TITLE 675 FIRE PREVENTION AND BUILDING SAFETY COMMISSION

Proposed Rule

LSA Document #XX-[XXX]

DIGEST

Amends 675 IAC 16-1.4 to update definitions and other provisions to reflect current standards and best practices regarding lead-free pipes and fittings.

675 IAC 16-1.4-3; 675 IAC 16-1.4-7

ARTICLE 16. PLUMBING CODE

SECTION 675 IAC 16-1.4-3 IS AMENDED TO READ AS FOLLOWS:

675 IAC 16-1.4-3 Chapter 2; definitions

Authority: IC 22-13

Affected: IC 10-19-2; IC 22-12; IC 22-13; IC 22-14; IC 22-15; IC 25-4; IC 25-31; IC 36-7-2-9

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: BACFLOW 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 IC 36-7-2-9 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 (675 IAC 17) 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 of materials, and by whose labeling the manufacturer indicates compliance with appropriate standards or performance in a specified manner.
- (20) Amend the definition of Lead-Free Pipe and Fittings to read as follows: LEAD-FREE PIPE AND FITTINGS: Before July 1, 2025, containing not more than 8.0-percent lead. On or after July 1, 2025, containing not more than 8.0-percent lead for water

supply pipe and fittings and containing not more than .25 percent weighted average lead content for drinking water pipe and fittings.

(20) (21) 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) (22) 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) (23) Amend the definition of Registered Design Professional to delete the text and insert as follows: REGISTERED DESIGN PROFESSIONAL. 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.

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

(24) (25) 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) (26) 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) (27) 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.

SECTION 675 IAC 16-1.4-7 IS AMENDED TO READ AS FOLLOWS:

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

Authority: IC 22-13-2

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) Add Section 605.2.1 to read as follows: 605.2.1 Lead Content of Drinking Water Pipe and Fittings. Pipe, pipe fittings, joints, valves, faucets and fixture fittings utilized to supply water for drinking or cooking purposes shall comply with NSF 372 and shall have a weighted average lead content of 0.25 percent of less.
- (e) (d) Amend Table 605.3, WATER SERVICE PIPE, under "copper or alloy tubing" by deleting "M or WM".

- (d) (e) Delete Section 605.3.1 without substitution.
- (e) (f) Amend Table 605.5, by inserting "Cross-linked" in front of "Polyethylene (PEX-AL-PEX)".
- (f) (g) Amend Section 605.22.2 to read as follows: after "A", delete "purple" and after "solvent cement", delete "not purple in color".
- (g) (h) Delete Section 606.4 without substitution
- (h) (i) 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) (j) 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.
- (i) (k) Amend Table 608.1, APPLICATION OF BACKFLOW PREVENTERS, "Backflow preventer for carbonated beverage machines", to delete "low hazard" and insert "high hazard".
- (k) (l) 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.
- (1) (m) 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) (n) 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. Installation 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) (o) Delete the text of 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 of 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) (p) Amend Section 608.16.1 to delete the text and insert as follows: The water supply connection to beverage dispensers shall be protected against the backflow by a listed reduced pressure principle backflow preventer. Copper shall not be used downstream from the backflow preventer.
- (p) (q) Amend Section 608.16.3 as follows: after "transfer fluid", add "(non-potable water)", and after "nontoxic transfer fluid", add "(potable water)".
- (q) (r) Amend Section 608.16.4 to delete the exceptions without substitution.
- (r) (s) Amend Section 608.16.5 as follows: after "A valve", insert "including system zone valves".
- (s) (t) Delete Section 608.17 in its entirety without substitution.