TITLE 675 FIRE PREVENTION AND BUILDING SAFETY COMMISSION

Final Rule

LSA Document #11-448(F)

DIGEST

Adds <u>675 IAC 16-1.4</u> concerning the 2012 Indiana Plumbing Code. Amends <u>675 IAC 18-1.5-4</u> concerning the 2008 Indiana Mechanical Code. Repeals <u>675 IAC 16-1.3</u> and <u>675 IAC 16-2</u>. Effective 90 days after filing with the Publisher.

675 IAC 16-1.3; 675 IAC 16-1.4; 675 IAC 16-2; 675 IAC 18-1.5-4

SECTION 1. 675 IAC 16-1.4 IS ADDED TO READ AS FOLLOWS:

Rule 1.4. 2012 Indiana Plumbing Code

675 IAC 16-1.4-1 Adoption by reference Authority: IC 22-13-2 Affected: IC 22-12; IC 22-13; IC 22-14; IC 22-15; IC 36-7

Sec. 1. (a) That certain document, being titled the International Plumbing Code, 2006 edition, second printing, published by the International Code Council, Inc., 500 New Jersey Avenue NW, Sixth Floor, Washington, D.C. 20001-2070, be and the same is hereby adopted by reference as if fully set out in this rule, save and except those amendments made in this rule.

(b) Wherever the term "this code" is used within this rule, it shall mean the 2012 Indiana Plumbing Code.

(c) 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

(Fire Prevention and Building Safety Commission; <u>675 IAC 16-1.4-1</u>; filed Sep 25, 2012, 2:42 p.m.: <u>20121024-IR-675110448FRA</u>, eff 90 days after filing with the Publisher)

675 IAC 16-1.4-2 Chapter 1; administration

Authority: <u>IC 22-13</u> Affected: <u>IC 4-21.5; IC 22-12-7; IC 22-13; IC 22-14; IC 22-15; IC 25-28.5; IC 36-7-2-9</u>

Sec. 2. Delete Chapter 1 and insert to read as follows:

(a) 101.1 Title. This rule shall be known as the 2012 Indiana Plumbing Code and shall be published, except incorporated documents, by the Department of Homeland Security for general distribution and use under that title.

(b) 101.2 Scope.

(1) The provisions of this code shall apply to the construction, alteration, and addition to plumbing equipment and systems regulated by this code for Class 1 structures, except townhouses, within the Class 1 structure and up to five (5) feet (1,524 mm) outside of any portion of the Class 1 structure.

(2) Compliance with this code for Class 2 structures or Class 1 townhouses is evidence of compliance with the Indiana Residential Code (675 IAC 14).

(3) This code does not regulate licensure requirements for plumbers. Such licensure requirements

are set out in IC 25-28.5.

(c) 101.3 Appendices and Standards. Provisions in the appendices are not enforceable unless specifically adopted. The codes and standards referenced in this code shall be considered part of the requirements of this code to the prescribed extent of each such reference. Where differences occur between provisions of this code and referenced codes and standards, the provisions of this code shall apply.

(d) 101.4 Intent. The purpose of this code is to provide minimum standards for safety and to safeguard property and public welfare by regulating and controlling the design, construction, installation, quality of material, and location of plumbing equipment and systems.

Exceptions: Where enforcement of a code provision would violate the conditions of the listing, labeling, or manufacturer's installation instructions of the equipment or appliance, the conditions of the listing, labeling, or manufacturer's instruction shall apply.

(e) 101.5 Plans. Plans shall be submitted for Class 1 structures as required by the General Administrative Rules (675 IAC 12-6), and for Class 2 structures as required by local ordinance. (f) 101.6 Existing construction. For existing construction, see the General Administrative Rules (675 IAC 12-4) and for Class 2 structures as required by local ordinances.

(g) 101.7 Conflicts between Codes. For conflicting requirements within the Fire Prevention and Building Safety Commission's rules, see the General Administrative Rules (675 IAC 12-4). (h) 101.8 Appeals. Appeals from orders issued by the Division of Fire and Building Safety are

governed by $\frac{1C}{12} \frac{4}{12} \frac{1}{12}$ and $\frac{1C}{12} \frac{22}{12} \frac{12}{7}$. Appeals of orders issued by a local unit of government are governed by local ordinance and also may be appealed to the commission.

(i) 101.9 Alternative Methods and Materials: See the General Administrative Rules 675 IAC 12-6-11.

(Fire Prevention and Building Safety Commission; <u>675 IAC 16-1.4-2</u>; filed Sep 25, 2012, 2:42 p.m.: <u>20121024-IR-675110448FRA</u>, eff 90 days after filing with the Publisher)

675 IAC 16-1.4-3 Chapter 2; definitions

Authority: <u>IC 22-13</u> Affected: <u>IC 10-19-2; IC 22-12; IC 22-13; IC 22-14; IC 22-15; IC 25-4; IC 25-31; IC 36-7-2-9</u>

Sec. 3. Chapter 2 is amended to read as follows:

(a) Amend Section 201.3 by deleting the text and inserting the following: Where terms are not defined in this code and are defined in the Indiana Building Code (675 IAC 13), the Indiana Electrical Code (675 IAC 17), the Indiana Mechanical Code (675 IAC 18), the Indiana Fire Code (675 IAC 22), or the Indiana Fuel Gas Code (675 IAC 25), such terms shall have the meanings ascribed to them in those codes. (b) Amend Section 202 Definitions, as follows:

(1) Delete the definition of Approved and insert to read as follows:

APPROVED as to materials, equipment, design of products, and types of construction, means acceptance by the code official by one (1) of the following methods:

(i) investigation or tests conducted by nationally recognized authorities; or

(ii) investigation or tests conducted by technical or scientific organizations; or

(iii) nationally accepted principles.

The investigation, tests, or principles shall establish that the materials, equipment, design of products, and construction are safe for their intended purposes.

(2) Amend the definition of Backflow to read as follows: BACKFLOW means the reversal of flow of water or mixtures of water and other liquids, gases, or other substances into the distribution pipes of the potable supply of water from any source or sources.

(3) Add the definition of Backpressure to read as follows: BACKPRESSURE means any elevation of the pressure in the downstream piping system (by pump, elevation of piping, steam pressure, air pressure, etc.) above the supply pressure at the point of consideration, which would cause or tend to cause a reversal of the normal flow direction.

(4) Amend the definition of Building to delete the text and insert as follows: BUILDING means any structure occupied or intended for supporting or sheltering any occupancy.

(5) Delete the definition of Code Official and insert to read as follows: CODE OFFICIAL means the Division of Fire and Building Safety, the local building official as authorized under <u>IC 36-7-2-9</u> and the local ordinance.

(6) Amend the definition of Dead End to delete the text and insert as follows: DEAD END means a pipe that is terminated at a developed length of two (2) feet (609.6 mm) or more by means of a plug or other closed fitting, except where serving a clean out extension to an accessible area.

(7) Add the definition of Division of Fire and Building Safety 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.

(8) Add the definition of Gray Water to read as follows: GRAY WATER means waste water discharged from lavatories, bathtubs, showers, clothes washers, laundry trays, condensate cooling coils, and evaporators.

(9) Add the definition of Indiana Building Code to read as follows: INDIANA BUILDING CODE means the Indiana Building Code (675 IAC 13) in effect in Indiana at the time of construction, remodeling, alteration, or addition of a Class 1 Structure, except for townhouses, or the Indiana Residential Code (675 IAC 14) for Class 2 structures and Class 1 townhouses, in effect at the time of the construction, addition, or alteration of the plumbing system.

(10) Add the definition of Indiana Electrical Code to read as follows: INDIANA ELECTRICAL CODE means the Indiana Electrical Code (<u>675 IAC 17</u>) in effect at the time of construction, remodeling, alteration, or addition of a Class 1 Structure.

(11) Add the definition of ICC Electrical Code: See the Indiana Electrical Code.

(12) Add the definition of Indiana Energy Conservation Code to read as follows: INDIANA ENERGY CONSERVATION CODE (675 IAC 19) means the Indiana Energy Conservation Code in effect at the time of construction, remodeling, alteration, or addition of a Class 1 Structure.

(13) 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 a Class 1 Structure.

(14) Add the definition of Indiana Plumbing Code to read as follows: INDIANA PLUMBING CODE means the Indiana Plumbing Code (675 IAC 16) in effect at the time of construction, remodeling, alteration, or addition of a Class 1 Structure.

(15) Add the definition of International Building Code to read as follows: INTERNATIONAL BUILDING CODE: See the Indiana Building Code.

(16) Add the definition of International Energy Conservation Code to read as follows:

INTERNATIONAL ENERGY CONSERVATION CODE: See the Indiana Energy Conservation Code. (17) Add the definition of International Mechanical Code to read as follows: International Mechanical Code: See the Indiana Mechanical Code.

(18) Add the definition of International Plumbing Code to read as follows: INTERNATIONAL PLUMBING CODE: See the Indiana Plumbing Code.

(19) Amend the definition of Labeled to delete the text and insert as follows: LABELED means equipment or materials to which has been attached a label, symbol, or other identifying mark of an organization engaged in product evaluation, that maintains periodic 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.

(20) Amend the definition of Listed to delete the text and insert 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.

(21) Delete the definition of Plumbing and insert to read as follows: PLUMBING means the practice, materials, and fixtures utilized in the installation, extension, and alteration of all piping, fixtures, plumbing appliances, and plumbing appurtenances, within or on the same property of the structure, in connection with sanitary drainage or storm drainage facilities; venting systems; and public or private water supply systems.

(22) Amend definition of Registered Design Professional to delete the text and insert as follows: REGISTERED DESIGN PROFESSIONAL. An architect who is registered under $\frac{|C 25-4|}{|C 25-4|}$ or professional engineer who is registered under $\frac{|C 25-31|}{|C 25-31|}$. If a registered design professional is not required by $\frac{675}{|AC 12-6|}$ or $\frac{675}{|AC 15|}$, then it means the owner.

(23) Amend the definition of Swimming Pool to read as follows: See Indiana Swimming Pool Code, <u>675 IAC 20-1.1</u>.

(24) Add the definition of Townhouse to read as follows: TOWNHOUSE means a single family dwelling constructed in a row of attached units separated by property lines 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.

(25) Add the definition of Water Closet to read as follows: WATER CLOSET means a water-flushed plumbing fixture designed to receive human waste directly from the user of the fixture.(26) Delete the definition of Water Main and insert to read as follows: WATER MAIN means water supply pipe or system of pipes for public or community use.

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675 IAC 16-1.4-4 Chapter 3; general regulations

Authority: <u>IC 22-13-2</u> Affected: IC 22-12; IC 22-13; IC 22-14; IC 22-15; IC 36-7-2-9

Sec. 4. Chapter 3 is amended as follows:

(a) Amend Section 301.1.1 to read as follows: See Section 101.2.

(b) Amend Section 301.3 to add an exception to read as follows:

Exception: Bathtubs, showers, lavatories, clothes washers, air conditioning condensation, laundry trays, and process water that is exposed only to heat transfer and no other contamination shall not be required to discharge to the sanitary drainage system where such fixtures discharge to a gray water system in accordance with Appendix C.

(c) Amend Section 301.7 to read as follows: See Section 101.7.

(d) Amend Section 304.4 by deleting the text after "protected" and inserting "with an impervious material".

(e) Amend Section 305.3 by adding a third sentence to read as follows: No plumbing pipes shall be directly embedded in concrete or masonry.

(f) Amend Section 305.6 as follows:

(1) In the first sentence, delete "water".

(2) Delete the last sentence in its entirety without substitution.

(g) Delete the text of Section 305.6.1 and insert to read as follows: Waterlines. Waterlines shall not be installed outside of a building, in attics or crawlspaces, or in any other place subjected to freezing temperatures, unless adequate provision is made to protect such waterlines from freezing by insulation, ambient heat, or alternate heat source. No waterlines shall be concealed in outside walls, above grade.

(h) Add Section 305.6.2 to read as follows: The minimum depth of exterior water supply piping measured from finished grade to the top of the water pipe shall be in accordance with Table 305.6.2.
 (i) Add Table 305.6.2 Minimum Depth of Bury of Exterior Water Supply Piping as follows:

DEPTH IN INCHES COUNTY NO. 1 Adams 48 2 Allen 48 3 Bartholomew 36 4 48 Benton 5 Blackford 42 42 6 Boone 7 Brown 36 8 Carroll 48 9 Cass 48 10 Clark 36 11 36 Clav 12 Clinton 42 13 Crawford 36 14 Daviess 36 15 Dearborn 36 16 Decatur 36 17 Dekalb 48 18 Delaware 42 19 Dubois 36 20 Elkhart 48 21 Fayette 42

 Table 305.6.2

 Minimum Depth of Bury for Exterior Water Supply Piping

 	· •••pp··/ · ·p	
NO.	COUNTY	DEPTH IN INCHES
47	Lawrence	36
48	Madison	42
49	Marion	42
50	Marshall	48
51	Martin	36
52	Miami	48
53	Monroe	36
54	Montgomery	42
55	Morgan	42
56	Newton	48
57	Noble	48
58	Ohio	36
59	Orange	36
60	Owen	36
61	Parke	42
62	Perry	36
63	Pike	36
64	Porter	48
65	Posey	36
66	Pulaski	48
67	Putnam	42
01	i utilalii	72

22	Floyd	36	68	Randolph	42
23	Fountain	36	69	Ripley	36
24	Franklin	36	70	Rush	42
25	Fulton	48	71	St. Joseph	48
26	Gibson	36	72	Scott	36
27	Grant	42	73	Shelby	42
28	Greene	36	74	Spencer	36
29	Hamilton	42	75	Starke	48
30	Hancock	42	76	Steuben	48
31	Harrison	42	77	Sullivan	36
32	Hendricks	42	78	Switzerland	36
33	Henry	42	79	Tippecanoe	42
34	Howard	42	80	Tipton	42
35	Huntington	48	81	Union	42
36	Jackson	36	82	Vanderburgh	36
37	Jasper	48	83	Vermillion	42
38	Jay	42	84	Vigo	36
39	Jefferson	36	85	Wabash	48
40	Jennings	36	86	Warren	42
41	Johnson	42	87	Warrick	36
42	Knox	36	88	Washington	36
43	Kosciusko	48	89	Wayne	42
44	LaGrange	48	90	Wells	48
45	Lake	48	91	White	48
46	LaPorte	48	92	Whitley	48

(j) Amend Section 305.8 to read as follows: delete "sixty two thousandths (0.062) -inch-thick (1.6 mm)" and insert "five hundred seventy-five ten-thousandths (0.0575) -inch-thick (1.463 mm), No. 16 gage". (k) Delete Section 308.6 without substitution.

(I) Delete Section 311 in its entirety without substitution.

(m) Amend Section 312.9.1 to read as follows: Delete "annual" and insert "at the time of installation".

(n) Delete Section 312.9.2 without substitution.

(o) Amend Section 314.2.1 as follows:

(1) After "disposal", insert "gray water storage or other nonpotable sustainable use".

(2) Insert the following text after the first sentence: Such piping shall maintain a minimum horizontal slope in the direction of discharge of not less than one-eighth (1/8) unit vertical in twelve (12) units horizontal (one (1) percent slope).

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675 IAC 16-1.4-5 Chapter 4; fixtures, faucets, and fixture fittings

Authority: <u>IC 22-13-2</u> Affected: <u>IC 22-12; IC 22-13; IC 22-14; IC 22-15; IC 36-7-2-9</u>

Sec. 5. Chapter 4 is amended as follows:

(a) Delete Section 403 in its entirety and insert: See Chapter 29 of the Indiana Building Code.

(b) Delete Section 404 in its entirety and insert: See Chapter 29 of the Indiana Building Code.

(c) Delete Section 405.2 and insert: See Chapter 29 of the Indiana Building Code.

(d) Delete Section 405.3 and insert: See Chapter 29 of the Indiana Building Code.

(e) Delete Section 405.3.1 and insert: See Chapter 29 of the Indiana Building Code.

(f) Delete Section 410.1 and insert: See Chapter 29 of the Indiana Building Code.

(g) Delete Section 410.2 and insert: See Chapter 29 of the Indiana Building Code.

(h) Amend Section 413.4 by adding a second sentence to read as follows: The cold water supply shall be protected against backflow by an air gap or a backflow preventer in accordance with Section 608.

(i) Amend Section 416.5 to add an exception to read as follows:

Exception: An ASSE 1070 point of use device may be omitted if the fixture is supplied with tempered water through an ASSE 1017 master mixing valve.

(j) Amend Section 419.1 to insert, after "ASME A112.19.2M", "ASME A112.19.19, Vitreous China Nonwater Urinals, 2006 edition,".

(k) Delete the last sentence in Section 419.2 and insert: See Chapter 29 of the Indiana Building Code.

(Fire Prevention and Building Safety Commission; <u>675 IAC 16-1.4-5</u>; filed Sep 25, 2012, 2:42 p.m.: <u>20121024-IR-675110448FRA</u>, eff 90 days after filing with the Publisher)

675 IAC 16-1.4-6 Chapter 5; water heaters

Authority: <u>IC 22-13-2-2</u> Affected: <u>IC 22-12; IC 22-13; IC 22-14; IC 22-15; IC 36-7-2-9</u>

Sec. 6. Chapter 5 is amended as follows:

(a) Add Section 502.1.1 Elevation of ignition source to read as follows: Elevation of ignition source. Equipment and appliances having an ignition source and located in hazardous locations and public garages, private garages, repair garages, automotive motor-fuel-dispensing facilities, and parking garages shall be elevated such that the source of ignition is not less than eighteen (18) inches (457 mm) above the floor surface on which the equipment or appliance rests. Such equipment and appliances shall not be installed in Group H occupancies or control areas where open use, handling, or dispensing of combustible, flammable, or explosive materials occur. For purposes of this section, rooms or spaces that are not part of the living space of a dwelling unit and that communicate directly with a private garage through openings shall be considered to be part of the private garage.
(b) Add Section 502.1.1.1, Parking garages to read as follows: Parking garages. Connection of a parking garage with any room in which there is a fuel-fired appliance shall be by means of a vestibule providing a two-door separation, except that a single door is permitted where the sources of ignition in the appliances are elevated in accordance with Section 304.3 of the Indiana Mechanical Code.

Exception: This section shall not apply to appliance installations complying with Section 304.5 of the Indiana Mechanical Code.

(c) Add Section 502.2.1, Prohibited locations to read as follows: Prohibited locations. Fuel-fired appliances shall not be located in, or obtain combustion air from, any of the following rooms or spaces:

(1) Sleeping rooms.

- (2) Bathrooms.
- (3) Toilet rooms.
- (4) Storage closets.
- (5) Surgical rooms.

Exception: This section shall not apply to the following appliances:

(i) Direct-vent appliances that obtain all combustion air directly from the outdoors.

(ii) Solid fuel-fired appliances provided that the room is not a confined space and the building is not of unusually tight construction.

(iii) Appliances installed in a dedicated enclosure in which all combustion air is taken directly from the outdoors, in accordance with Section 703 of the Indiana Mechanical Code. Access to such enclosure shall be through a solid door, weather-stripped in accordance with the exterior air leakage requirements of the Indiana Energy Conservation Code and equipped with an approved self-closing device.

(d) Delete Section 504.2 and insert to read as follows: Bottom fed water heaters. A bottom fed water heater or tank connected to a water heater that is installed at and above the fixture outlet shall be protected from accidental drainage and negative pressure by:

(1) a check valve and a properly sized expansion tank; or

(2) a vacuum relief valve that shall comply with ANSI Z 21.22 and be installed in accordance with the manufacturer's recommendations.

(e) Add Section 504.2.1 to read as follows: The cold water piping shall rise above the top of the water heater before connecting to the tank inlet.

(Fire Prevention and Building Safety Commission; <u>675 IAC 16-1.4-6</u>; filed Sep 25, 2012, 2:42 p.m.: <u>20121024-IR-675110448FRA</u>, eff 90 days after filing with the Publisher)

675 IAC 16-1.4-7 Chapter 6; water supply and distribution

Authority: <u>IC 22-13-2</u> Affected: IC 22-12; IC 22-13; IC 22-14; IC 22-15; IC 36-7-2-9

Sec. 7. Chapter 6 is amended as follows:

(a) Delete Section 602.3 in its entirety without substitution.

(b) Amend Section 604.9 to read as follows:

(1) Add a new second sentence as follows: An air chamber is not a water hammer arrestor.

(2) Delete the last sentence in its entirety without substitution.

(c) Amend Table 605.3, WATER SERVICE PIPE, under "copper or alloy tubing" by deleting "M or WM".

(d) Delete Section 605.3.1 without substitution.

(e) Amend Table 605.5, by inserting "Cross-linked" in front of "Polyethylene (PEX-AL-PEX)".

(f) Amend Section 605.22.2 to read as follows: after "A", delete "purple" and after "solvent cement", delete "not purple in color".

(g) Delete Section 606.4 without substitution.

(h) Amend Section 607.1 to add an exception to read as follows:

Exception: An ASSE 1070 point of use device may be omitted if the fixture is supplied with tempered water through an ASSE 1017 master mixing valve.

(i) Amend Section 607.3.2 to add a second sentence to read as follows: When thermal expansion tanks are used for this purpose, there shall be no valves installed between the water heating appliance and the expansion tank.

(j) Amend Table 608.1, APPLICATION OF BACKFLOW PREVENTERS, "Backflow preventer for carbonated beverage machines", to delete "low hazard" and insert "high hazard".

(k) Add Section 608.1.1 to read as follows: The owner of the structure shall have the backflow prevention assembly tested at the time of installation and after relocation.

(I) Add Section 608.1.2 to read as follows: Backflow preventers for hot water over one hundred ten (110) degrees Fahrenheit (43.3 degrees Celsius) shall be a listed type, designed to operate at temperatures of one hundred ten (110) degrees Fahrenheit (43.3 degrees Celsius) or more without rendering any portion of the assembly inoperable.

(m) Amend Section 608.14.1 to delete the text and insert as follows: Location of backflow preventers. Access and clearance shall be provided for the required testing. Access and clearance shall require a minimum of twelve (12) inches (305 mm) between the lowest portion of the assembly and grade, floor, or platform. Installations elevated more than five (5) feet (1,524 mm) above the floor or grade shall be provided with a permanent platform complying with the structural requirements and fire resistive requirements of the Indiana Building Code. Reduced pressure principle backflow preventers and reduced pressure detector assembly backflow preventers shall be installed horizontally, unless otherwise listed, at a location where any leakage from the relief port will be noticed and not subject the backflow preventer to flooding.

(n) Delete the text of Section 608.15.4 and insert as follows: Openings and outlets shall be protected by atmospheric type or pressure type vacuum breakers. The critical level of the atmospheric type vacuum breaker shall be set a minimum of six (6) inches (152 mm) above the flood level rim of the fixture or device. Pressure type vacuum breakers shall be set a minimum of twelve (12) inches (304 mm) above all downstream piping and outlets. Fill valves shall be set in accordance with Section 425.3.1. Vacuum breakers shall not be installed under exhaust hoods or similar locations that will contain toxic fumes or vapors. Pipe-applied atmospheric-type vacuum breakers shall be installed not less than six (6) inches (152 mm), and twelve (12) inches (304 mm) for pressure-type vacuum breakers, above the flood level rim of the fixture, receptor, or device served.

(o) Amend Section 608.16.1 to delete the text and insert as follows: The water supply connection to beverage dispensers shall be protected against backflow by a listed reduced pressure principle backflow preventer. Copper shall not be used downstream from the backflow preventer.

(p) Amend Section 608.16.3 as follows: after "transfer fluid", add "(non-potable water)", and, after "nontoxic transfer fluid", add "(potable water)".

(q) Amend Section 608.16.4 to delete the exceptions without substitution.

(r) Amend Section 608.16.5 as follows: after "A valve,", insert "including system zone valves".

(s) Delete Section 608.17 in its entirety without substitution.

(Fire Prevention and Building Safety Commission; <u>675 IAC 16-1.4-7</u>; filed Sep 25, 2012, 2:42 p.m.: <u>20121024-IR-675110448FRA</u>, eff 90 days after filing with the Publisher)

675 IAC 16-1.4-8 Chapter 7; sanitary drainage

Authority: <u>IC 22-13-2</u> Affected: <u>IC 22-12; IC 22-13; IC 22-14; IC 22-15; IC 36-7-2-9</u>

Sec. 8. Chapter 7 is amended as follows:

(a) Amend Table 704.1 as follows: delete "0.083.3 mm/m" and insert "83.3 mm/m".

(b) Amend Section 705.8.2 as follows: delete "purple" and "not purple in color and," without substitution.

(c) Amend Table 702.2 as follows: under "Copper or copper alloy tubing", delete without substitution "M or DWV".

(d) Amend Section 705.14.2 as follows: delete "purple" and "not purple in color and" without substitution.

(e) Amend Section 706.3 as follows: after "combination fittings", delete "side inlets or".

(f) Delete the fourth sentence in Section 708.3.5 without substitution.

(g) Amend Table 710.1(2) as follows: In the second column, delete "2,900" and insert "3,900".

(h) Add Section 710.3 to read as follows: 710.3 Minimum underground drainage size. The minimum pipe size installed underground in a sanitary drainage system within a building shall be two (2) inch nominal (50.8 mm) pipe size.

(Fire Prevention and Building Safety Commission; <u>675 IAC 16-1.4-8</u>; filed Sep 25, 2012, 2:42 p.m.: <u>20121024-IR-675110448FRA</u>, eff 90 days after filing with the Publisher)

675 IAC 16-1.4-9 Chapter 8; indirect/special waste

Authority: <u>IC 22-13-2-2</u> Affected: <u>IC 22-12; IC 22-13; IC 22-14; IC 22-15; IC 36-7-2-9</u>

Sec. 9. Chapter 8 is amended as follows: Amend Section 802.4 by inserting a new second sentence to read as follows: A trap for a clothes-washer standpipe receptor shall not be installed below the floor.

(Fire Prevention and Building Safety Commission; <u>675 IAC 16-1.4-9</u>; filed Sep 25, 2012, 2:42 p.m.: <u>20121024-IR-675110448FRA</u>, eff 90 days after filing with the Publisher)

675 IAC 16-1.4-10 Chapter 9; vents

Authority: <u>IC 22-13-2</u> Affected: <u>IC 22-12; IC 22-13; IC 22-14; IC 22-15; IC 36-7-2-9</u>

Sec. 10. Chapter 9 is amended as follows:

(a) Amend Section 901.2.1 by adding an exception to read as follows:

Exception: Floor drains.

(b) Amend Section 904.1, in the first sentence, to delete "[number] inches (mm)" and insert "six (6) inches (152.4 mm)".

(c) Amend Section 917.1 by deleting: "Stack type air admittance valves shall conform to ASSE 1050" without substitution.

(d) Delete the text of Section 917.3 and insert as follows: Where permitted. Individual branch and circuit vents shall be permitted to terminate with a connection to an individual or branch-type air admittance valve. Individual and branch-type air admittance valves shall vent only fixtures that are on the same floor level and connect to a horizontal branch drain. The horizontal branch drain having individual and branch-type air admittance valves shall conform to Section 917.3 or Section 917.3.2.
(e) Delete the text of Section 917.3.3 and insert as follows: Stack. Air admittance valves shall not serve as the vent terminal for vent stacks or stack vents.

(f) Amend Section 917.4 by deleting: "Stack type air admittance valves shall be located not less than six (6) inches (152 mm) above the flood level rim of the highest fixture being vented.".

(g) Amend Section 917.8 by adding a second sentence to read as follows: Air admittance valves shall not be used to vent sump pits.

(h) Amend Section 918.2 (Equation 9-1) as follows: delete " Q_v (gpm) = 27.8 r_s^{2/3} (1-r_s) D8/3" and insert " Q_v (gpm) = 27.8 r_s^{2/3} (1-r_s) D^{8/3}".

(Fire Prevention and Building Safety Commission; <u>675 IAC 16-1.4-10</u>; filed Sep 25, 2012, 2:42 p.m.: <u>20121024-IR-675110448FRA</u>, eff 90 days after filing with the Publisher)

675 IAC 16-1.4-11 Chapter 10; traps, interceptors, and separators Authority: IC 22-13-2 Affected: IC 22-12; IC 22-13; IC 22-14; IC 22-15; IC 36-7-2-9

Sec. 11. Chapter 10 is amended as follows:

(a) Amend Section 1002.1 as follows: in exception 2, after "fixture", insert "up to three (3) compartments".

(b) Amend Section 1003.1 to add a second sentence to read as follows: A cleanout shall be installed immediately downstream of the interceptor or separator.

(Fire Prevention and Building Safety Commission; <u>675 IAC 16-1.4-11</u>; filed Sep 25, 2012, 2:42 p.m.: <u>20121024-IR-675110448FRA</u>, eff 90 days after filing with the Publisher)

675 IAC 16-1.4-12 Chapter 11; storm drainage

Authority: <u>IC 22-13-2</u> Affected: <u>IC 22-12; IC 22-13; IC 22-14; IC 22-15; IC 36-7-2-9</u>

Sec. 12. Chapter 11 is amended as follows:

(a) Delete Section 1107.2 without substitution.

(b) Add Section 1113.1.5 to read as follows: Water powered sump pumps. Water powered sump pumps shall comply with Section 608 of this code.

(Fire Prevention and Building Safety Commission; <u>675 IAC 16-1.4-12</u>; filed Sep 25, 2012, 2:42 p.m.: <u>20121024-IR-675110448FRA</u>, eff 90 days after filing with the Publisher)

675 IAC 16-1.4-13 Chapter 12; special piping and storage systems

Authority: <u>IC 22-13-2</u> Affected: <u>IC 22-12; IC 22-13; IC 22-14; IC 22-15; IC 36-7-2-9</u>

Sec. 13. Chapter 12 is amended as follows: Delete the text of Chapter 12, Special Piping and Storage Systems and insert: See the Indiana Fire Code (675 IAC 22).

(Fire Prevention and Building Safety Commission; <u>675 IAC 16-1.4-13</u>; filed Sep 25, 2012, 2:42 p.m.: <u>20121024-IR-675110448FRA</u>, eff 90 days after filing with the Publisher)

675 IAC 16-1.4-14 Chapter 13; referenced standards

Authority: <u>IC 22-13-2-2</u> Affected: <u>IC 22-12; IC 22-13; IC 22-14; IC 22-15; IC 36-7-2-9</u>

Sec. 14. Referenced standards are amended as follows:

(a) Amend the first paragraph by deleting "Section 102.8" and inserting "See Section 101.3".

(b) Delete the following standard from the list of ASSE Standards in its entirety without substitu	ion:
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Standard Reference Number	Title	Referenced in Code Section Number
ASSE 1050-02	Performance Requirements for Stack Air Admittance Valves for Sanitary Drainage	917.1

(c) In the reference to NFPA 50-01, delete "01 edition" and insert "as adopted at <u>675 IAC 28-1-16</u>".
(d) In the reference to NFPA 51-02, delete "02 edition" and insert "as adopted at <u>675 IAC 28-1-18</u>".
(e) In the reference to NFPA 70-05, delete "05 edition" and insert "as adopted at <u>675 IAC 17</u>".

(Fire Prevention and Building Safety Commission; <u>675 IAC 16-1.4-14</u>; filed Sep 25, 2012, 2:42 p.m.: <u>20121024-IR-675110448FRA</u>, eff 90 days after filing with the Publisher)

675 IAC 16-1.4-15 Appendix A; plumbing permits fee schedule Authority: IC 22-13-2 Affected: IC 22-12; IC 22-13; IC 22-14; IC 22-15; IC 36-7-2-9

Sec. 15. Delete the text of Appendix A in its entirety and insert: See local ordinance.

(Fire Prevention and Building Safety Commission; <u>675 IAC 16-1.4-15</u>; filed Sep 25, 2012, 2:42 p.m.: <u>20121024-IR-675110448FRA</u>, eff 90 days after filing with the Publisher)

675 IAC 16-1.4-16 Appendix B; rate of rainfall for various cities Authority: IC 22-13-2 Affected: IC 22-12; IC 22-13; IC 22-14; IC 22-15; IC 36-7-2-9

Sec. 16. Appendix B is not adopted and is for informational purposes only.

(Fire Prevention and Building Safety Commission; <u>675 IAC 16-1.4-16</u>; filed Sep 25, 2012, 2:42 p.m.: <u>20121024-IR-675110448FRA</u>, eff 90 days after filing with the Publisher)

675 IAC 16-1.4-17 Appendix C; gray water recycling systems Authority: IC 22-13-2 Affected: IC 22-12; IC 22-13; IC 22-14; IC 22-15; IC 36-7-2-9

Sec. 17. Appendix C is adopted in its entirety except as amended:
(a) In Section C101.2, delete the text of the definition of GRAY WATER and insert to read as follows:
GRAY WATER means waste water discharged from lavatories, bathtubs, showers, clothes washers, laundry trays, condensate cooling coils, and evaporators.
(b) Delete Section C103 in its entirety without substitution.

(Fire Prevention and Building Safety Commission; <u>675 IAC 16-1.4-17</u>; filed Sep 25, 2012, 2:42 p.m.: <u>20121024-IR-675110448FRA</u>, eff 90 days after filing with the Publisher)

675 IAC 16-1.4-18 Appendix D; degree day and design temperatures

Authority: <u>IC 22-13-2-2</u> Affected: <u>IC 22-12; IC 22-13; IC 22-14; IC 22-15; IC 36-7-2-9</u>

Sec. 18. Appendix D is not adopted and is for informational purposes only.

(Fire Prevention and Building Safety Commission; <u>675 IAC 16-1.4-18</u>; filed Sep 25, 2012, 2:42 p.m.: <u>20121024-IR-675110448FRA</u>, eff 90 days after filing with the Publisher)

675 IAC 16-1.4-19 Appendix E; sizing of water piping system

Authority: <u>IC 22-13-2</u> Affected: <u>IC 22-12; IC 22-13; IC 22-14; IC 22-15; IC 36-7-2-9</u>

Sec. 19. Appendix E is adopted except as amended. Amend Section E201.1 as follows: (1) In item 4, delete the reference to "Table E201.1" and insert "Table E103.3(2)". (2) In item 5, delete the reference to "Table E202.1" and insert "Table E203.3(2)".

(Fire Prevention and Building Safety Commission; 675 IAC 16-1.4-19; filed Sep 25, 2012, 2:42 p.m.: 20121024-IR-675110448FRA, eff 90 days after filing with the Publisher)

675 IAC 16-1.4-20 Appendix F; structural safety

Authority: IC 22-13-2 Affected: IC 22-12; IC 22-13; IC 22-14; IC 22-15; IC 36-7-2-9

Sec. 20. Appendix F is not adopted and is for informational purposes only. For requirements for cutting, notching, and boring in wood members, see the Indiana Building Code (675 IAC 13) or Indiana Residential Code (675 IAC 14).

(Fire Prevention and Building Safety Commission; 675 IAC 16-1.4-20; filed Sep 25, 2012, 2:42 p.m.: 20121024-IR-675110448FRA, eff 90 days after filing with the Publisher)

675 IAC 16-1.4-21 Appendix G; vacuum drainage system

Authority: IC 22-13-2 Affected: IC 22-12; IC 22-13; IC 22-14; IC 22-15; IC 36-7-2-9

Sec. 21. Appendix G is not adopted and is for informational purposes only.

(Fire Prevention and Building Safety Commission; 675 IAC 16-1.4-21; filed Sep 25, 2012, 2:42 p.m.: 20121024-IR-675110448FRA, eff 90 days after filing with the Publisher)

675 IAC 16-1.4-22 ASME 112.19.19-2006, Vitreous China Nonwater Urinals

Authority: IC 22-13-2 Affected: IC 22-12; IC 22-13; IC 22-14; IC 22-15; IC 36-7-2-9

Sec. 22. (a) That certain document being titled ASME A112.19.19, Vitreous China Nonwater Urinals, 2006 edition, as published by The American Society of Mechanical Engineers, Three Park Avenue, New York, NY 10016-5990, is hereby adopted by reference as if fully set out in this rule save and except those revisions made in this rule.

(b) Amend Paragraph 1.3 as follows:

(1) Delete the second sentence in its entirety without substitution.

(2) In the reference to ANSI/ICC A117.1, insert, after "Facilities", ", as adopted by the Commission in the Indiana Building Code in effect at the time of construction, alteration or addition".

(3) In the reference to ASME A112.6.1M, insert, after "Use", ", the 1997 edition".
(4) In the reference to ASME A112.6.2, insert, after "Tanks", ", the 2000 edition".
(5) In the reference to ASME A112.19.2, insert, after "Tanks", ", the 2003 edition".
(6) In the reference to ASME A112.19.5, insert, after "Urinals", ", the 1999 edition".

(7) In the reference to ASME A112.19.12, insert, after "Systems", ", the 2000 edition".

(8) In the reference to UL 969, insert, after "Systems", "effective on 12/23/2005".

(c) Amend Paragraph 3.1 to delete the text and insert the following: See 675 IAC 12-6-11.

(Fire Prevention and Building Safety Commission; 675 IAC 16-1.4-22; filed Sep 25, 2012, 2:42 p.m.: 20121024-IR-675110448FRA, eff 90 days after filing with the Publisher)

SECTION 2. 675 IAC 18-1.5-4 IS AMENDED TO READ AS FOLLOWS:

675 IAC 18-1.5-4 Chapter 3; general requirements

Authority: IC 22-13-2 Affected: IC 22-12; IC 22-13; IC 22-14; IC 22-15; IC 36-7-2-9

Sec. 4. (a) In Section 301.2, Energy utilization, delete "all structures" and insert "all Class 1 structures".

(b) In Section 301.4, Listed and labeled, delete "in accordance with Section 105".

(c) Delete Section 301.5, Labeling.

(d) In item 4 of Section 301.6, Information, delete "approval" and insert "acceptance".

(e) Delete Section 301.13, Flood hazard, and substitute "See local ordinance".

(f) Delete Section 301.14, Rodent proofing.

(g) In Section 303.5, insert ", water heaters" after "furnaces".

(h) Amend Section 304.1, General, to read as follows: Equipment and appliances shall be installed in accordance with the conditions of the listing, the manufacturer's installation instructions, and this code unless otherwise approved.

(i) In Section 304.5, delete "fueling" and insert "fuel".

(j) In Section 306.1, delete the entire text and substitute as follows: Access for maintenance and replacement. Appliances shall be accessible for inspection, service, repair, and replacement appliances, venting systems or any other piping or ducts not connected to the appliance being inspected, serviced, repaired, or replaced. A level working space at least 30 inches deep and 30 inches wide (762 mm by 762 mm) shall be provided in front of the control side to service an appliance.

(k) In Section 306.5, insert the following text at the end of the first paragraph: Where access involves climbing over parapet walls, the height shall be measured to the top of the parapet wall.

(I) In Section 306.5, insert the following text at the end of item 6: Landing dimensions shall be not less than 18" and not less than the width of the ladder served. A guard rail shall be provided on all open sides of the landing.

(m) In Section 306.5.1, amend to read as follows: 306.5.1 Sloped roofs. Where appliances, equipment, fans, or other components that require service are installed on a roof having a slope of three units vertical in 12 units horizontal (25-percent slope) or greater and having an edge more than 30 inches (762 mm) above grade at such edge, a level platform shall be provided on each side of the appliance or equipment to which access is required for service, repair, or maintenance. The platform shall be not less than 30 inches (762 mm) in any dimension and shall be provided with guards. The guards shall extend not less than 42 inches (1,067 mm) above the platform, shall be constructed so as to prevent the passage of a 21-inch-diameter (533 mm) sphere, and shall comply with the loading requirements for guards specified in the International Building Code. Access shall not require walking on roofs having a slope greater than 4 units vertical in 12 units horizontal (33-percent slope). Where access involves obstructions greater than 30 inches in height, such obstructions shall be provided with ladders installed in accordance with the requirements specified in the International Building Code in the path of travel to and from appliances, fans, or equipment requiring service.

(n) In Amend Section 307.2.1 insert by inserting, after "disposal", "gray water storage or other nonpotable sustainable use" and by inserting the following text after the first sentence: Such piping shall maintain a minimum horizontal slope in the direction of discharge of not less than one-eighth unit vertical in 12

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units horizontal (1-percent slope).

(o) In Section 307.2.2, insert the following text after the second sentence: Joints and connections shall be made in accordance with the applicable provisions of Chapter 7 of the Indiana Plumbing Code ($\frac{675 \text{ IAC } 16}{100}$) relative to the material type.

(p) In Section 307.2.2, delete "an approved method. All horizontal sections of drain piping shall be installed in uniform alignment at a uniform slope" and insert "Table 307.2.2".

(q) Insert Table 307.2.2 to read as follows:

TABLE 307.2.2
CONDENSATE DRAIN SIZING

EQUIPMENT CAPACITY	MINIMUM CONDENSATE PIPE DIAMETER			
Up to 20 tons (70.3 kw) of refrigeration	3/4 inch (19 mm)			
Over 20 tons (70.3 kw) to 40 tons (141 kw) of refrigeration	1 inch (25 mm)			
Over 40 tons (141 kw) to 90 tons (317 kw) of refrigeration	11/4 inch (32 mm)			
Over 90 tons (317 kw) to 125 tons (440 kw) of refrigeration	11/2 inch (38 mm)			
Over 125 tons (440 kw) to 250 tons (879 kw) of refrigeration	2 inch (51 mm)			

(r) In Section 307.2.3, delete, in item 1, "0.0276-inch" and insert "24 gage (nominal 0.0276)".

(s) In Section 307.2.3.1, amend text to read as follows: 307.2.3.1 Water level monitoring devices. On down-flow units and all other coils that have no secondary drain or provisions to install a secondary or auxiliary drain pan, a water-level monitoring device shall be installed inside the primary drain pan. This device shall shut off the equipment served in the event that the primary drain becomes restricted. Devices installed in the drain line shall not be permitted.

(t) Insert Section 307.2.3.2 to read as follows: 307.2.3.2 Appliance, equipment, and insulation in pans. Where appliances, equipment, or insulation are subject to water damage when auxiliary drain pans fill, such portions of the appliances, equipment, and insulation shall be installed above the flood level rim of the pan. Supports located inside of the pan to support the appliance or equipment shall be water resistant and approved.

(Fire Prevention and Building Safety Commission; <u>675 IAC 18-1.5-4</u>; filed Mar 18, 2008, 2:22 p.m.: <u>20080423-IR-675070477FRA</u>, eff 90 days after filing with the Publisher; filed Sep 25, 2012, 2:42 p.m.: <u>20121024-IR-675110448FRA</u>, eff 90 days after filing with the Publisher)

SECTION 3. THE FOLLOWING ARE REPEALED: <u>675 IAC 16-1.3</u>; <u>675 IAC 16-2</u>.

SECTION 4. SECTIONS 1 through 3 of this document take effect ninety days after filing with the Publisher.

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