Sioux Falls Fire Rescue

International Fire Code/NFPA Policy Bulletins

August 2020



Sioux Falls Fire Rescue, Fire Prevention Division Policies

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Date: 8/6/2019

Subject: Code Interpretation, Authority for Supplemental Rules and Regulations

To propose changes to this policy, contact: Fire Marshal

I. Purpose:

A. To establish policy relative to code application and interpretation as provided for in the 2018 *International Fire Code* as amended and adopted.

II. General Instructions:

- A. The Chief or the Fire Marshal is authorized to render interpretations of fire code and to make and enforce such rules and regulations for the prevention and control of fires and fire hazards as may be necessary to carry out the intent of the code.
- B. As policies are developed, one printed copy of such rules and regulations shall be filed with the City Clerk's Office and shall be in effect immediately thereafter. An additional copy shall be kept in the office of Sioux Falls Fire Rescue for reference to the public.

III. References:

2018 International Fire Code, Section 104.1—General

Date: 8/6/2019

Subject: Code Interpretation, Authority for Inspection and Enforcement

To propose changes to this policy, contact: Division Chief/Fire Marshal

I. Purpose:

A. To establish policy for enforcement of adopted codes and standards.

II. General Instructions:

- A. Sioux Falls Fire Rescue is authorized to enforce the provisions of the City of Sioux Falls adopted codes and standards on property and buildings within the corporate limits of Sioux Falls to include all private and public schools and county buildings/property.
- B. Organizations exempt from fees are outlined in Section 41.007 of City Ordinance.

Exception: Codes and ordinances for flammable and combustible liquid storage tanks.

III. References:

2018 International Fire Code, Section 107.1—Inspection Authority

Date: 8/6/2019

Subject: Code Interpretation, Assembly Occupancy—Stage Fire Protection

To propose changes to this policy, contact: Fire Marshal

I. Purpose:

A. To establish policy for assembly occupancy stage fire protection and smoke/heat venting where a deluge sprinkler is used for proscenium opening protection.

II. General Instructions:

- A. Proscenium openings using a "water curtain" for opening protection as allowed in the *International Building Code*, Section 410.2.5, shall be installed as follows:
 - 1. Activation of the deluge system shall be in accordance with IBC 410.2.5.
 - 2. Heat detection required for deluge activation shall be located on the ceiling of the stage side of the proscenium opening. Reduction of coverage based on NFPA 72 requirements shall apply for detector spacing.
- B. Smoke/heat venting shall be in accordance with the IBC Section 410.3.7 <u>and</u> shall be activated by the stage heat detection.

III. References:

2018 *International Building Code*, Section 410.3.4—*Proscenium wall* and Section 410.3.5—*Proscenium Curtain*

2018 International Fire Code

NFPA 13—Standard for the Installation of Sprinkler Systems

NFPA 72—National Fire Alarm Code

Date: 8/6/2019

Subject: Code Interpretation, Fire Alarm Permits

To propose changes to this policy, contact: Fire Marshal

I. Purpose:

A. To establish definition of fire alarm systems requiring a permit.

II. General Instructions:

- A. Permits are required for:
 - 1. Fire alarm system installations, modifications, or removal.
 - 2. Installation of equipment controlled by a fire alarm system.
- B. A fire alarm system shall be defined as a system of devices producing either an alarm in a structure or transmitting an alarm signal to a central or remote station for the purpose of notification of a fire in the protected structure.
- C. The definition of a fire alarm system shall include:
 - 1. A control system using fire detection devices for:
 - i. Fire-extinguishing agent release;
 - ii. Dry or wet chemical systems;
 - iii. Pre-action type sprinkler systems; and
 - iv. Elevators.
 - 2. Digital communicators or leased-line remote transmitters.
 - 3. Conventional fire alarm systems.
 - 4. Intelligent/addressable fire alarm systems.

III. References:

2018 International Fire Code, Section 105.7.7—Fire Alarm and Detection Systems and Related Equipment

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Date: 8/6/2019

Subject: Code Interpretation, Sprinkler Permits

To propose changes to this policy, contact: Fire Marshal

I. Purpose:

A. To establish permit requirements for sprinkler system installation and/or modifications.

II. General Instructions:

- A. Permits are required for:
 - 1. All new systems.
 - 2. Modifications to existing systems involving ten or more sprinkler heads.
 - 3. Removal of a system or system components.
- B. The definition of a sprinkler system shall include:
 - 1. All equipment on a single riser.
 - 2. For a mall or multi-tenant occupancy, a single-tenant space constitutes a system, not all tenant spaces on a given riser.
- C. Special situations:
 - 1. Where remodeling includes the addition of concealed, combustible construction, a permit is required for any number of heads installed.
 - 2. Where any sprinkler heads are added to accommodate building expansion/addition.
 - 3. Where alteration is specifically required by code or a Board of Appeals decision. (**Example:** Spray booths and associated vent systems, water curtains, kitchen exhaust hood systems, opening protection such as no wired glass in one-hour corridors, etc.).

III. References:

2018 International Fire Code, Section 105.7.1—Automatic Fire-Extinguishing Systems

Date: 8/6/2019

Subject: Code Interpretation, Contaminating Liquid Tank Storage

To propose changes to this policy, contact: Fire Marshal

I. Purpose:

A. To establish permit requirements for liquid storage tank installations that may contain nonflammable/combustible liquids or contaminants.

II. General Instructions:

- A. Sioux Falls Fire Rescue, in agreement with Sioux Falls Health, Engineering, and Water Utility departments, requires a permit for the installation of tanks where content may have a potential for contaminating the City water supply, public health, or environment. The determination of tank contents considered a potential contaminate shall be provided by the Sioux Falls Health Department.
- B. Standards for tank installation shall be as specified in the *Revised Ordinances of the City of Sioux Falls,* Section 92.012 (Health and Sanitation).
- C. A Tank Installation Permit Application Form (No. 34-02 or No. 34-03, Storage Tank Permit Application) shall be utilized with appropriate fees collected.

III. References:

City of Sioux Falls Revised City Ordinances.

Date: 8/6/2019

Subject: Code Interpretation, Plan Submittals for Permit-Required Storage Tank Installation

To propose changes to this policy, contact: Fire Marshal

I. Purpose:

A. To establish minimum plan submittal requirements for permit-required tank installations.

II. General Instructions:

- A. Professional blueprints are not required for permit issuance.
- B. Plan submittals shall provide the following in a legible format:
 - 1. Site plan showing tank and distance from buildings and property lines drawn to scale or with dimensions indicated.
 - 2. Size and manufacturer of tanks.
 - 3. Pipe layout shall include pipe vents, supply line type, and fill ports.
 - 4. Cathodic protection type (where applicable).
 - 5. A cross-section drawing of the tank indicating fill depth around the tank and depth of cover.
 - 6. Vent/emergency vent locations.
 - 7. Overfill and spill protection devices.
 - 8. Leak detection systems.
 - 9. Dispensing system components.
 - 10. Inventory control devices.
 - 11. Emergency shut-off location(s).
 - 12. Additional protection systems.

- 13. Bulk plants shall also indicate fencing, physical barriers, and secondary containment.
- 14. Private fueling stations shall include keycard system components.
- 15. Inside storage shall include ventilation, containment, and explosion venting systems if required by other building or fire code provisions.

III. References:

2018 International Fire Code, Section 105.4.1—Submittals

Date: 8/6/2019

Subject: Code Interpretation, Flammable and Combustible Liquid Tank Storage

To propose changes to this policy, contact: Fire Marshal

I. Purpose:

A. To establish permit requirements for flammable and combustible liquid storage tank installations.

II. General Instructions:

- A. Permits are required for:
 - 1. Aboveground stationary tanks.
 - 2. Aboveground portable tanks with a capacity exceeding 660 gallons (*International Fire Code,* Section 5704.2).
 - a. Portable tanks shall mean tanks portable in nature to be removed from a site at a predetermined date.
 - b. Multiple tanks may be at a site provided they meet distance separation requirements as specified in the *International Fire Code*.
 - 3. All underground storage tank installations.

III. References:

2018 International Fire Code, Section 105.7.8—Flammable and Combustible Liquids

2018 International Fire Code, Section 5704.2—Tank Storage

Date: 8/6/2019

Subject: Code Interpretation, Permit Fees for Governmental Agencies

To propose changes to this policy, contact: Fire Marshal

I. Purpose:

A. To establish guidance for permit issuance to governmental agencies.

II. General Instructions:

- A. Permit fees shall be in accordance with the Revised Ordinances of Sioux Falls for permit-required work where said work is undertaken in buildings or property owned by the county government or the school district.
- B. With the exception of storage tank permits (petroleum or hazardous materials), federal, (county), and state-owned buildings are exempt; permits are not required. However, if a permit is issued, Fire Prevention personnel will conduct normal inspections associated with the specific permit type.
- C. Permits are required for City buildings and/or property. Payment of fees for permits and inspections shall be waived.

III. References:

City of Sioux Falls Revised Ordinances

City of Sioux Falls, Executive Orders

2018 International Fire Code, Section 105.7 (amendment)—Required Construction Permits

2018 *International Fire Code*, Section 105.7.22 and 105.7.25 (amendment)—*Required Event Permits*

Date: 8/6/2019

Subject: Code Interpretation, Temporary Certificates of Occupancy

To propose changes to this policy, contact: Fire Marshal

I. Purpose:

A. To establish minimum fire and life safety requirements to allow issuance of Temporary Certificates of Occupancy.

II. General Instructions:

- A. A Temporary Certificate of Occupancy may be approved through the building inspection office provided the following requirements are met:
 - 1. All required fire and life safety systems must be in place and operational throughout the structure.

Exceptions:

- a. In multilevel structures, all required fire and life safety systems must be in place and operational on the highest occupied level and all levels below. Minor remodeling or finishing of lower level floors may be allowed. This exception shall not include stair towers, common areas, and other exit ways. Fire alarm notification is required in all unfinished areas.
- b. In multi-tenant structures, all required fire and life safety systems must be in place and operational in any tenant space to be occupied and in common areas and exit ways. Where sprinkler mains pass through unfinished tenant spaces, sprinkler coverage is required. Fire alarm systems must be operational in any finished area. Fire alarm notification is required in all unfinished areas.

III. References:

2018 International Building Code, Section 909.19—Temporary Occupancy

Date: 8/6/2019

Subject: Code Interpretation, Increased Permit Fees

To propose changes to this policy, contact: Fire Marshal

I. Purpose:

A. To establish guidelines for imposition of increased permit fees as authorized by the 2018 *International Fire Code*.

II. General Instructions:

- A. Fire Prevention Division staff receiving late plan submittals and permit applications may use his/her discretion concerning the application of the IFC, Section 105.2.6; however, one of the following must be accomplished prior to enforcement:
 - 1. An inspector must have had verbal contact with the applicant at which time circumstances leading to increased fees would have been explained (i.e., commencement of work prior to plan submittal, review, and permit issuance).
 - 2. Written notice must have been provided to an applicant with an explanation of increased fees.
 - 3. If a permit has been issued and subsequent information is gained leading to enforcement of Section 105.2.6, an invoice for the increased amount along with a letter of explanation for increased fees may be sent to the contractor. (**Example:** Contractor performs work outside the scope of original permit.)
 - 4. When work has commenced without a permit (example: erecting and occupying a tent without a permit), increased permit fees will be applied in addition to the issuance of citation.
 - 5. Minimum lead time for all fire permit activities is three business days inclusive of expedited permits.

III. References:

2018 International Fire Code, Section 105.2.5 (amendment)—Fee Schedule

2018 International Fire Code, Section 105.2.6 (amendment)-Increased Fee

Date: 8/6/2019

Subject: Code Interpretation, Restaurant and Liquor Establishment Licensing/Inspection

To propose changes to this policy, contact: Fire Marshal

I. Purpose:

A. To establish guidelines for restaurant and liquor establishments subject to inspection by Fire Prevention personnel.

II. General Instructions:

- A. A yearly inspection will be conducted for all restaurants that meet any of the following requirements:
 - 1. Open to the public.
 - 2. Sales of food.
 - 3. Occupant load of 50 or more.
 - 4. Has a Type I Hood System as defined in Chapter 2 of the 2018 *International Mechanical Code*.
- B. For on-sale liquor establishments, the Licensing Specialist with the City Attorney's Office coordinates the Fire Rescue inspection fee and the yearly business license.
- C. For establishments that do not have on-sale liquor, the Fire Rescue inspection fee is initiated by the Fire Rescue. The yearly business operation license is coordinated by the City Health Department.

III. References:

2018 International Fire Code, Section 106.1—Inspection Authority

2018 International Mechanical Code, Chapter 2-Definitions

Date: 8/7/2019

Subject: Code Interpretation, Permit Application Forms Organization

To propose changes to this policy, contact: Fire Marshal

I. Purpose:

- A. To establish guidelines for permit application forms and required document submittal for installation, modification, or execution of systems and equipment as provided for in the 2018 edition of the *International Fire Code*, Section 105.1.1, as amended and adopted.
- B. To provide permit application forms numbering system that corresponds to fire code and is used in organizing, referencing, reporting, and storing vital data for all systems and equipment. NOTE: Forms are for reference only; actual permits are submitted online through Customer Support Service (CSS) in EnerGov.

II. General Instruction:

- A. Permit application forms are organized and numbered relative to their corresponding fire code chapters and sections.
- B. Permit forms are required for installation, alteration, upgrading, removal, or execution of the following systems or equipment and will hereby be named and numbered as follows:

Permit Application Name	IFC Chapter-Section	<u>Form Number</u>
Open Burning or Bonfire	03-307	03-1
Fire Sprinkler	09-903	09-1
Alternative Automatic Fire Ext. Sy	rs. 09-904	09-2
Standpipe System	09-905	09-3
Fire Alarm	09-907	09-4
Remote Fire Alarm Sys. Monitorir	ng 09-907.6.5	09-5
Fire Pumps	09-913	09-6
Application of Flam. or Comb. Ma	terial 24-2404, 05, 06, 07	24-1
Flammable Finishes	24-2410	24-2

Temporary Structures	31-3103, 04	31-1
Blasting and Use of Explosives	56-5607	56-1
Pyrotechnics or Open Flame	56-5608 & 03-0308	56-2
Tank Upgrade/Repair	57-5704.2.7.6	57-1
Storage Tanks—Above Ground	57-5704.2.9 & 2.11	57-2
Storage Tanks—Underground	57-5704.2.11	57-3
Tank Removal	57-3404.2.14	57-4
LPG Tank	38-3801.2	38-1

C. The Fire Prevention Division shall review each permit form and required documentation, and upon approval, issue a permit. Any work that commences without a valid/issued permit will be subject to increased fees.

III. References:

2018 International Fire Code

City of Sioux Falls Ordinance Chapters 16 and 23

Date: 8/8/2019

Subject: Code Interpretation, Commercial Barbecue Grills and Food Smokers

To propose changes to this policy, contact: Fire Marshal

I. Purpose:

A. To establish policy for fire safety provisions in facilities utilizing commercial barbecue grills and food smokers.

II. General Instructions:

- A. Indoor locations—Barbecues used for commercial cooking operations in buildings shall be constructed as commercial food heat processing equipment in accordance with the *International Mechanical Code*.
- B. Outdoor locations—Barbecues in outdoor locations shall be constructed of concrete or approved noncombustible materials, and shall not be located within 15 feet of combustible walls, roofs, or other combustible material.

III. References:

2018 International Fire Code, Section 307.4-Location

Date: 8/8/2019

Subject: Code Interpretation, Fire Apparatus Access Roads

To propose changes to this policy, contact Division Chief/Fire Marshal

I. Purpose:

A. To establish policy for application of the *International Fire Code*, Section 503, *Fire Apparatus Access Roads*.

II. General Instructions:

- A. When enforcing the requirements specified in the IFC, Section 503.1.1, modification can be granted under Exception 1 for buildings conforming to the specified requirements.
- B. The 150-foot requirement specified in Section 503.1.1 can be modified up to 300 feet.

Exception: High-piled storage facilities shall conform to requirements set forth in Chapter 32, *High-Piled Combustible Storage*, Section 3206.6, *Building Access.*

- C. Apparatus access roadways shall comply with the requirements as specified in Section 503 and Appendix 'D'.
- D. Section 503.2.3 *Surface*, asphalt or concrete shall be the acceptable surface. A temporary surface consisting of 6 inches of gravel compacted to 95 percent density shall be acceptable when asphalt or concrete cannot be provided due to seasonal constraints.
- E. Posting of Fire Rescue access roadways shall be in accordance with requirements specified in IFC Appendix 'D', Section D103.6, *Signs.*
- F. Site plan submittals shall incorporate posting of required Fire Rescue access as part of the plans.
- G. Property developers and owners shall ensure installation and maintenance of signage.
- H. Posting of required Fire Rescue access lanes shall be at intervals such that when adjacent to a sign, the next sign shall be viewable.

III. References:

2018 International Fire Code, Section 503—Fire Apparatus Access Roads

2018 International Fire Code, Section 901.4—Installation

2018 International Fire Code, Appendix 'D'—Fire Apparatus Access Roads

Policy Bulletin—D-01, Emergency Access Provisions

Date: 8/8/2019

Subject: Code Interpretation, Site Plan Review for Hydrant Placement

To propose changes to this policy, contact: Fire Marshal

I. Purpose:

- A. To establish policy for application of the *International Fire Code*, Section 507, *Fire Protection Water Supplies*.
- B. To provide guidance for hydrant placement relative to road classifications.

II. General Instructions:

- A. Minimum hydrant spacing and placement requirements shall be as specified in the IFC, Section 507.
- B. Hydrants located along one side of an arterial roadway shall not be considered for construction occurring on the opposite side.
- C. Consideration of site access shall be given where a hydrant, otherwise meeting distance requirements, may block access to additional emergency response vehicles. Additional hydrants or relocation may be required.

III. References:

2018 International Fire Code, Section 507—Fire Protection Water Supplies

Engineering Design Standards—Chapter 10 (10.2 Fire Hydrants)

Date: 5/1/2013

Subject: Code Interpretation, Lock Box Requirements

To propose changes to this policy, contact Division Chief/Fire Marshal

I. Purpose:

A. To establish policy for application of the *International Fire Code*, Section 506, *Key Boxes*.

II. General Instructions:

- A. Approved key boxes shall be installed on all buildings utilized for high-pile combustible storage. A key box shall be installed on each side of the structure requiring Fire Rescue building access in accordance with IFC 2306.6.
- B. Approved key boxes shall be installed on all buildings equipped with fire protection systems including automatic fire sprinklers and fire alarm systems. In multitenant commercial buildings, the key box shall be installed outside the business where the fire alarm panel is located. In larger buildings, additional key boxes may be required at additional entry points.
- C. Approved key boxes may be installed in a central location at all apartment complexes where buildings are equipped with sprinklers and/or fire alarm systems in lieu of individual buildings
- D. Keys stored shall provide access to common areas, mechanical (to include sprinkler riser and fire alarm control panel rooms), electrical service rooms, and elevator key boxes, where installed. Keys shall include those necessary for the operation of mechanical smoke and heat venting where installed.

III. References:

2018 International Fire Code, Section 506—Key Boxes

2018 International Fire Code, Section 3206.7.8-Key Box

Date: 8/8/2019

Subject: Code Interpretation, Requirements for Post Indicator Valve Installations

To propose changes to this policy, contact Division Chief/Fire Marshal

I. Purpose:

A. To establish policy for installation of Post Indicator Valves (PIV) on fire service mains.

II. General Instructions:

- A. A PIV shall be installed for control of sprinkler system water supplies in accordance with the referenced standard.
- B. PIV installations shall be supervised by the fire alarm control panel on a zone or address point dedicated to the tamper monitoring and shall be locked in the open position.
- C. Where installation of a PIV is determined not feasible due to geographic or other extenuating constraints, a Wall Indicating Valve (WIV) may be utilized at the discretion of the fire code official.
- D. Inspection, testing, and maintenance of PIV shall be in accordance with the current edition of NFPA 25.
- E. PIV padlock keys shall be kept in the spare sprinkler head box for accessibility.

III. References:

2018 International Fire Code, Section 507—Fire Protection Water Supplies

NFPA 24—Standard for the Installation of Private Fire Service Mains and Their Appurtenances

NFPA 25—Standard for the Inspection, Testing, and Maintenance of Water-Based Fire Protection System

Engineering Design Standards—Standard Detail No. 900.15

Date: 8/8/2019

Subject: Code Interpretation, Access to Building Openings

To propose changes to this policy, contact: Fire Marshal

I. Purpose:

A. To establish application policy for application of the *International Fire Code* Section 504, *Access to Building Openings and Roofs*.

II. General Instructions:

A. The width of the required walkway or open area stated in Section 504.1 shall be a minimum of 5 feet and may be increased as needed.

III. References:

2018 International Fire Code, Section 504—Access to Building Openings and Roofs

Date: 8/5/2018

Subject: Code Interpretation, Emergency Responder Radio Coverage

To propose changes to this policy, contact: Fire Marshal

I. Purpose:

A. To establish policy for application of the 2018 *International Fire Code*, Section 510, Emergency Responder Radio Coverage (ERRC).

II. General Instructions:

- A. New buildings shall have approved radio coverage for emergency responders within the building that does not require the improvement of the existing public safety communications.
- B. New buildings of Type I, II, II, and IV construction shall have an assessment to evaluate radio signal strength after substantial completion in accordance with Section 510.
- C. Signal strength in basements, garages, and other sub-grade structures shall be evaluated regardless of construction type.
- D. Any design for a new or existing structure must be permitted by Sioux Falls Fire Rescue/Fire Prevention Division.
- E. Existing structures will be reviewed by Sioux Falls Police Department and Sioux Falls Fire Rescue to determine risk associated with the structure and business type.
 - 1. Higher risk targets will include high schools and junior high schools, universities, hospitals, and large assembly structures open to the public. Facilities determined to be higher risk targets will be assessed for signal strength and planned for ERRC upgrades when required.
 - 2. Risk targets will be evaluated annually to determine priorities and changes to address new threats.

III. References:

2018 International Fire Code, Section 510—Emergency Responder Radio Coverage

Transmission and Reception Chart:

	- T T		
Channel	Transmission	Reception	Use
1	157.86	153.170	Existing
2	157.98	151.445	Existing
3	158.055	152.570	Existing
4	158.55	152.675	Existing
5	158.595	152.750	Existing
6	157.275	150.845	Expansion
7	157.485	153.770	Expansion
8	158.115	153.815	Expansion
9	158.280	154.325	Expansion

Date: 8/8/2019

Subject: Code Interpretation, Equipment Access Signage

To propose changes to this policy, contact: Fire Marshal

I. Purpose:

A. To establish policy for application of the *International Fire Code*, Section 509, Fire Protection Equipment Identification and Access.

II. General Instructions:

- A. Signs are required to identify the location of fire protection equipment and mechanical control elements.
- B. Exterior signs will be constructed of heavy-gauge, sign-grade aluminum with white reflective letters on a red reflective background. Letters and or numbers shall be a minimum of 4 inches tall.
- C. Interior signs may be constructed of plastic, light-gauge aluminum or other approved material and shall have a background contrasting with the lettering thereon. Lettering shall be a minimum 1 1/2 inches in height with a 3/16-inch stroke width.
- D. Signs shall be permanently affixed to the surface of the door(s) or wall leading to the equipment it is identifying.
- E. The following designations are acceptable: "SPRINKLER RISER," "FIRE ALARM,"
 "FIRE COMMAND ROOM," "ELECTRICAL ROOM," "MECHANICAL ROOM,"
 "ELEVATOR EQUIPMENT ROOM," "ROOF ACCESS," "TUNNEL ACCESS,"
 "BATTERY STORAGE ROOM," or other designations reflecting the specific room or area use as required by the AHJ.

III. References:

2018 International Fire Code, Section 509—Fire Protection and Utility Equipment Identification and Access

Date: 8/8/2019

Subject: Code Interpretation, Fire Alarm Control Panel and Annunciation Location

To propose changes to this policy, contact: Fire Marshal

I. Purpose:

A. To establish policy for installation of fire alarm control panels and required annunciators.

II. General Instructions:

- A. Fire alarm control panels (FACP) shall be mounted in an approved interior location of a building such that the operating specifications for the panel relative to environmental conditions are adhered to. The FACP shall not be located on the exterior of a building.
- B. The FACP or remote annunciator shall be mounted in an approved location within 15 feet of Fire Rescue building access such that ready identification of area of alarm origin is available.

III. References:

2018 International Fire Code, Section 907.6.3.1—Zoning Indicator Panel

NFPA 72—National Fire Alarm Code

Date: 8/8/2019

Subject: Code Interpretation, Fire Alarm System Testing

To propose changes to this policy contact: Fire Marshal

I. Purpose:

A. To establish requirements for testing of fire alarm system installations as authorized in IFC, Section 907.8.

II. General Instructions:

- A. Fire alarm systems shall be tested in accordance with NFPA 72 and manufacturer's recommendations.
- B. A minimum of one quarterly test shall be performed by a qualified service technician who is not an employee of the occupancy where the fire alarm system is located, and who has been trained on test procedures and is knowledgeable of the testing requirements as set forth in NFPA 72.
- C. Where a fire alarm contractor is hired to perform only one of the required quarterly tests, the testing shall be such that 100 percent of the initiating devices, notification appliances, and control features of the fire alarm system are tested.
- D. Where a fire alarm contractor is hired to perform all quarterly testing, it shall be acceptable for the contractor to test one fourth of the system each quarter, such that in a year's time frame, complete system testing as described in Item 'C' above has been accomplished.
- E. Sensitivity testing in accordance with NFPA 72 and IFC, Section 907.8.3 shall be performed. Detectors not meeting sensitivity requirements shall be replaced.
- F. If testing is performed in accordance with item 'C' above, the property owner or owner-authorized agent shall be required to perform three (3) of the quarterly tests, whereby the owner testing is allowed only if the system has devices capable of being tested without removal from mounting or wiring.

	Exception: Heat detection is not capable of owner testing.			
		1. The person preforming the quarterly testing must indicate on the fire alarm test tag required below the following information:		
	a. Date of testing.			
			b.	Name of person performing testing.
			C.	Extent of testing (i.e., what was tested).
	G. When testing is successfully completed and deficiencies corrected, the person performing the testing under Item 'B' above shall affix a tag to the fire alarm control panel that indicates the following:			
	2. Name of company performing testing (company tag).		me of company performing testing (company tag).	
	3. Name of company representative performing testing.		me of company representative performing testing.	
	4. Month and year the service was performed (preprinted on the card and punched to show these items).			
		5.	Sta	tement that the tag is void one year from marked month and year.
		6.		be of service provided, again to be punch-out marked. The service provided all be one of the following:
			a.	Quarterly/annual testing.
			b.	New system.
		7.		ne where the make and model of fire alarm control panel being tested are to written.
		8.	A li	ne for indicating the address of the building tested.
III.	References:			
	2018 International Fire Code, Section 907—Fire Alarm and Detection Systems			
	NFPA 72—National Fire Alarm Code			

Date: 6/28/2020

Subject: Code Interpretation, Multiple Building Fire Alarm Transmission Using Single DACT

To propose changes to this policy, contact: Division Chief/Fire Marshal

I. Purpose:

A. To establish policy for fire alarm monitoring at those locations consisting of single-owner, multi-structure sites.

II. General Instructions:

- A. The utilization of a single Digital Alarm Communication Transmitter (DACT) for the purpose of multiple building fire alarm monitoring shall be acceptable, provided the following provisions are adhered to:
 - 1. All structures must be owned by a single entity (person, partnership, corporation, etc.).
 - 2. All structures must be located on one contiguous piece of property with no intervening streets, alleys, etc. (public right-of-ways).
 - 3. Equipment (transmitting and receiving) shall be UL-listed and able to distinguish the specific building of alarm origin.
 - 4. Wiring methods between buildings shall conform to requirements of the electrical code.
 - 5. Applicable permits must be obtained from the Fire Prevention Division prior to work being performed.

III. References:

NFPA 72, National Fire Alarm Code

Date: 4/16/2007

Subject: Code Interpretation, Fire Alarm Requirements—Apartments with Exit Ways Open to the Exterior

To propose changes to this policy, contact: Division Chief/Fire Marshal

I. Purpose:

A. To establish policy providing consistency in the application of fire alarm requirements in apartment buildings with exterior exit ways.

II. General Instructions:

- A. Exterior exit ways are defined as being open to the exterior atmosphere on one to three sides and include balcony exits and exits passing through a building which is open on both ends. The code normally requires that exit ways be provided with smoke detector coverage and manuals at the exit doors on each level. The requirement for smoke detectors is waived, and heat detectors are substituted if the exit way meets the following:
 - 1. The exit way in question is roofed over and **any one** of the following conditions is met.
 - a. The exit way serves more than two apartments; or
 - b. The length of the exit balcony corridor is 10 feet or greater; or
 - c. The width of the exit balcony/corridor is 4 feet or greater; or
 - d. The perimeter of the exit balcony/corridor is closed for more than 50 percent and has an area of 25 square feet or more.
- B. If exterior exit ways do not meet any of the above conditions, automatic detection is not required.

III. References:

2018 International Fire Code, Section 907.2.9—Group R-2

Date: 8/9/2019

Subject: Code Interpretation, Fire Alarm Requirements—Voice Evacuation Modification

To propose changes to this policy, contact: Fire Marshal

I. Purpose:

A. To establish policy for modification of code relative to voice evacuation systems in certain assembly occupancies.

II. General Instructions:

- A. Modification to code relative to voice evacuation systems may be acceptable to provide for effective fire alarm notification in assembly occupancies such as gymnasiums and concert halls.
- B. Where a voice evacuation system is required based on occupant loads in Group A occupancies, use of standard notification appliances may be acceptable.
- C. Written request for modifications to voice evacuation requirements to allow standard notification devices shall be submitted to Fire Prevention.
- D. Where modifications are allowed, a copy of all written correspondence shall be filed with, and become a permanent part of, the building record.
- E. Items to be considered when determining equivalency would be:
 - 1. ADA compliance.
 - 2. Ambient noise level within the assembly area.
 - 3. Types of activity that will take place within the assembly area.
 - 4. Familiarity of audience with the facility.

III. References:

2018 International Fire Code, Section 104.8-Modifications

2018 International Fire Code, Section 907.2.1.1—System Initiation in Group A Occupancies with an Occupant Load of 1,000 or More

Date: 8/9/2019

Subject: Code Interpretation, Fire Alarm System Upgrade Requirements

To propose changes to this policy, contact: Fire Marshal

I. Purpose:

- A. To establish policy and provide guidance for upgrade of fire alarm systems in Group R-2 (apartment) buildings.
- B. Establish policy for fire alarm panel replacement in other commercial structures.
- C. Establish policy for required upgrades due to structural remodeling in existing buildings and tenant spaces.
- D. Establish policy for fire alarm system monitoring where fire alarm systems are found, upon inspection or emergency response, nonfunctioning/nonmaintained.

II. General Instructions:

- A. Upgrades to existing fire alarm systems in Group R-2 (apartment) buildings due to equipment malfunctions wherein the fire alarm panel is no longer serviceable shall meet the following requirements:
 - 1. If not currently installed, manual pull stations shall be installed at each exit from each level of the structure. Buildings equipped with an automatic sprinkler system shall be required to have at least one manual pull station located in an approved location.
 - 2. In existing fire sprinkler protected and nonsprinkled installations consisting of "system" smoke detectors installed in dwelling units, the dwelling unit "system" smoke detector shall be replaced with a 135° fixed-rate-of-rise system heat detector. **Exception: Buildings equipped throughout with an NFPA 13 or 13R fire sprinkler system shall not require heat detection within dwelling units.* Additionally, at least one 120-volt, battery-backup-equipped smoke alarm shall be installed and centrally located in each apartment. Smoke alarms shall be installed within each sleeping unit in accordance with fire code.
 - 3. Compliance with audio and visual components of NFPA 72 in accordance with ADA requirements.

- 4. Where not currently installed, system smoke detector coverage shall be provided for common exit corridors on each level and at the tops of enclosed stairwells.
- 5. Applicable permits must be obtained from the Fire Prevention Division prior to work being performed.
- B. Upgrades to existing fire alarm systems in commercial occupancies due to equipment malfunctions, wherein the fire alarm panel is no longer serviceable, shall meet the following requirements:
 - 1. Compliance with audio and visual components of NFPA 72 in accordance with ADA requirements.
 - 2. Applicable permits must be obtained from the Fire Prevention Division prior to work being performed.
- C. Structural remodeling in existing buildings consisting of adding or moving walls or expanding buildings or tenant spaces shall require upgrades to installed fire alarm systems to conformance to current NFPA 72 and ADA standards. Upgrades shall occur in the area being remodeled and all areas the remodeling opens into.
- D. Existing nonmonitored fire alarm systems discovered to be nonfunctioning or not maintained shall be repaired and monitored in accordance with the fire code.

III. References:

2018 International Fire Code, Section 907.6.6-Monitoring

Date: 6/26/2020

Subject: Code Interpretation, Class I Standpipe Installation Options

To propose changes to this policy, contact: Fire Marshal

I. Purpose:

- A. To establish policy for standpipe installations.
- B. To establish requirements for rooftop standpipe installation.

II. General Instructions:

- A. Class I standpipes may be installed as dry systems where approved.
- B. Standpipe systems shall meet the requirements for installation as specified in the IFC, Section 905, *Standpipe Systems* and current edition of NFPA 14.
- C. Fire Rescue connections for sprinkler systems and standpipe systems shall be located on the same area of the building exterior, shall be labeled with water pressure requirements, and shall be easily identified when separate connections are provided for both an automatic sprinkler system and a standpipe system.

Exception: Buildings such as retail malls where more than one sprinkler water main riser is required, these connections shall be labeled clearly as to what portion of the building is being served by the connection.

- D. A Fire Rescue connection for each standpipe system shall be located not more than 100 feet from the nearest fire hydrant.
- E. Rooftop standpipe connections are not required where access to rooftops is provided from within a vertical exit enclosure via a stairway or alternating tread device extending to rooftop level.

III. References:

2018 International Fire Code, Section 905—Standpipe Systems

2018 International Fire Code, Section 1009.16—Stairway to Roof

NFPA 14—Standard for the Installation of Standpipe and Hose Systems

Date: 4/16/2007

Subject: Code Interpretation, Reserved

To propose changes to this policy, contact: Division Chief/Fire Marshal

I. Purpose:

- A. Reserved.
- II. General Instructions:

Reserved.

III. References:

Date: 6/28/2020

Subject: Code Interpretation, Sprinkler System Remote Monitoring—Existing Installations

To propose changes to this policy, contact: Division Chief/Fire Marshal

I. Purpose:

A. To establish application policy for *International Fire Code*, Section 903.4—*Sprinkler System Supervision and Alarms* on installed systems approved under prior code editions.

II. General Instructions:

A. Section 903.4 shall be applied to existing systems installed prior to the adoption of the *International Fire Code* when work is performed on the system(s) requiring a permit as set forth in Fire Prevention Policy Bulletin No. 01-05.

III. References:

2018 International Fire Code, Section 903.4—Sprinkler System Supervision and Alarms.

Date: 6/26/2020

Subject: Code Interpretation, Sprinkler System Acceptance Testing

To propose changes to this policy, contact: Fire Marshal

I. Purpose:

A. To establish policy for acceptance testing of wet, dry, and preaction sprinkler systems.

II. General Instructions:

- A. All tamper valves shall be checked for correct supervisory functions. Flow alarms shall meet the following requirements:
 - 1. Where testing with an in-line inspector test valve, the valve shall be opened completely and time to alarm measured.
 - 2. Where remote inspectors test valves are installed, ensure properly sized discharge orifice equal to installed head discharge orifice is installed.
 - 3. Waterflow alarms shall not occur in less than 30 seconds, but shall occur within 60 seconds of valve opening.
- B. The following items shall be completed for acceptance testing of dry and preaction sprinkler systems:
 - 1. An air test in accordance with NFPA 13 (2013), Section 25.2.2.1.
 - 2. Low-air supervisory signals.
 - 3. A working test of the dry pipe system in accordance with NFPA 13(2013), Section 25.2.3.2.1 and/or 25.2.3.2.2 as applicable. Testing shall be accomplished by operation of the inspector's test valve. Water flow alarms shall activate within 60 seconds. A solid stream of water shall be present at the inspector test outlet within 60 seconds.

Exception: When a system by design is unable to meet the above, even after the installation of an accelerator or exhauster, the fire code official may approve the installation, subject to an agreement with the owner and the approval of the owner's insurance company.

- C. All test information shall be indicated on a Fire Prevention inspection form.
- D. The original inspection form shall be placed in the permanent address file.

III. References:

2018 International Fire Code, Section 903—Automatic Sprinkler Systems

NFPA 13—Standard for the Installation of Sprinkler Systems

Date: 6/26/2020

Subject: Code Interpretation, Hydrostatic Testing of Sprinkler Systems

To propose changes to this policy, contact: Fire Marshal

I. Purpose:

A. To establish requirements for hydrostatic testing of sprinkler systems.

II. General Instructions:

- A. Hydrostatic testing of sprinkler systems is required for:
 - 1. All new systems.
 - 2. Additions to existing systems, including the addition of branch lines serving four or more sprinkler heads to existing mains.
 - 3. Existing systems where branch lines serving four or more sprinkler heads or mains have been removed and replaced.

III. References:

2018 International Fire Code, Section 903—Automatic Sprinkler Systems

Date: 8/8/2019

Subject: Code Interpretation, Fire Department Connections

To propose changes to this policy, contact: Fire Marshal

I. Purpose:

A. To establish policy for Fire Rescue sprinkler and standpipe connection locations and signage.

II. General Instructions:

- A. Fire Rescue sprinkler and standpipe connections shall be on the street side of buildings, located a maximum of 75 feet from the street, parking lot, or fire lane without interference from nearby objects including buildings, fences, posts, or other connections.
- B. Fire Rescue connections shall be designated by signage in accordance with NFPA 13.
- C. Fire Rescue connections shall be 2 1/2-inch connections.
- D. Locking FDC caps shall be installed on all new exterior sprinkler and/or standpipe connections and on existing buildings where covers are missing.
- E. Fire Rescue connections shall be fully visible and recognizable from the street or nearest point of Fire Rescue vehicle access or as otherwise approved by the AHJ.

III. References:

2018 International Fire Code, Section 903.3.7—Fire Department Connections

2018 International Fire Code, Section 912.3.1—Locking Fire Department Connection Caps

2018 International Fire Code 912.4 Fire Department Connection Signs

NFPA 13—Standard for the Installation of Sprinkler Systems

Date: 8/8/2019

Subject: Code Interpretation, Positive Alarm Sequence for Fire Alarm Systems

To propose changes to this policy, contact: Fire Marshal

I. Purpose:

A. To establish policy for applicability and allowance of Positive Alarm Sequence features for fire alarm systems.

II. General Instructions:

- A. In accordance with NFPA 72, Positive Alarm Sequence features may be permitted where allowed by the Authority Having Jurisdiction.
- B. The facility shall be in accordance with the following items:
 - 1. Positive Alarm Sequence features shall not be allowed in facilities not connected to a central station.
 - 2. A written request must be submitted by the business owner or a representative of the owner.
 - 3. Where installation is permitted, approval may be revoked if the positive alarm sequence feature is misused.
 - 4. The system shall be in accordance with NFPA 72 such that remote monitoring provides for immediate transmission of the alarm resulting in dispatch of Sioux Falls Fire Rescue.

III. References:

2018 International Fire Code, Section 907—Fire Alarm and Detection Systems

NFPA 72—National Fire Alarm Code

Date: 8/9/2019

Subject: Code Interpretation, Kitchen Hood—Duct Sprinkler Systems

To propose changes to this policy, contact: Fire Marshal

I. Purpose:

A. To establish policy for water supply valve supervision on systems serving kitchen hood and duct sprinklers.

II. General Instructions:

- A. Installation shall be in accordance with NFPA 13 and NFPA 96.
- B. Sprinkler heads shall be UL300-listed.
- C. Sprinkler valve tamper switches controlling water supply to a sprinkler hood extinguishing system(s) shall be installed such that when the water supply serving the system(s) has been shut off; power (gas and electric) located beneath the system(s) shall be disconnected such that cooking operations are rendered inoperable.
- D. Valve tamper switches shall include any serving as supply to the hood system including the hood shutoff, zone(s), and mains serving as supply to the system.

III. References:

2018 International Fire Code, Section 904.12—Commercial Cooking Systems

NFPA 13—Standard for the Installation of Sprinkler Systems

NFPA 96—Standard for Ventilation Control and Fire Protection of Commercial Cooking Operations

Date: 8/9/2019

Subject: Code Interpretation, Duct Smoke Detection in Fire Alarm-Equipped Occupancies

To propose changes to this policy, contact: Fire Marshal

I. Purpose:

A. To establish requirements for installation of duct smoke detection in occupancies equipped with a required or nonrequired fire alarm system.

II. General Instructions:

- A. Duct smoke detection shall be compatible with and connected to a fire alarm system where a fire alarm system is installed (IFC, Section 907.3.1).
- B. Duct smoke detection shall be powered by the fire alarm system.
- C. Reset of duct smoke detection shall occur from the fire alarm control panel.
- D. Where duct smoke detectors are connected to a fire alarm system required by code to be monitored at a UL-listed Central Station, said detection may be installed such that activation causes "supervisory" signal transmission only.

III. References:

2018 International Fire Code, Section 907—Fire Alarm and Detection Systems

Date: 8/9/2019

Subject: Code Interpretation, Special Event—Portable Food Service—Trailers, Tents, and Canopies

To propose changes to this policy, contact: Fire Marshal

I. Purpose:

A. To establish guidance and set forth requirements for portable food service trailer, tent, and canopy use during special events.

II. General Instructions:

- A. Each vendor shall have an extinguisher of a minimum 2A:10BC rating.
- B. Where deep-fat frying operations occur, a Class 'K'-rated extinguisher, in addition to item 'A' above, shall be required.
- C. Extinguishers shall be tested, serviced, and tagged (within the year indicated on the service tag) by personnel trained and equipped in accordance with NFPA 10.
- D. Deep-fat frying shall not be performed in a "tent" occupied by the public.
- E. A hood exhaust system shall be installed which is capable of exhausting and preventing accumulation of grease-laden vapors in trailers equipped with equipment capable of producing said vapors (deep-fat frying, griddles, etc.).
- F. The deep-fat fryer and other cooking equipment *should* be UL-listed. Oil in the fryer *should* be cooled or in a sealed container prior to moving the trailer or equipment.
- G. An automatic-operating extinguishing system *should* be installed above the cooking equipment.
- H. LP tanks shall be outside the trailer, tent, or canopy and secured at all times or in a sealed compartment of a trailer vented to the outside.
- I. Vendors in operation shall maintain a minimum of 10 feet clearance on two sides from adjacent buildings, trailers, tents, canopies, and similar uses.

III. References:

2018 International Fire Code, Section 904.11—Commercial Cooking Systems

NFPA 10—Standard for Portable Fire Extinguishers

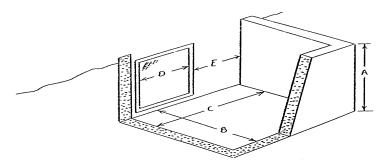
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Date: 8/9/2019

Subject: Code Interpretation, Basement Access Windows

To propose changes to this policy, contact: Fire Marshal

- I. Purpose:
 - A. To establish policy for required basement access windows.
- II. General Instructions:



- A. **Dimension B:** B shall equal A or 5 feet, whichever is greater.
- B. **Dimension C:** C shall equal D plus E, but shall not be less than 5 feet.
- C. **Dimension E:** E shall equal 30 inches.
- D. Window wells with a vertical depth of more than 44" (IBC 1029.5.2) must be equipped with a stair or ladder and guardrails as per building code where a walkway exists within 5 feet of the opening. No cover or grate will be allowed on top of the areaway.
- E. If all access openings are below grade, the first opening and every other required opening thereafter shall be a code-conforming exit.
- F. Tempered glass shall be installed in accordance with the IBC, Section 2406.5.

III. References:

2018 International Fire Code, Section 903.2.11

2018 International Building Code, Sections 1029 and 2406.4

Date: 4/16/2007

Subject: Code Interpretation, Reserved

To propose changes to this policy, contact: Division Chief/Fire Marshal

IV. Purpose:

B. Reserved.

V. General Instructions:

Reserved.

VI. References:

Date: 8/9/2019

Subject: Code Interpretation, Mechanical Smoke/Heat Removal Controls

To propose changes to this policy, contact: Division Chief/Fire Marshal

I. Purpose:

A. To establish policy for approved locations of mechanical smoke and heat venting controls.

II. General Instructions:

- A. Controls for smoke and heat removal systems shall be acceptable either in a one-hour occupancy separation accessible from the exterior or mounted on the outside of the building adjacent to a walk-in door.
- B. Where located on the exterior, controls must be mounted in a weather-tight, well-marked, locked box with the key located in a Fire Rescue-approved lock box.

III. References:

2018 International Fire Code, Section 506—Key Boxes

2018 International Fire Code, Section 909—Smoke Control Systems

2018 International Fire Code, Section 910—Smoke and Heat Removal

2018 International Fire Code, Chapter 32—High-Piled Combustible Storage

Date: 8/9/2019

Subject: Code Interpretation, Sprinkler Fire Pump, Electric Drive

To propose changes to this policy, contact: Fire Marshal

I. Purpose:

A. To establish policy determining reliability of the electric utility serving the City of Sioux Falls specific to electric fire pump installations.

II. General Instructions:

- A. Historical information concerning power service reliability provided by Xcel Energy indicates service delivered to the Sioux Falls area is 99 percent reliable.
- B. Sioux Falls Fire Rescue, as provided by NFPA 20, deems Xcel Energy as meeting requirements for "reliable" service as established in the referenced standard.

III. References:

2018 International Fire Code, Section 913—Fire Pumps

NFPA 20—Standard for the Installation of Stationary Pumps for Fire Protection

Date: 8/9/2019

Subject: Code Interpretation, Safety Factor for Sprinkler System Design

To propose changes to this policy, contact: Fire Marshal

I. Purpose:

A. To establish safety factor requirements for automatic fire sprinkler system design pressure.

II. General Instructions:

- A. The public water distribution system is subject to pressure fluctuation due to various seasonal and usage demands. Water pressure fluctuation is reported to be up to 10 psi annually as documented by the City of Sioux Falls Public Works department.
- B. A minimum pressure safety factor of 10 psi shall be added to all hydraulically calculated sprinkler pressure demands.

III. References:

2018 International Fire Code, Section 903—Automatic Sprinkler Systems

NFPA 13—Standard for the Installation of Sprinkler System

Date: 8/9/2019

Subject: Code Interpretation, Qualified Person Acceptable to the AHJ

To propose changes to this policy, contact: Fire Marshal

I. Purpose:

A. To establish policy for the definition of a "qualified person" acceptable to the AHJ for servicing of fire extinguishers and hood suppression systems.

II. General Instructions:

- A. Those responsible for the servicing of fire extinguishers or hood suppression systems shall be certified by a recognized organization through a formal certification program or by an equipment manufacturer having a certification program.
- B. Certification shall be presented to the fire code official upon request.

III. References:

2018 IFC 906—Portable Fire Extinguishers

NFPA 96—Standard for Ventilation Control and Fire Protection of Commercial. Cooking Operations

NFPA 10–Standard for Portable Fire Extinguishers

Date: 8/9/2019

Subject: Code Interpretation, Tank Recertification and Reinstallation

To propose changes to this policy contact: Fire Marshal

I. Purpose:

A. To establish policy for recertification and reinstallation of storage tanks.

II. General Instructions:

- A. With the approval of the Sioux Falls Fire Rescue—Fire Prevention Division, aboveground and underground tanks may be recertified and placed back into service by meeting the same design standards as new tanks.
- B. A current engineer statement or tank stamp is acceptable.

III. References:

2018 International Fire Code, Section 5704.2.7.6—Repair, Alteration, or Reconstruction of Tanks and Piping

2018 International Fire Code, Section 5704.2.13.1.5—Reinstallation of Underground Tanks

Date: 8/9/2019

Subject: Code Interpretation, Underground Storage Tank Abandonment

To propose changes to this policy, contact: Fire Marshal

I. Purpose:

A. To establish policy and guidance for underground storage tank abandonment.

II. General Instructions:

- A. Tanks shall not be considered abandoned where product is stored and proper inventory records are maintained. Inventory records shall be provided on request.
- B. Tanks and piping out of service for 90 days and less than one year shall meet the requirements of IFC, Section 5704.2.13.1.2, be precision-tested, and test results provided to Fire Prevention prior to return to service.
- C. Tanks may be abandoned in place following the requirements of Section 5704.2.13.1.4 <u>only</u> when:
 - 1. Located beneath a building.
 - 2. Located beneath footings.
 - 3. Removal may cause structural damage to adjacent buildings/facilities.
- D. An engineer's written verification of the above may be requested from the owner.

III. References:

2018 International Fire Code, Section 5704.2.13.1.2—Out of Service for 90 Days

2018 International Fire Code, Section 5704.2.13.1.4—Tanks Abandoned in Place

Date: 8/9/2019

Subject: Code Interpretation, Double-Wall Underground Tanks and Appurtenances

To propose changes to this policy, contact: Fire Marshal

I. Purpose:

A. To establish policy for installation of underground storage tanks (UST) and appurtenances.

II. General Instructions:

- A. Underground storage tanks shall be of a 360-degree double-wall design.
- B. Underground tanks shall be equipped with a continuous leak detection system capable of immediately detecting a leak and providing an audible and visible alarm.
- C. Fluid-handling piping to UST systems must be of double-wall design with terminations being made within containment sumps.
 - 1. Double-walled metallic piping shall be coated with South Dakota DENR approved coatings, cathodically protected in a manner designed for the specific soil in which it will be buried, and tested in accordance with IFC, Section 5703.6.3.
 - 2. Nonmetallic piping must be installed in accordance with the manufacturer's installation requirements and tested in accordance with IFC, Section 5703.6.3.
- D. Suction and/or pressure piping shall be equipped with leak detection devices that will promptly notify the operator in any one of the following manners:
 - 1. Slowing the dispensing rate to one-third its normal dispensing rate.
 - 2. Providing an audible and visible warning through the tank alarm panel.
 - 3. Completely stopping the flow of materials to the dispenser.

III. References:

City of Sioux Falls Ordinances, 19-13

2018 International Fire Code, Section 5703.6.3—Testing

2018 International Fire Code, Section 5704.2.11—Underground Tanks

Date: 8/9/2019

Subject: Code Interpretation, Emergency Access Provisions

To propose changes to this policy, contact: Fire Marshal

I. Purpose:

A. To establish minimum emergency access requirements for one- and two-family dwelling residential developments.

II. General:

- A. Residential developments of one- or two-family dwellings, where the number of dwelling units will exceed 30, shall be provided with access in accordance with *International Fire Code (IFC) Appendix 'D'* provisions.
- B. Preliminary plans with a single access road and plans for access roads to connect with adjacent concept plans/preliminary plans, as determined by the fire code official, shall meet the following criteria:
 - 1. The planned connection with future development shall comply with *IFC Appendix 'D'—D104.3, Remoteness.*
 - 2. In addition to the single emergency access road, a temporary access road shall be provided *prior* to the number of dwelling units exceeding 30.
- C. Temporary access roads *for emergency response use only* shall meet the following:
 - 1. A minimum of 6 inches of gravel compacted to 95 percent compaction, capable of all-weather travel.
 - 2. Roads shall be a minimum of 20 feet unobstructed width.
 - 3. Access/entrance to the road shall be controlled via a secured chain or gate at points of entry *and* at connection to an interior intersecting roadway.
 - 4. Fire lane signage, in accordance with *IFC Appendix 'D'*, shall be posted to prohibit vehicle blockage of access roadway entry/exit points.
 - 5. Road maintenance, including grading/scraping to maintain a navigable surface and required snow removal, shall be performed as needed to ensure availability at all times. Maintenance shall be the sole responsibility of the developer.

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- 6. If after five years a second permanent access road is not in place, the temporary access road shall be paved in accordance with the requirements of the *City of Sioux Falls Engineering Design Standards*. *This is not a substitute for a second permanent approved fire apparatus access road as required by code*.
- D. Temporary access roads intended for general public *and* emergency response use shall meet the following:
 - 1. A minimum of 6 inches of gravel compacted to 95 percent compaction, capable of all-weather travel.
 - 2. Road shall be a minimum of 28 feet unobstructed width.
 - 3. Fire lane signage shall be posted, in accordance with *IFC Appendix 'D'*, on *both* sides of road.
 - 4. Road maintenance, including grading/scraping to maintain a navigable surface and required snow removal, shall be performed as needed to ensure availability at all times. Maintenance shall be the sole responsibility of the developer.
 - 5. If after five years a second permanent access road is not in place, the temporary access road shall be paved in accordance with the requirements of the *City of Sioux Falls Engineering Design Standards. This is not a substitute for a second permanent approved fire apparatus access road as required by code.*
- E. Where emergency apparatus access roads complying with D104.1 and D107 are not possible or practical, and no future second approved access road is planned, all dwellings shall be equipped with automatic sprinkler protection in accordance with *IFC, Sections* 903.3.1.1, 903.3.1.2, or 903.3.1.3.
- F. Installed temporary access roads shall not be removed without approval of the fire code official.

III. References:

2018 International Fire Code, Chapter 9 and Appendix 'D'

City of Sioux Falls—Engineering Design Standards

Adula

Brad Goodroad Fire Chief

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