

# 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*)

### 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)*

### **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*)

#### **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).
- (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*)

**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".
  - (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*)

**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".
    - (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*)

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

#### **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*)

**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.

(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*)

**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*)

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

#### **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 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, 2002 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 25 are not adopted, are not enforceable, and are for information purposes only:

(1) NFPA 13D.

(2) NFPA 16.

(3) NFPA 22.

(4) NFPA 110.

(5) NFPA 307.

(6) NFPA 409.

(7) NFPA 1962.

(8) ASTM D 3359.

(c) The following documents referenced in NFPA 25 are adopted and are enforceable:

(1) NFPA 11 adopted in section 3 of this rule.

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

(3) NFPA 15 adopted in section 8 of this rule.

(4) NFPA 20 adopted in 675 IAC 13-1-10.

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

(d) Amend Section 1.1 in the fifth and sixth sentences by deleting "generally accepted practices" and substituting "the applicable rules of the commission".

(e) Amend Section 1.2 by deleting the last sentence without substitution.

(f) Amend Section 1.3 by deleting the last sentence and substituting "See 675 IAC 12-6-11.".

(g) 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.

**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.

**QUALIFIED:** See Qualified Individual.

(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.

**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.

**OWNER** means a corporation, limited liability company, firm, partnership, association, organization, and any other group acting as a unit, or a person who has legal title to any structure or premises with or without accompanying actual possession thereof, and shall include the duly authorized agent or attorney, a purchaser, devisee, fiduciary, and any person having a vested or contingent interest in the premises in question.

**QUALIFIED INDIVIDUAL** means 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.

(h) Delete subsection 4.1.2.3 and substitute the following: These tasks shall be performed by qualified individuals.

(i) Delete subsection 4.1.2.4 without substitution.

(j) Amend subsection 4.1.3 to read as follows: The owner or occupant shall notify the servicing fire department and the alarm receiving facility before testing/shutting down a system or its supply. The notification shall include the purpose for the shutdown, the system or component involved, and the estimated time of shutdown. The servicing fire department shall be notified when the system is returned to service.

(k) Delete subsection 4.1.3.1 without substitution.

(l) Delete subsection 4.1.3.2 without substitution.

(m) Delete subsection 4.1.3.3 without substitution.

(n) Amend Section 4.1.4.1 by deleting "maintenance personnel or a qualified contractor" and substituting "individuals".

(o) Delete subsection 4.1.4.2 without substitution.

(p) Amend Section 4.1.5 by deleting "evaluation of the fire protection system for their capability to protect the new occupancy, use, or materials" and substituting "compliance with the applicable rules of the commission".

(q) Delete subsection 4.1.5.2 without substitution.

(r) Amend Section 4.1.6 by deleting "promptly take steps, such as contacting a qualified contractor, consultant, or engineer, to evaluate the adequacy of the installed system in order to protect the building or hazard in question" and substituting "comply with the applicable rules of the commission".

(s) Delete subsection 4.1.6.1 without substitution.

(t) Amend Section 4.2 to read as follows: Where an impairment to a water-based fire protection system occurs, the procedures outlined in Chapter 14 of this standard shall be followed, including the attachment of a tag to the impaired system. The servicing fire department shall be notified when a system is impaired and when the system is returned to service.

(u) Amend 4.5.1 to insert "qualified individuals" before "to verify".

(v) Delete 4.9 in its entirety without substitution.



- (w) Amend Section 5.2.1.2 by deleting "Unacceptable obstructions" and substituting "Obstructions".
- (x) In subsection 5.2.5, delete "adequate" in the last sentence.
- (y) Amend Section 6.3 by deleting "person" and substituting "individual" in the first sentence.
- (z) Delete Section 6.3.1.2 without substitution.
- (aa) Delete subsection 7.1.3 without substitution.
- (bb) In subsection 7.3.1.2, amend to read as follows: Any flow test results that indicate deterioration of available water flow and pressure shall be investigated to ensure that the available water flow and pressure provide the water flow and pressure the fire protection system was designed to provide.
- (cc) Delete subsection 7.3.4 without substitution.
- (dd) In subsection 8.3.4.1, delete all text after "tested".
- (ee) In subsection 8.3.4.2, delete all text after "tested".
- (ff) Amend Section 10.3 to read as follows: Water spray fixed systems shall be maintained to ensure they perform as designed. Frequency of system tests shall be in accordance with Table 10.1. They shall be serviced in accordance with this standard and with the manufacturer's instructions.
- (gg) Amend subsection 10.3.2.3 to read as follows: The owner's representative and the servicing fire department or fire brigade shall be notified that testing is to be conducted so they have the opportunity to observe the inspection and testing of the water spray fixed system.
- (hh) Amend subsection 10.3.4.4.2 to read as follows: A second pressure reading shall be recorded at the deluge valve.
- (ii) Amend subsection 10.3.4.4.3 to read as follows: Readings shall be compared to the hydraulic design pressures to ensure the original system design requirements are met.
- (jj) In subsection 10.3.5, delete everything after "tested simultaneously".
- (kk) Amend subsection 11.1.2.1 to read as follows: This section shall apply to foam-water systems.
- (ll) In subsection 12.3.1.2, delete "applicable NFPA standards" and substitute "rules of the commission".
- (mm) In subsection 12.3.1.3, delete "applicable NFPA standard" and substitute "rules of the commission".
- (nn) In subsection 12.3.2.1.1, delete "applicable NFPA standards" and substitute "rules of the commission".
- (oo) Amend subsection 12.6.1.1.1 to read as follows: Valves secured with locks or electrically supervised in accordance with the rules of the commission shall be inspected monthly.
- (pp) In subsection 12.6.1.2.1, amend the exception to read as follows: Valves secured with locks or electrically supervised in accordance with the rules of the commission shall be inspected monthly.
- (qq) Amend Section 12.6.2.1 by deleting ", as required by the authority having jurisdiction," without substitution.
- (rr) Amend subsection 12.6.3.1 by deleting "trained" and substituting "qualified".
- (ss) Amend Section 12.6.3.2 by deleting "the authority having jurisdiction and" without substitution.
- (tt) Amend Section 13.2.1.1 by deleting "alternative" and substituting "approved".
- (uu) Amend Section 13.2.3.3 by deleting "alternative" and substituting "approved".
- (vv) Amend Section 13.3.1 by deleting "alternative" and substituting "approved".
- (ww) Delete 14.2.3 without substitution.
- (xx) Delete 14.3.3 without substitution.
- (yy) Amend Section 14.5.2(3) by deleting the first sentence and "(d) \*Establishment and implementation of an approved program to eliminate potential ignition sources and limit the amount of fuel available to the fire.".
- (zz) 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 28-1-12; filed Aug 23, 2006, 4:03 p.m.: 20060906-IR-675050104FRA; readopted filed Aug 8, 2012, 8:08 a.m.: 20120905-IR-675120260RFA*)

**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.
- (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** means 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*)



**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.
- (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*)

**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.
- (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*)

**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.

(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*)

**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.
- (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*)

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

#### **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.

(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*)

**675 IAC 28-1-22 NFPA 58; liquefied petroleum gas code**

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

Affected: IC 10-19-2; IC 22-11-15; IC 22-12; IC 22-13; IC 22-14; IC 22-15; IC 36-7; IC 36-8-17.5

Sec. 22. (a) That certain document, being titled NFPA 58-Liquefied Petroleum Gas Code, 2004 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 referenced documents in NFPA 58 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 160.
- (6) NFPA 220.
- (7) NFPA 251.
- (8) NFPA 1192.
- (9) API-ASME Code for Unfired Pressure Vessels for Petroleum Liquids and Gases.
- (10) API 620.
- (11) ASCE 7.
- (12) ASME Boiler and Pressure Vessels Code.
- (13) ASME B31.3.
- (14) ASME B36.10M.
- (15) ASTM A47.
- (16) ASTM A48.
- (17) ASTM A53.
- (18) ASTM A106.
- (19) ASTM A395.
- (20) ASTM A513.
- (21) ASTM A536.
- (22) ASTM A539.
- (23) ASTM B42.
- (24) ASTM B43.
- (25) ASTM B86.
- (26) ASTM B88.
- (27) ASTM B135.
- (28) ASTM B280.
- (29) ASTM D2513.
- (30) ASTM D2683.
- (31) ASTM D3261.
- (32) ASTM F1055.
- (33) ASTM F1733.
- (34) CGA C-6.
- (35) ANSI/CGA C-7.



- (36) CGA V-1.
- (37) ANSI/AGA LC-1.
- (38) ANSI Z-21.80/CSA 6.22.
- (39) National Board Inspection Code, 2001.
- (40) UL 132.
- (41) UL 144.
- (42) UL 147A.
- (43) UL 147B.
- (44) UL 567.
- (45) UL 651.
- (46) Title 49, Code of Federal Regulations.
- (47) Federal Motor Carrier Safety Regulations.
- (48) Rules for Construction of Unfired Pressure Vessels, Interstate Commerce Commission.
- (c) The following documents referenced in NFPA 58 are adopted and are enforceable:
  - (1) NFPA 10, as adopted in section 3 of the rule.
  - (2) NFPA 15, as adopted in section 4 of this rule.
  - (3) NFPA 25, as adopted in section 12 of this rule.
  - (4) NFPA 50B, as adopted in section 9 of this rule.
  - (5) NFPA 51B, as adopted in section 12 of this rule.
  - (6) NFPA 59, as adopted in section 13 of this rule.
  - (7) NFPA 70, as adopted in 675 IAC 17.

(d) "NOTES" that are not a part of a table, figure, or graph are not enforceable as part of this code.

(e) Amend Section 1.3.1(1) by deleting the text and substituting the following: Containers, piping, and associated equipment for supplying LP gas as a fuel, up to the point of delivery, into a building as defined in Section 3.3.53.

(f) Amend Section 1.3.1(3) by deleting the text and substituting the following: Marine and pipeline terminals, natural gas processing plants, refineries, or tank farms ("tank farm" storage at industrial locations).

(g) Amend Section 1.3.2(5) by deleting the text and substituting the following: (e) LP-gas used with oxygen shall comply with the Indiana Fire Code (675 IAC 22).

(h) Delete Section 1.3.2(8) in its entirety without substitution.

(i) Delete Sections 1.4.2 through 1.4.4 in their entirety without substitution.

(j) Amend Section 1.5 by deleting the text and substituting the following: See 675 IAC 12-6-11.

(k) 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.

(l) Amend Chapter 3 as follows:

(1) Amend the following definitions by deleting their text and substituting the following:

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.

CYLINDER means a portable container constructed to DOT (formerly ICC) cylinder specifications or, in some cases, constructed in accordance with the ASME Code of a similar size and for similar service. The maximum size permitted under DOT specifications is one thousand (1,000) pounds (four hundred fifty-four (454) kilograms) WATER capacity or four hundred twenty (420) pounds (one hundred (100) gallons) PROPANE capacity.

DISPENSING STATION means fixed equipment in which LP-Gas is stored and dispensed into portable containers. The public is not to be permitted access to the dispensing station area.

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.

SPECIAL PROTECTION means a means of limiting the temperature of an LP-Gas container for purposes of minimizing the possibility of failure of the container as a result of fire exposure. When required by this standard, special protection is allowed to consist of any of the following: applied insulated coatings, mounding, burial, water spray fixed systems, or fixed monitor nozzles meeting the criteria specified in this standard (see Section 3.10.3), or by other means approved for this purpose.

(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 International Fire Code, 2006 Edition, as incorporated by reference and amended in 675 IAC 22-2.3.

INSPECTION AUTHORITY means the Division of Fire and Building Services, the local building official, or their authorized representatives.

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.

POINT OF DELIVERY means the outlet of the first stage pressure regulator that provides utilization pressure, exclusive of line gas regulators, in the system.

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

(m) Delete Section 4.3 in its entirety without substitution.

(n) Amend Section 4.5.2 by inserting, between "contamination" and "prior", the following: in accordance with approved methods.

(o) Amend Section 5.2.1.1 by deleting the text in its entirety and substituting the following: Containers shall be listed and labeled for their intended use. (See Annexes C and D for guidance.)

(p) Amend Section 5.2.1.2(B) by deleting the text and substituting the following: Containers shall be retested using the hydrostatic test procedure applicable at the time of the original fabrication and relabeled by the manufacturer or the manufacturer's authorized representative.

(q) Insert a new Section 5.2.1.2.1 to read as follows: Containers complying with Sections 5.2.1.1 and 5.2.1.2 shall be permitted to be reused, reinstalled, or continued in use.

(r) Delete Section 5.2.2.2 in its entirety without substitution.

(s) Delete Section 5.2.3.2 in its entirety without substitution.

(t) Amend Section 5.2.4.1 by deleting the text and substituting the following: The minimum design or service pressure of containers shall be in accordance with their listing.

(u) Amend Section 5.2.4.3(C) by deleting the text and substituting the following: Wind loading on containers shall be based on wind pressures on the projected area as required by the building code (675 IAC 13).

(v) Amend Section 5.2.4.3(D) by deleting the text and substituting the following: Seismic loading on containers shall be as



required by the building code (675 IAC 13).

(w) Amend Section 5.2.7.2 by deleting the first sentence and substituting the following: Containers to be used as portable storage containers (see definition) for temporary stationary service and to be moved only with 5% or less of their liquid capacity shall comply with 5.2.7.2(A) through 5.2.7.2(D) (this shall apply to movable fuel storage tenders, including farm carts).

(x) Amend Section 5.7.1.1 by deleting "compatible with" and substituting "listed" in the first sentence.

(y) Amend Section 5.7.2.4 by deleting the text and substituting the following: American Society of Mechanical Engineers (ASME) containers for LP-gas shall be equipped with listed direct spring-loaded relief valves installed in accordance with manufacturer's recommendations.

(A) The start-to-leak setting of such pressure relief valves with relation to the design pressure of the container shall be in accordance with Table 5.7.2.4(A).

(B) Containers of 40,000 gal (151 m<sup>3</sup>) or more water capacity shall be equipped with either a spring-loaded pressure relief valve or a pilot-operated pressure relief valve, as follows:

(1) The pilot-operated relief valve shall be combined with and controlled by a self-actuated, direct, spring-loaded pilot valve that complies with Table 5.7.2.4(A).

(2) The use of a pilot-operated relief valve shall be approved.

(3) Pilot-operated pressure relief valves shall be inspected and maintained in accordance with manufacturer's recommendations, and shall be tested for proper operation at intervals not exceeding 5 years.

(z) Amend Section 5.8.1.2 by deleting the text and substituting the following: Pipe, piping, tubing, fittings, and valves used to supply utilization equipment shall be in accordance with the Mechanical Code (675 IAC 18).

(aa) Amend Section 5.8.1.3(2) by deleting the text and substituting the following: Pipe and tubing shall be of material that has been approved for its intended use.

(bb) Amend Section 5.8.6.1 by deleting the text and substituting the following: Hose, hose connections, and flexible connectors (\*see definition) shall be listed for use with LP-gas both as liquid and vapor.

(cc) Amend Section 5.8.6.2 by deleting the text and substituting the following: If wire braid is used for reinforcement, it shall be of corrosion resistant material.

(dd) Amend Section 5.18 by deleting the title and substituting the following: "APPLIANCES IN BUILDINGS."

(ee) Amend Section 5.18.1 by deleting the text and substituting the following: Approved appliances: See the Mechanical Code (675 IAC 18).

(ff) Amend Section 6.3.1 by deleting "important" and "that can be built upon" without substitution.

(gg) Amend Section 6.4.5.6 by deleting the text and substituting the following: Horizontal separation is not required between aboveground LP-gas containers and underground tanks containing flammable or combustible liquids installed in accordance with the Indiana Fire Code (675 IAC 22).

(hh) Amend Section 6.4.5.8 by deleting the text and substituting the following: The minimum separation between LP-gas containers and oxygen or gaseous hydrogen containers shall be in accordance with Table 6.4.5.8, except that lesser distances are allowed where protective structures interrupt the line of sight between uninsulated portions of the oxygen or hydrogen containers and the LP-gas containers.

(ii) Amend Section 6.4.5.9 by deleting the text and substituting the following: The minimum separation between LP-gas containers and liquefied hydrogen containers shall be in accordance with the Indiana Fire Code (675 IAC 22).

(jj) Amend Section 6.6.1.6 by inserting a second sentence to read as follows: See Section 3404.2.7.8 of the Indiana Fire Code.

(kk) Delete Section 6.6.7 in its entirety without substitution.

(ll) Amend Section 6.8.4.3 by deleting the text and substituting the following: Assembled anodeless risers shall be used to terminate underground polyamide and polyethylene piping systems above ground.

(A) The horizontal portion of risers shall be buried at least 12 in. (300 mm) below grade, and the casing material used for the risers shall be protected against corrosion in accordance with Section 6.14.

(B) Factory-assembled risers shall be sealed and leak tested by the manufacturer.

(mm) Amend Section 6.16.2.5 by deleting the text and substituting the following: Liquid inlet piping to the bulk plant storage facility shall be designed to prevent debris from entering the system.

(nn) Delete Section 6.17.4.10 in its entirety without substitution.

(oo) Amend Section 6.17.11.1 by deleting the text and substituting the following: Containers are allowed to be installed on



noncombustible roofs of buildings constructed as required for an occupancy separation having a fire-resistive rating of not less than the following: Groups B, F, M, and S Occupancies, Two Hours All other occupancies, Four Hours.

(pp) Delete Section 6.19.2.8 in its entirety without substitution.

(qq) Delete Section 6.19.2.9 in its entirety without substitution.

(rr) Amend Section 6.23.3.1 by deleting the text and substituting the following: Fire protection shall be provided for installations of ASME containers with an aggregate water capacity of more than four thousand (4,000) gallons (fifteen and one-tenth (15.1) m<sup>3</sup>).

(ss) Amend Section 6.23.3.2 by deleting the text and substituting the following: The mode of such protection shall be determined through a written fire safety analysis for new installations.

(tt) Amend Section 6.23.3.3 by deleting the text and substituting the following: A written fire safety analysis may be prepared by company risk management personnel, insurance company loss control representatives, LP gas industry consultants, or other competent persons.

(uu) Amend Section 6.23.3.4 by deleting the text and substituting the following: Nothing in this section shall preclude the use of an industry-accepted checklist or the written results of a preplanning inspection conducted by the local fire department under IC 36-8-17.5 to satisfy the requirements that a written analysis be prepared.

(vv) Amend Section 6.23.3.5 by deleting the text and substituting the following: Nothing in this section shall require that such written plans must be stamped or certified by a professional engineer or submitted to any governmental agency.

(ww) Delete Section 6.23.3.6 in its entirety without substitution.

(xx) Delete Section 6.23.3.7 in its entirety without substitution.

(yy) Insert a new Section 7.2.2.1.1 to read as follows: Containers shall be filled only by the owner or upon the owners' authorizations in accordance with IC 22-11-15.

(zz) Amend Chapter 10 by deleting the text and substituting the following: 10.1 See the Indiana Building Code (675 IAC 13).

(aaa) Amend Section 12.3.2.1 by deleting the text and substituting the following: The design seismic loading on refrigerated LP-Gas containers shall be based on forces recommended in the Indiana Building Code (675 IAC 13).

(bbb) Delete Section 12.3.2.2 in its entirety without substitution. (*Fire Prevention and Building Safety Commission; 675 IAC 28-1-22; 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*)

#### **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.

(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*)

#### **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.
- (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*)

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

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

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

**675 IAC 28-1-28 NFPA 72; national fire alarm 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 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 72 are not adopted, are not enforceable, and are for information only:

(1) NFPA 75.

(2) NFPA 90A.

(3) NFPA 110.

(4) NFPA 111.

(5) NFPA 601.

(6) NFPA 780.

(7) NFPA 1221.

(8) ANSI A-58.1.

(9) ANSI S1.4a.

(10) ANSI S3.2.

(11) ANSI S3.41.

(12) ANSI/IEEE C2.

(13) ANSI/UL 217.

(14) ANSI/UL 268.

(15) ANSI/UL 827.

(16) ANSI/UL 985.

(17) ANSI/UL 1730.



(18) ANSI/UL 1971.

(19) EIA Tr 41.3.

(20) IEC 60849.

(21) IEC 60268.

(22) ISO 7731.

(c) The following documents referenced in NFPA 72 are adopted and are enforceable:

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

(2) NFPA 13, as adopted in 675 IAC 13-1-25.

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

(4) NFPA 25, as adopted in section 12 of this rule.

(5) NFPA 37, as adopted in section 15 of this rule.

(6) NFPA 70, as adopted in 675 IAC 17-1.6.

(7) ANSI/ASME A17.1, as adopted at 675 IAC 21-3-1.

(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) Delete Section 1.7 in its entirety without substitution.

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

(h) 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 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.

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.

(i) Delete Section 3.2.3 without substitution.

(j) Amend the following definitions:

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.

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.

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.

STORY is that portion of a building included between the upper surface of any floor and the upper surface of the floor next above, except that the topmost story shall be that portion of a building included between the upper surface of the topmost floor and the ceiling or roof above. If the finished floor level directly above a usable or unused under-floor space is more than six (6) feet above grade as defined herein for more than fifty (50) percent of the total perimeter or is more than twelve (12) feet above grade as defined herein at any point, such usable or unused under-floor space shall be considered as a story.

(k) Add the following definitions:

ACCESSIBLE mean 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.

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 *[sic.]* 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).

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

(l) In Section 3.3.12, after "units", delete "with independent cooking and bathroom facilities".

(m) Delete the text of Section 3.3.85 and substitute to read "A building classified as an R-1 occupancy in accordance with the Indiana Building Code."

(n) Delete Section 3.3.95 without substitution.

(o) Amend Section 4.4.1.6.3(A) to read as follows: Storage batteries dedicated to the fire alarm system or an uninterruptible power supply (UPS) shall be permitted to supplement the secondary power supply to ensure required operation during the transfer period.

(p) Amend Section 4.4.1.9.3.1(A) to read as follows: Engine-driven generators used to provide secondary power for a protected premises fire alarm system shall be installed in accordance with NFPA 70.

(q) Amend Section 4.4.1.9.3.2(A) to read as follows: Automatic-starting, engine-driven generators used to provide secondary power for a supervising station shall be installed in accordance with NFPA 70.

(r) Amend Section 4.4.1.9.3.2(B) to read as follows: Manual-starting, engine-driven generators used to provide secondary power for a supervising station shall be installed in accordance with NFPA 70.

(s) Amend Section 4.4.3.7 by deleting the exception without substitution.

(t) Amend Section 4.4.4.2.4 by deleting the exception without substitution.

(u) Amend Section 4.4.5 to insert at the end of the exception "where approved by the authority having jurisdiction".

(v) Amend Section 4.4.6.1.1 by deleting "required" and substituting "approved".

(w) Amend Section 4.5.1.1 to read as follows: Complete information regarding the system or system alterations, including specifications, wiring diagrams, battery calculations, and floor plans, shall be submitted in accordance with 675 IAC 12-6.

(x) In Section 4.5.1.2:

(1) delete "The authority having jurisdiction" and substitute "local ordinance"; and

(2) delete "Appropriate NFPA requirements" and substitute "The Rules of the Commission".

(y) Delete Section 4.5.2.1 without substitution.

(z) Delete Section 4.5.2.4 without substitution.

(aa) Amend Section 4.5.2.4.1 by amending the first sentence to read as follows: Verification of the installation of a fire alarm system shall ensure that the installed system includes all required components and functions, that those components and functions are installed and operate as required, that the system has been 100-percent acceptance tested in accordance with Chapter 10, and that all required documentation has been provided to the system owner.

(bb) Amend Section 4.5.3.2 as follows: After "required" and before "reported", insert "by local ordinance".

(cc) Amend Section 4.6.3 to read as follows: Impaired fire alarm systems shall be in compliance with the Indiana Fire Code.

(dd) Amend Section 5.1.4 as follows: After "alarms" and before "shall" delete "and household fire alarm systems".

(ee) Amend Section 5.1.5 to read as follows: The material in this chapter shall be applied by trained persons.

(ff) Amend Section 5.1.6 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.

(gg) Delete Section 5.3 in its entirety without substitution

(hh) In Section 5.4.5, delete "other NFPA codes and standards or as required by the authority having jurisdiction" and substitute "this standard".

(ii) Amend Section 5.5.2.1 to delete "If required and unless" and substitute "Unless".

(jj) Amend Section 5.5.2.1.5 to delete "meeting the requirements of NFPA 90A, Standard for the Installation of Air-Conditioning and Ventilating Systems,".



- (kk) Delete Section 5.5.2.4 in its entirety without substitution.
- (ll) Amend Section 5.6 to read as follows: Heat sensing fire detectors shall be designed and installed as required by this standard, the Indiana Building Code and the Indiana Fire Code.
- (mm) Delete Section 5.6.1.1 in its entirety without substitution.
- (nn) Delete Section 5.6.1.2 in its entirety without substitution.
- (oo) Delete Section 5.6.1.3 in its entirety without substitution.
- (pp) Delete Section 5.6.5.6 in its entirety without substitution.
- (qq) Delete Section 5.7.1.1 without substitution.
- (rr) Delete Section 5.7.1.2 without substitution.
- (ss) Delete Section 5.7.1.3 without substitution.
- (tt) Delete Section 5.7.1.4 in its entirety without substitution.
- (uu) Amend Section 5.7.1.6 to read as follows: Smoke detectors shall be installed as required by this standard, the Indiana Building Code and the Indiana Fire Code.
- (vv) Amend Section 5.7.1.11 to delete the exception without substitution.
- (ww) Amend Section 5.7.3.2.3 to delete subsection (C).
- (xx) Amend Section 5.9.1 such that the second sentence reads as follows: Such detectors shall be installed in all areas required under the Indiana Building Code or the Indiana Fire Code.
- (yy) Amend Section 5.14.3.1 to delete "as required by NFPA 90A, Standard for the Installation of Air-Conditioning and Ventilating Systems, and 5.14.4.2.1."
- (zz) Amend Section 5.14.4.2.1 to delete "other NFPA Standards" and substitute "the rules of the commission".
- (aaa) Amend Section 5.14.4.2.2 to delete "other NFPA Standards" and substitute "the rules of the commission".
- (bbb) Amend Section 5.14.5.3 by deleting "in accordance with NFPA 90A, Standard for the Installation of Air-Conditioning and Ventilating Systems".
- (ccc) In Section 5.14.5.8, after "location", delete "acceptable to" and substitute "approved by".
- (ddd) Delete Section 6.2.3 in its entirety without substitution.
- (eee) Amend Section 6.4.3.1 by deleting "and on engineering judgment" without substitution.
- (fff) Delete Section 6.8.2.8 without substitution.
- (ggg) Delete Section 6.8.3 in its entirety without substitution.
- (hhh) In Section 6.8.4.5, delete Exception No. 1, renumber Exception No. 2 to be Exception No. 1, and delete number three in Exception No. 2 without substitution.
- (iii) Delete Section 6.8.4.7 without substitution.
- (jjj) In Section 6.8.5.1.2, delete the last sentence without substitution.
- (kkk) In Section 6.8.5.4.3, delete condition number one and renumber two and three.
- (lll) In Section 6.8.5.6.2, after 4.4.7.1, delete "and with other applicable NFPA standards".
- (mmm) In Section 6.8.5.8.1, delete "and the authority having jurisdiction".
- (nnn) In Section 6.8.5.10.2, delete "other applicable NFPA standards" and substitute "applicable rules of the commission".
- (ooo) In Section 6.8.6.4.1, delete the exception without substitution.
- (ppp) In Section 6.8.6.4.2, in the second sentence, delete "with the approval of" and substitute "as approved by".
- (qqq) In Section 6.9.4.3, delete method number three.
- (rrr) In Section 6.9.4.6, delete method number three.
- (sss) In Section 6.9.5.1, delete "as determined by the authority having jurisdiction".
- (ttt) In Section 6.9.5.2, delete "if required by the authority having jurisdiction".
- (uuu) In Section 6.9.5.3, in Exception No. 2, delete "if" and substitute "where".
- (vvv) In Section 6.9.5.4, delete Exception No. 1.
- (www) Amend Section 6.9.6.3 by deleting "permitted" and substituting "approved".
- (xxx) In Section 6.9.9.3, delete "if specifically permitted" and substitute "where specifically approved".
- (yyy) In Section 6.9.9.12, delete "if" and substitute "where".
- (zzz) Amend Section 6.9.9.14 by deleting ", as determined by the authority having jurisdiction" without substitution.
- (aaaa) In Section 6.10.2, delete "or by other approved means".



- (bbbb) In Section 6.11.2, delete "NFPA standards" and substitute "rules of the commission".
- (cccc) Amend Section 6.13.2 by deleting "in accordance with NFPA 601, Standard for Security Services in Fire Loss Prevention".
- (dddd) Amend Section 6.15.2.1 by deleting the third sentence without substitution.
- (eeee) In Section 6.15.2.6, delete means number three without substitution.
- (ffff) In Section 6.15.3.3, delete "Unless otherwise required by the authority having jurisdiction".
- (gggg) In Section 6.15.3.9, delete the exception without substitution.
- (hhhh) In Section 6.15.5.3, after "with", delete "applicable NFPA standards" and substitute "this standard".
- (iiii) Amend Section 6.15.6.2 by deleting the exception without substitution.
- (jjjj) In Section 6.15.7.2, delete the exception without substitution.
- (kkkk) In Section 6.16.4.5, delete the exception without substitution.
- (llll) In Section 7.1.1, after "by", delete "the authority having jurisdiction or other governing codes or standards" and substituting [*sic., substitute*] "this standard".
- (mmmm) Delete Section 7.1.5 without substitution.
- (nnnn) Delete Section 7.4.2.2 in its entirety without substitution.
- (oooo) In Section 7.4.2.4, delete "if" and substitute "where".
- (pppp) Amend Section 7.4.2.5 by deleting "when approved by the authority having jurisdiction" without substitution.
- (qqqq) Delete Section 7.4.3.3 in its entirety without substitution.
- (rrrr) In Section 7.4.3.4, delete "when approved by the authority having jurisdiction" without substitution.
- (ssss) In Section 7.4.3.4.1, delete "if approved by the authority having jurisdiction" without substitution.
- (tttt) Delete Section 7.4.5 in its entirety without substitution.
- (uuuu) Amend Section 7.5.3 by deleting "the polar dispersion requirements of ANSI/UL 1971, Standard for Safety Signaling Devices for Hearing Impaired, or equivalent" and substituting "applicable rules of the Commission".
- (vvvv) Delete Section 7.5.4.3 in its entirety without substitution.
- (wwww) Delete Section 7.6 in its entirety without substitution.
- (xxxx) Delete Section 7.8.2.1 in its entirety without substitution.
- (yyyy) In Section 7.9.3.1, delete "unless otherwise permitted by the authority having jurisdiction" without substitution.
- (zzzz) Amend Section 7.10 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.
- (aaaaa) Delete Section 8.2.3 in its entirety without substitution.
- (bbbbb) Delete Section 8.2.4.1 in its entirety without substitution.
- (ccccc) Amend Section 8.2.5.1 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".
- (dddd) Amend Section 8.2.5.2 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".
- (eeeee) Amend Section 8.2.7.1.2 (4) to read as follows: Provide immediate notice to the subscriber and the authority having jurisdiction.
- (fffff) Amend Section 8.2.7.2.1 (3) to read as follows: Report all delinquencies to the subscriber and the authority having jurisdiction as quickly as practicable.
- (ggggg) Amend Section 8.2.7.3 (3) to read as follows: Notify the fire department as quickly as practicable.
- (hhhhh) Amend Section 8.2.7.3 (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 8.2.7.4 (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 8.2.8.3 to read as follows: The central station shall furnish reports of signals received to the authority having jurisdiction immediately upon request.

(kkkkk) In Section 8.3.4.1.3, delete the exception without substitution.

(lllll) In Section 8.3.4.1.4, insert "approved" before "private-mode" and delete all text after "appliances".

(mmmmm) In Section 8.3.4.6.3, insert "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 8.3.5.1.2 by deleting "or" and substituting "and".

(ooooo) In Section 8.3.5.2.1, delete "designated by the authority having jurisdiction" without substitution.

(ppppp) Amend Section 8.3.5.2.2 by deleting "or" and substituting "and".

(qqqqq) Amend Section 8.3.5.3 by deleting "or other locations accepted by the authority having jurisdiction".

(rrrrr) In Section 8.3.5.4, delete "shall be accepted by the authority having jurisdiction and" without substitution.

(sssss) Amend Section 8.3.5.6.1 (1) to read as follows: Immediately notify the fire department and the plant fire brigade.

(ttttt) In Section 8.3.5.6.2, number one, delete "or other means accepted by the authority having jurisdiction" without substitution.

(uuuuu) Amend Section 8.3.6.3 to read as follows: The central station shall furnish reports of signals received to the authority having jurisdiction immediately upon request.

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

(wwwww) Delete Section 8.5.2.2 in its entirety without substitution.

(xxxxx) Amend Section 8.5.3.3.4 by deleting "Unless accepted by the authority having jurisdiction,".

(yyyyy) Delete Section 8.5.4 in its entirety without substitution.

(zzzzz) Delete Section 9.1.5 in its entirety without substitution.

(aaaaa) Amend Section 9.2.1 by deleting "this chapter to provide reliable transmission and receipt of fire alarms in a manner acceptable to the authority having jurisdiction" and substituting "local ordinance".

(bbbbbb) Delete Section 9.3 Management and Maintenance in its entirety and substitute "Management and Maintenance shall be in accordance with local ordinance and Chapter 10".

(ccccc) Delete Section 9.4.2 Public Accessible Fire Service Boxes (Street Boxes) and substitute "Fire service boxes shall be installed in accordance with local ordinance".

(ddddd) Delete Section 9.4.3.1.2 in its entirety without substitution.

(eeeeee) In Section 9.4.3.3.1, delete the exception without substitution.

(ffffff) Amend Section 9.4.3.3.2 by deleting everything after "building".

(gggggg) In Section 9.4.3.3.3, after "system", delete "where permitted by the authority having jurisdiction".

(hhhhh) Amend Section 9.4.3.3.4 to read as follows: Where 9.4.3.3.3 is applied, the box shall be equipped with a signal light to differentiate between automatic and manual operation, unless local outside alarms at the protected property serve the same purpose.

(iiiiii) Amend Section 9.4.3.3.5 to read as follows: The transmitting device shall be located after consultation with the fire department.

(jjjjj) In Section 9.4.3.3.9, delete the last sentence without substitution.

(kkkkk) Amend Section 9.4.3.3.10 by deleting "authority having jurisdiction" and substituting "fire department".

(lllll) Amend 9.5.1.7 by deleting ", NFPA 110, Standard for Emergency Standby Power Systems, and NFPA 1221, Standard for the Installation, Maintenance, and Use of Emergency Services Communications Systems".

(mmmmm) Delete Section 9.5.1.9 in its entirety without substitution.

(nnnnn) Delete the text of Section 9.7.2.1.1 and substitute "Outdoor circuitry shall be in accordance with the Indiana Electrical Code".

(ooooo) Delete Section 10.1.3 in its entirety without substitution.

(ppppp) Insert Section 10.1.5 to read as follows: Inspection, testing, and maintenance shall be performed by trained persons.

(qqqqq) Amend Section 10.2.1.2 to read as follows: Impairments. Impairments shall comply with the Indiana Fire Code.

(rrrrr) Delete Section 10.2.2.2 without substitution.

(sssss) In Section 10.3.1, delete all the text after "Table 10.3.1".

(ttttt) In Section 10.3.1, in the exception, delete "if" and substitute "where".



(uuuuuu) Amend Section 10.4.2.1 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.

(vvvvvv) In Section 10.4.3, delete all the text after "Table 10.4.3".

(wwwwww) In Section 10.4.3, in the exception, delete "if" and substitute "when".

(xxxxxx) Amend Section 10.4.3.2.2 by inserting, after the first sentence, "All smoke detectors in the system shall be sensitivity tested within the same calendar week."

(yyyyyy) Amend Section 10.4.3.2.3 by deleting "(or 4 percent obscuration light gray smoke, if not marked)" without substitution.

(zzzzzz) In Section 10.4.3.3, after "by", delete "the applicable NFPA standards" and substitute "this standard".

(aaaaaaa) Delete Section 10.4.3.4.1 in its entirety without substitution.

(bbbbbbb) Delete Section 10.4.3.4.2 in its entirety without substitution.

(ccccccc) Delete Section 10.4.3.4.3 in its entirety without substitution.

(ddddddd) Delete Section 10.4.5 in its entirety without substitution.

(eeeeeee) Delete Section 10.4.6 in its entirety without substitution.

(ffffff) Delete Section 10.4.7 in its entirety without substitution.

(ggggggg) In Section 10.4.9.2, delete the exception.

(hhhhhhh) Amend Section 10.6.1 by deleting "approved by the authority having jurisdiction" without substitution.

(iiiiiii) Delete Chapter 11 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*)

#### **675 IAC 28-1-29 (Reserved)**

#### **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*)

#### **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.

(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*)

**675 IAC 28-1-32 (Reserved)**

**675 IAC 28-1-33 (Reserved)**

**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.

(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*)

#### **675 IAC 28-1-35 (Reserved)**

#### **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 4.4.2, 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 (15,420 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*)

#### **675 IAC 28-1-37 (Reserved)**

#### **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*)

#### **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: 5.3.1, 5.3.2, or 5.3.3.

(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*)

**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.

(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*)

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