties with existing provisions in FMC Chapter 1, Article 3 |
| 10-50109.4 | Cost Recovery | Adds a requirement allowing cost recovery in enforcing public nuisance abatement | Recovery of costs for staff time spent on legal actions under FMC Chapter 1 is administrative |
| 10-50110.1 | General | Existing FMC amendment references Dangerous Building Ordinance for abatements | Coordinates and comports Fire Code with local administrative procedures in the Dangerous Building Ordinance to abate unsafe buildings |
| 10-50111.4 | Failure to Comply | Existing amendment on local penalties and administrative citations for failure to comply with stop work orders | Administrative citations are administrative issues |

2010 California Fire Code Administrative Amendments Summary Sheet

| FMC SECTION | TITLE | DESCRIPTION | REASON |
|--------------|---|---|--|
| 10-50113.6 | Fee for Inspection Services | Adds section allowing cost recover for fire inspection services | Comports Fire Code with authority under the Government Code to recover cost for services, an administrative matter |
| 10-50202 | General Definitions | Existing amendment regarding Fire Chief's authority and fire marshal title | Administrative clarification the fire code official for the City is the Fire Chief; defines the title of Fire Marshal. |
| 10-50304.4 | Recycling and Waste Handling Facilities | Existing FMC amendment references Chapter 19 for additional requirements at recycling and waste handling facilities; this is one of a series of amendments enacted after the Crippen and Barrios fires | Comports Fire Code with other provisions of the FMC; frequency of inspections is an administrative issue |
| 10-50304.5 | Dumping of Combustible Waste Material | Existing FMC amendment to address illegal dumping | Coordinates Fire Code with illegal dumping restrictions; determination where dumping may not occur is administrative |
| 10-50304.6 | Removal of Debris | Existing FMC amendment to address removal of fire debris | Determination of a time line as to when post-fire cleanup must commence is administrative |
| 10-50311.1.1 | Abandoned Premises | Existing amendment referencing the Dangerous Building Ordinance for abatement regarding safeguarding abandoned buildings | Administratively coordinates and comports the Fire Code with the Dangerous Building Ordinance |
| 10-50311.5 | Placards | Existing amendment referencing the Dangerous Building Ordinance for warning placarding for firefighters | Administratively coordinates and comports the Fire Code with the Dangerous Building Ordinance |
| 10-50312.1 | General | Existing amendment references Public Works standard for hydrant and riser bollards | Administratively coordinates and comports the Fire Code with Public Works standards |
| 10-50315.3.3 | Additional Requirements for Outside Storage | Existing amendment references other Fire Code sections for additional outside storage requirements; one of a series of amendments enacted after the Crippen and Barrios fires to establish regulations on inspections | Comports Fire Code with other provisions of the FMC; frequency of inspections is an administrative issue |

2010 California Fire Code Administrative Amendments Summary Sheet

| FMC SECTION | TITLE | DESCRIPTION | REASON |
|--------------|--|--|---|
| 10-50401.3 | Charge for Suppression and Hazardous Material Incident Responses | Existing FMC requirements on incident cost recovery penalty for when failure to comply with a correction notice contributes to an incident | Penalties and issuance of correction notices are administrative issues |
| 10-50505.1 | Premise Identification | Coordinates existing FMC requirements for addressing of buildings | Coordinates and comports the Fire Code with other provisions of the FMC |
| 10-50506 | Locked Premises Access | Existing FMC amendment on local requirements for building and gate access to property. | Coordinates and comports the Fire Code with other provisions of the FMC. |
| 10-50901.4.3 | Additional Fire Protection Systems | Existing FMC amendment clarifying language of this section to the fire code official with more options for specifying requirements to mitigate hazards | Coordinates and comports the Fire Code with other provisions of the FMC; enforcement options and procedures are administrative |
| 10-53302 | Prohibition of Fireworks | Existing FMC amendment (with modification) regulating safe and sane fireworks and sale use | Coordinates and comports the Fire Code with Government Code, Section 53069.4 and Health and Safety Code, Section 12557; the enforcement, collection and administrative review of administrative fines is administrative |
| 10-53303 | Prohibition of Explosives | Existing FMC amendment (with modification) regulating storage and manufacturing of explosives | Coordinates and comports the Fire Code with provisions of law prohibiting the storage and manufacture of explosives |
| 10-53801.3 | Construction Documents | Existing FMC amendment requiring plan submittal for LPG installations | Coordinates and comports with other provisions to ensure compliance with Chapter 38 of the Fire Code; allows for the administrative review of plans |

NOTICE OF EXEMPTION

**CITY OF FRESNO
Environmental Assessment**

Applicant: City of Fresno
Fresno Fire Department
911 H Street
Fresno, CA 93721

Project Location: Citywide

Project Description: An ordinance of the City of Fresno adopting the 2010 California Fire Code as amended.

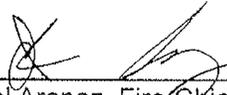
Exempt Status: The project is not subject to the requirements of CEQA pursuant to Section 15061(b)(3) of the Guidelines for California Environmental Quality Act.

Reason for Exempt Status: The adoption of this ordinance is exempt from having to comply with the requirements of CEQA, pursuant to CEQA Guidelines Section 15061(b)(3) which states: "CEQA only applies to project which have the potential for causing a significant effect on the environment. Where it can be seen with certainty that there is no possibility that the activity in question may have a significant effect on the environment, the activity is not subject to CEQA."

This exemption is applicable as the State of California has preempted the field related to fire standards and has already adopted the California Fire Code to go into effect on January 1, 2011, regardless of the City's action. There is no possibility the City's activity in adopting the 2010 California Fire Code will have a significant effect on the environment.

Date: November 10, 2010

Prepared by: Byron Beagles, Fire Prevention Engineer
City of Fresno

By: 
Joel Aranaz, Fire Chief
Fresno Fire Department
City of Fresno
(559) 621-4002

ORDINANCE OF THE COUNCIL OF THE CITY OF FRESNO
PROPOSED AND INITIATED BY _____
MOVED BY _____ SECONDED BY _____

BILL NO. B-46

ORDINANCE NO. 2010-48

AN ORDINANCE OF THE CITY OF FRESNO, CALIFORNIA, INCORPORATING AND ADOPTING EXPRESS FINDINGS OF NECESSITY RELATED TO LOCAL CLIMATIC, TOPOGRAPHICAL, AND GEOLOGICAL CONDITIONS THAT 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

THE COUNCIL OF THE CITY OF FRESNO DOES ORDAIN AS FOLLOWS:

SECTION 1. The express findings of Resolution No. 2010-274, entitled "A RESOLUTION OF THE COUNCIL OF THE CITY OF FRESNO, CALIFORNIA, MAKING AND ADOPTING EXPRESS FINDINGS THAT MODIFICATIONS OR CHANGES TO THE CALIFORNIA FIRE CODE ARE REASONABLY NECESSARY BECAUSE OF LOCAL CLIMACTIC, GEOLOGICAL, AND TOPOGRAPHICAL CONDITIONS," required for modifications or changes to the California Fire Code, which are reasonably necessary because of local climactic, geological, or topographical conditions, are incorporated and adopted herein as if set forth in full. The modifications or changes to the California Fire Code are specifically listed below, and the incorporated express findings regarding to those modifications may be generally characterized as relating to (1) solar panel installation; (2) fire sprinkler systems; (3) luminous exit markings; (4) additional regulation of lumber yards, woodworking, recycling, and waste handling facilities; and (5) additional regulation of motor fuel dispensing and repair garages, 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.

SECTION 2. Article 10 of Chapter 5 of the Fresno Municipal Code is repealed.

SECTION 3: Article 10 of Chapter 5 of the Fresno Municipal Code is added to read:

ARTICLE 10

FIRE PREVENTION

| | | |
|---------|--------------|--------------------------------------|
| Section | 10-50100 | Adoption of the California Fire Code |
| | 10-50101.1 | Title |
| | 10-50101.1.1 | Fire Zones |

| | |
|------------------|---|
| 10-50101.1.2 | Limits Established By Law |
| 10-50102.3 | Change of Occupancy |
| 10-50102.5 | Historic Buildings |
| 10-50103.1 | General |
| 10-50104.3.2 | Inspection Frequency |
| 10-50105.6 | Required Operational Permits |
| 10-50105.6.12 | Open Burning |
| 10-50105.6.13 | Exhibits, Trade Shows, and Special Events |
| 10-50105.6.15 | Fire Hydrants |
| 10-50105.6.48 | Exterior Storage |
| 10-50105.7 | Required Construction Permits |
| 10-50105.7.1 | Automatic Fire Sprinkler Systems |
| 10-50105.7.10 | LP-Gas |
| 10-50108 | Board of Appeals |
| 10-50109.2.1 | Service |
| 10-50109.3 | Violation Penalties |
| 10-50109.4 | Cost Recovery |
| 10-50110.1 | General |
| 10-50111.4 | Failure to Comply |
| 10-50113.6 | Fee for Inspection Services |
| 10-50202 | General Definitions |
| 10-50304.4 | Recycling and Waste Handling Facilities |
| 10-50304.5 | Dumping of Combustible Waste Material |
| 10-50304.6 | Removal of Debris |
| 10-50307.1.1 | Prohibited Open Burning |
| 10-50311.1.1 | Abandoned Premises |
| 10-50311.5 | Placards |
| 10-50312.1 | General |
| 10-50315.3.3 | Additional Requirements for Outside Storage |
| 10-50505.1 | Premise Identification |
| 10-50506 | Locked Premises Access |
| 10-50605.11 | Solar Panel Installations |
| 10-50901.4.3 | Additional Fire Protection Systems |
| 10-50903.1 | General |
| 10-50903.2.1 | Group A |
| 10-50903.2.2 | Group B |
| 10-50903.2.3 | Group E |
| 10-50903.2.4 | Group F |
| 10-50903.2.7 | Group M |
| 10-50903.2.9 | Groups S-1 |
| 10-50903.2.10 | Groups S-2 |
| 10-50903.3.1 | Installation Requirements |
| 10-50903.3.8 | Floor Control Valves |
| 10-50903.4.3 | Floor Control Valves |
| 10-50903.3.5.1.2 | Residential Combination Services |
| 10-50912.2.3. | Address Identification |
| 10-51024.1 | General |

| | |
|------------------|---|
| 10-51901.1 | Scope |
| 10-51907.2 | Size of Piles |
| 10-51907.3 | Pile Fire Protection |
| 10-51907.6 | Security |
| 10-51908.3 | Size of Piles |
| 10-51908.4 | Pile Separation |
| 10-51908.7 | Pile Fire Protection |
| 10-51908.11 | Security |
| 10-51908.12 | Baled Material and Idle Pallets |
| 10-52206.2.3 | Above-Ground Tanks Located Outside of Buildings, Above Grade |
| 10-53302 | Prohibition of Fireworks |
| 10-53303 | Prohibition of Explosives |
| 10-53404.2.9.6.1 | Locations Where Above-Ground Tanks are Prohibited |
| 10-53404.3.5.1 | Basement Storage |
| 10-53406.2.4 | Permanent and Temporary Tanks |
| 10-53801.3 | Construction Documents |

ADMINISTRATION

SECTION 10-50100. ADOPTION OF THE CALIFORNIA FIRE CODE.

Section 10-50100 of the Fresno Municipal Code is added to read:

100. Adoption of the California Fire Code. The 2010 California Fire Code, as promulgated by the California Building Standards Commission, which incorporates the adoption of the 2009 edition of the International Fire Code as amended with necessary California amendments, and the 2009 International Fire Code, including Appendix Chapters E and F, are hereby adopted and amended by the City of Fresno for the purpose of prescribing regulations governing conditions hazardous to life and property protection from fire, hazardous materials, or explosions, except such portions as fully as if set out at length herein. The Council does hereby find it is reasonably necessary to make certain changes and modifications to the requirements contained in the rules and regulations adopted pursuant to Sections 17922 et seq. and 18935 et seq. of the California Health and Safety Code; such change or modifications are herein more particularly set forth.

SECTION 10-50101.1. TITLE.

Section 101.1 of the California Fire Code is amended to read:

101.1. Title. This code shall be known as the Fresno Fire Code, may be cited as such, and shall be referred to herein as "this Code." When used here, "CFC" means the 2010 California Fire Code, with such amendments as adopted by the State of California and the 2009 International Fire Code, including appendix Chapters E and F, as adopted and amended in this article.

SECTION 10-50101.1.1. FIRE ZONES.

Section 10-50101.1.1 of the Fresno Municipal Code is added to read:

101.1.1. Fire Zones. For the purpose of this Code, the entire city shall be divided into three fire zones classified and known as Fire Zone No. 1, Fire Zone No. 2, and Fire Zone No. 3. The boundaries and limits of each such Fire Zone are shown upon a map designated Zone Map No. 166, Fresno, California, dated June 9, 1974, consisting of one sheet on file in the office of the fire code official, which with any amendments thereto, is hereby adopted and made a part of this chapter as though fully set forth herein.

Whenever in this Code reference is made to any Fire Zone, such reference shall be construed to mean one of the Fire Zones designated on said map and amendments thereto.

SECTION 10-50101.1.2. LIMITS ESTABLISHED BY LAW.

Section 10-50101.1.2 of the Fresno Municipal Code is added to read:

101.1.2. Limits Established by Law. The limits referred to in Sections 3506.2 and 3804.2 of the California Fire Code shall mean Fire Zones 1 and 2. The limits referred to in Section 3302 of the California Fire Code shall mean Fire Zones 1, 2, and 3.

SECTION 10-50102.3. CHANGE OF OCCUPANCY.

Section 102.3 of the California Fire Code is amended to read:

102.3. Change of Use or Occupancy. No change shall be made in the use or occupancy of any structure, which would place the structure in a different division of the same group or occupancy or in a different group of occupancies, unless such structure is made to comply with the requirements of this code and the California Building Code. Subject to the approval of the fire and building code official, the use or occupancy of an existing structure shall be allowed to be changed, and the structure is allowed to be occupied for purposes in other groups without conforming to all the requirements of this code and the California Building Code for those groups, provided the new or proposed use is less hazardous, based on life and fire risk, than the existing use.

SECTION 10-50102.6. HISTORIC BUILDINGS.

Section 102.6 of the California Fire Code is amended to read:

102.6. Historic Buildings. The provisions of this Code relating to the construction, alteration, repair, enlargement, restoration, relocation, or moving of buildings or structures shall not be mandatory for existing buildings or structures identified and classified by the state or local jurisdiction as historic buildings when such buildings or structures do not constitute a distinct hazard to life or property. Fire protection in designated historic buildings and structures shall be provided in accordance with Part 8 of Title 24 of the 2010 California Historic Building Code.

SECTION 10-50103.1. GENERAL.

Section 103.1 of the California Fire Code is amended to read:

103.1. General. The department of fire prevention is established within the jurisdiction under the direction of the fire code official. The function of the department shall be the implementation, administration, and enforcement of the provisions of this code. Whenever the terms "department of fire prevention," "fire prevention bureau," or "fire prevention division" are used in this Code or the Fresno Municipal Code, the terms shall mean "Fire Prevention and Investigation Division."

SECTION 10-50104.3.2. INSPECTION FREQUENCY.

Section 10-50104.3.2 of the Fresno Municipal Code is added to read:

104.3.2. Inspection Frequency. The fire code official shall be authorized to establish a minimum inspection frequency for all occupancy groups where not already determined by the State of California Health and Safety Code.

SECTION 10-50105.6. REQUIRED OPERATIONAL PERMITS.

Section 105.6 of the California Fire Code is amended to read:

105.6. Required Operational Permits. The fire code official is authorized to issue operational permits for the operations set forth in Section 105.6.1 through Section 105.6.48. Required permits will be issued only for those operations where a permit fee has been established by Master Fee Schedule resolution.

SECTION 10-50105.6.30. OPEN BURNING.

Section 105.6.30 of the California Fire Code is amended to read:

105.6.30. Open Burning. An operational permit is required for any open burning, which has been approved by the San Joaquin Valley Air Pollution Control District.

SECTION 10-50105.6.13. EXHIBITS, TRADE SHOWS AND SPECIAL EVENTS.

Section 105.6.13 of the California Fire Code is amended to read:

105.6.13. Exhibits, Trade Shows, and Special Events. An operational permit is required to operate exhibits, trade shows, and special events.

SECTION 10-50105.6.15. FIRE HYDRANTS.

Section 105.6.15 of the California Fire Code is amended to read:

105.6.15. Fire Hydrants. A permit is required to use fire hydrants intended for fire suppression purposes, which are installed on water systems and accessible to public roadways, alleys, or public utility easements on private property. Such permit shall be obtained from the Water Division of the Department of Public Utilities of the City, or person responsible for the provision of water to such fire hydrants or water systems within a waterworks district. Also see Sections 901.6 and 901.8.

Exception: A permit is not required for authorized employees of the water company, which supplies the system or the fire department to use or operate fire hydrants or valves.

SECTION 10-50105.6.48. EXTERIOR STORAGE.

Section 10-501105.6.48 of the Fresno Municipal code is added to read:

105.6.48. Exterior Storage. An operational permit is required for the exterior storage of more than 5,000 square feet of tires, pallets, bin boxes, wood or plastic products, other combustible finished materials or wood chips, hogged material, fines, compost, and raw product associated with yard waste and recycling facilities.

SECTION 10-50105.7. REQUIRED CONSTRUCTION PERMITS.

Section 105.7 of the California Fire Code is amended to read:

105.7. Required Construction Permits. The fire code official is authorized to issue construction permits for work as set forth in Section 105.7.1 through Section 105.7.14. Required permits will be issued only for those operations where a permit fee has been established by Master Fee Schedule resolution.

SECTION 10-50105.7.1. AUTOMATIC FIRE EXTINGUISHING SYSTEMS.

Section 105.7.1 of the California Fire Code is amended to read:

105.7.1. Automatic Fire Extinguishing Systems. A construction permit is required for installation of or modification to an automatic fire extinguishing system.

SECTION 10-50105.7.10. LP-GAS.

Section 105.7.10 of the California Fire Code is amended to read:

105.7.10. LP-Gas. A construction permit is required for installation or modification of LP-Gas tanks with a capacity (single or aggregate) in excess of 125 gallons.

SECTION 10-50108. BOARD OF APPEALS.

Section 108 of the California Fire Code is amended to read:

108.1. General. In order to hear and decide appeals of orders, decisions, or determinations by the fire code official relative to the application and interpretation of the Fresno Fire Code, there shall be and is hereby created a board of appeals (hereafter referred to as the "Building Standards Appeals Board") consisting of members who are qualified by experience and training to

pass on matters pertaining to building construction and hazards of fire, explosions, hazardous conditions, or fire protection systems, who are not employees of the City of Fresno.

The Building Standards Appeals Board shall perform the following appeal duties:

- a) Determine the suitability of alternate materials, engineering designs, methods of construction, and equipment.
- b) Provide reasonable interpretations of the provisions of the Fresno Fire Code and other relevant codes.

Exception: Appeals of administrative citations, fees, penalties, or charges that may be levied by the Fire Department such as suppression costs, mitigation costs, clean-up costs, re-inspection charges, false alarm charges, or failure to comply with written citations or notices, shall comply with Fresno Municipal Code, Chapter 1, Article 4.

The building official shall serve as an ex officio member of and shall act as secretary to said board but shall have no vote on any matter before the board. The Building Standards Appeals Board shall be appointed by the Mayor and shall hold office at the pleasure of the Mayor.

The Building Standards Appeals Board shall adopt rules of procedure for conducting its business, and shall render all decisions and findings in writing to the appellant with a duplicate copy to the fire code official.

108.2. Limitations of Authority. The Building Standards Appeals Board shall have no authority relative to interpretation of the administrative provisions of this code nor shall the board be empowered to waive requirements of this code. An economic condition shall not be considered as a basis for an appeal of the provisions of this code.

SECTION 109.2.1. SERVICE.

Section 109.2.1 of the California Fire Code is amended to read:

109.2.1. Service. A notice of violation issued pursuant to this code shall be served upon the owner, operator, occupant, or other person responsible for the condition of violation either by personal service, mail, or by delivering the same to, and leaving it with, some person of responsibility upon the premises. For unattended or abandoned properties, a copy of such notice shall be sent by first class mail to the last known address of the owner, occupant, or both. The fire code official is authorized to issue an administrative citation for abatement of violations of this code in accordance with Fresno Municipal Code, Chapter 1, Article 3 and written policy.

SECTION 50109.3. VIOLATION PENALTIES.

Section 109.3 of the California Fire Code is amended to read:

109.3. Violation Penalties. Persons who shall violate a provision of this code or shall fail to comply with any of the requirements thereof or who shall erect, install, alter, repair, or do work in violation of the approved construction documents or directive of the fire code official, or of a permit or certificate issued used under provisions of this code shall be guilty of a misdemeanor. Upon failure to comply with a written notice of violation, the fire code official is authorized to impose penalties or seek legal action in accordance with Fresno Municipal Code, Chapter 1, Article 3. Each day that a violation continues shall be deemed a separate offense.

109.3.1. Abatement of Violation. In addition to the imposition of the penalties herein described, the fire code official is authorized to institute appropriate action to prevent unlawful construction or to restrain, correct or abate a violation; or to prevent illegal occupancy of a structure or premises; or to stop an illegal act, conduct of business or occupancy of a structure on or about any premises. Such action is subject to the cost recovery provisions of Section 109.4.

SECTION 10-50109.4. COST RECOVERY.

Section 109.4 of the Fresno Municipal Code is added to read:

109.4. Cost Recovery. The Fire Chief or designee may seek recovery of any direct or indirect costs for fire prevention, fire suppression, hazardous material incident response, and protection of the public from fire and life safety hazards. Additionally, acts caused from serious negligence or carelessness, an intentional wrongful act, malice, or failure to comply with a written notice of violation will be subject to the cost recovery program set forth in Fresno Municipal Code, Chapter 1, Article 5, and the Master Fee Schedule.

SECTION 10-50110.1. GENERAL.

Section 110.1 of the California Fire Code is amended to read:

110.1. General. If during the inspection of a premises, a building or structure or any building system, in whole or in part, constitutes an inimical threat to human life, safety or health, the fire code official shall issue such notice or orders to remove or remedy the conditions as shall be deemed necessary in accordance with this section and shall refer the building to the building official for any repairs, alterations, remodeling, removing, or demolition as may be required

by Fresno Municipal Code, Chapter 11, Article 4, Dangerous Building Regulations.

SECTION 10-50111.4. FAILURE TO COMPLY.

Section 111.4 of the California Fire Code is amended to read:

111.4. Failure to Comply. Any persons who shall continue any work after having been served with a stop work order, except such work as that person is directed to perform to remove a violation or unsafe condition, shall be subject to an administrative citation or other judicial or administrative action in accordance with Section 109.3.

SECTION 10-50113.6. FEES FOR FIRE INSPECTIONS.

Section 10-50113.6 of the Fresno Municipal Code is added to read:

113.6. Fees for Fire Inspections. The fire code official shall be authorized to charge a fee for fire inspections of existing buildings and properties within the City of Fresno. Fees for such services shall be in accordance with the Master Fee Schedule.

DEFINITIONS

SECTION 10-50202. GENERAL DEFINITIONS.

The following definition in Section 202 of the California Fire Code is amended to read:

FIRE CODE OFFICIAL. The fire chief charged with the administration and enforcement of the code, or a duly authorized representative.

The following definition in Section 202 of the California Fire Code is added to read:

FIRE MARSHAL. The chief fire officer of the Fire Prevention and Investigation Division of the fire department or a duly authorized representative, who is charged with the prevention and investigation of fires.

GENERAL PRECAUTIONS AGAINST FIRE

SECTION 10-50304.4. RECYCLING AND WASTE HANDLING FACILITIES.

Section 10-50304.4 of the Fresno Municipal Code is added to read:

304.4. Recycling and Waste Handling Facilities. See Chapter 19 of the CFC for specific requirements related to recycling and waste handling facilities.

SECTION 10-50304.5. DUMPING OF COMBUSTIBLE WASTE MATERIAL.

Section 10-50304.5 of the Fresno Municipal Code is added to read:

304.5. Dumping of Combustible Waste Material. No owner or occupant of any lot or premises shall maintain thereon any rubbish or waste material likely to become easily ignited, and, provided further, no person shall place, deposit, or leave any plies of dirt, metallic cans, combustible waste, or rubbish on any property not owned or controlled by such person or persons.

SECTION 10-50304.6. REMOVAL OF DEBRIS.

Section 10-50304.6 of the Fresno Municipal Code is added to read:

304.6. Removal of Debris. Any person having in their possession or under their control, upon any premises, any kind of materials, which have been rendered useless or un-merchandisable by reasons of any fire on the premises, or any other debris resulting from such fire, must commence to remove the same from the premises within twenty-four hours after notice to do so from the Fire Department, and must thereupon proceed with and diligently carry on the work of such removal until the same has been completed.

SECTION 10-50307.1.1. PROHIBITED OPEN BURNING.

Section 10-50307.1.1 of the Fresno Municipal Code is amended to read:

304.7.1.1. Prohibited Open Burning. Notwithstanding other provision in Section 307, open burning is prohibited as follows:

1. Open burning that is offensive or objectionable because of smoke emissions or when atmospheric conditions or local circumstances make such fires hazardous shall be prohibited.
2. Open burning in violation of the rules promulgated by the San Joaquin Valley Air Pollution Control District.
3. The fire code official is authorized to order the immediate extinguishment of any unauthorized opening burning and may issue administrative citations and seek to recover costs in accordance with Sections 109.3 and 109.4 of this Code.

SECTION 10-50311.1.1. ABANDONED PREMISES.

Section 311.1.1 of the California Fire Code is amended to read:

311.1.1. Abandoned Premises. Buildings, structures, and premises for which an owner cannot be identified or located by dispatch of a certificate of mailing to the last known or registered address, which persistently or repeatedly become unprotected or unsecured, which have been occupied by unauthorized persons or for illegal purposes, or which present a danger of structural collapse or fire spread to adjacent properties shall be considered abandoned, declared unsafe, and abated by demolition or rehabilitation in accordance with the Fresno Municipal Code, Chapter 11, Article 4 (Dangerous Building Ordinance).

SECTION 10-50311.5. PLACARDS.

Section 311.5 of the California Fire Code is amended to read:

311.5. Placards. Any building determined to be unsafe pursuant to Section 110 of this code shall be marked as required by Fresno Municipal Code Section 11.418(d) (Dangerous Building Ordinance).

311.5.1. Informational Use. The use of these placards shall be informational only and shall not in any way limit the discretion of the on-scene incident commander.

SECTION 10-50312.1. GENERAL.

Section 10-50312.1 of the California Fire Code is amended to read:

312.1. General. Vehicle impact protection required by this Code shall be provided by posts that comply with Section 312.2 of the CFC or by other approved physical barriers that comply with 312.3 of the CFC

Exception: Fire hydrants and fire sprinkler risers may be protected in accordance with Public Works Standard W-23 (Fire hydrant installation with protector posts).

SECTION 10-50315.3.3. ADDITIONAL REQUIREMENTS FOR OUTSIDE STORAGE.

Section 10-50315.3.3 of the Fresno Municipal Code is added to read:

315.3.3. Additional Requirements for Outside Storage. Outside storage of tires shall be in accordance with Chapter 25 of the CFC. Outside storage of idle pallets, plastic or wooden finished products, baled material, or similar

products shall be in accordance with Fire Prevention Division Standard "Outdoor (Exterior) Storage Requirements." Outdoor storage at lumber yards, woodworking, recycling, and waste handling facilities shall be in accordance with Chapter 19 of the CFC. An approved water supply for firefighting purposes shall be provided in accordance with Section 508 of the CFC.

FIRE SERVICE FEATURES

SECTION 10-50505.1. PREMISE IDENTIFICATION.

Section 505.1 of the California Fire Code is amended to read:

505.1 Address Identification. New and existing buildings shall have approved address numbers placed in a position that is plainly legible and visible from the street or road fronting the property. These numbers shall contrast with their background. Address numbers shall be a minimum of 4 inches (101.6 mm) high with a minimum stroke width of 0.5 inch (12.7 mm) unless larger size numbers are specified by the Policy. Address numbers shall be Arabic numbers or alphabetical letters. The requirements of Fresno Municipal Code Section 12-1300 et seq. shall be followed.

SECTION 10-50506. LOCKED PREMISES ACCESS.

Section 506 of the California Fire Code is renamed and amended to read:

506.1. Where Required. Where access to or within a structure or an area is restricted because of secured openings, the fire code official is authorized to require a key box to be installed in an approved location. Installation requirements and key box contents shall be in accordance with Fire Prevention and Investigation Division Standards.

506.1.1 Locks. An approved lock or remote opening device shall be installed on gates or similar barriers when required by the fire code official in accordance with Fire Prevention and Investigation Division Standards.

506.2. Key Box Maintenance. The operator of the building or premises shall immediately notify the fire code official and provide the new key when a lock is changed or re-keyed. The key to such lock shall be secured in the key box.

BUILDING SERVICES AND FEATURES

SECTION 10-50605.11. SOLAR PANEL INSTALLATIONS.

Section 10-50605.11 of the Fresno Municipal Code is added to read:

605.11. Solar Panel Installations. The installation of solar panels shall comply with the California Electrical Code and the latest revision of the "Solar Photovoltaic Installation Guidelines" prepared by the California Office of the State Fire Marshal.

605.11.1. DC Roof Top Disconnects. There shall be a separate emergency DC disconnect on the roof to disconnect solar panels from DC wiring running through and on the building to the inverter. This disconnect must be permanently labeled in reflective, fade-resistant material (see CSFM Guidelines on marking) that states: "Emergency DC Disconnect." This provides a safety mechanism for firefighting ensuring power has been disabled as close to the source as possible. Disconnects, provided in a NEMA 3R box, shall be installed as close to the array as possible to eliminate any substantial length of energized wiring that cannot be shut down. Commercial installation where multiple disconnects are present will be evaluated and approved on a case by case basis.

FIRE PROTECTION SYSTEMS

SECTION 10-50901.4.3. ADDITIONAL FIRE PROTECTION SYSTEMS.

Section 901.4.3 of the California Fire Code is amended to read:

901.4.3. Additional Fire Protection Systems and Appliances. In occupancies of a hazardous nature, where special hazards exist in addition to the normal hazards of the occupancy, or where the fire code official determines access for firefighters or fire apparatus is unduly difficult, the fire code official shall have the authority to require additional safeguards. Such safeguards include, but are not limited to, fire detection systems, fire alarm systems, automatic fire-extinguishing systems, standpipe systems, or portable or fixed extinguishers. Fire protection equipment required under this section shall be installed in accordance with this code, applicable referenced standards, and written Fire Prevention and Investigation Division Standards.

SECTION 10-50903.1. GENERAL.

Section 903.1 of the California Fire Code is amended to add the following subsections:

903.1.2. Determination of Building Area. For purposes of determining building area for automatic fire sprinkler system requirements, the following criteria shall be used:

1. Fire walls, fire barriers, fire partitions, or horizontal fire assemblies as defined in this code shall not be considered to create separate buildings or fire areas for determining automatic fire sprinkler requirements.

Exceptions:

(a) Party walls located on a lot line between two buildings in accordance with California Building Code, Section 706.

(b) Fire walls without openings installed in accordance with California Building Code, Section 706 and with specific fire wall requirements in Section 903.2 of this code based on occupancy.

2. Determination of building area for combustible construction shall be measured to the building perimeter roof drip line, including architectural features, such as, but not limited to, mansards, towers, porte cocheres, etc., with the exception of 44" maximum depth roof eaves. For non-combustible construction, building area shall include all perimeter roof areas exceeding 44" that are required by NFPA 13 to have fire sprinkler protection under the projection. The area of open shafts or courts need not be included in calculating floor area. When multiple buildings are considered as one building per California Building Code Section 705.3, the combined floor areas shall be used to determine the automatic fire sprinkler requirements.

903.1.3. Applicability to Existing Buildings. For existing buildings an automatic fire extinguishing system shall be installed in those circumstances described in this sub-section. Installation requirements shall be as set forth for new buildings by Sections 903.2.1 through 903.2.10.

1. Building Additions. When additions exceed 25% of the existing building square footage and the total proposed building area exceeds 5,000 square feet, an automatic fire sprinkler system shall be installed throughout the building. The 25% threshold shall be cumulative over the life of the building.

Exception: Building additions of non-combustible construction and non-combustible uses such as covered pedestrian walkways.

2. Change of Occupancy. In existing buildings over 5,000 square feet, when a Change of Occupancy, in accordance with the California Building Code, is made and the proposed new occupancy is more

hazardous to life and safety than the existing occupancy an automatic fire extinguishing system shall be installed throughout the building.

Exceptions:

(a) If the area in which the Change of Occupancy occurs is less than 25 percent of the actual floor area of the existing building and the area of the new occupancy is 5,000 square feet or less and fire sprinklers are not required based on occupancy by Section 903, an automatic fire sprinkler system is not required for any portion of the building. The 25% limit is cumulative over the life of the building.

(b) If the area in which the Change of Occupancy occurs exceeds 25% but is less than 50% of the actual floor area of the existing building, only that portion of the building changing occupancy is required to have an automatic fire extinguishing system installed. An approved fire separation shall be required between portions of the building with fire sprinklers and those portions without.

(c) If individual or cumulative Change of Occupancies exceeds 50% of the overall floor area of the existing building, then the entire building shall have an automatic fire extinguishing system installed throughout.

3. Fire Damage Repairs. An automatic fire sprinkler system shall be installed as a condition of damage fire damage repair building permit as follows:

(a) When a fire occurs in any existing occupancy, and the building permit repair costs exceed 50% of the current building valuation, an automatic fire extinguishing system shall be installed throughout the building as required for a new building in Section 903.

(b) When a fire occurs in an R occupancy and building permit fire repair costs in the kitchen area of the dwelling unit(s) exceeds \$5,000, a single fire sprinkler head or approved automatic extinguishing system shall be installed in the kitchen per Fire Prevention and Investigation Division Standards.

(c) Fire damage repair costs and building valuation shall be based on the ICC Building Valuation Tables in use

by the Development and Resource Management Department at the time of the issuance of the fire damage repair permit.

4. R-2 Condominium Conversions. Existing R-1 or R-2 buildings proposed for conversion to condominiums shall have an automatic fire sprinkler systems installed as a condition of approval.

5. A-2 Occupancies. In existing A-2 occupancies with occupant loads of 100 or more, an automatic sprinkler system shall be installed in the A-2 fire area as a condition of any building permit application that increases the occupant load of the assembly fire area as determined by the California Building Code Section 1004.

SECTION 10-50903.2.1. GROUP A.

Section 903.2.1 of the California Fire Code is amended to read:

903.2.1.1. Group A-1. An automatic sprinkler system shall be provided for Group A-1 occupancies where one of the following conditions exists:

1. The fire area exceeds 5,000 square feet.
2. The fire area has an occupant load of 300 or more.
3. The fire area is located on a floor other than a level of exit discharge serving such occupancies.
4. The fire area contains a multi-theater complex.

903.2.1.2. Group A-2. An automatic sprinkler system shall be provided for Group A-2 occupancies where one of the following conditions exists:

1. The fire area exceeds 5,000 square feet.
2. The fire area has an occupant load of 100 or more.
3. The fire area is located on a floor other than a level of exit discharge serving such occupancies.
4. The fire area contains a multi-theater complex.

903.2.1.3. Group A-3. An automatic sprinkler system shall be provided for Group A-3 occupancies where one of the following conditions exists:

1. The fire area exceeds 5,000 square feet.
2. The fire area has an occupant load of 300 or more.
3. The fire area is located on a floor other than a level of exit discharge serving such occupancies.
4. The fire area contains a multi-theater complex.

903.2.1.4. Group A-4. An automatic sprinkler system shall be provided for Group A-4 occupancies where one of the following conditions exists:

1. The fire area exceeds 5,000 square feet.
2. The fire area has an occupant load of 300 or more.
3. The fire area is located on a floor other than a level of exit discharge serving such occupancies.
4. The fire area contains a multi-theater complex.

903.2.1.5. Group A-5. An automatic sprinkler system shall be provided for Group A-5 occupancies in the following areas: concession stands, retail areas, press boxes, and other accessory use areas in excess of 1,000 square feet.

SECTION 10-50903.2.2. GROUP B.

903.2.2. Group B Ambulatory Health Care Facilities. An automatic sprinkler system shall be installed throughout all fire areas containing a Group B ambulatory health care facility occupancy when either of the following conditions exist at any time:

1. Four or more care recipients are incapable of self preservation.
2. One or more care recipients who are incapable of self-preservation are located at other than the level of exit discharge serving such an occupancy.

903.2.2.2. All Other Group B Occupancies. An automatic fire sprinkler system shall be installed throughout all other B occupancies with a fire ar greater than 5,000 square feet.

SECTION 10-50903.2.3. GROUP E.

903.2.3. Group E. Except as provided for in Section 903.2.3.1 for a new public school campus an automatic sprinkler system shall be provided for Group E occupancies as follows:

1. Throughout all Group E fire areas greater than 5,000 square feet in area.

2. Throughout every portion of educational buildings below the lowest level of exit discharge serving that portion of the building.

Exception: An automatic sprinkler system is not required in any area below the lowest level of exit discharge serving that area where every classroom throughout the building has at least one exterior exit door at ground level.

3. In rooms or areas with special hazards such as laboratories, vocational shops and other such areas where hazardous materials in quantities not exceeding the maximum allowable quantities are used or stored.

4. Throughout any Group E structure greater than 12,000 square feet in area, and which is separated into two or more buildings by fire walls of less than four hour fire resistance rating without openings.

SECTION 10-50903.2.4. GROUP F.

Section 903.2.4 of the California Fire Code is amended to read:

903.2.4. Group F. An automatic fire sprinkler system shall be provided throughout buildings containing a Group F occupancy with a fire area over 5,000 square feet.

Exception: F-2 occupancies of non-combustible construction and where contents stored, used, or manufactured are classified by this code as non-combustible. Minor accessory uses such as administrative offices and break rooms that, in total, do not exceed 10% of the building area are allowed and such uses are not required to have fire sprinklers unless the area exceeds 5,000 square feet. An operational statement shall be submitted to the Development Department with building plan submission and the owner shall execute a covenant running with the land agreeing to the installation of the required automatic extinguishing system if the use should change from the approved noncombustible limitation.

903.2.4.1. Woodworking Operations. An automatic sprinkler system shall be provided throughout all Group F-1 occupancy fire areas that contain woodworking operations in excess of 2,500 square feet (232 m²), which generate finely divided combustible waste or which use finely divided combustible materials. A fire wall of less than four-hour fire resistance rating without openings, or any fire wall with openings shall not be used to establish fire areas.

SECTION 10-50903.2.7. GROUP M.

Section 903.2.7 of the California Fire Code is amended to read:

903.2.7. Group M. Automatic fire sprinkler system shall be provided throughout buildings containing a Group M occupancy where one of the following conditions exist:

1. A Group M fire area exceeds 5,000 square feet.
2. A Group M occupancy used for the display and sale of upholstered furniture.
3. Throughout any Group M structure greater than 24,000 square feet in area and is separated into two or more buildings by fire walls of less than four hour fire resistance rating without openings.

903.2.7.1. High Piled Storage. An automatic sprinkler system shall be provided as required in Chapter 23 of the CFC in all buildings of Group M where storage of merchandise is in high-piled or rack arrays.

SECTION 10-50903.2.9. GROUP S-1.

Sections 903.2.9 of the California Fire Code are amended to read:

903.2.9. Group S-1. An automatic fire sprinkler system shall be provided throughout buildings containing a Group S-1 occupancy with a fire area over 5,000 square feet or in buildings with repair garages servicing vehicles parked in basements.

903.2.9.1. Bulk Storage of Tires. Buildings and structures where the area for the storage of tires exceeds 20,000 cubic feet shall be equipped throughout with an automatic fire sprinkler system in accordance with 903.3.1.1.

SECTION 10-50903.2.10. GROUP S-2.

Sections 903.2.10 of the California Fire Code is amended to read:

903.2.10. GROUP S-2. An automatic fire sprinkler system shall be provided throughout buildings containing a Group S-2 occupancy with a fire area over 5000 square feet

Exceptions:

1. S-2 occupancies of non-combustible construction and with contents stored, used or manufactured that are classified as non-combustible. Minor accessory uses such as administrative offices and break rooms that, in total, do not exceed 10% of the building area and any single accessory use area does not exceed 5,000 square feet do not require fire sprinklers. An operational statement shall be submitted to the Development Department with building plan submission and the owner shall execute a covenant running with the land agreeing to the installation of the required automatic extinguishing system if the use should change from the approved non-combustible limitations.

2. Detached S-2 occupancy carports of non-combustible construction, without exterior walls, used exclusively for the parking of motor vehicles that meet the setback requirements to real and assumed property lines per Table 602 of the California Building Code. Installation of solar panels on the roof of such carports is permissible when using this exception.

SECTION 10-50903.3.1. INSTALLATION REQUIREMENTS.

Section 903.3.1 of the California Fire Code is amended to read:

903.3.1. Standards. Sprinkler systems shall be designed in accordance with Sections 903.3.1.1, 903.3.1.2, and 903.3.1.3. Automatic fire sprinklers or fire sprinkler systems not required by the California Fire or Building Codes may be of any type approved by the fire code official.

903.3.1.1. NFPA 13 Sprinkler Systems. Where the provisions of this code require that a building or portion thereof be equipped throughout with an automatic sprinkler system in accordance with this section, sprinklers shall be installed throughout in accordance with NFPA 13 as amended in Chapter 47 except as provided for in sub-sections 903.1.1.1 through 903.3.1.1.4.

903.3.1.1.2. Concealed Spaces Within Composite Wood Joist Construction. In residential occupancies, the "Residential Sprinklers" hydraulic design method in NFPA 13 shall not be used in lieu of protecting the combustible concealed spaces within

floor/ceiling assemblies by either providing fire sprinklers in the concealed spaces, completely filling the floor ceiling assembly with approved insulation, or utilizing the 3,000 square foot minimum density/area design method.

903.3.1.1.3. Group R Mixed Occupancy Buildings. Mixed occupancy buildings containing Group R occupancies shall be provided with automatic sprinkler systems in accordance with Section 903.3.1.1 (NFPA 13). The R-2 or R-3 residential portion of a mixed occupancy building shall be provided with fire sprinkler piping and control valves arranged so that the automatic sprinkler system can remain in service independent of non-residential occupancies.

Exception: Mixed occupancy buildings where a vertical fire barrier with no openings is provided in accordance with California Building Code, Section 707 separating the R occupancy from other uses may have automatic fire sprinkler systems installed in the residential portion in accordance with Sections 903.3.1.2 (NFPA 13R) or 903.3.1.3 (NFPA 13D) as applicable. Separate control valves shall be installed as indicated above unless otherwise approved by the fire code official.

903.3.1.1.4. Joint Live Work Units Quarters. Where joint live/work residential dwelling units are constructed as permitted by Fresno Municipal Code, Chapter 11, Article 7, automatic sprinkler systems shall be designed in accordance with Section 903.3.1.1 (NFPA 13).

903.3.1.2. NFPA 13R Sprinkler Systems. Automatic sprinkler systems in Group R occupancies up to and including three stories in height shall be permitted to be installed throughout in accordance with NFPA 13R as amended in Chapter 47 except where prohibited in Sections 903.3.1.1.3 and 903.3.1.1.4

903.3.1.2.1. Balconies and Decks. Sprinkler protection shall be provided for exterior balconies, decks, ground floor patios, and entryways (enclosed on two or more sides) of dwelling units where the building is of Type V construction, provided there is a roof or deck above. Sidewall sprinklers that are used to protect such areas shall be permitted to be located such that their deflectors are within 1 inch (25 mm) to 6 inches (152 mm) below the structural members and a maximum distance of 14 inches (356 mm) below the deck of the exterior balconies, decks, and entryways that are constructed of open wood joist construction.

SECTION 10-50903.3.8. FLOOR CONTROL VALVES.

Section 10-50903.3.8 of the California Fire Code is amended to read:

903.3.8. Floor Control Valves. Floor control valves and water flow detection shall be provided in accordance with Section 903.4.3.

SECTION 10-50903.4.3. FLOOR CONTROL VALVES.

Section 903.4.3 of the California Fire Code is amended to read:

903.4.3. Floor Control Valves. Approved supervised indicating control valves and water flow switches shall be provided at the point of connection to the riser on each floor in buildings with three or more levels or where the floor level of the highest story is located more than 30 feet above the lowest level of fire department vehicle access. The fire sprinkler system monitoring panel or remote annunciator panel shall be provided at an approved location readily accessible to the fire department indicating floor of activation of these devices.

Exception: NFPA 13R and 13D systems.

SECTION 10-50903.3.5.1.2. RESIDENTIAL COMBINATION SERVICES.

Section 903.3.5.1.2 of the California Fire Code is amended to read:

903.3.5.1.2. Residential Combination Services. A single combination water supply shall be allowed only when approved by the fire code official.

SECTION 10-50912.2.3. ADDRESS IDENTIFICATION.

Section 10-50912.2.3 of the Fresno Municipal Code is added to read:

912.2.3. Address Identification. For new and existing buildings, the fire code official is authorized to require approved address or building area identification signage as needed to readily determine the building or area of a building protected by fire department connections.

MEANS OF EGRESS
(Luminous Egress Path Markings)

SECTION 10-51024.1. GENERAL.

Section 10-51024.1 of the California Fire Code is amended to read:

1024.1. General. Approved luminous egress path markings delineating the exit path shall be provided in all new buildings three or more stories above grade or below grade in accordance with Sections 1024.1 through 1024.5.

Exceptions:

1. Luminous egress path markings shall not be required on the level of exit discharge in lobbies that serve as part of the exit path in accordance with Section 1027.1, Exception 1.

2. Luminous egress path markings shall not be required in open parking garages that serve as part of the exit path in accordance with Section 1027.1, Exception 3.

3. R-3 occupancies.

1024.1.1. Existing Buildings. Existing Group R-1, R-2, I, and E buildings with 3 or more stories above or below grade and all buildings over three stories above grade or three or more stories below grade shall be retrofitted with luminous exit path markings in the enclosed stairways and associated exit pathways to the exterior no later than January 1, 2012. Exceptions 1, 2, and 3 above are applicable to retrofit requirements. Buildings subject to these retrofit provisions may use the Fresno Fire Department "Uniform Standard for Photoluminescent Exit Path Markings" or California Fire Code, Sections 1024.2 through 1024.5 as an installation standard. Stairway exit path markings in existence at the time of the initial effective date of Ordinance No. 2007-27 adopted on March 20, 2007, may continue to exist as installed subject to the approval of the fire code official.

1024.1.2. Maintenance. Luminous egress path markings required in this section shall be maintained in accordance with Sections 1024.1 through 1024.5 or the Fresno Fire Department "Uniform Standard for Pholuminescent Exit Path Marking" as applicable.

LUMBER YARDS, WOODWORKING, RECYCLING, AND WASTE HANDLING FACILITIES

SECTION 10-51901.1. SCOPE.

Section 1901.1 of the California Fire Code is amended to read:

1901.1. Scope. The storage, manufacturing and processing of timber, lumber, plywood, veneers, wood by-products, compost and yard waste, un-baled recycled products, and similar materials shall be in accordance with this chapter.

The title of this Chapter shall be "LUMBER YARDS, WOODWORKING, RECYCLING, AND WASTE HANDLING FACILITIES."

SECTION 10-51907.2. SIZE OF PILES.

Section 1907.2 of the California Fire Code is amended to read:

1907.2. Size of Piles. Piles shall not exceed 20 feet (6.1 m) in height, 50 feet (15.2 m) in width and 250 feet (76.2 m) in length. Piles shall be separated from adjacent piles or other exposures (including, but not limited to, property lines, other storage, and buildings) by means of fire department access roadways. A 120 foot (36.6 m) by 90 foot (27.5 m) area shall be maintained available for use by the Fire Department for interim storage of pile breakdown material during fire suppression activities.

Exception: The fire code official is authorized to allow the pile size to be increased when additional fire protection is provided in accordance with Chapter 9. The increase shall be based on the capabilities of the system installed.

SECTION 10-51907.3. PILE FIRE PROTECTION.

Section 1907.3 of the California Fire Code is amended to read:

1907.3. Pile Fire Protection. An approved water supply for firefighting purposes shall be provided in accordance with Section 507. Automatic sprinkler protection shall be provided in conveyor tunnels and combustible enclosures that pass under a pile. Combustible or enclosed conveyor systems shall be protected by automatic sprinkler protection.

SECTION 10-51907.6. SECURITY.

Section 10-51907.6 of the Fresno Municipal Code is added to read:

1907.6. Security. Areas shall be surrounded with an approved fence. Fences shall be a minimum of 6 feet (1.8 m) in height.

SECTION 10-51908.3. SIZE OF PILES.

Section 1908.3 of the California Fire Code is amended to read:

1908.3. Size of Piles. Piles shall not exceed 20 feet (6.1 m) in height, 50 feet (15.2 m) in width and 250 feet (76.2 m) in length. A 120 foot (36.6 m) by 90 foot (27.5 m) area shall be maintained available for use by the Fire Department for interim storage of pile breakdown material during fire suppression activities.

Exception: The fire code official is authorized to allow the pile size to be increased when additional fire protection is provided in accordance with Chapter 9. The increase shall be based on the capabilities of the system installed.

SECTION 10-51908.4. PILE SEPARATION.

Section 1908.4 of the California Fire Code is amended to read:

1908.4. Pile Separation. Piles shall be separated from adjacent piles or other exposures (including but not limited to, property lines, other storage, and buildings) by means of Fire Department access roads.

SECTION 10-51908.7. PILE FIRE PROTECTION.

Section 1908.7 of the California Fire Code is amended to read:

1908.7. Pile Fire Protection. An approved water supply for firefighting purposes shall be provided in accordance with Section 507. Automatic sprinkler protection shall be provided in conveyor tunnels and combustible enclosures that pass under a pile. Combustible or enclosed conveyor systems shall be protected by automatic sprinkler protection.

SECTION 10-51908.11. SECURITY.

Section 10-51908.11 of the Fresno Municipal Code is added to read:

1908.11. Security. Areas shall be surrounded with an approved fence. Fences shall be a minimum of 6 feet (1.8 m) in height.

SECTION 10-51908.12. BALED MATERIAL AND IDLE PALLETS.

Section 10-51908.12 of the Fresno Municipal Code is added to read:

1908.12. Baled Material and Idle Pallets. For exterior storage of recycled baled material and idle pallets see Section 10-50315.3.3 and Fire Prevention and Investigation Division Standards.

MOTOR FUEL-DISPENSING FACILITIES AND REPAIR GARAGES

SECTION 10-52206.2.3. ABOVE-GROUND TANKS LOCATED OUTSIDE OF BUILDINGS, ABOVE GRADE.

Section 2206.2.3 of the California Fire Code is amended to read:

1. Above-ground tanks used for outside above grade storage of Class I and II liquids shall be listed and labeled as protected above-ground tanks in accordance with Chapter 34. Such tanks shall be located in accordance with Table 2206.2.3.

2. Above-ground tanks used for above grade storage of Class III-A liquids are allowed to be protected above-ground tanks, or when approved by the fire code official, other above-ground tanks that comply with Chapter 34. Tank locations shall be in accordance with Table 2206.2.3.

3. Tanks containing fuels shall not exceed 12,000 gallons (45 420 L) in individual capacity or 48,000 gallons (181 680 L) in aggregate capacity. Installations with the maximum allowable aggregate capacity shall be separated from other such installations by not less than 100 feet (30 480 mm).

4. Tanks located at farms, construction projects, or rural areas shall comply with Section 3406.2.

FIREWORKS AND EXPLOSIVES

SECTION 10-53302. FIREWORKS ORDINANCE.

Section 3302 of the California Fire Code is amended to read:

3302.1. Short Title.

This Section shall be known and cited as the "Fireworks Ordinance." When used, "this Section" means the Fireworks Ordinance.

3302.2. Findings and Intent.

(a) This Section governs the imposition, enforcement, collection and administrative review of all administrative fines related to: the possession, use, storage, sale and/or display of those fireworks classified as dangerous fireworks in California Health and Safety Code, Section 12505 et seq. or the possession, use, storage, sale and/or display of Safe and Sane fireworks on or at dates, times, and/or locations other than those permitted by this Section. The administrative fines are imposed under authority of Government Code, Section 53069.4; Health and Safety Code, Section 12557; and, the police power of the City of Fresno.

(b) The issuance of an administrative citation to any person constitutes but one remedy of the City to redress violations of this Section. By adopting this Section, the City does not intend to limit its authority to

employ any other remedy, civil or criminal, to redress any violation of this Section which the City may otherwise pursue.

(c) The imposition of administrative fines under this Section shall be limited to persons who possess, use, sell and/or display, or the seizure of 25 pounds or less of dangerous fireworks or persons who possess, use, sell and/or display Safe and Sane fireworks on or at the dates, times, and/or locations other than those permitted by this Section.

(d) Administrative fines collected pursuant to this Section shall not be subject to Health and Safety Code, Section 12706. The administrative fines collected shall be allocated in compliance with Health and Safety Code, Section 12557, which requires the City to provide cost reimbursement to the California State Fire Marshal for reimbursement of costs, including, but not limited to transportation, and disposal. Regulations are to be adopted by the California State Fire Marshal setting forth this allocation. Unless and until such regulations have been adopted by the State of California, the City shall hold in trust a \$250.00 fee in addition to any fine collected to cover the reimbursement to the California State Fire Marshal for the cost of transportation and disposal of the dangerous fireworks. This fee is non-refundable.

(e) Due to the serious threat of fire or injury posed by the use of dangerous fireworks or Safe and Sane fireworks on or at dates, times, and/or locations other than those permitted by this Section, this Section imposes strict civil liability upon the owners of residential real property for all violations of this Section existing on that property. Each contiguous use, display, and/or possession shall constitute a separate violation and shall be subject to a separate administrative fine.

(f) The Fire Chief or designee may seek cost recovery for any costs imposed on the Fire Department due to negligence, an intentional wrongful act, carelessness, or malice as set forth in Fresno Municipal Code, Chapter 1, Article 5, Article 10, Section 109.4, and the Master Fee Schedule.

(g) This section shall not apply to the public display of fireworks in accordance with Section 3308.

(h) This section shall not apply to the storage and handling of Safe and Sane fireworks in accordance with the California Building Code for Class 1.4G fireworks.

3302.3. Definitions.

(a) "Dangerous fireworks" shall include any items or materials listed as such in California Health and Safety Code, Section 12505.

(b) "Eligible organizations" means an organization or corporation, which has met all of the following criteria continuously for a minimum of one year preceding the filing of the application for a permit to display for sale or sell Safe and Sane fireworks.

(i) The organization and/or corporation must be a duly organized non-profit and tax-exempt charitable, religious, civic, patriotic, or community service organization or corporation with a current and valid 26 U.S.C Section 501(c)(3)(19) tax exemption from the Internal Revenue Service.

(ii) The organization must be headquartered within and clearly affiliated or identified with the City of Fresno.

(iii) The organization must be one which provides direct and regular community services and benefits to the citizens of the City of Fresno.

(iv) The organization must hold its regularly scheduled meetings within the City of Fresno.

(c) "Exempt fireworks" means any special item containing pyrotechnic compositions which the California State Fire Marshal, with the advice of the State Fire Advisory Board, has investigated and determined to be limited to industrial, commercial, and agricultural use, or religious ceremonies when authorized by a permit granted by the authority having jurisdiction.

(d) "Fireworks" means any device containing chemical elements and chemical compounds capable of burning independently of the oxygen of the atmosphere and producing audible, visual, mechanical, or thermal effects which are useful as pyrotechnic devices or for entertainment. These items include, but are not limited to:

(i) Devices designated by the manufacturer as fireworks.

(ii) Torpedoes, skyrockets, roman candles, rockets, Daygo bombs, sparklers, party poppers, paper caps, chasers, fountains, smoke sparks, aerial bombs, and fireworks kits.

(e) "Safe and Sane fireworks" means any fireworks which do not come within the definition of "dangerous fireworks" or "exempt fireworks." All Safe and Sane fireworks shall be labeled with the Safe and Sane fireworks seal as authorized by the California State Fire Marshal.

3302.4. General Prohibition Against Possession, Sale, Use and/or Display of Fireworks.

Except as otherwise provided in this Section, no person shall possess, sell, use, display, explode or discharge any fireworks within the City of Fresno.

3302.5. Safe and Sane Fireworks: Exceptions.

(a) The sale and/or display of Safe and Sane Fireworks shall be permitted only during that period beginning at noon on June 28 and ending at noon on July 6 of the same year.

(b) Safe and Sane fireworks shall not be sold to any person under the age of sixteen (16).

(c) The use and discharge of Safe and Sane fireworks within the City of Fresno is permitted 365 days a year, between the hours of 7:00 a.m. and 10:00 p.m., except for the period of June 28 to July 6 when use and discharge will be allowed between the hours of 7:00 a.m. and 12:00 a.m.

3302.6. Safe and Sane Fireworks Permits: Permits Required.

(a) It is unlawful for any person to sell Safe and Sane fireworks within the City of Fresno without a permit issued by the Fire Chief or designee.

(b) The Fire Chief is authorized to promulgate administrative rules and procedures necessary for the successful and effective implementation of this Section including rules and procedures governing the submission of applications for permits to sell Safe and Sane fireworks, inspections of fireworks stands, operation of fireworks stands, and such regulations relating to the sale of Safe and Sane fireworks as may be necessary for the protection of life and property. Said administrative rules and procedures shall be in writing and subject to approval by the City Attorney.

(c) The Fire Chief or designee shall be responsible for reviewing applications for permits to sell Safe and Sane fireworks.

3302.7. Safe and Sane Fireworks: Applications.

(a) All organizations or corporations interested in obtaining a permit to sell Safe and Sane fireworks shall submit an application to the Fire Department on forms provided by the Fire Department. There is a non-refundable application fee established by resolution of the City Council and set forth in the Master Fee Schedule. This application fee shall be in addition to any fee or tax imposed by any other chapter or article of the Fresno Municipal Code.

(b) The Fire Chief or designee shall designate the time period when applications will be accepted.

(c) No organization shall submit more than one application. Submittal of more than one application shall be grounds for denial of all applications submitted by that organization.

(d) There shall be allowed a maximum of one fireworks stand for every five thousand (5,000) population in the City. A maximum of fifty new stands will be issued permits on an alternating two-year cycle.

(e) Participants are selected by lottery, which shall take place at a time and location determined by the Fire Chief or designee.

(f) The newly selected participants, as well as the previous year's participants, shall submit additional information as required by the Fire Department which shall be reviewed prior to issuance of any permits to sell Safe and Sane fireworks for the upcoming fireworks season.

3302.8. Safe and Sane Fireworks: Issuance of Permits.

(a) No permit to sell Safe and Sane fireworks shall be issued to any organization except non-profit and tax-exempt organizations or corporations organized primarily for charitable, religious, civic, patriotic, or community service as defined in Section 10-53302.3(b).

(b) Upon notification that the organization has been selected by lottery to participate in the upcoming fireworks season, each organization shall provide additional information as required by the Fire Department including, but not limited to:

(i) A non-refundable fee established by resolution of the City Council and set forth in the Master Fee Schedule. This fee shall be in addition to any fee or tax imposed by any other chapter or article of the Fresno Municipal Code.

(ii) An executed Indemnification and Hold Harmless Agreement as required by the City's Risk Manager or the Risk Manager's designee.

(iii) Throughout the life of the permit, the applicant shall pay for and maintain in full force and effect policies of insurance as required by the City's Risk Manager or Risk Manager's designee. The policies of insurance shall name the City, its officers, officials, agents, employees and authorized volunteers as additional insured. The applicant shall submit proof of insurance in a manner authorized by the City's Risk Manager or Risk Manager's designee.

(iv) Other information as may be required by the Fire Department pursuant to administrative rules and procedures promulgated by the Fire Chief pursuant to Section 10-53302.6(b).

(c) Permits shall be issued upon review of all information submitted by the organization and inspection and approval of the organization's temporary fireworks stand.

3302.9. Safe and Sane Fireworks: Operator Safety Seminar.

Each year, one or more representatives from each organization that is granted a permit to sell or display fireworks shall attend a stand operator safety seminar conducted by the City of Fresno Fire Department or the fireworks industry. Failure of an organization to have a responsible individual attend the seminar shall result in the revocation of the permit.

3302.10. Revocation of Permits.

The Fire Chief or designee may revoke the permit of any organization that violates the provisions of this Section or any rules or regulations promulgated pursuant to Section 10-53302.6(b). Notice of revocation shall be made in writing by the Fire Department to the organization. The Fire Chief or his designee may reinstate a permit upon proof that the permit holder is in compliance with all provisions and rules pertaining to this Section.

3302.11. Administrative Fines.

In addition to any other remedy available at law, any person or entity who possesses, uses, stores, sells and/or displays dangerous fireworks or any person or entity who possesses, uses, sells and/or displays Safe and Sane fireworks on or at dates, times, or locations other than those permitted by this Section are subject to an administrative fine of not less than one-thousand dollars (\$1,000.00).

3302.12. Seizure of Fireworks.

The Fire Chief or designee shall seize, take, remove or cause to be removed, at the expense of the owner, all stocks of fireworks offered or exposed for sale, stored or held in violation of this Section. Such seizure shall be subject to cost recovery in accordance with Section 109.4.

3302.13. Appeals.

(a) A citation issued for failure to comply with the provisions of this Section shall be appealed pursuant to Fresno Municipal Code, Chapter 1, Article 4.

(b) The denial of an application for a fireworks permit shall be appealed pursuant to Fresno Municipal Code, Chapter 1, Article 4. If no appeal is filed within the time prescribed, the action of the Fire Chief or designee shall be final.

(c) A minor and the parent(s) or guardian(s) having custody and control of said minor, are jointly and severally liable to the City for any administrative citation and/or penalty issued for failure to comply with the provisions of this Section.

(d) The administrative citation penalty may become a special assessment or a lien against the property of any person who is issued a citation for violation of the provisions of this Section. This shall include the property of a minor who is issued a citation and/or the property of the parent(s) or guardian(s) having custody and control of the minor or private property owner that allows the illegal use or storage on their property. The procedures set forth in Section 1-506 shall be followed for the imposition of a special assessment or lien.

SECTION 10-53303. PROHIBITION OF EXPLOSIVES.

Section 3303 of the California Fire Code is amended to read:

3303. Prohibition of Explosives. The possession, storage, use and handling of explosives are prohibited within the limits established by law.

Exception: Storage and sale of small arms ammunition, small arms primers, smokeless powder and black sporting powder in accordance with Title 19, Chapter 10, Article 12 of the California Code of Regulations and Section 307 of the California Building Code.

FLAMMABLE AND COMBUSTIBLE LIQUIDS

SECTION 10-53404.2.9.6.1. LOCATIONS WHERE ABOVE-GROUND TANKS ARE PROHIBITED.

Section 3404.2.9.6.1 of the California Fire Code is amended to read:

3404.2.9.6.1. Locations Where Above-ground Tanks are Prohibited. Storage of Class I and II liquids in above-ground outside of buildings shall be in accordance with the protected above-ground tank provisions of Section 2206.2.3.

Exceptions:

1. Bulk plants and terminals.
2. Refineries.
3. Standby generators with integral base tanks for Class II liquids when installed per Fire Prevention and Investigation Division Standards.
4. For above-ground tanks at farms and construction site, see FMC 10-53406.2.4.

SECTION 10-53404.3.5.1. BASEMENT STORAGE.

Section 3404.3.5.1 of the California Fire Code is amended to read:

3404.3.5.1. Basement Storage. Class I liquids shall not be stored in basements. Class II and IIIA liquids shall be allowed to be stored in basements, provided that automatic fire suppression and other fire protection are provided in accordance with Chapter 9.

SECTION 10-53406.2.4. PERMANENT AND TEMPORARY TANKS.

Section 3406.2.4 of the California Fire Code is amended to read:

3406.2.4. Permanent and Temporary Tanks. The aggregate capacity of permanent and temporary above-ground tanks containing Class I and II liquids shall not exceed 1,100 gallons (4163.9L). Tanks shall be constructed in accordance with Section 3404.2.

Exception: Protected above-ground tanks meeting the requirements of Section 2206.2.3.

LIQUIFIED PETROLEUM GASES

SECTION 10-53801.3. CONSTRUCTION DOCUMENTS.

Section 3801.3 of the California Fire Code is amended to read:

3801.3. Construction Documents. Where a single container or aggregate of containers is more than 125 gallons in water capacity, the installer shall submit construction documents for such installation.

SECTION 4: If any section, subsection, sentence, clause, or phrase of this ordinance is, for any reason, held to be unconstitutional, such decision shall not affect the validity of the remaining portions of this ordinance. The City Council of the City of Fresno hereby declares that it would have passed this ordinance, and each section, subsection, clause or phrase thereof, regardless if any one or more sections, subsections, sentences, clauses and phrases be declared unconstitutional.

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

I, REBECCA E. KLISCH, City Clerk of the City of Fresno, certify that the foregoing ordinance was adopted by the Council of the City of Fresno, at a regular meeting held on the ____ day of _____, 2010.

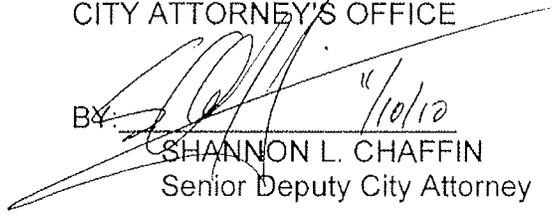
AYES :
NOES :
ABSENT :
ABSTAIN :

Mayor Approval : _____, 2010
Mayor Approval/No Return: _____, 2010
Mayor Veto: _____, 2010
Council Override _____, 2010

REBECCA E. KLISCH
City Clerk

BY: _____
Deputy

APPROVED AS TO FORM:
CITY ATTORNEY'S OFFICE

BY:  11/10/10
SHANNON L. CHAFFIN
Senior Deputy City Attorney

RESOLUTION NO. 2010-274

A RESOLUTION OF THE COUNCIL OF THE CITY OF FRESNO, CALIFORNIA MAKING AND ADOPTING EXPRESS FINDINGS THAT MODIFICATIONS OR CHANGES TO THE CALIFORNIA FIRE CODE ARE REASONABLY NECESSARY BECAUSE OF LOCAL CLIMACTIC, GEOLOGICAL AND TOPOGRAPHICAL CONDITIONS

WHEREAS, the State of California has adopted the 2009 edition of the International Fire Code, with amendments, which was entitled the 2010 California Fire Code. The 2010 California Fire Code has been incorporated into Title 24, Part 9 of the California Code of Regulations and will take effect on January 1, 2011; and,

WHEREAS, California Health & Safety Code Section 17958.5 authorizes the City, 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 Section 17921(a) that result in more stringent local requirements; and,

WHEREAS, California Health & Safety Code Sections 17958, 17958.5 and 17958.7 require more stringent local requirements be supported by express findings made by a city that such modifications or changes are "reasonably necessary because of local climactic, geological or topographical conditions"; and,

WHEREAS, the Council of the City of Fresno 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 climactic, geological or topographical conditions.

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Fresno that said Council 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 City of Fresno, 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.

1. CLIMATIC – EXTREME TEMPERATURES

1.1 As documented in the 2025 Fresno General Plan¹ and the Master Environmental Impact Report No. 10130² for the General Plan, during the summer months the City of Fresno experiences periods of what can only be described as extreme heat. Attached as Exhibit 1 and incorporated by reference is historical data compiled by the National Weather Service documenting temperatures experienced in Fresno during the months of May through October. This data shows that during the months of July and August, Fresno's daily high temperature has averaged in excess of 90 degrees. Attached as Exhibit 2 and incorporated by reference is a chart setting forth the high temperatures in Fresno, San Francisco, and San Diego for each day from July 1, 2006, through July 31, 2006, as reported by the National Weather Service. During this approximately 31-day period, the average high temperature in Fresno was 103.4 degrees, the average high temperature in San Diego was 81.2 degrees, and the average high temperature in San Francisco was 68.8 degrees. Furthermore, during this 31-day period, the average temperature in Fresno was 87.8 degrees, the average temperature in San Diego was 76.3 degrees, and the average temperature in San Francisco was 61.7 degrees. Finally, during this 31-day period Fresno experienced 20 days where the maximum temperature exceeded 100 degrees, while neither San Diego nor San Francisco experienced such temperatures at any time during the 31-day period. These extreme local climatic conditions are representative of the high-temperatures typically affecting Fresno during the summer months.

Although Health & Safety Code Section 17958.7 does not require the local conditions to be unique to a particular jurisdiction, the temperature chart demonstrates that the temperatures experienced in Fresno are extreme as compared to temperatures experienced

1 The 2025 Fresno General Plan at p. 166 states, "Fire Hazards. Fresno's high summer temperatures, intense sunlight, and low rainfall potentiate fires by drying and pre-heating combustible material and by fostering spontaneous combustion of flammable material. Fresno's estimated maximum wind speed (used to design structures) is 70 mph, which could fan blazes to a high intensity."

2 Master Environmental Impact Report No. 10130 at p. states, "The climate of the FMA [Fresno Metropolitan Area] is characterized by hot, dry summers ... Temperatures in the FMA range from a mean monthly maximum of 97.9 [degrees] F in July to a mean monthly minimum of 36.3 [degrees] F in December.

in other parts of California.

1.2 The Heat Stress Index published by the Federal Emergency Management Agency in its publication entitled Emergency Incident Rehabilitation sets forth the stress placed on the human body when exposed to various temperatures and humidities. This Heat Stress Index is attached as Exhibit 3 and incorporated by reference. A note under the Heat Stress Chart states that 10 degrees should be added to the temperature when protective clothing is worn and an additional 10 degrees should be added when the person is standing in direct sunlight. According to this chart, a person exposed to temperatures between 90 and 105 degrees is subject to heat cramps and heat exhaustion if exposure to these temperatures is prolonged and there is physical activity. A person exposed to temperatures of 105 to 130 degrees is likely to experience heat cramps and heat exhaustion. Furthermore, heat stroke is possible if exposure is prolonged and there is physical activity. A person exposed to temperatures above 130 degrees or greater faces a high risk of suffering from heat stroke.

1.3 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 105 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 Fresno Metropolitan area is arid area that receives an average of 10 to 12 inches of precipitation per year occurring primarily in the winter months. Furthermore, the City of Fresno primarily relies on groundwater for its municipal water supply. The underground aquifer is in a state of overdraft estimated at approximately 10,000-acre feet per year. Finally, local rainfall alone, even if fully captured, would meet only 20 percent of the Fresno Metropolitan Area's water needs.

2.2 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.

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.³ In the winter, inversions form that often trap particulate matter.⁴

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.⁵

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.⁶ 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 – FRESNO'S DEVELOPMENT PATTERN

4.1 Due to the relatively low density growth pattern in the Fresno area, the City of Fresno's nineteen fire stations are spaced approximately four miles apart resulting in an average of a two mile running distance for the designated first-in engine company.

4.2 This average two mile travel distance increases the response time to fires which result in an increase in the size and intensity of fires.

B. REASONABLE NECESSITY

The Council of the City of Fresno expressly finds the modifications and changes to the California Fire Code are reasonably necessary due to the local conditions set forth above since they reduce the risks to life, property, public health and safety that result from

3 See <http://www.ncdc.noaa.gov/oa/climate/online/ccd/pctposrank.txt>.

4 Master Environmental Impact Report No. 10130, 2025 Fresno General Plan, p. V-C1.

5 Master Environmental Impact Report No. 10130, 2025 Fresno General Plan, p. V-C1-C3.

the City of Fresno's climatic, geological and topographical conditions. The modifications and changes are further reasonably necessary and justified for the reasons set forth below.

In adopting the California Fire Code as the City of Fresno Fire Code, the City of Fresno proposes to make certain modifications or changes whose effect is to impose more stringent requirements locally than are mandated by the California Fire Code. These are specifically listed below, but may be generally characterized as relating to (1) solar panel installation; (2) fire sprinkler systems; (3) luminous exit markings; (4) additional regulation of lumber yards, woodworking, recycling, and waste handling facilities; and (5) additional regulation of motor fuel dispensing and repair garages, 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. These requirements are reasonably necessary to address risks created by local climatic, geological or topographical conditions set forth above for the following reasons:

1. INSTALLATION OF SOLAR PANELS IN ACCORDANCE WITH CALIFORNIA STATE FIRE MARSHAL GUIDELINES: FRESNO MUNICIPAL CODE SECTION 10-50605.11

1.1 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.⁶ Local sunny conditions are conducive to a growing prevalence and use of solar panel arrays in the City of Fresno. These solar panel arrays are commonly located on the roofs of buildings to take advantage of local sunlight conditions given structural designs resulting from the local topography and arid conditions. The presence of solar panel arrays on the roofs of buildings present fire ground operational issues including restricted access points to the roof, delay in deploying ground ladders, restricted locations for effective roof venting, and live direct current conductors on the roof and inside the attic. Solar panel placement done without regard to firefighter access and safety can result in additional working time on roofs, delays in fire suppression efforts, greater exposure by firefighters to health risks associated with exposure to sustained high temperatures, and increase in fire duration creating more smoke affecting air quality and requiring increased use of water.

⁶ Wildfire Smoke – A Guide for Public Health Officials (2001) Published by the Washington State Department of Health, p. 3; Fire Suppression Training – Requirements for Fire Fighter Training Exercises (July 28, 2006).

1.2 By establishing a layout for solar panel arrays that takes into account fire ground operation needs, fewer firefighters and less time will be needed to affect roof venting operations. As such, this ordinance mandating installation of solar arrays in accordance with California State Fire Marshal established guidelines is reasonably necessary to protect the health and safety of firefighters and other emergency personnel in light of Fresno's extremely high temperatures during the summer months and to lessen the time delays in properly venting and overhauling building fires thus reducing smoke generations affecting air quality and fire suppression water use from such fires.

2. MORE RESTRICTIVE REQUIREMENTS FOR INSTALLATION OF FIRE SPRINKLERS: FRESNO MUNICIPAL CODE AMENDMENTS SECTIONS 10-50903.1, 10-50903.2.1 THROUGH 10-50903.2.10 AND 10-60903.3.1 THROUGH 10-50912.2.3

2.1 The Fresno Municipal Code Amendments contain more restrictive requirements for installation of fire sprinklers than those in found in the California Fire Code. The requirements are located at Fresno Municipal Code Section 10-50903.1 (requiring retrofitting of fire sprinklers under prescribed conditions based on fire damage, building additions, a change of use to a higher life safety hazard or condominium conversions), Sections 10-50903.2.1 through 10-50903.2.10 (requiring fire sprinklers at a reduced square footage threshold) and Sections 10-60903.3.1 through 10-50912.2.3 (requiring more restrictive installation details to assist responding firefighters). The amendments are reasonably necessary to address risks created by local climatic, geological or topographical conditions.

2.2 Approximately thirty percent of all residential fires start in the kitchen.⁷ Furthermore, studies and testing performed by the United States Fire Administration has resulted in the United States Fire Administration concluding that a single low flow residential sprinkler in the kitchen was able to control both the cooking oil fire and an appliance fire on the countertop.⁸

2.3 Studies performed by the city of Scottsdale, Arizona established in over 90 percent of the cases where automatic fire sprinklers were activated, the fires were controlled with one fire sprinkler. Those one sprinkler activations deposited an average of 276 gallons of water in the structure, compared to an estimated average of 4,876 gallons that would have been sprayed by fire department hoses had sprinklers not been available.⁹ In summary, fires in buildings with sprinkler systems use thousands of gallons of water less to extinguish the

7 January 10, 2006 Staff Report to City Council relating to requiring Automatic Fire Sprinklers stated, "Nationally over the past ten years, more than 15 percent of all residential fire deaths, more than 29 percent of all injuries, and 30 percent of all residential fires were the direct result of kitchen fires." Exhibit B to January 10, 2006 Staff Report was a table showing that since 1996 on average 30 percent of fires in the Fresno Metropolitan Area that started in kitchen.

8 U.S. Fire Administration, "Localized Suppression Systems for the Kitchen," December 28, 2006.

9 January 10, 2006 Staff Report to Fresno City Council relating to Mandating Automatic Fire Sprinkler Systems in new Residential Occupancies.

fire than fires that occur in non-sprinklered property.¹⁰

2.4 Fires in non-sprinklered buildings generate orders of magnitude more smoke than fires controlled with automatic fire sprinklers. As set forth above, smoke contains particulate matter and other pollutants which contribute to the San Joaquin Valley's severe non-attainment status relating to PM₁₀ and ozone.

2.5 As such, this ordinance mandating more restrictive fire sprinkler installation standards is expressly found to be reasonably necessary to address risks created by local climatic, geological or topographical conditions, including limiting fire personnel's exposure to extreme temperatures, reducing the amount of water necessary to extinguish fires, reducing the amount of smoke generated by such fires and addressing extended run time due to topography-related low density growth pattern in the Fresno.

3. INSTALLATION OF LUMINOUS EXIT PATH MARKINGS SHALL BE PROVIDED IN ALL ENCLOSED STAIRWAYS IN ALL NEW BUILDINGS WITH THREE OR MORE STORIES: FRESNO MUNICIPAL CODE, SECTION 10-51024.1

3.1 Reports and studies related to building evacuation have concluded that the use of luminous egress markings indicators are effective in guiding occupants out of a building, with or without the use of electrical power.¹¹ This is because luminous exit path markings are not dependent upon electricity for illumination and they are placed at floor level as this is where the most visibility is in the event of smoke.¹² Traditional electrical exit lighting is located higher (above doorways) which is obscured when smoke fills a room or hallway.

3.2 By making it easier for individuals to evacuate buildings unassisted, fewer firefighters will have to respond to fires to assist with evacuation and/or firefighter resources can be directed toward fire suppression efforts to reduce fire intensity and duration. Accordingly, fewer firefighters will be exposed to health risks associated with exposure to sustained high temperatures and shorter fire duration can reduce smoke generations affecting air quality and fire suppression water use from such fires. As such, this ordinance mandating installation of luminous egress path markings in certain occupancies three stories or more is expressly found to be reasonably necessary to protect the health and safety of firefighters and other emergency personnel in light of Fresno's extremely high temperatures, air quality, limited water supply and pressure, and extended run time due to topography-related low density growth pattern in the Fresno.

4. REQUIREMENTS REGARDING LUMBER YARDS, WOODWORKING, RECYCLING, AND WASTE HANDLING FACILITIES: FRESNO MUNICIPAL CODE, SECTIONS

¹⁰ "Cost/Benefit to Society for Having Sprinklers in One-and-Two-Family Dwellings – A Pessimistic Analysis."

¹¹ Amy, James D.; The Path at Your Feet – The Shift in Emergency Lighting; International Fire Protection Magazine.

¹² Amy, James D.; The Path at Your Feet – The Shift in Emergency Lighting; International Fire Protection Magazine.

10-51901.1, 10-51907.2, 10-51907.3, 10-51907.6, 10-51908.3, 10-51908.4, 10-51908.7, 10-51908.11 AND 10-51908.12

4.1 In 2003, the City of Fresno Fire Department was involved in costly and time consuming fire suppression activities at two separate wood waste and green waste recycling facilities. Neither of these two facilities was in compliance with the requirements of Chapter 19 of the California Fire Code. After review of the suppression activities of both incidents, the City of Fresno Fire Department has concluded that even if the facilities had been in compliance with Chapter 19, the City would not have had the necessary equipment to rapidly suppress the fires. As a result, the fires lingered for numerous days, causing health and safety issues for the residents of the City and impacting air quality.

4.2 The City of Fresno currently has a number of wood waste and green waste recycling facilities within its boundaries and anticipates more like facilities as the City endeavors to reduce the amount of solid waste processed in landfills.

4.3 The Fresno Fire Department has concluded that it does not have adequate equipment to quickly engage and control a fire.

4.4 Winter conditions in Fresno and the entire Central Valley include rain and other moisture issues (Tule Fog). The green waste/recycling business is very well known for the problem of spontaneous combustion associated with it when the right amount of moisture creates a chemical reaction that develops heat which in turn, if unchecked, starts fires in the green waste piles. As set forth above, much of the year, Fresno has very hot, dry conditions. This makes all combustible materials more so, which increases the general fire hazard. As set forth above, this causes an obvious heat exposure to the firefighters that are responding to and addressing the emergency.

4.5 The larger the pile of wood product, the more heat retained and the more likely the pile will spontaneously combust. The larger the pile, the more difficult the fire is to fight, and as a result, the fire will burn longer, causing smoke to linger in the valley, creating a continuous health hazard to the residents and negatively affecting air quality.

4.6 The amendments to the California Fire Code reducing the dimensions of the size of the piles of such wood materials, and imposing additional safety measures, is necessary to ensure the City of Fresno's Fire Department's ability to quickly engage such fires and control them. By requiring pile size restrictions, separation and access the fire crews may more readily abate the emergency and/or hazard. On-site water mains and hydrant system will provide a more readily available source of water for firefighting, and will reduce the time it takes the fire crews to set up and extinguish a fire. The less time it takes to start the extinguishment process, the less time the fire has to spread and intensify. Access to a limited-size pile of green waste/recyclable material via all-weather roads will reduce the response time required by the Fire Department to set up and address a fire problem. Perimeter fencing provides a higher level of security for the business site and thereby reduces the threat of a possible arson-caused fire. Wood by-product stored in piles has a tendency to spontaneously combust and spread within a large pile.

4.7 The amendments relating to the storage of wood product are necessary to reduce, or attempt to reduce, air pollution in the San Joaquin Valley caused by wood fires, which is detrimentally enhanced by the above described local climatic, geologic and topographical conditions in the San Joaquin Valley.

5. REGULATION OF MOTOR FUEL DISPENSING AND REPAIR GARAGES, 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: FRESNO MUNICIPAL CODE SECTIONS 10-52206.2.3, 10-53404.2.9.6.1, 10-53406.2.4 AND 10-53404.3.5.1

5.1 The following describes when particle classes of liquids and gases reach boiling if temperatures remain at over 100°F:

Class I flammable liquids: Some of these liquids, such as gasoline and acetone, have boiling points (rapid release of ignitable vapors) at temperatures of 100-130 degrees F. Elevated ambient temperatures for these liquids increases the generation of flammable vapors and increases the chance of ignition.

Class II combustible liquids: These liquids have flash points (the temperature at which a liquid emits ignitable vapors) at or above 100°F. Local climatic conditions in the summer cause many common combustible liquids such as charcoal lighter fluid or paint thinner to be in a state of ready ignition from a spark or open flame.

For flammable and combustible liquids and gasses, the range of ignitability as a percentage of vapor volume in air increases with rise in temperature. For example: gasoline vapor at room temperature will ignite (lower flammability limit or LFL) at 1.07 percent of air volume; at 100°F gasoline will ignite at .94 percent of air volume.¹³

5.2 As set forth above, much of the year Fresno has very hot, dry conditions. This local condition makes all combustible materials (grass, weeds, buildings, roof, etc.) highly combustible, which increases the general fire hazard. High temperatures also make all flammable liquids and gases much more volatile, increasing the fire hazard.

5.3 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 fuel and gases caused by local conditions.

STATE OF CALIFORNIA)

COUNTY OF FRESNO) ss.
CITY OF FRESNO)

I, REBECCA E. KLISCH, City Clerk of the City of Fresno, certify that the foregoing ordinance was adopted by the Council for the City of Fresno, at a regular meeting held on the ____ day of _____, 2010.

AYES :
NOES :
ABSENT :
ABSTAIN :

Mayor Approval : _____, 2010

Mayor Approval/No Return: _____, 2010

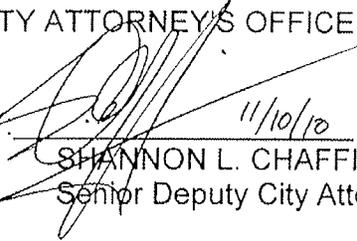
Mayor Veto: _____, 2010

Council Override _____, 2010

REBECCA E. KLISCH
City Clerk

BY: _____
Deputy

APPROVED AS TO FORM:
CITY ATTORNEY'S OFFICE

BY:  11/10/10
SHANNON L. CHAFFIN
Senior Deputy City Attorney

Attachments:

- Exhibit "1" – Historical temperature data compiled by the National Weather Service
- Exhibit "2" - Maximum Temperatures Chart
- Exhibit "3" - Heat Stress Index

Normals, Means & Extremes

May - Fresno, CA

EXHIBIT 1
PAGE 1 OF 6

Values in red represent the extremes for the month.

| D a t e | Temperature | | | | | | | Degree Days | | | | Precipitation | | | D a t e |
|------------------|-------------|------|------|------------|-----------|-----------|-----------|--------------------|-----------------------------|--------------------|-----------------------------|---------------|-----------------------------|-------------------|------------------|
| | Normal | | | High Max. | Low Max. | High Min. | Low Min. | Heating (daily) | Normal Season to Date | Cooling (daily) | Normal Season to Date | Daily | Normal Season to Date | Record Maximum | |
| | Max. | Min. | Avg. | | | | | | | | | | | | |
| 1 | 79 | 51 | 65 | 101 / 1947 | 57 / 1955 | 62 / 2006 | 38 / 1899 | 3 | 2409 | 3 | 46 | 0.02 | 10.63 | 0.67 / 1995 | 1 |
| 2 | 79 | 52 | 65 | 101 / 1947 | 60 / 1908 | 64 / 1947 | 40 / 1964 | 2 | 2411 | 3 | 49 | 0.02 | 10.65 | 0.57 / 1908 | 2 |
| 3 | 79 | 52 | 65 | 99 / 1947 | 52 / 1892 | 63 / 2004 | 38 / 1964 | 2 | 2413 | 3 | 52 | 0.02 | 10.67 | 0.80 / 1892 | 3 |
| 4 | 79 | 52 | 66 | 100 / 2004 | 58 / 1930 | 64 / 2004 | 39 / 1950 | 2 | 2415 | 3 | 55 | 0.02 | 10.69 | 0.20 / 1998 | 4 |
| 5 | 80 | 52 | 66 | 99 / 1990 | 57 / 1921 | 65 / 1989 | 36 / 1975 | 2 | 2417 | 4 | 59 | 0.02 | 10.71 | 1.02 / 2005 | 5 |
| 6 | 80 | 53 | 66 | 100 / 1987 | 58 / 1921 | 69 / 1992 | 41 / 1975 | 2 | 2419 | 4 | 63 | 0.02 | 10.73 | 0.48 / 1994 | 6 |
| 7 | 80 | 53 | 67 | 103 / 1987 | 56 / 1905 | 69 / 1989 | 36 / 1965 | 2 | 2421 | 4 | 67 | 0.02 | 10.75 | 1.02 / 1905 | 7 |
| 8 | 80 | 53 | 67 | 101 / 2001 | 59 / 1977 | 71 / 1987 | 39 / 1933 | 2 | 2423 | 4 | 71 | 0.02 | 10.77 | 0.38 / 1918 | 8 |
| 9 | 81 | 53 | 67 | 101 / 2001 | 57 / 1922 | 66 / 2001 | 39 / 1922 | 2 | 2425 | 4 | 75 | 0.01 | 10.78 | 0.63 / 1989 | 9 |
| 10 | 81 | 54 | 67 | 99 / 1993 | 60 / 1933 | 66 / 1931 | 41 / 1922 | 2 | 2427 | 4 | 79 | 0.01 | 10.79 | 0.16 / 1900 | 10 |
| 11 | 81 | 54 | 68 | 100 / 2001 | 62 / 1900 | 70 / 1987 | 40 / 1909 | 1 | 2428 | 5 | 84 | 0.01 | 10.80 | 1.64 / 1900 | 11 |
| 12 | 82 | 54 | 68 | 100 / 1987 | 54 / 1998 | 68 / 1987 | 42 / 1907 | 1 | 2429 | 5 | 89 | 0.01 | 10.81 | 0.33 / 1998 | 12 |
| 13 | 82 | 54 | 68 | 103 / 1976 | 64 / 1998 | 66 / 1987 | 44 / 1956 | 1 | 2430 | 5 | 94 | 0.01 | 10.82 | 1.00 / 1931 | 13 |
| 14 | 82 | 55 | 68 | 102 / 1972 | 64 / 1957 | 66 / 1996 | 43 / 1955 | 1 | 2431 | 5 | 99 | 0.01 | 10.83 | 0.56 / 1894 | 14 |
| 15 | 82 | 55 | 69 | 102 / 1927 | 60 / 1953 | 70 / 2006 | 42 / 1955 | 1 | 2432 | 5 | 104 | 0.01 | 10.84 | 0.83 / 1987 | 15 |
| 16 | 83 | 55 | 69 | 103 / 1970 | 64 / 1930 | 71 / 2008 | 40 / 1894 | 1 | 2433 | 5 | 109 | 0.01 | 10.85 | 0.13 / 2005 | 16 |
| 17 | 83 | 55 | 69 | 106 / 2009 | 64 / 1994 | 73 / 2008 | 44 / 1974 | 1 | 2434 | 6 | 115 | 0.01 | 10.86 | 0.44 / 1915 | 17 |
| 18 | 83 | 55 | 69 | 103 / 2008 | 63 / 1994 | 73 / 2008 | 42 / 1893 | 1 | 2435 | 6 | 121 | 0.01 | 10.87 | 0.86 / 1957 | 18 |
| 19 | 84 | 56 | 70 | 103 / 2008 | 63 / 1972 | 70 / 2009 | 42 / 1896 | 1 | 2436 | 6 | 127 | 0.01 | 10.88 | 0.30 / 1925 | 19 |
| 20 | 84 | 56 | 70 | 102 / 1947 | 61 / 1921 | 71 / 1897 | 44 / 1962 | 1 | 2437 | 6 | 133 | 0.01 | 10.89 | 0.65 / 1925 | 20 |
| 21 | 84 | 56 | 70 | 104 / 1892 | 56 / 1933 | 69 / 2001 | 42 / 1975 | 1 | 2438 | 6 | 139 | 0.01 | 10.90 | 0.28 / 2006 | 21 |
| 22 | 85 | 56 | 70 | 104 / 1967 | 67 / 2010 | 71 / 1892 | 43 / 1909 | 1 | 2439 | 7 | 146 | 0.01 | 10.91 | 0.15 / 1958 | 22 |
| 23 | 85 | 56 | 71 | 103 / 1967 | 65 / 1916 | 71 / 2000 | 44 / 1960 | 1 | 2440 | 7 | 153 | 0.01 | 10.92 | 0.23 / 1990 | 23 |
| 24 | 85 | 57 | 71 | 103 / 1924 | 64 / 1916 | 68 / 1943 | 41 / 1953 | 1 | 2441 | 7 | 160 | 0.01 | 10.93 | 0.22 / 1931 | 24 |
| 25 | 85 | 57 | 71 | 102 / 1890 | 59 / 1906 | 68 / 1890 | 42 / 1980 | 1 | 2442 | 7 | 167 | 0.01 | 10.94 | 0.24 / 1901 | 25 |
| 26 | 85 | 57 | 71 | 103 / 1974 | 66 / 1946 | 68 / 1951 | 40 / 1953 | 1 | 2443 | 7 | 174 | 0.01 | 10.95 | 0.94 / 1946 | 26 |
| 27 | 86 | 57 | 72 | 104 / 1974 | 55 / 1971 | 69 / 1951 | 46 / 1998 | 0 | 2443 | 7 | 181 | 0.01 | 10.96 | 0.63 / 1971 | 27 |
| 28 | 86 | 58 | 72 | 107 / 1984 | 58 / 1953 | 69 / 2009 | 45 / 1927 | 0 | 2443 | 8 | 189 | 0.01 | 10.97 | 1.34 / 1906 | 28 |
| 29 | 86 | 58 | 72 | 107 / 1984 | 69 / 1988 | 72 / 1939 | 45 / 1906 | 0 | 2443 | 8 | 197 | 0.01 | 10.98 | 0.46 / 1906 | 29 |
| 30 | 87 | 58 | 72 | 109 / 1910 | 64 / 1948 | 76 / 1984 | 45 / 1988 | 0 | 2443 | 8 | 205 | 0.01 | 10.99 | 0.38 / 1948 | 30 |
| 31 | 87 | 58 | 72 | 110 / 1910 | 68 / 1971 | 72 / 1910 | 46 / 1923 | 0 | 2443 | 8 | 213 | 0.01 | 11.00 | 0.15 / 1961 | 31 |
| Avg. | 82.7 | 54.9 | 68.8 | | | | | 37 | | 170 | | 0.39 | | | Avg. |
| D a t e | Max. | Min. | Avg. | High Max. | Low Max. | High Min. | Low Min. | Heating (daily) | Normal Season to Date | Cooling (daily) | Normal Season to Date | Daily | Normal Season to Date | Record Maximum | D a t e |
| | Temperature | | | | | | | Degree Days | | | | Precipitation | | | |

Normals, Means & Extremes

EXHIBIT 1
PAGE 2A OF 6

June - Fresno, CA

Values in red represent the extremes for the month.

| D a t e | Temperature | | | | | | | Degree Days | | | | Precipitation | | | D a t e |
|------------------|-------------|------|------|------------|-----------|-----------|-----------|--------------------|-----------------------------|--------------------|-----------------------------|---------------|--------------------------------|-------------------|------------------|
| | Normal | | | High Max. | Low Max. | High Min. | Low Min. | Heating (daily) | Normal Season to Date | Cooling (daily) | Normal Season to Date | Daily | Normal Season to Date | Record Maximum | |
| | Max. | Min. | Avg. | | | | | | | | | | | | |
| 1 | 87 | 58 | 73 | 105 / 1910 | 60 / 1953 | 71 / 2001 | 44 / 1955 | 1 | 2444 | 9 | 222 | 0.01 | 11.01 | 0.60 / 1899 | 1 |
| 2 | 87 | 59 | 73 | 106 / 1960 | 67 / 1985 | 70 / 1960 | 45 / 1902 | 1 | 2445 | 9 | 231 | 0.01 | 11.02 | 0.33 / 1985 | 2 |
| 3 | 88 | 59 | 73 | 107 / 1912 | 69 / 1936 | 72 / 1937 | 44 / 1908 | 1 | 2446 | 9 | 240 | 0.01 | 11.03 | 0.24 / 1945 | 3 |
| 4 | 88 | 59 | 73 | 105 / 1996 | 72 / 1954 | 73 / 1912 | 46 / 1908 | 1 | 2447 | 9 | 249 | 0.01 | 11.04 | 0.31 / 1993 | 4 |
| 5 | 88 | 59 | 74 | 107 / 1981 | 57 / 1894 | 72 / 1926 | 48 / 1954 | 0 | 2447 | 9 | 258 | 0.01 | 11.05 | 1.30 / 1993 | 5 |
| 6 | 88 | 59 | 74 | 107 / 1903 | 63 / 1894 | 75 / 1926 | 46 / 1954 | 0 | 2447 | 10 | 268 | 0.01 | 11.06 | 1.80 / 1998 | 6 |
| 7 | 89 | 59 | 74 | 107 / 1977 | 66 / 1914 | 76 / 1903 | 46 / 1950 | 0 | 2447 | 10 | 278 | 0.01 | 11.07 | 1.08 / 1931 | 7 |
| 8 | 89 | 60 | 74 | 105 / 1973 | 69 / 2000 | 76 / 1903 | 47 / 1950 | 0 | 2447 | 10 | 288 | 0.01 | 11.08 | 0.56 / 2000 | 8 |
| 9 | 89 | 60 | 75 | 108 / 1902 | 66 / 1954 | 70 / 1903 | 48 / 1901 | 0 | 2447 | 10 | 298 | 0.01 | 11.09 | 0.16 / 1957 | 9 |
| 10 | 89 | 60 | 75 | 106 / 1986 | 65 / 1976 | 70 / 1939 | 46 / 1954 | 0 | 2447 | 10 | 308 | 0.01 | 11.1 | 0.37 / 1976 | 10 |
| 11 | 90 | 60 | 75 | 106 / 1979 | 71 / 1894 | 72 / 1918 | 47 / 1894 | 0 | 2447 | 11 | 319 | 0.01 | 11.11 | 0.24 / 1907 | 11 |
| 12 | 90 | 60 | 75 | 107 / 1985 | 66 / 1998 | 73 / 1985 | 47 / 1952 | 0 | 2447 | 11 | 330 | 0.01 | 11.12 | 0.01 / 1891 | 12 |
| 13 | 90 | 61 | 76 | 107 / 1949 | 69 / 1922 | 71 / 1985 | 47 / 1907 | 0 | 2447 | 11 | 341 | 0.01 | 11.13 | 0.12 / 1922 | 13 |
| 14 | 91 | 61 | 76 | 108 / 1966 | 65 / 1962 | 72 / 2007 | 43 / 1907 | 0 | 2447 | 11 | 352 | 0.01 | 11.14 | 1.66 / 1939 | 14 |
| 15 | 91 | 61 | 76 | 109 / 1961 | 68 / 1995 | 77 / 2000 | 47 / 1907 | 0 | 2447 | 12 | 364 | 0.01 | 11.15 | 0.66 / 1995 | 15 |
| 16 | 91 | 61 | 76 | 110 / 1961 | 71 / 1921 | 74 / 1985 | 46 / 1995 | 0 | 2447 | 12 | 376 | 0.01 | 11.16 | 0.04 / 1929 | 16 |
| 17 | 91 | 61 | 76 | 107 / 1917 | 68 / 1909 | 75 / 1985 | 49 / 1939 | 0 | 2447 | 12 | 388 | 0.01 | 11.17 | 0.08 / 1909 | 17 |
| 18 | 92 | 62 | 77 | 106 / 1945 | 71 / 1909 | 72 / 1918 | 50 / 1908 | 0 | 2447 | 12 | 400 | 0.01 | 11.18 | 0.06 / 1894 | 18 |
| 19 | 92 | 62 | 77 | 106 / 1962 | 72 / 1897 | 75 / 1918 | 51 / 1893 | 0 | 2447 | 12 | 412 | 0.01 | 11.19 | 0.08 / 1914 | 19 |
| 20 | 92 | 62 | 77 | 110 / 1920 | 78 / 1897 | 75 / 1918 | 50 / 1908 | 0 | 2447 | 13 | 425 | 0.01 | 11.2 | 0.01 / 1988 | 20 |
| 21 | 92 | 62 | 77 | 110 / 2008 | 77 / 1944 | 75 / 2008 | 51 / 1912 | 0 | 2447 | 13 | 438 | 0.01 | 11.21 | 0 | 21 |
| 22 | 93 | 63 | 78 | 108 / 1981 | 71 / 1912 | 76 / 1921 | 49 / 1923 | 0 | 2447 | 13 | 451 | 0.01 | 11.22 | 0.01 / 1921 | 22 |
| 23 | 93 | 63 | 78 | 109 / 1895 | 74 / 1912 | 75 / 2006 | 50 / 1893 | 0 | 2447 | 13 | 464 | 0.01 | 11.23 | Tr. / 1952 | 23 |
| 24 | | | | 110 / | 75 / | 76 / | 51 / | | | | | | | 0.01 / | 24 |

Fresno Normals, Means and Extremes: May

| | | | | | | | | | | | | | | | |
|------------------|-------------|------|------|---------------|--------------|--------------|--------------|--------------------|-----------------------------|--------------------|-----------------------------|-------|--------------------------------|-------------------|------------------|
| | 93 | 63 | 78 | 1929 | 1975 | 2006 | 1912 | 0 | 2447 | 14 | 478 | 0 | 11.23 | 1988 | |
| 25 | 93 | 63 | 78 | 112 / 1925 | 72 / 1996 | 80 / 1925 | 47 / 1975 | 0 | 2447 | 14 | 492 | 0 | 11.23 | 0.06 / 1899 | 25 |
| 26 | 94 | 63 | 79 | 108 / 1993 | 69 / 1913 | 77 / 1925 | 48 / 1965 | 0 | 2447 | 14 | 506 | 0 | 11.23 | 0.12 / 1941 | 26 |
| 27 | 94 | 64 | 79 | 110 / 1925 | 76 / 1906 | 77 / 1973 | 51 / 1955 | 0 | 2447 | 14 | 520 | 0 | 11.23 | 0.06 / 1996 | 27 |
| 28 | 94 | 64 | 79 | 108 / 2010 | 71 / 1952 | 77 / 1926 | 51 / 1906 | 0 | 2447 | 14 | 534 | 0 | 11.23 | 0.01 / 1920 | 28 |
| 29 | 94 | 64 | 79 | 110 / 1891 | 77 / 1982 | 78 / 1977 | 49 / 1963 | 0 | 2447 | 15 | 549 | 0 | 11.23 | 0.12 / 1982 | 29 |
| 30 | 95 | 64 | 79 | 112 / 1891 | 68 / 1982 | 75 / 1984 | 53 / 1970 | 0 | 2447 | 15 | 564 | 0 | 11.23 | 0.19 / 1982 | 30 |
| Avg. | 90.9 | 61.2 | 76.1 | | | | | 4 | | 351 | | 0.23 | | | Avg. |
| D a t e | Max. | Min. | Avg. | High Max. | Low Max. | High Min. | Low Min. | Heating (daily) | Normal Season to Date | Cooling (daily) | Normal Season to Date | Daily | Normal Season to Date | Record Maximum | D a t e |
| | Normal | | | | | | | | | | | | | | |
| | Temperature | | | | | | | Degree Days | | | Precipitation | | | | |

Fresno Normals, Means and Extremes: July

National Weather Service

San Joaquin Valley - Hanford, CA

Normals, Means & Extremes

July - Fresno, CA

Values in red represent the extremes for the month.

| D a t e | Temperature | | | | | | | Degree Days | | | | Precipitation | | | D a t e |
|------------------|-------------|------|------|------------|-----------|-----------|-------------|--------------------|-----------------------------|--------------------|-----------------------------|---------------|-----------------------------|-------------------|------------------|
| | Normal | | | High Max. | Low Max. | High Min. | Low Min. | Heating (daily) | Normal Season to Date | Cooling (daily) | Normal Season to Date | Daily | Normal Season to Date | Record Maximum | |
| | Max. | Min. | Avg. | | | | | | | | | | | | |
| 1 | 95 | 64 | 80 | 114 / 1891 | 82 / 1982 | 80 / 1934 | 53 / 1975 | 0 | 0 | 15 | 579 | 0.01 | 0.01 | Tr. / 1916 | 1 |
| 2 | 95 | 65 | 80 | 110 / 1942 | 70 / 1916 | 78 / 1924 | 51 / 1956 | 0 | 0 | 15 | 594 | 0 | 0.01 | Tr. / 1961 | 2 |
| 3 | 95 | 65 | 80 | 110 / 2001 | 78 / 1910 | 78 / 2001 | 50 / 1901 | 0 | 0 | 16 | 610 | 0 | 0.01 | 0.14 / 1925 | 3 |
| 4 | 96 | 65 | 80 | 112 / 1889 | 79 / 1955 | 81 / 2001 | 51 / 1951 | 0 | 0 | 16 | 626 | 0 | 0.01 | Tr. / 1896 | 4 |
| 5 | 96 | 65 | 80 | 112 / 1991 | 77 / 1909 | 77 / 1991 | 52 / 1948 | 0 | 0 | 16 | 642 | 0 | 0.01 | Tr. / 1970 | 5 |
| 6 | 96 | 65 | 80 | 111 / 2007 | 83 / 1903 | 77 / 2007 | 50 / 1955 | 0 | 0 | 16 | 658 | 0 | 0.01 | 0.01 / 2001 | 6 |
| 7 | 96 | 65 | 81 | 111 / 1905 | 84 / 1891 | 76 / 1936 | 53 / 1903 | 0 | 0 | 16 | 674 | 0 | 0.01 | 0.07 / 2001 | 7 |
| 8 | 96 | 66 | 81 | 115 / 1905 | 84 / 1891 | 81 / 1896 | 51 / 1891 | 0 | 0 | 16 | 690 | 0 | 0.01 | Tr. / 1968 | 8 |
| 9 | 96 | 66 | 81 | 113 / 1905 | 78 / 1936 | 81 / 2008 | 55 / 1983 | 0 | 0 | 17 | 707 | 0 | 0.01 | 0.01 / 1950 | 9 |
| 10 | 97 | 66 | 81 | 112 / 2008 | 81 / 1974 | 82 / 2008 | 54 / 1904 | 0 | 0 | 17 | 724 | 0 | 0.01 | 0.01 / 1950 | 10 |
| 11 | 97 | 66 | 81 | 110 / 1961 | 82 / 1888 | 78 / 2002 | 52 / 1974 | 0 | 0 | 17 | 741 | 0 | 0.01 | 0.01 / 1908 | 11 |
| 12 | 97 | 66 | 81 | 109 / 2002 | 82 / 1995 | 81 / 1999 | 54 / 1965 | 0 | 0 | 17 | 758 | 0 | 0.01 | 0.22 / 1992 | 12 |
| 13 | 97 | 66 | 81 | 110 / 1983 | 84 / 1932 | 83 / 1999 | 55 / 1903 | 0 | 0 | 17 | 775 | 0 | 0.01 | Tr. / 1969 | 13 |
| 14 | 97 | 66 | 82 | 110 / 1972 | 89 / 1920 | 81 / 1935 | 55 / 1920 | 0 | 0 | 17 | 792 | 0 | 0.01 | Tr. / 1992 | 14 |
| 15 | 97 | 66 | 82 | 111 / 1972 | 83 / 1975 | 79 / 1911 | 54 / 1905 | 0 | 0 | 17 | 809 | 0 | 0.01 | Tr. / 1976 | 15 |
| 16 | 97 | 66 | 82 | 111 / 1925 | 83 / 1958 | 80 / 1984 | 54 / 1916 | 0 | 0 | 17 | 826 | 0 | 0.01 | 0.01 / 1976 | 16 |
| 17 | 97 | 66 | 82 | 114 / 1925 | 78 / 1987 | 79 / 1925 | 56 / 1987 | 0 | 0 | 17 | 843 | 0 | 0.01 | 0.01 / 1995 | 17 |
| 18 | 97 | 67 | 82 | 111 / 1899 | 81 / 1987 | 83 / 1925 | 54 / 1987 | 0 | 0 | 17 | 860 | 0 | 0.01 | Tr. / 2006 | 18 |
| 19 | 97 | 67 | 82 | 112 / 2009 | 88 / 1987 | 79 / 2006 | 54 / 1932 | 0 | 0 | 17 | 877 | 0 | 0.01 | Tr. / 2003 | 19 |
| 20 | 97 | 67 | 82 | 111 / 1908 | 81 / 1973 | 78 / 1938 | 54 / 1903 | 0 | 0 | 18 | 895 | 0 | 0.01 | 0.04 / 1985 | 20 |
| 21 | 97 | 67 | 82 | 112 / 1908 | 79 / 1987 | 82 / 2006 | 56 / 1973 | 0 | 0 | 18 | 913 | 0 | 0.01 | 0.08 / 1979 | 21 |
| 22 | 97 | 67 | 82 | 112 / 2006 | 83 / 1896 | 84 / 2006 | 56 / 1903 | 0 | 0 | 18 | 931 | 0 | 0.01 | 0.33 / 1913 | 22 |
| 23 | 97 | 67 | 82 | 113 / 2006 | 84 / 1918 | 90 / 2006 | 55 / 1897 | 0 | 0 | 18 | 949 | 0 | 0.01 | Tr. / 2007 | 23 |
| 24 | 97 | 67 | 82 | 113 / 2006 | 87 / 1999 | 85 / 2006 | 55 / 1903 | 0 | 0 | 18 | 967 | 0 | 0.01 | Tr. / 1965 | 24 |
| 25 | 97 | 67 | 82 | 113 / 2006 | 76 / 1913 | 82 / 2006 | 56 / 1889 | 0 | 0 | 18 | 985 | 0 | 0.01 | 0.06 / 1896 | 25 |
| 26 | 97 | 67 | 82 | 113 / 1931 | 84 / 1965 | 80 / 1931 | 56 / 1955 | 0 | 0 | 18 | 1003 | 0 | 0.01 | Tr. / 1964 | 26 |
| 27 | 97 | 67 | 82 | 114 / 1933 | 83 / 1941 | 79 / 1933 | 52 / 1897 | 0 | 0 | 17 | 1020 | 0 | 0.01 | Tr. / 1908 | 27 |
| 28 | 97 | 67 | 82 | 110 / 1980 | 89 / 1913 | 82 / 1980 | 55 / 1892 | 0 | 0 | 17 | 1037 | 0 | 0.01 | 0.02 / 1958 | 28 |
| 29 | 97 | 66 | 82 | 113 / 1898 | 87 / 1896 | 78 / 2003 | 57 / 1919 | 0 | 0 | 17 | 1054 | 0 | 0.01 | Tr. / 2003 | 29 |
| 30 | 97 | 66 | 82 | 114 / 1898 | 80 / 1966 | 83 / 2003 | 57 / 1975 | 0 | 0 | 17 | 1071 | 0 | 0.01 | 0.03 / 1966 | 30 |
| 31 | 97 | 66 | 82 | 114 / 1908 | 83 / 1976 | 81 / 1908 | 53 / 1895 | 0 | 0 | 17 | 1088 | 0 | 0.01 | Tr. / 2003 | 31 |
| Avg. | 96.6 | 66.1 | 81.4 | | | | | 0 | | 524 | | 0.01 | | | Avg. |
| D a t e | Max. | Min. | Avg. | High Max. | Low Max. | High Min. | Low Min. | Heating (daily) | Normal Season to Date | Cooling (daily) | Normal Season to Date | Daily | Normal Season to Date | Record Maximum | D a t e |
| | Normal | | | | | | | | | | | | | | |
| Temperature | | | | | | | Degree Days | | | | Precipitation | | | | |

National Weather Service

San Joaquin Valley - Hanford, CA

Normals, Means & Extremes

September - Fresno, CA

Values in red represent the extremes for the month.

| D a t e | Temperature | | | | | | | Degree Days | | | | Precipitation | | | D a t e |
|------------------|-------------|------|------|------------|-----------|-----------|-----------|--------------------|-----------------------------|--------------------|-----------------------------|---------------|-----------------------------|-------------------|------------------|
| | Normal | | | High Max. | Low Max. | High Min. | Low Min. | Heating (daily) | Normal Season to Date | Cooling (daily) | Normal Season to Date | Daily | Normal Season to Date | Record Maximum | |
| | Max. | Min. | Avg. | | | | | | | | | | | | |
| 1 | 92 | 63 | 78 | 107 / 1888 | 73 / 1964 | 76 / 2007 | 51 / 1964 | 0 | 0 | 13 | 1579 | 0 | 0.02 | 0.32 / 2000 | 1 |
| 2 | 92 | 63 | 78 | 108 / 1955 | 76 / 2000 | 77 / 1998 | 48 / 1964 | 0 | 0 | 13 | 1592 | 0 | 0.02 | 0.07 / 1997 | 2 |
| 3 | 92 | 63 | 77 | 111 / 1955 | 71 / 1912 | 77 / 2003 | 52 / 1964 | 0 | 0 | 13 | 1605 | 0 | 0.02 | 0.42 / 1985 | 3 |
| 4 | 92 | 63 | 77 | 107 / 1988 | 74 / 1912 | 75 / 1998 | 51 / 1912 | 0 | 0 | 13 | 1618 | 0 | 0.02 | 0.92 / 1978 | 4 |
| 5 | 91 | 63 | 77 | 105 / 1984 | 73 / 1978 | 73 / 1991 | 47 / 1887 | 0 | 0 | 13 | 1631 | 0.01 | 0.03 | 0.28 / 1972 | 5 |
| 6 | 91 | 62 | 77 | 106 / 1988 | 75 / 1965 | 76 / 1998 | 49 / 1887 | 0 | 0 | 12 | 1643 | 0.01 | 0.04 | 0.04 / 1969 | 6 |
| 7 | 91 | 62 | 77 | 108 / 1904 | 78 / 1978 | 73 / 1998 | 50 / 1964 | 0 | 0 | 12 | 1655 | 0.01 | 0.05 | 0.22 / 1958 | 7 |
| 8 | 91 | 62 | 76 | 108 / 1904 | 76 / 1931 | 74 / 1998 | 49 / 1897 | 0 | 0 | 12 | 1667 | 0.01 | 0.06 | Tr. / 1997 | 8 |
| 9 | 91 | 62 | 76 | 107 / 1904 | 75 / 1985 | 76 / 1888 | 50 / 1964 | 0 | 0 | 12 | 1679 | 0.01 | 0.07 | 0.02 / 1960 | 9 |
| 10 | 90 | 62 | 76 | 108 / 1888 | 68 / 1952 | 76 / 1888 | 48 / 1952 | 0 | 0 | 12 | 1691 | 0.01 | 0.08 | 0.48 / 1976 | 10 |
| 11 | 90 | 62 | 76 | 111 / 1888 | 72 / 1952 | 72 / 1888 | 44 / 1952 | 0 | 0 | 11 | 1702 | 0.01 | 0.09 | 0.42 / 1976 | 11 |
| 12 | 90 | 61 | 76 | 105 / 1983 | 73 / 1893 | 70 / 1960 | 48 / 1952 | 0 | 0 | 11 | 1713 | 0.01 | 0.10 | 0.06 / 1895 | 12 |
| 13 | 90 | 61 | 75 | 106 / 1983 | 74 / 1915 | 70 / 2006 | 48 / 1970 | 0 | 0 | 11 | 1724 | 0.01 | 0.11 | 0.01 / 1895 | 13 |
| 14 | 89 | 61 | 75 | 105 / 1971 | 70 / 1910 | 71 / 2000 | 47 / 1903 | 0 | 0 | 11 | 1735 | 0.01 | 0.12 | 0.27 / 1910 | 14 |
| 15 | 89 | 61 | 75 | 104 / 1983 | 74 / 1982 | 69 / 1998 | 45 / 1970 | 0 | 0 | 11 | 1746 | 0.01 | 0.13 | 0.73 / 1910 | 15 |
| 16 | 89 | 60 | 75 | 105 / 1937 | 70 / 1908 | 71 / 1983 | 49 / 1955 | 0 | 0 | 10 | 1756 | 0.01 | 0.14 | 0.26 / 1891 | 16 |
| 17 | 88 | 60 | 74 | 105 / 1979 | 73 / 1950 | 74 / 1984 | 48 / 1965 | 0 | 0 | 10 | 1766 | 0.01 | 0.15 | 0.27 / 1989 | 17 |
| 18 | 88 | 60 | 74 | 107 / 1913 | 67 / 1963 | 78 / 1984 | 48 / 1978 | 0 | 0 | 10 | 1776 | 0.01 | 0.16 | 0.61 / 1989 | 18 |
| 19 | 88 | 60 | 74 | 105 / 1922 | 70 / 1989 | 75 / 1984 | 44 / 1978 | 0 | 0 | 10 | 1786 | 0.01 | 0.17 | 0.63 / 1959 | 19 |
| 20 | 88 | 60 | 74 | 104 / 1939 | 73 / 2007 | 70 / 1984 | 46 / 1978 | 0 | 0 | 9 | 1795 | 0.01 | 0.18 | 0.09 / 1939 | 20 |
| 21 | 87 | 59 | 73 | 102 / 1949 | 72 / 1945 | 74 / 1983 | 42 / 1968 | 0 | 0 | 9 | 1804 | 0.01 | 0.19 | 0.14 / 1916 | 21 |
| 22 | 87 | 59 | 73 | 104 / 1949 | 67 / 1923 | 72 / 1999 | 41 / 1968 | 0 | 0 | 9 | 1813 | 0.01 | 0.20 | 0.47 / 1887 | 22 |
| 23 | 87 | 59 | 73 | 105 / 1949 | 66 / 1904 | 66 / 1991 | 47 / 1968 | 0 | 0 | 9 | 1822 | 0.01 | 0.21 | 0.24 / 1958 | 23 |
| 24 | 87 | 59 | 73 | 102 / 1899 | 62 / 1904 | 66 / 1991 | 46 / 1945 | 0 | 0 | 8 | 1830 | 0.01 | 0.22 | 0.76 / 1904 | 24 |
| 25 | 86 | 58 | 72 | 100 / 1978 | 70 / 1986 | 69 / 2002 | 43 / 1948 | 0 | 0 | 8 | 1838 | 0.01 | 0.23 | 0.85 / 1982 | 25 |
| 26 | 86 | 58 | 72 | 107 / 1963 | 64 / 1898 | 66 / 1978 | 43 / 1948 | 0 | 0 | 8 | 1846 | 0.01 | 0.24 | 1.12 / 1898 | 26 |
| 27 | 86 | 58 | 72 | 105 / 1888 | 66 / 1986 | 68 / 1963 | 44 / 1948 | 0 | 0 | 7 | 1853 | 0.01 | 0.25 | 0.13 / 1938 | 27 |
| 28 | 85 | 57 | 71 | 104 / 1887 | 64 / 1911 | 67 / 2010 | 43 / 1971 | 1 | 1 | 7 | 1860 | 0.01 | 0.26 | 0.18 / 1994 | 28 |
| 29 | 85 | 57 | 71 | 102 / 1992 | 63 / 1919 | 72 / 2010 | 43 / 1905 | 1 | 2 | 7 | 1867 | 0.01 | 0.27 | 1.12 / 1890 | 29 |
| 30 | 85 | 57 | 71 | 101 / 2010 | 56 / 1894 | 71 / 2010 | 37 / 1950 | 1 | 3 | 6 | 1873 | 0.01 | 0.28 | 0.73 / 1894 | 30 |
| Avg. | 88.8 | 60.4 | 74.6 | | | | | 3 | | 307 | | 0.26 | | | Avg. |
| D a t e | Max. | Min. | Avg. | High Max. | Low Max. | High Min. | Low Min. | Heating (daily) | Normal Season to Date | Cooling (daily) | Normal Season to Date | Daily | Normal Season to Date | Record Maximum | D a t e |
| | Normal | | | | | | | | | | | | | | |
| Temperature | | | | | | | | Degree Days | | | | Precipitation | | | |

National Weather Service

San Joaquin Valley - Hanford, CA

Normals, Means & Extremes

October - Fresno, CA

Values in red represent the extremes for the month.

| Date | Temperature | | | | | | | Degree Days | | | | Precipitation | | | Date |
|------|-------------|------|------|------------|-------------|-----------|-----------|-----------------|-----------------------|-----------------|-----------------------|---------------|-----------------------|----------------|------|
| | Normal | | | High Max. | Low Max. | High Min. | Low Min. | Heating (daily) | Normal Season to Date | Cooling (daily) | Normal Season to Date | Daily | Normal Season to Date | Record Maximum | |
| | Max. | Min. | Avg. | | | | | | | | | | | | |
| 1 | 84 | 57 | 70 | 100 / 1987 | 65 / 1894 | 70 / 2010 | 39 / 1971 | 0 | 3 | 6 | 1879 | 0.01 | 0.29 | 1.46 / 1976 | 1 |
| 2 | 84 | 56 | 70 | 101 / 1980 | 58 / 1916 | 71 / 2010 | 40 / 1891 | 0 | 3 | 6 | 1885 | 0.01 | 0.30 | 0.35 / 1939 | 2 |
| 3 | 84 | 56 | 70 | 101 / 1980 | 62 / 1916 | 68 / 2001 | 41 / 1908 | 0 | 3 | 6 | 1891 | 0.01 | 0.31 | 0.20 / 1900 | 3 |
| 4 | 83 | 56 | 70 | 102 / 1980 | 64 / 1916 | 69 / 1917 | 42 / 1957 | 0 | 3 | 5 | 1896 | 0.01 | 0.32 | 0.64 / 1994 | 4 |
| 5 | 83 | 55 | 69 | 101 / 1980 | 64 / 1916 | 66 / 1904 | 40 / 1969 | 0 | 3 | 5 | 1901 | 0.02 | 0.34 | 1.69 / 1925 | 5 |
| 6 | 83 | 55 | 69 | 99 / 1987 | 64 / 1939 | 68 / 1892 | 37 / 1969 | 0 | 3 | 5 | 1906 | 0.02 | 0.36 | 2.38 / 1904 | 6 |
| 7 | 82 | 55 | 68 | 96 / 1996 | 59 / 1923 | 64 / 1983 | 39 / 1969 | 1 | 4 | 4 | 1910 | 0.02 | 0.38 | 0.67 / 1973 | 7 |
| 8 | 82 | 54 | 68 | 99 / 1980 | 65 / 1923 | 64 / 1996 | 35 / 1949 | 1 | 5 | 4 | 1914 | 0.02 | 0.40 | 0.24 / 1904 | 8 |
| 9 | 81 | 54 | 68 | 98 / 1996 | 65 / 1960 | 65 / 1996 | 39 / 1949 | 1 | 6 | 4 | 1918 | 0.02 | 0.42 | 0.29 / 1920 | 9 |
| 10 | 81 | 54 | 67 | 99 / 1991 | 59 / 2000 | 62 / 1936 | 42 / 1890 | 1 | 7 | 4 | 1922 | 0.02 | 0.44 | 0.76 / 2000 | 10 |
| 11 | 81 | 54 | 67 | 97 / 1950 | 53 / 1899 | 64 / 1991 | 38 / 1893 | 1 | 8 | 4 | 1926 | 0.02 | 0.46 | 0.57 / 1904 | 11 |
| 12 | 80 | 53 | 67 | 95 / 1964 | 60 / 1910 | 62 / 2010 | 39 / 1969 | 1 | 9 | 3 | 1929 | 0.02 | 0.48 | 0.20 / 1899 | 12 |
| 13 | 80 | 53 | 66 | 95 / 1991 | 57 / 1899 | 63 / 2010 | 40 / 1981 | 1 | 10 | 3 | 1932 | 0.02 | 0.50 | 1.28 / 2009 | 13 |
| 14 | 79 | 53 | 66 | 100 / 1978 | 54 / 1899 | 64 / 2010 | 41 / 1981 | 1 | 11 | 3 | 1935 | 0.02 | 0.52 | 0.48 / 1935 | 14 |
| 15 | 79 | 52 | 66 | 99 / 1961 | 61 / 1899 | 64 / 1945 | 36 / 1966 | 2 | 13 | 3 | 1938 | 0.02 | 0.54 | 0.23 / 1946 | 15 |
| 16 | 78 | 52 | 65 | 96 / 1961 | 58 / 1971 | 63 / 2009 | 36 / 1966 | 2 | 15 | 3 | 1941 | 0.02 | 0.56 | 0.42 / 1963 | 16 |
| 17 | 78 | 52 | 65 | 97 / 1959 | 62 / 1892 | 62 / 2009 | 36 / 1893 | 2 | 17 | 2 | 1943 | 0.02 | 0.58 | 0.54 / 1934 | 17 |
| 18 | 77 | 51 | 64 | 95 / 1903 | 61 / 1936 | 62 / 2009 | 36 / 1949 | 2 | 19 | 2 | 1945 | 0.02 | 0.60 | 0.67 / 1936 | 18 |
| 19 | 77 | 51 | 64 | 92 / 1921 | 59 / 1949 | 61 / 1979 | 30 / 1949 | 3 | 22 | 2 | 1947 | 0.02 | 0.62 | 0.75 / 2004 | 19 |
| 20 | 77 | 51 | 64 | 94 / 1927 | 56 / 1941 | 57 / 1991 | 35 / 1949 | 3 | 25 | 2 | 1949 | 0.02 | 0.64 | 0.38 / 1889 | 20 |
| 21 | 76 | 50 | 63 | 93 / 2003 | 58 / 1941 | 60 / 1992 | 34 / 1949 | 3 | 28 | 2 | 1951 | 0.02 | 0.66 | 0.67 / 1985 | 21 |
| 22 | 76 | 50 | 63 | 92 / 1948 | 63 / 1889 | 64 / 1982 | 35 / 1961 | 3 | 31 | 2 | 1953 | 0.02 | 0.68 | 0.56 / 1889 | 22 |
| 23 | 75 | 50 | 62 | 90 / 1965 | 57 / 1956 | 64 / 1982 | 35 / 1975 | 4 | 35 | 1 | 1954 | 0.02 | 0.70 | 1.17 / 1889 | 23 |
| 24 | 75 | 49 | 62 | 95 / 1959 | 59 / 1897 | 63 / 1982 | 36 / 1956 | 4 | 39 | 1 | 1955 | 0.02 | 0.72 | 0.35 / 1940 | 24 |
| 25 | 74 | 49 | 62 | 91 / 1966 | 61 / 1998 | 62 / 1982 | 36 / 1971 | 4 | 43 | 1 | 1956 | 0.03 | 0.75 | 0.33 / 1927 | 25 |
| 26 | 73 | 49 | 61 | 89 / 2003 | 56 / 2004 | 58 / 1927 | 35 / 1939 | 5 | 48 | 1 | 1957 | 0.03 | 0.78 | 1.05 / 2004 | 26 |
| 27 | 73 | 48 | 61 | 89 / 2003 | 58 / 1896 | 61 / 1987 | 35 / 1970 | 5 | 53 | 1 | 1958 | 0.03 | 0.81 | 1.28 / 1896 | 27 |
| 28 | 72 | 48 | 60 | 89 / 2003 | 58 / 1971 | 61 / 1987 | 33 / 1970 | 5 | 58 | 1 | 1959 | 0.03 | 0.84 | 0.99 / 1974 | 28 |
| 29 | 72 | 48 | 60 | 88 / 1915 | 55 / 1996 | 61 / 1914 | 29 / 1971 | 6 | 64 | 1 | 1960 | 0.03 | 0.87 | 1.50 / 1996 | 29 |
| 30 | 71 | 47 | 59 | 91 / 1887 | 57 / 1975 | 60 / 1983 | 27 / 1972 | 6 | 70 | 1 | 1961 | 0.03 | 0.90 | 1.43 / 1992 | 30 |
| 31 | 71 | 47 | 59 | 90 / 1949 | 57 / 1974 | 61 / 2008 | 32 / 1972 | 6 | 76 | 1 | 1962 | 0.03 | 0.93 | 0.93 / 1934 | 31 |
| Avg. | 78.1 | 51.9 | 65.0 | | | | | 73 | | 89 | | 0.65 | | | Avg. |
| Date | Max. | Min. | Avg. | High Max. | Low Max. | High Min. | Low Min. | Heating (daily) | Normal Season to Date | Cooling (daily) | Normal Season to Date | Daily | Normal Season to Date | Record Maximum | Date |
| | Normal | | | | | | | | | | | | | | |
| | Temperature | | | | Degree Days | | | | Precipitation | | | | | | |

Normals, Means & Extremes

San Joaquin Valley - Hanford, CA

August - Fresno, CA

Values in red represent the extremes for the month.

| Date | Temperature | | | | | | | Degree Days | | | | Precipitation | | Date | |
|------|-------------|------|------|------------|-----------|-----------|-----------|-----------------|-----------------------|-----------------|-----------------------|---------------|-----------------------|-------------|----------------|
| | Normal | | | High Max. | Low Max. | High Min. | Low Min. | Heating (daily) | Normal Season to Date | Cooling (daily) | Normal Season to Date | Daily | Normal Season to Date | | Record Maximum |
| | Max. | Min. | Avg. | | | | | | | | | | | | |
| 1 | 97 | 66 | 82 | 112 / 1908 | 83 / 1976 | 86 / 1908 | 56 / 1888 | 0 | 0 | 17 | 1105 | 0 | 0.01 | Tr. / 1950 | 1 |
| 2 | 97 | 66 | 82 | 112 / 1908 | 83 / 1953 | 82 / 1908 | 53 / 1956 | 0 | 0 | 17 | 1122 | 0 | 0.01 | Tr. / 1895 | 2 |
| 3 | 97 | 66 | 81 | 110 / 1946 | 80 / 1976 | 78 / 1901 | 55 / 1953 | 0 | 0 | 17 | 1139 | 0 | 0.01 | Tr. / 1961 | 3 |
| 4 | 96 | 66 | 81 | 110 / 1889 | 83 / 1976 | 82 / 1901 | 53 / 1956 | 0 | 0 | 17 | 1156 | 0 | 0.01 | Tr. / 1978 | 4 |
| 5 | 96 | 66 | 81 | 110 / 1895 | 83 / 1957 | 79 / 1998 | 51 / 1950 | 0 | 0 | 17 | 1173 | 0 | 0.01 | 0.10 / 1961 | 5 |
| 6 | 96 | 66 | 81 | 110 / 1902 | 78 / 1999 | 77 / 1998 | 54 / 1950 | 0 | 0 | 17 | 1190 | 0 | 0.01 | Tr. / 1964 | 6 |
| 7 | 96 | 66 | 81 | 112 / 1908 | 82 / 1999 | 78 / 1990 | 54 / 1975 | 0 | 0 | 17 | 1207 | 0 | 0.01 | Tr. / 1982 | 7 |
| 8 | 96 | 66 | 81 | 113 / 1908 | 86 / 1999 | 80 / 1983 | 54 / 1900 | 0 | 0 | 17 | 1223 | 0 | 0.01 | 0.03 / 1989 | 8 |
| 9 | 96 | 66 | 81 | 110 / 1898 | 83 / 1997 | 78 / 1981 | 53 / 1900 | 0 | 0 | 16 | 1239 | 0 | 0.01 | 0.01 / 1999 | 9 |
| 10 | 96 | 66 | 81 | 111 / 1981 | 85 / 1907 | 78 / 1990 | 55 / 1916 | 0 | 0 | 16 | 1255 | 0 | 0.01 | Tr. / 1999 | 10 |
| 11 | 96 | 65 | 81 | 113 / 1898 | 85 / 1999 | 74 / 1990 | 54 / 1919 | 0 | 0 | 16 | 1271 | 0 | 0.01 | 0.02 / 1965 | 11 |
| 12 | 95 | 65 | 80 | 110 / 1933 | 83 / 1991 | 81 / 1996 | 55 / 1916 | 0 | 0 | 16 | 1287 | 0 | 0.01 | Tr. / 1991 | 12 |
| 13 | 95 | 65 | 80 | 112 / 1996 | 80 / 1968 | 79 / 1996 | 53 / 1954 | 0 | 0 | 16 | 1303 | 0 | 0.01 | Tr. / 1968 | 13 |
| 14 | 95 | 65 | 80 | 112 / 1933 | 74 / 1976 | 80 / 1933 | 54 / 1968 | 0 | 0 | 16 | 1319 | 0 | 0.01 | 0.01 / 1983 | 14 |
| 15 | 95 | 65 | 80 | 109 / 1920 | 74 / 1976 | 77 / 1933 | 53 / 1954 | 0 | 0 | 16 | 1335 | 0 | 0.01 | 0.01 / 1976 | 15 |
| 16 | 95 | 65 | 80 | 110 / 1920 | 78 / 1976 | 78 / 1958 | 53 / 1976 | 0 | 0 | 15 | 1350 | 0 | 0.01 | 0.07 / 1941 | 16 |
| 17 | 95 | 65 | 80 | 111 / 1892 | 77 / 1976 | 77 / 1933 | 53 / 1968 | 0 | 0 | 15 | 1365 | 0 | 0.01 | 0.02 / 1985 | 17 |
| 18 | 95 | 65 | 80 | 112 / 1892 | 77 / 1975 | 73 / 1909 | 52 / 1916 | 0 | 0 | 15 | 1380 | 0 | 0.01 | 0.05 / 1975 | 18 |
| 19 | 94 | 65 | 80 | 108 / 1892 | 67 / 1976 | 74 / 1892 | 54 / 1916 | 0 | 0 | 15 | 1395 | 0 | 0.01 | 0.20 / 1976 | 19 |
| 20 | 94 | 64 | 79 | 108 / 1919 | 76 / 1959 | 75 / 1897 | 53 / 1900 | 0 | 0 | 15 | 1410 | 0 | 0.01 | Tr. / 1976 | 20 |
| 21 | 94 | 64 | 79 | 108 / 1919 | 80 / 1968 | 76 / 1913 | 51 / 1959 | 0 | 0 | 15 | 1425 | 0 | 0.01 | Tr. / 1968 | 21 |
| 22 | 94 | 64 | 79 | 108 / 1897 | 81 / 1960 | 75 / 1995 | 52 / 1959 | 0 | 0 | 15 | 1440 | 0 | 0.01 | Tr. / 2009 | 22 |
| 23 | 94 | 64 | 79 | 112 / 1891 | 79 / 1959 | 78 / 1913 | 51 / 1960 | 0 | 0 | 15 | 1455 | 0 | 0.01 | 0.01 / 1959 | 23 |
| 24 | 94 | 64 | 79 | 112 / | 81 / | 80 / | 51 / | 0 | 0 | 14 | 1469 | 0 | 0.01 | 0.15 / | 24 |

Fresno Normals, Means and Extremes: August

| | | | | 1891 | 1930 | 1913 | 1973 | | | | | | | | 1920 | |
|------------------|-------------|------|------|---------------|--------------|--------------|--------------|--------------------|-----------------------------|--------------------|-----------------------------|-------|--------------------------------|-------------------|------------------|------|
| 25 | 94 | 64 | 79 | 110 / 2010 | 75 / 1954 | 79 / 1913 | 52 / 1960 | 0 | 0 | 14 | 1483 | 0 | 0.01 | Tr. / 1967 | 25 | |
| 26 | 93 | 64 | 79 | 108 / 1924 | 76 / 1920 | 75 / 1931 | 52 / 1968 | 0 | 0 | 14 | 1497 | 0 | 0.01 | 0.04 / 2003 | 26 | |
| 27 | 93 | 64 | 79 | 109 / 1924 | 80 / 1895 | 78 / 1913 | 51 / 1895 | 0 | 0 | 14 | 1511 | 0 | 0.01 | 0.01 / 1916 | 27 | |
| 28 | 93 | 64 | 78 | 108 / 1924 | 78 / 1953 | 77 / 1894 | 52 / 1907 | 0 | 0 | 14 | 1525 | 0 | 0.01 | 0.07 / 1916 | 28 | |
| 29 | 93 | 64 | 78 | 109 / 1915 | 79 / 2010 | 76 / 1915 | 52 / 1895 | 0 | 0 | 14 | 1539 | 0 | 0.01 | Tr. / 2000 | 29 | |
| 30 | 93 | 63 | 78 | 109 / 1988 | 80 / 1957 | 81 / 2007 | 49 / 1966 | 0 | 0 | 14 | 1553 | 0 | 0.01 | 0.15 / 1896 | 30 | |
| 31 | 92 | 63 | 78 | 107 / 2007 | 69 / 1964 | 75 / 2007 | 50 / 1887 | 0 | 0 | 13 | 1566 | 0.01 | 0.02 | 0.25 / 1964 | 31 | |
| Avg. | 94.8 | 64.9 | 79.9 | | | | | 0 | | 478 | | 0.01 | | | | Avg. |
| D a t e | Max. | Min. | Avg. | High Max. | Low Max. | High Min. | Low Min. | Heating (daily) | Normal Season to Date | Cooling (daily) | Normal Season to Date | Daily | Normal Season to Date | Record Maximum | D a t e | |
| | Normal | | | | | | | Degree Days | | | Precipitation | | | | | |
| | Temperature | | | | | | | | | | | | | | | |

JULY 2006 MAXIMUM TEMPERATURES

| DATE | FRESNO | | SAN DIEGO | | SAN DIEGO | | SAN FRANCISCO | | SAN FRANCISCO | | | |
|------|-----------|--------------------------|-----------|-----------------------------|-----------|------------------------|---------------|---------------------------------|---------------|----------------------------|--|------|
| | HIGH TEMP | FRESNO MONTHLY AVG. HIGH | HIGH TEMP | SAN DIEGO MONTHLY AVG. HIGH | HIGH TEMP | SAN DIEGO MONTHLY AVG. | HIGH TEMP | SAN FRANCISCO MONTHLY AVG. HIGH | HIGH TEMP | SAN FRANCISCO MONTHLY AVG. | | |
| 7/1 | 98 | | 83 | | 61 | | 61 | | 61 | | | |
| 7/2 | 101 | | 79 | | 61 | | 61 | | 61 | | | |
| 7/3 | 101 | | 80 | | 60 | | 60 | | 60 | | | |
| 7/4 | 99 | | 79 | | 61 | | 61 | | 61 | | | |
| 7/5 | 96 | | 78 | | 62 | | 62 | | 62 | | | |
| 7/6 | 93 | | 77 | | 63 | | 63 | | 63 | | | |
| 7/7 | 96 | | 79 | | 73 | | 73 | | 73 | | | |
| 7/8 | 103 | | 81 | | 73 | | 73 | | 73 | | | |
| 7/9 | 107 | | 79 | | 67 | | 67 | | 67 | | | |
| 7/10 | 107 | | 76 | | 61 | | 61 | | 61 | | | |
| 7/11 | 101 | | 79 | | 62 | | 62 | | 62 | | | |
| 7/12 | 95 | | 82 | | 66 | | 66 | | 66 | | | |
| 7/13 | 99 | | 83 | | 71 | | 71 | | 71 | | | |
| 7/14 | 103 | | 82 | | 64 | | 64 | | 64 | | | |
| 7/15 | 104 | | 86 | | 64 | | 64 | | 64 | | | |
| 7/16 | 107 | | 80 | | 70 | | 70 | | 70 | | | |
| 7/17 | 109 | | 76 | | 80 | | 80 | | 80 | | | |
| 7/18 | 105 | | 79 | | 77 | | 77 | | 77 | | | |
| 7/19 | 107 | | 79 | | 78 | | 78 | | 78 | | | |
| 7/20 | 109 | | 80 | | 73 | | 73 | | 73 | | | |
| 7/21 | 109 | | 82 | | 75 | | 75 | | 75 | | | |
| 7/22 | 112 | | 99 | | 87 | | 87 | | 87 | | | |
| 7/23 | 113 | | 83 | | 83 | | 83 | | 83 | | | |
| 7/24 | 113 | | 85 | | 77 | | 77 | | 77 | | | |
| 7/25 | 113 | | 76 | | 75 | | 75 | | 75 | | | |
| 7/26 | 112 | | 84 | | 65 | | 65 | | 65 | | | |
| 7/27 | 106 | | 86 | | 64 | | 64 | | 64 | | | |
| 7/28 | 99 | | 83 | | 64 | | 64 | | 64 | | | |
| 7/29 | 97 | | 80 | | 64 | | 64 | | 64 | | | |
| 7/30 | 94 | | 80 | | 68 | | 68 | | 68 | | | |
| 7/31 | 96 | | 79 | | 64 | | 64 | | 64 | | | |
| | | 103.4 | | 87.8 | | 81.2 | | 76.3 | | 68.8 | | 61.7 |

HEAT STRESS INDEX

| TEMPERATURE °F | RELATIVE HUMIDITY | | | | | | | | |
|----------------|-------------------|-----|-----|-----|-----|-----|-----|-----|-----|
| | 10% | 20% | 30% | 40% | 50% | 60% | 70% | 80% | 90% |
| 104 | 98 | 104 | 110 | 120 | 132 | | | | |
| 102 | 87 | 101 | 108 | 117 | 125 | | | | |
| 100 | 85 | 99 | 105 | 110 | 120 | 132 | | | |
| 98 | 83 | 97 | 101 | 106 | 110 | 125 | | | |
| 96 | 81 | 85 | 98 | 104 | 108 | 120 | 128 | | |
| 94 | 89 | 83 | 85 | 100 | 105 | 111 | 122 | | |
| 92 | 87 | 90 | 92 | 98 | 100 | 100 | 115 | 122 | |
| 90 | 85 | 88 | 90 | 92 | 96 | 100 | 108 | 114 | 122 |
| 88 | 82 | 88 | 87 | 89 | 93 | 95 | 100 | 108 | 115 |
| 86 | 80 | 84 | 85 | 87 | 90 | 92 | 96 | 100 | 109 |
| 84 | 78 | 81 | 83 | 85 | 86 | 89 | 91 | 95 | 99 |
| 82 | 77 | 79 | 80 | 81 | 84 | 86 | 89 | 91 | 95 |
| 80 | 75 | 77 | 78 | 79 | 81 | 83 | 85 | 86 | 89 |
| 78 | 72 | 75 | 77 | 78 | 79 | 80 | 81 | 83 | 85 |
| 76 | 70 | 72 | 75 | 76 | 77 | 77 | 77 | 78 | 79 |
| 74 | 68 | 70 | 73 | 74 | 75 | 75 | 75 | 78 | 77 |

NOTE: Add 10°F when protective clothing is worn and add 10°F when in direct sunlight.

| HUMIDITY °F | DANGER CATEGORY | INJURY THREAT |
|-------------|-----------------|--|
| BELOW 60° | NONE | LITTLE OR NO DANGER UNDER NORMAL CIRCUMSTANCES |
| 80° - 90° | CAUTION | FATIGUE POSSIBLE IF EXPOSURE IS PROLONGED AND THERE IS PHYSICAL ACTIVITY |
| 90° - 105° | EXTREME CAUTION | HEAT CRAMPS AND HEAT EXHAUSTION POSSIBLE IF EXPOSURE IS PROLONGED AND THERE IS PHYSICAL ACTIVITY |
| 105° - 130° | DANGER | HEAT CRAMPS OR EXHAUSTION LIKELY, HEAT STROKE POSSIBLE IF EXPOSURE IS PROLONGED AND THERE IS PHYSICAL ACTIVITY |
| ABOVE 130° | EXTREME DANGER | HEAT STROKE IMMINENT |

Table 1-1

[40306(C)sz/jwf]