

# ARTICLE 28. NATIONAL FIRE PROTECTION ASSOCIATION (NFPA) STANDARDS

## Rule 1. National Fire Protection Association (NFPA) Standards

### 675 IAC 28-1-1 Purpose

Authority: IC 22-13-2-2; IC 22-13-2-13

Affected: IC 22-12; IC 22-13; IC 22-14; IC 22-15; IC 36-7

Sec. 1. The purpose of this rule is to locate editions of NFPA Standards adopted by the commission in one (1) article. (*Fire Prevention and Building Safety Commission; 675 IAC 28-1-1; filed Aug 23, 2006, 4:03 p.m.: 20060906-IR-675050104FRA; readopted filed Aug 8, 2012, 8:08 a.m.: 20120905-IR-675120260RFA; readopted filed Jul 3, 2018, 2:22 p.m.: 20180801-IR-675180204RFA*)

### 675 IAC 28-1-2 NFPA 10; standard for portable fire extinguishers

Authority: IC 22-13-2-2; IC 22-13-2-13

Affected: IC 10-19-2; IC 22-12; IC 22-13; IC 22-14; IC 22-15; IC 25-4; IC 25-31; IC 36-7

Sec. 2. (a) That certain standard, being titled NFPA 10, Standard for Portable Fire Extinguishers, 2010 edition, published by the National Fire Protection Association (NFPA), 1 Batterymarch Park, Quincy, Massachusetts 02169-7471, be and the same is hereby adopted by reference as if fully set out in this section except as revised hereafter.

(b) This rule is available for review and reference at the:

Legal and Code Services Section  
Indiana Department of Homeland Security  
Indiana Government Center South  
302 West Washington Street, Room W246  
Indianapolis, Indiana 46204

(c) Delete the text of Section 1.1 and insert the following: Scope. The provisions of this standard apply to the selection, installation, inspection, maintenance, and testing of portable extinguishing systems.

(d) Delete Section 1.2 in its entirety without substitution.

(e) Amend Section 2.2 as follows:

- (1) In the reference to NFPA 14, delete "2010 edition" and insert "as adopted at 675 IAC 13-1-9".
- (2) In the reference to NFPA 58, delete "2008 edition" and insert "as adopted at 675 IAC 28-1-22".
- (3) In the reference to NFPA 72, delete "2010 edition" and insert "as adopted at 675 IAC 28-1-28".
- (4) In the reference to NFPA 86, delete "2007 edition" and insert "as adopted at 675 IAC 28-1-31".
- (5) In the reference to NFPA 385, delete "2007 edition" and insert "as adopted at 675 IAC 28-1-34".
- (6) In the reference to NFPA 407, delete "2007 edition" and insert "as adopted at 675 IAC 28-1-36".
- (f) Delete Section 2.3.7 without substitution.

(g) Amend Section 2.4 as follows:

- (1) In the reference to NFPA 17, delete "2009 edition" and insert "as adopted at 675 IAC 28-1-9".
- (2) In the reference to NFPA 17A, delete "2009 edition" and insert "as adopted at 675 IAC 28-1-10".
- (3) In the reference to NFPA 52, delete "2010 edition" and insert "as adopted at 675 IAC 28-1-21".

(h) Amend Chapter 3 as follows:

(1) Amend the following definitions to read as follows:

APPROVED means acceptance by the authority having jurisdiction by one (1) of the following methods:

- (1) Investigation or tests conducted by nationally recognized authorities; or
- (2) Investigation or tests conducted by nationally recognized technical or scientific organizations; or
- (3) Nationally accepted principles.

The investigation, tests, or principles shall establish that the method, material, equipment, design, or type of construction is safe for its intended purpose.

**AUTHORITY HAVING JURISDICTION** means the Division of Fire and Building Safety or officer of a local unit of government empowered by law to administer and enforce the rules of the commission.

**EXTINGUISHER MAINTENANCE** means a thorough examination of the fire extinguisher and any necessary repair.

**HALOGENATED AGENTS** means halogenated (clean) agents referenced in this standard are the following types:

- (1) Halons. Bromochlorodifluoromethane (Halon 1211), bromotrifluoromethane (Halon 1301), and mixtures of Halon 1211 and Halon 1301 (Halon 1211/1301).

NOTE: Halon 1211 and Halon 1301 are included in the "Montreal Protocol on Substances that Deplete the Ozone Layer", signed September 16, 1987. In compliance with National regulations, production of halons ceased on January 1, 1994.

- (2) Halocarbons. Halocarbon agents include hydrochlorofluoro-carbon (\*HCFC), hydrofluorocarbon (HFC), perfluorocarbon (PFC), and fluoriododocarbon (FIC) type agents.

**LABELED** means equipment or materials to which has been attached a label, symbol, or other identifying mark of an organization engaged in product evaluation, that maintains periodic inspection of production of labeled equipment or materials, and by whose labeling the manufacturer indicates compliance with appropriate standards or performance in a specified manner.

**LISTED** means equipment or materials included in a list published by an organization engaged in product evaluation, that maintains periodic inspection of production of listed equipment or materials, and whose listing states either that the equipment or material meets appropriate standards or has been tested and found suitable for use in a specified manner.

- (2) Add the following definitions:

**BUILDING CODE** means the Indiana Building Code in effect in Indiana at the time of construction, remodeling, alteration, or addition of the structure.

**DESIGN PROFESSIONAL** means an architect who is registered under IC 25-4 or professional engineer who is registered under IC 25-31. If a registered design professional is not required by 675 IAC 12-6 or 675 IAC 15, then it means the owner.

**DIVISION OF FIRE AND BUILDING SAFETY** means the Division of Fire and Building Safety of the Indiana Department of Homeland Security created pursuant to IC 10-19-2.

**FIRE CODE** means the Indiana Fire Code.

**INDIANA BUILDING CODE** means the rules adopted at 675 IAC 13 in effect in Indiana at the time of construction, remodeling, alteration, or addition of the structure.

**INDIANA FIRE CODE** means the rules adopted at 675 IAC 22 in effect in Indiana at the time of inspection by the inspection authority or, with respect to construction required to be filed under 675 IAC 12-6, 675 IAC 22 in effect at the time of construction, remodeling, alteration, or addition of the structure.

**QUALIFIED** means a design professional or a person having successfully completed a course of instruction related to the equipment being installed, serviced, or repaired. Such instruction shall be provided by the manufacturer of the equipment or their authorized representative.

- (3) Delete Section 3.2.6 in its entirety without substitution.

- (i) Amend Section 4.1.1 to read as follows: Portable fire extinguishers used to comply with this standard shall be listed and labeled.

- (j) Amend Section 4.2(2) to read as follows: Hazardous materials shall be identified in accordance with NFPA 704 as adopted by the commission at 675 IAC 28-1-38. Hazardous materials shall be classified in accordance with chapter 27 of the Indiana Fire Code.

- (k) Delete the text of Section 5.1 and substitute the following: Extinguishers shall be suitable for the anticipated growth and character of the fire, construction, and occupancy of the individual property or premises, the vehicle or hazard to be protected, and ambient-temperature conditions. Selection of the class, size, number, and location of extinguishers shall be as specified in the Indiana Fire Code.

- (l) Delete Section 5.4.1 without substitution.

- (m) Delete Section 5.4.1.4 without substitution.

- (n) Delete Section 5.4.2 in its entirety without substitution.

- (o) Delete the text of Section 5.5.5 and insert as follows: See Section 904.11.5 of the Indiana Fire Code.
- (p) Delete the text of Section 5.5.5.2 and insert as follows: Cooking appliances that are protected by a UL 300 fire-extinguishing system shall be provided with a type K fire extinguisher.
- (q) Delete Section 5.6 in its entirety without substitution.
- (r) Delete the text of Section 6.1.1 and insert as follows: The minimum required number of fire extinguishers needed to protect a property shall be determined as specified in the Indiana Fire Code.
- (s) Amend Section 6.1.2 to read as follows: Fire extinguishers shall be provided for the protection of the occupancy hazard as required by the Indiana Building Code and the Indiana Fire Code.
- (t) Delete the text of Section 7.1.2 in its entirety and insert to read as follows:  
 Section 7.1.2.1. Persons performing design, installation, maintenance, and servicing shall be qualified.  
 Section 7.1.2.2. Documentation of qualifications shall be provided to the authority having jurisdiction upon request.  
 Section 7.1.2.3. Persons performing maintenance and recharging of the fire extinguishers shall have available the appropriate manufacturer's servicing manuals, the correct tools, recharge materials, lubricants, and manufacturer's replacement parts or parts specifically listed for the use in the fire extinguisher.
- (u) Amend Section 7.3.3.1 to read as follows: Fire extinguisher shells that pass the applicable six (6) year requirement of 7.3.1.2.1 shall have the test information recorded on a durable weatherproof label, a minimum size of two (2) inches by three and one-half (3½) inches (51mm × 89mm).

The label shall be affixed to the shell by means of a heatless process. These labels shall be self-destructive type when their removal from a fire extinguisher is attempted. The label shall include the following information:

- (1) Month and year the test was performed, indicated by a perforation such as by a hand punch.
- (2) Name or initials of the person performing the test and the name of the agency performing the test.
- (v) Delete Section 8.1.2 without substitution.
- (w) Delete Section 8.7.1 without substitution.
- (x) Delete Section 8.7.2.3 without substitution.
- (y) Delete Section 8.7.3.2 without substitution.
- (z) The annexes are:
  - (1) not adopted as part of this code;
  - (2) intended for use as a guide; and
  - (3) not enforceable as part of this code.

*(Fire Prevention and Building Safety Commission; 675 IAC 28-1-2; filed Aug 23, 2006, 4:03 p.m.: 20060906-IR-675050104FRA; readopted filed Aug 8, 2012, 8:08 a.m.: 20120905-IR-675120260RFA; filed Nov 15, 2012, 2:59 p.m.: 20121212-IR-675120051FRA; readopted filed Jul 3, 2018, 2:22 p.m.: 20180801-IR-675180204RFA)*

**675 IAC 28-1-3 NFPA 11; standard for low-, medium-, and high-expansion foam**

Authority: IC 22-13-2-2; IC 22-13-2-13

Affected: IC 10-19-2; IC 22-12; IC 22-13; IC 22-14; IC 22-15; IC 36-7

Sec. 3. (a) Standard for Low-, Medium-, and High-Expansion Foam, NFPA 11, 2005 edition, published by National Fire Protection Association (NFPA), 1 Batterymarch Park, Quincy, Massachusetts 02269-9101 is adopted by reference except as revised hereafter.

(b) The following documents referenced in NFPA 11 are not adopted, are not enforceable, and are for information purposes only:

- (1) NFPA 16, NFPA 24, NFPA 30, NFPA 1150, NFPA 1901, and NFPA 1961.
- (2) ANSI B1.20.1, B16.1, B16.3, B16.4, B16.5, B16.9, B16.11, and B16.25.
- (3) ASTM A 53, A 105, A 106, A 135, A 182, A 216, A 234, A 312, A 395, A 795, and SI 10.
- (4) AWS D10.9.
- (5) API 650.
- (6) IEEE 45.
- (7) IMO Safety of life at Sea SOLAS Regulations II-2/4.3 and 4.3.5.

(8) UL 162.

(9) Notes: (2) and (3) in Table 5.2.5.2.2.

(c) The following documents referenced in NFPA 11 are adopted and are enforceable:

(1) NFPA 13, as adopted in 675 IAC 13-1-8.

(2) NFPA 15, as adopted in section 8 of this rule.

(3) NFPA 20, as adopted in 675 IAC 13-1-10.

(4) NFPA 70, as adopted in 675 IAC 17.

(5) NFPA 72, as adopted in section 28 of this rule.

(d) Delete Section 1.2.2, and substitute to read as follows: For alternate materials, methods, and design see the General Administrative Rules (675 IAC 12-6-11).

(e) Delete subsection 1.4 in its entirety without substitution.

(f) Delete subsection 1.5 in its entirety and substitute "See 675 IAC 12-6-11."

(g) Amend the following definitions in Chapter 3 to read as follows:

APPROVED means acceptance by the authority having jurisdiction by one (1) of the following methods:

(1) Investigation or tests conducted by nationally recognized authorities; or

(2) Investigation or tests conducted by nationally recognized technical or scientific organizations; or

(3) Nationally accepted principles.

The investigation, tests, or principles shall establish that the method, material, equipment, design, or type of construction is safe for its intended purpose.

AUTHORITY HAVING JURISDICTION means the Division of Fire and Building Safety or officer of a local unit of government empowered by law to administer and enforce the rules of the commission.

LABELED. Equipment or materials to which has been attached a label, symbol, or other identifying mark of an organization engaged in product evaluation that maintains periodic inspection of production of labeled equipment or materials and by whose labeling the manufacturer indicates compliance with appropriate standards or performance in a specified manner.

LISTED. Equipment or materials included in a list published by an organization engaged in product evaluation that maintains periodic inspection of production of listed equipment or materials and whose listing states either that the equipment or material meets appropriate standards or has been tested and found suitable for use in a specified manner.

(h) Add the following definitions to Chapter 3 as follows:

DIVISION OF FIRE AND BUILDING SAFETY means the Division of Fire and Building Safety of the Indiana Department of Homeland Security created pursuant to IC 10-19-2.

NFPA 70, National Electrical Code means the Indiana Electrical Code (675 IAC 17).

TRAINED means one who has undergone the instructions necessary to design, install, and perform the maintenance and recharge service.

(i) Delete subsection 4.2.1.5 in its entirety without substitution.

(j) Amend subsection 4.2.1.6 to read as follows: Water supply or premixed solution shall be protected against freezing.

(k) Delete subsection 4.3.2.1 in its entirety and substitute: Storage Facilities. Foam concentrates and equipment shall be stored in an accessible location not exposed to the hazard they protect. If housed, they shall be in a noncombustible structure. Off-premises supplies shall be of the proper type for use in the systems of the given installation. At the time of a fire, these off-premises supplies shall be accumulated in sufficient quantities, before placing the equipment in operation, to ensure uninterrupted foam production at the design rate for the required period of time.

(l) Amend subsection 4.3.2.5.1 to read as follows: The consumption rates shall be based on the percentage concentrate used in the system design (e.g., three percent (3%) or six percent (6%) or other, if so listed).

(m) Delete subsection 4.7.1.3 without substitution.

(n) Insert subsection 4.8.1 Fixed Systems. These systems are complete installations in which foam is piped from a central foam station, discharging through fixed delivery outlets to the hazard to be protected. Any required pumps are permanently installed.

(o) Insert subsection 4.8.2 Semifixed Systems. These systems are the type in which the hazard is equipped with fixed discharge outlets connected to piping that terminates at a safe distance. The fixed piping installation might or might not include a foam maker. Necessary foam-producing materials are transported to the scene after the fire starts and are connected to the piping.

(p) Insert subsection 4.8.3 Mobile Systems. These systems include any foam-producing unit that is mounted on wheels and that is self-propelled or towed by a vehicle. These units can be connected to a suitable water supply or can utilize a premixed foam solution.

(q) Insert subsection 4.8.4 Portable Systems. These systems are the type in which the foam-producing equipment and materials, hose, etc., are transported by hand.

(r) Delete subsection 4.9.2.3 without substitution.

(s) Delete subsection 4.9.2.4 without substitution.

(t) Delete subsection 4.9.2.5.2 without substitution.

(u) Delete subsection 4.9.2.7 in its entirety and substitute: Where automatic shutdown is required, an alarm condition shall remain until manually reset.

(v) Amend Section 5.2.4.3.2 by deleting the "," between "approved" and "for".

(w) Amend Section 5.2.5.1.3 by inserting "securely" before "attached".

(x) Amend Section 5.2.5.1.5 by inserting "a" before "seal".

(y) Amend Section 5.2.6.4 by inserting "as specified in 675 IAC 12-6-11" after "testing laboratories".

(z) Delete Chapter 7 and substitute the following: Plans and specifications shall be filed as required by the General Administrative Rules (675 IAC 12).

(aa) Delete subsection 8.3.4.1 in its entirety without substitution.

(bb) Amend Section 8.3.4.2 by inserting "." at the end of each sentence for items (1), (2), and (3).

(cc) Delete subsection 8.5.1.4 without substitution.

(dd) Amend Section 6.5.2 by deleting "in the opinion of the authority having jurisdiction".

(ee) Delete Section 6.7.1.1.1 in its entirety without substitution.

(ff) Amend Section 6.11.3.3 by deleting "acceptable to" and substituting "approved by".

(gg) Amend Section 9.1.1 by deleting "where required by the AHJ".

(hh) Delete Section 9.12.2 in its entirety without substitution.

(ii) Amend Section 10.3.1 to read as follows: The completed system shall be tested by trained personnel.

(jj) Amend Section 10.3.2 to read as follows: The tests shall be adequate to determine that the system has been properly installed and that it functions as intended.

(kk) Delete in Section 11.1.6, "competent" and substitute "trained".

(ll) Chapter 2 and the appendices are not adopted as part of this code and are intended for use as a guide, and the standards referenced therein are not enforceable as part of this code. (*Fire Prevention and Building Safety Commission; 675 IAC 28-1-3; filed Aug 23, 2006, 4:03 p.m.: 20060906-IR-675050104FRA; readopted filed Aug 8, 2012, 8:08 a.m.: 20120905-IR-675120260RFA; readopted filed Jul 3, 2018, 2:22 p.m.: 20180801-IR-675180204RFA*)

#### **675 IAC 28-1-4 NFPA 12; standard on carbon dioxide extinguishing systems**

Authority: IC 22-13-2-2; IC 22-13-2-13

Affected: IC 10-19-2; IC 22-12; IC 22-13; IC 22-14; IC 22-15; IC 36-7

Sec. 4. (a) Standard on Carbon Dioxide Extinguishing Systems, NFPA 12, 2005 Edition, published by National Fire Protection Association (NFPA), 1 Batterymarch Park, Quincy, Massachusetts 02269-9101 is adopted by reference except as revised hereafter.

(b) The following documents referenced in NFPA 12 are not adopted, are not enforceable, and are for information purposes only:

(1) ASME B 31.1.

(2) ANSI/IEEE C 2.

(3) MNBV/ANSI Z535.

(4) API/ASME, Code for Unfired Pressure Vessels for Petroleum Liquids and Gases.

(5) ASTM A 53.

(6) ASTM A 106.

(7) ASTM A 120.

- (8) ASTM A 182.
- (9) CGA G6.2.
- (10) CSA C22.1.
- (11) Title 46, Code of Federal Regulations, Part 58.20.
- (12) Title 46, Code of Federal Regulations, Part 72.
- (13) Title 49, Code of Federal Regulations, Parts 171-190 (DOT).
- (14) Bureau of Mines Bulletins 503 and 627 (DOT).

(c) The following documents referenced in NFPA 12 are adopted and are enforceable:

- (1) NFPA 70, as adopted in 675 IAC 17.
- (2) NFPA 72, as adopted in section 28 of this rule.
- (d) Delete Section 1.1.2 in its entirety without substitution.

(e) Amend subsection 1.2.2 to read as follows: For alternate materials, methods, and design, see the General Administrative Rules (675 IAC 12-6-11).

(f) Amend Section 1.2.3 to read as follows: Design, installation, inspection and maintenance shall be performed by trained persons only.

(g) Delete Section 1.3 in its entirety without substitution.

(h) Amend the following definitions in Chapter 3 to read as follows:

APPROVED means acceptance by the authority having jurisdiction by one (1) of the following methods:

- (1) Investigation or tests conducted by nationally recognized authorities; or
- (2) Investigation or tests conducted by nationally recognized technical or scientific organizations; or
- (3) Nationally accepted principles.

The investigation, tests, or principles shall establish that the method, material, equipment, design, or type of construction is safe for its intended purpose.

AUTHORITY HAVING JURISDICTION means the Division of Fire and Building Safety or officer of a local unit of government empowered by law to administer and enforce the rules of the commission.

LABELED. Equipment or materials to which has been attached a label, symbol, or other identifying mark of an organization engaged in product evaluation that maintains periodic inspection of production of labeled equipment or materials and by whose labeling the manufacturer indicates compliance with appropriate standards or performance in a specified manner.

LISTED. Equipment or materials included in a list published by an organization engaged in product evaluation, that maintains periodic inspection of production of listed equipment or materials and whose listing states either that the equipment or material meets appropriate standards or has been tested and found suitable for use in a specified manner.

(i) Add in Chapter 3, the following definitions to read as follows:

DIVISION OF FIRE AND BUILDING SAFETY means the Division of Fire and Building Safety of the Indiana Department of Homeland Security created pursuant to IC 10-19-2.

NFPA 70, National Electric Code means the Indiana Electrical Code (675 IAC 17).

TRAINED means one who has undergone the instructions necessary to design, install, and perform the maintenance and recharge service.

(j) Delete subsection 4.3.1.3.2 in its entirety without substitution.

(k) Amend subsection 4.3.3.6.2 by deleting "(1) When persons not familiar with the systems and their operation are present in a protected space (2)" and substitute "(1)". Delete the "s" in "conditions".

(l) Delete subsections 4.4.1 and 4.4.2 and substitute the following: Plans and specifications shall be filed in accordance with the General Administrative Rules (675 IAC 12).

(m) Delete subsections 4.4.3 and 4.4.4 and substitute the following: The completed system shall be tested. Only listed or approved equipment and devices shall be used in the system and shall perform as designed and in accordance with this standard.

(n) Delete, in subsection 4.5.2, Exception No. 1 without substitution. Delete "(2)" and substitute "(1)". Delete "(3)" and substitute "(2)".

(o) In subsection 4.5.5.1 delete "unless specifically waived by the authority having jurisdiction" without substitution.

(p) In subsection 4.5.5.2 delete "unless specifically waived by the authority having jurisdiction" without substitution.

(q) Delete subsection 4.6.1.2 in its entirety without substitution.

(r) Amend subsection 4.6.1.3 to read as follows: Both main and reserve supplies for fixed storage systems shall be permanently connected to the piping and arranged for easy changeover.

(s) Delete subsection 4.6.5.2.2 without substitution.

(t) Amend subsection 4.6.6.1.1 to read as follows: Pressure containers exceeding five (5) cubic feet in volume shall be made and marked in accordance with the rules of construction of the Boiler and Pressure Vessel Board (680 IAC 1-4-1 [675 IAC 30]).

(u) Amend subsection 4.7.2.1 by adding a sentence to the end of the section to read as follows: The system shall be designed and installed to accommodate the seismic forces as required by the Indiana Building Code (675 IAC 13).

(v) Amend subsection 4.8.3.2 by deleting "competent" and substituting "trained".

(w) Amend subsection 4.8.3.7.2 by deleting "competent" and substituting "trained".

(x) Amend subsection 5.3.2.3 by deleting "recognized" and substituting "approved".

(y) Delete subsection 5.4.2.2.1 in its entirety without substitution.

(z) Delete subsection 6.2.1.4 in its entirety without substitution.

(aa) Delete subsection 6.2.1.5 in its entirety without substitution.

(bb) Amend subsection 6.6.1.2 to read as follows: The system shall be designed for automatic operation.

(cc) Delete Chapter 7 in its entirety without substitution.

(dd) Amend subsection 8.1.2 to read "Only approved standpipe systems shall be installed."

(ee) Amend subsection 8.1.3 to read as follows: Standpipe systems shall be installed and maintained in accordance with the requirements in Chapters 4, 5, and 6.

(ff) Amend Section 8.2 to read as follows: Standpipe systems may be used to protect hazards included in Chapters 4, 5, and 6.

(gg) Delete Section 8.3 in its entirety without substitution.

(hh) Delete Section 8.4 in its entirety without substitution.

(ii) Amend the first sentence in subsection 9.3.6 to read as follows: System design shall comply with Chapters 5 and 6, except as described in 9.3.6.1 through 9.3.6.4.2.

(jj) Chapter 2 and the annexes are not adopted as part of this code and are intended for use as a guide, and the standards referenced therein are not enforceable as part of this code. (*Fire Prevention and Building Safety Commission; 675 IAC 28-1-4; filed Aug 23, 2006, 4:03 p.m.: 20060906-IR-675050104FRA; readopted filed Aug 8, 2012, 8:08 a.m.: 20120905-IR-675120260RFA; readopted filed Jul 3, 2018, 2:22 p.m.: 20180801-IR-675180204RFA*)

### **675 IAC 28-1-5 NFPA 13; Standard for the installation of sprinkler systems**

Authority: IC 22-13-2-2; IC 22-13-2-13

Affected: IC 10-19-2; IC 10-19-7; IC 22-11-8; IC 22-12; IC 22-13; IC 22-14; IC 22-15; IC 25-4; IC 25-31; IC 36-7

Sec. 5. (a) That certain standard, being titled NFPA 13, Standard for the Installation of Sprinkler Systems, 2010 edition, published by the National Fire Protection Association (NFPA), 1 Batterymarch Park, Quincy, Massachusetts 02169-7471 be and the same is hereby adopted by reference as if fully set out in this section, including all errata effective on September 1, 2011, except as revised hereafter. This rule is available for review and reference at the:

Legal and Code Services Section

Indiana Department of Homeland Security

Indiana Government Center South

302 West Washington Street, Room W246

Indianapolis, Indiana 46204

(b) Delete Section 1.2 in its entirety and substitute as follows: 1.2 Purpose. The purpose of this standard is to provide a reasonable degree of protection for life and property from fire through standardization of design, installation, and testing requirements for sprinkler systems based upon sound engineering principles, test data, and field experience.

(c) Delete Section 1.4 in its entirety without substitution.

(d) Delete the text of Section 1.5 and substitute the following: See the General Administrative Rules, 675 IAC 12-6-11.

(e) Delete the text of Section 1.6 and substitute the following: See the General Administrative Rules, 675 IAC 12-6-11.

(f) Amend Section 2.2 as follows:

- (1) In the reference to NFPA 11, delete "2005 edition" and insert "as adopted at 675 IAC 28-1-3".
- (2) In the reference to NFPA 14, delete "2007 edition" and insert "as adopted at 675 IAC 13-1-9".
- (3) In the reference to NFPA 15, delete "2007 edition" and insert "as adopted at 675 IAC 28-1-8".
- (4) In the reference to NFPA 20, delete "2010 edition" and insert "as adopted at 675 IAC 13-1-10".
- (5) In the reference to NFPA 25, delete "2008 edition" and insert "as adopted at 675 IAC 28-1-12".
- (6) In the reference to NFPA 33, delete "2007 edition" and insert "as adopted at 675 IAC 28-1-13".
- (7) In the reference to NFPA 51B, delete "2009 edition" and insert "as adopted at 675 IAC 28-1-20".
- (8) In the reference to NFPA 59, delete "2008 edition" and insert "as adopted at 675 IAC 28-1-23".
- (9) In the reference to NFPA 59A, delete "2009 edition" and insert "as adopted at 675 IAC 28-1-24".
- (10) In the reference to NFPA 70, delete "2008 edition" and insert "as adopted at 675 IAC 17-1-8".
- (11) In the reference to NFPA 72, delete "2010 edition" and insert "as adopted at 675 IAC 28-1-28".
- (12) In the reference to NFPA 82, delete "2009 edition" and insert "as adopted at 675 IAC 28-1-30".

(g) Amend Section 2.3.2 as follows:

(1) In the reference to ASME BPVC-IX, BPVC Section IX – Welding and Brazing Qualifications, delete "2004 edition" and insert "as adopted at 680 IAC 2 [675 IAC 30]".

(2) In the reference to ASME A17.1, Safety Code for Elevators and Escalators, delete "2000 edition" and insert "as adopted at 675 IAC 21".

(h) Amend Section 2.4 as follows:

- (1) In the reference to NFPA 33, delete "2007 edition" and insert "as adopted at 675 IAC 28-1-13".
- (2) In the reference to NFPA 51, delete "2007 edition" and insert "as adopted at 675 IAC 28-1-18".
- (3) In the reference to NFPA 59, delete "2008 edition" and insert "as adopted at 675 IAC 28-1-23".
- (4) In the reference to NFPA 59A, delete "2009 edition" and insert "as adopted at 675 IAC 28-1-24".
- (5) In the reference to NFPA 70, delete "2008 edition" and insert "as adopted at 675 IAC 17-1-8".
- (6) In the reference to NFPA 82, delete "2009 edition" and insert "as adopted at 675 IAC 28-1-30".
- (7) In the reference to NFPA 86, delete "2007 edition" and insert "as adopted at 675 IAC 28-1-31".

(i) Amend Section 3.1 as follows:

- (1) Amend the first sentence by inserting "solely" after "apply".
- (2) Delete the last sentence without substitution.

(j) Amend Section 3.2 as follows:

(1) Delete the definition of APPROVED and substitute to read as follows: APPROVED means acceptance by the authority having jurisdiction by one (1) of the following methods:

- (i) Investigation or tests conducted by nationally recognized authorities; or
- (ii) Investigation or tests conducted by nationally recognized technical or scientific organizations; or
- (iii) Nationally accepted principles.

The investigation, tests, or principles shall establish that the method, material, equipment, design, or type of construction is safe for its intended purpose.

(2) Delete the definition of AUTHORITY HAVING JURISDICTION and substitute to read as follows: AUTHORITY HAVING JURISDICTION means the Division of Fire and Building Safety or officer of a local unit of government empowered by law to administer and enforce the rules of the commission.

(3) Add the definition of LABELED to read: LABELED means equipment or materials to which has been attached a label, symbol, or other identifying mark of an organization engaged in product evaluation, that maintains periodic inspection of production of labeled equipment or materials, and by whose labeling the manufacturer indicates compliance with appropriate standards or performance in a specified manner.

(4) Delete the definition of LISTED and substitute to read as follows: LISTED means equipment or materials included in a list published by an organization engaged in product evaluation, that maintains periodic inspection of production of listed equipment or materials, and whose listing states either that the equipment or material meets appropriate standards or has been tested and found suitable for use in a specified manner.

(5) Delete the definition of SHOULD without substitution.

(k) Amend Section 3.3 as follows:



(1) Add the definition of BUILDING CODE to read: BUILDING CODE means the Indiana Building Code (675 IAC 13) in effect in Indiana at the time of construction, remodeling, alteration, or addition of the structure.

(2) Add the definition of DESIGN PROFESSIONAL to read: DESIGN PROFESSIONAL means an architect who is registered under IC 25-4 or a professional engineer who is registered under IC 25-31.

(3) Add the definition of DIVISION OF FIRE AND BUILDING SAFETY to read: DIVISION OF FIRE AND BUILDING SAFETY means the Division of Fire and Building Safety of the Indiana Department of Homeland Security created pursuant to IC 10-19-7.

(4) Add the definition of FIRE CODE to read: FIRE CODE means the Indiana Fire Code (675 IAC 22) in effect in Indiana at the time of inspection by the authority having jurisdiction or, with respect to construction required to be filed under 675 IAC 12-6, 675 IAC 22 in effect at the time of construction, remodeling, alteration, or addition of the structure.

(5) Add the definition of Indiana Mechanical Code to read as follows: INDIANA MECHANICAL CODE means the Indiana Mechanical Code (675 IAC 18) in effect at the time of construction, remodeling, alteration, or addition of the structure.

(6) Delete the definition of NONCOMBUSTIBLE MATERIAL and substitute to read as follows: NONCOMBUSTIBLE MATERIAL, as applied to building construction materials, means a material that, in the form in which it is used, is either one (1) of the following:

i. Material of which no part will ignite and burn when subjected to fire. Any material conforming to ASTM E 136 shall be considered noncombustible.

ii. Material having a structural base of noncombustible material as defined in item i above, with a surfacing material not over one-eighth (1/8) inch (3.2 mm) thick which has a flame-spread rating of fifty (50) or less.

"Noncombustible" does not apply to surface finish materials. Material required to be noncombustible for reduced clearances to flues, heating appliances, or other sources of high temperature shall consist of material conforming to item i. No material shall be classed as noncombustible that is subject to increase in combustibility or flame-spread rating, beyond the limits herein established, through the effects of age, moisture, or other atmospheric condition.

Flame-spread rating as used herein refers to rating obtained according to tests conducted as specified in ASTM E 84.

(7) Delete the definition of SHOP WELDED and substitute to read: SHOP WELDED as used in this standard, "shop", in the term "shop welded" means either of the following:

(i) At a sprinkler contractor's or fabricator's premises.

(ii) In an area specifically designed for such work, such as a detached outside location, maintenance shop, or other area of noncombustible or fire-resistive construction free of combustible and flammable contents and segregated from adjacent areas.

(l) Amend Section 3.4 to add the definition of PREMIXED ANTIFREEZE SOLUTION to read as follows: PREMIXED ANTIFREEZE SOLUTION means a mixture of an antifreeze material with water that is prepared by the manufacturer with a quality control procedure in place that ensures that the antifreeze solution remains homogeneous.

(m) Delete Section 3.10 in its entirety without substitution.

(n) Delete Section 4.2.2 without substitution.

(o) In Section 4.3, delete item (3) without substitution.

(p) Add Section 4.5 Air, Nitrogen or other approved gas to read as follows: Air, nitrogen or other approved gas. Where air is used to charge, maintain, or supervise sprinkler systems, nitrogen or other approved gas shall be permitted to be used.

(q) Delete the text of Section 5.6.3 and substitute the following: See the Indiana Fire Code.

(r) Delete the text of Section 5.6.4 and substitute the following: See the Indiana Fire Code.

(s) Delete the text of Section 5.6.5 and substitute the following: See the Indiana Fire Code.

(t) Amend Section 6.5.2.2.2 by deleting "NFPA 51B, Standard for Fire Prevention during Welding, Cutting, and Other Hot Works" and inserting "the Indiana Fire Code".

(u) Amend Section 6.5.2.2.3 by deleting "NFPA 51B, Standard for Fire Prevention during Welding, Cutting, and Other Hot Works" and inserting "the Indiana Fire Code".

(v) Amend Section 6.5.2.5.2 by deleting "or other applicable qualification standard as required by the authority having jurisdiction".

(w) Delete the text of Section 6.5.2.5.4 and substitute to read as follows: See the General Administrative Rules, 675 IAC 12-4.

- (x) Amend Section 7.6.1.5 by inserting "by volume" after "concentration".
- (y) Delete the text of Section 7.6.2.1 and substitute to read as follows: Antifreeze solutions shall be limited to premixed antifreeze solutions of glycerin (chemically pure or United States Pharmacopoeia) ninety-six and five-tenths (96.5) percent at a maximum concentration of forty-eight (48) percent by volume, or propylene glycol at a maximum concentration of thirty-eight (38) percent by volume.
- (z) Add Section 7.6.2.1.1 to read as follows: Premixed antifreeze solutions of propylene glycol exceeding forty (40) percent concentration by volume shall be permitted for use with ESFR sprinklers where the ESFR sprinklers are listed for such use in a specific application.
- (aa) Add Section 7.6.2.1.2 to read as follows: Premixed antifreeze solutions, other than those described in Section 7.6.2.1 of this rule, that are listed for use in sprinkler systems shall be permitted to be used.
- (bb) Add Section 7.6.2.1.3 to read as follows: All premixed antifreeze solutions shall be provided with a certificate from the manufacturer indicating the type of antifreeze, concentration by volume, and freezing point.
- (cc) Delete Section 7.6.2.3 without substitution.
- (dd) Delete Table 7.6.2.3 without substitution.
- (ee) Delete the text of Section 7.6.2.4 and substitute to read as follows: A premix antifreeze solution with a freezing point below the expected minimum temperature for the locality shall be provided.
- (ff) Delete Section 7.6.2.5 without substitution.
- (gg) Delete Figures 7.6.2.5 (a-c) without substitution.
- (hh) Delete Section 7.6.2.6 without substitution.
- (ii) Delete the text of Section 7.10.3.4.1 and substitute to read as follows: Where the entire exhaust duct is protected with an approved automatic fire suppression system in accordance with the Indiana Mechanical Code, sprinkler(s) or automatic spray nozzle(s) shall not be required.
- (jj) Delete the text of Section 7.10.8.3 and substitute as follows: See the Indiana Mechanical Code for shut-off requirements.
- (kk) Amend Section 8.2.1 by deleting "NFPA Standards" and inserting "rules of the commission, as applicable".
- (ll) Amend Section 8.2.3 by deleting "NFPA Standards" and inserting "rules of the commission, as applicable".
- (mm) Amend Section 8.15.8.1.2 by deleting "NFPA 101, Life Safety Code" and inserting "the Indiana Building Code".
- (nn) Amend Section 8.15.12 by deleting "the authority having jurisdiction or the" and inserting "other".
- (oo) Add Section 8.16.2.5.3.1.1 to read as follows: Auxiliary drains piped to accommodate the accumulation of water condensate shall be installed in the vertical position to allow the free flow of water out of the drain termination.
- (pp) Amend Section 8.17.5.1.1.1 by deleting "subject to the approval of the authority having jurisdiction".
- (qq) Amend Section 9.1.1.2 as follows:
  - (1) In the first sentence, delete "registered professional engineer" and insert "design professional".
  - (2) In item (5), delete "when required by the reviewing authority" and insert "to the Division of Fire and Building Safety as required by the General Administrative Rules in 675 IAC 12-6".
- (rr) Delete the text of Section 9.3.1.1 and substitute to read as follows: Sprinkler systems shall be protected to prevent pipe breakage where subject to earthquakes in accordance with the requirements of Section 9.3 of this rule and the Indiana Building Code.

Exception: Where alternative methods of providing earthquake protection are provided, the design shall be based on a dynamic seismic analysis certified by a design professional. The system performance shall be at least equal to that of the building structure under expected seismic forces.
- (ss) Amend Section 9.3.5.6.1 by deleting, in the first sentence, "or as required by the authority having jurisdiction".
- (tt) Amend Section 9.3.5.6.2 by deleting "authority having jurisdiction or from" and inserting "the Indiana Building Code".
- (uu) Amend Section 9.3.5.6.3 by deleting "Where the authority having jurisdiction does not specify the horizontal seismic load".
- (vv) Amend Section 10.8.3.1.2.6 by deleting "if approved for the specific installation by the authority having jurisdiction".
- (ww) Amend Section 12.2.1 by deleting "where required by the authority having jurisdiction".
- (xx) Delete Section 12.6.4 without substitution.
- (yy) Delete Section 12.6.5 without substitution.
- (zz) Amend Section 12.12.2.1 by deleting item (7) without substitution.

- (aaa) Delete Section 12.12.2.3.1 without substitution.
- (bbb) Delete the text of Section 21.2.1 and substitute to read as follows: Flammable and combustible liquids: See Chapter 34 of the Indiana Fire Code.
- (ccc) Delete the text of Section 21.3.1 and substitute to read as follows: Aerosol products: See Chapter 28 of the Indiana Fire Code.
- (ddd) Delete Section 21.5 without substitution.
- (eee) Delete Section 21.7 without substitution.
- (fff) Delete Section 21.8 without substitution.
- (ggg) Amend Section 21.12.1.1 by adding "675 IAC 28-1-23" after "Code".
- (hhh) Amend Section 21.13.1 by adding "675 IAC 28-1-24" after "Gas".
- (iii) Amend Section 21.18.1.1 by deleting "21.21.2" and inserting "21.18.2".
- (jjj) Amend Section 21.22.1.2 by deleting "With the approval of the authority having jurisdiction".
- (kkk) Delete the text of Section 22.1.1 and substitute to read as follows: Plans and specifications shall be filed as required by the General Administrative Rules in 675 IAC 12-6.
- (lll) Delete Section 22.1.2 without substitution.
- (mmm) Amend Section 22.3.5.2, Summary Sheet, by deleting "(13) Authority having jurisdiction".
- (nnn) Amend Section 22.4.1.4 by deleting "standards" and inserting "rules of the fire prevention and building safety commission".
- (ooo) Delete the footnote to Table 22.4.4.7 without substitution.
- (ppp) Amend Section 23.1.5.1 by deleting "the owner(s) shall notify the sprinkler system installer and".
- (qqq) Amend Section 23.1.5.2 by deleting "the owner(s) shall notify the sprinkler system installer and".
- (rrr) Delete Chapter 25 in its entirety without substitution.
- (sss) Add Section 26.2.4 to read as follows: Sprinkler systems out of service shall follow the requirements of the Indiana Fire Code.
- (ttt) Add Section 26.2.5 to read as follows: Sprinkler systems shall be maintained as required by 675 IAC 12-4-9 and required sprinkler systems shall remain operational as required by the Indiana Fire Code.
- (uuu) The annexes are not adopted as part of this code, are intended for use as a guide only, and are not enforceable as part of this code. (*Fire Prevention and Building Safety Commission; 675 IAC 28-1-5; filed Aug 28, 2012, 2:00 p.m.: 20120926-IR-675110683FRA; readopted filed Jul 3, 2018, 2:22 p.m.: 20180801-IR-675180204RFA*)

**675 IAC 28-1-6 NFPA 13R; Standard for the installation of sprinkler systems in residential occupancies up to and including four stories in height**

Authority: IC 22-13-2-2; IC 22-13-2-13

Affected: IC 10-19-2; IC 10-19-7; IC 22-11-8; IC 22-12; IC 22-13; IC 22-14; IC 22-15; IC 25-4; IC 25-31; IC 36-7

Sec. 6. (a) That certain standard, being titled NFPA 13R, Standard for the Installation of Sprinkler Systems in Residential Occupancies up to and Including Four Stories in Height, 2010 edition, published by the National Fire Protection Association (NFPA), 1 Batterymarch Park, Quincy, Massachusetts 02169-7471, be and the same is hereby adopted by reference as if fully set out in this section except as revised hereafter. This rule is available for review and reference at the:

Legal and Code Services Section  
Indiana Department of Homeland Security  
Indiana Government Center South  
302 West Washington Street, Room W246  
Indianapolis, Indiana 46204

(b) Amend Section 1.2 as follows:

(1) Delete the text of Section 1.2.1 and insert to read as follows: The purpose of this standard shall be to provide a sprinkler system that aids in the detection and control of residential fires.

(2) Delete the text of Section 1.2.2 and insert to read as follows: A sprinkler system designed and installed in accordance with this standard shall be expected to prevent flashover (total involvement) in the room of fire origin, where sprinklered.

- (3) Amend Section 1.2.3 by deleting "trained" and inserting "qualified".
- (c) Delete Section 1.3 in its entirety without substitution.
- (d) Delete the text in Section 1.4 and insert the following: See the General Administrative Rules, 675 IAC 12-6-11.
- (e) Amend Section 1.5.5 by deleting "and then rounding the result to the appropriate number of significant digits".
- (f) Delete the text in Section 1.6 and insert to read as follows: See the General Administrative Rules, 675 IAC 12-6-11.
- (g) Amend Section 2.2 as follows:
  - (1) In the reference to NFPA 13, delete "2010 edition" and insert "as adopted at 675 IAC 28-1-5".
  - (2) In the reference to NFPA 20, delete "2010 edition" and insert "as adopted at 675 IAC 13-1-10".
  - (3) In the reference to NFPA 25, delete "2008 edition" and insert "as adopted at 675 IAC 28-1-12".
- (h) Amend Section 2.3 as follows:
  - (1) In the reference to ANSI A17.1, Safety Code for Elevators and Escalators, 2004, delete "2004 edition" and insert "as adopted at 675 IAC 21".
  - (2) In the reference to ANSI B36.10M, Welded and Seamless Wrought Steel Pipe 2004, delete "2004 edition" and insert "as adopted at 680 IAC 2 [675 IAC 30]".
- (3) Delete Section 2.3.5 without substitution.
- (i) Amend Section 3.1 as follows:
  - (1) Amend the first sentence by inserting "solely" after "apply".
  - (2) Delete the last sentence without substitution.
- (j) Amend Section 3.2 as follows:
  - (1) Delete the text of the definition APPROVED and insert to read as follows: APPROVED means acceptance by the authority having jurisdiction by one (1) of the following methods:
    - (i) Investigation or tests conducted by nationally recognized authorities; or
    - (ii) Investigation or tests conducted by nationally recognized technical or scientific organizations; or
    - (iii) Nationally accepted principles.

The investigation, tests, or principles shall establish that the method, material, equipment, design, or type of construction is safe for its intended purpose.
  - (2) Delete the text of the definition AUTHORITY HAVING JURISDICTION and insert to read as follows: AUTHORITY HAVING JURISDICTION means the Division of Fire and Building Safety or officer of a local unit of government empowered by law to administer and enforce the rules of the commission.
- (k) Amend Section 3.3 as follows:
  - (1) Add the definition of BUILDING CODE to read: BUILDING CODE means the Indiana Building Code (675 IAC 13) in effect in Indiana at the time of construction, remodeling, alteration, or addition of the structure.
  - (2) Add the definition of DESIGN PROFESSIONAL to read: DESIGN PROFESSIONAL means an architect who is registered under IC 25-4 or a professional engineer who is registered under IC 25-31.
  - (3) Add the definition of DIVISION OF FIRE AND BUILDING SAFETY to read: DIVISION OF FIRE AND BUILDING SAFETY means the Division of Fire and Building Safety of the Indiana Department of Homeland Security created pursuant to IC 10-19-7.
  - (4) Add the definition of FIRE CODE to read: FIRE CODE means the Indiana Fire Code (675 IAC 22) in effect in Indiana at the time of inspection by the authority having jurisdiction or, with respect to construction required to be filed under 675 IAC 12-6, 675 IAC 22 in effect at the time of construction, remodeling, alteration, or addition of the structure.
  - (5) Delete the text of the definition LABELED and insert to read as follows: LABELED means equipment or materials to which has been attached a label, symbol, or other identifying mark of an organization engaged in product evaluation, that maintains periodic inspection of production of labeled equipment or materials, and by whose labeling the manufacturer indicates compliance with appropriate standards or performance in a specified manner.
  - (6) Delete the text of the definition LISTED and insert to read as follows: LISTED means equipment or materials included in a list published by an organization engaged in product evaluation, that maintains periodic inspection of production of listed equipment or materials, and whose listing states either that the equipment or material meets appropriate standards or has been tested and found suitable for use in a specified manner.
  - (7) Add the definition of PLUMBING CODE to read: PLUMBING CODE means the Indiana Plumbing Code (675 IAC 16)

in effect at the time of construction, remodeling, alteration, or addition of the structure.

(8) Add the definition of QUALIFIED to read: QUALIFIED means a design professional (IC 25-4 or IC 25-31) or a person having successfully completed a course of instruction related to the equipment being installed, serviced, or repaired. Such instruction shall be provided by the manufacturer of the equipment or their authorized representative.

(9) Delete the text of the definition RESIDENTIAL OCCUPANCIES and insert to read as follows: RESIDENTIAL OCCUPANCIES means residential occupancies, as included in the scope of this standard, include the following:

- (i) Apartment buildings.
- (ii) Lodging and rooming houses.
- (iii) Board and care facilities.
- (iv) Hotels, motels, and dormitories.
- (v) Fraternities and sororities, including congregate living facilities.

(10) Add the definition of TOWNHOUSE to read: TOWNHOUSE means a single-family dwelling unit constructed in a group of three or more attached units separated by property lines in which each unit extends from foundation to roof and with open space on at least two (2) sides and is regulated by the Indiana Residential Code (675 IAC 14) as a Class 1 structure.

(l) Amend Section 5.2.12.1.3.3 by deleting "and where accepted by the authority having jurisdiction".

(m) Amend Section 6.6.6 by adding (675 IAC 21) after "Safety Code for Elevators and Escalators".

(n) Amend Section 7.3.1 by deleting "local code" and inserting "Indiana Building Code".

(o) Delete the text of 8.1.1 and insert to read as follows: Plans and specifications shall be filed as required by the General Administrative Rules in 675 IAC 12-6.

(p) Delete Section 8.1.2 without substitution.

(q) Delete the text of Section 9.3 and insert to read as follows: The water supply sources shall be one of the following:

- (1) A connection to the water purveyor's distribution system with or without a booster pump, as required.
- (2) An elevated tank.
- (3) An approved pressure tank.
- (4) A stored water source with an automatically operated pump, installed in accordance with NFPA 20, Standard for the Installation of Centrifugal Fire Pumps, as adopted at 675 IAC 13-1-10.

(r) Amend Section 10.1.1 by deleting "prior to asking for approval of the installation".

(s) Amend Section 10.1.2 by deleting "prior to asking for approval of the installation".

(t) Amend Figure 10.1.2 as follows:

- (1) In the second paragraph, first sentence, delete "approving authority".
- (2) In the second paragraph, second sentence, delete "approving authority's requirements" and insert "the requirements of this standard".

(3) Delete the category titled "Plans" without substitution.

(u) Delete the text of Section 10.1.3 and insert to read as follows: "The certificate(s) shall be available on-site to the authority having jurisdiction".

(v) Delete Section 10.1.4 without substitution.

(w) Add Section 11.3.1 to read as follows: Sprinkler systems shall be maintained as required by 675 IAC 12-4-9 and required sprinkler systems shall remain operational as required by the Indiana Fire Code.

(x) Add Section 11.3.2 to read as follows: Sprinkler systems out of service shall comply with the requirements of the Indiana Fire Code.

(y) The annexes are not adopted as part of this code and are intended for use as a guide only, and are not enforceable as part of this code. (*Fire Prevention and Building Safety Commission; 675 IAC 28-1-6; filed Aug 28, 2012, 2:03 p.m.: 20120926-IR-675110684FRA; readopted filed Jul 3, 2018, 2:22 p.m.: 20180801-IR-675180204RFA*)

## **675 IAC 28-1-7 (Reserved)**

Sec. 7. (*NOTE: Reserved to retain citation sequence continuity.*)

**675 IAC 28-1-8 NFPA 15; standard for water spray fixed systems for fire protection**

Authority: IC 22-13-2-2; IC 22-13-2-13

Affected: IC 22-12; IC 22-13; IC 22-14; IC 22-15; IC 36-7

Sec. 8. (a) That certain document, being titled NFPA 15-Standard for Water Spray Fixed Systems for Fire Protection, 2001 Edition, published by the National Fire Protection Association (NFPA), 1 Batterymarch Park, Quincy, Massachusetts 02269-9101, be and the same is hereby adopted by reference, as if fully set out in this section except as revised hereafter.

(b) The following documents referenced in NFPA 15 are not adopted, are not enforceable, and are for information purposes only:

- (1) NFPA 16.
- (2) NFPA 18.
- (3) NFPA 22.
- (4) NFPA 24.
- (5) NFPA 214.
- (6) ANSI/ASME B1.20.1.
- (7) ANSI B16.1.
- (8) ANSI B16.3.
- (9) ANSI B16.4.
- (10) ANSI B16.5.
- (11) ANSI B16.9.
- (12) ANSI B16.11.
- (13) ANSI B16.18.
- (14) ANSI B16.22.
- (15) ANSI B16.25.
- (16) ANSI B36.10M.
- (17) ANSI B36.19M.
- (18) ANSI C2.
- (19) ASTM A 53.
- (20) ASTM A 135.
- (21) ASTM A 182.
- (22) ASTM A 234.
- (23) ASTM A 312.
- (24) ASTM A 536.
- (25) ASTM A 795.
- (26) ASTM B 75.
- (27) ASTM B 88.
- (28) ASTM B 251.
- (29) ASTM D 2996.
- (30) ASTM E 380.
- (31) ASTM F 1173.
- (32) AWS A5.8.
- (33) AWS B2.1.

(c) The following documents referenced in NFPA 15 are adopted and are enforceable:

- (1) NFPA 13 adopted in 675 IAC 13-1-8.
- (2) NFPA 20 adopted in 675 IAC 13-1-10.
- (3) NFPA 25 adopted in section 12 of this rule.
- (4) NFPA 51B adopted in section 20 of this rule.
- (5) NFPA 70 adopted in 675 IAC 17.
- (6) NFPA 72 adopted in section 28 of this rule.

- (d) Delete Section 1.4 in its entirety without substitution.
- (e) Amend Section 1.5 by deleting in its entirety and substituting "See 675 IAC 12-6-11."
- (f) Amend Chapter 3 as follows:
- (1) Amend the following definitions:

APPROVED means acceptance by the authority having jurisdiction by one (1) of the following methods:

- (1) Investigation or tests conducted by nationally recognized authorities; or
- (2) Investigation or tests conducted by nationally recognized technical or scientific organizations; or
- (3) Nationally accepted principles.

The investigation, tests, or principles shall establish that the method, material, equipment, design, or type of construction is safe for its intended purpose.

AUTHORITY HAVING JURISDICTION means the Division of Fire and Building Safety or officer of a local unit of government empowered by law to administer and enforce the rules of the commission.

FLAMMABLE AND COMBUSTIBLE LIQUIDS. See the Indiana Fire Code.

LISTED means equipment or materials included in a list published by an organization engaged in product evaluation, that maintains periodic inspection of production of listed equipment or materials, and whose listing states either that the equipment or material meets appropriate standards or has been tested and found suitable for use in a specified manner.

- (2) Add the following definitions:

BUILDING CODE means the Indiana Building Code in effect in Indiana at the time of construction, remodeling, alteration, addition, or repair of the structure.

DIVISION OF FIRE AND BUILDING SAFETY means that division of the Indiana Department of Homeland Security.

ELECTRICAL CODE means the Indiana Electrical Code in effect in Indiana at the time of construction, remodeling, alteration, addition, or repair of the structure.

FIRE CODE means the Indiana Fire Code.

INDIANA BUILDING CODE means the rules adopted at 675 IAC 13 in effect in Indiana at the time of construction, remodeling, alteration, addition, or repair of the structure.

INDIANA FIRE CODE means the rules adopted at 675 IAC 22 in effect in Indiana at the time of inspection by the inspection authority or, with respect to construction required to be filed under 675 IAC 12-6, 675 IAC 22 in effect at the time of construction, remodeling, alteration, addition, or repair of the structure.

NFPA 70 means the Indiana Electrical Code (675 IAC 17).

- (g) In subsection 3.2.5, delete the definition SHOULD in its entirety without substitution.

- (h) Delete Section 4.3 in its entirety without substitution.

- (i) Delete subsection 4.4.10 in its entirety without substitution.

- (j) Amend subsection 6.3.2.4 to read as follows: Tapping or drilling of load-bearing structural members shall be in accordance with the building code (675 IAC 13).

- (k) Amend subsection 7.1.5 to read as follows: Other design objectives requiring different protection shall be permitted in accordance with 675 IAC 12-6-11.

- (l) Delete Chapter 8 and substitute to read: Plans and hydraulic calculations shall be submitted in accordance with 675 IAC 12-6.

- (m) Delete Section 10.1 without substitution.

- (n) Amend Section 12.1.4 by deleting "conform to the applicable requirements of the standards of the National Fire Protection Association listed in Chapter 2" and substituting "in accordance with the rules of the commission".

- (o) Chapter 2 and the annexes are not adopted as part of this code and are intended for use as a guide, and the standards referenced therein are not enforceable as part of this code. (*Fire Prevention and Building Safety Commission; 675 IAC 28-1-8; filed Aug 23, 2006, 4:03 p.m.: 20060906-IR-675050104FRA; readopted filed Aug 8, 2012, 8:08 a.m.: 20120905-IR-675120260RFA; readopted filed Jul 3, 2018, 2:22 p.m.: 20180801-IR-675180204RFA*)

**675 IAC 28-1-9 NFPA 17; standard for dry chemical extinguishing systems**

Authority: IC 22-13-2-2; IC 22-13-2-13

Affected: IC 10-19-2; IC 22-12; IC 22-13; IC 22-14; IC 22-15; IC 36-7

Sec. 9. (a) Standard for Dry Chemical Extinguishing Systems, NFPA 17, 2002, published by National Fire Protection Association (NFPA), 1 Batterymarch Park, Quincy, Massachusetts 02269-9101 is adopted by reference except as revised hereafter.

(b) The following documents referenced in NFPA 17 are not adopted, are not enforceable, and are for information purposes only:

- (1) ASTM A 53.
- (2) ANSI C-2.
- (3) ANSI/ASME B31.1.
- (4) UL 300.
- (5) UL 1254

(6) Title 29, Code of Federal Regulations.

(c) The following documents referenced in NFPA 17 are adopted and are enforceable:

- (1) NFPA 70 adopted in 675 IAC 17.
- (2) NFPA 72 adopted in section 28 of this rule.
- (3) ASME Boiler and Pressure Vessel Code, as adopted at 680 IAC 2-1-1 [675 IAC 30-1-1].

(d) Add sentence to Section 1.2 to read as follows: For alternate materials, methods, and design, see the General Administrative Rules (675 IAC 12-6-11).

(e) Delete Section 1.3 in its entirety without substitution.

(f) Delete Section 1.4 in its entirety and substitute "See 675 IAC 12-6-11."

(g) Amend the following definitions in Chapter 3 to read as follows:

APPROVED means acceptance by the authority having jurisdiction by one (1) of the following methods:

- (1) Investigation or tests conducted by nationally recognized authorities; or
- (2) Investigation or tests conducted by nationally recognized technical or scientific organizations; or
- (3) Nationally accepted principles.

The investigation, tests, or principles shall establish that the method, material, equipment, design, or type of construction is safe for its intended purpose.

AUTHORITY HAVING JURISDICTION means the Division of Fire and Building Safety or officer of a local unit of government empowered by law to administer and enforce the rules of the commission.

LISTED means equipment or materials included in a list published by an organization engaged in product evaluation that maintains periodic inspection of production of listed equipment or materials and whose listing states either that the equipment or material meets appropriate standards or has been tested and found suitable for use in a specified manner.

(h) Add the following definitions to Chapter 3 to read as follows:

DIVISION OF FIRE AND BUILDING SAFETY means the Division of Fire and Building Safety of the Indiana Department of Homeland Security created pursuant to IC 10-19-2.

NFPA 70 means the Indiana Electrical Code (675 IAC 17).

TESTING LABORATORY means an independent nationally recognized testing laboratory or other organization listed in the General Administrative Rules (675 IAC 12-6-11).

(i) Delete subsection 3.2.6 in its entirety without substitution.

(j) Delete Section 4.2 in its entirety without substitution.

(k) In Section 4.5.2, delete text and substitute "The piping (types) shall be listed or labeled for the intended use."

(l) Amend Section 4.6.1 to read as follows: The type of dry chemical used in the system shall not be changed unless proved to be changeable by a testing laboratory and recommended by the manufacturer of the equipment.

(m) Amend Section 4.6.3 to read as follows: CAUTION: Types of dry chemicals shall not be mixed. Mixtures of certain dry chemicals will generate dangerous pressures and will form lumps.

(n) Delete subsection 4.9.1 in its entirety without substitution.

(o) Delete subsection 4.9.2 in its entirety without substitution.



- (p) Delete subsection 5.7.2.1 in its entirety without substitution.
- (q) Delete subsection 5.7.2.2 in its entirety without substitution.
- (r) Delete Chapter 8 in its entirety without substitution.
- (s) In Section 9.3.2, delete "UL 300" and substitute "the Indiana Mechanical Code (675 IAC 18)".
- (t) Delete subsection 9.3.4.3 in its entirety without substitution.
- (u) Delete subsection 9.3.5.2 and substitute as follows: For other specific details, see the Indiana Mechanical Code (675 IAC 18).
- (v) Delete subsection 9.9.3.1.
- (w) Delete Section 9.10 in its entirety without substitution.
- (x) Delete Sections 10.1 and 10.2 and substitute to read as follows: Plans and specifications shall be filed in accordance with the General Administrative Rules (675 IAC 12).
- (y) Delete subsection 10.3.1 in its entirety without substitution.
- (z) Amend Section 10.4 by deleting "qualified" and substituting "trained".
- (aa) Delete subsection 10.4.3.1 in its entirety without substitution.
- (bb) Delete subsection 10.4.3.5 in its entirety without substitution.
- (cc) Amend Section 11.5.5 by deleting "acceptable to" and substituting "approved by". (*Fire Prevention and Building Safety Commission; 675 IAC 28-1-9; filed Aug 23, 2006, 4:03 p.m.: 20060906-IR-675050104FRA; readopted filed Aug 8, 2012, 8:08 a.m.: 20120905-IR-675120260RFA; readopted filed Jul 3, 2018, 2:22 p.m.: 20180801-IR-675180204RFA*)

**675 IAC 28-1-10 NFPA 17A; standard for wet chemical extinguishing systems**

Authority: IC 22-13-2-2; IC 22-13-2-13

Affected: IC 10-19-2; IC 22-12; IC 22-13; IC 22-14; IC 22-15; IC 36-7

Sec. 10. (a) Standard for Wet Chemical Extinguishing Systems, NFPA 17A, 2002 Edition, published by National Fire Protection Association (NFPA), 1 Batterymarch Park, Quincy, Massachusetts 02269-9101 is adopted by reference except as revised hereafter.

- (b) The document, UL 300, referenced in NFPA 17A is not adopted, is not enforceable, and is for information purposes only:
- (c) The following documents have been adopted and are enforceable:
  - (1) NFPA 70 as adopted in 675 IAC 17.
  - (2) NFPA 72 as adopted in section 28 of this rule.
- (d) Add sentence to Section 1.2 to read as follows: For alternate materials, methods, and design, see the General Administrative Rules (675 IAC 12-6-11).
- (e) Delete Section 1.4 in its entirety without substitution.
- (f) Amend Section 1.5 by deleting in its entirety and substituting "See 675 IAC 12-6-11."
- (g) Amend Section 1.7 by inserting "in the design, installation, and servicing of pre-engineered wet chemical systems" between "trained" and "shall".
- (h) Delete Section 1.4 in its entirety without substitution.
- (i) Amend the following definitions in Chapter 3 to read as follows:
 

APPROVED means acceptance by the authority having jurisdiction by one (1) of the following methods:

  - (1) Investigation or tests conducted by nationally recognized authorities; or
  - (2) Investigation or tests conducted by nationally recognized technical or scientific organizations; or
  - (3) Nationally accepted principles.

The investigation, tests, or principles shall establish that the method, material, equipment, design, or type of construction is safe for its intended purpose.

AUTHORITY HAVING JURISDICTION means the Division of Fire and Building Safety or officer of a local unit of government empowered by law to administer and enforce the rules of the commission.

LISTED. Equipment or materials included in a list published by an organization engaged in product evaluation that maintains periodic inspection of production of listed equipment or materials and whose listing states either that the equipment or material meets appropriate standards or has been tested and found suitable for use in a specified manner.

(j) Add the following definitions to Chapter 3 to read as follows:

DIVISION OF FIRE AND BUILDING SAFETY means the Division of Fire and Building Safety of the Indiana Department of Homeland Security created pursuant to IC 10-19-2.

NFPA 70 means the Indiana Electrical Code (675 IAC 17).

(k) Delete subsection 4.4.3.5 in its entirety without substitution.

(l) Amend Section 4.7 by deleting "or the requirements of the authority having jurisdiction".

(m) Delete subsection 5.1.1 in its entirety without substitution.

(n) Amend subsection 5.4.3 by adding "to severe weather conditions or" after "subjected".

(o) Amend subsection 5.4.4 to read as follows: Where excessive climatic or mechanical exposures are expected, suitable enclosures or guards shall be provided.

(p) Delete subsections 5.6.1.1 through 5.6.1.3 in their entirety without substitution.

(q) Delete Sections 6.1 through 6.3 in their entirety and substitute to read as follows: Plans and specifications shall be filed in accordance with the General Administrative Rules (675 IAC 12).

(r) Amend subsection 6.4.2 by deleting "approved" and substituting "released".

(s) Amend subsection 6.4.3 by deleting "Where required by the authority having jurisdiction, the approval" and substituting "Approval".

(t) Chapter 2 and the annexes are not adopted as part of this code and are intended for use as a guide, and the standards referenced therein are not enforceable as part of this code.

(u) Delete Section 7.5.2.3 in its entirety without substitution. (*Fire Prevention and Building Safety Commission; 675 IAC 28-1-10; filed Aug 23, 2006, 4:03 p.m.: 20060906-IR-675050104FRA; readopted filed Aug 8, 2012, 8:08 a.m.: 20120905-IR-675120260RFA; readopted filed Jul 3, 2018, 2:22 p.m.: 20180801-IR-675180204RFA*)

#### **675 IAC 28-1-11 (Reserved)**

Sec. 11. (*NOTE: Reserved to retain citation sequence continuity.*)

#### **675 IAC 28-1-12 NFPA 25; standard for the inspection, testing, and maintenance of water-based fire protection systems**

Authority: IC 22-13-2-2; IC 22-13-2-13

Affected: IC 10-19-2; IC 22-12; IC 22-13; IC 22-14; IC 22-15; IC 25-4; IC 25-31; IC 36-7

Sec. 12. (a) That certain document, being titled NFPA 25-Standard for the Inspection, Testing, and Maintenance of Water-Based Fire Protection Systems, 2011 Edition, published by the National Fire Protection Association (NFPA), 1 Batterymarch Park, Quincy, Massachusetts 02169-7471, be and the same is hereby adopted by reference, as if fully set out in this section except as revised hereafter.

(b) This rule is available for review and reference at:

Legal and Code Services Section

Indiana Department of Homeland Security

Indiana Government Center South

302 West Washington Street, Room W246

Indianapolis, Indiana 46204

(c) Delete Section 1.1.1 without substitution.

(d) Amend Section 1.1.3 to delete "generally accepted practices" and insert "the applicable rules of the commission".

(e) Delete Section 1.2.2 without substitution.

(f) Delete the title and text of Section 1.3 and *[sic]* and insert: Alternative materials, methods, and design. See 675 IAC 12-6-11, alternative materials, methods, and design.

(g) Amend Section 2.2 as follows:

(1) In the reference to NFPA 11, delete "2010 edition" and insert "as adopted at 675 IAC 28-1-3".

(2) In the reference to NFPA 13, delete "2010 edition" and insert "as adopted at 675 IAC 13-1-8".

(3) In the reference to NFPA 14, delete "2010 edition" and insert "as adopted at 675 IAC 13-1-9".

(4) In the reference to NFPA 15, delete "2007 edition" and insert "as adopted at 675 IAC 28-1-8".

- (5) In the reference to NFPA 20, delete "2010 edition" and insert "as adopted at 675 IAC 13-1-10".
- (h) Delete Section 2.3.2 without substitution.
- (i) Amend Section 2.4 as follows:
  - (1) In the reference to NFPA 11, delete "2010 edition" and insert "as adopted at 675 IAC 28-1-3".
  - (2) In the reference to NFPA 13, delete "2010 edition" and insert "as adopted at 675 IAC 13-1-8".
  - (3) In the reference to NFPA 14, delete "2010 edition" and insert "as adopted at 675 IAC 13-1-9".
  - (4) In the reference to NFPA 15, delete "2007 edition" and insert "as adopted at 675 IAC 28-1-8".
  - (5) In the reference to NFPA 20, delete "2010 edition" and insert "as adopted at 675 IAC 13-1-10".
- (j) Amend Chapter 3 as follows:
  - (1) Amend Section 3.1 as follows:
    - (A) Amend the first sentence by inserting "solely" after "apply".
    - (B) Delete the last sentence without substitution.
  - (2) Amend the following definitions to read as follows:
    - (A) APPROVED means acceptance by the authority having jurisdiction by one (1) of the following methods:
      - (1) Investigation or tests conducted by nationally recognized authorities; or
      - (2) Investigation or tests conducted by nationally recognized technical or scientific organizations; or
      - (3) Nationally accepted principles.The investigation, tests, or principles shall establish that the method, material, equipment, design, or type of construction is safe for its intended purpose.
    - (B) AUTHORITY HAVING JURISDICTION means the Division of Fire and Building Safety or officer of a local unit of government empowered by law to administer and enforce the rules of the commission.
    - (C) LISTED means equipment or materials included in a list published by an organization engaged in product evaluation, that maintains periodic inspection of production of listed equipment or materials, and whose listing states either that the equipment or material meets appropriate standards or has been tested and found suitable for use in a specified manner.
    - (D) QUALIFIED means a design professional or a person having successfully completed a course of instruction related to the equipment being installed, serviced, or repaired. Such instruction shall be provided by the manufacturer of the equipment or their authorized representative.
  - (3) Add the following definitions:
    - (A) DESIGNATED REPRESENTATIVE: See Owner.
    - (B) DESIGN PROFESSIONAL means an architect who is registered under IC 25-4 or professional engineer who is registered under IC 25-31. If a registered design professional is not required by 675 IAC 12-6 or 675 IAC 15, then the term means the owner.
    - (C) DIVISION OF FIRE AND BUILDING SAFETY means the Division of Fire and Building Safety of the Indiana Department of Homeland Security created pursuant to IC 10-19-2.
    - (D) FIRE CODE means the Indiana Fire Code (675 IAC 22) in effect in Indiana at the time of inspection by the authority having jurisdiction or, with respect to construction, in accordance with 675 IAC 12-4-7.
    - (E) IMPAIRMENT COORDINATOR: See Owner.
    - (F) LABELED means equipment or materials to which has been attached a label, symbol, or other identifying mark of an organization engaged in product evaluation, that maintains periodic inspection of production of labeled equipment or materials, and by whose labeling the manufacturer indicates compliance with appropriate standards or performance in a specified manner.
    - (G) OWNER means any person, agent, firm, or corporation having a legal or equitable interest in the property.
    - (H) PROPERTY OWNER: See Owner.
  - (4) Delete Section 3.2.5 without substitution.
  - (k) Delete the text of Section 4.1.1.2, and insert the following: These tasks shall be performed by a qualified person.
  - (l) Delete Section 4.1.1.3 without substitution.
  - (m) Delete Section 4.1.1.4 without substitution.
  - (n) Amend Section 4.1.3 to delete "if required" without substitution.

- (o) Delete Section 4.1.3.1 without substitution.
- (p) Delete Section 4.1.3.2 without substitution.
- (q) Delete the text of Section 4.1.5 and insert: See 675 IAC 12-4-11, Occupancy of existing buildings.
- (r) Delete the title and text of Section 4.1.6 and insert: Changes in hazards in existing buildings. See 675 IAC 12-4-11, Occupancy of existing buildings.
- (s) Amend Section 4.1.8.2, to delete item number 4 without substitution.
- (t) Add Section 4.1.9.1.1 to read as follows: The servicing fire department shall be notified when a system is impaired and when the system is returned to service.
- (u) Delete Section 4.2 without substitution.
- (v) Amend Section 4.3.4 as follows: At the end of the sentence, delete "." and insert ", and made available to the authority having jurisdiction."
- (w) Delete Section 4.6 without substitution.
- (x) Delete Section 4.8.1 without substitution.
- (y) Delete Section 4.8.2 without substitution.
- (z) Delete Section 4.8.3 without substitution.
- (aa) Delete Section 4.8.4 without substitution.
- (bb) Delete Section 4.8.5.1 without substitution.
- (cc) Delete Section 4.8.5.2 without substitution.
- (dd) Delete the text of Section 5.2.1.3 and insert to read as follows: Maintenance of sprinkler system deflector clearance. See 675 IAC 12-4-9, Maintenance of buildings and structures.
- (ee) Delete Section 5.2.7 without substitution.
- (ff) Delete Section 5.3.1.3.1 without substitution.
- (gg) Delete the text of Section 5.3.4.2 and insert as follows: Antifreeze solutions shall comply with one (1) of the following for system installation:
  - (1) The concentration of a glycerin solution shall be limited to forty-eight percent (48%) glycerin by volume.
  - (2) The concentration of a propylene glycol solution shall be limited to thirty-eight percent (38%) propylene glycol by volume.
  - (3) Newly introduced solutions shall be factory premixed antifreeze solutions (chemically pure or United States Pharmacopoeia ninety-six and five-tenths percent (96.5%)).
  - (4) Other solutions listed specifically for use in fire protection systems shall be permitted.
  - (5) Premixed antifreeze solutions of propylene glycol exceeding forty percent (40%) concentration by volume shall be permitted for use with ESFR sprinklers where the ESFR sprinklers are listed for such use in a specific application.
- (hh) Delete the text of Section 5.5.3 and insert: Applicable standard for the inspection, testing, and maintenance of sprinkler systems. See 675 IAC 12-4-9, Maintenance of buildings and structures.
- (ii) Delete the text of Section 5.5.4 and insert: No construction design release is required for inspection, testing, and maintenance of sprinkler systems.
- (jj) Amend Section 6.1.8 by inserting the following text "and the responding fire department" after "facility" and before "shall".
- (kk) Delete Section 6.1.7 without substitution.
- (ll) Delete Section 6.3.1.2 without substitution.
- (mm) Delete the text of Section 6.5.2 and insert: Applicable standard for inspection, testing, and maintenance of standpipe and hose systems. See 675 IAC 12-4-9, Maintenance of buildings and structures.
- (nn) Delete the text of Section 6.5.4 and insert: No construction design release is required for inspection, testing, and maintenance of standpipe and hose systems.
- (oo) Delete Section 7.1.4 without substitution.
- (pp) Amend Section 7.3.1.2 to delete "to the complete satisfaction of the authority having jurisdiction" without substitution.
- (qq) Amend Section 7.3.2 to delete "tested" and insert "flowed".
- (rr) Add a new Section 7.3.2.2.1 to read as follows: A pitot reading shall be taken and recorded during the one (1) minute flow.

- (ss) Delete the text of Section 7.5.2 and insert: Applicable standard for inspection, testing, and maintenance of private fire service mains. See 675 IAC 12-4-9, Maintenance of buildings and structures.
- (tt) Amend Section 7.5.3.1 by inserting "full" after "of" and before "flow".
- (uu) Delete the text of Section 7.5.4 and insert: No construction design release is required for inspection, testing, and maintenance of private fire service mains.
- (vv) Amend Table 8.1.2, Alternative Fire Pump Inspections, Testing, and Maintenance Procedures, as follows: In the portion of the table titled "Electrical System", in the column marked "Frequency", delete "monthly" and insert "weekly".
- (ww) Amend Section 8.3.4.1 to delete all of the text after "tested" without substitution.
- (xx) Amend Section 8.3.4.2 to delete all of the text after "tested" without substitution.
- (yy) Amend Section 8.4.1 as follows: At the end of the sentence, delete the "." and insert ", and to the responding fire department, if requested".
- (zz) Amend Section 9.5.1.2 by deleting the text "NFPA standards" and inserting "rules of the commission".
- (aaa) Amend Section 9.5.1.3 by inserting "automatic tank fill valve" after "the".
- (bbb) Amend Section 9.5.2.1 to delete all of the text after "instructions" without substitution.
- (ccc) Amend Section 9.5.2.2 to delete the following without substitution: "the authority having jurisdiction and".
- (ddd) Delete the text of Section 9.6.2 and insert: Applicable standard for inspection, testing, and maintenance of water storage tanks. See 675 IAC 12-4-9, Maintenance of buildings and structures.
- (eee) Delete the text of Section 9.6.4 and insert: No construction design release is required for inspection, testing, and maintenance of water storage tanks.
- (fff) Amend Section 10.3.4.4.2 to read as follows: A second pressure reading shall be recorded at the deluge valve.
- (ggg) Delete the text of Section 10.3.4.4.3 and insert to read as follows: Readings shall be compared to the hydraulic design pressures to ensure the original system design requirements are met.
- (hhh) Amend Section 10.3.5 to delete all of the text after "tested simultaneously" without substitution.
- (iii) Delete the text of Section 10.5.2 and insert: Applicable standard for inspection, testing, and maintenance of water spray fixed systems. See 675 IAC 12-4-9, Maintenance of buildings and structures.
- (jjj) Delete the text of Section 10.5.4 and insert: No construction design release is required for inspection, testing, and maintenance of water spray fixed systems.
- (kkk) Delete the text of Section 11.1.3.1 and insert to read as follows: This section shall apply to foam-water systems.
- (lll) Delete the text of Section 11.5.2 and insert: Applicable standard for inspection, testing, and maintenance of foam-water sprinkler systems. See 675 IAC 12-4-9, Maintenance of buildings and structures.
- (mmm) Delete the text of Section 11.5.4 and insert: No construction design release is required for inspection, testing, and maintenance of foam-water sprinkler systems.
- (nnn) Delete Section 12.3 in its entirety without substitution.
- (ooo) Amend Section 13.2.5.2 to delete the following text without substitution: "if necessary".
- (ppp) Amend Section 13.3.1.3 to delete "applicable NFPA standards" and insert "rules of the commission".
- (qqq) Amend Section 13.3.1.4 to delete "applicable NFPA standard" and insert "rules of the commission".
- (rrr) Amend Section 13.3.2.1.1 to delete "applicable NFPA standards" and insert "rules of the commission".
- (sss) Delete the text of Section 13.4.4.3 and insert as follows: Low points and auxiliary drains in dry pipe sprinkler systems shall be drained after each operation of the system, before the onset of freezing weather condition, and thereafter as needed.
- (ttt) Amend Section 13.5.4.2 to delete "quarterly" and insert "annually".
- (uuu) Amend Section 13.5.4.3 to delete "annually" and insert "every five (5) years".
- (vvv) Delete the text of Section 13.6.1.1.1 and insert to read as follows: Valves secured with locks or electrically supervised in accordance with the rules of the commission shall be inspected monthly.
- (www) Delete the text of Section 13.6.1.2.1 and insert to read as follows: Valves secured with locks or electrically supervised in accordance with the rules of the commission shall be inspected monthly.
- (xxx) Amend Section 13.6.3.1 by deleting "trained" and inserting "qualified".
- (yyy) Amend Section 13.6.3.2 by deleting "the authority having jurisdiction and" without substitution.
- (zzz) Amend Section 14.2.1.1 by deleting "Alternative" and inserting "Approved".
- (aaaa) Amend Section 14.3.2.3 by deleting "Alternative" and inserting "Approved".

(bbbb) Amend Section 14.4.1 by deleting "Alternative" and inserting "Approved".

(cccc) Delete Section 15.2.3 without substitution.

(dddd) Amend Section 15.3.2 by deleting "required by the authority having jurisdiction" without substitution.

(eeee) Amend Section 15.5.2 as follows:

(1) Delete item 3 without substitution.

(2) In item 4 (b), delete the text and insert: A fire watch in accordance with the Indiana Fire Code (675 IAC 22).

(3) Delete item 4 (c) without substitution.

(4) Delete item 4 (d) without substitution.

(ffff) In the Index, on page 25-115, under the heading "fire hydrants", in the item titled "testing", delete "Table 7.1" and insert "Table 7.1.1.2". (*Fire Prevention and Building Safety Commission; 675 IAC 28-1-12; filed Aug 23, 2006, 4:03 p.m.: 20060906-IR-675050104FRA; readopted filed Aug 8, 2012, 8:08 a.m.: 20120905-IR-675120260RFA; filed Apr 12, 2013, 11:07 a.m.: 20130508-IR-675110685FRA; readopted filed Jul 3, 2018, 2:22 p.m.: 20180801-IR-675180204RFA*)

**675 IAC 28-1-13 NFPA 33; standard for spray application using flammable and combustible materials**

Authority: IC 22-13-2-2; IC 22-13-2-13

Affected: IC 10-19-2; IC 22-12; IC 22-13; IC 22-14; IC 22-15; IC 36-7

Sec. 13. (a) That certain document, being titled NFPA 33-Standard for Spray Application Using Flammable and Combustible Materials, 2003 Edition, published by the National Fire Protection Association (NFPA), 1 Batterymarch Park, Quincy, Massachusetts 02269-9101, be and the same is hereby adopted by reference as if fully set out in this section, except as revised.

(b) The following documents referenced in NFPA 33 are not adopted, are not enforceable, and are for information purposes only:

(1) NFPA 16.

(2) NFPA 30.

(3) NFPA 69.

(4) NFPA 91.

(5) NFPA 101.

(6) NFPA 220.

(7) NFPA 432.

(8) NFPA 496.

(9) NFPA 701.

(10) UL 340.

(11) UL 900.

(12) UL 2208.

(c) The following documents referenced in NFPA 33 are adopted and are enforceable:

(1) NFPA 10, as adopted in section 2 of this rule.

(2) NFPA 12, as adopted in section 4 of this rule.

(3) NFPA 13, as adopted in 675 IAC 13-1-8.

(4) NFPA 17, as adopted in section 9 of this rule.

(5) NFPA 70, as adopted in 675 IAC 17.

(6) NFPA 72, as adopted in section 28 of this rule.

(7) NFPA 86, as adopted in section 31 of this rule.

(8) NFPA 2001, as adopted in section 40 of this rule.

(9) ASME Boiler and Pressure Vessel Code as adopted at 680 IAC 2-1-1 [675 IAC 30-1-1].

(d) In Section 1.2.1, delete everything after the first sentence.

(e) Delete Section 1.4 in its entirety without substitution.

(f) Amend Section 1.5 by deleting in its entirety and substituting "See 675 IAC 12-6-11."

(g) Amend Chapter 3 as follows:

(1) Amend the following definitions:

**APPROVED** means acceptance by the authority having jurisdiction by one (1) of the following methods:

- (1) Investigation or tests conducted by nationally recognized authorities; or
- (2) Investigation or tests conducted by nationally recognized technical or scientific organizations; or
- (3) Nationally accepted principles.

The investigation, tests, or principles shall establish that the method, material, equipment, design, or type of construction is safe for its intended purpose.

**AUTHORITY HAVING JURISDICTION** means the Division of Fire and Building Safety or officer of a local unit of government empowered by law to administer and enforce the rules of the commission.

**LABELED** means equipment or materials to which has been attached a label, symbol, or other identifying mark of an organization engaged in product evaluation, that maintains periodic inspection of production of labeled equipment or materials, and by whose labeling the manufacturer indicates compliance with appropriate standards or performance in a specified manner.

**LIQUID** means a material that has a melting point which is equal to or less than sixty-eight degrees Fahrenheit (68°F) (twenty degrees Celsius (20°C)) and a boiling point which is greater than sixty-eight degrees Fahrenheit (68°F) (twenty degrees Celsius (20°C)) at 14.7 psi (101.3 kPa). When not otherwise identified, the term "liquid" includes both flammable and combustible liquids.

**COMBUSTIBLE LIQUID** means a liquid having a flash point at or above one hundred degrees Fahrenheit (100°F) (thirty-seven and eight-tenths degrees Celsius (37.8°C)). Combustible liquids are subdivided as follows. The category of combustible liquids does not include compressed gases or cryogenic fluids.

Class II liquids are those having closed cup flash points at or above one hundred degrees Fahrenheit (100°F) (thirty-seven and eight-tenths degrees Celsius (37.8°C)) and below one hundred forty degrees Fahrenheit (140°F) (sixty degrees Celsius (60°C)).

Class III-A liquids are those having closed cup flash points at or above one hundred forty degrees Fahrenheit (140°F) (sixty degrees Celsius (60°C)) and below two hundred degrees Fahrenheit (200°F) (ninety-three and three-tenths degrees Celsius (93.3°C)).

Class III-B liquids are those liquids having closed cup flash points at or above two hundred degrees Fahrenheit (200°F) (ninety-three and three-tenths degrees Celsius (93.3°C)).

**FLAMMABLE LIQUID** means a liquid having a closed cup flash point below one hundred degrees Fahrenheit (100°F) (thirty-seven and eight-tenths degrees Celsius (37.8°C)). The category of flammable liquids does not include compressed gases or cryogenic fluids. Flammable liquids are further categorized into a group known as Class I liquids.

The Class I category is subdivided as follows:

Class I-A liquids include those having a flash point below seventy-three degrees Fahrenheit (73°F) (twenty-two and eight-tenths degrees Celsius (22.8°C)) and having a boiling point below one hundred degrees Fahrenheit (100°F) (thirty-seven and eight-tenths degrees Celsius (37.8°C)).

Class I-B liquids include those having a flash point below seventy-three degrees Fahrenheit (73°F) (twenty-two and eight-tenths degrees Celsius (22.8°C)) and having a boiling point at or above one hundred degrees Fahrenheit (100°F) (thirty-seven and eight-tenths degrees Celsius (37.8°C)).

Class I-C liquids include those having a flash point at or above seventy-three degrees Fahrenheit (73°F) (twenty-two and eight-tenths degrees Celsius (22.8°C)) and below one hundred degrees Fahrenheit (100°F) (thirty-seven and eight-tenths degrees Celsius (37.8°C)).

**LISTED** means equipment or materials included in a list published by an organization engaged in product evaluation, that maintains periodic inspection of production of listed equipment or materials, and whose listing states either that the equipment or material meets appropriate standards or has been tested and found suitable for use in a specified manner.

**SPRAY BOOTH** means a mechanically ventilated appliance of varying dimensions and construction provided to enclose or accommodate a spraying operation and to confine and limit the escape of spray vapor and residue and to exhaust it safely.

**SPRAY AREA** mean an area in which quantities of flammable vapors or combustible residues, dusts, or deposits are present due to the operation of spraying processes.

SPRAY ROOM means a room designed to accommodate spraying operations complying with the building code requirements for a Group H, Division 2 Occupancy.

(2) Add the following definitions:

BUILDING CODE means the Indiana Building Code in effect in Indiana at the time of construction, remodeling, alteration, addition, or repair of the structure.

DIVISION OF FIRE AND BUILDING SAFETY means the Division of Fire and Building Safety of the Indiana Department of Homeland Security created pursuant to IC 10-19-2.

ELECTRICAL CODE means the Indiana Electrical Code in effect in Indiana at the time of construction, remodeling, alteration, addition, or repair of the structure.

FIRE CODE means the Indiana Fire Code.

INDIANA FIRE CODE means the rules adopted at 675 IAC 22 in effect in Indiana at the time of inspection by the inspection authority or, with respect to construction required to be filed under 675 IAC 12-6, 675 IAC 22 in effect at the time of construction, remodeling, alteration, addition, or repair of the structure.

MECHANICAL CODE means the Indiana Mechanical Code in effect in Indiana at the time of construction, remodeling, alteration, addition, or repair.

NFPA 70 means the Indiana Electrical Code (675 IAC 17).

(h) Amend Section 4.2 to read as follows: Location: Spray application operations and processes shall be in accordance with the Building Code (675 IAC 13) and the Indiana Fire Code.

(i) Delete Section 5.1.1 in its entirety without substitution.

(j) Amend Section 5.1.4 to read as follows: Spray booths shall be constructed of steel not less than forty-four thousandths (0.044) inch (1.118 mm) (eighteen (18) gage) in thickness or other approved noncombustible materials.

(k) Amend Section 5.1.6 to read as follows: Spray rooms shall be constructed and separated from surrounding areas of the building in accordance with the Indiana Building Code (675 IAC 13) and the Indiana Fire Code.

(l) Amend Section 5.1.7 to read as follows: Enclosed spray booths and spray rooms shall be provided with means of egress in accordance with the Indiana Building Code (675 IAC 13).

(m) Amend Section 5.1.8 by deleting "where approved by the authority having jurisdiction".

(n) Amend Section 5.3 to read as follows: Separation from Other Occupancies. Spray booths shall be separated from other operations in accordance with the Indiana Building Code (675 IAC 13). Multiple connected spray booths shall be considered as "other operations".

(o) Amend Section 6.2.1 to read as follows: Electrical wiring and utilization equipment shall be in accordance with the Indiana Electrical Code (675 IAC 17) and this chapter.

(p) Amend Section 6.3.1.4 by adding "s" to "exist" before the ":".

(q) In Section 6.8 (2), after "requirements of", delete "Section 400.2 of".

(r) Amend Section 7.1 to read as follows: Ventilating and exhaust systems shall be designed and installed in accordance with the Indiana Building Code (675 IAC 13) and the Indiana Mechanical Code (675 IAC 18).

(s) Amend Section 7.2 exception by deleting "a properly applied" and substituting "an approved". Delete the last sentence.

(t) Amend Section 8.1 to read as follows: Storage handling and mixing of flammable and combustible liquids shall be in accordance with the Indiana Fire Code.

(u) Delete Sections 8.2 through 8.5 without substitution.

(v) Add to the end of Section 9.1: in accordance with the Indiana Fire Code.

(w) Amend Section 9.6 to read as follows: Approved portable fire extinguishers shall be installed in accordance with the Indiana Fire Code.

(x) Amend Section 9.7.1 by deleting ", both listed and unlisted," without substitution.

(y) Delete Section 9.7.2 in its entirety without substitution.

(z) Amend Section 10.1 to read as follows: Maintenance procedures shall be established to ensure that all spray application apparatus and processes are operated and maintained in accordance with the manufacturer's specifications and the applicable rules of the commission.

(aa) Amend Section 10.8.2 by deleting all the text after "approved" without substitution.

(bb) Amend Section 10.11 by deleting "at" and substituting "in".



- (cc) Delete Section 10.12 without substitution.
- (dd) Amend Section 11.2.1 by deleting "applicable requirements of all other chapters" and inserting "Indiana Fire Code".
- (ee) Amend Section 12.2 by deleting "applicable requirements of all other chapters" and inserting "Indiana Fire Code".
- (ff) Amend Section 13.3.1.5 by inserting "Approved" in the first sentence and deleting all the text after "used" without substitution.
- (gg) Amend Section 13.3.1.6.1 by deleting all the text in first sentence after "that" and substitute "is approved". Delete the second sentence and substitute "Track-mounted systems shall be approved."
- (hh) Delete the text of Chapter 14 in its entirety without substitution.
- (ii) Amend Section 15.2 by deleting "applicable requirements of all other chapters" and inserting "Indiana Fire Code".
- (jj) Amend Section 16.2 to add a second sentence to read as follows: Spray application operations that involve the use of organic peroxide formulations and other plural component coatings shall comply with the requirements of the Indiana Fire Code.
- (kk) Delete the text of Chapter 17 and substitute the following: See the Indiana Fire Code.
- (ll) Delete the text of Chapter 18 and substitute the following: In accordance with local ordinance.
- (mm) Chapter 2 and the annexes are not adopted as part of the code and are intended for use as a guide, and the standards referenced therein are not enforceable as part of this code. (*Fire Prevention and Building Safety Commission; 675 IAC 28-1-13; filed Aug 23, 2006, 4:03 p.m.: 20060906-IR-675050104FRA; readopted filed Aug 8, 2012, 8:08 a.m.: 20120905-IR-675120260RFA; readopted filed Jul 3, 2018, 2:22 p.m.: 20180801-IR-675180204RFA*)

**675 IAC 28-1-14 NFPA 34; dipping and coating processes using flammable or combustible liquids (Repealed)**

Sec. 14. (*Repealed by Fire Prevention and Building Safety Commission; filed Nov 15, 2012, 2:59 p.m.: 20121212-IR-675120051FRA*)

**675 IAC 28-1-15 NFPA 37; standard for the installation and use of stationary combustion engines and gas turbines**

Authority: IC 22-13-2-2; IC 22-13-2-13

Affected: IC 10-19-2; IC 22-12; IC 22-13; IC 22-14; IC 22-15; IC 36-7

Sec. 15. (a) That certain standard, being titled NFPA 37, Standard for the Installation and Use of Stationary Combustion Engines and Gas Turbines, 2002 Edition, published by National Fire Protection Association (NFPA), 1 Batterymarch Park, Quincy, Massachusetts 02269-9101, be and the same is hereby adopted by reference as if fully set out in this section except as revised hereafter.

(b) The following documents referenced in NFPA 37, are not adopted, are not enforceable, and are for information purposes only:

- (1) NFPA 11A.
- (2) NFPA 12A.
- (3) NFPA 30.
- (4) NFPA 54.
- (5) NFPA 211.
- (6) NFPA 750.
- (7) API 620.
- (8) API 650.
- (9) ANSI/ASME B31.3.
- (10) MSS SP-69.

(c) The following documents are adopted and are enforceable:

- (1) NFPA 10 adopted in section 2 of this rule.
- (2) NFPA 12 adopted in section 4 of this rule.
- (3) NFPA 13 adopted in 675 IAC 13-1-8.
- (4) NFPA 15 adopted in section 8 of this rule.
- (5) NFPA 17 adopted in section 9 of this rule.

- (6) NFPA 58 adopted in 675 IAC 22-2.2-14.
- (7) NFPA 70 adopted in 675 IAC 17.
- (8) NFPA 72 adopted in section 28 of this rule.
- (9) NFPA 2001 adopted in section 40 of this rule.
- (10) ANSI/ASME Boiler and Pressure Vessel Code, as adopted at 680 IAC 2-1-1 [675 IAC 30-1-1].
- (d) Amend Section 1.4 by deleting in its entirety and substituting "See 675 IAC 12-6-11."
- (e) Amend Section 1.7 as follows:
- (1) Amend the following definitions:

APPROVED means acceptance by the authority having jurisdiction by one (1) of the following methods:

- (1) Investigation or tests conducted by nationally recognized authorities; or
- (2) Investigation or tests conducted by nationally recognized technical or scientific organizations; or
- (3) Nationally accepted principles.

The investigation, tests, or principles shall establish that the method, material, equipment, design, or type of construction is safe for its intended purpose.

AUTHORITY HAVING JURISDICTION means the Division of Fire and Building Safety or officer of a local unit of government empowered by law to administer and enforce the rules of the commission.

- (2) Add the following definitions:

DIVISION OF FIRE AND BUILDING SAFETY means the Division of Fire and Building Safety of the Indiana Department of Homeland Security created pursuant to IC 10-19-2.

ELECTRICAL CODE means the Indiana Electrical Code in effect in Indiana at the time of construction, remodeling, alteration, addition, or repair of the structure.

INDIANA FIRE CODE means the rules adopted at 675 IAC 22 in effect in Indiana at the time of inspection by the inspection authority or, with respect to construction required to be filed under 675 IAC 12-6, 675 IAC 22 in effect at the time of construction, remodeling, alteration, addition, or repair of the structure.

NFPA 30 means the Indiana Fire Code.

NFPA 70 means the Indiana Electrical Code (675 IAC 17).

TRAINED means one who has undergone the instructions necessary to design, install, and perform maintenance and inspections.

(f) Chapter 2 and the annexes are not adopted as part of this code and are intended for use as a guide, and the standards reference therein are not enforceable as part of this code. (*Fire Prevention and Building Safety Commission; 675 IAC 28-1-15; filed Aug 23, 2006, 4:03 p.m.: 20060906-IR-675050104FRA; readopted filed Aug 8, 2012, 8:08 a.m.: 20120905-IR-675120260RFA; readopted filed Jul 3, 2018, 2:22 p.m.: 20180801-IR-675180204RFA*)

#### **675 IAC 28-1-16 NFPA 50; standard for bulk oxygen systems at consumer sites**

Authority: IC 22-13-2-2; IC 22-13-2-13

Affected: IC 10-19-2; IC 22-12; IC 22-13; IC 22-14; IC 22-15; IC 36-7

Sec. 16. (a) That certain standard, being titled NFPA 50, Standard for Bulk Oxygen Systems at Consumer Sites, 2001 Edition, published by the National Fire Protection Association (NFPA), 1 Batterymarch Park, Quincy, Massachusetts 02269-9101, be and the same is hereby adopted by reference, as if fully set out in this section except as revised hereafter.

(b) The following documents referenced in NFPA 50 are not adopted, are not enforceable, and are for information purposes only:

- (1) NFPA 99.
- (2) NFPA 220.
- (3) ANSI/ASME B31.3.
- (4) CGA S-1.3.
- (5) ASTM E 136.
- (6) Title 49, Code of Federal Regulations.
- (c) The following documents referenced in NFPA 50 are adopted and are enforceable:

- (1) NFPA 70 as adopted at 675 IAC 17.
- (2) ASME Boiler and Pressure Vessel Code, as adopted at 680 IAC 2-1-1 [675 IAC 30-1-1].
- (d) Delete Section 1.1.2 in its entirety without substitution.
- (e) Amend Section 1.3 as follows:
- (1) Amend the following definitions:

APPROVED means acceptance by the authority having jurisdiction by one (1) of the following methods:

- (1) Investigation or tests conducted by nationally recognized authorities; or
- (2) Investigation or tests conducted by nationally recognized technical or scientific organizations; or
- (3) Nationally accepted principles.

The investigation, tests, or principles shall establish that the method, material, equipment, design, or type of construction is safe for its intended purpose.

AUTHORITY HAVING JURISDICTION means the Division of Fire and Building Safety or officer of a local unit of government empowered by law to administer and enforce the rules of the commission.

LISTED means equipment or materials included in a list published by an organization engaged in product evaluation, that maintains periodic inspection of production of listed equipment or materials, and whose listing states either that the equipment or material meets appropriate standards or has been tested and found suitable for use in a specified manner.

NONCOMBUSTIBLE/LIMITED-COMBUSTIBLE CONSTRUCTION: See the Building Code (675 IAC 13), Chapter 7.

NONCOMBUSTIBLE MATERIAL means a material which, in the form in which it is used and under the conditions anticipated, will not ignite, burn, support combustion, or release flammable vapors when subjected to fire or heat. Materials reported as noncombustible, when tested in accordance with ASTM E-136, Standard Method of Test for Behavior of Materials in a Vertical Tube Furnace at 750°C, shall be considered noncombustible materials.

- (2) Add the following definitions:

BUILDING CODE means the Indiana Building Code in effect in Indiana at the time of construction, remodeling, alteration, addition, or repair of the structure.

DIVISION OF FIRE AND BUILDING SAFETY means the Division of Fire and Building Safety of the Indiana Department of Homeland Security created pursuant to IC 10-19-2.

ELECTRICAL CODE means the Indiana Electrical Code in effect in Indiana at the time of construction, remodeling, alteration, addition, or repair of the structure.

FIRE RESISTIVE CONSTRUCTION: See the Building Code (675 IAC 13), Chapter 7.

LABELED means equipment or materials to which has been attached a label, symbol, or other identifying mark of an organization engaged in product evaluation, that maintains periodic inspection of production of labeled equipment or materials, and by whose labeling the manufacturer indicates compliance with appropriate standards or performance in a specified manner.

NFPA 70 means the Indiana Electrical Code (675 IAC 17).

ACCESSIBLE, READILY means capable of being reached safely and quickly for operation, repair, or inspection without requiring those to whom ready access is required to climb over or remove obstacles, or to resort to the use of portable access equipment.

- (f) Delete the text of Chapter 2 and substitute to read as follows:

2.1 Location of Bulk Oxygen Systems

2.1.1 Bulk oxygen storage systems shall be located in accordance with the Fire Code (675 IAC 22).

- (g) Amend Section 3.1.2 to read as follows: Liquid oxygen containers shall be listed or labeled.

- (h) Amend Section 3.1.3 to read as follows: High-pressure gaseous oxygen containers shall be listed or labeled.

(i) Amend Section 3.2.1 to read as follows: Piping, tubing, and fittings shall be listed or labeled for oxygen service and for the pressures and temperatures involved.

- (j) Delete Section 3.2.2.

- (k) Delete Section 3.2.3.

- (l) Amend Section 3.5.9 to read as follows: Electrical wiring for bulk oxygen equipment shall be in accordance with the

Indiana Electrical Code (675 IAC 17).

(m) Chapter 5 and the appendices are not adopted as part of this code and are intended for use as a guide, and the standards referenced therein are not enforceable as part of this code. (*Fire Prevention and Building Safety Commission; 675 IAC 28-1-16; filed Aug 23, 2006, 4:03 p.m.: 20060906-IR-675050104FRA; readopted filed Aug 8, 2012, 8:08 a.m.: 20120905-IR-675120260RFA; readopted filed Jul 3, 2018, 2:22 p.m.: 20180801-IR-675180204RFA*)

**675 IAC 28-1-17 NFPA 50B; standard for liquefied hydrogen systems at consumer sites**

Authority: IC 22-13-2-2; IC 22-13-2-13

Affected: IC 10-19-2; IC 22-12; IC 22-13; IC 22-14; IC 22-15; IC 36-7

Sec. 17. (a) That certain document, being titled NFPA 50B, Standard for Liquefied Hydrogen Systems at Consumer Sites, 1999 Edition, published by the National Fire Protection Association (NFPA), 1 Batterymarch Park, Quincy, Massachusetts 02269-9101, be and same is hereby adopted by reference, as if fully set out in this section except as revised hereafter.

(b) The following documents referenced in NFPA 50B are not adopted, are not enforceable, and are for information purposes only:

- (1) NFPA 220.
- (2) NFPA 496.
- (3) ASME B31.3.
- (4) CGA S-1.1.
- (5) CGA S-1.2.
- (6) CGA S-1.3.
- (7) ASTM E136-96a.

(8) Title 49, Code of Federal Regulations.

(c) The following documents referenced in NFPA 50B are adopted and is *[sic., are]* enforceable:

- (1) NFPA 70 as adopted at 675 IAC 17.
- (2) ASME Boiler and Pressure Vessel Code, as adopted at 680 IAC 2-1-1 *[675 IAC 30-1-1]*.
- (d) Delete Section 1-2 in its entirety without substitution.

(e) In Section 1-3, amend the following definitions:

APPROVED means acceptance by the authority having jurisdiction by one (1) of the following methods:

- (1) Investigation or tests conducted by nationally recognized authorities; or
- (2) Investigation or tests conducted by nationally recognized technical or scientific organizations; or
- (3) Nationally accepted principles.

The investigation, tests, or principles shall establish that the method, material, equipment, design, or type of construction is safe for its intended purpose.

AUTHORITY HAVING JURISDICTION means the Division of Fire and Building Safety or officer of a local unit of government empowered by law to administer and enforce the rules of the commission.

LABELED means equipment or materials to which has been attached a label, symbol, or other identifying mark of an organization engaged in product evaluation, that maintains periodic inspection of production of labeled equipment or materials, and by whose labeling the manufacturer indicates compliance with appropriate standards or performance in a specified manner.

LISTED means equipment or materials included in a list published by an organization engaged in product evaluation, that maintains periodic inspection of production of listed equipment or materials, and whose listing states either that the equipment or material meets appropriate standards or has been tested and found suitable for use in a specified manner.

OUTDOOR LOCATION means outside of any building or structure.

(f) In Section 1-3, add the following definitions:

BUILDING CODE means the Indiana Building Code in effect in Indiana at the time of construction, remodeling, alteration, addition, or repair of the structure.

DIVISION OF FIRE AND BUILDING SAFETY means the Division of Fire and Building Safety of the Indiana Department of Homeland Security created pursuant to IC 10-19-2.

ELECTRICAL CODE means the Indiana Electrical Code in effect in Indiana at the time of construction, remodeling, alteration, addition, or repair of the structure.

NFPA 70 means the Indiana Electrical Code (675 IAC 17).

QUALIFIED means having successfully completed a course of instruction related to the equipment being installed, serviced, or repaired. Such instruction shall be provided by the manufacturer of the equipment or their authorized representative.

(g) Delete Section 4-1.2 without substitution.

(h) Delete the text of Section 4-2 and substitute to read as follows: Buildings or portions of buildings which contain liquefied hydrogen shall be constructed in accordance with the Indiana Building Code (675 IAC 13).

(i) Delete Section 4-3 without substitution.

(j) Chapter 8 and the appendices are not adopted as part of this code and are intended for use as a guide, and the standards referenced therein are not enforceable as part of this code. (*Fire Prevention and Building Safety Commission; 675 IAC 28-1-17; filed Aug 23, 2006, 4:03 p.m.: 20060906-IR-675050104FRA; readopted filed Aug 8, 2012, 8:08 a.m.: 20120905-IR-675120260RFA; readopted filed Jul 3, 2018, 2:22 p.m.: 20180801-IR-675180204RFA*)

**675 IAC 28-1-18 NFPA 51; standard for the design and installation of oxygen-fuel gas system for welding, cutting, and allied processes**

Authority: IC 22-13-2-2; IC 22-13-2-13

Affected: IC 10-19-2; IC 22-12; IC 22-13; IC 22-14; IC 22-15; IC 36-7

Sec. 18. (a) That certain document, being titled as NFPA 51, Standard for the Design and Installation of Oxygen-Fuel Gas System for Welding, Cutting and Allied Processes, 2002 Edition, published by the National Fire Protection Association, 1 Batterymarch Park, Quincy, Massachusetts 02269-9101, be and the same is hereby adopted by reference, as if fully set out in this section, except as revised hereafter.

(b) The following documents referenced in NFPA 51 are not adopted, are not enforceable, and are for information purposes only:

- (1) NFPA 54.
- (2) NFPA 101.
- (3) NFPA 255.
- (4) NFPA 259.
- (5) ANSI B31.3.
- (6) ANSI Z49.1.
- (7) ASTM B 88.
- (8) ASTM E 136.
- (9) ANSI/CGA C4.
- (10) ANSI/CGA V1.
- (11) CGA G1.6.
- (12) CGA E-1.
- (13) CGA E-3.

(c) The following documents referenced in NFPA 51 are adopted and are enforceable:

- (1) NFPA 13 as adopted in 675 IAC 13-1-8.
- (2) NFPA 15 as adopted in section 8 of this rule.
- (3) NFPA 50 as adopted in section 16 of this rule.
- (4) NFPA 51B as adopted in section 20 of this rule.
- (5) NFPA 58 as adopted in 675 IAC 22-2.2-14.
- (6) NFPA 70 as adopted in 675 IAC 17.
- (7) ASME Boiler and Pressure Vessel Code, as adopted at 680 IAC 2-1-1 [675 IAC 30-1-1].
- (d) Delete Section 1.3 in its entirety without substitution.
- (e) Amend Section 1.4 by deleting in its entirety and substituting "See 675 IAC 12-6-11."
- (f) Delete Section 1.6.1 in its entirety without substitution.

(g) Amend Chapter 3 as follows:

(1) Amend the following definitions:

APPROVED means acceptance by the authority having jurisdiction by one (1) of the following methods:

- (1) Investigation or tests conducted by nationally recognized authorities; or
- (2) Investigation or tests conducted by nationally recognized technical or scientific organizations; or
- (3) Nationally accepted principles.

The investigation, tests, or principles shall establish that the method, material, equipment, design, or type of construction is safe for its intended purpose.

AUTHORITY HAVING JURISDICTION means the Division of Fire and Building Safety or officer of a local unit of government empowered by law to administer and enforce the rules of the commission.

LABELED means equipment or materials to which has been attached a label, symbol, or other identifying mark of an organization engaged in product evaluation, that maintains periodic inspection of production of labeled equipment or materials, and by whose labeling the manufacturer indicates compliance with appropriate standards or performance in a specified manner.

LIMITED-COMBUSTIBLE MATERIALS means a material not complying with the definition of noncombustible material, which, in the form in which it is used, has a potential heat value not exceeding three thousand five hundred (3,500) Btu per lb (8,141 IJ/kg) and complies with one (1) of the following paragraphs (a) or (b). Materials subject to increase in combustibility or flame spread rating beyond the limits herein established through the effects of age, moisture, or other atmospheric condition shall be considered combustible.

(a) Materials having a structural base of noncombustible material, with a surfacing not exceeding a thickness of one-eighth (1/8) inch (3.2 mm) that has a flame spread rating not greater than fifty (50).

(b) Materials, in the form and thickness used, other than as described in (a), having neither a flame spread rating greater than twenty-five (25) nor evidence of continued progressive combustion and of such composition that surfaces that would be exposed by cutting through the material on any plane would have neither a flame spread rating greater than twenty-five (25) nor evidence of continued progressive combustion.

LISTED means equipment or materials included in a list published by an organization engaged in product evaluation, that maintains periodic inspection of production of listed equipment or materials, and whose listing states either that the equipment or material meets appropriate standards or has been tested and found suitable for use in a specified manner.

NONCOMBUSTIBLE MATERIAL, as applied to building construction materials, means a material which, in the form in which it is used, is either one (1) of the following:

1. Material of which no part will ignite and burn when subjected to fire. Any material conforming to ASTM E 136 shall be considered noncombustible.
2. Material having a structural base of noncombustible material as defined in Item 1 above, with a surfacing material not over one-eighth (1/8) inch (3.2 mm) thick which has a flame-spread rating of fifty (50) or less.

"Noncombustible" does not apply to surface finish materials. Material required to be noncombustible for reduced clearances to flues, heating appliances, or other sources of high temperature shall consist of material conforming to Item 1. No material shall be classed as noncombustible that is subject to increase in combustibility or flame-spread rating, beyond the limits herein established, through the effects of age, moisture, or other atmospheric condition.

Flame-spread rating as used herein refers to rating obtained according to tests conducted as specified in ASTM E 84-99.

(2) Add the following definitions:

DIVISION OF FIRE AND BUILDING SAFETY means the Division of Fire and Building Safety of the Indiana Department of Homeland Security created pursuant to IC 10-19-2.

BUILDING CODE means the Indiana Building Code in effect in Indiana at the time of construction, remodeling, alteration, addition, or repair of the structure.

MECHANICAL CODE means the Indiana Mechanical Code in effect in Indiana at the time of construction, remodeling, alteration, addition, or repair of the structure.

NFPA 70 means the Indiana Electrical Code (675 IAC 17).

(h) Delete subsection 3.2.6 in its entirety without substitution.

(i) Amend Section 4.1.1 to read "Cylinders shall be designed, fabricated, tested, and marked (stamped) in accordance with the rules of the commission."

(j) Amend Section 4.2.2 to read as follows: Separate rooms or buildings used for gas cylinder storage shall be provided with natural or mechanical ventilation designed in accordance with the building code and the mechanical code. Ventilation systems shall discharge a minimum of fifty (50) feet (15 m) from intakes of air handling systems, air conditioning equipment, and air compressors.

(k) In Section 5.1.3, amend the last sentence to read: Such buildings or rooms shall be in accordance with the building code (675 IAC 13).

(l) Amend Section 5.2.4, Exception, to read as follows:

Exception: An oxygen manifold to which cylinders having an aggregate capacity of more than six thousand five hundred (6,500) cubic feet (168 m<sup>3</sup>) of oxygen are connected shall be located as follows:

(1) Outdoors, or

(2) In a separate building constructed in accordance with the building code, or

(3) If located inside a building having occupancy other than that directly associated with the production of acetylene, the storage of calcium carbide, or the storage and manifolding of fuel gases used in welding and cutting, shall be in either a separate room constructed in accordance with the building code or in an area with no combustible material within twenty (20) feet (6 m) of the manifold.

(m) Amend Section 6.3.1 to read as follows: Piping shall be protected against corrosion and physical damage. Piping under buildings or foundations shall be provided with a vented casing or located in a well-ventilated tunnel.

(n) In Section 6.5.1, delete "in accordance with ANSI B31.1, Chemical plant and Petroleum Refinery Piping."

(o) In Section 8.4.1.2, delete "adequate" and substitute "approved".

(p) In Section 8.4.1.4, delete "adequate" and substitute "approved".

(q) In Section 8.4.2, delete "sufficient" without substitution and add at the end of the sentence "in accordance with the manufacturer's instructions".

(r) Amend Section 8.5.1.1 to read as follows: Construction of outside generator houses and inside generator rooms for stationary acetylene generators shall be in accordance with the Indiana Building Code (675 IAC 13).

(s) Delete Section 8.5.1 in its entirety and substitute "Construction: Construction shall be performed in accordance with the building code and fire code."

(t) Amend Section 8.5.2 to read as follows: Ventilation. Inside generator rooms or outside generator houses shall be ventilated in accordance with the Indiana Building Code (675 IAC 13) and the Indiana Mechanical Code (675 IAC 18).

(u) Chapter 2 and the annexes are not adopted as part of this code and are intended for use as a guide, and the standards referenced therein are not enforceable as part of this code. (*Fire Prevention and Building Safety Commission; 675 IAC 28-1-18; filed Aug 23, 2006, 4:03 p.m.: 20060906-IR-675050104FRA; readopted filed Aug 8, 2012, 8:08 a.m.: 20120905-IR-675120260RFA; readopted filed Jul 3, 2018, 2:22 p.m.: 20180801-IR-675180204RFA*)

## **675 IAC 28-1-19 (Reserved)**

Sec. 19. (*NOTE: Reserved to retain citation sequence continuity.*)

## **675 IAC 28-1-20 NFPA 51B; standard for fire prevention during welding, cutting and other hot work (Repealed)**

Sec. 20. (*Repealed by Fire Prevention and Building Safety Commission; filed Nov 15, 2012, 2:59 p.m.: 20121212-IR-675120051FRA*)

## **675 IAC 28-1-21 NFPA 52; compressed natural gas (CNG) vehicular fuel systems code**

Authority: IC 22-13-2-2; IC 22-13-2-13

Affected: IC 10-19-2; IC 22-12; IC 22-13; IC 22-14; IC 22-15; IC 36-7

Sec. 21. (a) That certain document, being titled NFPA 52-Compressed Natural Gas (CNG) Vehicular Fuel Systems Code,

2002 Edition, published by the National Fire Protection Association (NFPA), 1 Batterymarch Park, Quincy, Massachusetts 02269-9101, be and the same is hereby adopted by reference, as if fully set out in this section except as revised hereafter.

(b) The following documents referenced in NFPA 52 are not adopted, are not enforceable, and are for information purposes only:

- (1) NFPA 30.
- (2) NFPA 30A.
- (3) NFPA 54.
- (4) NFPA 101.
- (5) NFPA 259.
- (6) NFPA 302.
- (7) NFPA 303.
- (8) NFPA 496.
- (9) ANSI SI 10.
- (10) ANSI Z 87.1.
- (11) ANSI Z 89.1.
- (12) API RP 2003.
- (13) ANSI/ASME B31.3.
- (14) ASTM A 47.
- (15) ASTM A 395.
- (16) ASTM A 536.
- (17) ASTM E 136.
- (18) CGA S-1.1.
- (19) CSA B 51.
- (20) ANSI/IAS NGV1.
- (21) ANSI/IAS NGV2.
- (22) IAS US 5-96.
- (23) SAE J 1616.
- (24) Title 49, Code of Federal Regulations.

(c) The following documents are adopted and are enforceable:

- (1) NFPA 37, as adopted in section 15 of this rule.
- (2) NFPA 70, as adopted in 675 IAC 17.
- (3) ASME Boiler and Pressure Vessel Code, as adopted at 680 IAC 2-1-1 [675 IAC 30-1-1].
- (d) Delete Section 1.3 in its entirety without substitution.
- (e) Amend Section 1.4 by deleting text and substituting "Alternate provisions are permitted as specified in 675 IAC 12-6-

11."

(f) Amend Chapter 3 as follows:

(1) Amend the following definitions:

APPROVED means acceptance by the authority having jurisdiction by one (1) of the following methods:

- (1) Investigation or tests conducted by nationally recognized authorities; or
- (2) Investigation or tests conducted by nationally recognized technical or scientific organizations; or
- (3) Nationally accepted principles.

The investigation, tests, or principles shall establish that the method, material, equipment, design, or type of construction is safe for its intended purpose.

AUTHORITY HAVING JURISDICTION means the Division of Fire and Building Safety or officer of a local unit of government empowered by law to administer and enforce the rules of the commission.

LABELED means equipment or materials to which has been attached a label, symbol, or other identifying mark of an organization engaged in product evaluation, that maintains periodic inspection of production of labeled equipment or materials, and by whose labeling the manufacturer indicates compliance with appropriate standards or performance in a specified manner.



**LIMITED-COMBUSTIBLE MATERIAL:** Delete the phrase "(as defined in NFPA 220 Standard of Types of Building Construction)".

**LISTED** means equipment or materials included in a list published by an organization engaged in product evaluation, that maintains periodic inspection of production of listed equipment or materials, and whose listing states either that the equipment or material meets appropriate standards or has been tested and found suitable for use in a specified manner.

**NONCOMBUSTIBLE MATERIAL:** Delete the phrase "(as defined in NFPA 220 Standard of Types of Building Construction)".

(2) Add the following definitions:

**BUILDING CODE** means the Indiana Building Code in effect in Indiana at the time of construction, remodeling, alteration, addition, or repair of the structure.

**DIVISION OF FIRE AND BUILDING SAFETY** means the Division of Fire and Building Safety of the Indiana Department of Homeland Security created pursuant to IC 10-19-2.

**ELECTRICAL CODE** means the Indiana Electrical Code in effect in Indiana at the time of construction, remodeling, alteration, addition, or repair of the structure.

**HAZARDOUS MATERIALS** are those chemicals or substances which are hazardous as defined and classified in accordance with the Indiana Fire Code.

**INDIANA FIRE CODE** means the rules adopted at 675 IAC 22 in effect in Indiana at the time of inspection by the inspection authority or, with respect to construction required to be filed under 675 IAC 12-6, 675 IAC 22 in effect at the time of construction, remodeling, alteration, addition, or repair of the structure.

**NFPA 70** means the Indiana Electrical Code (675 IAC 17).

**INTERNATIONAL FIRE CODE (I.F.C.)** means the Indiana Fire Code.

(g) Delete Section 3.2.6 in its entirety without substitution.

(h) Section 5.13.4 (3) is amended to read as follows: delete "proved suitable tests" and insert "approved by manufacturer".

(i) Delete Section 6.4.2.2 without substitution.

(j) Amend Section 6.4.2.3 to read as follows: Compression, storage, and dispensing equipment located outdoors shall be aboveground, shall not be beneath electric power lines or where exposed by power line failure, and shall be located in accordance with the Indiana Fire Code.

(k) Amend Section 6.4.2.8 by deleting "important".

(l) Amend Section 6.4.3 to read as follows:

6.4.3 Indoors

6.4.3.1 General. Compression, dispensing equipment, and storage containers connected for use are allowed to be located inside of buildings. The buildings shall be constructed in accordance with the building code and the requirements of the Indiana Fire Code Chapter 35 for flammable gases.

6.4.3.2 Quantity Limit. Storage shall be limited to not more than ten thousand (10,000) cubic feet (283,168 L) of natural gas in each building.

Exception: Compressed natural gas stored in vehicle-mounted fuel-supply containers.

6.4.3.3 Explosion Control. Explosion control shall be provided in accordance with the Indiana Fire Code Chapter 35.

6.4.3.4 Automatic Fire-extinguishing System. Rooms or buildings used for the storage, compression, or dispensing of CNG shall be protected throughout by an automatic sprinkler system. The automatic sprinkler system shall be designed in accordance with the Indiana Fire Code Chapter 35 and the Indiana Building Code (675 IAC 13).

6.4.3.5 Mechanical Ventilation. Ventilation shall be provided throughout for buildings or rooms used for the storage, compression, or dispensing of CNG. Ventilation shall be by a continuous mechanical ventilation system or by a mechanical ventilation system activated by a supervised methane gas-detection system when a gas concentration of not more than twenty (20) percent of the lower flammability limit is present. Failure of the mechanical ventilation system shall shut down the fuel compression and dispensing system. The mechanical ventilation system shall be in accordance with the Indiana Fire Code Chapter 35 and the Indiana Mechanical Code (675 IAC 18). In addition, the mechanical ventilation system shall be designed for both lighter than air and heavier than air vapors.

Exception: The mechanical ventilation system can be designed for methane when the building or room is used

exclusively for the dispensing of CNG.

6.4.3.6 Supervised Methane Gas-Detection System. A supervised methane gas-detection system shall be provided throughout buildings or rooms used for the storage, compression, or dispensing of CNG. The gas-detection system shall sound a distinct alarm signal when a gas concentration of not more than twenty (20) percent of the lower flammability limit is present. Activation of the gas-detection system shall shut down the fuel compression and dispensing system.

6.4.3.7 Electrical Service. Buildings and rooms used for the storage, compression, or dispensing of CNG shall be classified in accordance with Table 4-12 for installations of electrical equipment. Electrical equipment shall be installed in accordance with the Indiana Electrical Code (675 IAC 17).

6.4.3.8 Emergency Shutdown Devices. Emergency shutdown devices shall be provided in rooms or buildings used for storage, compression, or dispensing of CNG. Such devices shall be provided at each dispenser, at each exit, and at the room or building used for the storage or compression of CNG. Activation of the emergency shutdown devices shall shut down the compression and dispensing equipment.

6.4.3.9 Discharge of Relief Devices. Pressure-relief devices on storage and compression systems shall be provided with an approved means of discharging CNG outside of the building. The point of discharge shall be a minimum of ten (10) feet (3,048 mm) from building and ventilation openings, property lines, public ways, and paths of egress. The point of discharge shall not impinge on the building.

6.4.3.10 Signs. Rooms or buildings used for the storage, compression, or dispensing of CNG shall be provided with warning signs with the words WARNING-NO SMOKING-FLAMMABLE GAS. The wording shall be in plainly legible red letters on a white reflective background with letters no less than one (1) inch (25.4 mm) high.

(m) In Section 6.5.1, delete the last sentence and substitute the following: Where flooding can occur, they shall be secured in accordance with Section 3404.2.7.8 of the Indiana Fire Code.

(n) Chapter 2 and the annexes are not adopted as part of this code and are intended for use as a guide, and the standards referenced therein are not enforceable as part of this code. (*Fire Prevention and Building Safety Commission; 675 IAC 28-1-21; filed Aug 23, 2006, 4:03 p.m.: 20060906-IR-675050104FRA; readopted filed Aug 8, 2012, 8:08 a.m.: 20120905-IR-675120260RFA; readopted filed Jul 3, 2018, 2:22 p.m.: 20180801-IR-675180204RFA*)

#### **675 IAC 28-1-22 NFPA 58; liquefied petroleum gas code (Repealed)**

Sec. 22. (*Repealed by Fire Prevention and Building Safety Commission; filed Feb 21, 2014, 4:15 p.m.: 20140319-IR-675120522FRA*)

#### **675 IAC 28-1-23 NFPA 59; utility lp-gas plant code**

Authority: IC 22-13-2-2; IC 22-13-2-13

Affected: IC 10-19-2; IC 22-12; IC 22-13; IC 22-14; IC 22-15; IC 36-7

Sec. 23. (a) That certain document, being titled NFPA 59-Utility LP-Gas Plant Code, 2004 Edition, published by the National Fire Protection Association (NFPA), 1 Batterymarch Park, Quincy, Massachusetts 02269-9109, be and the same is hereby adopted by reference, as if fully set out in this section except as revised hereafter.

(b) The following documents referenced in NFPA 59 are not adopted, are not enforceable, and are for information purposes only:

- (1) NFPA 11A.
- (2) NFPA 12A.
- (3) NFPA 16.
- (4) NFPA 22.
- (5) NFPA 24.
- (6) NFPA 30.
- (7) NFPA 54.
- (8) NFPA 101.
- (9) NFPA 290.

- (10) NFPA 780.
- (11) NFPA 1961.
- (12) NFPA 1962.
- (13) NFPA 1963.
- (14) NFPA 1971.
- (15) NFPA 1981.
- (16) API 607-1998.
- (17) API 620-2001.
- (18) ASCE 7.
- (19) ASME B31.3.
- (20) ASTM A47.
- (21) ASTM A395.
- (22) ASTM A536.
- (23) UL 132.

(c) The following documents referenced in NFPA 59 are adopted and are enforceable:

- (1) NFPA 11, as adopted in section 3 of this rule.
- (2) NFPA 12, as adopted in section 4 of this rule.
- (3) NFPA 13, as adopted in 675 IAC 13-1-8.
- (4) NFPA 14, as adopted in 675 IAC 13-1-9.
- (5) NFPA 15, as adopted in section 8 of this rule.
- (6) NFPA 17, as adopted in section 9 of this rule.
- (7) NFPA 20, as adopted in 675 IAC 13-1-10.
- (8) NFPA 51B, as adopted in section 20 of this rule.
- (9) NFPA 58, as adopted at 675 IAC 22-2.2-14.
- (10) NFPA 70, as adopted in 675 IAC 17.
- (11) ASME Boiler and Pressure Vessel Code as adopted at 680 IAC 2-1-1 [675 IAC 30-1-1].

(d) Delete Section 1.3 in its entirety without substitution.

(e) Amend Section 1.4 by deleting in its entirety and substituting "See 675 IAC 12-6-11."

(f) Amend Chapter 3 as follows:

(1) Amend the following definitions:

APPROVED means acceptance by the authority having jurisdiction by one (1) of the following methods:

- (1) Investigation or tests conducted by nationally recognized authorities; or
- (2) Investigation or tests conducted by nationally recognized technical or scientific organizations; or
- (3) Nationally accepted principles.

The investigation, tests, or principles shall establish that the method, material, equipment, design, or type of construction is safe for its intended purpose.

AUTHORITY HAVING JURISDICTION means the Division of Fire and Building Safety or officer of a local unit of government empowered by law to administer and enforce the rules of the commission.

LABELED means equipment or materials to which has been attached a label, symbol, or other identifying mark of an organization engaged in product evaluation, that maintains periodic inspection of production of labeled equipment or materials, and by whose labeling the manufacturer indicates compliance with appropriate standards or performance in a specified manner.

LISTED means equipment or materials included in a list published by an organization engaged in product evaluation, that maintains periodic inspection of production of listed equipment or materials, and whose listing states either that the equipment or material meets appropriate standards or has been tested and found suitable for use in a specified manner.

(2) Add the following definitions:

BUILDING CODE means the Indiana Building Code in effect in Indiana at the time of construction, remodeling, alteration, addition, or repair of the structure.

DIVISION OF FIRE AND BUILDING SAFETY means the Division of Fire and Building Safety of the Indiana Department of Homeland Security created pursuant to IC 10-19-2.

ELECTRICAL CODE means the Indiana Electrical Code in effect in Indiana at the time of construction, remodeling, alteration, addition, or repair of the structure.

INDIANA FIRE CODE means the rules adopted at 675 IAC 22 in effect in Indiana at the time of inspection by the inspection authority or, with respect to construction required to be filed under 675 IAC 12-6, 675 IAC 22 in effect at the time of construction, remodeling, alteration, addition, or repair of the structure.

NFPA 70 means the Indiana Electrical Code (675 IAC 17).

QUALIFIED means having successfully completed a course of instruction related to the equipment being installed, serviced, or repaired.

(g) Amend Section 4.4 to read as follows: Where damage to liquefied petroleum gas systems from vehicular traffic is a possibility, protection shall be provided in accordance with section 2703.9.3 of the Indiana Fire Code.

(h) Amend Section 4.8.2 to read as follows: Smoking shall be permitted only in designated areas.

(i) In Section 5.4.1.7, delete "NFPA 30, Flammable and Combustible Liquids Code. [58:6.4.5.6]" and substitute "the Indiana Fire Code."

(j) In Section 5.5.1.9, delete "approval of the authority having jurisdiction" and insert "requirements of the building code (675 IAC 13)".

(k) In Section 5.7.3, delete "or on accepted engineering practices for the operating conditions involved with the approval of" and substitute "as approved by".

(l) Amend Section 11.2.1.3 as follows: In the second sentence, delete "competent" and insert "qualified".

(m) Amend Section 11.3.1 to read as follows: Each facility shall maintain a record of all operating log sheets and recorded data. These records shall be made immediately available to the authority having jurisdiction upon request.

(n) Amend Section 12.5.1(A) to read as follows: The records shall be made immediately available to the authority having jurisdiction upon request.

(o) Delete Section 13.7.6 without substitution.

(p) Delete Section 13.7.7 without substitution.

(q) Delete Section 13.7.9 without substitution.

(r) Chapter 2 and the annexes are not adopted as part of this code and are intended for use as a guide, and the standards referenced therein are not enforceable as part of this code. (*Fire Prevention and Building Safety Commission; 675 IAC 28-1-23; filed Aug 23, 2006, 4:03 p.m.: 20060906-IR-675050104FRA; readopted filed Aug 8, 2012, 8:08 a.m.: 20120905-IR-675120260RFA; readopted filed Jul 3, 2018, 2:22 p.m.: 20180801-IR-675180204RFA*)

**675 IAC 28-1-24 NFPA 59A; standard for the production, storage, and handling of liquefied natural gas (LNG)**

Authority: IC 22-13-2-2; IC 22-13-2-13

Affected: IC 10-19-2; IC 22-12; IC 22-13; IC 22-14; IC 22-15; IC 36-7

Sec. 24. (a) That certain document, being titled NFPA 59A-Standard for the Production, Storage and Handling of Liquefied Natural Gas (LNG), 2001 Edition, published by the National Fire Protection Association (NFPA), 1 Batterymarch Park, Quincy, Massachusetts 02269-9101, be and same is hereby adopted by reference, as if fully set out in this section, except as revised hereafter.

(b) The following documents referenced in NFPA 59A are not adopted, are not enforceable, and are for information purposes only:

(1) NFPA 11A.

(2) NFPA 12A.

(3) NFPA 16.

(4) NFPA 22.

(5) NFPA 24.

(6) NFPA 30.

(7) NFPA 54.

- (8) NFPA 101.
- (9) NFPA 255.
- (10) NFPA 600.
- (11) NFPA 701.
- (12) NFPA 1221.
- (13) NFPA 1901.
- (14) ACI 301.
- (15) ACI 304.6R.
- (16) ACI 311.4R.
- (17) ACI 318.
- (18) ACI 318R.
- (19) ACI 344R-W.
- (20) ACI 372R.
- (21) ACI 373R.
- (22) ACI 506.2.
- (23) API 6D.
- (24) API 620.
- (25) API 2510.
- (26) ASCE 7.
- (27) ASME B31.3.
- (28) ASME B31.5.
- (29) ASME B31.8.
- (30) ASTM A366.
- (31) ASTM A416.
- (32) ASTM A421.
- (33) ASTM A615.
- (34) ASTM A722.
- (35) ASTM A821.
- (36) ASTM A966.
- (37) ASTM C33.
- (38) ASTM E380.
- (39) CGA 341.
- (40) CGA S-1.3.
- (41) CSA B51.
- (42) CAN 4-S102.
- (43) CAN 3-A23.3.
- (44) CAN 3-A23.4.
- (45) CAN A23.1.
- (46) CSA G279.
- (47) CSA C22.1.
- (48) CSA G30.3.
- (49) CSA G30.5.
- (50) CSA G30.18.
- (51) NEHRP Recommended Provisions for Seismic Regulation for New Buildings and Other Structures-1997.
- (52) GRI Report 96/0396.5.
- (53) GRI Report 0176.
- (54) GRI Report 0242.
- (55) Uniform Building Code 1994.
- (56) NACE RP 0169.

(c) The following documents are adopted and are enforceable:

- (1) NFPA 10, as adopted in section 2 of this rule.
- (2) NFPA 11, as adopted in section 3 of this rule.
- (3) NFPA 12, as adopted in section 4 of this rule.
- (4) NFPA 13, as adopted in 675 IAC 13-1-8.
- (5) NFPA 14, as adopted in 675 IAC 13-1-9.
- (6) NFPA 15, as adopted in section 8 of this rule.
- (7) NFPA 17, as adopted in section 9 of this rule.
- (8) NFPA 20, as adopted in 675 IAC 13-1-10.
- (9) NFPA 37, as adopted in section 15 of this rule.
- (10) NFPA 58, as adopted in 675 IAC 22-2.2-14.
- (11) NFPA 59, as adopted in section 23 of this rule.
- (12) NFPA 70, as adopted in 675 IAC 17.
- (13) NFPA 72, as adopted in section 28 of this rule.
- (14) NFPA 385, as adopted in section 34 of this rule.
- (15) ASME Boiler and Pressure Vessel Code, as adopted at 680 IAC 2-1-1 [675 IAC 30-1-1].

(d) Amend Section 1.2 by deleting in its entirety and substituting "See 675 IAC 12-6-11."

(e) Delete Section 1.3 in its entirety without substitution.

(f) Delete Section 1.6 without substitution.

(g) Amend Section 1.7 as follows:

(1) Amend the following definitions:

APPROVED means acceptance by the authority having jurisdiction by one (1) of the following methods:

- (1) Investigation or tests conducted by nationally recognized authorities; or
- (2) Investigation or tests conducted by nationally recognized technical or scientific organizations; or
- (3) Nationally accepted principles.

The investigation, tests, or principles shall establish that the method, material, equipment, design, or type of construction is safe for its intended purpose.

AUTHORITY HAVING JURISDICTION means the Division of Fire and Building Safety or officer of a local unit of government empowered by law to administer and enforce the rules of the commission.

FLAME SPREAD RATING means the flame spread rating of materials.

(2) Add the following definitions:

DIVISION OF FIRE AND BUILDING SAFETY means the Division of Fire and Building Safety of the Indiana Department of Homeland Security created pursuant to IC 10-19-2.

ELECTRICAL CODE means the Indiana Electrical Code in effect in Indiana at the time of construction, remodeling, alteration, addition, or repair of the structure.

INDIANA BUILDING CODE means the rules adopted at 675 IAC 13 in effect in Indiana at the time of construction, remodeling, alteration, addition, or repair of the structure.

INDIANA FIRE CODE means the rules adopted at 675 IAC 22 in effect in Indiana at the time of inspection by the inspection authority or, with respect to construction required to be filed under 675 IAC 12-6, 675 IAC 22 in effect at the time of construction, remodeling, alteration, addition, or repair of the structure.

NFPA 30 means the Indiana Fire Code.

NFPA 70 means the Indiana Electrical Code (675 IAC 17).

TRAINED means one who has undergone the instructions necessary to design, install, and perform maintenance and inspections.

(h) Amend Section 2.2.2.5 by deleting "NFPA 30, Flammable and Combustible Liquids Code" and substituting "the Indiana Fire Code".

(i) Amend Section 2.2.3.2(a)(3) by deleting "NFPA 101, Life Safety Code" and substituting "the Building Code".

(j) Amend Section 2.2.4.1 by deleting the exception in its entirety without substitution.

(k) Delete Section 2.6 in its entirety without substitution.

(l) Amend Section 2.7.5 by deleting "in accordance with 2.2.1 of ACI 344R-W, Design and Construction of Circular Wire and Strand Wrapped Prestressed Concrete Structures".

(m) Amend Section 3.4.3 by deleting "designed and fabricated in accordance with the standards of the Tubular Exchanger Manufacturers Association (TEMA)" and substituting "listed for their intended use".

(n) Amend Section 4.1.1 by deleting "qualified" and inserting "trained".

(o) Amend Section 4.1.7.1 to read as follows: LNG containers shall be installed on foundations in accordance with rules of the commission.

(p) Amend Section 7.7.1 by adding at the end of the first sentence "in accordance with the Indiana Electrical Code (675 IAC 17)".

(q) Amend Section 8.4.1 by deleting "requirements of the authorities having jurisdiction" and inserting "rules of the commission".

(r) Amend Section 9.5.2 by deleting the last sentence without substitution.

(s) Delete Section 10.2.5 in its entirety without substitution.

(t) Amend Section 10.6.2 by deleting the exception without substitution.

(u) Amend Section 10.10.4 by deleting, in Exception No. 2, "without" and substituting "with".

(v) Amend Section 11.3.6.2(b), 11.3.6.2(c), and 11.3.6.2(d) by deleting "acceptable" and inserting "approved".

(w) Chapter 12 and the appendices are not adopted as part of this code and are intended for use as a guide, and the standards referenced therein are not enforceable as part of this code. (*Fire Prevention and Building Safety Commission; 675 IAC 28-1-24; filed Aug 23, 2006, 4:03 p.m.: 20060906-IR-675050104FRA; readopted filed Aug 8, 2012, 8:08 a.m.: 20120905-IR-675120260RFA; readopted filed Jul 3, 2018, 2:22 p.m.: 20180801-IR-675180204RFA*)

#### **675 IAC 28-1-25 (Reserved)**

Sec. 25. (*NOTE: Reserved to retain citation sequence continuity.*)

#### **675 IAC 28-1-26 (Reserved)**

Sec. 26. (*NOTE: Reserved to retain citation sequence continuity.*)

#### **675 IAC 28-1-27 (Reserved)**

Sec. 27. (*NOTE: Reserved to retain citation sequence continuity.*)

#### **675 IAC 28-1-28 NFPA 72; national fire alarm and signaling code**

Authority: IC 22-13-2-2; IC 22-13-2-13

Affected: IC 10-19-2; IC 22-11-8; IC 22-12; IC 22-13; IC 22-14; IC 22-15; IC 36-7

Sec. 28. (a) That certain standard, being titled NFPA 72, National Fire Alarm and Signaling Code, 2010 edition, published by the National Fire Protection Association (NFPA), 1 Batterymarch Park, Quincy, Massachusetts 02269-9101, be and the same is hereby adopted by reference as if fully set out in this section except as revised hereafter.

(b) This rule is available for review and reference at the:

Legal and Code Services Section

Indiana Department of Homeland Security

Indiana Government Center South

302 West Washington Street, Room W246

Indianapolis, Indiana 46204

(c) Delete Section 1.4 in its entirety without substitution.

(d) Amend Section 1.5 by deleting the text and substituting "See 675 IAC 12-6-11.".

(e) Delete Section 1.7 in its entirety without substitution.

(f) Amend Section 2.2 as follows:

- (1) In the reference to NFPA 10, delete "2010 edition" and insert "as adopted at 675 IAC 28-1-2".
  - (2) In the reference to NFPA 11, delete "2010 edition" and insert "as adopted at 675 IAC 28-1-3".
  - (3) In the reference to NFPA 13, delete "2010 edition" and insert "as adopted at 675 IAC 13-1-5".
  - (4) In the reference to NFPA 25, delete "2008 edition" and insert "as adopted at 675 IAC 28-1-12".
  - (5) In the reference to NFPA 70, delete "2008 edition" and insert "as adopted at 675 IAC 17-1-8".
  - (g) Amend Section 2.3.1 as follows:
    - (1) In the reference to ANSI A17.1, Safety Code for Elevators and Escalators, delete "2004 edition" and insert "as adopted at 675 IAC 21".
    - (2) In the reference to ANSI B36.10M, Welded and Seamless Wrought Steel Pipe, delete "2004 edition" and insert "as adopted at 680 IAC 2 [675 IAC 30]".
  - (h) Delete Section 2.3.6 in its entirety without substitution.
  - (i) In Section 2.4, in the reference to NFPA 70, delete "2008 edition" and insert "as adopted at 675 IAC 17-1-8".
  - (j) Amend Chapter 3 as follows:
    - (k) Amend Section 3.1 by inserting "solely" after "apply" and deleting the last sentence.
    - (l) Amend Section 3.2 as follows:
      - (1) Amend Section 3.2.1 to delete the text and insert as follows: APPROVED means acceptance by the authority having jurisdiction by one (1) of the following methods:
        - (1) Investigation or tests conducted by national recognized authorities; or
        - (2) Investigation or tests conducted by national recognized technical or scientific organizations; or
        - (3) National accepted principles.
- The investigation, tests or principles shall establish that a method, material, equipment, design, or type of construction is safe for its intended purpose.
- (2) Amend Section 3.2.2 to delete the text and insert as follows: AUTHORITY HAVING JURISDICTION means the Division of Fire and Building Safety or officer of a local unit of government empowered by law to administer and enforce the rules of the commission.
  - (3) Amend Section 3.2.4 to delete the text and insert as follows: LABELED means equipment or materials to which has been attached a label, symbol, or other identifying mark of an organization engaged in product evaluation, that maintains periodic inspections of production of labeled equipment or materials, and by whose labeling the manufacturer indicates compliance with appropriate standards or performance in a specified manner.
  - (4) Amend Section 3.2.5 to delete the text and insert as follows: LISTED means equipment or materials included in a list published by an organization engaged in a product evaluation, that maintains periodic inspections of production of listed equipment or materials, and whose listing states either that the equipment or material meets appropriate standards or has been tested and found suitable for use in a specified manner.
  - (5) Delete Section 3.2.7 in its entirety without substitution.
  - (6) Add Section 3.2.8 to read as follows: STORY. STORY is that portion of a building included between the upper surface of a floor and the upper surface of the floor or roof next above. It is measured as the vertical distance from top to top of two successive tiers of beams or finished floor surfaces and, for the topmost story, from the top of the floor finish to the top of the ceiling joists or, where there is not a ceiling, to top of the roof rafters.
  - (7) Add Section 3.2.9 to read as follows: ACCESSIBLE. ACCESSIBLE means capable of being reached safely and quickly for operation, repair or inspection without requiring those whom ready access is requisite to climb over or remove obstacles, or to resort to the use of portable access equipment.
  - (8) Add Section 3.2.10 to read as follows: BUILDING CODE. BUILDING CODE means the Indiana Building Code (675 IAC 13) in effect in Indiana at the time of construction, remodeling, alteration, addition, or repair of the structure.
  - (9) Add Section 3.2.11 to read as follows: DIVISION OF FIRE AND BUILDING SAFETY. DIVISION OF FIRE AND BUILDING SAFETY means the Division of Fire and Building Safety of the Indiana Department of Homeland Security created pursuant to IC 10-19-2.
  - (10) Add Section 3.2.12 to read as follows: INDIANA FIRE CODE. INDIANA FIRE CODE the Indiana Fire Code (675 IAC 22) in effect in Indiana at the time of inspection by the inspection authority or, with respect to construction in accordance with 675 IAC 12-4-7.



- (11) Add Section 3.2.13 to read as follows: **INDIANA MECHANICAL CODE**. **INDIANA MECHANICAL CODE** means the Indiana Mechanical Code (675 IAC 18) in effect at the time of construction, remodeling, alteration, or addition of the structure.
- (12) Add Section 3.2.14 to read as follows: **NFPA 70, NATIONAL ELECTRICAL CODE**. **NFPA 70, NATIONAL ELECTRICAL CODE** means the Indiana Electrical Code (675 IAC 17) in effect at the time of construction, remodeling, alteration, or addition of the structure.
- (m) Amend Section 3.3 as follows:
- (1) Amend Section 3.3.17 to read as follows: **APARTMENT BUILDING**. **APARTMENT BUILDING** means a building classified as an R-2 occupancy under the Indiana Building Code.
- (2) Amend Section 3.3.54 to delete the text and insert to read as follows: **DAY-CARE HOME**. **DAY-CARE HOME** means a child care home as defined in IC 12-7-2-28.6.
- (3) Add Section 3.3.58.5 to read as follows: **DESIGN PROFESSIONAL**. **DESIGN PROFESSIONAL** means an architect who is registered under IC 25-4 or a professional engineer who is registered under IC 25-31.
- (4) Delete the text of Section 3.3.70 and insert to read as follows: **DORMITORY**. **DORMITORY** means a building classified as an R-2 under the Indiana Building Code.
- (5) Delete the text Section 3.3.74 and insert to read as follows: **DWELLING UNIT**. **DWELLING UNIT** is any building or portion thereof which contains living facilities, including provisions for sleeping, eating, cooking, and sanitation, as required by this code, for not more than one (1) family, or congregate resident for ten (10) or less persons.
- (6) Delete Section 3.3.111 in its entirety without substitution.
- (7) Delete Section 3.3.112 in its entirety without substitution.
- (8) Amend Section 3.3.117 by deleting the text and inserting to read as follows: **HOTEL**. **HOTEL** means a building classified as an R-1 occupancy in accordance with the Building Code.
- (9) Delete Section 3.3.118 in its entirety without substitution.
- (10) Delete Section 3.3.133 without substitution.
- (11) Delete Section 3.3.148 in its entirety without substitution.
- (12) Amend Section 3.3.206 to read as follows: **QUALIFIED**. See "QUALIFIED PERSON".
- (13) Add Section 3.3.206.5 to read as follows: **QUALIFIED PERSON**. **QUALIFIED PERSON** means a person who is a design professional or a person who has successfully completed a course of instruction related to the equipment being installed, serviced, or repaired, with such instruction having been provided by the manufacturer of the equipment or their authorized representative.
- (14) Amend Section 3.3.226 by deleting the text and inserting to read as follows: **RESIDENTIAL BOARD AND CARE OCCUPANCY**. **RESIDENTIAL BOARD AND CARE OCCUPANCY** means a building classified as an I-1 occupancy under the Building Code.
- (15) Amend Section 3.3.227 by deleting the text and inserting to read as follows: **RESIDENTIAL OCCUPANCY**. **RESIDENTIAL OCCUPANCY** means a building classified as an R-3 or R-4 occupancy under the Indiana Building Code.
- (16) Delete Section 3.3.235 in its entirety without substitution.
- (17) Delete Section 3.3.244 in its entirety without substitution.
- (18) Delete Section 3.3.262 in its entirety without substitution.
- (n) Delete the text of Section 10.4 in its entirety and insert as follows: 10.4 Design, installation, testing, and maintenance.
- 10.4.1 Fire alarm plans and specifications shall be designed as required by 675 IAC 12-6.
- 10.4.2 Plans and specifications shall be filed with the Plan Review Section of the Division of Fire and Building Safety in accordance with 675 IAC 12-6-7.
- 10.4.3 Installation personnel shall be qualified.
- 10.4.4 Personnel who perform inspections, testing, and maintenance shall be qualified.
- 10.4.5 Evidence of qualification shall be provided to the authority having jurisdiction upon request.
- (o) Amend Section 10.15 to insert at the end of the exception "where approved by the authority having jurisdiction".
- (p) Amend Section 10.16.3.1 by deleting "required".
- (q) Delete Section 10.16.3.2 without substitution.
- (r) Amend Section 10.17.3.3 by deleting "Unless prohibited by the authority having jurisdiction" and by deleting

"supervising" and inserting "Supervising".

(s) Amend Section 10.18.1.2 by deleting the text and inserting as follows:

When requested by the authority having jurisdiction, the specifications, wiring diagrams, and floor plans that were submitted for state construction design release shall be provided to the authority having jurisdiction prior to inspection.

(t) Amend Section 10.18.1.3 by deleting the text and inserting as follows: Where required by local ordinance, prior to requesting a final inspection of the installation, including alterations to the system, the installing contractor shall provide a written statement to the fire department that the fire alarm system was installed in accordance with the rules of the commission and this code.

(u) Amend Section 10.18.1.4 by deleting the text and inserting as follows: Where required by local ordinance, the form in FIGURE 10.18.2.1.1 shall be completed as part of the written statement.

(v) Amend Section 10.18.1.5 by deleting the text and inserting as follows: Where required by local ordinance, each installing contractor shall complete their relevant portion of the form in FIGURE 10.18.2.1.1.

(w) Add Section 10.18.1.6 to read as follows: The following documents shall be provided to the owner:

(1) Owner's manual and manufacturer's published instructions for all equipment.

(2) Copy of all applicable construction design releases issued pursuant to 675 IAC 12-6.

(3) Copy of the as-built plans and specifications.

(4) Record copy of site-specific software, if applicable.

(5) Operating instructions.

(x) Delete Section 10.18.2.1.2.8 without substitution.

(y) Delete Section 10.18.2.1.1 without substitution.

(z) Delete Section 10.18.2.2 without substitution.

(aa) Delete Section 10.18.2.4 without substitution.

(bb) Amend Section 10.18.3.2 as follows: After "required" and before "reported", insert "by local ordinance".

(cc) Amend Section 10.19.3 to read as follows: Impaired fire alarm systems shall be in compliance with the Indiana Fire Code.

(dd) Delete Section 14.1.3 without substitution.

(ee) Amend Section 14.1.4 to read as follows: The requirements of this chapter apply to all new systems. For existing systems, see 675 IAC 12-4-9, 675 IAC 12-4-11, and 675 IAC 12-4-12.

(ff) Add Section 14.1.5 by deleting the text and inserting as follows: Inspection, testing, and maintenance shall be performed by qualified persons.

(gg) Amend Section 14.2.1.2.1 by deleting the text and inserting as follows: Impairments shall comply with the Indiana Fire Code.

(hh) Delete Section 14.2.2.2 in its entirety without substitution.

(ii) Delete Section 14.2.2.4 in its entirety without substitution.

(jj) Delete Section 14.2.8 in its entirety without substitution.

(kk) Amend Section 14.3.1 to delete all the text after "Table 14.3.1".

(ll) Amend Section 14.3.2 to delete "if" and substitute "where".

(mm) Amend Section 14.4.2.1 to read as follows: When requested by the authority having jurisdiction, the specifications, wiring diagrams, and floor plans that were submitted for state construction design release shall be provided to the authority having jurisdiction prior to inspection of the central station facility.

(nn) Amend Section 14.4.5 to delete all the text after "Table 14.4.5".

(oo) Amend Section 14.4.5.1 to delete "if" and substitute "when".

(pp) Amend Section 14.4.5.3.2 by inserting, after the first sentence, "All smoke detectors in the system shall be sensitivity tested within the same calendar year."

(qq) Amend Section 14.4.5.3.3 by deleting "(or 4 percent obscuration light gray smoke, if not marked)" without substitution.

(rr) Amend Section 14.4.5.4, after "by", by deleting "the applicable NFPA standards" and substituting "this standard".

(ss) Delete Section 14.4.7 in its entirety without substitution.

(tt) Delete Section 14.4.8 in its entirety without substitution.

(uu) Amend Section 14.4.12 by deleting the text and inserting as follows: Where the installation of an in-building emergency

radio communication system is required by local ordinance, the system shall be tested as required in such local ordinance.

(vv) Amend Section 14.6.1 by deleting "approved by the authority having jurisdiction" without substitution.

(ww) Amend Section 17.1.4 to read as follows: The requirements of single and multiple-station alarms shall be determined in accordance with the Indiana Building Code, the Indiana Fire Code, IC 22-11-18, and Chapter 14 of this code.

(xx) Amend Section 17.1.5 to read as follows: The material in this chapter shall be applied by trained persons.

(yy) Amend Section 17.1.6 to read as follows: The interconnection of initiating devices with control equipment configurations and power supplies, or with output systems responding to external actuation shall comply with the applicable rules of the commission, including, without limitation, NFPA 70.

(zz) Delete Section 17.3 in its entirety without substitution.

(aaa) Amend Section 17.4.6 by deleting "other NFPA codes and standards or as required by other governing laws, codes, or standards" and substituting "this standard".

(bbb) Amend Section 17.4.8 by deleting "in a location acceptable to the authority having jurisdiction" without substitution.

(ccc) Amend Section 17.5.3.1 to delete "Where required by laws, codes, or standards, and unless".

(ddd) Amend Section 17.5.3.1.4 to delete "meeting the requirements of NFPA 99A, Standard for the Installation of Air-Conditioning and Ventilating Systems," and insert as follows: in accordance with the Indiana Mechanical Code" before ",".

(eee) Amend Section 17.5.3.2 by deleting "codes, standards, or laws" and inserting "the rules of the commission".

(fff) Delete Section 17.5.3.3 in its entirety without substitution.

(ggg) Delete Sections 17.6.1.1, 17.6.1.2 and 17.6.1.3 without substitution.

(hhh) Delete the text of Section 17.6.2.1 and insert as follows: Heat Sensing Fire Detectors shall be designed and installed as required by this code, the Indiana Building Code and the Indiana Fire Code.

(iii) Delete Section 17.6.3.8 without substitution.

(jjj) Delete Section 17.7.1.1 without substitution.

(kkk) Delete Section 17.7.1.2 without substitution.

(lll) Delete Section 17.7.1.3 without substitution.

(mmm) Delete Section 17.7.1.4 without substitution.

(nnn) Amend Section 17.7.1.6 to read as follows: Smoke detectors shall be installed as required by this standard, the Indiana Building Code and the Indiana Fire Code.

(ooo) Amend Section 17.7.1.10 by deleting the second sentence without substitution.

(ppp) Delete Section 17.7.3.2.3.3 in its entirety without substitution.

(qqq) Amend Section 17.7.5.3.1 to delete "on the supply side of air handling systems as required by NFPA 90A, Standard for the Installation of Air-Conditioning and Ventilating Systems, and 5.14.4.2.1." and insert the following: in air handling systems in accordance with the Indiana Mechanical Code.

(rrr) Amend Section 17.7.5.4.2.1 by deleting "other NFPA Standards" and inserting "the rules of the commission".

(sss) Amend Section 17.7.5.4.2.2 by deleting "other NFPA Standards" and inserting "the rules of the commission".

(ttt) Amend Section 17.7.5.5.3 by deleting "NFPA 90A, Standard for the Installation of Air-Conditioning and Ventilating Systems" and inserting "the Indiana Mechanical Code".

(uuu) Amend Section 17.10.2.4 by deleting "an engineering" and inserting "a design professional's".

(vvv) Amend Section 17.11.1.1 to read as follows: Such detectors shall be installed in all areas required under the Indiana Building Code or the Indiana Fire Code.

(www) Amend Section 18.1.1 by deleting, after "by", "the enforcing authority having jurisdiction or other governing laws, codes or standards or other parts of this Code" and inserting "this standard".

(xxx) Delete Section 18.1.5 in its entirety without substitution.

(yyy) Delete Section 18.4.3.2 without substitution.

(zzz) Amend Section 18.4.3.4 by deleting "if" and inserting "where".

(aaaa) Delete the text of Section 18.4.4.2 and insert the following: Where permitted by applicable rules of the commission, the requirements for audible signaling shall be permitted to be reduced or eliminated when visible signaling is provided in accordance with Section 18.5.

(bbbb) Amend Section 18.4.5.3 as follows:

(1) Delete "Effective January 1, 2014,".

(2) Delete "where" and insert "Where".

(cccc) Amend Section 18.4.7.3 to delete "Where required by the enforcing authority, governing laws, codes, or standards, or other parts of this Code,".

(dddd) Amend Section 18.4.7.4 to delete "Where required by the enforcing authority, governing laws, codes, or standards, or other parts of this Code,".

(eeee) Delete Section 18.4.10.3 without substitution.

(ffff) Amend Section 18.5.2.5 to read as follows: Lights used to signal occupants to see information or instructions shall be clear, nominal white or other color as approved by the code official.

(gggg) Amend Section 18.5.4.3.6 by deleting "or at the mounting height determined using the performance-based alternative of 18.5.4.5" without substitution.

(hhhh) Delete Section 18.5.4.5 without substitution.

(iiii) Delete Section 18.6 in its entirety without substitution.

(jjjj) Delete Section 18.8.2.1 without substitution.

(kkkk) Amend Section 18.9.3.1 by deleting "unless otherwise permitted by the authority having jurisdiction" without substitution.

(llll) Amend Section 18.11 to read as follows: Annunciators, information display systems, and controls for portions of the fire alarm system provided for use by the fire service shall be designed, arranged and located after consultation with the responding fire department.

(mmmm) Amend Section 21.2.11 by deleting item #3 without substitution.

(nnnn) Amend Section 21.3.3 by deleting "Unless otherwise required by the authority having jurisdiction".

(oooo) Amend Section 21.7.3 by deleting after the word "with", "applicable NFPA standards" and inserting "this standard".

(pppp) Amend Section 21.8.2 by deleting the exception without substitution.

(qqqq) Amend Section 21.9.2 by deleting "other laws, codes, and governing standards" and inserting "the Indiana Fire Code".

(rrrr) Amend Section 21.9.3 by deleting all of the text after "condition" without substitution.

(ssss) Amend Section 21.10.1 by deleting "other laws, codes, and governing standards" and inserting "local ordinance".

(tttt) Delete Section 23.2.3 in its entirety without substitution.

(uuuu) Delete Section 23.3.1 in its entirety without substitution.

(vvvv) Delete Section 23.3.2 in its entirety without substitution.

(www) Amend Section 23.4.3.1 by deleting all of the text after "performance" and inserting "this code".

(xxxx) Amend Section 23.4.3.2, in item #4, by deleting "mission" without substitution.

(yyyy) Amend Section 23.8.1.2.1 by deleting "if" and inserting "where".

(zzzz) Amend Section 23.8.1.3.1 by deleting "if" and inserting "where".

(aaaaa) Amend Section 23.8.1.3.1.1, item #1, by deleting "trained personnel" and inserting "qualified persons".

(bbbbbb) Delete Section 23.8.2.10 without substitution.

(cccc) Delete Section 23.8.3 in its entirety without substitution.

(dddd) Delete Section 23.8.4.3.1.1 in its entirety without substitution.

(eeee) Delete Section 23.8.4.6 without substitution.

(ffff) Amend Section 23.8.5.4.3 by deleting condition number one and renumbering two and three as one and two.

(ggggg) Amend Section 23.8.5.5.1 by deleting "other governing laws, codes, or standards" and inserting "the rules of the commission".

(hhhhh) Amend Section 23.8.5.6.1 by deleting "other governing laws, codes, or standards" and inserting "the rules of the commission".

(iiii) Amend Section 23.8.5.7.1 by deleting "other governing laws, codes, or standards" and inserting "the rules of the commission".

(jjjjj) Amend Section 23.8.5.7.2, after 10.17.1.2, to delete ", and with other applicable NFPA standards".

(kkkkk) Amend Section 23.8.5.10.3 by deleting "other governing laws, codes, or standards" and inserting "the rules of the commission".

(lllll) Amend Section 23.8.5.11.2, delete "other applicable NFPA standards" and substitute "applicable rules of the commission".

(mmmmm) Amend Section 23.10.2, in the second sentence, by deleting all of the text after the second use of the word "provided" and inserting "to the authority having jurisdiction, upon request".

(nnnnn) Amend Section 23.12.2 by deleting "or by other approved means".

(ooooo) Amend Section 23.13.3 by deleting "NFPA standards" and substituting "rules of the commission".

(ppppp) Amend Section 23.15.2 by deleting "in accordance with NFPA 601, Standard for Security Services in Fire Loss Prevention".

(qqqqq) Amend Section 23.18.4.2, the exception, by deleting "Until the expiration date for this exception of June 30, 2013, the" and inserting "The".

(rrrrr) Add Section 23.19 to read as follows:

23.19 McCulloh Systems. ©2002 NFPA\*

23.19.1 Transmitters.

(A) A coded alarm signal from a transmitter shall consist of not less than three complete rounds of the number or code transmitted.

(B) A coded fire alarm box shall produce not less than three signal impulses for each revolution of the coded signal wheel or another approved device.

(C) Circuit-adjusting means for emergency operating shall be permitted to be either automatic or be provided through manual operation upon receipt of a trouble signal.

(D) Equipment shall be provided at the supervising or subsidiary station on all circuits extending from the supervising or subsidiary station that is utilized for McCulloh systems for performing the following:

(1) Tests on current on each circuit under nontransmitting conditions.

(2) Tests on current on each side of the circuit with the receiving equipment conditioned for an open circuit.

23.19.2 Transmission Channels.

(A) Circuits between the protected premises and the supervising or subsidiary station that are essential to the actuation or operation of devices that initiate a signal indicative of fire shall be arranged so that the occurrence of a single break or single ground fault does not prevent transmission of an alarm.

(B) Circuits wholly within the supervising or subsidiary station shall not be required to be arranged in accordance with 23.19.2(A).

(C) The carrier system portion of circuits shall not be required to be arranged in accordance with 23.19.2(A).

(D) The occurrence of a single break or a single ground fault on any circuit shall not of itself cause a false signal that is able to be interpreted as an alarm of fire. If such a single fault prevents the functioning of any circuit, its occurrence shall be indicated automatically at the supervising station by a trouble signal that compels attention and that is distinguishable from signals other than those indicative of an abnormal condition of supervised parts of a fire suppression system(s).

(E) The circuits and devices shall be arranged to receive and record a signal identifiable as to location of origin, and provisions shall be made for identifying transmission to the public fire service communications center.

(F) Multipoint transmission channels between the protected premises and the supervising or subsidiary station and within the protected premises, consisting of one or more coded transmitters and an associated system unit(s), shall meet the requirements of either 23.19.2(G) or 23.19.2(H).

(G) If end-to-end metallic continuity is present, signals shall be received from other points under any one of the following transmission channel fault conditions at one point on the line:

(1) Open.

(2) Ground.

(3) Wire-to wire short.

(4) Open and ground.

(H) If end-to-end metallic continuity is not present, the nonmetallic portion of transmission channels shall meet all of the following requirements:

(1) Two nonmetallic channels or one channel plus a means for immediate transfer to a standby channel shall be provided for each transmission channel, with a maximum of eight transmission channels being associated with each standby channel, or shall be furnished over one channel, provided that service is limited to one plant.

(2) The two nonmetallic channels (or one channel with standby arrangement) for each transmission channel shall be provided by one of the following means, shown in descending order of preference:

- (a) Over separate facilities and separate routes.
- (b) Over separate facilities in the same route.
- (c) Over the same facilities in the same route.

(3) Failure of a nonmetallic channel or any portion thereof shall be indicated immediately and automatically in the supervising station.

(4) Signals shall be received from other points under any one of the following fault conditions at one point on the metallic portion of the transmission channel:

- (a) Open.
- (b) Ground.
- (c) Wire-to-wire.

#### 23.19.3 Loading Capacity of McCulloh Circuits.

23.19.3.1 The number of transmitters connected to any transmission channel shall be limited to eliminate interference.

23.19.3.2 The total number of code wheels or other approved devices connected to a single transmission channel shall not exceed 250.

23.19.3.3 Alarm signal transmission channels shall be reserved exclusively for fire alarm signal transmitting service unless the transmission channels meet the requirements of 23.19.3.6.

23.19.3.4 The number of waterflow switches permitted to be connected to actuate a single transmitter shall not exceed five switches.

23.19.3.5 The number of supervisory switches permitted to be connected to actuate a single transmitter shall not exceed 20 switches.

23.19.3.6 Combined alarm and supervisory transmission channels shall comply with the following:

- (1) If both sprinkler supervisory signals and fire or waterflow alarm signals are transmitted over the same transmission channel, provision shall be made to obtain either alarm signal precedence or continuous repetition of the alarm signal to prevent the loss of any alarm signal.
- (2) Other signal transmitters (e.g., burglar, industrial processes) on an alarm transmission channel shall not exceed five.

23.19.3.7 If signals from manual fire alarm boxes and waterflow alarm transmitters within a building are transmitted over the same transmission channel and are operating at the same time, there shall be no interference with the fire box signals. Provision of the shunt noninterfering method of operation shall be permitted for this performance.

23.19.3.8 One alarm transmission channel shall serve not more than 25 plants.

(A) A plant shall be permitted to consist of one or more buildings under the same ownership, and the circuit arrangement shall be such that an alarm signal cannot be received from more than one transmitter at a time within a plant.

(B) If such noninterference is not provided, each building shall be a plant.

23.19.3.9 One sprinkler supervisory transmission channel circuit shall serve not more than 25 plants. A plant shall be permitted to consist of one or more buildings under the same ownership.

23.19.3.10 Connections to a guard supervisory transmission channel or to a combination manual fire alarm and guard transmission channel shall be limited so that not more than 60 scheduled guard report signals are transmitted in any 1-hour period. Patrol scheduling shall be such as to eliminate interference between guard report signals.

\* All of this section is reprinted by permission of the National Fire Protection Association, 1 Batterymarch Park, Quincy, Massachusetts 02269-9101.

(sssss) Add Section 23.20 to read as follows:

23.20 Directly Connected Noncoded Systems. ©2002 NFPA \*

23.20.1 Circuits. Circuits for transmission of alarm signals between the fire alarm control unit or the transmitter in the protected premises and the supervising station shall be arranged so as to comply with the following provisions:

- (1) These circuits shall be arranged so that the occurrence of a single break or single ground fault does not prevent the transmission of an alarm signal. Circuits complying with this paragraph shall be automatically self-adjusting in

the event of either a single break or a single ground fault and shall be automatically self-restoring in the event that the break or fault is corrected.

(2) These circuits shall be arranged so that they are isolated from ground (except for reference ground detection) and so that a single ground fault does not prevent the transmission of an alarm signal. Circuits complying with this paragraph shall be provided with a ground reference circuit so as to detect and indicate automatically the existence of a single ground fault.

(3) A multiple ground-fault condition that would prevent alarm operation shall be indicated by an alarm or by a trouble signal.

(4) Circuits for transmission of supervisory signals shall be separate from alarm circuits.

(5) The occurrence of a single break or a single ground fault on any circuit shall not of itself cause a false signal that is able to be interpreted as an alarm of fire.

(6) The requirements of this section shall not apply to the following circuits:

(a) Circuits wholly within the supervising station.

(b) Circuits wholly within the protected premises extending from one or more automatic fire detectors or other noncoded initiating devices other than waterflow devices to a transmitter or control unit.

(c) Power supply leads wholly within the building or buildings protected.

#### 23.20.2 Loading Capacity of Circuits.

(A) The number of initiating devices connected to any signaling circuit and the number of plants that shall be permitted to be served by a signal circuit shall be determined by the authority having jurisdiction and shall not exceed the limitations specified in this subsection.

(B) A plant shall be permitted to consist of one or more buildings under the same ownership.

(C) A single circuit shall not serve more than one plant.

\* All of this section is reprinted by permission of the National Fire Protection Association, 1 Batterymarch Park, Quincy, Massachusetts 02269-9101.

(ttttt) Add Section 23.21 to read as follows:

#### 23.21 Private Microwave Radio Systems. ©2002 NFPA \*

23.21.1 If a private microwave radio is used as the transmission channel and communications channel, supervised transmitting and receiving equipment shall be provided at supervising, subsidiary, and repeater stations.

23.21.2 If more than five protected buildings or premises or 50 initiating devices or initiating device circuits are being serviced by a private radio carrier, the supervising, subsidiary, and repeater station radio facilities shall meet all of the following criteria:

(1) Dual supervised transmitters, arranged for automatic switching from one to the other in case of trouble, shall be installed.

(2) If the transmitters are located where someone is always on duty, switchboard facilities shall be permitted to be manually operated, provided the switching is able to be carried out within 30 seconds.

(3) If the transmitters are located where no one is continuously on duty, the circuit extending between the supervising station and the transmitters shall be a supervised circuit.

(4) Transmitters shall be operated on a time ratio of 2:1 within each 24 hours.

(5) Dual receivers shall be installed with a means for selecting a usable output from one of the two receivers.

(6) The failure of one receiver shall in no way interfere with the operation of the other receiver, and failure of either receiver shall be annunciated.

23.21.3 Means shall be provided at the supervising station for the supervision and control of supervising, subsidiary, and repeater station radio transmitting and receiving equipment. If the radio equipment is remote from the supervising station, this shall be accomplished via a supervised circuit.

(A) The following conditions shall be supervised at the supervising station:

(1) Transmitter in use (radiating).

(2) Failure of ac power supplying the radio equipment.

(3) Receiver malfunction.

(4) Indication of automatic switchover.

(B) It shall be possible to independently deactivate either transmitter from the supervising station.

\* All of this section is reprinted by permission of the National Fire Protection Association, 1 Batterymarch Park, Quincy, Massachusetts 02269-9101.

(uuuuu) Delete Chapter 24 Emergency Communications Systems (ECS) in its entirety without substitution.

(vvvvv) Delete Section 26.2.4 in its entirety without substitution.

(wwwww) Delete Section 26.3.3 in its entirety without substitution.

(xxxxx) Delete Section 26.3.4.1 without substitution.

(yyyyy) Delete Section 26.3.4.2 without substitution.

(zzzzz) Delete Section 26.3.4.8 without substitution.

(aaaaa) Amend Section 26.4.5.6.3, item #3, by deleting "required" and inserting "requested".

(bbbbb) Amend Section 26.4.5.6.4, item #3, by deleting "required" and inserting "requested".

(ccccc) Amend Section 26.3.5.1 by deleting "construction, fire protection, restricted access, emergency lighting, and power facilities requirements of the latest edition of ANSI/UL 827, Standard for Safety Central-Station Alarm Services" and substituting "the rules of the Commission".

(ddddd) Amend Section 26.3.5.2 by deleting "construction, fire protection, restricted access, emergency lighting, and power facilities requirements of the latest edition of ANSI/UL 827, Standard for Safety Central-Station Alarm Services" and substituting "the rules of the Commission".

(eeeeee) Amend Section 26.3.7.1.2, in item (2) to delete "Except where prohibited by the authority having jurisdiction," and in item (4) to read as follows: Provide immediate notice to the subscriber and the authority having jurisdiction.

(fffff) Amend Section 26.3.7.2.1, (3) to read as follows: Report all delinquencies to the subscriber and the authority having jurisdiction as quickly as practicable.

(ggggg) Amend Section 26.3.7.3, to insert a new item (3) to read as follows: Notify the fire department as quickly as practicable.

(hhhhh) Amend Section 26.3.7.3, to renumber item (3) to item (4) and renumber item (4) to item (5), and amend (5) to read as follows: When service has been restored, provide notice to the subscriber and the authority having jurisdiction as to the nature of the signal, the time of occurrence, and the restoration of service when equipment has been out of service for 8 hours or more.

(iiiiii) Amend Section 26.3.7.4, (3) to read as follows: Provide notice to the subscriber and the authority having jurisdiction as to the nature of the interruption, the time of occurrence, and the restoration of service, when the interruption is more than 8 hours.

(jjjjj) Amend Section 26.3.8.3 to read as follows: The central station shall furnish reports of signals received to the authority having jurisdiction immediately upon request.

(kkkkk) Amend Section 26.4.4.1.3 by deleting the exception without substitution.

(lllll) Amend Section 26.4.4.1.4 by inserting "approved" before "private-mode" and delete all text after "appliances".

(mmmmm) Amend Section 26.4.4.6.3 by inserting "and" before "operate", delete the "," after "signals", and delete "and take such action as shall be required by the authority having jurisdiction" without substitution.

(nnnnn) Amend Section 26.4.5.1.2 by deleting the word "or" after the word "owner" and substituting "and".

(ooooo) Amend Section 26.4.5.2.1 by deleting "designated by the authority having jurisdiction" without substitution.

(ppppp) Amend Section 26.4.5.2.2 by deleting "or" and substituting "and".

(qqqqq) Amend Section 26.4.5.3 by deleting "or other locations accepted by the authority having jurisdiction".

(rrrrr) Amend Section 26.4.5.4 by deleting "shall be accepted by the authority having jurisdiction and" without substitution.

(sssss) Amend Section 26.4.5.6.1 (1) to read as follows: Immediately notify the fire department and the emergency response team.

(ttttt) Amend Section 26.4.5.6.2, (1) by deleting "or other means accepted by the authority having jurisdiction" without substitution.

(uuuuu) Amend Section 26.4.6.3 to read as follows: The central station shall furnish reports of signals received to the authority having jurisdiction immediately upon request.

(vvvvv) Delete Section 26.5 in its entirety without substitution.

(wwwww) Delete Section 26.6.2.2 without substitution.

(xxxxx) Delete Section 26.6.3.1.1 without substitution.



(yyyyyy) Delete Section 26.6.3.1.4.1 without substitution.

(zzzzzz) Amend Section 26.6.3.2.1.4(A) to delete the text and insert to read as follows: (A) A system employing a DACT shall employ two (2) transmission channels. The DACT shall employ one of the following transmission means for the primary channel and a different transmission technology for the secondary channel from the following:

- (1) A telephone line (POTS).
- (2) A cellular telephone connection.
- (3) A one-way private radio alarm system.
- (4) A two-way RF multiplex system.
- (5) An internet alarm communicator.

(aaaaaaa) Amend Section 26.6.3.2.1.4(B) to delete Exception No. 2 without substitution.

(bbbbbbb) Delete Chapter 27 in its entirety, and insert to read as follows: For public emergency alarm reporting systems, see local ordinance.

(ccccccc) Delete Chapter 29 in its entirety and substitute the following: Single and Multiple-Station Alarms. Single and multiple station alarms shall be installed in occupancies in Class 1 structures as required in the Indiana Building Code, the Indiana Fire Code, and IC 22-11-18, and in accordance with Chapters 4 through 10 of this standard. *(Fire Prevention and Building Safety Commission; 675 IAC 28-1-28; filed Aug 23, 2006, 4:03 p.m.: 20060906-IR-675050104FRA; readopted filed Aug 8, 2012, 8:08 a.m.: 20120905-IR-675120260RFA; filed Feb 21, 2014, 4:15 p.m.: 20140319-IR-675120522FRA; errata filed Nov 7, 2014, 8:26 a.m.: 20141203-IR-675140454ACA; readopted filed Jul 3, 2018, 2:22 p.m.: 20180801-IR-675180204RFA)*

#### **675 IAC 28-1-29 (Reserved)**

Sec. 29. *(NOTE: Reserved to retain citation sequence continuity.)*

#### **675 IAC 28-1-30 NFPA 82; standard on incinerators, waste and linen handling systems and equipment**

Authority: IC 22-13-2-2; IC 22-13-2-13

Affected: IC 10-19-2; IC 22-12; IC 22-13; IC 22-14; IC 22-15; IC 36-7

Sec. 30. (a) That certain document, being titled NFPA 82-Standard on Incinerators, Waste and Linen Handling Systems and Equipment, 2004 Edition, published by National Fire Protection Association (NFPA), 1 Batterymarch Park, Quincy, Massachusetts 02269-9101 be and the same is adopted by reference, as if fully set out in this section except as revised hereafter.

(b) The following documents referenced in NFPA 82 are not adopted, are not enforceable, and are for information purposes only:

- (1) NFPA 31.
- (2) NFPA 54.
- (3) NFPA 90A.
- (4) NFPA 211.
- (5) NFPA 259.
- (6) NFPA 5000.
- (7) ASTM C 27.
- (8) ASTM C 199.
- (9) ASHRAE handbook HVAC Systems and Equipment, 2000.
- (c) The following documents referenced in NFPA 82 are adopted and are enforceable:
  - (1) NFPA 13, as adopted in 675 IAC 13-1-8.
  - (2) NFPA 58, as adopted in 675 IAC 22-2.2-14.
  - (3) NFPA 70, as adopted in 675 IAC 17.
- (d) Delete Section 1.4 in its entirety without substitution.
- (e) Amend Section 1.5 by deleting in its entirety and substituting "See 675 IAC 12-6-11."
- (f) Amend Chapter 3 as follows:
  - (1) Amend the following definitions:

APPROVED means acceptance by the authority having jurisdiction by one (1) of the following methods:

- (1) Investigation or tests conducted by nationally recognized authorities; or
- (2) Investigation or tests conducted by nationally recognized technical or scientific organizations; or
- (3) Nationally accepted principles.

The investigation, tests, or principles shall establish that the method, material, equipment, design, or type of construction is safe for its intended purpose.

**AUTHORITY HAVING JURISDICTION** means the Division of Fire and Building Safety or officer of a local unit of government empowered by law to administer and enforce the rules of the commission.

**LABELED** means equipment or materials to which has been attached a label, symbol, or other identifying mark of an organization engaged in product evaluation, that maintains periodic inspection of production of labeled equipment or materials, and by whose labeling the manufacturer indicates compliance with appropriate standards or performance in a specified manner.

**LISTED** means equipment or materials included in a list published by an organization engaged in product evaluation, that maintains periodic inspection of production of listed equipment or materials, and whose listing states either that the equipment or material meets appropriate standards or has been tested and found suitable for use in a specified manner.

- (2) Add the following definitions:

**BUILDING CODE** means the Indiana Building Code in effect in Indiana at the time of construction, remodeling, alteration, addition, or repair of the structure.

**ELECTRICAL CODE** means the Indiana Electrical Code in effect in Indiana at the time of construction, remodeling, alteration, addition, or repair of the structure.

**DIVISION OF FIRE AND BUILDING SAFETY** means the Division of Fire and Building Safety of the Indiana Department of Homeland Security created pursuant to IC 10-19-2.

**INDIANA FIRE CODE** means the rules adopted at 675 IAC 22 in effect in Indiana at the time of inspection by the inspection authority or, with respect to construction required to be filed under 675 IAC 12-6, 675 IAC 22 in effect at the time of construction, remodeling, alteration, addition, or repair of the structure.

**NFPA 70** means the Indiana Electrical Code (675 IAC 17).

(g) Chapter 2 and Annex A are not adopted as part of this code and are intended for use as a guide, and the standards referenced therein are not enforceable as part of this code. (*Fire Prevention and Building Safety Commission; 675 IAC 28-1-30; filed Aug 23, 2006, 4:03 p.m.: 20060906-IR-675050104FRA; readopted filed Aug 8, 2012, 8:08 a.m.: 20120905-IR-675120260RFA; readopted filed Jul 3, 2018, 2:22 p.m.: 20180801-IR-675180204RFA*)

#### **675 IAC 28-1-31 NFPA 86; standard for ovens and furnaces**

Authority: IC 22-13-2-2; IC 22-13-2-13

Affected: IC 10-19-2; IC 22-12; IC 22-13; IC 22-14; IC 22-15; IC 36-7

Sec. 31. (a) That certain standard, being titled as NFPA 86, Standard for Ovens and Furnaces, 2003 Edition, published by the National Fire Protection Association (NFPA), 1 Batterymarch Park, Quincy, Massachusetts 02269-9101, be and the same is hereby adopted by reference, as if fully set out in this section except as revised hereafter.

(b) The following documents referenced in NFPA 86 are not adopted, are not enforceable, and are for information purposes only:

- (1) NFPA 30.
- (2) NFPA 31.
- (3) NFPA 50A.
- (4) NFPA 54.
- (5) NFPA 79.
- (6) NFPA 91.
- (7) NFPA 750.
- (8) ANSI Z50.1.
- (9) ASME B31.1.

(10) ASME B31.3.

(11) ASTM D396.

(c) The following documents are adopted and are enforceable:

(1) NFPA 10, as adopted in section 2 of this rule.

(2) NFPA 11, as adopted in section 3 of this rule.

(3) NFPA 12, as adopted in section 4 of this rule.

(4) NFPA 13, as adopted in 675 IAC 13-1-8.

(5) NFPA 15, as adopted in section 8 of this rule.

(6) NFPA 17, as adopted in section 9 of this rule.

(7) NFPA 17A, as adopted in section 10 of this rule.

(8) NFPA 25, as adopted in section 12 of this rule.

(9) NFPA 50, as adopted in section 16 of this rule.

(10) NFPA 50B, as adopted in section 17 of this rule.

(11) NFPA 58, as adopted at 675 IAC 22-2.2-14.

(12) NFPA 70, as adopted in 675 IAC 17.

(13) ASME Boiler and Pressure Vessel Code, as adopted at 680 IAC 2-1-1 [675 IAC 30-1-1].

(d) Amend Section 1.1.4 to read as follows: This standard also applies to listed bakery ovens and requires all bakery ovens to be listed.

(e) Amend Section 1.3.2 by deleting all the text and substituting "This entire standard shall apply to new installations or as required otherwise under the rules of the commission."

(f) Delete Section 1.4 in its entirety without substitution.

(g) Amend Section 1.5 by deleting in its entirety and substituting "See 675 IAC 12-6-11."

(h) Amend Chapter 3 to read as follows:

(1) Amend the following definitions:

APPROVED means acceptance by the authority having jurisdiction by one (1) of the following methods:

(1) Investigation or tests conducted by nationally recognized authorities; or

(2) Investigation or tests conducted by nationally recognized technical or scientific organizations; or

(3) Nationally accepted principles.

The investigation, tests, or principles shall establish that the method, material, equipment, design, or type of construction is safe for its intended purpose.

AUTHORITY HAVING JURISDICTION means the Division of Fire and Building Safety or officer of a local unit of government empowered by law to administer and enforce the rules of the commission.

LABELED means equipment or materials to which has been attached a label, symbol, or other identifying mark of an organization engaged in product evaluation, that maintains periodic inspection of production of labeled equipment or materials, and by whose labeling the manufacturer indicates compliance with appropriate standards or performance in a specified manner.

LISTED means equipment or materials included in a list published by an organization engaged in product evaluation, that maintains periodic inspection of production of listed equipment or materials, and whose listing states either that the equipment or material meets appropriate standards or has been tested and found suitable for use in a specified manner.

(2) Add the following definitions:

BUILDING CODE means the building code in effect in Indiana at the time of construction, remodeling, alteration, addition, or repair of the structure.

DIVISION OF FIRE AND BUILDING SAFETY means the Division of Fire and Building Safety of the Indiana Department of Homeland Security created pursuant to IC 10-19-2.

FIRE CODE means the Indiana Fire Code.

INDIANA BUILDING CODE means the rules adopted at 675 IAC 13 in effect in Indiana at the time of construction, remodeling, alteration, addition, or repair of the structure.

INDIANA FIRE CODE means the rules adopted at 675 IAC 22 in effect in Indiana at the time of inspection by the

inspection authority or, with respect to construction required to be filed under 675 IAC 12-6, 675 IAC 22 in effect at the time of construction, remodeling, alteration, addition, or repair of the structure.

MECHANICAL CODE means the Indiana Mechanical Code in effect in Indiana at the time of construction, remodeling, alteration, addition, or repair of the structure.

NFPA 70, National Electrical Code means the Indiana Electrical Code (675 IAC 17).

PLUMBING CODE means the Indiana Plumbing Code in effect in Indiana at the time of construction, remodeling, alteration, addition, or repair of the structure.

QUALIFIED means having successfully completed a course of instruction related to the equipment being installed, serviced, or repaired.

TRAINED means one who has undergone the instruction necessary to design, install, and perform testing, maintenance, and inspection.

(i) Amend Section 4.1.1 to read as follows: Before new equipment is installed or existing equipment remodeled, complete plans, sequence of operations, and specifications shall be submitted in accordance with 675 IAC 12-6.

(j) Delete Sections 4.1.1.1 through 4.1.3.3 without substitution.

(k) Delete Section 4.2.1 without substitution.

(l) Amend Section 5.1.3.1 to read as follows: Furnaces shall be located to minimize exposure to power equipment, process equipment, and sprinkler risers. Unrelated stock and combustible materials shall be maintained at not less than two and one-half (2½) feet (0.76 m) from a furnace, a furnace heater, or ductwork.

(m) Amend Section 5.2.5.2 by deleting "in accordance with applicable federal, state, and local regulations. (See also Section 14.2)" without substitution.

(n) Amend Section 5.2.13 by deleting ", subject to approval by the authority having jurisdiction." without substitution.

(o) Amend Section 5.4.3.1 by deleting the text and substituting "Ventilating and exhaust systems shall be installed in accordance with the applicable rules of the commission, including, without limitations, the mechanical code."

(p) In the third line of Section 5.4.3.3, delete "noncombustible" and insert "listed".

(q) Amend Section 5.4.4.1 by deleting "in accordance with all applicable codes" without substitution.

(r) Delete Section 6.2.3.2 without substitution.

(s) Amend Section 6.2.4.3 to read as follows: Piping from the point of delivery to the equipment isolation valve shall comply with the Indiana Plumbing Code and the Indiana Mechanical Code.

(t) Amend Section 6.2.5.2 to read as follows: Piping shall be sized to provide flow rates and pressure to maintain a stable flame over the burner operating range.

(u) Amend Section 6.2.7.3.4 by deleting, in the exception, "require approval" and substituting "be approved".

(v) Amend Section 6.3.1 by deleting "as specified by ASTM D 396, Standard Specifications for Fuel Oils".

(w) Amend Section 6.3.4.1 to read as follows: Storage tanks, their installation, and their supply piping materials shall comply with the requirements of this standard, the Indiana Fire Code and the Indiana Mechanical Code.

(x) Amend Section 6.3.5.2 to read as follows: Equipment piping shall be listed for the use.

(y) Amend Section 6.5.1 to read as follows: Fuel-fired equipment shall be vented and shall be sized to provide flow rates and pressure to maintain a stable flame over the burner operating range in accordance with the Indiana Mechanical Code.

(z) Amend Section 6.7.2.1 to read as follows: Piping and fittings shall be listed for the use. Relief valves shall be provided where required by this standard or the Indiana Mechanical Code.

(aa) Amend Section 7.2.1 by deleting, in the exception, "require approval" and inserting "be approved".

(bb) Amend Section 7.14.6 by deleting, in the exception, "tested" and inserting "listed".

(cc) Amend Section 9.2.1.12 by deleting, in the exception, "subject to the approval of" and inserting "when approved by".

(dd) In Section 9.3.5.2, delete the last sentence.

(ee) Amend Section 9.3.5.5 to read: Locations for compressed gas tanks and cylinders shall be in accordance with the Indiana Building Code and the Indiana Fire Code.

(ff) Amend Section 9.3.6.2 by deleting "by the agency responsible for rating them".

(gg) Amend Section 9.3.8.3 by deleting "in accordance with ASME B31.3, Process Piping" and substituting "listed for their use".

(hh) Amend Section 11-1.4 to read as follows: Dip tanks and drain boards included in the oven enclosure shall be protected

in accordance with NFPA 34, Standard for Dipping and Coating Using Flammable or Combustible Liquids, and Chapter 15 of the Indiana Fire Code.

(ii) Amend Section 11.1.5.1.2 by deleting "in accordance with ASME B31.3, Process Piping" and substituting "listed for their use".

(jj) Amend Section 11.1.5.1.4 by deleting "applicable NFPA standards" and substituting "the Building Code and Fire Code".

(kk) Amend Section 11.1.5.1.5(4) by deleting "NFPA 30, Flammable and Combustible Liquids Code" and substituting "the Fire Code".

(ll) Amend Section 11.1.6.1.3 by deleting "in accordance with ASME B31.3, Process Piping" and substituting "listed for their use".

(mm) Amend Section 13.2.7 by deleting "designed in accordance with fire protection engineering principles. (See Annex F, Steam Extinguishing Systems.)" and substituting "in accordance with 675 IAC 12-6-11.".

(nn) In Section 13.4, delete "to the authority having jurisdiction for review and approval" and substitute "in accordance with 675 IAC 12".

(oo) Amend Section 14.1.2 by inserting "as approved by the authority having jurisdiction" after "procedures".

(pp) Chapter 2 and the annexes are not adopted as part of this code and are intended for use as a guide, and the standards referenced therein are not enforceable as part of this code. (*Fire Prevention and Building Safety Commission; 675 IAC 28-1-31; filed Aug 23, 2006, 4:03 p.m.: 20060906-IR-675050104FRA; readopted filed Aug 8, 2012, 8:08 a.m.: 20120905-IR-675120260RFA; readopted filed Jul 3, 2018, 2:22 p.m.: 20180801-IR-675180204RFA*)

#### **675 IAC 28-1-32 (Reserved)**

Sec. 32. (*NOTE: Reserved to retain citation sequence continuity.*)

#### **675 IAC 28-1-33 (Reserved)**

Sec. 33. (*NOTE: Reserved to retain citation sequence continuity.*)

#### **675 IAC 28-1-34 NFPA 385; standard for tank vehicles for flammable and combustible liquids**

Authority: IC 22-13-2-2; IC 22-13-2-13

Affected: IC 10-19-2; IC 22-12; IC 22-13; IC 22-14; IC 22-15; IC 36-7

Sec. 34. (a) That certain document, being titled NFPA 385-Standard for Tank Vehicles for Flammable and Combustible Liquids, 2000 Edition, published by the National Fire Protection Association (NFPA), 1 Batterymarch Park, Quincy, Massachusetts 02269-9101, be and the same is hereby adopted by reference except as revised hereafter.

(b) The following documents referenced in NFPA 385 are not adopted, are not enforceable, and are for information purposes only:

(1) NFPA 30.

(2) ANSI Z 535.1.

(3) ASTM B 209.

(4) ASTM D 5.

(5) ASTM D 323.

(6) Title 49, Code of Federal Regulations.

(c) The following documents referenced in NFPA 385 are adopted and are enforceable:

(1) NFPA 10, as adopted in section 2 of this rule.

(2) NFPA 58, as adopted in 675 IAC 22-2.2-14.

(3) NFPA 70, as adopted in 675 IAC 17.

(4) NFPA 407, as adopted [*sic., in*] section 36 of this rule.

(5) ASME Boiler and Pressure Vessel Code, as adopted at 680 IAC 2-1-1 [*675 IAC 30-1-1*].

(d) Amend Section 1-2 as follows:

(1) Amend the following definitions to read as follows:

APPROVED means acceptance by the authority having jurisdiction by one (1) of the following methods:

- (1) Investigation or tests conducted by nationally recognized authorities; or
- (2) Investigation or tests conducted by nationally recognized technical or scientific organizations; or
- (3) Nationally accepted principles.

The investigation, tests, or principles shall establish that the method, material, equipment, design, or type of construction is safe for its intended purpose.

COMBUSTIBLE LIQUID means a liquid having a closed cup flash point as specified by the Fire Code (675 IAC 22-2.3).

FLAMMABLE LIQUID means a liquid having a closed cup flash point as specified by the Fire Code (675 IAC 22-2.3).

LABELED means equipment or materials to which has been attached a label, symbol, or other identifying mark of an organization engaged in product evaluation, that maintains periodic inspection of production of labeled equipment or materials, and by whose labeling the manufacturer indicates compliance with appropriate standards or performance in a specified manner.

LIQUID means a material having a melting point as specified by section 2702 of the Fire Code (675 IAC 22-2.3).

LISTED means equipment or materials included in a list published by an organization engaged in product evaluation, that maintains periodic inspection of production of listed equipment or materials, and whose listing states either that the equipment or material meets appropriate standards or has been tested and found suitable for use in a specified manner.

- (2) Add the following definitions:

AUTHORITY HAVING JURISDICTION means the Division of Fire and Building Safety or officer of a local unit of government empowered by law to administer and enforce the rules of the commission.

DIVISION OF FIRE AND BUILDING SAFETY means the Division of Fire and Building Safety of the Indiana Department of Homeland Security created pursuant to IC 10-19-2.

INDIANA FIRE CODE means the rules adopted at 675 IAC 22 in effect in Indiana at the time of inspection by the inspection authority or, with respect to construction required to be filed under 675 IAC 12-6, 675 IAC 22 in effect at the time of construction, remodeling, alteration, addition, or repair of the structure.

NFPA 70 means the Indiana Electrical Code (675 IAC 17).

- (e) Delete Section 4-1.1 without substitution.

(f) Chapter 7 and the appendices are not adopted as part of this code and are intended for use as a guide, and the standards referenced therein are not enforceable as part of this code. (*Fire Prevention and Building Safety Commission; 675 IAC 28-1-34; filed Aug 23, 2006, 4:03 p.m.: 20060906-IR-675050104FRA; readopted filed Aug 8, 2012, 8:08 a.m.: 20120905-IR-675120260RFA; readopted filed Jul 3, 2018, 2:22 p.m.: 20180801-IR-675180204RFA*)

#### **675 IAC 28-1-35 (Reserved)**

Sec. 35. (NOTE: Reserved to retain citation sequence continuity.)

#### **675 IAC 28-1-36 NFPA 407; standard for aircraft fuel servicing**

Authority: IC 22-13-2-2; IC 22-13-2-13

Affected: IC 10-19-2; IC 22-12; IC 22-13; IC 22-14; IC 22-15; IC 36-7

Sec. 36. (a) That certain standard, being titled as NFPA 407, 2001 Edition, Standard for Aircraft Fuel Servicing, published by the National Fire Protection Association (NFPA), 1 Batterymarch Park, Quincy, Massachusetts 02269-9101, be and the same is hereby adopted by reference, as if fully set out in this section except as revised hereafter.

(b) The following documents referenced in NFPA 407 are not adopted, are not enforceable, and are for information purposes only:

- (1) NFPA 30.
- (2) NFPA 410.
- (3) NFPA 415.

- (4) NFPA 418.
- (5) ANSI B 31.3.
- (6) API Bulletin 1529.
- (7) ASTM D 380.
- (8) AWS A 5.10.
- (9) UL 913.
- (10) Title 49, Code of Federal Regulations.
- (c) The following documents referenced in NFPA 407 are adopted and are enforceable:
  - (1) NFPA 10, as adopted in section 2 of this rule.
  - (2) NFPA 70, as adopted in 675 IAC 17.
  - (3) NFPA 385, as adopted in section 34 of this rule.
- (d) When the provisions of the Indiana Fire Code apply, they shall take precedence over the provisions of this standard.
- (e) Amend Chapter 3 to read as follows:
  - (1) Amend the following definitions:
    - APPROVED means acceptance by the authority having jurisdiction by one (1) of the following methods:
      - (1) Investigation or tests conducted by nationally recognized authorities; or
      - (2) Investigation or tests conducted by nationally recognized technical or scientific organizations; or
      - (3) Nationally accepted principles.
    - The investigation, tests, or principles shall establish that the method, material, equipment, design, or type of construction is safe for its intended purpose.
    - AUTHORITY HAVING JURISDICTION means the Division of Fire and Building Safety or officer of a local unit of government empowered by law to administer and enforce the rules of the commission.
    - DIVISION OF FIRE AND BUILDING SAFETY means that division of the Indiana Department of Homeland Security.
    - LABELED means equipment or materials to which has been attached a label, symbol, or other identifying mark of an organization engaged in product evaluation, that maintains periodic inspection of production of labeled equipment or materials, and by whose labeling the manufacturer indicates compliance with appropriate standards or performance in a specified manner.
    - LISTED means equipment or materials included in a list published by an organization engaged in product evaluation, that maintains periodic inspection of production of listed equipment or materials, and whose listing states either that the equipment or material meets appropriate standards or has been tested and found suitable for use in a specified manner.
  - (2) Add the following definitions:
    - BUILDING CODE means the building code in effect in Indiana at the time of construction, remodeling, alteration, addition, or repair of the structure.
    - DIVISION OF FIRE AND BUILDING SAFETY means the Division of Fire and Building Safety of the Indiana Department of Homeland Security created pursuant to IC 10-19-2.
    - FIRE CODE means the Indiana Fire Code.
    - INDIANA FIRE CODE means the rules adopted at 675 IAC 22 in effect in Indiana at the time of inspection by the inspection authority or, with respect to construction required to be filed under 675 IAC 12-6, 675 IAC 22 in effect at the time of construction, remodeling, alteration, addition, or repair of the structure.
    - NFPA 30 means the Indiana Fire Code.
    - NFPA 70 means the Indiana Electrical Code (675 IAC 17).
    - QUALIFIED means having successfully completed a course of instruction related to the equipment being installed, serviced, or repaired.
- (f) In the second line of Section 4.3.1.1, delete "safe" and insert "listed".
- (g) In Section 4.3.14.4, delete "adequately".
- (h) Amend Section 4.4.1 to read as follows: Plans and specifications shall be filed as required by 675 IAC 12.
- (i) In Section 4.4.2, delete "and approve" and replace "shall" with "may".

(j) In Section 4.4.4.2, delete the first sentence and substitute the following: Clearances required from runways, taxiways, and other aircraft movement and servicing areas to any aboveground fuel storage or fuel transfer equipment shall be in accordance with national and international standards establishing clearances from obstructions.

(k) Delete Section 4.4.6.4 and substitute to read as follows: Piping, valves, and fittings shall be listed for their use.

(l) Amend Section 4.4.11.1 to read as follows: Ramps used for aircraft fueling shall slope away from buildings and loading walkways at a grade of not less than one (1) percent for the first fifty (50) feet (15,240 mm). The balance of such ramps shall slope to a drainage system at a grade not less than one-half percent (.5%). When drainage inlets are provided, they shall be at least fifty (50) feet (15,240 mm) from buildings and loading walkways.

(m) In Section 4.4.13, add the following sentence to the end: All test results shall be submitted to the authority having jurisdiction before the system is placed in service.

(n) Amend Section 4.5.1.1 to read as follows: Fueling on rooftop heliports shall not be permitted.

(o) Amend Section 4.5.2.1 to read as follows: Basic Construction and Protection Requirements. In addition to the special requirements of this chapter, heliports shall comply with the Indiana Fire Code (675 IAC 22) and the Indiana Building Code (675 IAC 13).

(p) In Section 4.5.4, amend the first sentence to read as follows: Piping above grade shall be steel and shall be cased or shall be installed in a duct or chase.

(q) Amend Section 4.5.10 to read as follows: Fixed fire protection systems shall be in accordance with the Indiana Fire Code (675 IAC 22).

(r) Amend Section 4.6.1 to read as follows: Self-service fueling shall be permitted, subject to the requirements of this standard and the Indiana Fire Code (675 IAC 22).

(s) Amend Section 4.6.3.4 to read as follows: Dispensing devices shall be protected in accordance with section 2206.7.3 of the Indiana Fire Code (675 IAC 22).

(t) Amend Section 5.2.6 to read as follows: Unauthorized discharges of hazardous materials shall be reported and documented in accordance with the Indiana Fire Code (675 IAC 22) Chapter 27.

(u) Amend Section 5.3.5 to read as follows: Records shall be kept of tests required by this standard. These records shall be made available to the inspection authority upon request.

(v) Delete Section 5.8.4 without substitution.

(w) In Section 5.13.6, delete "they might be expected to use".

(x) Chapter 2 and the annexes are not adopted as part of this standard and are intended for use as a guide, and the standards referenced therein are not enforceable as part of this code. (*Fire Prevention and Building Safety Commission; 675 IAC 28-1-36; filed Aug 23, 2006, 4:03 p.m.: 20060906-IR-675050104FRA; readopted filed Aug 8, 2012, 8:08 a.m.: 20120905-IR-675120260RFA; readopted filed Jul 3, 2018, 2:22 p.m.: 20180801-IR-675180204RFA*)

#### **675 IAC 28-1-37 (Reserved)**

Sec. 37. (*NOTE: Reserved to retain citation sequence continuity.*)

#### **675 IAC 28-1-38 NFPA 704; standard system for the identification of the fire hazards of materials for emergency response**

Authority: IC 22-13-2-2; IC 22-13-2-13

Affected: IC 10-19-2; IC 22-12; IC 22-13; IC 22-14; IC 22-15; IC 36-7

Sec. 38. (a) That certain standard, being titled as NFPA 704, Standard System for the Identification of the Fire Hazards of Materials for Emergency Response, 2001 Edition, published by the National Fire Protection Association, 1 Batterymarch Park, Quincy, Massachusetts 02269-9101, be and the same is hereby adopted by reference, as if fully set out in this section except as revised herein.

(b) The following documents referenced in NFPA 704 are not adopted, are not enforceable, and are for information purposes only:

(1) NFPA 495.

(2) ASTM D 86.

(3) ASTM D 92.



- (4) Process Safety Progress, Vol. 18, No. 4, 1999.
- (5) UN Manual of Tests Criteria.
- (6) UN Recommendations on the Transport of Dangerous Goods, Model Regulations.
- (7) Title 49.
- (c) NFPA 495 as adopted at 675 IAC 26-3-1 is enforceable as referenced in NFPA 704.
- (d) Delete Section 1-4 in its entirety without substitution.
- (e) Amend Section 1.5 by deleting in its entirety and substituting "See 675 IAC 12-6-11."
- (f) Amend Chapter 3 to read as follows:
- (1) Amend the following definitions:

APPROVED means acceptance by the authority having jurisdiction by one (1) of the following methods:

- (1) Investigation or tests conducted by nationally recognized authorities; or
- (2) Investigation or tests conducted by nationally recognized technical or scientific organizations; or
- (3) Nationally accepted principles.

The investigation, tests, or principles shall establish that the method, material, equipment, design, or type of construction is safe for its intended purpose.

AUTHORITY HAVING JURISDICTION means the Division of Fire and Building Safety or officer of a local unit of government empowered by law to administer and enforce the rules of the commission.

- (2) Add the following definitions:

DIVISION OF FIRE AND BUILDING SAFETY means the Division of Fire and Building Safety of the Indiana Department of Homeland Security created pursuant to IC 10-19-2.

FIRE CODE means the Indiana Fire Code.

INDIANA FIRE CODE means the rules adopted at 675 IAC 22 in effect in Indiana at the time of inspection by the inspection authority or, with respect to construction required to be filed under 675 IAC 12-6, 675 IAC 22 in effect at the time of construction, remodeling, alteration, addition, or repair of the structure.

(g) Chapter 2 and the annexes are not adopted as part of this code and are intended for use as a guide, and the standards referenced therein are not enforceable as part of this code. (*Fire Prevention and Building Safety Commission; 675 IAC 28-1-38; filed Aug 23, 2006, 4:03 p.m.: 20060906-IR-675050104FRA; readopted filed Aug 8, 2012, 8:08 a.m.: 20120905-IR-675120260RFA; readopted filed Jul 3, 2018, 2:22 p.m.: 20180801-IR-675180204RFA*)

#### **675 IAC 28-1-39 NFPA 1123; code for fireworks display**

Authority: IC 22-13-2-2; IC 22-13-2-13

Affected: IC 10-19-2; IC 22-11-14-2; IC 22-12; IC 22-13; IC 22-14; IC 22-15; IC 36-7

Sec. 39. (a) That certain standard, being titled as NFPA 1123, Code for Fireworks Display, 2006 Edition, published by the National Fire Protection Association, 1 Batterymarch Park, Quincy, Massachusetts 02269, be and the same is hereby adopted by reference, as if fully set out in this section except as revised hereafter.

(b) The following documents referenced in NFPA 1123 are not adopted, are not enforceable, and are for information purposes only:

- (1) NFPA 160.
- (2) NFPA 306.
- (3) NFPA 1122.
- (4) NFPA 1124.
- (5) NFPA 1127.
- (6) Title 16, Code of Federal Regulations.
- (7) Title 27, Code of Federal Regulations.
- (8) Title 49, Code of Federal Regulations.
- (9) API Standard 87-1.
- (c) NFPA 1126, as adopted in 675 IAC 22-2.2-26 and referenced in NFPA 1123, is adopted and is enforceable.
- (d) Delete subsection 1.1.2, numbers (1), (2), (6), (7), (8), and (9), in their entirety without substitution.

- (e) Delete Section 1.2, numbers (2) and (3), without substitution.
- (f) Delete Section 1.3, 1.3.1 and 1.3.2 *it [sic]* in its entirety and substitute "See 675 IAC 12-6-11."
- (g) Amend Chapter 3 to read as follows:
  - (1) 3.2.1 **APPROVED** means acceptance by the authority having jurisdiction by one (1) of the following methods:
    - (1) Investigation or tests conducted by nationally recognized authorities; or
    - (2) Investigation or tests conducted by nationally recognized technical or scientific organizations; or
    - (3) Nationally accepted principles.

The investigation, tests, or principles shall establish that the method, material, equipment, design, or type of construction is safe for its intended purpose.

- (2) 3.2.2 **AUTHORITY HAVING JURISDICTION** means the Division of Fire and Building Safety or officer of a local unit of government empowered by law to administer and enforce the rules of the commission.

3.2.4 **LABELED** means equipment or materials to which has been attached a label, symbol, or other identifying mark of an organization engaged in product evaluation, that maintains periodic inspection of production of labeled equipment or materials, and by whose labeling the manufacturer indicates compliance with appropriate standards or performance in a specified manner.

- (3) Add the following definitions:

**DIVISION OF FIRE AND BUILDING SAFETY** means the Division of Fire and Building Safety of the Indiana Department of Homeland Security created pursuant to IC 10-19-2.

**FIRE WATCH** means a temporary measure intended to ensure continuous and systematic surveillance of a building or portion thereof by one (1) or more qualified individuals for the purposes of identifying and controlling fire hazards, detecting early signs of unwanted fire, raising an alarm of fire, and notifying the fire department.

**LISTED** means equipment or materials included in a list published by an organization engaged in product evaluation, that maintains periodic inspection of production of listed equipment or materials, and whose listing states either that the equipment or material meets appropriate standards or has been tested and found suitable for use in a specified manner.

- (h) Delete subsection 3.3.14 in its entirety and insert the following definitions:

Section 3.3.14 "Fireworks" means fireworks as defined at IC 22-11-14-1.

Section 3.3.14.1 "Consumer fireworks" means consumer fireworks as defined at IC 22-11-14-1.

Section 3.3.14.2 "Display fireworks" means display fireworks as defined at IC 22-11-14-1.

- (i) Amend Section 4.1.3.1 #3 and Figure 4.1.3.1 by deleting the last sentence without substitution.

- (j) Amend Section 4.2 to delete the title and substitute, "STORAGE, HANDLING AND ASSEMBLY OF FIREWORKS".

(k) Amend Section 4.2.1 to delete the text and substitute the following: Any storage, handling, or assembly of fireworks materials and devices intended for outdoor display prior to their delivery to the display site shall be in accordance with the applicable rules of the Commission, including, without limitation, Chapter 33 of the Indiana Fire Code and Chapter 3 of the Indiana Building Code.

- (l) Delete Section 5.1.1 in its entirety without substitution.

- (m) Delete Section 5.1.1.1 in its entirety without substitution.

- (n) Delete Section 5.1.1.2 in its entirety without substitution.

(o) Amend Section 5.1.4.6 by deleting the text in its entirety and substitute the following: Dwellings, buildings, and structures shall be permitted to be located within the display site with the approval of the owner of the dwelling, building, or structure, if the dwelling, building, or structure is unoccupied during the display, or if the structure provides protection through substantial noncombustible or fire-resistant construction for the occupants.

- (p) Delete Section 6.3.1.2.2 in its entirety without substitution.

- (q) Delete subsection 6.7.2 in its entirety without substitution.

(r) Amend Section 8.1.2 by deleting the text and substituting the following: Monitors whose sole duty shall be the enforcement of crowd control shall be located around the display area.

- (s) Delete Section 8.1.2.5 in its entirety without substitution.

(t) Amend Section 8.1.4 by deleting the text and substituting the following: Wherever any hazardous condition exists, the fireworks display shall be postponed until the condition is corrected.

(u) Amend Section 8.1.4.1 by deleting the text and substitute the following: Whenever the lack of crowd control poses a hazard, the fireworks display shall be discontinued immediately until such time as the situation is corrected.

(v) Amend Section 8.1.4.2 by deleting the text and substituting the following: If high winds, precipitation, or other adverse weather conditions prevail such that a significant hazard exists, the fireworks display shall be postponed until weather conditions improve to a reasonable level.

(w) Delete subsection 8.3 in its entirety without substitution and leaving the following subsections: 8.3.1, 8.3.2, or 8.3.3.

(x) Amend Chapter 10 by deleting the text and substituting the following:

(1) 10.1 Operator Qualifications.

(2) 10.1.1 The operator shall be approved in accordance with IC 22-11-14-2.

(3) 10.1.2 An operator shall provide evidence of actual experience as an operator or assistant as part of demonstrating competency to the authority having jurisdiction.

(4) 10.2 All assistants shall be at least eighteen (18) years of age.

(5) 10.3 The fireworks display company, municipality, fair association, amusement park, other organizations, or group of individuals shall obtain a permit in accordance with IC 22-11-14-2.

(y) Chapter 2 and the annexes are not adopted as part of this code and are intended for use as a guide, and the standards referenced therein are not enforceable as part of this code. (*Fire Prevention and Building Safety Commission; 675 IAC 28-1-39; filed Aug 23, 2006, 4:03 p.m.: 20060906-IR-675050104FRA; filed Mar 18, 2008, 2:30 p.m.: 20080423-IR-675070478FRA, eff 90 days after filing with the Publisher; readopted filed Aug 8, 2012, 8:08 a.m.: 20120905-IR-675120260RFA; errata filed Jul 3, 2013, 8:14 a.m.: 20130710-IR-675130300ACA; readopted filed Jul 3, 2018, 2:22 p.m.: 20180801-IR-675180204RFA*)

#### **675 IAC 28-1-40 NFPA 2001; standard on clean agent fire extinguishing systems**

Authority: IC 22-13-2-2; IC 22-13-2-13

Affected: IC 10-19-2; IC 22-12; IC 22-13; IC 22-14; IC 22-15; IC 36-7

Sec. 40. (a) Standard on Clean Agent Fire Extinguishing Systems, NFPA 2001, 2004 Edition, published by National Fire Protection Association (NFPA), 1 Batterymarch Park, Quincy, Massachusetts 02269-9101 is adopted by reference except as revised hereafter.

(b) The following documents referenced in NFPA 2001 are not adopted, are not enforceable, and are for information purposes only:

(1) ANSI B1.20.1.

(2) ANSI C2.

(3) ASME B31.1.

(4) ASTM A 120.

(5) ASTM SI 10.

(6) CGA C-6.

(7) CAN/CSA-Z234.1.

(8) IMO MSC/Circular 848.

(9) ISO/IEC Guide 7.

(10) UL 2127.

(11) UL 2166.

(12) ULC S524-M91.

(13) ULC S529-M87.

(14) OSHA, Title 29 CFR.

(15) Title 46 CFR, Part 72.

(16) Title 46 CFR, Subchapter J.

(17) Title 49 CFR, Parts 170-190.

(c) The following documents referenced in NFPA 2001 are adopted and are enforceable:

(1) NFPA 70, as adopted in 675 IAC 17.

(2) NFPA 72, as adopted in section 28 of this rule.

(3) ASME Boiler and Pressure Vessel Code, as adopted at 680 IAC 2-1-1 [675 IAC 30-1-1].

(d) Delete the last sentence of subsection 1.2.1 and substitute to read as follows: For alternate materials, methods, and design, see the General Administrative Rules (675 IAC 12-6-11).

(e) Amend the following definitions in Chapter 3 to read as follows:

APPROVED means acceptance by the authority having jurisdiction by one (1) of the following methods:

- (1) Investigation or tests conducted by nationally recognized authorities; or
- (2) Investigation or tests conducted by nationally recognized technical or scientific organizations; or
- (3) Nationally accepted principles.

The investigation, tests, or principles shall establish that the method, material, equipment, design, or type of construction is safe for its intended purpose.

AUTHORITY HAVING JURISDICTION means the Division of Fire and Building Safety or officer of a local unit of government empowered by law to administer and enforce the rules of the commission.

LISTED. Equipment or materials included in a list published by an organization engaged in product evaluation that maintains periodic inspection of production of listed equipment or materials and whose listing states either that the equipment or material meets appropriate standards or has been tested and found suitable for use in a specified manner.

(f) Add the following definitions to Chapter 3 as follows:

DIVISION OF FIRE AND BUILDING SAFETY means the Division of Fire and Building Safety of the Indiana Department of Homeland Security created pursuant to IC 10-19-2.

NFPA 70, National Electrical Code means the Indiana Electrical Code (675 IAC 17).

TESTING LABORATORY means an independent nationally recognized testing laboratory or other organization listed in the General Administrative Rules (675 IAC 12-6-11).

TRAINED means one who has undergone the instructions necessary to design, install, and perform the maintenance and recharge service.

(g) Amend subsection 1.4.2.2 to read as follows: Clean agents shall not be used on fires involving the following materials:

- (1) Certain chemicals or mixtures of chemicals, such as cellulose, nitrate, and gunpowder, that are capable of rapid oxidation in the absence of air.
- (2) Reactive metals, such as lithium, sodium, potassium, magnesium, titanium, zirconium, uranium, and plutonium.
- (3) Metal hydrides.
- (4) Chemicals capable of undergoing autothermal decomposition, such as certain organic peroxides and hydrazine.

(h) Delete subsection 4.1.1.2 in its entirety without substitution.

(i) Amend subsection 4.1.3.3 by deleting "suitable" and inserting "approved".

(j) Amend subsection 4.1.4.3 to read as follows: The design pressure shall be suitable for the maximum pressure developed at one hundred thirty degrees Fahrenheit (130°F) (fifty-five degrees Celsius (55°C)) or at the maximum controlled temperature limit.

(k) Delete subsection 4.1.4.4 in its entirety without substitution.

(l) Amend subsection 4.2.1.3 to read as follows: Pipe identification shall not be painted over or removed.

(m) Amend subsection 4.2.3.2 to read as follows: Cast-iron fittings and Class 150 lb fittings shall not be used.

(n) Amend subsection 4.2.3.3 by deleting the first sentence.

(o) Delete the text of subsection 4.2.3.5 and substitute "Welding shall be performed in accordance with the commission rules on boilers and pressure vessels."

(p) Amend subsection 4.2.5.2 to read as follows: Approved corrosion-resistant materials or coatings shall be required in corrosive atmospheres.

(q) Delete subsection 4.3.1.2.1 in its entirety and substitute the following: Manual-only activation shall be permitted where approved by the AHJ.

(r) Delete subsections 5.1.1, 5.1.2, and 5.1.3 and substitute the following: Plans and specifications shall be filed as required by the General Administrative Rules (675 IAC 12).

(s) Amend subsection 5.2.1 to read as follows: System flow-calculations shall be performed using a calculation method listed. The system design shall be within the manufacturer's listed limitations.

(t) Delete subsection 5.2.1.1 in its entirety without substitution.

(u) Delete subsection 5.2.4 in its entirety without substitution.

(v) Delete subsection 5.3.3 in its entirety without substitution.

(w) Amend subsection 5.7.1.2.1 to read as follows: The agent discharge shall be completed as quickly as possible to suppress the fire and limit the formation of decomposition and combustion products. In no case shall the discharge time exceed ten (10) seconds.

Exception: For inert gases that do not form decomposition products, the discharge time may be extended to achieve the design concentration within one (1) minute.

(x) Amend subsection 5.7.1.2.2 by deleting "or as otherwise required by the authority having jurisdiction" without substitution.

(y) Amend subsection 6.1.1 by deleting "competent" and substituting "trained".

(z) Delete the last sentence of subsection 6.1.5 without substitution.

(aa) Amend the last sentence of subsection 6.2.2 by deleting "competent" and substitute [*sic., substituting*] "trained".

(bb) Amend subsection 6.7.1 to read as follows: Only listed equipment and devices shall be used in the systems. The completed system shall be reviewed and tested to determine that the system has been properly installed and will function as specified.

(cc) Delete subsections 6.7.2.1, 6.7.2.2.1, and 6.7.2.2.2 in their entirety without substitution.

(dd) In subsection 6.7.2.3, delete "or other means" from the last sentence without substitution.

(ee) Delete subsection 6.7.2.2.8 in its entirety without substitution.

(ff) Delete subsection 6.7.2.4.9 in its entirety and substitute to read as follows: The detectors shall be installed in accordance with the manufacturers' installation instructions.

(gg) Amend subsection 7.5.1.1 by deleting "requirements of the authority having jurisdiction" and inserting "rules of the commission".

(hh) Amend subsection 7.9.2.3 by deleting "or as otherwise required by the authority having jurisdiction".

(ii) Chapter 2 and the annexes are not adopted as part of this code and are intended for use as a guide, and the standards referenced therein are not enforceable as part of this code. (*Fire Prevention and Building Safety Commission; 675 IAC 28-1-40; filed Aug 23, 2006, 4:03 p.m.: 20060906-IR-675050104FRA; readopted filed Aug 8, 2012, 8:08 a.m.: 20120905-IR-675120260RFA; readopted filed Jul 3, 2018, 2:22 p.m.: 20180801-IR-675180204RFA*)

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