

ORDINANCE NO. 23 - 14

AN ORDINANCE REPEALING AND REORDAINING PART 1 (FIRE PREVENTION CODE) OF ARTICLE 4 (FIRE PREVENTION) OF CHAPTER 8 (PUBLIC SAFETY) OF THE CODE OF THE CITY OF COLORADO SPRINGS 2001, AS AMENDED, ADOPTING THE 2021 EDITION OF THE INTERNATIONAL FIRE CODE WITH AMENDMENTS AND PROVIDING PENALTIES FOR THE VIOLATION THEREOF

WHEREAS, the City Council is committed to providing for the protection of the public health and safety; regulating the storage, use, and handling of dangerous and hazardous materials, substances, and devices; the operation, installation, construction, location, safeguarding, and maintenance of adequate means of egress not provided for by other Codes in the City of Colorado Springs, Colorado, and

WHEREAS, the Division of the Fire Marshal has been established providing officers therefore for the purpose of providing for the prevention and control of fires; the purpose of providing an International Fire Code describing regulations governing conditions hazardous to life and property from fire or explosion; and their powers and duties defined and providing for an International Fire Code, International Fire Code Appendices; adopting by reference the 2021 Edition of the International Fire Code, International Fire Code appendices, as amended; repealing all ordinances in conflict thereof.

NOW BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF COLORADO SPRINGS:

Section 1. That Part 1 (Fire Prevention Code) of Article 4 (Fire Prevention) of Chapter 8 (Public Safety) of the Code of the City of Colorado Springs 2001, as amended, is repealed and reordained to read as follows:

8.4.101: SHORT TITLE:

This part may be known and cited as the Fire Prevention Code.

8.4.102: ADOPTION OF THE FIRE CODE, PREFACE AND APPENDICES, TO THE 2021 EDITION OF THE INTERNATIONAL FIRE CODE:

Pursuant to Part 2 of Article 16 of Title 31, Colorado Revised Statutes and pursuant to the Charter of the City there is hereby adopted by reference the International Fire Code, 2021 Edition of the International Code Council, 4051 West Flossmoor Road, Country Club Hills, IL, 60478-5795, including Appendices B, C, D, E, F, G, K, L, and O as set forth therein. These appendices are deemed included as a part of any reference to the

International Fire Code. One copy of the 2021 International Fire Code, and one copy of all Amendments to these Codes, are on file in the Office of the City Clerk and may be inspected during regular business hours. The above Code is adopted as if set out at length, subject to modifications, additions, or deletions as set forth in Section 8.4.105 of this part.

#### 8.4.103: APPLICATION AND INTERPRETATION OF PROVISIONS:

A. Application: The International Fire Code hereby adopted shall apply to every building, structure, or asset, either within or outside the corporate limits of the City, the use of which the City has jurisdiction and authority to regulate.

B. Interpretation: This part shall be so interpreted and construed as to effectuate its general purpose to make uniform the local fire regulations contained herein. Article and section headings of this part and of the adopted International Fire Code shall not be deemed to govern, limit, modify, or in any manner affect the scope, meaning, or extent of the provisions of any article or section thereof.

#### 8.4.104: Definitions:

Wherever the word jurisdiction is used in the International Fire Code, it shall be held to mean the City of Colorado Springs.

#### 8.4.105: AMENDMENTS TO THE INTERNATIONAL FIRE CODE:

The International Fire Code and Appendices herein adopted, are adopted subject to the following modifications, additions, or deletions as set forth:

**Table of Contents.** Amend the Table of Contents to add the following:

#### **Chapter-3 General Requirements**

SECTION 322 - STORAGE OF LITHIUM-ION AND LITHIUM METAL BATTERIES

SECTION 323 - POWERED MICROMOBILITY DEVICES

SECTION 324 – Electric Vehicle Charging Stations

#### **Chapter-6 Building Services and Systems**

SECTION 611 - MAGNETIC RESONANCE IMAGING FACILITIES

#### **Chapter-11 Construction Requirements for Existing Buildings**

SECTION 1107 - EXISTING HIGH PILED STORAGE FACILITIES

SECTION 1108 - EXISTING ELECTRICAL ENERGY STORAGE SYSTEMS

#### **Chapter-32 High-Piled Combustible Storage**

SECTION 3211 - BUILDINGS CONTAINING AREAS CAPABLE OF ACCOMMODATING HIGH PILE COMBUSTIBLE STORAGE

SECTION 3212 - EXISTING BUILDINGS

#### **Chapter-39 Processing and Extraction Facilities**

SECTION 3906 - EXHAUST  
SECTION 3907 - CO2 EXTRACTIONS

**Chapter-53 Compressed Gasses**

SECTION 5308 - CARBON DIOXIDE (CO2) GAS ENRICHMENT SYSTEMS USING A NATURAL GAS BURNER IN PLANT GROWING (HUSBANDRY) APPLICATIONS

**Appendixes**

APPENDIX K - WILDLAND URBAN INTERFACE REQUIREMENTS

APPENDIX O - INDOOR FLORA GROW OPERATIONS IN RESIDENTIAL OCCUPANCIES

**Chapter-1 Scope & Administration**

**Section 101.1.** Amend Section 101.1 to read as follows:

101.1 Title. These regulations shall be known as the Fire Code of the City of Colorado Springs, hereinafter referred to as this Code.

**Section 103.1.** Delete Section 103.1 and replace it with the following:

103.1 General. The Division of the Fire Marshal, established within the Fire Department under the direction of the fire chief shall consist of Fire Department personnel assigned thereto by the fire chief. The function of office shall be to assist the fire code official in the administration and enforcement of the provisions of this Code and the Code of the City of Colorado Springs 8.2.203.

**Section 103.2.1.** Add a new Section 103.2.1 to read as follows:

103.2.1 Fire Marshal. There is hereby created the position of Fire Marshal, who shall be appointed by the Fire Chief and shall be responsible for fire prevention, plan reviews and inspections, hazard assessment and mitigation, fire investigations, community education, wildfire mitigation, and any other duties assigned by the chief. When this Code requires or authorizes the Fire Marshal to act, the act may be taken by the fire marshal's authorized employees, assistants, or designees. Wherever the term fire code official is used in the International Fire Code, it shall be held to mean the fire marshal. Wherever the term CSFD is used in these amendments, it shall be held to mean the Colorado Springs Fire Department. See Code of the City of Colorado Springs, Section 8.2.203.

**Section 104.3.1.** Amend Section 104.3.1 to read as follows:

104.3.1 Warrant. Where the fire code official has first obtained a proper inspection warrant or other remedy provided by law to secure entry, an owner, the owner's authorized agent or occupant, or person having charge, care, or control of the building or premises shall not fail or neglect, after the proper request is made as herein provided, to permit entry therein by the fire code official for the purpose of inspection and examination pursuant to this Code. See Code of the City of Colorado Springs, Chapter 11, Article 3.

**Section 104.7.** Delete Section 104.7 and replace it with the following:

104.7 Liability. See Code of the City of Colorado Springs, Chapter 1, Article 4 Part 3 and Chapter 8, Article 3.

**Section 104.7.1.** Amend Section 104.7.1 to read as follows:

104.7.1 Legal defense. See Code of the City of Colorado Springs, Chapter 1, Article 4 Part 3 and Chapter 8, Article 3.

**Section 104.11.1.** Delete Section 104.11.1 and replace it with the following:

104.11.1 The Division of the Fire Marshal personnel and police. The fire code official and members of the Division of the Fire Marshal shall have the power of a police officer in performing their duties under this Code. When requested to do so by the fire code official, the chief of police is authorized to assign such available police officers necessary to assist the fire department in enforcing the provisions of this Code.

**Section 104.12.** Delete Section 104.12 and replace it with the following:

104.12 Authority at fires and other emergencies. See Code of the City of Colorado Springs, Chapter 8, Article 2, Part 3.

**Section 104.12.1.** Amend Section 104.12.1 to read as follows:

104.12.1 Barricades. The fire chief or officer of the fire department in charge of an emergency under the authority of the Code of the City of Colorado Springs, Chapter 8, Article 2, Part 3, is authorized to place ropes, guards, barricades, or other obstructions across any street, alley, place, or private property in the vicinity of such operations so as to prevent accidents or interference with the lawful efforts of the fire department to manage and control the situation and to handle fire apparatus.

**Section 104.12.2.** Delete Section 104.12.2 and replace it with the following:

104.12.2 Obstructing operations. See Code of the City of Colorado Springs, Chapter 8, Article 2, Part 3.

**Section 105.1.2.1** Amend Section 105.1.2.1 to read as follows:

105.1.2 Types of permits. There shall be three (3) types of permits as follows:

1. Operational permit. An operational permit allows the applicant to conduct an operation or a business for which a permit is required by Section 105.5 for either:

- 1.1. A prescribed period.
- 1.2. Until renewed or revoked.

2. Construction permit. A construction permit allows the applicant to install or modify systems and equipment for which a permit is required by Section 105.6.

3. An administrative permit allows the applicant to modify fire protection or life safety systems and equipment, having a limited scope of work, for which a construction permit would otherwise be issued. Administrative permits apply to the following:

- 3.1 20-Head letters
- 3.2 5-device letters
- 3.3 Temporary removal of equipment during construction activities
- 3.4 Others as approved by the fire code official

**Section 105.1.6.** Amend Section 105.1.6 to read as follows:

105.1.6 Annual facility permit. Instead of an individual construction permit for each alteration to an already approved system or equipment installation, the fire code official

is authorized to issue an annual facilities permit upon application therefor to any person, firm, or corporation regularly employing one or more approved tradespersons in the building, structure or on the premises owned or operated by the applicant for the permit. The annual permit process shall comply with the guidance documents provided by the Division of the Fire Marshal.

**Section 105.1.6.1.** Amend Section 105.1.6.1 to read as follows:

105.1.6.1 Annual facility permit records. The person to whom an annual facilities permit is issued shall keep a detailed record of alterations made under such annual facilities permit. The fire code official shall have access to such records at all times or such records shall be filed with the fire code official as specified in the guidance documents provided by the Division of the Fire Marshal.

**Section 105.2.2.** Amend Section 105.2.2 to read as follows:

105.2.2 Inspection authorized. Before a new operational permit is approved, the fire code official is authorized to inspect the receptacles, vehicles, buildings, devices, premises, storage spaces, areas, activities, processes, procedures, and all other relevant items of fire and life safety to be used to determine compliance with this Code or any operational constraints required.

**Section 105.3.1.** Amend Section 105.3.1 and add table 105.3.1 to read as follows:

105.3.1 Expiration. An operational permit shall remain in effect until reissued, renewed, or revoked or for such a period of time as specified in the permit, not to exceed 365 days. Construction permits shall automatically become invalid unless the work authorized by such permit is commenced within 180 days after its issuance, or if the work authorized by such permit is suspended or abandoned for a period of 180 days after the time the work is commenced. Before such work recommences, a new permit shall be first obtained and the fee to recommence work, if any, shall be as determined by the fire code official and per the adopted fee schedule. Permits are not transferable and any change in occupancy, operation, tenancy, or ownership shall require that a new inspection be conducted, and a new permit be issued. See Table 105.3.1.

**TABLE 105.3.1 Permit Expiration Fees**

Time of Renewal	Status/Condition	New Plans/Permits	Fee Determination	Fees
Before grace period expires (a)	No changes to design/contractor AND Inspections conducted within the last 13 months	Not Required	Search/retrieval fee	*
	Change in Contractor regardless of inspection status	Required	Change in Design/Adopted Code: Plan Review/Permit Fees	*
			No Change in Design/Adopted Codes: Administrative Review Plus Search/Retrieval Fee	*
	Abandonment†	Required	No inspections conducted within 13 months: Plan Review/Permit	*
			Inspections conducted: administrative review plus search/retrieval fee	*
	After the grace period expires (a)	No changes to design/contractor / adopted Codes AND Inspections conducted within the last 13 months	Not Required	1/2 original plan review/permit plus search/retrieval fee
Change in Contractor regardless of inspection status		Required	Change in Design/Adopted Codes: Plan Review/Permit Fees	*
			No Change in Design/Adopted	*

			Codes: Administrative Review Plus Search/Retrieval Fee	
	Abandonment†	Required	No inspections conducted within 13 months: Plan Review/Permit	*
			Inspections conducted: administrative review plus search/retrieval fee	*
Lost permit card			Duplicate card	*

(a) Renewal Grace Period is 30 Days.

† As defined by Section 105.3.1.

\* Approved and adopted fees shall be assessed.

**Section 105.3.3.** Amend Section 105.3.3 to read as follows:

105.3.3 Occupancy prohibited before approval. The building or structure shall not be occupied prior to the fire code official conducting and approving the associated inspections and/or issuing the required permits where applicable, indicating the provisions of this Code have been met. All approvals not issued a permit shall be done in writing.

**Section 105.3.4.1.** Add new Section 105.3.4.1 to read as follows:

105.3.4.1 Work at risk. Where a permit is required, and upon the request of a permit the applicant, the fire code official may issue a work-at-risk permit to begin work prior to the issuance of the required permit. The work-at-risk permit will allow the applicant to begin installation, modification, or commencement of a system, process, or activity for which the permit is required prior to approved plans or a construction permit. The holder of the work-at-risk permit shall be authorized to proceed at their own risk with the installation or modification of the system, or other work requiring a permit, but shall not entitle them to any required inspections of the system or work until construction documents or permit applications are approved and the required permits are posted on site. Any required changes or modifications based upon approved plan review or inspection activities will be the responsibility of the contractor and shall be made prior to final approval of the system and Certificate of Occupancy. A work-at-risk permit fee shall be assessed as set forth by the adopted fee schedule.

**Section 105.3.4.2.** Add a new Section 105.3.4.2 to read as follows:

105.3.4.2 Temporary use permit. A temporary use permit may be issued upon request to allow an activity or use to occur within a given facility where the occupancy classification may not meet the intended temporary use, or temporary activity when it is determined to

create a considerable risk based upon use or activity itself or environmental hazards. A request for temporary use must be submitted in writing to the fire code official and include a permit application, Code study with details on the occupant loads, means of egress, fire protection systems, and specific hazards or activities present. Inspections shall be performed in accordance with Section 108 prior to the issuance of the temporary use permit. A temporary use permit may be issued for a maximum of 180 days and may only be extended upon approval by the fire code official. A temporary use permit fee shall be assessed as set forth by the adopted fee schedule.

**Section 105.3.6.** Amend Section 105.3.6 to read as follows:

105.3.6 Compliance with Code. The issuance or granting of a permit shall not be construed to be a permit for, or an approval of, any violation of any of the provisions of this Code or of any other ordinance of the jurisdiction. Permits presuming to give authority to violate or cancel the provisions of this Code or other ordinances of the jurisdiction shall not be valid. The issuance of a permit based on construction documents and other data shall not prevent the fire code official from requiring the correction of errors in the construction documents and other data. Any addition to or alteration of approved construction documents shall be approved by the fire code official.

**Section 105.5.** Amend Section 105.5 to read as follows:

105.5 Required operational permits. The fire code official is authorized to issue operational permits for the operations set forth in Sections 105.5.1 through 105.5.57.

**Table 105.5.9.** Amend table 105.9 to read as follows:

**TABLE 105.5.9**  
PERMIT AMOUNTS FOR COMPRESSED GASES

Type of Gas	Amount (Cubic Feet at NTP)
Carbon dioxide used in carbon dioxide enrichment systems	875 (100 lb)
Carbon dioxide used in insulated liquid carbon dioxide beverage dispensing applications	875 (100 lb)
Corrosive	200
Flammable (except cryogenic fluids and liquefied petroleum gases)	200
Highly Toxic	Any Amount
Inert and simple asphyxiant	6,000
Inert and simple asphyxiant in beverage dispensing applications	(100 lb)
Oxidizing (including oxygen)	504
Pyrophoric	Any Amount
Toxic	Any Amount

For SI: 1 cubic foot = 0.02832 m<sup>3</sup>.

**Section 105.5.17.** Delete Section 105.5.17 in its entirety.



**Section 105.5.18.** Amend Section 105.5.18 to read as follows:

105.5.18 Flammable and combustible liquids. An operational permit is required:

1. To use or operate a pipeline for the transportation within facilities of flammable or combustible liquids. This requirement shall not apply to the off-site transportation in pipelines regulated by the Department of Transportation (DOTn) nor does it apply to piping systems.
2. To store, handle or use Class I liquids in excess of 10 gallons in a building or in excess of 20 gallons outside of a building, except that a permit is not required for the following:
  - 2.1. The storage or use of Class I liquids in the fuel tank of a motor vehicle, aircraft, motorboat, mobile power plant, or mobile heating plant, unless such storage, in the opinion of the fire code official, would cause an unsafe condition.
  - 2.2. The storage or use of paints, oils, varnishes, or similar flammable mixtures where such liquids are stored for maintenance, painting, or similar purposes for a period of not more than 30 days.
3. To store, handle or use Class II or Class IIIA liquids in excess of 25 gallons (95 L) in a building or in excess of 60 gallons outside a building, except for fuel oil used in connection with oil-burning equipment.
  - 3.1. To store, handle or use Class IIIB liquids of 60 gallons or more in or outside a building.
4. To store, handle or use Class IIIB liquids in tanks or portable tanks for fueling motor vehicles at motor fuel-dispensing facilities or where connected to fuel-burning equipment.

Exception: Fuel oil and used motor oil used for space heating or water heating.

5. To remove Class I or II liquids from an underground storage tank used for fueling motor vehicles by any means other than the approved, stationary on-site pumps normally used for dispensing purposes.
6. To operate tank vehicles, equipment, tanks, plants, terminals, wells, fuel-dispensing stations, refineries, distilleries, and similar facilities where flammable and combustible liquids are produced, processed, transported, stored, dispensed, or used.
7. To place temporarily out of service (for more than 90 days) an underground, protected above-ground, or above-ground flammable or combustible liquid tank.
8. To change the type of contents stored in a flammable or combustible liquid tank to a material that poses a greater hazard than that for which the tank was designed and constructed.
9. To manufacture, process, blend or refine flammable or combustible liquids.
10. To engage in the dispensing of liquid fuels into the fuel tanks of motor vehicles at commercial, industrial, governmental, or manufacturing establishments in accordance with Section 5706.5.4 or to engage in on-demand mobile fueling operations in accordance with Section 5707.
11. To utilize a site for the dispensing of liquid fuels from tank vehicles into the fuel tanks of motor vehicles, marine craft, and other special equipment at commercial, industrial, governmental, or manufacturing establishments in accordance with Section 5706.5.4 or, where required by the fire code official, to utilize a site for on-demand mobile fueling operations in accordance with Section 5707.

12. To manufacture, produce or store, alcoholic beverages, distilled spirits, or wines in excess of 16-percent alcohol content stored in containers/vessels greater than 1.3 gallons each.

**Section 105.5.25.** Amend Section 105.5.25 to read as follows:

105.5.25 Hot work operations. An operational permit is required for hot work including, but not limited to:

1. Public exhibitions and demonstrations where hot work is conducted.
2. Use of portable hot work equipment inside a structure.  
Exception: Work that is conducted under a construction permit.
3. Fixed-site hot work equipment, such as welding booths.
4. Hot work conducted within a wildfire risk area during burn restrictions or burn bans.
5. Where approved, the fire code official shall issue a permit to carry out a hot work program. This program allows approved personnel to regulate their facility's hot work operations. The approved personnel shall be trained in the fire safety aspects denoted in this chapter and shall be responsible for issuing permits requiring compliance with the requirements found in Chapter 35. These permits shall be issued only to their employees or hot work operations under their supervision.

**Section 105.5.29.** Amend Section 105.5.29 to read as follows:

105.5.29 LP-gas. An operational permit is required for:

1. Storage and use of LP-gas where a single container, cylinder, or tank is more than 125 gallons water capacity; or the aggregate capacity of containers is more than 125 gallons water capacity.

Exception: A permit is not required for individual containers with a 500-gallon (1893 L) water capacity or less or multiple container systems having an aggregate quantity not exceeding 500 gallons (1893 L) for existing mobile home communities

2. Operation of cargo tankers that transport LP-gas.
3. One or more LP-gas cabinets associated with a cylinder exchange program.

**Section 105.5.32.** Delete section 105.5.32 in its entirety:

**Section 105.5.34.** Amend Section 105.5.34 to read as follows:

105.5.34 Open burning. An operational permit is required for the kindling or maintaining of an open fire or a fire on any public street, alley, road, or other public or private ground. Instructions and stipulations of the permit shall be complied with. This includes all planned ignition of prescription burns.

Exception: Recreational fires.

**Section 105.5.34.1.** Add a new Section 105.5.34.1 to read as follows:

105.5.34.1 Prescribed burns. An operational permit is required for the kindling or maintaining of an open fire or a fire on any public street, alley, road, or other public or private ground. Instructions and stipulations of the permit shall be complied with.

**Section 105.5.36.** Amend Section 105.5.36 to read as follows:

105.5.36 Open flames and candles. An operational permit is required to use open flames or candles in connection with assembly areas, dining areas of restaurants, drinking establishments or to use open flame effects before a proximate audience

**Section 105.5.49.** Amend Section 106.5.49 to read as follows:

105.5.49 Temporary membrane structures and tents. An operational permit is required to operate an air-supported temporary membrane structure, a temporary special event structure, or a tent having an area in excess of 2400 square feet.

Exceptions:

1. Tents open on all sides, which comply with all of the following:
  - 1.1. The aggregate area of multiple tents placed side by side without a fire break clearance of not less than 12 feet (3658 mm) shall not exceed 2400 square feet (65 m<sup>2</sup>) total.
  - 1.2. A minimum clearance of 12 feet (3658 mm) to structures and other tents shall be provided

**Section 105.5.53.** Add a new Section 103.5.53 to read as follows:

105.5.53 Lithium batteries. An operational permit is required for an accumulation of more than 5 cubic feet of lithium-ion and lithium metal batteries, where required by Section 322.

**Section 105.5.54.** Add a new Section 103.5.54 to read as follows:

105.5.54 Model Rockets. An operational permit is required for the use model rockets during citywide fire restrictions.

**Section 105.5.57.** Add a new Section 105.5.57 to read as follows:

105.5.57 Other permits not otherwise listed. An operational permit may be required for hazardous activities or operations not otherwise specifically listed in this Code that the fire code official determines creates a substantial risk or hazard.

**Section 105.6.** Amend Section 105.6 to read as follows:

105.6 Required construction permits. The fire code official is authorized to issue construction permits for work as set forth in Sections 105.6.1 through 105.6.28.

**Section 105.6.11.** Amend Section 105.6.11 to read as follows:

105.6.11 Gates, fencing, and barricades. A construction permit is required for the installation of or modification to a gate or barricade across a fire apparatus access road and/or fencing around the perimeter of commercial and multi-family residential properties.

**Section 105.6.15.** Amend Section 105.6.15 to read as follows:

105.6.15 LPG. A construction permit is required for:

1. Installation of or modification to an LP-gas system where a single container, cylinder, or tank is more than 125 gallons water capacity; or the aggregate capacity of containers is more than 125 gallons water capacity.

Exception: A permit is not required for individual containers with a 500-gallon (1893 L) water capacity or less or multiple container systems having an aggregate quantity not exceeding 500 gallons (1893 L), serving occupancies in Group R-3, townhomes, and serving one and two (2) family dwellings.

2. One or more LP-gas cabinets associated with a cylinder exchange program.
3. Maintenance performed in accordance with this Code is not considered to be a modification and does not require a permit.

**Section 105.6.18.** Delete Section 105.6.18 in its entirety.

**Section 105.6.20.** Amend Section 150.6.20 to read as follows:

105.6.20 Solar photovoltaic power systems. A construction permit is required to install or modify solar photovoltaic power systems. Maintenance performed in accordance with this Code is not considered to be a modification and does not require a permit.

Exception: Group R-3 Structures and Structures designed and constructed in accordance with the International Residential Code.

**Section 105.6.24.** Amend Section 105.6.24 to read as follows:

105.6.24 Temporary membrane structures and tents. A construction permit is required to erect an air-supported temporary membrane structure, a temporary stage canopy, or a tent having an area in excess of 2400 square feet.

Exceptions:

1. Tents open on all sides, which comply with all of the following:
  - 1.1. The aggregate area of multiple tents placed side by side without a fire break clearance of not less than 12 feet (3658 mm) shall not exceed 2400 square feet (65 m<sup>2</sup>) total.
  - 1.2. A minimum clearance of 12 feet (3658 mm) to structures and other tents shall be provided

**Section 105.6.25.** Add a new Section 105.6.25 to read as follows:

105.6.25 Alternative Fire Lanes. A construction permit is required for the installation of a fire lane constructed of any material other than approved concrete, asphalt, or gravel.

**Section 105.6.26.** Add a new Section 105.6.26 to read as follows:

105.6.26 Fire protection system demolition permit. When a fire protection system, or portion thereof is no longer needed, or required by this Code, a licensed fire protection contractor shall obtain a permit prior to any demolition or removal of any portion of the system. The request for a demolition permit must include a complete Code study showing the system is no longer required and justification for the permanent removal of the system.

**Section 105.6.27.** Add a new Section 105.6.27 to read as follows:

105.6.27 Fire Fighter Air Replenishment Systems (FARS). A construction permit is required for the installation of or modification to a FARS. The construction permit shall include documentation of an acceptance and testing plan as specified in Section L105.

**Section 105.6.28.** Add a new Section 105.6.28 to read as follows:

105.6.29 Direct Current Fast Charging (DCFC) bank(s). A construction permit is required for the installation of any Direct Current Fast Charging (DCFC) bank(s).

**Section 105.6.29.** Add a new Section 105.6.29 to read as follows:

105.6.28 Other permits not otherwise listed. A construction permit is required for activities, installations, or operations not otherwise specifically listed in Code that the fire code official determines creates a substantial risk or hazard.

**Section 106.1.** Amend Section 106.1 to read as follows:

106.1 Submittals. Construction documents and supporting data shall be submitted in two or more sets with each application for a permit and in such form and detail as required by the fire code official. The construction documents shall be prepared by an approved design professional where required by the jurisdiction in which the project is to be constructed.

Exception: The fire code official is authorized to waive the submission of construction documents and supporting data not required to be prepared by an approved design professional if it is found that the nature of the work applied for is such that review of construction documents is not necessary to obtain compliance with this Code.

**Section 106.3.** Delete Section 106.3 and replace it with the following:

106.3 Amended construction documents. Where field conditions necessitate any substantial change from the approved construction documents, the fire code official shall have the authority to require the amended construction documents to be submitted for review and approval. Fees may be assessed for time spent on the review of corrected documents in accordance with Section 107 and the adopted fee schedule.

**Section 107.5.** Amend Section 107.5 to read as follows:

107.5 Related fees. The payment of the fee for the construction, alteration, removal or demolition, or activity of work done in connection to or concurrently with the work or authorized by a permit shall not relieve the applicant or holder of the permit from the payment of other fees that are prescribed by law. The approved/adopted fee schedule shall be utilized as the list of fees that may be assessed by the Colorado Springs Fire Department.

**Section 107.7.** Add a new Section 107.7 to read as follows:

107.7. Reinspection fees. A reinspection fee as set forth in the approved/adopted fee schedule may be assessed for each inspection or reinspection when any portion of work for which inspection is called is not complete or when required corrections have not been completed. This subsection is not to be interpreted as requiring reinspection fees upon initial rejection of work for failure to comply with the requirements of this Code, but as controlling the practice of calling for inspections before work is ready for the inspection or reinspection's, or if hazards are not abated in the required timeframe. The reinspection fees may be assessed:

1. When the permit is not properly posted and/or the approved plans are not available on the work site; or

2. For failure to provide access on the date for which inspection is requested; or
3. For failure to maintain all work in an exposed condition until inspected and approved for installation; or
4. For deviating from plans requiring the approval of the fire code official; or
5. For lack of sufficient documentation, equipment, or personnel needed to complete the inspection; or
6. The work that an inspection has been called for has not been pretested or is not ready for inspection.
7. Failure to comply with the conditions of the permit.
8. When identified, violations or hazards are not corrected or abated within the specified timeframe.

**Section 107.8.** Add a new Section 107.8 to read as follows:

107.8 Subsequent review fees. When additional reviews of construction documents or permit applications are required, either caused by field changes, or revisions, or when multiple reviews are needed in order to approve construction drawings or permit applications, a subsequent review fee may be assessed as set forth in the approved/adopted fee schedule.

**Section 109.3.1.** Add a new Section 109.3.1 to read as follows:

109.3.1 Inspection, Test and Maintenance Records. All inspection, testing, and maintenance reports with impairments to include repairs related to the requirements of this Code shall be filed immediately but no later than 7 days of the system inspection, testing, or maintenance. All other reports shall be submitted within 30 days of the inspection, test, or maintenance. The reports shall be filed with an approved third-party agency designated by the fire code official, using the format and electronic filing system specified by the third-party filing service. Any filing and reporting costs will be the responsibility of the licensed submitting contractor. Failure to utilize the designated reporting system within the timeframe specified may result in re-inspection fees, revocation of licensure, and/or a court summons to the fire protection contractor.

**Section 111.1.** Delete Section 111.1 and replace it with the following:

111.1 Board of appeals established. See Code of the City of Colorado Springs, Chapter 8, Article 3.

**Sections 111.2.** Delete Section 111.2 in its entirety.

**Section 111.3.** Delete Section 111.3 in its entirety.

**Section 114.4.** Delete Sections 111.4 in its entirety.

**Section 112.1.** Amend Section 112.1 to read as follows:

112.1 Unlawful acts. It shall be unlawful for a person, firm, or corporation to erect, construct, alter, repair, remove, and/or conduct activities, demolish, or utilize a building, occupancy, premises, or system regulated by this Code, or cause the same to be done, in conflict with or in violation of any of the provisions of this Code. Any person, firm, or corporation violating this section will be punished in accord with the Section 113.5 of this Code.

**Section 112.3.1.** Amend Section 112.3.1 to read as follows:

112.3.1 Service. A notice of violation issued pursuant to this Code shall be served on the owner, the owner's authorized agent, operator, occupant, or other person responsible for the condition or violation, either by personal service, mail, or by delivering the same to, and leaving it with, some person of responsibility on the premises. The fire code official is authorized to affix a stop use or cease and desist tag prohibiting the use thereof, until such repairs or alterations are made. For unattended or abandoned locations, a copy of such notice of violation shall be posted on the premises in a conspicuous place at or near the entrance to such premises and the notice of violation shall be mailed by certified mail with a return receipt requested or a certificate of mailing, to the last known address of the owner, the owner's authorized agent, or occupant.

**Section 112.3.2.1.** Add a new Section 112.3.2.1 to read as follows:

112.3.2.1 Failure to comply. Persons operating or maintaining an occupancy, premises, or vehicle subject to this Code who allow a hazard to exist or fail to take immediate action to abate a hazard on such occupancy, premises, or vehicle when ordered or notified to do so by the fire code official, will be punished in accord with the Section 113.5 of this Code.

**Section 112.3.3.** Amend Section 112.3.3 to read as follows:

112.3.3 Prosecution of violations. If the notice of violation is not complied with immediately, the fire code official is authorized to request the City Attorney's Office to institute the appropriate legal proceedings at law or in equity to restrain, correct, or abate such violation or to require removal or termination of the unlawful occupancy of the structure in violation of the provisions of this Code, the Code of the City of Colorado Springs 2001, as amended, or of the order or direction made pursuant hereto.

**Section 112.4.** Amend Section 112.4 to read as follows:

112.4 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 will be assessed penalties in accord with the Section 113.5 of this Code.

**Section 113.4.** Delete Section 113.4 Failure to Comply and replace to read as follows:

113.4 Failure to comply. Persons operating or maintaining an occupancy, premises, or vehicle subject to this Code who allow a hazard to exist or fail to take immediate action to abate a hazard on such occupancy, premises, or vehicle when ordered or notified to do so by the Code official will be punished in accord with the Section 113.5 of this Code.

**Section 113.5.** Add a new Section 113.5 to read as follows:

113.5 Violations and Penalties. It is unlawful for any person to violate any of the provisions of this part including any provisions of the International Fire Code, International Fire Code Appendices, and International Fire Code Amendments, as adopted. Any person convicted of a violation of any provision set forth in this part will be punished in accord with the penalty provisions as set forth below.

1. Any person who performs or fails to perform an act where the performance or failure to perform is declared in any provision of this Code or any promulgated rule or

regulation to be unlawful or an offense or misdemeanor, or any person who performs an act which is prohibited or fails to perform an act which is required by any provision of this Code or any promulgated rule or regulation, or any person who fails to meet a standard of conduct or behavior prescribed in any provision of this Code for which no specific penalty is provided will, upon conviction, be punished as provided in subsection 2 of this section.

2. Any person convicted for the violation of any provision of this Code or any promulgated rule or regulation will be punished by a fine of not more than two thousand five hundred dollars (\$2,500.00); by imprisonment in jail for a period not exceeding one hundred eighty nine (189) days; by a sentence of probation; or by a combination of fine, imprisonment, and a sentence of probation; unless a lesser penalty is provided for elsewhere in this Code. The Municipal Court may designate fines that may be made payable at the Violations Bureau.

## **Chapter-2 Definitions**

**Section 202.** Amend the following definitions in Section 202 to read as follows:

### **SECTION 202 GENERAL DEFINITIONS.**

**BONFIRE.** An outdoor fire, greater than 3 feet in diameter and 2 feet in height, utilized for any religious, celebratory, or similar purpose.

**Institutional Group I-2.**

**Occupancy Conditions.** Buildings of Group I-2 shall be classified as one of the following occupancy conditions and shall comply with Section 407 of the International Building Code:

[BG] **Condition 1.** This occupancy condition shall include facilities that provide nursing and medical care but do not provide emergency care, surgery, obstetrics, or in-patient stabilization units for psychiatric or detoxification, including, but not limited to, nursing homes, memory care facilities, and foster care facilities.

**CASK.** A closed vessel of 185 gallons (700 L) or less capacity, used primarily for storing Class 1 liquids, constructed of wooden staves and heads, held together by metal hoops, not equipped with provisions for emergency venting, and not intended for fixed installation.

**Direct current fast charging (DCFC) bank(s).** An electric vehicle charging bank in which eight or more parking spaces are designated for electric vehicle charging. Commonly referred to as Level 3 chargers

**EXTRACTION PROCESS.** The extraction process includes the act of extraction of the essential oils, other botanic materials and/or fats by use of a solvent, dissolving of the raw material, production of the miscella, distillation of the solvent from the miscella, and solvent recovery.

**FLAME EFFECTS.** The combustion of flammable solids, liquids, or gases to produce thermal, physical, visual, or audible phenomena before an audience.



**HAZMAT INVENTORY STATEMENT (HMIS).** A portion of an HMR containing a list of all the HazMat in a facility including information related to the materials such as product names, locations, quantities, regulated hazards, and Chemical Abstract Service (CAS) numbers.

**HAZMAT MANAGEMENT PLAN (HMMP).** A portion of a HazMat Permit Application containing site maps and facility floor plans identifying HazMat locations and site and building features relevant to the management of HazMat inventories, systems, and operations.

**HAZMAT REPORT (HMR).** A consolidated description of a facility and the HazMat therein including a contact list, Code-based description of the building and adjacent outdoor areas, and a HazMat Inventory Statement (HMIS).

**HOT WORK AREA.** The HOT WORK AREA shall be no less than a 35-foot radius and 15 feet above and below the area directly exposed to sparks, hot slag, radiant heat, or convective heat as a result of the hot work.

**MINIMUM EXPLOSIVE CONCENTRATION (MEC).** The lowest mass to volume concentration of combustible dust that will propagate a flame (sometimes referred to as LFL). The MEC for grain dust is 0.055 oz. /ft<sup>3</sup> (55 g/m<sup>3</sup>).

**PILE.** Independently stacked commodities possibly organized by separate spacers, dunnage, or pallets in which the demise of any storage container on a lower tier compromises the structural stability of the storage system.

**PORTABLE TANK.** A tank that is readily capable of being relocated within the facility, not permanently attached to immovable structure, or ground, and not constructed of wood.

**POST OIL PROCESSING.** The process of refining essential oils after extraction from the plant material, including, but not limited to dewaxing, and winterization processes

**POWERED MICROMOBILITY DEVICES.** Motorized bicycles, motorized scooters, and other personal mobility devices powered by a lithium-ion or lithium metal battery. The term does not include motor vehicles that are required to be registered with the Department of Motor Vehicles for the state or jurisdiction.

**RACK.** Shelves or similar structural frame-supported system of tiers in which the demise of any storage container on a lower tier does not affect the structural stability of the storage system.

**TEMPORARY FIRE ACCESS ROAD.** Temporary access roads shall be an all-weather surface comprised of either the first lift of asphalt or concrete/compacted gravel to a thickness capable of supporting the imposed loads of fire department apparatus. A 20-ft minimum width shall be maintained unless the permanent road is designed less than 20-ft, in which case the temporary road shall be the intended width of the permanent road. Adequate street signs and fire lane signs shall be installed where applicable. Temporary access roads must be maintained in accord with this section. Temporary access roads

serving as fire lanes shall not be in place for more than 6 months without special approval from the fire code official.

### **Chapter-3 General Requirements**

**Section 301.2.** Amend Section 301.2 to read as follows:

301.2 Permits. Permits shall be required as set forth in Section 105.5 for the activities or uses regulated by Sections 306, 307, 308, 315, 320, and 322.

**Section 304.1.2.** Amend Section 304.1.2 to read as follows:

304.1.2 Vegetation. Weeds, grass, vines, or other growth that is capable of being ignited and endangering property, shall be cut down and removed by the owner or occupant of the premises. Vegetation clearance requirements in wildland-urban interface areas shall be in accordance with Appendix K.

**Section 307.1.2.** Add a new Section 307.1.2 to read as follows:

307.1.2 Burn restrictions and burn bans. The fire code official is authorized to issue a burn restriction or burn ban order as deemed necessary when local conditions make recreational fires, open burning, other open-flame, or similar activities, hazardous or objectionable. Persons failing to comply with issued burn restrictions or burn bans will be punished in accord with the Section 113.5 of this Code.

**Section 307.2.** Amend Section 307.2 to read as follows:

307.2. Permit required. A permit shall be obtained from the fire code official in accordance with Section 105.5.34.1 prior to kindling a fire for recognized silvicultural or range or wildlife management practices, prevention, or control of disease or pests, or a bonfire or a prescribed burn for fuels management or wildfire risk reduction. Application for such approval shall only be presented by and permits issued to the owner of the land upon which the fire is to be kindled.

**Section 307.2.2.** Add a new Section 307.2.2 to read as follows:

307.2.2. Prescribed burn plan required. The applicant must attach a Prescribed Burn Plan to the application for a CSFD Open Burning Permit when requested by the fire code official. Prescribed burn plans shall be included for any understory burns, broadcast burns, multiple pile burns, or slash burns conducted within city limits or on any area determined as a city asset. Prescribed burn plans shall comply with the guidance documents provided by the Division of the Fire Marshal.

**Section 307.4.1.1.** Add a new Section 307.4.1.1 to read as follows:

307.4.1.1 Materials. Bonfires shall be constructed of solid wood products as approved by the fire code official and void of any trash, debris, or rubbish. Bonfires shall not use a flammable liquid as an ignition source.

**Section 307.4.1.2.** Add a new Section 307.4.1.2 to read as follows:

307.4.1.2 Large bonfires. Bonfires greater than 8 feet in any direction shall require plan submittal for review and approval prior to the issuance of a fire inspection. Such bonfires shall also require fire department apparatus standby to be paid by the permit holder at

the rate(s) per the approved/adopted fee schedule. Fees shall be paid prior to issuance of fire inspection.

**Section 307.4.3.** Amend section 307.4.3 to read as follows:

307.4.3 Portable outdoor fireplaces. Portable outdoor fireplaces shall be used in accordance with the manufacturer's instructions and shall not be operated within 15 feet of a structure or combustible material.

Exception: Occupants of one- and two-family dwellings:

1. Shall operate portable outdoor fireplaces in accordance with the manufacturer's instructions.
2. Shall NOT operate a portable outdoor fireplace within 15 feet of a neighboring structure or combustible material, including but not limited to a tree, bush, or common fence.

**Section 307.4.4.** Add a new Section 307.4.4 to read as follows:

307.4.4 Spark arrestor. Use of a functional spark arrestor is required during high or greater fire danger days and during burn restrictions for all solid fuels such as wood, charcoal, or pellets, for recreational fires, and all outdoor fireplaces.

**Section 307.5.** Amend Section 307.5 to read as follows:

307.5 Attendance. Open burning, bonfires, recreational fires, and use of portable outdoor fireplaces shall be constantly attended by a minimum of one alert, ambulatory, unimpaired, responsible adult until the fire is extinguished. A minimum of one portable fire extinguisher complying with Section 906 with a minimum 4-A rating or other approved on-site fire-extinguishing equipment, such as dirt, sand, water barrel, garden hose, or water truck, shall be available for immediate utilization by the responsible attendant.

**Section 308.1.4.** Amend Section 308.1.4 to read as follows:

308.1.4 Open-flame cooking devices. Charcoal and solid-fuel burners and other open-flame cooking devices shall not be operated on combustible balconies or within 10 feet (3048mm) of combustible construction.

Exceptions:

1. One- and two-family dwellings.
2. Where buildings, balconies, and decks are protected by an automatic sprinkler system
3. LPG cooking devices having LPG container with a water capacity not greater than 47 pounds [nominal 20-pound LPG capacity].

**Section 308.1.4.1.** Add a new Section 308.1.4.1 to read as follows:

308.1.4.1. Valves. All valves shall be turned off when propane cylinders are not in use.

**Section 308.1.4.2.** Add a new Section 308.1.4.2 to read as follows:

308.1.4.2. Egress from buildings. Open flame devices and/or associated LPG tanks shall never be used or stored in or near stairwells, corridors, or other areas that are intended to be used as a means of egress or considered an interior living space.

**Section 308.1.7.** Amend Section 308.1.7 to read as follows:

308.1.7 Religious ceremonies. When, in the opinion of the fire code official, adequate safeguards have been taken and documented, participants in religious ceremonies are allowed to carry hand-held candles.

**Section 308.2.** Amend Section 308.2 by adding #4 to read as follows:

308.2 Permits required. Permits shall be obtained from the fire code official in accordance with Section 105.5 prior to engaging in the following activities involving open flame, fire, and burning:

1. Use of a torch or flame-producing device to remove paint from a structure.
2. Use of open flame, fire, or burning in connection with Group A or E occupancies.
3. Use or operation of torches and other devices, machines, or processes liable to start or cause a fire in or on wildfire risk areas.
4. Use of flame effects before a proximal audience.

**Section 316.3.1.** Add a new section 316.3.1 to read as follows:

316.3.1 Modifications and alterations. Modifications, alterations, or changes made to buildings and structures that are of non-approved work, and/or pose a threat to the life and safety of emergency responders are prohibited.

**Section 319.** Delete Section 319 in its entirety.

**Section 322.** Add a new Section 322 to read as follows:

**SECTION 322 - STORAGE OF LITHIUM-ION AND LITHIUM METAL BATTERIES**

**Section 322.1.** Add a new Section 322.1 to read as follows:

322.1 General. The storage of lithium-ion and lithium metal batteries shall comply with Section 322.

Exceptions:

1. New or refurbished batteries installed in the equipment, devices, or vehicles they are designed to power.
2. New or refurbished batteries packed for use with the equipment, devices, or vehicles they are designed to power.
3. Batteries in original retail packaging that are rated at 300 watt-hours or less for lithium-ion batteries or contain 25 grams or less of lithium metal for lithium metal batteries.
4. Temporary storage of batteries or battery components during the battery manufacturing process before completion of final quality control checks.
5. Temporary storage of batteries during the vehicle manufacturing or repair process.

**Section 322.2.** Add a new Section 322.2 to read as follows:

322.2 Permits. Permits shall be required for quantities in excess of more than 5 cubic feet of lithium-ion and lithium metal batteries, other than batteries listed in the exceptions to Section 322.1, as set forth in Section 105.5.53.

**Section 322.3.** Add a new Section 322.3 to read as follows:

322.3 Fire safety plan. A fire safety plan shall be provided in accordance with Section 403.10.6. In addition, the fire safety plan shall include emergency response actions to be taken upon detection of a fire or possible fire involving lithium-ion or lithium metal battery storage.

**Section 322.4.** Add a new Section 322.4 to read as follows:

322.4 Storage requirements. Lithium-ion and lithium metal batteries shall be stored in accordance with Section 322.4.1, 322.4.2, or 322.4.3, as applicable.

**Section 322.4.1.** Add a new Section 322.4.1 to read as follows:

322.4.1 Limited indoor storage in containers. Not more than 15 cubic feet of lithium-ion or lithium metal batteries shall be permitted to be stored in containers in accordance with all of the following.

1. Containers shall be open-top and constructed of noncombustible materials or shall be approved for battery collection.
2. Individual containers and groups of containers shall not exceed a capacity of 7.5 cubic feet.
3. A second container or group of containers shall be separated by not less than 3 feet of open space, or 10 feet of space that contains combustible materials.
4. Containers shall be located not less than 5 feet from exits or exit access doors.

**Section 322.4.2.** Add a new Section 322.4.2 to read as follows:

322.4.2 Indoor storage areas. Indoor storage areas for lithium-ion and lithium metal batteries, other than those complying with Section 322.4.1, shall comply with Sections 322.4.2.1 through 322.4.2.6.

**Section 322.4.2.1.** Add a new Section 322.4.2.1 to read as follows:

322.4.2.1 Technical opinion and report. A technical opinion and report complying with Section 104.8.2 shall be prepared to evaluate the fire and explosion risks associated with the indoor storage area and to make recommendations for fire and explosion protection. The report shall be submitted to the fire code official and shall require the fire code official's approval prior to issuance of a permit. In addition to the requirements of Section 104.8.2, the technical opinion and report shall specifically evaluate the following at a minimum:

1. The potential for deflagration of flammable gases released during a thermal runaway event.
2. The basis of design for an automatic sprinkler system or other approved fire suppression system. Such design basis shall reference relevant full-scale fire testing or another approved method of demonstrating sufficiency of the recommended design.

**Section 322.4.2.2.** Add a new Section 322.4.2.2 to read as follows:

322.4.2.2 Construction requirements. Where indoor storage areas for lithium-ion and lithium metal batteries are located in a building with other uses, battery storage areas shall be separated from the remainder of the building by 2-hour rated fire barriers or horizontal assemblies. Fire barriers shall be constructed in accordance with Section 707 of the International Building Code, and horizontal assemblies shall be constructed in accordance with Section 711 of the International Building Code.

Exceptions:

1. Where battery storage is contained in one or more approved prefabricated portable structures providing a complete 2-hour fire resistance rated enclosure, fire barriers and horizontal assemblies are not required.
2. Where battery storage is limited to new batteries in packaging that has been demonstrated to and approved by the fire code official as sufficient to isolate a fire in packaging to the package interior, fire barriers and horizontal assemblies are not required.

**Section 322.4.2.3.** Add a new Section 322.4.2.3 to read as follows:

322.4.2.3 Fire protection systems. Indoor storage areas for lithium-ion and lithium metal batteries shall be protected by an automatic sprinkler system complying with Section 903.3.1.1 or an approved alternative fire suppression system. The system design shall be based on recommendations in the approved technical opinion and report required by Section 322.4.2.1.

**Section 322.4.2.4** Add a new Section 322.4.2.4 to read as follows:

322.4.2.4 Fire alarm systems. Indoor storage areas for lithium-ion and lithium metal batteries shall be provided with an approved automatic fire detection and alarm system complying with Section 907. The fire detection system shall use air-aspirating smoke detection, radiant energy-sensing fire detection, or both.

**Section 322.4.2.5.** Add a new Section 322.4.2.5 to read as follows:

322.4.2.5 Explosion control. Where the approved technical opinion and report required by Section 322.4.2.1 recommends explosion control, explosion control complying with Section 911 shall be provided.

**Section 322.4.2.6.** Add a new Section 322.4.2.6 to read as follows:

322.4.2.6 Reduced requirements for storage of partially charged batteries. Indoor storage areas for lithium-ion and lithium metal batteries with a demonstrated state of charge not exceeding 30 percent shall not be required to comply with Sections 322.4.2.1, 322.4.2.2, or 322.4.2.5, provided that procedures for limiting and verifying that the state of charge will not exceed 30 percent have been approved.

**Section 322.4.3.** Add a new Section 322.4.3 to read as follows:

322.4.3 Outdoor Storage. Outdoor storage of lithium-ion or lithium metal batteries shall comply with Sections 322.4.3.1 through 322.4.3.3.

**Section 322.4.3.1.** Add a new Section 322.4.3.1 to read as follows

322.4.3.1 Distance from storage to exposures. Outdoor storage of lithium-ion or lithium metal batteries, including storage beneath weather protection in accordance with Section 414.6.1 of the International Building Code, shall comply with one of the following.

1. Battery storage shall be located not less than 20 feet from any building, lot line, public street, public alley, public way, or means of egress.
2. Battery storage shall be located not less than 3 feet from any building, lot line, public street, public alley, public way, or means of egress, where the battery storage is separated by a 2-hour fire-resistance-rated assembly per chapter 7 of International

Building Code, without openings or penetrations and extending 5 feet above and to the sides of the battery storage area.

3. Battery storage shall be located not less than 3 feet from any building, lot line, public street, public alley, public way, or means of egress, where batteries are contained in approved prefabricated portable structures providing a complete 2-hour fire-resistance-rated enclosure per chapter 7 of International Building Code.

**Section 322.4.3.2.** Add a new Section 322.4.3.2 to read as follows

322.4.3.2 Storage area size limits and separation. Outdoor storage areas for lithium-ion or lithium metal batteries, including storage beneath weather protection in accordance with Section 414.6.1 of the International Building Code, shall not exceed 900 sq. ft. The height of battery storage in such areas shall not exceed 10 feet. Multiple battery storage areas shall be separated from each other by not less than 10 feet of open space.

**Section 322.4.3.3.** Add a new Section 322.4.3.3 to read as follows

322.4.3.3 Fire detection. Outdoor storage areas for lithium-ion or lithium metal batteries, regardless of whether such areas are open, under weather protection, or in a prefabricated portable structure, shall be provided with an approved automatic fire detection and alarm system complying with Section 907. The fire detection system shall use radiant energy-sensing fire detection.

**Section 323.** Add a new Section 323 to read as follows:

**SECTION 323 - POWERED MICROMOBILITY DEVICES**

**Section 323.1.** Add a new Section 323.1 to read as follows:

323.1 General. Lithium-ion and lithium metal battery-powered micromobility devices shall be operated and maintained in accordance with this section.

Exceptions:

1. Storage, repair, and charging in residential occupancies of battery-powered mobility devices, provided that such devices are for personal use by its owner.
2. Charging of a single powered mobility device in any occupancy by its owner:

**Section 323.1.** Add a new Section 323.1.1 to read as follows:

323.1.1 Prohibited locations. The use of a residential occupancy as a business for the charging of commercially owned powered mobility devices as part of a rental or sales service shall not be permitted.

**Section 323.2.** Add a new Section 323.2 to read as follows:

323.2 Battery chargers and equipment. Powered micromobility devices shall be charged in accordance with their listing and the manufacturer's instructions using only the original equipment manufacturer-supplied charging equipment or charging equipment in accordance with the listing and manufacturer's instructions.

**Section 323.3.** Add a new Section 323.3 to read as follows:

323.3 Listing. Powered micromobility devices shall be listed and labeled in accordance with UL 2272 or UL 2849, as applicable.

**Section 323.4.** Add a new Section 323.4 to read as follows:

323.4 Battery charging areas. Where approved, powered micromobility devices shall be permitted to be charged in a room or area that complies with all of the following:

1. Only listed devices utilizing listed charging equipment shall be permitted to be charged.
2. Is provided with sufficient electrical receptacles to allow the charging equipment for each device to be directly connected to a receptacle. Extension cords and relocatable power taps shall not be used or permitted
3. Storage of combustible materials, combustible waste, or hazardous materials shall not be permitted.
4. The charging operation shall not be conducted in or obstruct any required means of egress.
5. Removable storage batteries shall not be stacked or charged in an enclosed cabinet unless the cabinet is specially designed and approved for such purpose.
6. A minimum distance of 18 inches shall be maintained between each removable storage battery during charging operations unless each battery is isolated from neighboring batteries by an approved fire-resistant material.
7. A minimum of 18 inches shall be maintained between the locations of the batteries on each powered micromobility device during charging operations.
8. The indoor room or area shall be protected by a fire alarm system utilizing air-aspirating smoke detectors or radiant energy-sensing fire detection.

**Section 323.5.** Add a new Section 323.5 to read as follows:

323.5 Fire safety plan. A fire safety plan shall be provided in accordance with Section 403.10.6. In addition, the fire safety plan shall include emergency response actions to be taken upon detection of a fire or possible fire involving lithium-ion or lithium metal battery storage.

**Section 324.** Add a new Section 324 to read as follows:

Section 324

Electric Vehicle (EV) Charging Stations

**Section 324.1.** Add a new Section 324.1 to read as follows:

324.1 Scope. Electric vehicle charging stations installed inside of buildings or open parking lots shall be in compliance with the International Building Code, NFPA 70, and this Section as applicable.

**Section 324.2.** Add a new Section 324.2 to read as follows:

324.2 Permit. A Construction Permit shall be obtained for Direct Current Fast Charging (DCFC) bank(s) as set forth in Section 105.6.29

**Section 324.3.** Add a new Section 324.3 to read as follows:

324.3 Access. Electric vehicle charging stations shall be located along fire apparatus access roads not less than 24 feet wide

**Section 324.4.** Add a new Section 324.4 to read as follows:



324.4 Listing. Electric vehicle charging system equipment shall be listed and labeled in accordance with UL 2202. Electric vehicle supply equipment shall be listed and labeled in accordance with UL 2594.

**Section 324.5.** Add a new Section 324.5 to read as follows:

324.5 Landscaping. Landscaping shall not obstruct access to electric vehicle charging stations. Landscaping within 10 feet of electric vehicles charging stations must be irrigated, maintained, and not allowed to collect debris, weeds or other combustible materials.

Exception: When located in the Wildland Urban Interface, no combustible landscaping, regardless of irrigation, shall be allowed within 10 feet of electric vehicle charging stations. Noncombustible landscaping such as gravel or other similar materials are acceptable within 10 feet.

**Section 324.6.** Add a new Section 324.6 to read as follows:

324.6 Location. Electric vehicle charging equipment shall be designed and located in a manner that does not create a safety hazard or impede pedestrian, bicycle, or wheelchair movement. Direct current fast charging stations shall be installed at grade level and be separated by a minimum of 25 feet from any exits.

**Section 324.7.** Add a new Section 324.8 to read as follows:

324.8 Emergency disconnect. An emergency disconnect switch shall be located at least 20 ft. but not more than 100 ft. away from all direct current fast charging stations.

**Section 324.8.** Add a new Section 324.9 to read as follows:

324.9 Labeling and signage. Permanently affixed labels shall be posted on electronic vehicle charging stations identifying voltage, amperage level, and emergency disconnect location as approved by the fire code official. Safety information related to the operation of the charging station may also be required.

**Section 324.9.** Add a new Section 324.10 to read as follows:

324.10 Separation. Electric vehicle charging stations shall be segregated into groups not exceeding eight (8) parking spaces consecutively. Each group of charging stations shall be separated by one of the following methods:

1. A minimum of 9 feet separation from neighboring vehicles.
2. A 2-hour fire barrier constructed in accordance with Section 707 of the International Building Code and 2-hour horizontal assembly constructed in accordance with Section 711 of the International Building Code, as appropriate.
3. Alternative separation methods may be allowed as approved by the fire code official.

Exception: Fleet vehicles owned by a single entity may be exempt from separation requirements where approved by the fire code official.

**Section 324.10.** Add a new Section 324.11 to read as follows:

324.11 Vehicle Impact Protection. Where provided, vehicle impact protection shall be in accordance with Section 312.

**Section 324.11.** Add a new Section 324.12 to read as follows:

324.12 Maintenance. Electric vehicle charging stations shall be properly maintained. Contact information shall be provided on the equipment to address the responsible party of equipment malfunction.

## **Chapter-4 Emergency Planning and Preparedness**

**Section 401.1.** Amend Section 401.1 by deleting the exception.

401.1 Scope. Reporting of emergencies, coordination with emergency response forces, emergency plans, and procedures for managing or responding to emergencies shall comply with the provisions of this section.

**Section 403.4.3.** Amend Section 403.4.3 to read as follows:

403.4.3 Assembly points. Outdoor assembly areas shall be designated and shall be located a safe distance from the building being evacuated so as to avoid interference with fire department operations. Outdoor assembly areas shall be accessed via an accessible route. The assembly areas shall be arranged to keep each class separate to provide accountability of all individuals.

**Section 403.10.6.** Add a new Section 403.10.6 to read as follows:

403.10.6 Lithium-ion and lithium metal batteries. An approved fire safety and evacuation plan in accordance with Section 404 shall be prepared and maintained for occupancies that involve activities for the research and development, testing, manufacturing, handling, storage of lithium-ion batteries or lithium metal batteries or the repair or servicing of vehicles powered by lithium-ion batteries or lithium metal batteries.

Exceptions. A fire safety and evacuation plan is not required for the storage or merchandizing of any of the following:

1. New or refurbished batteries installed for use in the equipment or vehicles they are designed to power
2. New or refurbished batteries packed for use with the equipment or vehicles they are designed to power for merchandizing purposes.
3. New or refurbished lithium-ion batteries rated at no more than 300 Watt-hours and lithium metal batteries containing no more than 25 grams of lithium metal in their original retail packaging.
4. The storage, repair, and charging activities in detached one-and two-family dwellings and townhouses, provided that such devices are for personal use.
5. The storage, repair, and charging activities associated with personal use in sleeping units and dwelling units of Group R-1 and R-2 occupancies.

**Section 403.10.6.1.** Add a new Section 403.10.6.1 to read as follows:

403.10.6.1 Mitigation planning. The approved fire safety and evacuation plan shall include thermal runaway event mitigation measures addressing activities undertaken to prevent thermal runaway, early detection of a thermal runaway event, and mitigations measures to be undertaken to limit the size and impact of the event on occupants and the facility.

**Section 404.2.1.** Amend Section 404.2.1 by adding the number 11 to read as follows:

404.2.1 Fire evacuation plans. Fire evacuation plans shall include the following:

1. Emergency egress or escape routes and whether evacuation of the building is to be complete by selected floors or areas only or with a defend-in-place response.
2. Procedures for employees who must remain to operate critical equipment before evacuating.
3. Procedures for the use of elevators to evacuate the building where occupant evacuation elevators complying with Section 3008 of the International Building Code are provided.
4. Procedures for assisted rescue for persons unable to use the general means of egress unassisted.
5. Procedures for accounting for employees and occupants after evacuation has been completed.
6. Identification and assignment of personnel responsible for rescue or emergency medical aid.
7. The preferred and any alternative means of notifying occupants of a fire or emergency.
8. The preferred and any alternative means of reporting fires and other emergencies to the fire department or designated emergency response organization.
9. Identification and assignment of personnel who can be contacted for further information or explanation of duties under the plan.
10. A description of the emergency voice/alarm communication system alert tone and preprogrammed voice messages, where provided.
11. Outdoor assembly areas shall be accessible by all occupants. Outdoor assembly areas shall be designated and shall be located a safe distance, as approved by the fire code official, from the building being evacuated so as to avoid interference with fire department operations.

**Section 404.2.2.** Amend Section 404.2.2 by deleting 4.8, to read as follows:

404.2.2 Fire safety plans. Fire safety plans shall include the following:

1. The procedure for reporting a fire or other emergency.
2. The life safety strategy includes the following:
  - 2.1. Procedures for notifying occupants, including areas with a private mode alarm system.
  - 2.2. Procedures for occupants under a defend in-place response.
  - 2.3. Procedures for evacuating occupants, including those who need evacuation assistance.
3. Site plans indicating the following:
  - 3.1. The occupancy assembly point.
  - 3.2. The locations of fire hydrants.
  - 3.3. The normal routes of fire department vehicle access.
4. Floor plans identifying the locations of the following:
  - 4.1. Exits.
  - 4.2. Primary evacuation routes.
  - 4.3. Secondary evacuation routes.
  - 4.4. Accessible egress routes.
    - 4.4.1. Areas of refuge.
    - 4.4.2. Exterior areas for assisted rescue.
  - 4.5. Refuge areas associated with smoke barriers and horizontal exits.
  - 4.6. Manual fire alarm boxes.

- 4.7. Portable fire extinguishers.
- 4.8. Fire alarm annunciators and controls.
5. A list of major fire hazards associated with the normal use and occupancy of the premises, including maintenance and housekeeping procedures.
6. Identification and assignment of personnel responsible for maintenance of systems and equipment installed to prevent or control fires.
7. Identification and assignment of personnel responsible for maintenance, housekeeping, and controlling fuel hazard sources.

**Section 408.** Add a new Section 408 to read as follows:  
Section 408 Fire Watch

**Section 408.1.** Add a new Section 408.1 to read as follows:

408.1 General. Fire Watch shall be required at the discretion of the fire code official for a building with a disabled fire protection system, or when there are situations that could compromise the public's safety.

**Section 408.2.** Add a new Section 408.2 to read as follows:

408.2 Fire Watch Duties. The primary duty of fire watch personnel shall be to perform constant patrols and watch for the occurrence of fire. The combination of fire watch duties and site security duties is acceptable if approved by the fire code official.

1. Conduct continuous patrols of the entire facility (or affected area)
2. Identify any fire, life, or property hazards.
3. Immediately notify the Fire Department if a fire is discovered by calling 9-1-1.
4. Notify occupants of the facility of the need to evacuate.
5. Maintain a log of Fire Watch activities.
6. Fire Watch personnel cannot have other duties besides their assigned Fire Watch except those assigned or approved by the fire code official.
7. Fire Watch personnel must be familiar with the existing system of the facility.

**Section 408.2.1.** Add a new Section 408.2.1 to read as follows:

408.2.1 Fire Watch patrol frequency. Fire Watch personnel shall continuously patrol the entire facility (or affected area) in a manner such that the entire patrol area is inspected every 30 minutes. The appropriate number of fire watch personnel shall be provided in order to satisfy the requirements of the fire watch.

Exception. Based on the risk, facilities such as those with occupants incapable of self-preservation, shall be patrolled every 15 minutes.

**Section 408.2.2.** Add a new Section 408.2.2 to read as follows:

408.2.2 Fire Watch Log. A Fire Watch log shall be maintained on-site. The log must be available at all times until the Fire Watch has been terminated by CSFD. Records shall be made available for review by the fire code official upon request the log shall show the following:

- Name of the person(s) conducting the Fire Watch.
- Times that each patrol was started and completed.

**Section 408.3.** Add a new Section 408.3, Table 408.3(1), and Table 408.3(2) to Read as follows:  
 408.3 Fire Watch Levels.

**Table 408.3(1)**

LEVEL 1	Continuous monitoring of the affected area for signs of smoke or fire for the sole purpose of notifying emergency services (dialing 9-1-1)	One or more approved employees of the building owner; security guards; or qualified CSFD personnel
LEVEL 2	Same as Level 1 and assist with evacuation	Same as LEVEL 1
LEVEL 3	Same as Level 2 and fire extinguishment / hazard mitigation	One or more qualified CSFD personnel. NOTE: An emergency action plan may be required. Established only by Division of the Fire Marshal

The level of Fire Watch coverage for different occupancy types shall be based upon the following guidelines; however, circumstances may warrant modifications at the discretion of the on-site fire code official as to the amount and type of personnel performing the fire watch. Unusual risk may alter requirements regardless of occupancy.

**Table 408.3 (2)**

Situation	Level of Fire Watch per Occupancy Classification					
	A	B, M	E	H	F, I, R	S
Loss of any required fire protection system	1 or 2	1 <sup>A</sup>	2 <sup>B</sup>	2 or 3	1, 2, or 3	1 <sup>C</sup> , 2 <sup>D</sup> , or 3
Special circumstances such as an occupant load increase, or the nature of the activity.	3	ESTABLISHED ONLY BY THE DIVISION OF THE FIRE MARSHAL. AS REQUIRED BY FIRE INSPECTION OR OTHER CIRCUMSTANCES				

- a. All building occupants and/or staff must be notified that the system(s) are out of service.
- b. Only while the building is occupied, and all staff must be notified that the system(s) are out of service.
- c. Stocked but no occupants.
- d. During operations.

**Section 408.4.** Add a new Section 408.4, to read as follows:  
 408.4 Fees for fire watch. For all fire watch activities that involve CSFD personnel, fees shall be assessed as set forth in the approved/adopted fee schedule.

**Chapter-5 Fire Service Features**

**Section 501.1.** Amend Section 501.1 to read as follows:

501.1 Scope. Fire service features for buildings, structures, and premises shall comply with this chapter.

**Section 503.1.** Amend Section 503.1 to read as follows:

503.1 Where required. Fire apparatus access roads shall be provided and maintained in accordance with Sections 503.1.1 through 503.1.3 and Appendix D.

**Section 503.2.** Amend Section 503.2 to read as follows:

503.2 Specifications. Fire apparatus access roads shall be installed and arranged in accordance with Sections 503.2.1 through 503.2.8 and Appendix D.

**Section 503.2.5.** Amend Section 503.2.5 to read as follows:

503.2.5 Dead ends. Dead-end fire apparatus access roads in excess of 200 feet in length shall be provided with an approved area for turning around fire apparatus.

**Section 505.1.** Amend Section 505.1 to read as follows:

505.1 Address identification. New and existing buildings shall be provided with approved address identification. The address identification shall be legible and placed in a position that is visible from the street or road fronting the property. Address identification characters shall contrast with their background. Address numbers shall be Arabic numbers or alphabetical letters. Numbers shall not be spelled out. Each character shall be not less than 5 inches high with a minimum stroke width of 1/2 inch. Where required by the fire code official, address identification shall be provided in additional approved locations to facilitate emergency response. Where access is by means of a private road and the building cannot be viewed from the public way, a monument, pole, or other sign or means shall be used to identify the structure. Address identification shall be maintained.

**Section 505.1.1.** Add a new Section 505.1.1 to read as follows:

505.1.1 Suite numbers. Any area occupied by tenants of a mall or shopping center, or any area used for other than single-unit or multi-unit residential occupancy that abuts a public courtyard or other public space shall be identified by numbers that are a minimum of 4 inches (101.6 mm) in height with a minimum stroke of 1/2 inch (12.7mm) so as to be plainly visible and legible from a distance of at least fifty (50) feet (1.5 m) from the main entrance to the area.

**Section 505.1.2.** Add a new Section 505.1.2 to read as follows:

505.1.2. Addressing of rear doors. The rear door entrance of access doors of all malls, strip centers, commercial center buildings and other areas with multi-tenant spaces shall be identified with the appropriate address number and business name. The address numbers and/or letters shall be at least 3 inches (76.2 mm) in height and no less than three-eighths (3/8) inch (9.5 mm) stroke. The Colorado Springs Fire Department may require the installation of address numbers/letters on other locations to prevent confusion in the event of an emergency.

**Section 506.1.** Amend Section 506.1 to read as follows:

506.1 Where required. Where access to or within a structure or an area is restricted because of secured openings or where immediate access is necessary for lifesaving, or fire-fighting purposes, or where monitored fire protection systems or elevators exist in the building, the fire code official is authorized to require a key box to be installed in an approved location. The key box shall be of an approved type listed in accordance with UL 1037 and shall contain keys to gain necessary access as required by the fire code official.

**Section 507.3.** Amend Section 507.3 to read as follows:

507.3 Fire Flow. Fire flow requirements for buildings or portion of buildings and facilities shall be determined as outlined in Appendix B of this Code.

**Section 507.5.** Amend Section 507.5 to read as follows:

507.5 Fire hydrant systems. Fire hydrant systems shall comply with Sections 507.5.1 through 507.5.6, NFPA 24, and Appendix C.

**Section 507.5.1.** Delete Section 507.5.1 in its entirety.

**Section 507.5.1.1.** Amend Section 507.5.1.1 to read as follows:

507.5.1.1 Hydrant for standpipe and fire sprinkler systems. Buildings equipped with a standpipe and/or fire sprinkler system installed in accordance with Chapter 9 shall have a fire hydrant within 100 feet (30.4 m) of the fire department connection.

**Section 510.4.** Amend Section 510.4 to read as follows:

510.4 Technical requirements. Equipment required to provide in-building, two-way emergency responder communication coverage shall be listed in accordance with UL 2524. Systems, components, and equipment required to provide the emergency responder radio coverage system shall comply with this section, the published technical and performance rules and regulations published by the City of Colorado Springs Fire Department, the Pikes Peak Radio Communications Network and NFPA 1225.

**Section 510.4.2** Amend Section 510.4.2 to read as follows:

510.4.2 System design. The in-building, two-way emergency responder communication coverage system shall be designed in accordance with Sections 510.4.2.1 through 510.4.2.8, and NFPA 1225.

**Section 510.5** Installation requirements. The installation of the inbuilding, two-way emergency responder communication coverage system shall be in accordance with NFPA 1225 and Sections 510.5.2 through 510.5.5.

**Section 511.** Add a new Section 511 to read as follows:

Section 511 Firefighter Air Replenishment Systems.

511.1 General. Where required by the fire code official, a firefighter air replenishment system shall be provided in accordance with Appendix L101.2.

## **Chapter-6 Building Services and Systems**

**Section 603.5.2.** Delete the exceptions to 603.5.2 to read as follow:

603.5.2 Application and use. Relocatable power taps and current taps shall be directly connected to a permanently installed receptacle.

**SECTION 611.** Add a new Section 611 to read as follows:

**SECTION 611 MAGNETIC RESONANCE IMAGING FACILITIES**

**Section 611.1.** Add a new Section 611.1 to read as follows:

611.1 General. Magnetic resonance imaging (MRI) facilities shall be inspected, tested, and maintained in accordance with the most current American College of Radiology (ACR) safety Guidelines and NFPA 99.

Exception: As approved by the fire code official, existing facilities may comply with the edition in effect at the time of installation.

**Section 611.2.** Add a new Section 611.2 to read as follows:

611.2 Records. Records shall be maintained of all testing and repair conducted on the MRI device/facility and associated devices and equipment. Records shall be available to the fire code official.

**Section 611.3.** Add a new Section 611.3 to read as follows:

611.3 Zones. All MRI Zones shall be clearly established within the facility with proper signage per the ACR.

**Section 611.4.** Add a new Section 611.4 to read as follows:

611.4 Signage. In addition to the ACR required signage an NFPA 704 shall be required at the entry to the MRI Level IV zone.

**Section 611.4.1.** Add a new Section 611.4.1 to read as follows:

611.4.1. Size. The NFPA 704 signage at the MRI level IV Zone shall be a minimum of 7-1/2 IN X 7-1/2 IN with each individual block being a minimum of 3-1/4 IN X 3-1/4 IN. The following shall be in each individual block. Blue-2, Red-0, Yellow-0, White MRI.

## **Chapter- 9 Fire Protection Systems**

**Section 901.1.1.** Add a new Section 901.1.1 to read as follows:

901.1.1. Approved Contractors. All fire protection systems and appliances referenced by this Code shall be designed, installed, repaired, inspected, tagged, and maintained by an approved licensed contractor. Private fire hydrants shall be inspected and maintained by an approved licensed contractor.

Exceptions:

1. Non-rechargeable portable fire extinguishers are allowed to be inspected by a property owner or management company representative. These individuals are not required to maintain a FSC-D license or Service Technician D. Companies conducting inspections on fire extinguishers shall maintain a



current copy of NFPA 10 as a reference for inspection requirements and shall maintain records of annual inspections as required by NFPA 10.

2. New portable fire extinguishers may be installed and tagged by a general contractor, or a business owner/manager without requiring a fire suppression contractor license.
3. The monthly inspection of portable fire extinguishers required by NFPA 10 Standard for Portable Fire Extinguishers, does not have to be performed by a licensed fire suppression contractor.

**Section 901.3.1.** Add a new Section 901.3.1 to read as follows:

901.3.1 Administrative permits. Any additions or remodeling to existing commercial sprinkler systems involving 20 sprinkler heads or less, fire alarm systems involving 5 devices or less, or temporary removal of system components during construction, will not require a construction permit when approved by the fire code official. The approved letters shall become the de-facto permit for the scope of work described thereon. The letter submittal and review process shall comply with the guidance documents provided by the Division of the Fire Marshal.

**Section 901.4.8.** Add a new Section 901.4.8 to read as follows:

901.4.8 System replacement. Where a fire protection or life safety system is being replaced, the system shall be designed and installed per the current edition of the appropriate NFPA standard. Replacement of fire alarm control units (FACU) shall fall under one of the following conditions:

1. Failure due to damage or age and cannot be repaired or replaced with an identical unit. If the new FACU is not listed as compatible with the remaining existing devices, components, or equipment, the existing required fire alarm system no longer functions as originally designed and installed and the entire system must be brought up to compliance with currently adopted Codes and standards.
2. Building or system expansion or modification. If the existing FACU cannot support additional components or equipment resulting from a system expansion of building modification and a new FACU is not listed as compatible with the existing devices, components, or equipment the existing required system must be brought up to compliance with the currently adopted Codes and standards.
3. Voluntary replacement. If a new FACU is desired, and one cannot be found that is compatible with the existing devices, components, or equipment, the system must either be left in place as-is or brought up to compliance with currently adopted Codes and standards.

**Section 901.7.** Amend Section 901.7 to read as follows:

901.7 Systems out of service. Where a required fire protection system is out of service, the fire department and the fire code official shall be notified immediately and, where required by the fire code official, the building shall be either evacuated or an approved fire watch shall be provided for all occupants left unprotected by the shutdown until the fire protection system has been returned to service.

Where utilized, fire watches shall follow fire watch requirements as required in section 408.

Exception: Facilities with an approved notification and impairment management program. The notification and impairment program for water-based fire protection systems shall comply with NFPA 25

**Section 901.7.7.** Add a new Section 901.7.7 to read as follows:

901.7.7. Permanent removal from service. When a fire protection system is permanently removed from service it shall be completely removed from the structure, to include all valves, panels, devices, appliances, wiring, piping, appurtenances, fire department connections, etc. The only portion of the system permitted to remain includes portions concealed in walls or ceilings. The water riser stub coming out of the ground and associated fire line shall be abandoned in accordance with Colorado Springs Utility requirements. A construction permit per 105.6.26 is required prior to any system removal.

**Section 903.2.2.** Replace Section 903.2.2 to read as follows:

903.2.2 Group B. An automatic sprinkler system shall be provided for Group B occupancies as follows:

**Section 903.2.2.1.** Renumber the previous 903.2.2 to read as follows:

903.2.2.1 Ambulatory care facilities. An automatic sprinkler system shall be installed throughout the entire floor containing an ambulatory care facility where either of the following conditions exist at any time:

1. Four (4) or more care recipients are incapable of self-preservation, whether rendered incapable by staff or staff has accepted responsibility for care recipients already incapable.
2. One or more care recipients that are incapable of self-preservation are located at other than the level of exit discharge serving such a facility. In buildings where ambulatory care is provided on levels other than the level of exit discharge, an automatic sprinkler system shall be installed throughout the entire floor where such care is provided as well as all floors below, and all floors between the level of ambulatory care and the nearest level of exit discharge, including the level of exit discharge.

**Section 903.2.2.2.** Add a new Section 903.2.2.2 to read as follows:

903.2.2.2 Laboratories; research and development or testing. An automatic sprinkler system shall be installed throughout the fire areas utilized for the research and development or testing of lithium-ion or lithium metal batteries.

**Section 903.2.4.** Amend Section 903.2.4 to read as follows:

903.2.4 Group F-1. An automatic sprinkler system shall be provided throughout all buildings containing a Group F-1 occupancy where one of the following conditions exists:

1. A Group F-1 fire area exceeds 12,000 square feet.
2. A Group F-1 fire area is located more than three (3) stories above grade plane.
3. The combined area of all Group F-1 fire areas on all floors, including any mezzanines, exceeds 24,000 square feet.
4. A Group F-1 fire area used to manufacture lithium-ion or lithium metal batteries.

5. A Group F-1 fire area used to manufacture vehicles, energy storage systems or equipment containing lithium-ion or lithium metal batteries where the batteries are installed as part of the manufacturing process.

**Section 903.2.7.2.** Delete Section 903.2.7.2 in its entirety:

**Section 903.2.7.3.** Add a new Section 903.2.7.3 to read as follows:

903.2.7.3 Lithium-ion or lithium metal battery storage. An automatic sprinkler system shall be provided in a room or space within a Group M occupancy where required for the storage of lithium-ion or lithium metal batteries by Section 322 or Chapter 32 of this Code.

**Section 903.2.9.** Amend Section 903.2.9. to read as follows:

903.2.9 Group S-1. An automatic sprinkler system shall be provided throughout all buildings containing a Group S-1 occupancy where one of the following conditions exists:

1. A Group S-1 fire area exceeds 12,000 square feet.
2. A Group S-1 fire area is located more than three (3) stories above grade plane.
3. The combined area of all Group S-1 fire areas on all floors, including any mezzanines, exceeds 24,000 square feet.
4. A Group S-1 fire area used for the storage of commercial motor vehicles where the fire area exceeds 5,000 square feet.
5. A Group S-1 fire area used for the storage of lithium-ion or lithium metal powered vehicles where the fire area exceeds 500 square feet.

**Section 903.2.9.1.** Amend Section 903.2.9.1 to read as follows:

903.2.9.1 Repair garages. An automatic sprinkler system shall be provided throughout all buildings used as repair garages in accordance with Section 406.8 of the International Building Code, as shown:

1. Buildings having two (2) or more stories above grade plane, including basements, with a fire area containing a repair garage exceeding 10,000 square feet.
2. Buildings not more than one story above grade plane, with a fire area containing a repair garage exceeding 12,000 square feet.
3. Buildings with repair garages servicing vehicles parked in basements.
4. A Group S-1 fire area used for the repair of commercial motor vehicles where the fire area exceeds 5,000 square feet.
5. A Group S-1 fire area used for the repair of vehicles powered by lithium-ion or lithium metal batteries that exceed 500 square feet.

**Section 903.2.9.4.** Amend 903.2.9.4 by deleting this section:

**Section 903.3.1.1.1.** Amend Section 903.3.1.1.1 to read as follows:

903.3.1.1.1. Exempt locations. Automatic sprinklers shall not be required in the following rooms or areas where such rooms or areas are protected with an approved monitored automatic fire detection system in accordance with Section 907.2 and NFPA 72 that will respond to visible or invisible particles of combustion. Sprinklers shall not be omitted from a room merely because it is damp, of fire-resistance-rated construction, or contains electrical equipment.

1. A room where the application of water, or flame and water, constitutes a serious life or fire hazard.
2. A room or space where sprinklers are considered undesirable because of the nature of the contents, where approved by the fire code official.
3. Generator and transformer rooms separated from the remainder of the building by walls and floor/ceiling or roof/ceiling assemblies having a fire-resistance rating of not less than 2 hours.
4. Safe deposit or other vaults of fire-resistive construction when used for the storage of records, files, and other documents, when stored in metal cabinets.
5. Elevator machine rooms, provided all of the following are met:
  - 5.1 The elevator equipment is to be installed within an enclosure having a fire-resistive rating no less than that specified by the International Building Code
  - 5.2 No combustible storage is permitted to be stored in the room.
  - 5.3 A portable fire extinguisher rated not less than 2A:20BC is provided at the door giving access into the room.

**Section 903.3.1.1.3.** Add a new Section 903.3.1.1.3 to read as follows:

903.3.1.1.3 Shell building design. Fire sprinkler systems in shell buildings, other than specified office buildings, shall be designed according to the requirements set forth in NFPA 13 for Ordinary Hazard Group II criteria.

**Section 903.3.1.1.4.** Add a new Section 903.3.1.1.4 to read as follows:

903.3.1.1.4 Lithium-ion or lithium metal batteries. Where automatic sprinkler systems are required by this Code for areas containing lithium-ion or lithium metal batteries, the design of the system shall be based upon a series of fire tests conducted or witnessed and reported by an approved testing laboratory involving test scenarios that address the range of variables associated with the intended arrangement of the hazards to be protected.

**Section 903.3.5.2.** Amend Section 903.3.5.2 to read as follows:

903.3.5.2 Residential Combination Services. A single combination water supply shall be allowed on NFPA 13D systems installed in residential occupancies built per the International Residential Code or R-3 occupancies built per the International Building Code.

**Section 903.3.5.3.** Add new Section:903.3.5.3 to read as follows:

903.3.5.3 Dead-end fire service mains. Unless approved by the fire code official, dead-end fire service mains shall not be used when there is not a reliable secondary or redundant means of water supply within 500 feet of a structure along an approved route.

**Section 903.3.5.4.** Add a new Section 903.3.5.4 to read as follows:

903.3.5.4 Safety factor in hydraulic information. A safety factor of 10% shall be incorporated into the fire flow information when designing water-based fire suppression systems.

**Section 903.4.** Amend Section 903.4 by deleting exception #4 and read as follows:

903.4 Sprinkler system supervision and alarms. Valves controlling the water supply for automatic sprinkler systems, pumps, tanks, water levels and temperatures, critical

air pressures and waterflow switches on all sprinkler systems shall be electrically supervised by a listed fire alarm control unit.

Exceptions:

1. Automatic sprinkler systems protecting one- and two-family dwellings.
2. Limited area sprinkler systems in accordance with Section 903.3.8.
3. Jockey pump control valves that are sealed or locked in the open position.
4. Control valves to commercial kitchen hoods, paint spray booths, or dip tanks that are sealed or locked in the open position.
5. Valves controlling the fuel supply to fire pump engines that are sealed or locked in the open position.
6. Trim valves to pressure switches in dry, pre-action, and deluge sprinkler systems that are sealed or locked in the open position.
7. Underground key or hub gate valves in roadway boxes.

**Section 903.4.2.** Amend Section 903.4.2 to read as follows:

903.4.2 Alarms. An approved audible and visual device, located on the exterior of the building in an approved location, shall be connected to each automatic sprinkler system. Such sprinkler waterflow alarm devices shall be activated by water flow equivalent to the flow of a single sprinkler of the smallest orifice size installed in the system. Where a fire alarm system is installed, actuation of the automatic sprinkler system shall actuate the building fire alarm system.

**Section 903.4.2.1.** Add a new Section 903.4.2.1 to read as follows:

903.4.2.1 Interior alarms. A minimum of one interior audible and visual appliance shall be provided and located in a normally occupied space.

Exception: Buildings intended to serve more than one tenant, without common interior access need not be equipped with an interior audible and visual appliance.

**Section 904.2.1.** Amend Section 904.2.1 by adding an exception to read as follows:

904.2.1 Restriction on using automatic sprinkler system exceptions or reductions. Automatic fire-extinguishing systems shall not be considered alternatives for the purposes of exceptions or reductions allowed for automatic sprinkler systems or by other requirements of this Code.

Exception: Data and/or server rooms not exceeding 800 square feet, protected with only an alternative extinguishing system.

**Section 904.13.2.** Amend Section 904.13.2 to read as follows:

904.13.2 System interconnection. The actuation of the fire extinguishing system shall automatically shut down the fuel and/or electrical power supply to the cooking equipment; any electrical receptacles under the hood and any receptacle that could be used to power equipment located under the hood shall also be shut down. The fuel and electrical power supply reset shall be manual.

**Section 904.13.2.1.** Add a new Section 904.13.2.1 to read as follows:

904.13.2.1 Ventilation system interconnection. Upon activation of the fire suppression systems, the exhaust for the hood shall remain on.

**Section 904.13.3.** Add a new Section 904.13.3 to read as follows:

904.13.3 Monitoring. All commercial cooking systems shall be electrically supervised by a listed fire alarm control unit and monitored by an approved supervising station in accordance with NFPA 72.

**Section 905.3.1.** Amend Section 905.3.1 to read as follows:

905.3.1 Height Class—III I standpipe systems shall be installed throughout a building where any of the following conditions exist:

1. Four (4) or more stories are above or below grade plane.
2. The floor level of the highest story is located more than 30 feet above the lowest level of fire department vehicle access.
3. The floor level of the lowest story is located more than 30 feet below the highest level of fire department vehicle access.

Exceptions:

In determining the lowest level of fire department vehicle access, it shall not be required to consider either of the following:

1. Recessed loading docks for four (4) vehicles or less.
2. Conditions where topography makes access from the fire department vehicle to the building impractical or impossible.

**Section 905.3.4.** Amend Section 905.3.4 to read as follows:

905.3.4 Stages. Stages greater than 1,000 square feet in area shall be equipped with a Class I wet standpipe system with 2½ inch hose connections on each side of the stage.

**Section 905.3.4.1.** Delete Section 905.3.4.1 in its entirety:

**Section 905.3.6.** Amend Section 905.3.6 to read as follows:

905.3.6 Helistops and heliports. Buildings with a rooftop helistop or heliport shall be equipped with a Class I standpipe system extended to the roof level on which the helistop or heliport is located in accordance with Section 2007.5.

**Section 905.3.8.** Amend Section 905.3.8 to read as follows:

905.3.8 Landscaped roofs. Buildings or structures that have landscaped roofs and that are equipped with a standpipe system shall have the standpipe system extended to the roof level on which the rooftop garden or landscaped roof is located. Roof top valves shall be protected from tampering.

**Section 905.4.** Amend Section 905.4 to read as follows:

905.4 Location of Class I standpipe hose connections. Class I standpipe hose connections shall be provided in all of the following locations:

1. In every required interior exit stairway, a hose connection shall be provided for each story above and below grade plane. Hose connections shall be located on an intermediate landing unless otherwise approved by the fire code official.

Exceptions:

1. A single hose connection shall be permitted to be installed in the open corridor or open breezeway between open stairs that are not greater than 75 feet apart.
2. Where stairways are constructed with a vestibule in accordance with the International Building Code, the hose connections may be installed inside the floor level vestibule.

**Section 906.1.** Amend section 906.1 to add 7:

906.1 Where required. Portable fire extinguishers shall be installed in all of the following locations:

7. Main electrical rooms not provided with fire sprinklers.

**Section 906.2.1.** Amend Section 906.2.1 by adding an exception, to read as follows:

906.2.1 Certification of service personnel for portable fire extinguishers. Service personnel providing or conducting maintenance on portable fire extinguishers shall possess a valid certificate issued by an approved governmental agency, or other approved organization for the type of work performed.

Exception: Certification or licensing is not required for fire authorities or their employees who are maintaining and recharging air-pressurized-water (APW) extinguishers which are the property of the fire authority.

**Section 907.1.** Amend Section 907.1 to read as follows:

907.1 General. This section covers the application, installation, performance, and maintenance of fire alarm systems and their components in new and existing buildings and structures. The requirements of Section 907.2 apply new buildings and structures, new fire alarm systems in existing buildings, and complete fire alarm system replacements. The requirements of Section 907.9 are applicable to new and existing buildings and structures.

**Section 907.2.** Amend Section 907.2 to read as follows:

907.2 Where required – new buildings and structures. An approved fire alarm system installed in accordance with the provisions of this Code and NFPA 72 shall be provided in new buildings and structures in accordance with Sections 907.2.1 through 907.2.25.1 and provide occupant notification in accordance with Section 907.5 unless other requirements are provided by another section of this Code.

Not fewer than one manual fire alarm box shall be provided in an approved location to initiate a fire alarm signal for fire alarm systems employing automatic fire detectors or waterflow detection devices. Where other sections of this Code allow the elimination of fire alarm boxes due to sprinklers, a single fire alarm box shall be installed.

Exceptions:

1. The manual fire alarm box is not required for fire alarm systems dedicated to elevator recall control and supervisory service.
2. The manual fire alarm box is not required for Group R-2 occupancies unless required by the fire code official to provide a means for fire watch personnel to initiate an alarm during a sprinkler system impairment event. Where provided, the manual fire alarm box shall not be located in an area that is open to the

public.

**Section 907.2.2.2.** Add a new Section 907.2.2.2 to read as follows:

907.2.2.2 Laboratories; research and development or testing. A monitored fire alarm system activated by an air sampling-type smoke detection system, or a radiant energy-sensing detection system shall be installed throughout the entire fire area utilized for the research and development or testing of lithium-ion or lithium metal batteries.

**Section 907.2.4.1.** Add a new Section 907.2.4.1 to read as follows:

907.2.4.1 Manufacturing involving lithium-ion or lithium metal batteries. A monitored fire alarm system activated by an air sampling-type smoke detection system, or a radiant energy-sensing detection system shall be installed throughout the entire fire area where lithium-ion or lithium metal batteries are manufactured; and where the manufacturer of vehicles, energy storage systems, or equipment containing lithium-ion or lithium metal batteries where the batteries are installed as part of the manufacturing process.

**Section 907.2.6.2.** Amend Section 907.2.6.2 to read as follows:

907.2.6.2 Group I-2. An automatic smoke detection system shall be installed in corridors in Group I-2, Condition 1 facilities, and spaces permitted to be open to the corridors by Section 407.2 of the International Building Code. The system shall be activated in accordance with Section 907.4. Group I-2, Condition 2 occupancies shall be equipped with an automatic smoke detection system as required in Section 407 of the International Building Code.

Exceptions:

1. Corridor smoke detection is not required in smoke compartments that contain sleeping units where such units are provided with addressable smoke detectors that comply with UL 268. Such detectors shall provide an audible and visual alarm at the care providers' station attending each unit.
2. Corridor smoke detection is not required in smoke compartments that contain sleeping units where sleeping unit doors are equipped with automatic door-closing devices with integral smoke detectors on the unit sides installed in accordance with their listing, provided that the integral detectors perform the required alerting function.

**Section 907.2.7.** Replace Section 907.2.7 to read as follows

907.2.7 Group M. A monitored fire alarm systems shall be required in Group M occupancies in accordance with Sections 907.2.7.1 and 907.2.7.2.

**Section 907.2.7.1.** Amend the previous Section 907.2.7 by renumbering it to read as follows:

907.2.7.1 Group M Occupant load. A manual fire alarm system that activates the occupant notification system in accordance with Section 907.5 shall be installed in Group M occupancies where one of the following conditions exists:

1. The combined Group M occupant load of all floors is 500 or more persons.
2. The Group M occupant load is more than 100 persons above or below the lowest level of exit discharge.



Exceptions:

1. A manual fire alarm system is not required in covered or open mall buildings complying with Section 402 of the International Building Code.
2. Manual fire alarm boxes are not required where the building is equipped throughout with an automatic sprinkler system installed in accordance with Section 903.3.1.1 and the occupant notification appliances will automatically activate throughout the notification zones upon sprinkler water flow.
3. A monitored fire alarm system activated by an air sampling-type smoke detection system, or a radiant energy-sensing detection system shall be installed in a room or space within a Group M occupancy where required for the storage of lithium ion or lithium metal batteries by Section 321.

**Section 907.2.10.** Replace Section 907.2.10 to read as follows:

907.2.10 Group S. A fire alarm system shall be in a Group S occupancy as required by the following sections 907.2.10.1 and 907.2.10.2.

**Section 907.2.10.1.** Amend the previous Section 907.2.10 by renumbering it to read as follows:

907.2.10.1 Group S Public- and self-storage occupancies. A manual fire alarm system that activates the occupant notification system in accordance with Section 907.5 shall be installed in Group S public- and self-storage occupancies three (3) stories or greater in height for interior corridors and interior common areas. Visible notification appliances are not required within storage units.

Exception: Manual fire alarm boxes are not required where the building is equipped throughout with an automatic sprinkler system installed in accordance with Section 903.3.1.1, and the occupant notification appliances will activate throughout the notification zones upon sprinkler water flow.

**Section 907.2.10.2.** Add a new Section 907.2.10.2 to read as follows:

907.2.10.2 Storage of lithium-ion or lithium metal batteries. A fire alarm system activated by an air sampling-type smoke detection system, or a radiant energy-sensing detection system shall be installed throughout the entire fire area where required for the storage of lithium-ion batteries or lithium metal batteries By Section 321 of this Code.

**Section 907.2.24.** Add a new Section 907.2.24 to read as follows:

907.2.24 Main electrical rooms. Main electrical rooms permitted to be non-sprinklered under NFPA 13 shall be provided with an approved automatic smoke detection system installed in accordance with NFPA 72 in accordance with this Code.

**Section 907.2.25.** Add a new Section 907.2.25 to read as follows:

907.2.25 One- and two-family dwellings in the wildland-urban-interface. Where specifically required on the approved development plan, one- and two-family dwellings (R3 occupancies) located in wildland-urban-interface overlay, shall comply with the fire alarm requirements of 907.2.25.1 and Appendix K, in addition to other requirements of this Code, or as identified on the approved development plans.

**Section 907.2.25.1.** Add a new Section 907.2.25.1 to read as follows:

907.2.25.1 Fire alarm system requirements. Where required, monitored fire alarm systems for one-and two-family dwellings (R3 occupancies) in the wildland-urban-interface overlay shall be provided with the following:

1. Smoke detectors on all levels, in bedrooms, and in hallways near/outside bedrooms
2. Combination of Rate-of-rise and 195 F fixed temperature detectors in kitchen and garage areas.
3. An outside strobe unit with a clear lens, to be visible from the roadway.

**Section 907.5.2.2.** Amend Section 907.5.2.2 to read as follows:

907.5.2.2. Emergency voice/alarm communication systems. Emergency voice/alarm communication systems required by this Code shall be designed and installed in accordance with NFPA 72. The operation of any automatic fire detector, sprinkler water-flow device, or manual fire alarm box shall automatically sound an alert tone followed by voice instructions giving approved information and directions on a general or staged evacuation in accordance with the building's fire safety and evacuation plans required by Section 404. In high-rise buildings, the system shall operate on at least the alarming floor, the floor above, the floor below, the main ground level, and the highest occupied floor. Speakers shall be provided throughout the building by paging zones. At a minimum, paging zones shall be provided as follows:

1. Elevator groups.
2. Exit stairways.
3. Each floor.
4. Areas of refuge as defined in Chapter 2.

Exception:

In Group I-1 and I-2 occupancies, the alarm shall sound in a constantly attended area and a general occupant notification shall be broadcast over the overhead page.

**Section 910.3.5.** Amend Section 910.3.5 to read as follows:

910.3.5 Fusible link temperature rating. Where vents are installed in areas provided with automatic fire sprinklers and the vents operate by a fusible link, the fusible link shall have a temperature rating of at least 100 F (37.8 C) above the operating temperature of the fire sprinklers.

**Section 912.2.3.** Add a new Section 912.2.3 to read as follows:

912.2.3 Multiple Fire department connections (FDC's). When the demand of a sprinkler system exceeds 1,500 gallons per minute, additional fire department connections shall be provided and located as required by the fire code official. All FDC's shall be of equal capacity.

**Section 914.12.** Add a new Section 904.12 to read as follows:

914.12 Extraction operations. Extraction rooms, booths, or hoods, including ductwork where required for hazardous exhaust systems, shall be protected by an approved automatic fire-extinguishing system complying with Chapter 9 where any of the following exist:

1. Extraction processes utilizing flammable and/or combustible materials, or off-gassing flammable vapors from spent plant material or oil.

2. Vapors are released exceeding 25% of the lower flammable limit from flammable liquid extraction processes or flammable liquid post-oil processing.

## **Chapter-10 Means of Egress**

**Section 1009.8.** Amend Section 1009.8 to read as follows

1009.8 Two-way communication. A two-way communication system complying with Sections 1009.8.1, 1009.8.2 and NFPA 72 shall be provided at the landing serving each elevator or bank of elevators on each accessible floor that is one or more stories above or below the level of exit discharge.

Exceptions:

1. Two-way communication systems are not required at the landing serving each elevator or bank of elevators where the two-way communication system is provided within areas of refuge in accordance with Section 1009.6.5.
2. Two-way communication systems are not required on floors provided with ramps conforming to the provisions of Section 1012.
3. Two-way communication systems are not required at the landings serving only service elevators that are not designated as part of the accessible means of egress or serve as part of the required accessible route into a facility.
4. Two-way communication systems are not required at the landings serving only freight elevators.
5. Two-way communication systems are not required at the landing serving a private residence elevator.
6. Two-way communication systems are not required in Group I-2 or I-3 facilities.

## **Chapter-11 Construction Requirements for Existing Buildings**

**Section 1103.1.** Amend Section 1103.1 to read as follows:

1103.1 Required construction. Existing buildings shall comply with not less than the minimum provisions specified in Sections 1103.2 through 1103.7.

Exception: Group U occupancies.

**Table 1103.1.** Delete Table 1103.1 in its entirety.

**Section 1103.2.** Amend Section 1103.2 to read as follows:

1103.2 Emergency responder communication coverage in existing buildings. Existing buildings other than Group R-3, that have in-building, two-way emergency response communication coverage for emergency responders in the building based on existing coverage levels of the public safety communication systems shall be maintained and inspected per this Code and NFPA 1225.

Exception: Where it is determined by the fire code official that the in-building, two-way emergency responder communication coverage system is not needed due to documented signal strength testing per Section 510.4.1 – 510.4.3.

**Section 1103.2.1** Where an existing wired communication system cannot be repaired, Emergency responder radio coverage shall be installed per Section 510.

**Section 1103.3.** Amend Section 1103.3 to read as follows:

1103.3 Existing elevators. In other than Group R-3, existing elevators, escalators, and moving walks shall comply with the requirements of Sections 1103.3.1.

**Section 1103.3.1.** Delete Section 1103.3.1 and replace it with the following

1103.3.1. Elimination of previously installed Phase I emergency recall or Phase II in-car systems shall not be permitted.

**Section 1103.3.2.** Delete Section 1103.3.2 in its entirety.

**Section 1103.4.** Delete the entire Section 1103.4 through 1103.4.10.

**Section 1103.5.** Amend Section 1103.5 to read as follows:

1103.5 Sprinkler systems. An automatic sprinkler system shall be provided in existing buildings in accordance with Sections 1103.5.1 through 1103.5.3.

**Section 1103.5.1.** Deleted Section 1103.5.1 and replace it with the following:

1103.5.1. Group I-1. In Group I-1, an automatic sprinkler system shall be provided in accordance with Section 903.3.1.1.

**Section 1103.5.3.** Amend Section 1103.5.3 to read as follows:

1103.5.3 Group I-2, Condition 2. In addition to the requirements of Section 1103.5.2, exiting buildings of Group I-2, Condition 2 occupancy shall be equipped throughout with an approved automatic sprinkler system in accordance with Section 903.3.1.1. The automatic sprinkler system shall be installed as established by the adopted ordinance.

**Section 1103.5.4.** Delete Section 1103.5.4 in its entirety and replace with the following:

1103.5.4 Group R-3 Care Facilities. An automatic sprinkler system in accordance with section 903.3.1.1, 903.3.1.2, or 903.3.1.3 shall be provided throughout existing R-3 occupancies utilized as a care facility for not more than 5 persons not capable of self-preservation.

**Section 1103.5.5.** Delete Section 1103.5.5 in its entirety.

**Section 1103.6.** Delete the entire Section 1103.6 through 1103.6.2.

**Section 1103.7.6.** Delete Section 1103.7.6 and replace it with the following:

1103.7.6 Group R-3 Care Facilities. A residential fire alarm system shall be provided throughout existing R-3 occupancies utilized as a care facility. The fire alarm shall comply with Section 907 and shall include the following at a minimum:

1. Smoke detectors located per 907.2.11.2.
2. Combination rate-of-rise and 195 F fixed temperature heat detections in the kitchen and garage areas.
3. An outside horn/strobe with a clear lens visible from the roadway.
4. Heat detectors in accessible attics and crawlspaces.

**Section 1103.7.6.2.** Add a new Section 1107.6.2 to read as follows:

1103.7.6.2 Group R-4. A monitored manual fire alarm system that activates the occupant notification in accordance with IFC 907.5 shall be installed in existing R-4 residential care/assisted living facilities. In addition, to the requirements of IFC 907.5, heat detectors shall be provided in accessible attics and crawlspaces.

Exceptions:

1. One- or two-story buildings where all individual sleeping units and contiguous attic and crawl spaces to those units are separated from each other and public or common areas by not less than 1-hour fire partitions and each individual sleeping unit has an exit directly to a public way, egress court or yard.
2. Manual fire alarm boxes are not required throughout the building where all of the following are met:
  - 2.1. The building is equipped throughout with an automatic sprinkler system installed in accordance with Section 903.3.1.1 or 903.3.1.2.
  - 2.2. The notification appliances will activate upon sprinkler water flow.
  - 2.3. Not fewer than one manual fire alarm box is installed at an approved location.
3. Manual fire alarm boxes in resident or patient sleeping areas shall not be required at exits where pull stations are located at all nurses' control stations or other constantly attended staff locations, provided such stations are visible and continuously accessible and that the distance of travel required in Section 907.4.2.1 are not exceeded.

**Section 1103.8.1.** Amend Section 1103.8.1 by deleting exception 1 and 2 to read as follows:

1103.8.1 Where required. Existing Group I-1 and R occupancies shall be provided with single-station smoke alarms in accordance with Section 907.2.11. Interconnection and power sources shall be in accordance with Sections 1103.8.2 and 1103.8.3, respectively.

Exception: Where smoke detectors connected to a fire alarm system have been installed as a substitute for smoke alarms.

**Section 1104.1.** Amend Section 1104.1 to read as follows:

1104.1 General. Means of egress in existing buildings shall comply with the minimum egress requirements where specified in Sections 1104.4 through 1104.25, and the building Code that applied at the time of construction. Where the provisions of this chapter conflict with the building Code that applied at the time of construction, the most restrictive provision shall apply. Existing buildings that were not required to comply with a building Code at the time of construction shall comply with the minimum egress requirements specified in Sections 1104.2 through 1104.25.

**Table 1104.18.** Amend Table 1104.18–Footnotes to read as follows.

e. In smoke compartments containing care recipient's sleeping rooms and treatment rooms, dead-end corridors shall comply with sections 1105.6.5, and 1105.6.6.

f. In Group I-2, Condition 2, care recipient sleeping rooms or any suite that includes care recipient sleeping rooms shall comply with the building Code.

**Section 1105.4.3.2.1.** Delete Section 1105.4.3.2.1.

**Section 1105.5.** Delete Section 1105.5 through 1105.7 in its entirety.  
Section 1105.5 through Section 1105.5.7 has been deleted in its entirety.

**Section 1105.7.** Delete Section 1105.7 through 1105.7.6 in its entirety.

**Section 1107.** Add a new Section 1107 to read as follows:  
SECTION 1107 EXISTING HIGH PILED STORAGE FACILITIES

**Section 1107.1.** Add a new Section 1107.1 to read as follows:  
1107.1 Scope. Existing buildings utilizing high pile storage defined by Chapter 32 in which no official record exists, such as certificate of occupancy, fire department records, or similar verifying high pile use, the building shall comply with this section.

**Section 1107.2.** Add a new Section 1107.2 to read as follows:  
1107.2 General. Based on the storage arrangement and commodity class, existing buildings shall comply with Table 3206.2.

**Section 1107.3.** Add a new Section 1107.3 to read as follows.  
1107.3 Performance requirements. Where structural limitations, as determined by an engineering analysis by a Colorado registered structural engineer, prohibits compliance with Chapter 32, storage arrangement and commodity class shall be in compliance with 104.9 of this Code. Such performance alternatives shall be submitted for review and approved by the fire code official.

**Section 1108.** Add a new Section 1108 to read as follows:  
SECTION 1108 EXISTING ELECTRICAL ENERGY STORAGE SYSTEMS

**Section 1108.1.** Add a new Section 1108.1 to read as follows:  
1108.1 Scope. Existing buildings utilizing existing electrical energy storage systems (ESS) as defined by Section 102, shall comply with this section.

**Section 1108.2.** Add a new Section 1108.2 to read as follows:  
1108.2 Permits. An operational permit will be required per Section 105.5.14.

**Section 1108.2.1.** Add a new Section 1108.2.1 to read as follows:  
1108.2.1 Permit Requirements. In order to obtain an operational permit, the following must be reviewed and approved by the fire code official:  
1. Hazard mitigation analysis per Section 1207.1.4.  
2. Fire remediation plan per Section 1207.1.6.  
3. Decommissioning plan per Section 1207.2.3.

**Section 1108.3.** Add a new Section 1108.3 to read as follows:

1108.3 Repairs. Repairs of ESS systems with other than identical parts shall comply with Section 1207.3.6.

**Section 1108.4.** Add a new Section 1108.4 to read as follows:

1108.4 System Replacement. Replacement of ESS systems shall comply with Section 1203.8.

**Section 1108.5.** Add a new Section 1108.5 to read as follows:

1108.5 Inspection and testing. Inspection and testing of existing ESS systems shall comply with Section 1207.2.2.1.

## **Chapter-12 Energy Systems**

**Section 1207.1.1** Amend Section 1207.1.1 to read as follows:

1207.1.1 Scope. ESS having capacities exceeding the values shown in Table 1207.1.1 shall comply with this section and NFPA 855 as required by the fire code official.

## **Chapter-20 Aviation Facilities**

**Section 2006.4.1.1.** Add a new Section 2006.4.1.1 to read as follows:

2006.4.1.1 Documentation. A vehicle maintenance checklist for aircraft-fueling vehicles shall be documented on a daily basis by the apparatus operator, in accordance with current Air Transport Association (ATA) Specification form 103.04A.

**Section 2007.1.** Amend Section 2007.1 to read as follows:

2007.1. General. Helistops and heliports shall be maintained in accordance with Sections 2007.2 through 2007.8. Helistops and heliports on buildings shall be constructed in accordance with the International Building Code, and NFPA 418.

**Section 2007.5.** Amend Section 2007.5 to read as follows:

2007.5. Standpipe systems. A building with a rooftop helistop or heliport shall be provided with a Class I ~~or Class III~~ standpipe system extended to the roof level on which the helistop or heliport is located. All portions of the helistop and heliport area shall be within 150 feet of a 2½-inch outlet on the standpipe system.

## **Chapter-23 Motor Fuel Dispensing Facilities and Repair Garages**

**Section 2303.2.** Delete Section 2303.2 and replace it with the following:

2303.2. Emergency disconnect switches. Approved, clearly identified, and readily accessible emergency disconnect switches shall be provided at approved locations to stop the transfer of fuel to the fuel dispensers in the event of a fuel spill or other emergency.

Two (2) emergency disconnect switches for exterior fuel dispensers shall be required as follows:

1. Exterior: Shall be located within 100 feet (30.4 m) of, but not less than 20 feet (6 m) from, the fuel dispensers. The switch shall be a mushroom-style switch/ that is readily accessible and must cut off power to all dispensers and pumps.
2. Interior: Shall be located at the attendant duty location. The switch shall be a mushroom-type switch/button which will shut off the flow of fuel and cut off power to all dispensers and pumps.
3. Emergency disconnect switches shall shut off the power in conformance with NFPA 70 and NFPA 30A.
4. Emergency controls shall be of a type that is only manually resettable.

For interior fuel-dispensing operations, the emergency disconnect switch shall be installed at an approved location along the path of egress.

**Section 2303.2.2.** Add a new Section 2303.2.2 to read as follows:

2303.2.2. Emergency disconnect switch signage. Signs shall be provided in approved locations and of the legible size as follows:

1. Interior: At least 1 inch (25.2 mm) in height and 1/8-inch (3.175 mm) stroke red on white background.
2. Exterior: At least 2 inches (51 mm) in height and 1/4-inch (6.35 mm) stroke red on white background.

## **Chapter-31 Tents, Temporary Special Event Structures**

**Section 3103.2.** Amend section 3103.1 to read as follows:

3103.2 Approval required. Tents and membrane structures having an area in excess of 2400 square feet (37 m<sup>2</sup>) shall not be erected, operated, or maintained for any purpose without first obtaining a permit and approval from the fire code official.

Exceptions:

1. Tents open on all sides, which comply with all of the following:
  - 1.1. The aggregate area of multiple tents placed side by side without a fire break clearance of not less than 12 feet (3658 mm) shall not exceed 2400 square feet (65 m<sup>2</sup>) total.
  - 1.2. A minimum clearance of 12 feet (3658 mm) to structures and other tents shall be provided

**Section 3103.6.** Amend Section 3103.6 to read as follows:

3103.6 Construction documents. A detailed site and floor plan for tents or membrane structures in excess of 2400 square feet shall be provided with each application or approval. The tent or membrane structure floor plan shall indicate details of the means of egress facilities, seating capacity, arrangement of the seating and location, and type of heating and electrical equipment. The construction documents shall include an analysis of structural stability.

## **Chapter-32 High-Piled Combustible Storage**

**Section 3201.5.** Add a new Section 3201.5 to read as follows:



3201.5. Facility closure. Facilities containing permitted high-piled storage areas, that are no longer utilizing high-piled storage practices shall comply with sections 3201.5.1 through 3201.5.2.

**Section 3201.5.1.** Add a new Section 3201.5.1 to read as follows:

3201.5.1. Temporarily out-of-service facilities. Facilities without a high-piled combustible storage operational permit; containing fire protection systems not being monitored or inspected on a regular basis shall be deemed permanently out of service and shall be closed in an approved manner complying with section 3201.5.2. High-piled combustible storage facilities that do not meet this section are considered temporarily out of service and shall continue to maintain a permit, monitoring, and inspections.

**Section 3201.5.2** Add a new Section 3201.5.2 to read as follows:

3201.5.2. Facility closure plan. When a high-piled combustible storage facility is considered for permanent closure as defined in Section 3201.5.1, the permit holder for the facility shall apply for closure approval by submitting an application to the fire code official a minimum of 30 days prior to facility closure. The closure plan shall be finalized by an owner/operator scheduled inspection to verify compliance with the application and close out the operational permit.

**Section 3205.7.** Amend Section 3205.7 to read as follows:

3205.7 Designation of storage heights. Where required by the fire code official, an approved visual method of indicating the maximum allowable storage height shall be provided.

**Section 3211.** Add a new Section 3211 to read as follows:

SECTION 3211

BUILDINGS CONTAINING AREAS CAPABLE OF ACCOMMODATING HIGH PILE COMBUSTIBLE STORAGE

**Section 3211.1.** Add a new Section 3211.1 to read as follows:

3211.1 General. Any building containing an area capable of high piled storage, but otherwise not meeting definitions and/or requirements of this chapter, shall be maintained in accordance with sections 3211.1.1 and 3211.1.2.

**Section 3211.1.1.** Add a new Section 3211.1.1 to read as follows:

3211.1.1 High piled combustible storage waiver. The owner or the owner's designated representative shall sign a waiver declaring that the facility will not allow the high-piled storage of combustible materials. By signing this waiver, the owner acknowledges responsibility to comply with all applicable provisions of Chapter 32 should the facility begin the high piled storage of combustible materials.

**Section 3211.1.2.** Add a new Section 3211.1.2 to read as follows:

3211.1.2 Designation of storage heights. Areas capable of high piled combustible storage, but currently not being utilized as such, shall have visual storage height limits displayed in accordance with Section 3205.7.

**Section 3212.** Add a new Section 3212 to read as follows:

## SECTION 3212 EXISTING BUILDINGS

**Section 3212.1.** Add a new Section 3212.1 to read as follows:

3212.1 General. Existing facilities containing high piled combustible storage areas shall be in accordance with Section 1107.

## Chapter-33 Fire Safety During Construction & Demolition

**Section 3301.1.** Amend section 3301.1 as follows:

3301.1 Scope. This chapter shall apply to structures in the course of construction, alteration, or demolition, including those in underground locations. Compliance with NFPA 241 is required for items not specifically addresses herein. This scope applies to commercial, multi-family residential, and townhouse developments.

Exception: One and Two-Family Dwellings, not including townhouses as specified above, shall comply with Chapter 33 but shall be exempt from sections 3303.1, 3303.1.1, 3303.2, and 3303.3

**Section 3303.3.1.** Delete 3303.3.1 in its entirety

**Section 3311.1.1.** Add a new Section 3311.1.1 to read as follows:

3311.1.1. Minimum specifications for temporary roads. Temporary access roads shall be an all-weather surface comprised of either the first lift of asphalt or concrete/compacted gravel to a thickness capable of supporting the imposed loads of fire department apparatus. A 20-ft minimum width shall be maintained unless the permanent road is designed less than 20-ft, in which case the temporary road shall be the intended width of the permanent road. Adequate street signs and fire lane signs shall be installed where applicable. Temporary access roads must be approved and inspected by the fire code official and maintained in accord with this section.

**Section 3312.1.** Amend Section 3312.1 to read as follows:

3312.1 Stairways required. Where building construction exceeds 30 feet to an occupiable floor level above the lowest level of fire department vehicle access, a temporary or permanent stairway shall be provided. As construction progresses, such stairway shall be extended to within one floor of the highest point of construction having secured decking or flooring.

**Section 3313.2.** Amend Section 3313.2 to read as follows:

3313.2 Combustible building materials. When combustible building materials of the building under construction are delivered to a site, a minimum fire flow of 1500 gallons per minute shall be provided. The fire hydrants used to provide this fire-flow supply shall be within the requirements of Table C102.1 of the combustible building materials, as measured along an approved fire apparatus access lane.

**Section 3313.3.1** Delete sections 3313.3.1 through 3313.3.3 and replace with

Section 3313.3.1 Vertical Construction. Where a building of Type III, IV, or V construction the water supply shall provide the minimum fire flow of that equal to the building size and type referenced in Table B105.1(2) for the building.

**Section 3313.4.** Amend Section 3313.4 to read as follows:

3313.4 Vertical construction, Type I and II construction. If When combustible building materials and/or fuel-powered equipment are delivered to the construction site, water supply in accordance with Section 3313.2 shall be provided.

**Section 3314.1.** Amend Section 3314.1 to read as follows:

3314.1 Where required. In buildings required to have standpipes by Section 905.3.1, not less than one standpipe shall be provided for use during construction. Such standpipes shall be installed prior to construction exceeding 30 feet in height above the lowest level of fire department vehicle access. Such standpipes shall be provided with fire department hose connections at locations adjacent to stairways complying with Section 3312.1. As construction progresses, such standpipes shall be extended to within one floor of the highest point of construction having secured decking or flooring.

**Section 3314.1.2.** Add a new Section 3314.1.2 to read as follows:

3314.1.2 Second Required Standpipe. Where more than three (3) exit stairways are required, in a type V building, two (2) temporary standpipes shall be required at opposite ends of the building. The two (2) standpipes shall be interconnected with a fire department connection in an approved location. The second standpipe shall be installed prior to construction exceeding 30 feet in a stairway on the opposite side of the building from the first standpipe.

**Section 3319.** Add new section 3319 to read as follows:

Section 3319. ONE AND TWO-FAMILY DWELLINGS.

**Section 3319.1.** Add new section 3319.1

3319.1 One and Two-Family Dwellings shall comply with this section. The following items are to be inspected by a qualified person and documented in accordance with section 3303.3. This list shall include the following as applicable:

1. Fire hydrants are operational, clearly visible from access roads and are not obstructed.
2. Temporary heating equipment shall be in accordance with section 3304.
3. Street signs are visible and installed.
4. Construction site addressing is visible and clear of obstructions.
5. Control of combustible waste material in accordance with section 3305.
6. Fire apparatus access roads required by section 3311 are maintained clear of obstructions that reduce the width of the usable roadway to less than 20 feet.
7. Portable fire extinguisher(s) on site and quickly accessible for use by all trades.
8. Any trades conducting hot work shall comply with section 3303.8

## **Chapter-34 Tire Rebuilding and Tire Storage**

**Section 3408.3.** Add a new Section 3408.3 to read as follows:

3408.3 Fire sprinklers. Where the area for storage of tires exceeds the requirements of Section 903.2.9.2, the area shall be sprinklered in accordance with Section 903.3.1.1.

## **Chapter-35 Welding and Other Hot Work**

## **Chapter-36 Marinas**

## **Chapter-37 Combustible Fibers**

## **Chapter-38 Higher Education Labs**

## **Chapter-39 Processing and Extraction Facilities**

**Section 3901.1.** Amend Section 3901.1 to read as follows:

3901.1 Scope. Plant processing or extraction facilities shall comply with this chapter the Pikes Peak Regional Building Code, and the International Building Code. The extraction process includes the act of extraction of the oils and fats by use of a solvent, desolventizing of the raw material, production of the miscella, distillation of the solvent from the miscella, and solvent recovery. The use, storage, transfilling, and handling of hazardous materials in these facilities shall comply with this chapter, other applicable provisions of this Code, the Pikes Peak Regional Building Code, and the International Building Code.

**Section 3903.1.** Amend Section 3903.1 to read as follows:

3903.1 Construction. Processing shall be in a building complying with the International Building Code, Pikes Peak Regional Building Code, and this Code.

**Section 3903.1.1.** Add a new Section 3903.1.1 to read as follows:

3903.1.1 Extraction Rooms. Extraction rooms utilizing hazardous materials shall be fully enclosed. The floor, ceiling, and walls of extraction rooms shall be constructed with a minimum of 1-hour rated construction in accordance with the Pikes Peak Regional Building Code.

Exception: Enclosed booths constructed in accordance with Chapter 24.

**Section 3903.1.2.** Add a new Section 3903.1.2 to read as follows:

3903.1.2 Penetrations. Openings and penetrations into extraction rooms shall only be provided for egress, mechanical, electrical, or plumbing systems serving the extraction room. Penetrations shall be sealed in accordance with applicable provisions of the Pikes Peak Regional Building Code, and the International Building Code.

**Section 3903.1.3.** Add a new Section 3903.1.3 to read as follows:

3903.1.3 Egress. For extraction rooms using hazardous materials each room shall be provided with means of egress complying with the following:

1. Exit doors leading from the extraction room shall swing in the direction of egress travel.
2. Exit doors from the extraction room shall be provided with panic hardware.

**Section 3903.1.4.** Add a new Section 3903.1.4 to read as follows:

3903.1.4 Fire Protection. Extraction rooms, booths, or hoods, including ductwork where required for hazardous exhaust systems, shall be protected by an approved automatic fire-extinguishing system complying with Chapter 9 where any of the following exist:

1. Extraction processes utilizing flammable and/or combustible materials, or off-gassing flammable vapors from spent plant material or oil.
2. Vapors are released exceeding 25% of the lower flammable limit from flammable liquid extraction processes or flammable liquid post-oil processing.

**Section 3903.1.5.** Add a new Section 3903.1.5 to read as follows:

3903.1.5 Electrical equipment. Extraction rooms, hoods, or booths utilizing hazardous materials shall be classified as a Class 1 Division 1 area in accordance with NFPA 70.

**Section 3903.7.** Add a new Section 3903.7 to read as follows:

3903.7 Smoking and open flames. Smoking, open flames, direct-fired heating devices, and other similar equipment shall be prohibited in areas where flammable vapors exist.

**Section 3903.7.1.** Add a new Section 3903.7.1 to read as follows:

3903.7.1 Smoking. Smoking shall be prohibited, and No Smoking signs shall be provided in accordance with Section 5003.7.1.

**Section 3904.3.** Add a new Section 3904.3 to read as follows:

3904.3 Equipment Field Verification.

**Section 3904.3.1.** Add a new Section 3904.3.1 to read as follows:

3904.3.1 Re-certification. The extraction equipment shall be re-certified every 2 years by the manufacturer or by an approved third party. The re-certification report shall include the following items from 3904.2.2.2: 1-4, 5, 7 & 9-11.

**Section 3904.4.** Add a new Section 3904.4 to read as follows:

3904.4 Refrigerated equipment. Refrigerators, freezers, and other cooling equipment used to store or process flammable and/or combustible materials shall be listed for the storage of flammable/combustible liquids or be listed for Class 1, Division 1 locations. Equipment shall be in accordance with NFPA 45, the applicable provisions of the Pikes Peak Regional Building Code, the International Building Code, and this Code.

**Section 3904.5.** Add a new Section 3904.5 to read as follows:

3904.5 Explosion Hazards. Where an explosion hazard exists, heating equipment such as vacuum ovens, heating mantels, heat guns, or other equipment shall not be used to heat flammable or combustible liquids or oils containing LPG.

**Section 3905.1.** Amend Section 3905.1 to read as follows:

3905.1 Gas detection. For extraction processes utilizing flammable gases as solvents, a continuous gas detection system complying with Section 916 shall be provided. The gas detection threshold shall be not greater than 25 percent of the lower explosive limit/lower flammability limit (LEL/LFL) of the materials.

**Section 3905.1.1.** Add a new Section 3905.1.1 to read as follows:

3905.1.1 System design. The flammable gas detection system shall be listed or approved and shall be calibrated to the types of fuels or gases used for the extraction process. The gas detection system shall be designed to activate when the level of flammable gas exceeds 25 percent of the LFL.

**Section 3905.1.2.** Renumber the previous Section 3905.1.1 to 3905.1.2 to read as follows:

3905.1.2 Operation. Activation of the gas detection system shall result in all the following:

1. Initiation of distinct audible and visual alarm signals in the extraction room.
2. Deactivation of all heating systems located in the extraction room.
3. Activation of the mechanical ventilation system, where the system is interlocked with gas detection.
4. De-energize all light switches and electrical outlets.

**Section 3905.1.3.** Add a new Section 3905.1.3 to read as follows:

3905.1.3 Gas detection system components. Gas detection system control units shall be listed and labeled in accordance with UL 864 or UL 2017 for use with the vapors being detected.

**Section 3905.1.4.** Renumber the previous Section 3905.1.2 to 3905.1.4 to read as follows:

3905.1.4 Failure of the gas detection system. Failure of the gas detection system shall result in the deactivation of the heating system; activation of the mechanical ventilation system where the system is interlocked with the gas detection system.

**Section 3905.1.5.** Add a new Section 3905.1.5 to read as follows:

3905.1.5 Interlocks. Electrical components within the extraction room shall be interlocked with the gas detection system. Activation of the gas detection system shall disable all light switches and electrical outlets.

**Section 3905.3.** Add a new Section 3905.3 to read as follows:

3905.3 Transfilling. Filling LPG extraction equipment supply containers shall comply with NFPA 1 and NFPA 58.

**Section 3905.4.** Add a new Section 3905.4 to read as follows:

3905.4 LPG containers. LPG containers not in use shall not be stored within extraction rooms.

**Section 3905.5.** Add a new Section 3905.5 to read as follows:

3905.5 Grounding and bonding. Precautions shall be taken within flammable and/or combusting material extraction rooms to minimize the possibility of ignition by static electrical sparks through static bonding and grounding of extraction equipment, ducts, and piping, etc., installed in accordance with NFPA 70.

**Section 3906.** Add a new Section 3906 to read as follows:

**SECTION 3906 EXHAUST**

**Section 3906.1.** Add a new Section 3906.1 to read as follows:

3906.1 Exhaust system. A hazardous exhaust system in accordance with the Pikes Peak Regional Building, the International Building Code, the International Mechanical Code, and this Code shall be provided for flammable and/or combustible material extraction processes.

Exceptions:

1. Unheated distillation process with less than 1/2 gallon of flammable and/or combustible materials performed under a listed and labeled chemical fume hood installed in accordance with this Code, the Pikes Peak Regional Building Code, and the International Mechanical Code.
2. Solvent distillation units in compliance with Section 5705.4.

**Section 3907.** Add a new Section 3907 to read as follows:  
SECTION 3907 CO2 EXTRACTIONS

**Section 3907.1.** Add a new Section 3901.1 to read as follows:

3907.1 Carbon Dioxide Solvent. Extraction facilities using carbon dioxide as a solvent shall comply with 5307.

**Section 3907.2.** Add a new Section 3907.2 to read as follows:

3907.2 Calibration. Auto calibrating and self-zeroing devices or detectors shall be prohibited.

## **Chapter 40 - STORAGE OF DISTILLED SPIRITS AND WINES**

**Section 4003.3.4.** Amend Section 4003.4 to read as follows:

4003.3.4 Electrical. Electrical wiring and equipment shall be installed and maintained in accordance with Section 603, Section 608, and NFPA 70.

**Section 4003.4.** Amend Section 4003.4 to read as follows:

4003.4 Lightning. Structures containing barrel storage, shall be protected from lightning. The lightning protection equipment shall be installed in accordance with NFPA 70 and NFPA 780.

**Section 4003.5.** Add a new Section 4003.5 to read as follows:

4003.5 Standby or emergency power. Where mechanical ventilation, treatment systems, limit controls, alarm, detection, or other electrically operated systems are required, such systems shall be provided with an emergency or standby power system in accordance with NFPA 70 and Section 604.1, as amended.

Exception: Standby power for mechanical ventilation and limit control systems shall not be required where an approved fail-safe engineered system is installed.

**Section 4003.6.** Add a new Section 4003.6 to read as follows:

4003.6 Security. The manufacture, production, and storage of distilled spirits and wines shall be secured against unauthorized entry and safeguarded in an approved manner.

**Section 4004.1.1.** Add a new Section 4004.1.1 to read as follows:

4004.1.1 Storage plan. Aisle and storage plans shall be submitted in accordance with Chapter 50, as amended.

**Section 4004.1.2.** Add a new Section 4004.1.2 to read as follows:

4004.1.2 Emergency Planning. Fire safety and evacuation plans in accordance with Section 404, as amended, shall be prepared, and maintained.

**Section 4006.1.** Amend Section 4006.1 to read as follows:

4006.1 Hazard identification signs. Unless otherwise exempted by the fire code official, visible hazard identification signs, as specified in Section 5003.5 through 5003.6.2 and NFPA 704 for the specific material contained, shall be placed on stationary containers and above-ground tanks; at entrances to locations where hazardous materials are stored, dispensed, used, or handled in quantities requiring a permit; and at specific entrances and locations designated by the fire code official.

Exception: Casks are not required to be labeled.

**Section 4006.1.1.** Amend Section 4006.1.1 to read as follows:

4006.1.1 Maintenance and style. Signs and markings required by Section 4006.1 shall not be obscured or removed; shall be in English as a primary language or in symbols allowed by this Code; shall be durable; and the size, color, and lettering shall be as specified in Section 5003.6 through 5003.6.1.

## **Chapter-50 Hazardous Materials**

**Section 5001.2.2.** Amend Section 5001.2.2 to read as follows:

5001.2.2 Hazard Categories. Hazardous materials shall be classified according to hazard categories. The categories include materials regulated by this chapter and materials regulated elsewhere in this Code, including Appendix E for Hazard Categories.

**Section 5001.3.3.19.** Add a new Section 5001.3.3.19 to read as follows:

5001.3.3.19 Detection of a gas or vapor. Detection and alarm are required where a release of a hazardous material gas or vapor could cause immediate harm to any person by exceeding the permissible exposure level (PEL) of the gas, by decreasing the oxygen level to below 19.5 percent, or by exceeding 25 percent of the lower flammable limit (LFL) of a flammable gas. A detection and alarm system may initiate a means of mitigation of the dangerous effects of a release as well as notification to occupants.

**Section 5003.5.** Amend Section 5003.5 to read as follows:

5003.5 Hazard identification signs. Unless otherwise exempted by the fire code official, visible hazard identification signs as specified in NFPA 704 for the specific material contained shall be placed on stationary containers and above-ground tanks and at entrances to locations where hazardous materials are stored, dispensed, used, or handled in quantities requiring a permit and at specific entrances and locations per section 5003.6.2 or designated by the fire code official.

**Section 5003.5.1.** Amend Section 5003.5.1 to read as follows:



5003.5.1 Markings. Individual containers, cartons, or packages shall be conspicuously marked or labeled in an approved manner. Rooms or cabinets containing hazardous materials shall be conspicuously labeled, for example: COMPRESSED GAS.

**Section 5003.6.1.** Add a new section 5003.6.1 to read as follows:

5003.6.1 Size. Exterior NFPA 704 signs shall be a minimum of 10 IN X 10 IN with each individual block being a minimum of 5 IN X 5IN. The hazard ranking numbers shall be a minimum of 4 IN in height and 2.5 IN in width, with a 5/8 stoke. Interior NFPA 704 signs shall be a minimum of 7-1/2 IN X 7-1/2 IN with each individual block being a minimum of 3-1/4 IN X 3-1/4 IN. The hazard ranking numbers shall be a minimum of 3 IN in height and 2 IN in width, with a 13/32 stroke. NFPA 704 labels on containers, cartons, cabinets, cylinders, and packages shall be a minimum of 5 IN X 5 IN with each individual block being a minimum of 2-1/2 IN X 2-1/2 IN. The hazard ranking numbers shall be a minimum of 2 IN in Height and 1.5 IN in width, with a 5/16 stroke. All letters and numbers on the NFPA 704 shall be black in color.

**Section 5003.6.2.** Add a new Section 5003.6.2 to read as follows:

5003.6.2 Location of Signs. Signs shall be in locations approved by the authority having jurisdiction and as a minimum shall be posted at the following locations:

1. Two (2) exterior walls, doors, or enclosures containing a means of access to a building or facility.
2. Each access to a room or area that contains hazardous materials
3. Each principal means of access to an exterior storage area that contains hazardous materials.

## **Chapter-53 Compressed Gasses**

**Section 5306.2.4.** Add a new Section 5306.2.4 to read as follows:

5306.2.4 Fire Protection. When the building is not normally provided with a fire sprinkler system, and the room does not exceed 24 square feet; a single ordinary temperature, quick response sprinkler head from the domestic water supply after the building's backflow preventer is allowed. The feed to the sprinkler shall have a quarter-turn isolation valve to facilitate changing the sprinkler. This valve must be chained and locked in the open position and be labeled indicating the valve function. For this sprinkler head configuration, no design area calculations or sprinkler reviews are required. A minimum temperature of 40°F must be maintained in this room and anywhere the water supply piping is run.

**Section 5306.5.1.** Add a new Section 5306.5.1 to read as follows:

5306.5.1 Medical gas systems in veterinary clinics. Where containers of medical gases are limited to oxygen supply, regardless of quantity amounts located inside or outside buildings, veterinary clinics shall comply with and design to a minimum Level 3 –Medical Gas Supply, Piped Medical Gas and Vacuum System as required by the current edition of NFPA 99. A higher-level design may be required if the system includes additional medical gases. Medical gas systems shall be designed by a registered design professional and comply with the fire Code, the current edition of NFPA 99, and all appropriate industry standards, Codes, regulations, and practices. Medical gas systems

shall be installed, inspected, verified, and maintained by personnel in compliance with Section 5306.6.

**Section 5307.3.2.** Amend Section 5307.3.3 by adding subsection 3 to read as follows:  
5307.3.2 Gas detection system. Where ventilation is not provided in accordance with Section 5307.3.1, a gas detection system shall be provided in rooms or indoor areas and in below-grade outdoor locations with insulated carbon dioxide systems. Carbon dioxide sensors shall be provided within 12 inches (305 mm) of the floor in the area where the gas is expected to accumulate or other approved locations. The system shall be designed as follows:

1. Activates an audible and visible supervisory alarm at a normally attended location upon detection of a carbon dioxide concentration of 5,000 ppm (9000 mg/m<sup>3</sup>).
2. Activates an audible and visible alarm within the room or the immediate area where the system is installed upon detection of a carbon dioxide concentration of 30,000ppm (54 000 mg/m<sup>3</sup>).
3. Activates a fail-safe feature that shuts off flow from the supply tank upon reaching 5,000 ppm (9000 mg/m<sup>3</sup>) and/or loss of power.

**Section 5703.3.2.1.** Add a new Section 5703.3.2.1 to read as follows:

5307.3.3 Point of use detection. An approved gas detector is required to be installed at each point of use where the use location is remote from the supply.

**Section 5307.3.3.** Add a new Section 5703.3.3 to read as follows:

5307.3.3 Piping. Piping for all carbon dioxide and inert gas systems shall be located and supported to protect against damage from strain on piping and fittings, the effects of expansion, contraction, and vibration, mechanical damage, and heat sources.

**Section 5307.3.3.1.** Add a new Section 5703.3.3.1 to read as follows:

5307.3.3.1 Piping requirements. Piping, tubing, and hoses and fittings shall be designed to a bursting pressure of at least four (4) times the system design pressure.

**Section 5307.3.3.2.** Add a new Section 5703.3.3.2 to read as follows:

5307.3.3.2 Pipe labeling. All piping associated with carbon dioxide and inert gas systems shall be labeled in accordance with ASME A13.1 to indicate the material conveyed and the direction of flow.

**Section 5307.3.3.3.** Add a new Section 5703.3.3.3 to read as follows:

5307.3.3.3 Couplings. Where carbon dioxide (CO<sub>2</sub>) and inert gas piping is run through areas not protected with gas detection and ventilation as required by this Code, there shall be no couplings, unions, or other joints that may pose a threat due to failure, as determined by the fire code official.

**Section 5307.3.4.** Add a new Section 5703.3.4 to read as follows:

5307.3.4 Signage. Hazard identification signs shall be posted at the entrance to the room and indoor areas where the carbon dioxide enrichment process is located, and at the entrance to the room or indoor area where the carbon dioxide containers are located. The sign shall be not less than 8 inches (200 mm) in width and 6 inches (150 mm) in height and indicate:

**Section 5307.3.4.1.** Add a new Section 5703.3.4.1 to read as follows:

5307.3.4.1 Carbon dioxide systems.

CAUTION—CARBON DIOXIDE GAS VENTILATE THE AREA BEFORE ENTERING  
A HIGH CARBON DIOXIDE (CO<sub>2</sub>) GAS CONCENTRATION IN THIS AREA CAN  
CAUSE ASPHYXIATION

**Section 5307.3.4.2.** Add a new Section 5703.3.4.2 to read as follows:

5307.3.4.2 Inert gas systems.

CAUTION –INERT GAS IF ALARM IS SOUNDING VENTILATE THE AREA BEFORE  
ENTERING A HIGH INERT GAS CONCENTRATION IN THIS AREA CAN CAUSE  
ASPHYXIATION

**Section 5307.4.5.** Amend Section 5307.4.5 to read as follows.

5307.4.5 Signage. Shall be in compliance with Section 5307.4.1.

**Section 5308.** Add a new Section 5308 to read as follows:

SECTION 5308 CARBON DIOXIDE (CO<sub>2</sub>) GAS ENRICHMENT SYSTEMS USING A  
NATURAL GAS BURNER IN PLANT GROWING (HUSBANDRY) APPLICATIONS

**Section 5308.1.** Add a new Section 5308.1 to read as follows:

5308.1 General. Natural gas burners that are utilized to generate carbon dioxide (CO<sub>2</sub>) in plant growing (husbandry) applications shall comply with Sections 5308.2 through 5308.6. A mechanical exhaust system shall be provided as required by 5308.6 and the International Mechanical Code. This Code section shall apply to all applications in new and existing buildings.

**Section 5308.2.** Add a new Section 5308.2 to read as follows:

5308.2 Permits. Permits shall be required in accordance with Sections 105.6 and 105.7.

**Section 5308.3.** Add a new Section 5308.3 to read as follows:

5308.3 Equipment. Natural gas burners shall be listed, labeled, and installed in accordance with the manufacturer's installation instructions. Piping systems, combustion, and ventilation air, and venting for natural gas appliances shall be designed and installed in accordance with approved standards, the International Fuel Gas Code, and manufacturer's recommendations.

**Section 5308.4.** Add a new Section 5308.4 to read as follows:

5389.4 Required protection. A carbon dioxide (CO<sub>2</sub>) gas detection system shall be provided in accordance with Section 5308.4.1 and a carbon monoxide (CO) gas detection system shall be provided in accordance with Section 5308.4.2.

**Section 5308.4.1.** Add a new Section 5308.4.1 to read as follows:

5308.4.1 Carbon dioxide (CO<sub>2</sub>) detection. Rooms or areas where carbon dioxide is used indoors or in enclosed outdoor locations shall be provided with a carbon dioxide gas detection and alarm system.

**Section 5308.4.1.1.** Add a new Section 5308.4.1.1. to read as follows:

5308.4.1.1. Detectors. Detectors shall comply with all of the following:

1. Suitable for the use intended and shall be listed or approved.
2. Permanently mounted.
3. Installed at a height of no more than 18 inches above the floor.
4. Directly connected to building electrical or fire alarm systems and protected from accidental disconnection or damage.
5. Auto calibrating and self-zeroing devices are not permitted unless they can be zeroed and spanned.
6. Where the point of use is remote from the supply a detection and alarm system is required for each point of use.

**Section 5308.4.1.2.** Add a new Section 5308.4.1.2 to read as follows:

5308.4.1.2 Notification. The detection system shall be capable of notifying personnel in the immediate area of a leak at 5,000 parts per million. Upon reaching 30,000 parts per million this system must notify all building occupants of a mandatory evacuation.

Exception: Systems with a fail-safe feature that shuts off carbon dioxide flow from the source upon reaching 5,000 parts per million or loss of power are not required to notify building occupants at 30,000 parts per million.

**Section 5308.4.1.3.** Add a new Section 5308.4.1.3 to read as follows:

5308.4.1.3 Warning sign. Shall be in compliance with Section 5307.3.4.1.

**Section 5308.4.1.4.** Add a new Section 5308.4.1.4 to read as follows:

5308.4.1.4 Shut down. All carbon dioxide (CO<sub>2</sub>) burner systems shall shut down in the event of a loss of electrical power to the carbon dioxide (CO<sub>2</sub>) detectors.

**Section 5308.4.2.** Add a new Section 5308.4.2 to read as follows:

5308.4.2 Carbon monoxide (CO) detection. Rooms or areas where carbon dioxide burners are used indoors or in enclosed outdoor locations shall be provided with a carbon monoxide gas detection and alarm system.

**Section 5308.4.2.1.** Add a new Section 5308.4.2.1 to read as follows:

5308.4.2.1 Detectors. Detectors shall comply with all of the following:

1. Shall be listed or approved for the intended use.
2. Permanently mounted.
3. Installed per manufacturer's recommendations and directions.
4. Directly connected to building electrical and protected from accidental disconnection or damage.

**Section 5308.4.2.2.** Add a new Section 5308.4.2.2 to read as follows:

5309.4.2.2 Notification. The CO detection system shall be capable of notifying personnel in the immediate area of a leak at 35 PPM and upon activation shall initiate the following:

1. Close the valve to each burner.
2. Activate the mechanical exhaust system.

**Section 5308.4.2.4.** Add a new Section 5308.4.2.4 to read as follows:

5308.4.2.4 Shut down. All carbon dioxide (CO<sub>2</sub>) burner systems shall shut down in the event of a loss of electrical power to the carbon monoxide (CO) detectors.

**Section 5308.5.** Add a new Section 5308.5 to read as follows:

5308.5 Ventilation. Mechanical ventilation shall be installed in addition to a detection and alarm system as required in Section 5308.4. All gas systems shall have ventilation installed as required by Sections 5001.3.3.10, 5004.3 through 5004.3.1, and the International Mechanical Code. Construction plan data and/or a technical report by a registered design professional shall be submitted to the fire code official demonstrating compliance with the requirements. Approved plans/permits for ventilation from the governing mechanical authority shall be prima facie evidence for compliance.

Exception: No ventilation is required for those systems equipped with a gas detection fail-safe feature, as described in the exception for 5308.4.1.2.

**Section 5309.5.** Add a new Section 5309.5 to read as follows:

5309.5 Detector testing. The equipment, systems and devices listed in 5308.4 shall be tested annually and in accordance with the approved manufacturer's requirements.

## **Chapter-56 Explosives and Fireworks**

**Section 5601.1.3.** Delete Section 5601.1.3 and replace to read as follows:

5601.1.3 Fireworks. It is unlawful for any person to possess, store, offer for sale, expose for sale, sell at retail, use, or explode any fireworks except as allowed in the City Code of Colorado Springs Chapter 9, Article 7, Part 3.

Exceptions:

1. Storage and handling of fireworks as allowed in Section 5604.
2. Manufacture, assembly, and testing of fireworks as allowed in Section 5605.
3. The use of fireworks for fireworks displays as allowed in Section 5608.
4. The possession, storage, sale, handling, and use of a specific type of Division 1.4G fireworks where allowed by applicable laws, ordinances, and regulations, provided such fireworks and facilities comply with NFPA 1124, CPSC 16 CFR Parts 1500 and 1507, and DOTn 49 CFR Parts 100–185, for consumer fireworks.

**Section 5601.2.4.** Delete Section 5601.2.4 and replace to read as follows:

5601.2.4 Financial responsibility. Before a permit is issued, as required by Section 5601.2, the applicant shall file insurance requirements directly to Colorado Springs Fire Department for the purpose of the payment of all damages to persons or property that arise from, or are caused by, the conduct of any act authorized by the permit upon which a judicial judgment result. The certificate of insurance shall list the City of Colorado Springs as an additional insured and shall have the following minimum limits:

1. General liability for each occurrence-\$1,000,000
2. General liability aggregate -\$2,000,000
3. Professional liability -\$1,000,000
4. Automobile liability -\$1,000,000 per occurrence.

5. Workers' Compensation and Employers Liability as required by statute. Employer's Liability coverage is to be carried for a minimum limit of \$500,000

The fire code official is authorized to specify a greater or lesser amount when, in his or her opinion, conditions at the location of use indicate a greater or lesser amount is required. Government entities shall be exempt from this insurance requirement.

**Section 5608.1.** Amend Section 5608.1 to read as follows:

5608.1 General. Outdoor fireworks display, use of pyrotechnics before a proximate audience, and pyrotechnic special effects in motion picture, television, theatrical, and group entertainment productions shall comply with Sections 5608.2 through 5608.10 and NFPA 1123, or NFPA 1126 and/or NFPA 160, as applicable.

**Section 5608.2.1.1.** Add a new Section 5608.2.1.1 to read as follows:

5608.2.1.1 Fire extinguishers. The person, group, or organization sponsoring the firework display shall consult with the fire code official to determine the level of fire protection required. Four (4) or more fire extinguishers of the classification and size as approved by the fire code official shall be readily accessible while the pyrotechnics are being loaded, prepared for firing, or fired.

**Section 5608.2.1.2.** Add a new Section 5608.2.1.2 to read as follows:

5608.2.1.2 Standby personnel. Standby fire department personnel and equipment may be required by the fire department prior to and during the event. The fire department shall be reimbursed by the event coordinator or responsible party for all costs associated with providing this service.

**Section 5608.2.1.3.** Add a new Section 5608.2.1.3 to read as follows:

5608.2.1.3 Weather conditions. Firework displays if allowed during High or Very High fire danger conditions shall require a minimum of one dedicated brush truck with sufficient staffing to operate said vehicle at the site of the display both prior to and throughout the event. The total number of equipment and staffing shall be approved by the fire chief. Firework displays are prohibited during any issued burn bans, extreme fire danger, or red flag warning conditions.

Exception: Scheduled public events held over well-irrigated landscaping and/or bodies of water as approved by the fire code official and the presence of standby equipment and personnel.

**Section 5608.6.1.** Add a new Section 5608.6.1 to read as follows:

5608.6.1 Mortar rack reinforcement. Aboveground mortar racks shall be constructed and secured to withstand a catastrophic malfunction in a mortar rack(s). Added sandbag reinforcement to the mortar rack(s) shall be required. Sandbags shall be used to secure mortar rack(s) and to prevent tip-over or movement. Placement of sandbags at the mortar rack(s) shall be on spectator sides of the rack(s) and on each end of a rack or group of racks at a minimum. The sandbags shall be stacked to a minimum height of three-fourths (3/4) of the rack(s) frame height.

**Section 5608.8.1.** Add new Section 5608.8.1 to read as follows:

5608.8.1 Wind speed. Firework displays shall not be fired when wind speeds measured within 10 feet of ground level, exceed 15 mph.

## **Chapter-62 Organic Peroxides**

**Section 6109.13.** Amend Section 6901.3 to read as follows:

6109.13 Protection of containers. LP-gas containers shall be stored within a suitable enclosure or otherwise protected against tampering. Vehicle impact protection shall be provided as required by Section 6107.4.

## **Chapter-63 Oxidizers, Gasses, and Cryogenic Fluids**

## **Chapter-64 Pyrophoric Materials**

## **Chapter-65 Pyroxylin (Cellulose Nitrate) Plastics**

## **Chapter-66 Unstable (reactive) Materials**

## **Chapter-67 Water Reactive Solids and**

## **Chapter-80 Referenced Standards**

**Section 8001.1.** Add a new Section 8001.1 as follows:

Section 8001.1 Adoption of Standards. In every case where this Code references NFPA standards, the most current edition, to include TIA's and errata's of said standards is hereby adopted. The current edition shall become effective on January 1 of the year following NFPA's effective date for said standard.

Amend Chapter 80 by Adding the following referenced standards:

ACR	American College of Radiology safety guidelines.
DISCUS	Distilled Spirits Council of U.S. 1250 Eye Street, NW Suite 400, Washington D.C. 20005. Recommended Fire Protection Practices for Distilled Spirits Beverage Facilities.
NFPA 1	Fire Code
NFPA 418	Standard for Heliports.
NFPA 497	Recommended Practice for the Classification of Flammable Liquids, Gases, or Vapors and of Hazardous (Classified) Locations for Electrical Installations in Chemical Process Areas.
NFPA 855	Standard for Installation of Stationary Energy Storage Systems
NFPA 1225	Standard for Emergency Services Communications.
UL 2272	2016 Electrical Systems for Personal E-Mobility Devices
UL 2849	2020 Electrical Systems for eBikes
UL 2202	2009 Standard for Electrical Vehicle Charging System Equipment
UL 2594	2016 Standard of Electric Vehicle Supply Equipment
MUTCD	Manual on Uniform Traffic Control Devices for Streets and Highways

**Appendix A. Delete Appendix A in its entirety.**

**Appendix-B Fire Flow Requirements**

**Section B104.1.** Amend Section B104.1 to read as follows.

B104.1 General. The fire-flow calculation area shall be the total floor area of all floor levels within the exterior walls, and under the horizontal projections of the roof of a building, except as modified in Section B104.3 and B104.4.

**Section B104.4.** Add a new Section B104.4 to read as follows:

B104.4 Townhomes. The single largest townhome, per group of attached units, shall be permitted to be considered as the fire-flow calculation area, for townhomes separated in accordance with the International Residential Code.

**Table B105.1 (1)** Amend Table B105.1(1) to read as follows:

TABLE B105.1(1)			
REQUIRED FIRE-FLOW FOR ONE- AND TWO-FAMILY DWELLINGS, GROUP R3 AND R4 BUILDINGS, AND TOWNHOUSES			
FIRE-FLOW CALCULATION AREA (square feet)	AUTOMATIC SPRINKLER SYSTEM (Design Standard)	MINIMUM FIRE-FLOW (gallons per minute) <sup>a</sup>	FLOW DURATION (hours)
0-3,600	No automatic sprinkler system	1,500	1
3,601 and greater	No automatic sprinkler system	Value in Table B105.1(2)	Duration in Table B105.1(2) at the required flow rate
0-3,600	Section 903.3.1.2 or Section 903.3.1.3 of International Fire Code	1,500	1/2
3,601 and greater	Section 903.3.1.2 or Section 903.3.1.3 of International Fire Code	1/2 value in Table B105.1(2)	1
For SI: 1 square foot = 0.0929 m <sup>2</sup> , 1 gallon per minutes = 3.785 L/m			
a. Reduced fire-flow shall not be less than 1,500 gallons per minute.			

**Table B105.2.** Amend Table B105.2 to read as follows:

TABLE B105.2		
REQUIRED FIRE-FLOW FOR BUILDINGS OTHER THAN ONE-AND TWO-FAMILY DWELLINGS, GROUP R3 AND R4 BUILDINGS, AND TOWNHOUSES		
AUTOMATIC SPRINKLER SYSTEM (Design Standard)	MINIMUM FIRE-FLOW (Gallons per minute)	FLOW DURATION (hours)
No automatic sprinkler system	Value in Table B105.1(2)	Duration in Table B105.1(2)



Section 903.3.1.1 of the International Fire Code	Minimum of 50% of the value in Table B105.1(2) <sup>a</sup>	Duration in Table B105.1(2) at the reduced flow rate
Section 903.3.1.2 of the International Fire Code	Minimum of 50% of the value in Table B105.1(2) <sup>a b</sup>	Duration in Table B105.1(2) at the reduced flow rate
For SI: 1 gallon per minute = 3.785 L/m		
The reduced fire flow shall not be less than 1,500 gallons per minute		

**Section B105.4.** Add a new Section B105.4 to read as follows:

B105.4 Simultaneous Flows. Any hydrant must produce a minimum flow of 1,500 gallons per minute at 20 psi of residual pressure when flowing individually, or a minimum of 750 gallons per minute at 20 psi residual pressure when flowing simultaneously to be considered by Table C105.1 or by Table C105.1's footnotes as one of the minimum hydrants required to protect any structure, hazard, or potential hazard.

**Appendix-C Fire Hydrant Location & Distribution**

**TABLE C102.1** Footnotes. Amend table footnotes as follows:

Table C102.1 footnotes:

- a. Where streets are provided with median dividers that cannot be crossed by firefighters pulling hose lines, or where arterial streets are provided with four (4) or more traffic lanes and have a traffic count of more than 30,000 vehicles per day, hydrant spacing shall average 1000 feet on each side of the street and be arranged on an alternating basis.
- b. Where new water mains are extended along streets where hydrants are not needed for the protection of a structure or similar fire problems, the hydrants shall be provided at a spacing not to exceed 1,000 feet to provide for transportation hazards.
- c. Regardless of hydrant spacing, no hydrant distributed for a structure shall be located more than 500 feet from a prospective engine stopping point on a drivable surface.
- d. All distances measured as fire apparatus would drive on an approved drivable surface.
- e. One hydrant for each 1,000 gallons per minute or fraction thereof.

Section C103.4. Add a new Section C103.4 to read as follows:

C103.4. Color-coding of fire hydrants. Fire hydrants shall be color-Coded based on the specific flow or use per Table C103.4.1. Colors/paint to be used is in Table C103.4.2.

**Table C103.4.1.** Add a new Table C103.4.1 as follows:

**TABLE C103.4.1**  
COLOR CODING OF FIRE HYDRANTS FLOWS

Flows	Colors	Area Painted
3,000+ gpm	Ford Blue	Bonnet and steamer cap
1,500 - 2,999 gpm	Ford Blue	Bonnet only
1,000 - 1,499 gpm	John Deere Green	Bonnet only
500 - 999 gpm	OSHA/Safety	Bonnet only

	Orange	
Less than 500 gpm	OSHA/Safety Red	Bonnet only
Hydrant Barrel	Equipment Yellow	All areas not painted above
Non-Potable	OSHA/Safety Purple	Bonnet & Caps w/ White Barrel
Decorative/Inoperable	Safety Gloss Black	Bonnet, Caps & Barrel

**Table C103.4.2.** Add a new Table C103.4.2 as follows:

TABLE C103.4.2

APPROVED MANUFACTURER COLORS

ADD FOOTNOTE: Specification numbers are from CSU and the manufactures website and may change or be discontinued.

**Appendix-D - FIRE APPARATUS ACCESS ROADS**

Delete the subtitle of Appendix D.

**Section D102.1.** Amend Section D102.1 to read as follows:

D102.1 Access and loading. Facilities, buildings, or portions of buildings hereafter constructed shall be accessible to fire department apparatus by way of an approved fire

Approved Manufacturers		
Colors	Aerovoe Spec	Rustoleum Spec
Ford Blue	560	7424830
John Deere Green	157	7435830
OSHA/Safety Orange	305	1653830
OSHA/Safety Red	301	2163
Equipment Yellow	302	282148
OSHA/Safety Purple	300	1670830
Safety Gloss Black	306	1679830
Gloss White	307, 5019	280132, 2192

apparatus access road with asphalt, concrete, or other approved driving surface capable of supporting the imposed load of fire apparatus weighing up to 75,000 pounds with a minimum single axle weight of 27,000 pounds.

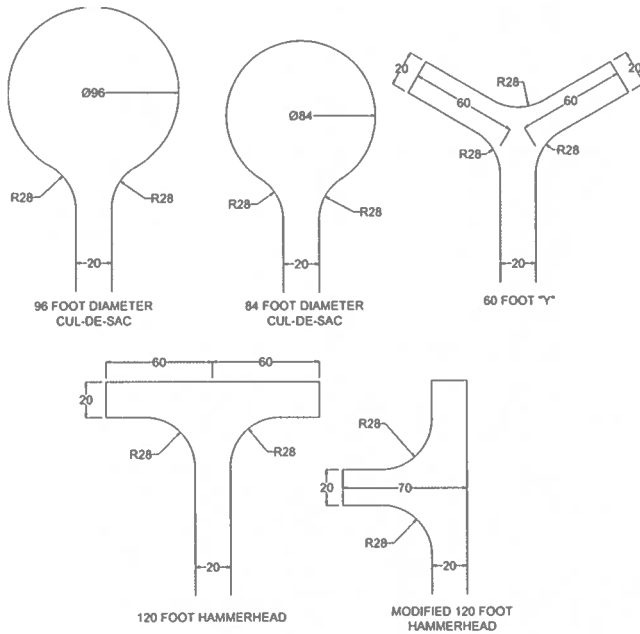
**Section D103.1.** Delete Section D103.1 in its entirety.

**FIGURE D103.1.** Delete Figure D103.1.

**FIGURE D103.4.** Add new Figure D103.4 as follows:

FIGURE D103.4

DEAD-END FIRE APPARATUS ACCESS ROAD TURNAROUNDS



Amend Table D103.4 to read as follows:

TABLE D103.4

REQUIREMENTS FOR DEAD-END FIRE APPARATUS ACCESS ROADS

Length (ft)	Minimum Width (ft)	Required Turnaround
0-200	20	None required.
201-500	20	120-foot Hammerhead, 60-foot Y or 96-foot or 84' diameter cul-de-sac in accordance with Figure D103.4.
501-750	26	120-foot Hammerhead, 60-foot Y or 96-foot diameter cul-de-sac in accordance with Figure D103.4. Additional intermediate turnarounds may be required.
Over 750		Special approval required.

**Section D103.5.** Amend Section D103.5 to read as follows:

D103.5 Fire apparatus access road gates. Gates securing the fire apparatus access roads shall comply with all of the following criteria:

1. Where a single gate is provided, the gate clear opening width shall be not less than 16 feet or as approved by the fire code official. Where a fire apparatus road consists of a divided roadway, the gate clear opening width shall be not less than 16 feet or as approved by the fire code official.
2. Gates shall be approved by the fire code official.
3. Construction of gates shall be of materials that allow manual operation by one person.
4. Gate components shall be maintained in an operative condition at all times and replaced or repaired when defective.

5. Electric gates shall be equipped with a means of opening the gate by fire department personnel for emergency access. When outbound/egress movements do not include an automatic method of the gate opening when a vehicle is present, an approved means of opening the gate by the fire department shall be provided. Emergency opening devices shall be approved by the fire code official.
6. Methods of locking shall be submitted for approval by the fire code official.
7. Electric gate operators, where provided, shall be listed in accordance with UL 325.
8. Gates intended for automatic operation shall be designed, constructed, and installed to comply with the requirements of ASTM F2200.

**FIGURE D103.6.** Delete Figure D103.6.

**Section D103.6.** Amend Section D103.6 to read as follows:

D103.6 Signs. Where required by the fire code official, fire apparatus access roads shall be marked with permanent NO PARKING—FIRE LANE signs approved by the fire code official and comply with the most current Manual on Uniform Traffic Control Devices (MUTCD) for Streets and Highways. Signs shall have a minimum dimension of 12 inches wide by 18 inches high and have red letters on a white reflective background. Signs shall be posted on one or both sides of the fire apparatus road as required by Section D103.6.1, D103.6.2, or D103.6.3, and indicate the extent of the no parking zone.

**Section D103.6.1.** Amend Section D103.6.1 to read as follows:

D103.6.1 Roads less than 28 feet in width. Fire lane signs as specified in Section D103.6 shall be posted on both sides of fire apparatus access road(s).

**Section D103.6.2.** Amend Section D103.6.2 to read as follows:

D103.6.2 Roads 28 feet to less than 34 feet in width. Fire lane signs as specified in Section D103.6 shall be posted on one side of fire apparatus access road(s).

**Section D103.6.3.** Add a new Section D103.6.3 to read as follows:

D103.6.3 Roads 34 feet and greater. Fire lane signs are not required on either side of fire apparatus access road(s).

**Section D104.3.** Amend Section D104.3 to read as follows:

D104.3 Remoteness. Where two fire apparatus access roads are required, they shall be placed a distance apart equal to not less than one-half of the length of the maximum overall diagonal dimension of the lot or area to be served, measured in a straight line between accesses.

Exception: The fire code official is authorized to modify this requirement when the required remoteness is not possible due to the location on property, topography, waterways, non-negotiable grades or similar.

**Section D106.3.** Amend Section D106.3 to read as follows:

D106.3 Remoteness. Where two fire apparatus access roads are required, they shall be placed a distance apart equal to not less than one-half of the length of the maximum overall diagonal dimension of the property or area to be served, measured in a straight line between accesses.

Exception: The fire code official is authorized to modify this requirement when the required remoteness is not possible due to the location on property, topography, waterways, non-negotiable grades or similar.

**Section D107.1.** Amend D107.1 to read as follows:

D107.1 One- or two-family dwelling residential developments. Developments of one- or two-family dwellings where the number of dwelling units exceeds 40 shall be provided with two (2) separate and approved fire apparatus access roads unless otherwise required by the fire code official.

Exceptions:

1. Where there are more than 40 dwelling units on or accessed from a single public or private fire apparatus access road and all dwelling units are equipped throughout with an approved automatic sprinkler system in accordance with Section 903.3.1.1, 903.3.1.2 or 903.3.1.3, access from two directions shall not be required.
2. The number of dwelling units on or accessed from a single fire apparatus access road shall not be increased unless fire apparatus access roads will connect with future development, as determined by the fire code official.
3. The fire code official is authorized to modify the requirement of two (2) separate and approved fire apparatus access roads, when they are not possible due to location on property, topography, waterways, non-negotiable grades, or similar.

**Section D107.2.** Amend Section D107.2 to read as follows:

D107.2 Remoteness. Where two fire apparatus access roads are required, they shall be placed a distance apart equal to not less than one-half of the length of the maximum overall diagonal dimension of the property or area to be served, measured in a straight line between accesses.

Exception: The fire code official is authorized to modify this requirement when the required remoteness is not possible due to the location on property, topography, waterways, non-negotiable grades or similar.

**TABLE D108.1.** Amend Table D108.1 to read as follows:

TABLE D108.1  
REFERENCED STANDARDS

STANDARD ACRONYM	STANDARD NAME	SECTIONS HEREIN REFERENCED
ASTM F2200-14	Standard Specification for Automated Vehicular Gate Construction	D103.5
UL 325—02	Door, Drapery, Gate, Louver, and Window Operators and Systems, with Revisions through May 2015	D103.5
MUTCD-11	Manual on Uniform Traffic Control Devices	D103.6

**Appendix E.** Delete the subtitle of Appendix E.

**Appendix F.** Delete the subtitle of Appendix F.

**Appendix G.** Delete the subtitle of Appendix G.

**Appendix-H** – Not Adopted

**Appendix-I** – Not Adopted

**Appendix-J** – Not Adopted

**Appendix-K** – Delete Appendix K in its entirety and replace it with the following:  
**APPENDIX K WILDLAND URBAN INTERFACE REQUIREMENTS**

**Section K101.** Add a new Section K101 to read as follows:  
**SECTION K101 GENERAL**

**Section K101.1.** Add a new Section K101.1 to read as follows:

K101.1 Scope. All lots with a development plan and subdivision plat within the wildland urban interface approved on or after April 1, 1993, as well as lots with dwelling units and ancillary buildings constructed or reconstructed on or after January 15, 2013, shall comply with this Appendix.

Add new subsection: K101.1.1 and K101.1.2

K101.1.1 All lots within the wildland urban interface with dwelling units and ancillary buildings in which decks are added, modified, altered, or reconstructed on or after June 30th, 2023, will comply with this Appendix.

K101.1.2 All lots within the wildland urban interface with dwelling units and ancillary buildings in which are completely rebuilt or receive 50% net or more exterior siding/covering/material replacement on or after June 30th, 2023, will comply with this appendix.

**Section K101.2.** Add a new Section K101.2 to read as follows:

K101.2. Development plans and subdivision plats. All development plans and subdivision plats within the wildland urban interface approved on or after April 1, 1993, and wildland urban interface site plan/lot grading plans shall contain the following disclosure statements:

1. Residing in or near wildland urban interface or intermix areas involves increased wildfire risks that may not apply in urban or more urbanized types of developed communities.
2. All lots within this development are subject to fuels management requirements. It is the responsibility of the builder to implement fuels management requirements in Section 103 of this Appendix. An approved inspection must be obtained from the fire code official prior to final inspection by the building Code official and/or allowing occupancy of the residence. The initial fuels management inspection must be

requested from the fire department prior to the framing inspection with subsequent approval obtained before building final.

**Section K101.3.** Add a new Section K101.3 to read as follows:

K101.3 Permits and Inspections. Permits and inspections shall be required as set forth in this section.

1. Construction Permit Review Requirements. All requirements must be reviewed and approved by the fire code official prior to permit issuance and prior to final inspection.
2. Prior to Framing Inspection. Before a dig out and foundation pour, a fuels management inspection with the Wildfire Mitigation Section is required. The home shall be staked out in the intended location for an appropriate inspection to be conducted.
3. At Framing: An inspection shall be scheduled to check any attic/roof/eave vent protection. This inspection shall be scheduled with the Construction Services Section.
4. A final fire department inspection to verify compliance will be required prior to the Issuance of the Certificate of Occupancy. This inspection shall be scheduled with the Construction Services Section.

**Section K102.** Add a new Section K102 to read as follows:

#### SECTION K102 DEFINITIONS

**Section K102.1.** Add a new Section 1K02.1 to read as follows.

K102.1 Definitions.

The following terms are defined in this Appendix.

**Ancillary Buildings.** A building or structure constructed for non-residential occupancy that is providing support to the primary activities or use of the lot that is greater than 120 square feet in size and at least 3 feet away from the primary structure.

**Character Tree.** Character trees shall be defined as existing, mature, overstory trees that are unique to the site: i.e., species-specific, or large diameter (>12 inches diameter at 4.5 feet above grade) or wildlife essential (nesting habitat). This includes Gamble Oak with a diameter of >5 inches.

**Combustible.** A substance or material that is readily ignitable, that may be set on fire, or which is liable to take fire and burn.

**Dripline.** The area directly located under the outer circumference of the tree's branches.

**Fuels Management.** The act or practice of controlling fuels through mechanical, chemical, biological or manual means, or by fire, in support of land management objectives.

**Ignition Resistant Construction.** The use of materials and systems in the design and construction of a building or structure to safeguard or provide reasonable protection against the ignition and/or spread of fire to or from buildings or structures.



Reconstructed. Dwelling units or ancillary buildings or structures that are completely rebuilt or receive 50% or more exterior siding/covering/material replacement.

Safety Zone. The safety zone is the first thirty feet (30') immediately surrounding a structure, not to extend beyond the property line.

Structure. That which is built or constructed.

Wildland Urban Interface (WUI). An area of heightened wildfire risk, where structures and other human development meets or intermingles with wildland or vegetative fuels as identified by The Colorado Springs Fire Department.

**Section K103.** Add a new Section K103 to read as follows:  
**SECTION K103 FUELS MANAGEMENT REQUIREMENTS**

**Section K103.1.** Add a new Section K103.1 to read as follows:

K103.1 Scope. All lots with development plans and subdivision plats within the wildland urban interface approved on or after April 1, 1993, as well as lots with dwelling units constructed or reconstructed after January 15, 2013.

**Section K103.2.** Add a new Section K103.2 to read as follows:

K103.2 Brush patches or clusters. Brush patches or clusters may be left in the safety zone but shall be separated by clear areas of at least ten feet (10') or more of non-combustible materials and/or grass mowed to not more than four inches (4) in height.

**Section K103.3.** Add a new Section K103.3 to read as follows:

K103.3 Clearance to the main structure. No hazardous brush or trees (i.e., junipers and conifers) shall be allowed within fifteen feet (15') of the main structure or ancillary building as measured from the drip line of the tree. Conifers or other similarly combustible plants shall not be planted under soffit vents.

Exception:

1. When approved by the fire code official, small brush patches or trees, not exceeding one hundred (100) square feet in size and no more than fifteen (15) linear feet in any direction, may be allowed to encroach into this zone.
2. Approved plants with fire resistant characteristics are allowed within fifteen feet (15') of the main structure or ancillary structure.
3. When approved by the fire code official, character trees may be within fifteen feet (15') of a structure. Character trees must be limbed up to a height of ten feet (10') above the ground or no more than one-third the height of the tree, and vegetation must be cleared within ten feet (10') of the dripline.

**Section K103.4.** Add a new Section K103.4 to read as follows:

K103.4 Pruning of dead limbs. Large trees shall not be allowed to have limbs overlap another tree and shall be pruned of dead limbs to a height of up to ten feet (10') above the ground or no more than one-third the height of the tree. Tree clusters may be allowed if sufficient clear area is provided and approved.

**Section K103.5.** Add a new Section K103.5 to read as follows:

K103.5 Clearance of tree branches to structures or appurtenances. Tree branches, with the exception of character trees and deciduous trees, shall not extend over or under the roof or eaves and shall not be within fifteen feet (15') of a deck or similar combustible projection, wood burning appliance, or chimney.

**Section K104.** Add a new Section K104 to read as follows:

#### SECTION K104 ROOF COVERINGS

**Section K104.1.** Add a new Section K104.1 to read as follows:

K104 Resistant Roofing Materials. After January 1, 2003, a class A roof covering (excluding solid wood roofing products) shall be installed on all residential occupancies and a minimum class B roof covering shall be installed on all remaining occupancies (not to replace Class A where already required by the Building Code) at the time a permitted roofing or reroofing application is done within the limits of the City of Colorado Springs, Colorado unless specifically approved by the fire code official.

**Section K105.** Add a new Section K105 to read as follows:

#### SECTION K105 STRUCTURE HARDENING

**Section K105.1.** Add a new Section K105.1 to read as follows:

K105.1 Structure Hardening. The following requirements shall be enforced for all dwelling units constructed or reconstructed, after January 15, 2013, and all decks added, modified, altered, or reconstructed on or after June 30th, 2023, within the wildland urban interface:

1. A Class A roof covering (excluding solid wood materials) shall be installed on all Residential Occupancies and a minimum Class B roof covering shall be installed on remaining occupancies unless otherwise permitted.
2. Exterior cladding, eaves, and soffits shall be constructed of ignition-resistant materials approved by the fire code official. Approved materials include but are not limited to fiber-cement board, stucco, masonry/brick, manufactured stone, and similar materials. Natural wood/cedar siding, hardboard, vinyl, and similar combustible materials are not allowed.

Exception: Natural wood or plastic products used for fascia, trim board materials, and trim accents, such as corbels, false rafter tails, faux trusses, shutters, and decorative vent materials may be permitted when painted or as approved.

3. For any portion of the attached structure with projections or overhangs, the area below the structure shall have all horizontal under-floor areas enclosed with ignition-resistant materials such as those allowed in item 2 above.

Exception: Heavy timber or dimensional log construction as defined by Pikes Peak Regional Building Department, or the International Building Code is allowed.

4. Exterior doors shall be noncombustible or solid core not less than 1 3/4 inch thick. Windows within doors and glazed doors shall be tempered safety glass or multi-layered glazed panels.

Exception: Decorative single pane glazing in front entry doors is allowed.

5. Exterior windows shall be a minimum double pane. Tempered panes are preferable but not required.
6. All attic vents shall be screened with wire mesh or hardware cloth having openings no larger than 1/8-inch unless an alternative design or product is allowed by the fire code official. Gable vents are not allowed except when approved by the fire code official.
7. Gutters and downspouts that are of non-combustible construction shall be installed such that the leading edge of the roof is finished with a metal drip edge so that no wood sheathing is exposed. The drip edge shall extend into the gutter. Vinyl gutters may be allowed but must have a non-combustible landing area below the roof line, which is a minimum 5-foot (5') distance from the side of the structure or foundation.
8. Decks and other habitable exterior spaces shall be constructed of ignition-resistant or non-combustible decking materials, such as composite or metal decking. Wood is not permitted to be used for the decking surface but can be used for all large structural components and railings. Exposed wood of heavy timber or dimensional log construction is allowed to be used for vertical support posts for covered decks and patios.
9. The base of exterior walls, posts, or columns shall be protected on the bottom side with provisions such as fire-resistant foam or wire mesh having openings no larger than 1/8 inch to protect them from ember intrusion and still allow for weeping and moisture control.
10. Chimneys serving fireplaces, as well as other heating appliances in which solid or liquid fuels are used, shall have an approved spark arrestor or cap.

**Section K105.2.** Add a new Section K105.2 to read as follows:

Section K105.2 Alternative Materials. Alternative materials or construction methods not specifically addressed in section K105 may be considered on a case-by-case basis if found to have comparable ignition-resistant properties and as approved by the fire code official.

**Section K106.** Add a new Section K106 to read as follows:

#### SECTION K106 FIRE PROTECTION SYSTEMS

**Section K106.1.** Add a new Section K106.1 to read as follows:

K106.1 Scope. Fire protection system requirements for wildland urban interface homes shall only apply to the conditions in this section.

**Section K106.2.** Add a new Section K106.2 to read as follows:

K106.2 Fire Protection Systems. Homes upon lots within the wildland urban Interface illustrated on development plans approved on or after April 1, 1993, shall be required to install a monitored fire alarm system or a fire sprinkler system when the lot lies beyond one thousand feet (1,000') along a road way serving, a cul-de-sac, dead-end road or single access point, or lies beyond roadways with grades in excess of ten percent (10%) if roadways are the primary vehicular points of access to the home. Additionally,

development plans which contain streets or lots that meet this criterion shall contain the following statement:

A monitored fire alarm system or a fire sprinkler system is required for residences built upon the following lot(s): The fire code official shall review all building plans, determine system requirements, and issue appropriate permits. A visual piping inspection must be secured through the fire code official prior to requesting the framing inspection. Final inspection and approval of the system must be secured through the fire code official prior to final inspection by the Building Department and/or occupancy of the residence.

**Appendix-L** – Revise and amend Appendix L as follows:

APPENDIX-L

REQUIREMENTS FOR FIREFIGHTER AIR REPLENISHMENT SYSTEMS

Delete the subtitle of Appendix L.

**Section L101.1.** Delete Section L101.1 and replace to read as follows:

L101.1 Scope. The design, installation, and maintenance of firefighter air replenishment systems (FARS) shall be in accordance with this section.

Section L101.2. Add a new Section L101.2 to read as follows:

L101.2 Required installations. A firefighter air replenishment system shall be installed in the following buildings:

1. Buildings classified as high-rise in accordance with the International Building Code.
2. Basements or sub-floors of high-rise buildings, and underground structures having normally occupied floors that are three (3) or more floors below grade with a per floor area greater than 25,000 square feet.
3. Underground parking structures having three (3) or more levels below grade.
4. Any new building 500,000 square feet or more in size.
5. Transportation tunnels constructed in accordance with NFPA 130 or 502 that exceed 700 feet in length.

**Section L102.1** Definitions. Add a new definition to Section L102.1 to read as follows:

INTERIOR FILL STATION. A station designed for the safe, simultaneous filling of breathing air cylinders utilizing universal air connections (UAC) without having to remove the bottle from the self-contained breathing apparatus (SCBA) harness assembly.

**Section L103.2.** Amend Section L103.2 to read as follows:

L103.2 Construction permit. A construction permit in accordance with 105.6.27 is required for installation of or modification to a FARS. The construction permit application shall include documentation of an acceptance and testing plan as specified in Section L105.

**Section L103.3.** Delete Section L103.2 and replace to read as follows:

L103.3 Plans. Prior to the installation of a FARS, plans, and specifications shall be submitted to the fire code official for review and approval. Plans shall demonstrate compliance with the requirements of this section and shall include calculations prepared by a registered design professional demonstrating that the design criteria for all pressure-containing components are satisfied plus a minimum safety factor of 25 percent. Plans

and specifications shall conform to guidance documents provided by the Division of the Fire Marshal.

**Section L103.3.1.** Add a new Section L103.3.1 to read as follows:

L103.3.1 Quality assurance. Plans, specifications, equipment and product data sheets, and system calculations for the FARS shall be reviewed and stamped by a State of Colorado licensed design professional, who is knowledgeable in high-pressure breathing air replenishment systems and can demonstrate previous experience with such systems.

**Section L104.1.** Amend Section L104.1 to read as follows:

104.1 Design and installation. A FARS shall be designed and installed in accordance with Sections L104.2 through L104.16.4.

**Section L104.1.1.** Add a new Section L104.1.1 to Read as Follows:

L104.1.1 Contractor qualification. The FARS shall be installed by a manufacturer approved vendor.

**Section L104.1.2.** Add a new Section L104.1.2 to read as follows:

L104.1.2 Prevention of contamination. The installing contractor shall ensure that, at all times, the system components are not exposed to contaminants, including, but not limited to, oils, solvents, dirt, and construction materials. When contamination of the system components has occurred, the affected component shall not be installed in the system.

**Section L104.1.3.** Add a new Section L104.1.3 to read as follows:

L104.1.3 Internal surfaces. The internal surfaces of all pressurized materials shall be free of contamination.

**Section L104.4.** Amend Section L104.4 to read as follows:

L104.4 Cylinder refill rate. The FARS shall be capable of refilling breathing air cylinders of a size and pressure used by the fire department at a rate of not less than two (2) empty cylinders in 2 minutes at the most remote cylinder filling panel.

**Section L104.5.** Amend Section 104.5 to read as follows:

L104.5 Breathing air supply. Where a fire department mobile air unit is available, the FARS shall be supplied by an external mobile air connection in accordance with Section L104.14.

**Section L104.5.1.** Amend Section L104.5.1 to read as follows:

L104.5.1 Stored pressure air supply. A stored pressure air supply shall be designed based on Chapter 24 of NFPA 1901 except those provisions applicable only to mobile apparatus or not applicable to system design shall not apply. A stored pressure air supply shall be capable of refilling not less than 25 empty breathing air cylinders of a size and pressure used by the fire department, or as approved by the fire code official.

**Section L104.8.** Amend Section L104.8 to read as follows:

L104.8 Materials and equipment. Pressurized system components shall be listed or approved for their intended use and rated for the maximum allowable design pressure in

the system. Piping and fittings shall be stainless steel meeting the requirements of ASTM A269, Grade 316 or equivalent.

**Section L104.8.1.** Add a new Section L104.8.1 to read as follows:

L104.8.1 Prohibited materials. The use of carbon steel, iron pipe, malleable iron, high-strength gray iron, or alloy steel is prohibited.

**Section L104.8.2.** Add a new Section L104.8.2 to read as follows:

L104.8.2 Marking. System piping, gauges, valves, fill stations, external mobile air connection, air storage enclosure, and air storage cylinders shall be clearly marked by means of permanent signage indicating their function. Marking for specific equipment shall be as follows:

1. Markings used for distribution piping shall contain content's name and direction of flow arrow and shall be located as follows:
  - 1.1. At each valve
  - 1.2. At wall, floor, or ceiling penetrations
  - 1.3. At each change of direction
  - 1.4. At a minimum of every 20 feet or fraction thereof throughout the piping system
  - 1.5. At external mobile air connection
  - 1.6. At interior fill stations
  - 1.7. At entrance to air storage enclosure.
2. The front of each fill station access panel, the external mobile air connection, the air storage system room, and the air storage system shall be marked FIRE FIGHTER AIR REPLENISHMENT SYSTEM. The lettering shall be in a color that contrasts with the background and a minimum 2 inches high with a 3/8-inch stroke.

**Section L104.10.** Amend Section L104.10 to read as follows:

L104.10 Protection of piping. System piping shall be protected by a minimum two (2)-hour fire-resistance-rated construction and shall be protected from physical damage in an approved manner.

**Section L104.12.** Amend Section L104.12 to read as follows:

L104.12 Security. Connections to a FARS shall be safeguarded from unauthorized access or tampering in an approved manner. A tamper switch monitored by an approved supervising station shall be provided.

**Section L104.13.1.** Amend Section L103.13.1 to read as follows:

L104.13.1 Location. Fill stations for refilling breathing air cylinders shall be located as follows:

1. Aboveground structures. A fill station shall be installed on floor landings in all stairwells, commencing on the third-floor landing above grade, and every other floor thereafter.
2. Basements, sub-floors, and/or underground structures. A fill station shall be installed on floor landings in all stairwells, commencing on the second floor below grade and every other below-grade level thereafter.
3. Large horizontal structure. A fill station shall be located at each standpipe hose connection and no more than 150 feet travel distance.

4. Transportation and pedestrian tunnels. A fill station shall be located within 200 feet of the tunnel entrance and at intervals not exceeding 400 feet thereafter as approved by the fire code official.
5. The fill station panel shall be located a minimum of 36 inches (0.9 m) but not more than 60 inches (1.5 m) above the finished floor or stairway landing.

**Section L104.13.2.** Amend Section L103.13.2 to read as follows:

L104.13.2 Design. Fill stations for breathing air cylinders shall be designed to meet the following requirements:

1. A pressure gauge and pressure-regulating devices and controls shall be provided to allow the operator to control the fill pressure and fill rate on each cylinder fill hose.
2. Valves controlling cylinder fill hoses shall be slow-operating valves.
3. A separate flow restriction device shall be provided on each fill hose.
4. A method shall be provided to bleed each cylinder fill hose.
5. Provide for the direct refilling of the fire fighter's breathing air cylinders using Rapid Intervention Crew/Company Universal Air Connection (RIC/UAC) fittings.

**Section L104.13.4.** Add a new Section L104.13.4 to read as follows.

L104.13.4 Cabinet requirements. Each fill station shall be installed in a cabinet constructed of a minimum of 18-gauge carbon steel. The depth of the cabinet shall not create an exit obstruction when installed in building stairways. All components with the exception of the shutoff valve, pressure gauges, fill hoses and ancillary components shall be contained behind a minimum 18-gauge access panel.

**Section L104.13.4.1.** Add a new Section L104.13.4.1 to read as follows:

L104.13.4.1 Door. Hinges for the cabinet door shall be located inside of the cabinet. The door shall be arranged such that when the door is open, it does not reduce the required exit width or create an obstruction in the path of egress. A minimum of 20 percent of the door surface area shall be constructed of tempered glass.

**Section L104.13.4.2.** Add a new Section L104.13.2 to read as follows:

L104.13.4.2 Components. The cabinet shall be of sufficient size to allow for the installation of all the necessary components as may be required to allow authorized personnel to safely and reliably replenish a minimum of two (2) breathing air cylinders connecting directly to firefighters' self-contained breathing apparatus equipment by means of quick fill adapters, hose, and RIC/UAC fittings.

**Section L104.13.4.3.** Add a new Section L104.13.3 to read as follows:

L104.13.4.3 Cylinder filling hose. The design of the cabinet shall provide a means for storing the hose to prevent kinking. When the hose is coiled, the brackets shall be installed so that the hose bend radius is maintained at 4 inches or greater.

The discharge outlet of each cylinder filling hose shall have a female RIC UAC. The female fitting shall be designed to connect to a male RIC/UAC. The assembled RIC/UAC shall meet the construction, performance, and dimensional requirements of NFPA 1981, Standard on Open-Circuit Self-Contained Breathing Apparatus for Fire and Emergency Services.

**Section L104.14.** Amend Section 104.14 to read as follows:

L104.14. External mobile air connection. A minimum of one external mobile air connection shall be provided for fire department mobile air apparatus where required by Section L104.5 to supply the system with breathing air.

**Section L104.14.1.** Amend Section L104.1 to read as follows:

L104.14.1 Location. The location of the external mobile air connection shall be within 40 feet of approved fire department vehicle access and approved by the fire code official.

**Section L104.14.4.** Add a new Section L104.14.4 to read as follows:

L104.14.4 Construction. The external mobile air connection panel shall be installed in a cabinet constructed of minimum 18-gauge carbon steel, provided with corrosion preventive coating or equivalent, and comply with NEMA 4 weather resistance requirements.

**Section L104.14.5.** Add a new Section L104.14.5 to read as follows:

L104.14.5 Enclosure components. The external mobile air connection panel shall consist of the necessary components to provide air to the air fill stations located on the upper or lower building levels, or both. The external mobile air connection shall be designed to allow connection from the mobile air unit.

**Section L104.15.** Renumber Section L104.15 to L104.16 and add a new Section L104.15 to read as follows:

L104.15 Air Storage System. The air storage system shall be installed in buildings and structures at locations approved by the fire code official.

**Section L104.15.1.** Renumber Section L104.15.1 to L104.16.1 and add a new Section L104.15.1 to read as follows:

L104.15.1 Room Design. The air storage system shall be located in rooms that are separated from all other areas of the building by a minimum of 2-hour fire-resistance-rated construction in accordance with the International Building Code.

**Section L104.15.1.1.** Add a new Section L104.15.1.1 to read as follows:

L104.15.1.1. Storage. Rooms containing air storage systems shall be free from storage, equipment, and penetrations not essential to the operation of the air storage system and related components.

**Section L104.15.1.2.** Add a new Section L104.1.2 to read as follows:

L104.15.1.2 Size. Rooms containing air storage systems shall be designed with adequate space for all equipment necessary for the installation, as defined by the manufacturer, with sufficient working room around the stationary equipment. Clearances around equipment to elements of permanent construction, including other installed equipment and appliances, shall be sufficient to allow inspection, service, repair, or replacement, without removing such elements of permanent construction or disabling the function of a required fire-resistive-rated assembly. Air storage rooms shall be provided with a door(s) and unobstructed passageway large enough to allow removal of the largest piece of equipment.

**Section L104.15.1.3.** Add a new Section L104.15.1.3 to read as follows:



L104.15.1.3 Freeze protection. The room shall be conditioned so that the temperature is no less than 40 F (4 C) and no more than 80 F (26.7 C).

**Section L104.15.1.4.** Add a new Section L104.15.1.4 to read as follows:

L104.15.1.4 Lighting. Artificial and emergency lighting shall be provided and shall have a minimum intensity of illumination of 3.0 ft-candles unless otherwise specified.

Section L104.15.2. Renumber Section L104.15.2 to 1L04.16.2 and add a new Section L104.15.2 to read as follows:

L104.15.2 Pipe, tube, and fittings. Pipe, tube, and fittings shall be constructed of stainless-steel materials that are compatible with high-pressure breathing air and shall meet all of the following:

1. ASTM A269 Grade 316 or equivalent.
2. Minimum 0.375-inch outside diameter x 0.065-inch wall fully annealed seamlessly.
3. ASTM A276 Grade 316 or equivalent or ASTM A182 for forged fittings.

**Section L104.15.2.1.** Add a new Section L104.15.2.1 to read as follows:

L104.15.2.1 Securement. Piping and tubing shall be supported at a minimum of five (5) feet intervals. Individual clamps and mounting components shall be mechanically secured to the building support members in accordance with the manufacturer's recommendations.

**Section L104.15.2.2.** Add a new Section L104.15.2.2 to read as follows:

L104.15.2.2 Design flow. The distribution piping shall have a minimum calculated design flow using one (1) interior fill panel, and four (4) breathing air cylinders operating simultaneously at the furthest point from the fire department access.

**Section L104.15.** Renumber section to be L104.16:

L104.16 Air Monitoring system. An approved air monitoring system shall be provided. The system shall automatically monitor air quality, moisture, and pressure on a continual basis. The air monitoring system shall be equipped with not less than two (2) content analyzers capable of detecting carbon monoxide, carbon dioxide, nitrogen, oxygen, moisture, and hydrocarbons.

**Section L104.15.1.** Renumber section to be L104.16.1:

L104.16.1 Alarm conditions. The air monitoring system shall transmit a supervisory signal when any of the following levels are detected:

1. Carbon monoxide exceeds 5 ppm.
2. Carbon dioxide exceeds 1,000 ppm.
3. An oxygen level below 19.5 percent or above 23.5 percent.
4. A nitrogen level below 75 percent or above 81 percent.
5. Hydrocarbon (condensed) content exceeds 5 milligrams per cubic meter of air.
6. The moisture concentration exceeds 24 ppm by volume.
7. The pressure falls below 90 percent of the maintenance pressure specified in Section L104.3

**Section L104.15.2.** Renumber section to be L104.16.2:

L104.16.2 Alarm supervision, monitoring and notification. The air monitoring system shall be connected to the building's fire alarm system and monitored by an approved supervising station. Audible and visual supervisory signals shall be annunciated at a constantly attended location and the fire command center.

**Section L104.16.2.1.** Add a new Section L104.16.2.1 to read as follows:

L104.16.2.1 Reporting. The building owner or authorized agent shall notify the fire department of any alarm signaling a rise in moisture or carbon monoxide levels within the system, as well as the locally available service provider.

**Section L104.16.3.** Renumber Section L104.15.3 to Section L104.16.3.

L104.16.3 Air quality status display. Air quality status shall be digitally displayed at the external mobile air connection required by Section L104.14 and the fire command center.

**Section L104.16.4** Add a new Section L104.16.4 to read as follows:

L104.16.4 Pressure monitoring switch. An electric low-pressure monitoring switch shall be installed in the piping system to monitor the air pressure. The pressure switch shall initiate a supervisory signal when the pressure of the breathing-air system is less than 4,950 psig (20,685 kPa) at 70 F (21 C) + 100 psig (690 kPa).

**Section L105.1.** Amend Section L105.1 to read as follows:

L105.1 Acceptance tests. Upon completion of the installation, a FARS shall be acceptance tested to verify compliance with the equipment manufacturer's instructions and design documents. Oversight of the acceptance tests shall be provided by the registered design professional who reviewed the stamped plans. Acceptance testing shall include all of the following:

1. A pneumatic test in accordance with ASME B31.3 of the complete system at a minimum test pressure of 110 percent of the system design pressure using oil-free dry air, nitrogen, or argon shall be conducted. Test pressure shall be maintained for not less than 24 hours. During this test, all fittings, joints, and system components shall be inspected for leaks. Any defects in the system or leaks detected shall be documented on an inspection report and repaired or replaced.
2. A cylinder-filling performance test shall be conducted to verify compliance with the required breathing air cylinder refill rate from the exterior mobile air connection and where provided, a stored air pressure supply system.
3. The air quality monitoring system shall be testing to verify both of the following conditions:
  - 3.1. Visual indicators required by Section L104.16.1 function properly.
  - 3.2. Supervisory signals are transmitted as required by Section L104.16.2 for each sensor based on a sensor function test.
4. Connections intended for fire department use shall be confirmed as compatible with the fire department's mobile air unit, SCBA cylinders, and, where provided RIC/UAC connections.
5. Air samples shall be taken from not less than two (2) fill stations and submitted to an approved gas analysis laboratory to verify compliance with NFPA 989. The FARS

shall not be placed into service until a written report verifying compliance with NFPA 1989 has been provided to the fire code official.

5.1 During the period of air quality analysis, the air fill panel inlet shall be secured so that no air can be introduced into the system and each air fill panel shall be provided with a sign stating AIR QUALITY ANALYSIS IN PROGRESS, DO NOT FILL OR USE ANY AIR FROM THIS SYSTEM. This sign shall be a minimum of 8-1/2 by 11 inches with a minimum of 1-inch lettering.

6. A functional test of the low-pressure monitoring switch shall be performed to verify compliance with L104.16.

7. Internal surfaces of all pressurized materials shall be certified as free of contamination.

**Section L105.2.** Add a new Section L105.2 to read as follows:

L105.2 System certification. Prior to final acceptance, the building owner shall provide the fire code official with written verification of a testing and certification contract. Upon satisfactory completion of all tests and verification of air quality, the system shall be considered complete.

**Section L105.2.1.** Add a new Section L105.2.1 to read as follows:

L105.2.1 Commissioning report. The registered design professional shall certify the entire FARS has been installed, tested, and commissioned in accordance with this section and the approved plans through a sealed commissioning report, provided to the fire code official.

**Section L106.2.** Add a new Section L106.2 to read as follows:

L106.2 Modifications. FARS shall be extended, altered, or augmented as necessary to maintain and continue protection where the building is altered, remodeled, or added to. Alterations to FARS shall be done in accordance with applicable standards. Upon completion of necessary alterations, the system shall undergo certification requirements of Section L105.

**Appendix M.** Delete Appendix M in its entirety.

**Appendix-N - Not Adopted**

**Appendix-O** – Add a new Appendix O to read as follows:

APPENDIX O INDOOR FLORA GROW OPERATIONS IN RESIDENTIAL OCCUPANCIES

**Section O101.** Add a new Section O101 to read as follows:

SECTION O101 GENERAL

**Section O101.1.** Add a new Section O101.1 to read as follows:

O101.1 Scope. The provisions of this appendix shall apply to all 1- and 2- single family dwellings and townhomes, as defined by the International Residential Code, where the indoor growing for propagation, production, consumption, and/or selling of flora exists and shall constitute minimum requirements and standards to provide a reasonable level

of safety from fire and other hazards. Flora grow operations shall not be permitted in R1 and R2 occupancies as defined by the International Building Code.

**Section O101.2.** Add a new Section O101.2 to read as follows:

O101.2 Intent. This appendix shall be construed to secure its expressed intent, which is to ensure public health, safety, and welfare insofar as they are affected by the continued occupancy and maintenance of structures and premises.

**Section O101.3.** Add a new Section O101.3 to read as follows:

O101.3 Authority to inspect. The fire code official is authorized to enter and examine any building, structure, vehicle, or premises in accordance with Section 104.3 of the International Fire Code for the purpose of enforcing this Code.

**Section O101.4.** Add a new Section O101.4 to read as follows:

O101.4 Inspections. The fire code official is authorized to conduct inspections as are deemed necessary to determine the extent of compliance with the provisions of this Code and to approve reports of inspection by approved agencies or individuals. All reports of such inspections shall be prepared and submitted in writing for review and approval. Inspection reports shall be certified by a responsible officer of an approved agency or by the responsible individual. The fire code official is authorized to engage expert opinion as deemed necessary to report upon unusual, detailed, or complex technical issues subject to the approval of the governing body.

**Section O101.4.1.** Add a new Section O101.4.1 to read as follows:

O101.4.1 Inspection requests. It shall be the duty of the property owner or their designee to notify the fire code official when work is ready for inspection. It shall be the duty of the property owner or their designee to provide access to and means for inspections of such work that are required by this Code.

**Section O101.** Add a new Section O101 to read as follows:

SECTION O102 DEFINITIONS

**Section O102.1.** Add a new Section O102.1 to read as follows:

O102.1 Terms defined in other Codes. Where terms are not defined in this Code and are defined in the International Building Code, International Existing Building Code, International Fire Code, International Fuel Gas Code, International Mechanical Code, International Plumbing Code, International Residential Code, International Zoning Code or NFPA 70, such terms shall have the meanings ascribed to them as stated in those Codes.

**Section O102.2.** Add a new Section O102.2 to read as follows:

O102.2 Parts. Whenever the words dwelling unit, dwelling, premises, building, rooming house, rooming unit, housekeeping unit or story are stated in this appendix, they shall be construed as though they were followed by the words or any part thereof.

**Section O102.3.** Add a new Section O102.3 to read as follows:

O102.3 Definitions not listed. For definitions not listed in Section O102.4, see Chapter 2 of the International Fire Code.

**Section O102.4.** Add a new Section O102.4 to read as follows:  
O102.4 Definitions.

**ACCESSORY STRUCTURE.** A structure that is accessory to and incidental to that of the dwellings and that is located on the same lot or premises. For example, a residential structure may have a detached garage or storage shed for garden tools as accessory structures. Other examples of accessory structures include, but are not limited to, gazebos, picnic pavilions, greenhouses, pole barns, storage sheds, and similar buildings.

**BEDROOM/SLEEPING ROOM.** A habitable space used primarily for sleeping purposes and containing a closet 16 inches or greater in depth.

**DETERIORATION.** To weaken, disintegrate, corrode, rust or decay and lose effectiveness.

**EASEMENT.** That portion of land or property reserved for present or future use by a person or agency other than the legal fee owner(s) of the property. The easement shall be permitted to be for use under, on, or above a said lot or lots.

**ENCLOSURE.** An area that is sealed off with an artificial or natural barrier.

**FLORA.** The plant life occurring in a particular region or time, generally the naturally occurring or indigenous. For the purposes of this Code, flora shall include non-indigenous as well.

**IMMINENT DANGER.** A condition that could cause serious or life-threatening injury or death at any time.

**NEGLECT.** The lack of proper maintenance for a building or structure.

**OCCUPANCY.** The purpose for which a building or portion thereof is utilized or occupied.

**OCCUPANT.** Any individual living or sleeping in a building, or having possession of a space within a building.

**OPENABLE AREA.** That part of a window, skylight, or door which is available for unobstructed ventilation, and which opens directly to the outdoors.

**PREMISES.** A lot, plot, or parcel of land, easement, or public way, including any structures thereon.

**RELOCATABLE POWER TAPS.** Multi-outlet power strip used to extend power from an approved receptacle.

**STRUCTURE.** That which is built or constructed or a portion thereof.

TENANT. A person, corporation, partnership, or group, whether or not the legal owner of record, occupying a building or portion thereof as a unit.

**Section O103.** Add a new Section O103 to read as follows:  
SECTION O103 HAZARDS TO ENFORCEMENT OFFICIALS

**Section 103.1.** Add a new Section O103.1 to read as follows:  
O103.1 Pitfalls. The intentional design or alteration of buildings to disable, injure, trap, immobilize, engulf, maim, or kill persons is prohibited. No person shall install and use firearms, trapdoors, sharp, or pointed objects, razor wire, explosives, flammable or combustible liquid containers, or dispensers containing highly toxic, toxic, irritant, or other hazardous materials in a manner that may passively or actively disable, injure, maim, or kill a firefighter, emergency medical personnel, peace officer, person, or other enforcement official who enters a building for the purpose of controlling or extinguishing a fire, rescuing trapped occupants or rendering other emergency assistance.

**Section O104.** Add a new Section O104 to read as follows:  
SECTION O104  
ROOMS USED FOR FLORA GROW AND PRODUCTION OPERATIONS

**Section 104.1.** Add a new Section O104.1 to read as follows:  
O104.1 Permitted locations. Flora growing operations utilizing grow lighting shall be limited to areas of the residence other than kitchens, bathrooms, and/or bedrooms/sleeping rooms.  
Exception: A bedroom/sleeping room may be used as long as the dwelling unit maintains at least one Code compliant bedroom/sleeping room.

**Section O104.2.** Add a new Section O104.2 to read as follows:  
O104.2 Room size. A room or an enclosure with grow lighting used for flora grow, propagation, consumption, or selling shall be limited to 150 square feet aggregate in size per premises.

**Section O104.3.** Add a new Section O104.3 to read as follows:  
O104.3 Occupancy classification. Flora grow, propagation, consumption, or selling operations in a room or an enclosure exceeding 150 square feet aggregate shall be considered an F-occupancy under the International Building Code, and a change of use and occupancy for the single-family dwelling. Permitting for a change of use/occupancy shall be required through the Pikes Peak Regional Building Department and Colorado Springs Land Use Review. Applicable building and fire Code requirements for the F-occupancy shall apply.

**Section O104.4.** Add a new Section O104.4 to read as follows:  
O104.4 Land use. The use/occupancy of the structure shall meet all applicable zoning Code requirements or otherwise obtain zoning approval for the desired use, through City Planning/Land Use Review.

**Section O105.** Add a new Section O105 to read as follows:  
SECTION O105 ELECTRICAL AND LIGHTING

**Section O105.1.** Add a new Section O105.1 to read as follows:

O105.1 Service. The wattage and usage of appliances and equipment shall serve as a basis for determining the need for additional facilities in accordance with NFPA 70.

**Section O105.2.** Add a new Section O105.2 to read as follows:

O105.2 Installation. All electrical equipment, wiring, and appliances shall be properly permitted, installed, and inspected in accordance with the requirements of the currently adopted Pikes Peaks Regional Building Code.

**Section O105.2.1.** Add a new Section O105.2.1 to read as follows:

O105.2.1 Permits. All required permits shall be obtained, and electrical equipment shall be maintained in a safe and approved manner at all times.

**Section O105.3.** Add a new Section 105.3 to read as follows:

O105.3 Lighting. Lighting used for the indoor growing, or propagation of flora shall be limited to light emitting diodes (LED), compact fluorescent lamps (CFL), fluorescent lighting or other lighting that may be approved by the fire Code official.

**Section O105.3.1.** Add a new Section O105.3.1 to read as follows:

O105.3.1 Listed and labeled. All lighting used for the indoor growing and propagation of flora shall be listed and labeled.

**Section O105.4.** Add a new Section O105.4 to read as follow:

O105.4 Electrical hazards. Where it is found that the electrical system in a structure constitutes a hazard to the occupants or the structure by reason of inadequate service, improper overcurrent protection, insufficient receptacle and lighting outlets, improper wiring or installation, deterioration, or damage, or for similar reasons, the fire code official shall require the defects to be corrected or removed, to eliminate the hazard.

**Section O105.4.1.** Add a new Section O105.4.1 to read as follows:

O105.4.1 Relocatable power taps. Multi-plug adapters, such as cube adapters, unfused plug strips or any other device not complying with NFPA 70 shall be prohibited.

**Section O105.4.2.** Add a new Section O105.4.2 to read as follows:

O105.4.2 Relocatable power tap design. Relocatable power taps shall be of the polarized or grounded type, equipped with overcurrent protection, and shall be listed in accordance with UL 1363.

**Section O105.4.3.** Add a new Section O105.4.3 to read as follows:

O105.4.3 Power supply. Relocatable power taps shall be directly connected to a permanently installed and approved receptacle.

**Section O105.4.4.** Add a new Section O105.4.4 to read as follows:

O105.4.4 Installation. Relocatable power tap cords shall not extend through walls, ceilings, floors, under doors or floor coverings, or be subject to environmental or physical damage.

**Section O105.5.** Add a new Section O105.5 to read as follows:

O105.5 Extension cords. Extension cords and flexible cords shall not be a substitute for permanent wiring. Extension cords and flexible cords shall not be affixed to structures, extended through walls, ceilings, or floors, or under doors or floor coverings, nor shall such cords be subject to environmental damage or physical impact. Extension cords shall be used only with portable appliances.

**Section O105.5.1.** Add a new Section O105.5.1 to read as follows:

O105.5.1 Power supply. Extension cords shall be plugged directly into an approved receptacle, power tap, or multiplug adapter and, except for approved multiplug extension cords, shall serve only one portable appliance.

**Section O105.5.2.** Add a new Section O105.5.2 to read as follows:

O105.5.2 Ampacity. The ampacity of the extension cords shall not be less than the rated capacity of the portable appliance supplied by the cord.

**Section O105.5.3.** Add a new Section O105.5.3 to read as follows:

O105.5.3 Maintenance. Extension cords shall be maintained in good condition without splices, deterioration, or damage.

**Section O105.5.4.** Add a new Section O105.5.4 to read as follows:

O105.5.4 Grounding. Extension cords shall be grounded when serving grounded portable appliances.

**Section O105.6.** Add a new Section O105.6 to read as follows:

O105.6 Unapproved conditions. Open junction boxes and open-wiring splices shall be prohibited. Approved covers shall be provided for all switch and electrical outlet boxes.

**Section O105.7.** Add a new Section O105.7 to read as follows:

O105.7 Appliances. Electrical appliances and fixtures shall be tested and listed in published reports of inspected electrical equipment by an approved agency and installed and maintained in accordance with all instructions included as part of such listing.

**Section O105.8.** Add a new Section O105.8 to read as follows:

O105.8 Electrical motors. Electrical motors shall be maintained free from excessive accumulations of oil, dirt, waste, and debris.

**Section O105.9.** Add a new Section O105.9 to read as follows:

O105.9 Portable, electric space heaters. Where not prohibited by other sections of this Code, portable, electric space heaters shall be permitted to be used in all occupancies and in accordance with Section 603.9.

**Section O105.9.1.** Add a new Section O105.9.1 to read as follows:

O105.9.1 Listed and labeled. Only listed and labeled portable, electric space heaters shall be used.

**Section O105.9.2.** Add a new Section O105.9.2 to read as follows:



O105.9.2 Power supply. Portable, electric space heaters shall be plugged directly into an approved receptacle.

Section O105.9.3. Add a new Section O105.9.3. to read as follows:

O105.9.3 Extension cords. Portable, electric space heaters shall not be plugged into extension cords.

**Section O105.9.4.** Add a new Section O105.9.4 to Read as follows:

O105.9.4 Prohibited areas. Portable, electric space heaters shall not be operated within 3 feet (914 mm) of any combustible materials. Portable, electric space heaters shall be operated only in locations for which they are listed.

**Section O106.** Add a new Section O106 to read as follows:

**SECTION O106 HAZARDOUS MATERIALS**

**Section O106.1.** Add a new Section O106.1 to read as follows:

O106.1 Compressed flammable/combustible gases. The manufacture of flora concentrates, oils, or other derivatives involving the use of compressed flammable gas, flammable gas, flammable liquid, or combustible liquid as a solvent in a residential setting is prohibited.

**Section O106.2.** Add a new Section O106.2 to read as follows:

O106.2 Carbon dioxide. The storage, use, and/or handling of carbon dioxide, and/or carbon dioxide systems shall be prohibited.

**Section O106.3.** Add a new Section O106.3 to read as follows:

O106.3 Chemicals. Chemicals used in the growing or propagation of flora shall not be stored within the habitable areas of the residence. Chemicals stored on the premises shall meet all applicable sections of Chapter 50, along with any other associated Chapter(s), given the chemical stored.

**Section O107.** Add a new Section O107 to read as follows:

**SECTION O107 VENTILATION**

**Section O107.1.** Add a new Section O107.1 to read as follows:

O107.1 General. Where injurious, toxic, irritating, or noxious fumes, gases, dusts, molds, mildew, or mists are generated as a result of flora grows or propagation, a local exhaust ventilation system shall be provided to remove the contaminating agent at the source. Air shall be exhausted to the exterior and not be recirculated to any space. Such systems shall be designed to meet the following:

1. Ensure odors from the grow or propagation are not detectable beyond the structure
2. Prevent mold, and moisture, to otherwise protect the health and safety of persons residing in the residence
3. Meet any/all applicable requirements of the International Mechanical Code.

**Section O107.2.** Add a new Section O107.2 to read as follows:

O107.2 Installation. All mechanical/ventilation equipment, wiring, and appliances shall be properly installed by a Pikes Peak Regional Building Department licensed contractor and shall be permitted, installed, and inspected in accordance with the requirements of the currently adopted Pikes Peaks Regional Building Code.

**Section O107.2.1.** Add a new Section O107.2.1 to read as follows:

O107.2.1 Permits. All required permits shall be obtained, and mechanical/ventilation equipment shall be maintained in a safe and approved manner at all times.

**Section O107.3.** Add a new Section O107.3 to read as follows:

O107.3 Exhaust vents. Pipes, ducts, conductors, fans or blowers shall not discharge gases, steam, vapor, hot air, grease, smoke, odors, or other gaseous or particulate wastes directly upon abutting or adjacent public or private property or that of another tenant, and shall be inspected in accordance with the requirements of the currently adopted Pikes Peaks Regional Building Code.

**Section O105.** Add a new Section O105 to read as follows:

SECTION O108 STRUCTURAL

**Section O108.1.** Add a new Section O108.1 to read as follows:

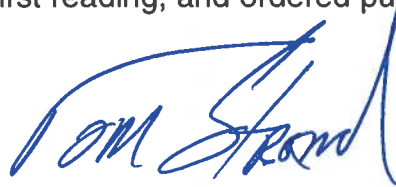
O108.1 Structural members. All structural members shall be maintained structurally sound and be capable of supporting the imposed loads. Construction, alterations, removal, and/or modification of any structural members, floors, walls, ceilings, doors, and windows shall be in compliance with the International Residential Code, International Building Code, and require a permit from the Pikes Peak Regional Building Department. Atta\

Section 2. This ordinance shall be in full force and effect from and after its passage and publication as provided by Charter.

Section 3. Council deems it appropriate that this ordinance be published by title and summary prepared by the City Clerk and that this ordinance shall be available for inspection and acquisition in the Office of the City Clerk.

Introduced, read, passed on first reading, and ordered published this 14<sup>th</sup> day of March 2023.

**Finally passed:** March 28, 2023



---

Council President

**Mayor's Action:**

- Approved on 3/30/2023.
- Disapproved on \_\_\_\_\_, based on the following objections:

---

---

---

---

John W. Suthers  
Mayor

**Council Action After Disapproval:**

- Council did not act to override the Mayor's veto.
- Finally adopted on a vote of \_\_\_\_\_, on \_\_\_\_\_.
- Council action on \_\_\_\_\_ failed to override the Mayor's veto.

\_\_\_\_\_  
Council President

ATTEST:

Sarah B. Johnson  
Sarah B. Johnson, City Clerk



CAO: [Signature]  
COS: [Signature]

I HEREBY CERTIFY that the foregoing ordinance entitled “AN ORDINANCE REPEALING AND REORDAINING PART 1 (FIRE PREVENTION CODE) OF ARTICLE 4 (FIRE PREVENTION) OF CHAPTER 8 (PUBLIC SAFETY) OF THE CODE OF THE CITY OF COLORADO SPRINGS 2001, AS AMENDED, ADOPTING THE 2021 EDITION OF THE INTERNATIONAL FIRE CODE WITH AMENDMENTS AND PROVIDING PENALTIES FOR THE VIOLATION THEREOF” was introduced and read at a regular meeting of the City Council of the City of Colorado Springs, held on March 14, 2023; that said ordinance was finally passed at a regular meeting of the City Council of said City, held on the 28<sup>th</sup> day of March 2023, and that the same was published by title and in summary, in accordance with Section 3-80 of Article III of the Charter, a newspaper published and in general circulation in the Gazette, at least ten days before its passage.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the seal of the City, this 28<sup>th</sup> day of March 2023.

  
Sarah B. Johnson, City Clerk  


1<sup>st</sup> Publication Date: March 17, 2023

2<sup>nd</sup> Publication Date: April 5, 2023

Effective Date: April 10, 2023

Initial: SBS  
City Clerk