

**City of San Luis Amendments  
to the  
NFPA 1, Fire Code 2018**

Ordinance No. 405, Resolution No. 2151

**Exhibit A**

## **City of San Luis Amendments to NFPA 1, Fire Code 2018**

The following amendments, additions, and deletions (these “amendments”) are hereby made to the “NFPA 1, Fire Code 2018” including Annexes “A,” “B,” “D,” “E,” and “G” (the “2018 Fire Code”), as adopted by Ordinance No. 405 which adopted both the 2018 Fire Code and these amendments. Code references not appearing in these amendments shall be enforced as published in the NFPA 1, Fire Code 2018.

This “NFPA 1, Fire Code 2018” is hereby amended, altered, and changed in the following respects:

[NOTE: The section numbers that follow are the reference sections found in NFPA 1, Fire Code 2018].

### **1.1.2 Title. Is hereby amended as follows:**

These regulations shall be known as the 2018 Fire Code with City of San Luis Amendments, hereinafter referred to as “this code.”

### **1.3.1 Application. Is hereby amended by the addition of the following sentence:**

All construction and/or alterations of a structure, which require a building permit, shall comply with the current building code adopted by the City of San Luis.

### **1.3.2 Reference Standards. Is hereby amended as follows:**

#### **1.3.2.1.1**

When reference is made to the Building Code, it shall mean the current building code adopted by the City of San Luis with amendments by the City of San Luis.

### **1.3.3.1 Conflicts. Is hereby amended by the addition of the following sentence:**

The provisions of this code shall not be deemed to nullify any provisions of local, state or federal law.

### **1.3.3.2 Conflicts. Is hereby amended by the addition of the following sentence:**

Where, in a specific case, different sections of this code specify different materials, methods of construction or other requirements, the most restrictive shall govern.

### **1.3.6.3 Buildings. Is hereby amended as follows:**

Repairs, renovations, alterations, reconstruction, change of occupancy, and additions to buildings shall conform with the adopted building code of the jurisdiction having authority, except for repairs, renovation, alteration and reconstruction of fire sprinkler and fire alarms. Those activities shall be regulated by this current fire code adopted by this ordinance and the currently adopted building codes adopted by the City of San Luis.

**1.7.12 Plans and Specifications. Is hereby amended by the addition of the following sentence:**

All plans, specifications, calculations, and design criteria shall be stamped by a registrant licensed to practice in the state of Arizona. Calculation sheets for fire sprinkler systems shall be made a permanent part of the submitted design drawings.

**1.10.1 Fire Code Board of Appeals. Is hereby amended by striking the entire paragraph and replacing it with the following:**

Whenever reference is made to the "Board of Appeals" in "NFPA 1, Fire Code 2018", it shall mean the City of San Luis "Fire Appeals Board." It will follow the rules, guidelines and terms of service as identified within the criteria for establishing the "Fire Appeals Board."

**1.10.1.1.4 Membership. Is hereby amended by striking the entire sentence.**

**1.10.1.1.5 Membership. Is hereby amended by striking the entire paragraph.**

**1.10.1.1.5.3 Membership. Is hereby amended by striking the entire sentence.**

**1.10.3 Authority of the Board of Appeals. Is hereby amended by striking sections 1.10.3.3 and 1.10.6.2.**

**Chapter 2 Reference Publications**

**2.2 NFPA Publications**

The reference to the 2018 Edition of the *NFPA 5000, Building Construction and Safety Code* shall be changed to name the current building code adopted by the City of San Luis.

**Chapter 3 Definitions. Is hereby amended by the addition of the following:**

**3.3.01 Chief**

Whenever the word Chief, Fire Chief or Chief of the Fire Department is used in NFPA 1, Fire Code, 2018 Edition shall be construed to mean the Fire Chief or the authorized representative of the City of San Luis Fire Department.

**3.3.02 City**

Whenever the word City, Municipality, Jurisdiction or Authority having Jurisdiction (AHJ) is used in NFPA 1, Fire Code, 2018 Edition shall be construed to mean the City of San Luis, Arizona.

///

///

### **3.3.03 Corporate Counsel**

Whenever the word "Corporate Counsel" or "City Attorney" used in NFPA 1, Fire Code, 2018 Edition shall be construed to mean the Attorney of the City of San Luis, Arizona.

### **3.3.169.1 Combustible Liquid. Is hereby amended by addition of the following paragraph:**

Note: Storage and use of combustible liquids with a flash point under 141 degrees Fahrenheit (141 °F) in outdoor areas and areas without climatic controls will be treated as Class I-C flammable liquids throughout the code.

## **Chapter 4 General Requirements**

### **4.5.7 Changes of Occupancy. In order to determine when a change of occupancy will initiate a fire sprinkler retrofit, the following will be added to sub-section (1):**

(1) For the purpose of determining if a change of occupancy will be a more hazardous operation requiring the retrofit of a fire sprinkler system, the "Means of Egress Hazard Categories Table" (for life safety) in the edition of the International Existing Building Code currently adopted by the City of San Luis will be referenced. See section 10.3.4.

## **Chapter 10 General Fire Safety**

### **10.1.2 Life Safety Code: Is hereby amended by adding the following section:**

10.1.2.1 When specific conflicts arise between requirements of the NFPA 101 Life Safety Code and the requirements of the adopted building code of the City of San Luis for design and construction of new structures, the requirements of the adopted building code will be applied.

Exception: New health care and day care occupancies must comply with this code, the adopted building code and NFPA 101, Life Safety Code.

### **10.1.3 Building Code. Is hereby amended by the addition of the following sentence:**

The design and construction of new structures shall comply with the current building code adopted by the City of San Luis, and any alterations, additions, changes in use or changes in structures required by this code, which are within the scope of the current building code adopted by the City of San Luis, shall be made in accordance therewith.

### **10.2.7 Minimum Fire Prevention Inspection Frequencies for Existing Occupancies. Is hereby amended by deletion. This includes Table 10.2.7.1**

**10.3.4.01 Change of Use or Occupancy Classification. Is hereby amended by the addition of the following paragraph:**

No change shall be made in the use or occupancy of any structure that 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 current building code adopted by the City of San Luis. Subject to the approval of the fire 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 the purposes in other groups without conforming to all the requirements of this code and the current building code adopted by the City of San Luis for those groups, provided the new or proposed use is less hazardous, based on life and fire risk, than the existing use.

**10.12.1 Seasonal and Vacant Building and Premises. Is hereby amended by the addition of the following subsection:**

10.12.1.2 The Authority Having Jurisdiction is authorized to placard, post signs, erect barriers or take similar measures as necessary to secure public safety on any vacant, abandoned, or unoccupied building, structure, premises or portions thereof.

**Chapter 11 Building Services**

**11.3.6.1 Requirements for Standardized Fire Service Keys. Is hereby amended by addition of the following exception:**

Exception: The owner shall be permitted to place the building's non-standardized fire service elevator keys in a key box installed in accordance with section 11.3.6.5.1.1-7.

**11.12.1 Photovoltaic Systems. Is hereby amended by addition of the following reference:**

New photovoltaic systems shall be installed in accordance with section 11.12, NFPA 70, and the current building code adopted by the City of San Luis.

**Chapter 12 Features of Fire Protection**

**12.5.1 Interior Finish. Is hereby amended by addition of the following reference:**

Interior finish in buildings and structures shall meet the requirements of *NFPA 101*, this code, and the current building code adopted by the City of San Luis.

**Chapter 13 Fire Protection Systems**

**13.1.4.1 Fire Department Connection. Is hereby amended by the addition of the following sentence:**

The Fire Department Connection shall be remotely located from the building in a location approved by the AHJ.

### 13.3 Automatic Sprinklers

**13.3.2.1 to 13.3.2.29 Where Required. Is hereby amended by the addition of the following to read as follows:**

A. An automatic sprinkler system shall be installed throughout all levels of all buildings here after constructed, except for Group U occupancies, and one/two family dwellings.

- a. Exception 1: Buildings housing a group A-1, A-2, A-3, A-4, A-5, B, E, F-2, M, or S-2 occupancy having square footage less than 500 square feet. Note: For the purposes of this article, fire resistive fire walls will not be considered a barrier creating a separate building.
- b. Exception 2: Temporary use of modular or factory built structures shall not be required to provide an automatic fire sprinkler system, provided that the use of the structure and the "Certificate of Occupancy" is limited to one year from the time of set up to removal.
- c. Exception 3: Free standing open canopy structure. When automatic fire sprinklers are not required by the current building code adopted by the City of San Luis, and when the structure meets each of the following criteria, fire sprinklers will not be required:
  - i. The structure shall not exceed 10,000 square feet.
  - ii. The entire covered area is open on all sides void of interior walls or partitions.
  - iii. Setbacks from property lines or other structures are in accordance with the current building code adopted by the City of San Luis.
  - iv. The building use is not classified as hazardous, or mercantile occupancy.
  - v. Portable fire extinguishers are installed in accordance with NFPA 10.
  - vi. Open flames and devices emitting flames or creating a glow capable of igniting combustible materials shall not be used in or adjacent to the structure.
  - vii. Flammable or combustible liquids and LP-Gas shall not be stored in or adjacent to the structure, except for automobile fueling islands.
  - viii. An approved water supply capable of supplying the required fire flow shall be provided.

Note: Any changes to the free standing open canopy structure or its use may result in the loss of this exception and may require a retrofit of an automatic fire sprinkler system.

B. Retrofit of fire sprinklers to existing structures. An existing building that undergoes a “change of occupancy” as outlined in section 4.5.7, whereby occupancy, the building will be treated as a new building and may require the installation of fire sprinklers. The “Means of Egress Hazard Categories Table” (for life safety) in the edition of the International Existing Building Code currently adopted by the City of San Luis shall be referenced to determine occupancy hazard level.

C. Any building except Group U occupancy, and one/two family dwellings, which undergoes a total summation renovation in excess of 50% of value as assessed by the building code, shall meet the requirements of this section.

D. Any building that increases in size by a total summation of 50% as a result of one or more expansions will require a retrofit of an automatic fire sprinkler system.

**13.3.2.20.1 One and Two-Family Dwellings. Is hereby amended by deletion.**

**Chapter 16 Safeguarding During Construction, Alteration, and Demolition Operations.**

**16.1.1 General Requirements. Is hereby amended by addition of the following reference:**

Structures undergoing construction, alteration, or demolition operations, including those in underground locations, shall comply with NFPA 241, *Standard for Safeguarding Construction, Alteration, and Demolition Operations*, this chapter, and the current building code adopted by the City of San Luis.

**Chapter 18 Fire Department Access and Water Supply.**

**18.2.3.1.1 Required Access. Is hereby amended by the addition of the following sentence:**

When required, the apparatus access road shall be located no closer than 50 feet from any structure unless authorized by the Chief.

**18.5.1 Fire Hydrants. Is hereby amended by the addition of the following paragraph:**

The average spacing in residential areas shall be 500 feet or as otherwise approved by the Fire Chief and/or the Chief’s designee. For educational, industrial, commercial, institutional, mercantile, multi-family dwellings and storage

areas, the average fire hydrant spacing shall be 300 hundred feet or as otherwise approved by the Fire Chief and/or the Chief's designee.

**18.5.2 Detached One-and Two-Family Dwellings. Is hereby amended by replacing the section with:**

Fire hydrants shall be provided for detached one and two-family dwellings in accordance with both of the following:

The maximum distance to a fire hydrant from the closest point on the building shall not exceed 600 feet.

The maximum distance between fire hydrants shall not exceed 500 feet.

**18.5.3 Buildings Other than Detached One-and Two-Family Dwellings. Is hereby amended by replacing the section with:**

Fire hydrants shall be provided for buildings other than detached one and two-family dwellings in accordance with both of the following:

The maximum distance to a fire hydrant from the closest point on the building shall not exceed 400 feet.

The maximum distance between fire hydrants shall not exceed 300 feet.

**31.3.2.4 - Is hereby amended by the addition of the following:**

**AIR CURTAIN DESTRUCTOR AND FIREBOX PROCEDURES**

**OUTDOOR FIRES IN AN AIR CURTAIN DESTRUCTOR:** Prior to conducting an outdoor fire in an air curtain destructor, the owner or operator of the air curtain destructor shall obtain an applicable permit from ADEQ, and follow all applicable state requirements in addition to this section.

**A. Air Curtain Destructor Requirements:** The following must be complied with prior to use of an air curtain destructor:

- 1.The length of the firebox must not exceed the length of the plenum.
- 2.The firebox shall be lined with refractory materials.
- 3.The depth of the firebox shall be of such a distance to allow all burning material to be below the curtain of air created by the air curtain destructor.
- 4.The width of the firebox shall not extend beyond the length of the nozzle action.
- 5.The firebox must have four stable, vertical sides.
- 6.When air curtain destructor locations are established or changed, an inspection of the newly located air curtain destructor must be made and approved by the City of San Luis Fire Department prior to use; and if the new location deviates from a previously approved location, another inspection and approval by the City of San Luis Fire Department must be made.

7. Air curtain destructors must be operated in accordance with their manufacturer's specifications.

**B. Equipment Set-Up:**

1. An owner or operator of an air curtain destructor shall use a firebox and not a pit or trench to conduct outdoor burning.
2. The equipment must be positioned so as to allow the blower's airflow to strike at a downward angle no less than 24 inches below the opposite rim of the firebox.
3. There shall be at least 1,000 feet between any two air curtain destructors, or per manufacturer's guidelines, whichever is greater.
4. An air curtain destructor shall be located at least 500 feet from any residence or building structure, or per manufacturer's guidelines, whichever is greater.
5. An air curtain destructor shall be located at least 500 feet from any pipeline or fuel storage area, or per manufacturer's guidelines, whichever is greater.
6. An air curtain destructor shall be located at least 250 feet from any power lines, or per manufacturer's guidelines, whichever is greater.
7. Material that is not being worked or is being stockpiled to be burned at a later date by using an air curtain destructor shall be kept at least 75 feet from the air curtain destructor while the burn is taking place, or per manufacturer's guidelines, whichever is greater.

**C. Operation of Blower:**

1. The proper blower speed must be maintained according to manufacturer's specifications.
2. The blower must be operating when and as long as any material in the firebox is burning.

**D. Loading of the Firebox:**

1. When loading (feeding) the firebox, the material must not extend above the air curtain (blower airflow).
2. The loading of materials into the firebox must be discontinued at a minimum of two hours (2 hours) prior to the end of the designated burning hours. The blower must continue to operate until the end of the burning hours or until combustion is completed.
3. Adequate measures must be taken to assure that no emissions emanate from materials left in the firebox (i.e., when combustion is completed). All materials left in the firebox must be extinguished with water or covered over with a minimum of one foot (1') of mineral soil.

**E. Firebox Clean-Out:** All materials removed from the firebox must be completely extinguished and all reasonable precautions taken to control emissions and fires.

**F. Burning Hours for Air Curtain Destructors:** Burning hours must be consistent with ADEQ rules and regulations and be conducted during the following periods, unless otherwise waived or directed by the ADEQ Director on a specific day basis.

- i. Year-round: ignite fire no earlier than one hour (1 hour) after sunrise; and
- ii. Year-round: extinguish fire no later than two hours (2 hours) before sunset;

While complying with the above schedule, the owner/operator/occupant must also ensure it is a burn day locally for each day of burning. Burning using an air curtain destructor is not authorized on weekends or on holidays. Prohibited materials shall never be burned in an air curtain destructor.

## **DEFINITIONS**

**AIR CURTAIN DESTRUCTOR-** A device designed to form a curtain of air over a firebox in which burning occurs that aids in more complete combustion through increases in turbulence and combustion time. Above ground air curtain destructors are the only type of air curtain destructor allowed in the City of San Luis.

**DANGEROUS MATERIAL-** Any substance or combination of substances that is capable of causing bodily harm or property loss unless neutralized, consumed, or otherwise disposed of in a controlled and safe manner.

**FIREBOX** - The chamber or compartment inside of an air curtain destructor where materials are burned.

**PROHIBITED MATERIALS** - Non-paper garbage from the processing, storage, service or consumption of food; books, magazines, fiberboard, packaging, rags, fabrics, office records, chemically treated or soaked wood; lead-painted wood; linoleum flooring, and composite counter tops; tires; animal wastes and carcasses, coal, liquid or gelatinous hydrocarbons tar, explosives or ammunition; oleanders, leaves, grass clippings, refuse; asphalt shingles or asphalt; tar paper; plastic and rubber products, including bottles for household chemicals; plastic grocery and retail bags; waste petroleum products, such as waste crankcase oil, transmission oil, and oil filters; transformer oils; asbestos; batteries; anti-freeze; aerosol spray cans; electrical wire insulation; thermal insulation; polyester products; hazardous waste products such as paints, pesticides, cleaners and solvents, stains and varnishes, and other flammable liquids; plastic pesticide bags and containers; and hazardous material containers including those that contained lead, cadmium, mercury and arsenic compounds.

### **31.3.6.3.2 Is hereby amended to read:**

Piles shall not exceed 12.5 feet in height, 75 feet in width, and 125 feet in length.

### **31.3.6.4.2 Is hereby amended to read:**

A clear space of not less than 30 feet shall be maintained between piles and exposing structures, yard equipment, or stock, depending on the degree of exposure hazard.

///

///

**31.3.7.2 Is hereby amended to read:**

When not protected by a fixed fire-extinguishing system in accordance with Chapter 13, piles shall not exceed 12.5 feet in height, 75 feet in width, and 125 feet in length.

**Chapter 66 Flammable and Combustible Liquids**

**66.21.3 General Requirements. Is hereby amended by the addition of the following sentence:**

Any permanent tank installation over 500 gallons will require that the foundation and anchorage be engineered by a design professional registered in the State of Arizona.

**Chapter 69 Liquefied Petroleum Gases and Liquefied Natural Gasses**

**69.1 General Provisions. Is hereby amended by the addition of the following sentence:**

Any permanent tank installation over 500 gallons will require that the foundation and anchorage be engineered by a design professional registered in the State of Arizona.

**69.4.2 Operational Safety. Is hereby amended by the addition of the following paragraph:**

Dispensing, filling, and evacuating of LP gases shall be performed by a qualified person. In service training for qualified persons shall be conducted annually and current records of such training shall be maintained on site.