### ATTACHMENT "A" FINDINGS and EXPLANATIONS

FOR REVISION OF THE CITY OF SALINAS FIRE DEPARTMENT AMENDMENTS TO THE 2016 CALIFORNIA FIRE CODE OF THE CALIFORNIA CODE OF REGULATIONS TITLE 24, PART 9

As required by Health and Safety Code section 17958 and 18941.5 the City of Salinas does herewith make express findings that amendments to the 2016 California Fire Code are necessary for the protection of the public health, safety, and welfare due certain climatic, topographic, or geological features existing in the City of Salinas.

The following matrix lists the City of Salinas amendments and the corresponding express findings. Minor editorial changes or typographical corrections to the Fire Code are not shown in these findings. The full texts of the proposed California Fire Code amendments are shown in Ordinance Article II of Chapter 13 of the Salinas City Code.

Definitions:

**<u>Climatic</u>** The average course or condition of the weather at a particular place over a period of many years, as exhibited in absolute extremes, means and frequencies of given departures from these means (i.e., of temperature, wind velocity, precipitation and other weather elements). **<u>Topography</u>** The configuration of landmass surface, including its relief (elevation) and the position of its natural and man-made features that affect the ability to cross or transit a terrain. **<u>Geological</u>** Scientific study of the Earth, including its composition, structure, physical properties, and history. Geology is commonly divided into sub-disciplines concerned with the chemical makeup of the Earth

Webster's Third New California Dictionary.

#### **Climatic Considerations:**

There are two types of climates: macro and micro. A macro climate affects an entire region and gives the area a general environmental context. A micro climate is a specific variation that could be related to the other two factors, topography and geography. A micro climate may cover a relatively small area or be able to encompass an entire community, as opposed to another community in the same county.

Climatic consideration should be given to the extremes, means, and anomalies of the following weather elements:

- 1. Temperatures
- 2. Relative humidity
- 3. Precipitation and flooding conditions
- 4. Wind speed and duration of periods of high velocity
- 5. Wind direction
- 6. Fog and other atmospheric conditions.

# **Topographical Considerations:**

Topographic considerations should be given to the presence of the following topographical elements:

- 1. Elevation and ranges of elevation
- 2. Location of ridges, drainages and escarpments
- 3. Percent of grade (slope)
- 4. Location of roads, bridges and railroads
- 5. Other topographical features, such as aspect exposure

This information becomes an important part of creating an analysis of flood prone because topography and elevations are key elements (along with access roads) that create the need for fixed fire protection requirements in this code.

#### **Geological Considerations:**

Geological considerations should be evaluated to determine the relationship between man-made improvements (creating an exposure) and factors such as the following:

- 1. Fuel types, concentration in a mosaic and distribution of fuel types
- 2. Earthquake fault zone
- 3. Hazardous material routes
- 4. Artificial boundaries created by jurisdictional boundaries
- 5. Vulnerability of infrastructure to damage by climate and topographical concerns

Earthquake fault zones are the final component of the findings that suggest the need for fixed fire protection systems in a jurisdiction.

	Chapters or Sections	Description of Change	Finding Number(s) <sup>1</sup>
	Salinas City Code Cha	pter 13-9, Article II. Amendments to the California Fire Code	
(a)	Section 101.1	The code allows the local jurisdiction to fill in the jurisdictions name. This change provides the name 'City of Salinas'.	N/A
(b)	Section 103.1	The first change (1) clarifies that the enforcement of the CFC shall be enforced by the fire prevention bureau and (2) sets the precedent for an annual Fire Department Report that is presented to council annually.	N/A
(c)	Section 103.2	This section is removed as amendment (b) establishes enforcement responsibilities.	N/A
(d)	Sections 104.12.1 and 104.12.2	Establishes the authority to obtain reimbursement from responsible individuals for the expenses of any emergency response and/or enforcement action by the City of Salinas.	N/A

### MATRIX OF FINDINGS and EXPLANATIONS 2016 California Fire Code Amendments

(c)Section 105.1.1.1Specifies that all permits and inspections shall be charged a fee, and specifies that all permits and inspections shall be charged a fee, and specifies that all permits and inspections shall be charged a fee, and specifies that all permits and inspections, and associated enforcement action by the Salinas Fire Department(SFD) to protect the public from fire or substances and situations.(g)Section 105.6.50Adds the requirement for an operational permit to operate a Christmas tree lot.(g)Section 105.6.50Adds the requirement for an operational permit to operate a Christmas tree lot.(h), (i), (i), (k)Section 109.4 to 109.4.2 and 109.5Provides specific rules for Penalties, Abatement of the Violation, Enforcement of the Code with regards to the Penal Code and provides recordation requirements of the violation.(i)Section 111.4Provides provisions to address failures of compliance with regards to violations of the code.(m)Section 307.2.1Adds required approvals from the Monterey Bay Air Resource District and the City prior to any" Open Burn" permits. Provides general burning prohibitions of Trash, yard waste, rubbish and paper as fuel for bonfires, recreational fires, and fires in outdoor fireplaces. Additionally, provides autionization for the SFD to extinguish a fire which creates a nuisance or adds to a hazardous situation.(p)Section 503.1Brings Appendix D – "Fire Apparatus Access Roads" into the body of the Fire Code.(r), (s), (v) and (v) ad (v) adSection 503.2.4, 503.2.8, 503.2.8, road say.2.8, roadds say.2.8, roadds say.2.8, roadds say.2.8, roadds say.2.8, roadds say.2.8, roadds say.2.8, roadds say.2	
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<ul> <li>(z) Section 503.6</li> <li>(z) Section 503.6</li> <li>(z) Requires review of security gates or devices across a fire access roadway. It also provides specific widths and traffic requirements with regards to traffic lanes, functionality of electric and manual gates along with specific occupancy requirements.</li> </ul>	2,3,4

(aa)	Section 505.3	Requires maps – in electronic format, to be submitted to the Fire Code Official, compatible with current department	3,4
(bb)	Section 506.1	Requires buildings with Hazardous Materials to provide an approved access key box on site at an approved location. Additionally the MSDS sheets, building floor plans and evacuations procedures shall be kept together in an approved location.	2, 3, 4, 5
(cc)	Section 507.3	References and provides an alternative standard by referencing the Insurance Services Office, "Guide for Determination of Required Fire Flow".	All
(dd)	Section 507.5	References and provides an alternative standard for Fire Hydrant Systems compliant with NFPA 291.	All
(ee)	Section 510.1	Provides an additional exception which would allow a mitigation fee to be paid to the city to augment to coverage of a regional public safety radio system.	TBD
(ff)	Section 903.2	Allows for separation walls and smoke detection systems instead of sprinklers for buildings of certain size and occupancy.	All
(gg)	Section 903.3.1.3	Adds two additional requirements of 13D sprinklers. Leak testing and flow alarms are required prior to final of the installed system.	All
(hh)	Section 903.3.5.1	Allows for domestic water-supply connection when approved by the Fire Code Official; additionally, it requires a single indicating control valve after the meter, but may be provided with a separate shut off-valve.	All
(ii)	Section 907.8.6	Provides language to charge fees for false and nuisance alarms.	3, 4
(jj)	Section 5001.5.1.1	Requires the hazardous materials management plan shall be placed in an approved location	1, 2, 3, 5
(kk)	Section 5601.1	Amends the code to reference the State Fire Marshalls regulations for handling of explosives. Additionally it references fireworks requirements back to Chapter 13A of Municipal Code.	3, 4, 5
(11)	Section 5704.2.9.6.1	Amends the code to address locations of where and how certain above-ground storage tanks are allowed.	All
(mm)	Section 5806.2	Amends to code to address locations of where and how certain fluids are contained based upon populated areas.	All
(nn)	Section 6104.2	Provides maximum capacity of bulk storage of LPG with established limits based upon populated areas.	All
1	Administrative Standards does not require justification pursuant to HSC 17958, HSC 18941.5 or HSC 13869		

# Findings for the Fire Code

### Finding 1

The City of Salinas is situated in the Salinas Valley on California's Central Coast in between the Santa Lucia and Gabilan mountain ranges. Potential flood conditions are a concern in to the City of Salinas. The most flood prone areas include either side of the creeks, in the vicinity of the airport, and the reclamation ditch which runs northwest-southwest through the City. The Natividad Creeks and Carr Lake are also prone to flooding during more intense storms. Flood in the low, central areas of the City of Salinas would affect the direct movement of fire apparatus. Two large fires at the same time during flood conditions would be disastrous. Automatic fire sprinklers may be the only fire control inside buildings within the flood area. Any delay in structural firefighting could allow a fire on our many wood shake or wood shingled structures to quickly involve a number of buildings. Additional fire apparatus and equipment from other communities responding on a mutual aid request may not be able to reach some fire areas. Access could be obstructed due to flooded streets and/or damaged bridges. Automatic fire sprinkler systems would reduce demands on firefighting forces and protect buildings, which may be otherwise inaccessible to the fire department during flood conditions.

Further, the flood conditions described above carry the potential for overcoming the ability of the fire department to aid or assist in evacuations, rescues, and the emergency tasks demands inherent in such situations. The potential for the aforementioned flooding conditions to result in limiting fire department emergency vehicular traffic, with resulting overtaxing fire department personnel, may further cause a substantial or total lack of protection against fire for the buildings and structures located within the jurisdiction.

# Finding 2

All of Salinas is located within Seismic Design Category D according to Section 1613A of the 2016 California Building Code. Category D consists of the second highest potential risk category due to the frequency and magnitude of earthquake activity nationwide. Seismic activity in this area occurs frequently and the real potential exists from four "active" faults. The greatest seismic threats are the San Andreas, and Calaveras Faults. The potential effects of earthquake activity include isolating the City of Salinas from the surrounding area and restricting or eliminating internal circulation due to the potential for collapsing of highway overpasses and underpasses, along with other bridges in the district, and the potential for vertical movement rendering surface travel unduly burdensome or impossible. Should an earthquake occur, built-in fire protection such as automatic fire sprinklers will allow the fire department to concentrate its efforts on areas of severe damage while the sprinkler systems will contain fires in areas where the water system still has pressure. Reduction in size of aboveground storage tanks containing flammable and combustible liquids and explosive materials will enhance the ability to contain fire as the result of such conditions.

# Finding 3

Highway 101 bisects the City of Salinas. Transportation vehicles carrying known toxic, flammable, explosive, and hazardous materials heavily travel this highway. The potential for release or threatened release of a hazardous material along this route and others within the district is likely given the volume

transported daily. Incidents of this nature will normally require all available emergency response personnel to prevent injury and loss of life and to prevent, as far as practicable, property loss. Emergency personnel responding to such aforementioned incidents may be unduly impeded and delayed in accomplishing an emergency response as a result of this situation. With the potential result of undue and unnecessary risk to the protection of life and public safety and, in particular, endangering residents and occupants in buildings or structures without the protection of automatic fire sprinklers.

# Finding 4

The City of Salinas is limited in its growth due to surrounding farmlands. This has caused high concentration of buildings and population density, whereby industrial areas of the City encroach and are in close proximity to commercial thoroughfare, business and residential areas. Restricting or prohibiting the storage, handling and use of certain explosive materials and flammable and combustible liquids is a means to reduce the hazard to life.

# Finding 5

Prevailing north/south winds in the Salinas Valley increase the danger of a fire spreading from the place of origin, thereby increasing the need for built-in fire protection.