Date: December 10, 2018
Time: 9:00 a.m.
Location: Washington Room, Department of Labor and Industry
443 Lafayette Road No., St. Paul, MN 55117-4344

### Committee Members Present
- Richard Becker
- Rick Jacobs (chair)
- Cathy Tran

### DLI Staff & Visitors
- Suzanne Todnem, General Counsel (DLI)
- Jim Peterson (DLI)
- Brad Jensen (DLI)
- Mike Johnson (J. Berd)
- Matt Marciniak (IAPMO)
- Trevor Ogilvie (City of Minneapolis)
- David Radziej (Metro PHCC)
- Tom Pahkala (UA Plumbers Local 15)
- Dave Wagner (Plumbing Board member)
- Rodger Vantassel
- Cales Hansen (City of Blaine)
- Scott Eggen (City of Minneapolis)
- Adam Hanson (MN ABC)
- Larry Justin (MN ASPE) – via teleconference
- Ruth Thompson (My Plumbing Training) – via teleconference

### Committee Members Absent
- John Flagg
- Mike Herman

1. **Call to Order**
The meeting was called to order by Chair Jacobs at 9:22 a.m. Introductions and housekeeping announcements were made. Attendance was taken; a quorum was met with 3 of 5 members present.

2. **Approval of meeting agenda**
A motion to approve agenda as presented by Becker, seconded by Tran. Agenda approved unanimously.

3. **Regular Business**
Approval of Expense Reports – Jacobs approved the expenses as presented.

4. **Approval of previous meeting minutes**
A motion to approve November 16, 2018, draft minutes as amended by Becker, seconded by Tran. Agenda approved unanimously.
5. **Special Business**
Review RFA’s submitted to the Committee related to the 2018 Uniform Plumbing Code, chapters 3, 4, and 5.

**Chapter 3**
A. RFA PB0102 was submitted by the Department of Labor and Industry, Cathy Tran and contained the following proposals:

1. **301.1 Proposal: Delete part 4714.0301,** amending 2012 UPC sections 301.0; 301.1, 301.1.2

   By deleting rule part 4714.0301, the language in sections 301.0, 301.1 and 301.2, of the 2018 UPC would replace the language in rule part 4714.030. Part 4714.0301 is no longer necessary because the 2018 UPC has addressed and removed non-plumbing language in this section, which was the purpose of the amendment in part 4714.0301.

   Rule part 4714.0301, regarding section 301.1.2 is not necessary as the original amendment original removes the language regarding appendix I to avoid confusion about whether it is adopted or not. It is no longer needed since code section 4715.0050 clarifies by incorporation by reference.

   Todnem noted that the Reviser’s Office may have to renumber or modify the location.

   The Committee agreed that this proposed amendment be forwarded to the Board for consideration.

2. **301.2.5 Proposal: Delete 2018 UPC subsection 301.2.5** in its entirety.

   Existing Buildings In existing buildings or premises in which plumbing installations are to be altered, repaired, or renovated, the Authority Having Jurisdiction has discretionary powers to permit deviation from the provisions of this code, provided that such proposal to deviate is first submitted for proper determination in order that health and safety requirements, as they pertain to plumbing, shall be observed.

   Tran explained this section currently exists in rule part 4714.0101, subparts 3 and .6 so it is not necessary.

   The Committee agreed that this proposed amendment should be forwarded to the Board for consideration.

3. **4714.0314 Proposal: Delete amendments under 4714.0314, Sections 314.0, 314.2, 314.3 and 314.4** to bring in 2018 UPC language for Sections 314.2, 314.3, 314.4, 314.4.1

   UPC section 314.2 has provisions for tunneling and driving in yards and driveways with specific requirements outlined for proper installation using tunneling and driving. Section 314.3 clarifies that open trench excavation for building drainage system within walls of a building must be utilized for proper installation. Section 314.4 and 314.4.1 adds specific requirements for underground thermoplastic pipe and fittings for sewers which previously did not. This will ensure installation will be installed correctly. These sections are needed for proper installation of building drainage system within walls of buildings and thermoplastic pipe and fittings for sewers since installation standards for plastic pipe have been eliminated in the appendixes.

   Tran informed the committee section 314.1 is in conflict with Minnesota OHSA Regulations
The Committee agreed that this proposed amendment should be forwarded to the Board for consideration.

Todnem noted the proposal would be subject to Reviser numbering corrections.

4. Table 313.3 Proposal: Add footnote #6 to “Schedule 40 PVC and ABS DWV” row for “Horizontal” and “Vertical” columns.

Notes:
6. Installations shall compensate for thermal expansion and contraction. Expansion joints shall be utilized in vertical straight runs in excess of thirty (30) feet (9,144 mm) provided they are installed per manufacturer’s installation instructions.
Except piping buried below ground, horizontal and vertical piping must be installed with restraint fittings or a minimum twenty-four (24) inches (610 mm) 45° offset every thirty (30) feet (9144 mm).

Installation standards for plastic drain, waste, and vent (IS5-2006 no longer exists in the 2018 UPC. Furthermore, a nationally recognized standard is not yet available for expansion joints. This proposed note 6 provides acceptable offset methods to compensate for expansion and contraction of plastic DWV pipe for aboveground installation horizontally and vertically for proper support. This proposed language is reasonable and provides specific requirements needed for in design and installation, and consistent enforcement.

Becker raised the the 24” offset, the prescriptive nature of the 24 inches and if other means could achieve the same result. There were also questions as to the support and restraint, and lack of consistent engineering practice, of vertical and horizontal plastic piping.

The question came does the committee wanted to relocate the language in IS5-2006 and insert it as an amendment to the table 313.1 (as adopted in the MN code). Becker suggested that the committee table the issue of thermal expansion, and send to the Plumbing Board without recommendation. It was recommended that representatives of the Plastic Pipe Manufactures be invited to a Plumbing Board meeting to address the expansion issue.

B. PB0103, submitted by Brent Marsolek, presented by David Wagner from the Municipal Water Suppliers. Regarding 2018 UPC section 312.6; Proposal: amendment to 2018 UPC section 312.6 Freezing Protection, and rule part 4714.0609.1 Installation.

Mr. Wagner expressed the submitters concern about the bury depth of water service pipes and the frost depths throughout the state to protect the service pipes from freezing. The RFA proposes requiring the installer to contact the water provider for proper bury depths, and leave the required depth determination to the Authority Having Jurisdiction. Todnem expressed concern with that the reviser’s office may strike the rule as “unfettered discretion” with no objective marker, might not give the regulated party sufficient predictability. Becker stated this would be better addressed in chapter 6, Jacobs suggested this item be tabled until amendments to chapter 6 are reviewed. The Committee agreed to table this discussion until chapter 6 is reviewed.

Chapter 4
A. RFA PB0102 was submitted by the Department of Labor and Industry, Cathy Tran and contained the following proposals:
1. 4714.0409 Proposal: amend rule part 4714.0409 to reflect the additions of nationally recognized standards in the body of the code that are also referenced standards under Chapter 17 of the UPC 2018 (see attachment, PB0102)

Whirlpool pedicure tubs are plumbing appliances and function similarly to typical whirlpool bathtubs. The differences are that the whirlpool pedicure tub size is much smaller than a typical whirlpool bathtub and only feet are submerged instead of the entire body like a typical whirlpool bathtub. Whirlpool pedicure tub fixtures raise concerns of sanitation because disease could be spread through water retained in the tubs and recirculated or unitized jet components similar to a typical whirlpool bathtub, particularly when used in commercial salons. Whirlpool pedicure tubs are intended for submerging only feet so suction and hair entrapment requirements are not safety concerns that need to be addressed here. The whirlpool bathtub standards are ASME A112.19.7, Hydromassage Bathtub Appliances, and IAPMO IGC 155-2008, Pipeless Whirlpool Bathtub Appliances.

Tran stated this proposed amendment adds the 2018 standard to the current amendment in Minnesota rule part 4714.0409.1 for pedicure tubs.

The applicable sections in ASME A112.19.7 that apply to whirlpool pedicure tubs are general requirements that cover material construction, water pump standard UL 1795, circulation/air piping and water retention requirements. The applicable sections of IAPMO IGC 155 are all sections of this standard.

Matt Marciniak informed the Committee that the IAPMO IGC 155-2008 was superseded by ASME A112.19.7-2012\CSA b45.10-12 Hydro Message Bathtub System; Jacobs recommend that references to IAPMO IGC 155 be stricken.

The Committee agreed this proposed amendment should be forwarded to the Board for consideration.

2. 4714.0418, section 418.7 Proposal: Add a reference to other sections (specifically 1017, 1009.1, 1011.1, and 1017.1, as indicated in the RFA).

“418.7 Garage and Parking Area Floor Drains. Floor area drains in open parking areas, including open areas of parking ramps, shall discharge to the storm sewer or to a place of disposal satisfactory to the sewer authority. Floor drains in parking areas that are enclosed, and floor drains in areas open or enclosed that are used for maintenance or as vehicle wash bays, shall discharge to the sanitary sewer if a municipal sewer is available. An oil and flammable liquid interceptor shall be provided complying with 1017 if required by sections 1009.1, 1011.1, and 1017.1.

Exception: Floor drains in private garages serving one- and two-family dwellings may discharge to daylight if approved by the administrative authority.”

The change in this proposed amendment is to clarify the correct code sections where flammable and oily are required under code sections 1009.1, 1011.1, and 1017.1, and not only Section 1017.

History: This was a Minnesota amendment that added a new subsection in Minnesota Rules part 4714 to amend section 418.7 in the last rule adoption. The language requires drains in enclosed garages to discharge to the sanitary sewer while floor drains in open parking areas must discharge to the storm sewer.
• Drains in enclosed garages generally do not collect rainwater, but will collect oil, grease, even vehicle wash waste, and other types of waste from vehicles that need proper treatment and discharge to the sanitary sewer.
• Open areas of parking ramps will collect significant amounts of rainwater and must discharge to the storm sewer with an exception that the municipal sewer authority may determine other approved places of disposal as necessary for open parking ramp drainage.

There is some concern with the definition of “open” from the Building Code.

The Building Code describes “open” for ventilation. Jacobs suggested adding a definition in chapter 2 for the term “Open and Enclosed Garage” to address the different Plumbing and Building Code terms. Todnem suggested that an RFA would be in order to add the definition in Chapter 2. Jacobs recommended the committee refer this to the Plumbing Board for review, and note for an addition into chapter 2 for “Open and Enclosed” parking garage.

Jacobs recommended that the committee close the DLI RFA, and review previous Plumbing Board RFI’s that impact chapter 4, and would need to be reviewed for possible amendments. There were several to address chapter 4714.0414.3 these were tabled by Jacobs for a later date.

3. Section 421.2 Limitation of Hot Water Temperature for Public Lavatories. Proposal: delete Minn. Rule part 4714.0421 to change temperature from 110 degrees F to 120 degrees F because of legionella concerns.

This language has been relocated to section 407.3 of the 2018 UPC so this rule part is no longer necessary. Section 421.2 of 2018 UPC addresses floor sink strainers.

It was noted by Tran that the current Minnesota Rule allows the hot water temperature to be no more than 110 degrees; this is consistent with current Minnesota Energy Code. The Department would allow the temperature to not reference the 120 degree set by the 20018 IAPMO UPC due to concerns of Legionella concerns.

The Committee agreed that this amendment should be forwarded to the Board for consideration.

The Committee completed its review of chapter 3 RFAs and some of the chapter 4 RFAs. Due to time constraints, the Committee concluded discussions and planned to review the remainder of Chapter 4, and begin chapters 5, and 6, at the next meeting, as time permits.

6. Adjournment
Motion to adjourn by Becker, seconded by Tran. Motion passed unanimously.

Respectfully submitted,

Rick Jacobs
Committee Chair
NOTICE OF FINAL INTERPRETATION

On May 11, 2016, the Minnesota Plumbing Board issued a Final Interpretation, which is printed below, pursuant to Minnesota Statutes §§ 326B.435, subd. 2(a)(4), and 326B.127, subd. 5.

Any person aggrieved by this Final Interpretation may appeal it within 30 days of its issuance in accordance with Minnesota Statutes chapter 14.

Questions may be directed to Wendy Willson Legge, telephone number: 651-284-5019, email: wendy.w.legge@state.mn.us.

FINAL INTERPRETATION

Inquiry: PB0083
Subject: Air gap fittings and drainage from domestic dishwashers
Submitted by: Patrick Lorio, City of Minneapolis, 250 South 4th Street, 300, Minneapolis, MN 55415
Approved by: Minnesota Plumbing Board, by John Parizek, Chair
Date Received: April 14, 2016
Issue Date: May 11, 2016

Question: May a domestic dishwasher be drained to a lower floor, without the installation of an approved air gap fitting with an indirect drain?

Answer: No. The Minnesota Plumbing Board interprets UPC Sections 414.3 and 807.4 as incorporated into the Minnesota Plumbing Code by Minnesota Rule 4714.0050, to require a domestic dishwasher to discharge through a listed air gap fitting. The air gap fitting must be referenced in chapter 14 of the 2012 UPC as amended by Minnesota Rules chapter 4714.

Commentary: This request for interpretation was considered at the April 19, 2016 meeting of the Minnesota Plumbing Board. All parties had an opportunity to be heard. As required by
Minnesota Statutes § 326B.127, subd. 5, the Minnesota Plumbing Board will consider this final interpretation for adoption as part of the Minnesota Plumbing Code.

Date: May 11, 2016

s/s
John Parizek, Chair
Minnesota Plumbing Board
Plumbing Board

Request for Action

NAME OF SUBMITTER: Joel S. Hoistad/NW Chapter of Building Officials

PURPOSE OF REQUEST (check all that apply): □ New Code □ Code Amendment □ Repeal of an existing Rule

The Minnesota Plumbing Code (MN Rules, Chapter 4714) is available at www.dli.mn.gov/CCLD/PlumbingCode.asp

Specify the purpose of the proposal: If recommendation for code change for appurtenance or method (check all that apply)

☒ Appurtenance (e.g., water conditioning equipment) ☐ Test Method

☒ Other (describe) - Redundancy - Dishwasher listed air gap device

Does your submission contain a Trade Secret? □ Yes ☒ No

If Yes, mark “TRADE SECRET” prominently on each page of your submission that you believe contains trade secret information. Minnesota Statutes, section 13.37, subdivision 1(b), defines “trade secret” as follows:

“Trade secret information” means government data, including a formula, pattern, compilation, program, device, method, technique or process (1) that was supplied by the affected individual or organization, (2) that is the subject of efforts by the individual or organization that are reasonable under the circumstances to maintain its secrecy, and (3) that derives independent economic value, actual or potential, from not being generally known to, and not being readily ascertainable by proper means by, other persons who can obtain economic value from its disclosure or use.

Note that, although “trade secret” information is generally not public, the Board and its committees may disclose “trade secret” information at a public meeting of the Board or committee if reasonably necessary for the Board or committee to conduct the business or agenda item before it (such as your request.) The record of the meeting will be public.

Describe the proposed change. The Minnesota Plumbing Code (Minnesota Rules Chapter 4714) is available via the World Wide Web at http://www.revisor.leg.state.mn.us/arule/4714/

NOTE:
- Please review the Minnesota Plumbing Code and include all parts of the Code that require revision to accomplish your purpose.
- The proposed change, including suggested rule language, should be specific. If modifying existing rule language, underline new words and strike through deleted words. Please list all areas of the Minnesota Plumbing Code that would be affected.

4714.0414.3 Drainage Connection - Domestic dishwashing machines shall discharge indirectly through an air gap fitting in accordance with section 897.4 into a waste receptor, away branch fitting or the tail piece of a kitchen sink, or dishwasher connection of a food waste disposer. Commercial dishwashing machines shall discharge indirectly through an air gap or direct connection in accordance with section 704.3 with floor drain protection.

4714.0897.4 Domestic Dishwashing Machine - No domestic dishwashing machine shall be directly connected to a drainage system or food waste disposer without the use of an approved dishwasher air gap fitting on the discharge side of the dishwashing machine. Listed air gaps shall be installed with the flood level (FL) marking at or above the flood level of the sink or drainboard, whichever is higher.

This material can be made available in different forms, such as large print, Braille or on a tape. To request, call 1-800-342-5354 (DIAL-DLI).
Need and Reasons For the Change. Thoroughly explain the need and why you believe it is reasonable to make this change. During a rulemaking process, the need and reasonableness of all proposed rule changes must be justified; therefore, a detailed explanation is necessary to ensure the Board thoroughly considers all aspects of the proposal.

The need for this change is that the device in question has added cost to projects unnecessarily, has caused water damage when these devices fail, and were never justified with a need for them in the first place. We couldn't find record of even one instance where a backup in a kitchen sink was under enough pressure to force waste water back into a dishwasher causing illness. It would be reasonable to eliminate this code requirement, as we have qualified (MN Licensed) plumbers installing the majority of these dishwashers and they are being installed properly, virtually eliminating any possible back up of the sewer into dishwashing machines. Also, in the 2015 & 2018 National Standard Plumbing Code (which I have attached to this email), it is giving the consumer and the installer an option of the high loop under the countertop OR be connected to a deck-mounted dishwasher air gap fitting.

If your product/method standard(s) is not currently listed in both national codes, your Request For Action will not be considered by the Board or its committees, however, you are welcome to present at any Board meeting during the Open Forum section of the Agenda.

The proposal must be accompanied by copies of any published standards, the results of testing, and copies of any product listings, as documentation of the health, sanitation and safety performance of any materials, methods, fixtures, and/or appurtenances. If none are available, please explain:

Primary reason for change: (check only one)
- Protect public, health, safety, welfare, or security
- Mandated by legislature
- Lower construction costs
- Provide uniform application
- Encourage new methods and materials
- Clarify provisions
- Change made at national level
- Situation unique to Minnesota
- Other (describe)

Anticipated benefits: (check all that apply)
- Save lives/reduce injuries
- Improve uniform application
- Mandated by legislature
- Increase health of indoor environment
- Provide more construction alternatives
- Provide more affordable construction
- Increase building property
- Drinking water quality protection
- Decrease cost of enforcement
- Other (describe)

Economic impact: (explain all answers marked "yes")
1. Does the proposed change increase or decrease the cost of enforcement?  Yes  No  If yes, explain

2. Does the proposed change increase or decrease the cost of compliance?  Yes  No  If yes, explain
   Include the estimated cost increase or decrease, and who will bear the cost increase or experience the cost decrease:
   The proposed change would decrease the cost of compliance - less holes to cut into very costly countertops/sinks. The savings will start at the plumber doing the work and will be passed along to the end consumer.

3. Are there less costly or intrusive methods to achieve the proposed change?  Yes  No  If yes, explain
   The less costly or intrusive would be to eliminate the requirement for this air gap device as it is redundant.

4. Were alternative methods considered?  Yes  No  If no, why not?  If yes, explain what alternative methods were considered and why they were rejected.
   There were never any alternate ways indicated by code to achieve the end result, and none that industry could come up with.

5. If there is a fiscal impact, try to explain any benefit that will offset the cost of the change. If there is no impact, mark "N/A." N/A

6. Provide a description of the classes of persons affected by a proposed change, who will bear the cost, and who will benefit. There will be no cost - some savings of dollars to end consumers who will also be the beneficiary of this code change.

7. Does the proposed rule affect farming operations? (Agricultural buildings are exempt from the Minnesota Building Code under Minnesota Statutes, Section 326B.121.)  Yes  No  If yes, explain

Are there any existing Federal Standards?  Yes  No  If yes, list:

2015 & 2018 National Standard Plumbing Code

Are there any differences between the proposed change and existing federal regulations?  Yes  No
- Not applicable
- Unknown
   If yes, describe each difference & explain why each difference is needed & reasonable.
   The National Standard gives the consumer and the installer an option of a high loop under the countertop or a deck mounted air gap, whereas the Minnesota Plumbing Code does not give an option.

Minnesota Statutes, section 14.127, requires the Board to determine if the cost of complying with proposed rule changes in the first year after the changes take effect will exceed $25,000 for any small business or small city. A small business is defined as a business (either for profit or nonprofit) with less than 50 full-time employees and a small city is defined as a city with less than ten full-time employees.

During the first year after the proposed changes go into effect, will it cost more than $25,000 for any small business or small city of comply with the change?  Yes  No  If yes, identify by name the small business(es or small city(ies).
Will this proposed plumbing code amendment require any local government to adopt or amend an ordinance or other regulation in order to comply with the proposed plumbing code amendment? ☐ Yes ☒ No. If yes, identify by name the government(s) and ordinance(s) that will need to be amended in order to comply with the proposed plumbing code amendment.

Additional supporting documentation may also be attached to this form. Are there any additional comments you feel the Committee/Board may need to consider? If so, please state them here:

Please consider the letter written by a local plumber as testimony and the 2015 & 2018 National Standard Plumbing Code.

Information regarding submitting this form:
- Submissions are received and heard by the Committee on an “as received” basis. Any missing documentation will delay the process, and your proposal will be listed as the date it was received “Complete.”
- Submit any supporting documentation to be considered, such as manufacturer’s literature, approvals by other states, and engineering data electronically to DLI.CCLDBOARDS@state.mn.us. Once your Request For Action form has been received, it will be assigned a file number. Please reference this file number on any correspondence and supplemental submissions.
- For copyrighted materials that must be purchased from publishers, such as published standards, product approvals or testing data, listings by agencies (IAPMO, ASSE, ASTM, etc.,) you may send just 2 copies, along with written permission from the publisher to distribute the materials at meetings, via U.S. Mail to: Plumbing Board, c/o Department of Labor and Industry, 443 Lafayette Road No., St. Paul, MN 55155-4344. For materials that must be submitted by U.S. Mail, please include a copy of your “Request For Action” form originally submitted and reference your assigned RFA file number.

Information for presentation to the Committee and/or Board:
- Limit presentations to 5 minutes or less.
- Be prepared to answer questions regarding the proposal and any documentation.

Information regarding Committee and/or Board function:
- The Plumbing Board or designated Committee.

I understand that any action is a recommendation to the Plumbing Board and is not to be considered final action.

NAME AND E-MAIL ADDRESS FIRM NAME
Joel S. Hoistad - jhoistad@breckenridgemn.net NW Chapter of Building Officials
NAME, PHONE NUMBER AND E-MAIL ADDRESS OF PRESENTER TO THE COMMITTEE (if different):
SAME AS ABOVE
ADDRESS CITY STATE ZIP CODE
420 Nebraska Ave Breckenridge MN 56520
PHONE (218)-643-1431 ext. 106 SIGNATURE (original or electronic) DATE 6-19-18

For Assistance or questions on completing this form, contact Cathy Tran, Department of Labor and Industry at 651-284-5898.
7.14.4 Water Supply
An adequate supply of water shall be provided for proper operation of food waste disposers.

7.15 DISHWASHING MACHINES

7.15.1 Compliance
   a. Domestic dishwashing machines shall comply with UL 749 and AHAM DW-1. The water supply to domestic dishwashing machines shall be protected from back siphonage by an integral air gap, an other internal means, or a vacuum breaker. Air gap fittings for drum discharge shall comply with ASSE 1021.

7.15.2 Residential Sink and Dishwasher
The discharge from a residential kitchen sink and dishwasher may discharge through a single 1-1/2" trap. The discharge line from the dishwasher shall be not less than the size recommended by the dishwasher manufacturer. It shall either be looped up and securely fastened to the underside of the counter or be connected to a deck-mounted dishwasher air gap fitting. The discharge shall then be connected to a branch inlet wye fitting between the sink waste outlet and the trap inlet. The discharge may also drain indirectly into a trapped standpipe, or receptor. See Figure 7.15.2
7.15.3 Residential Sink, Dishwasher, and Food Waste Disposer

The discharge from a residential kitchen sink, dishwasher, and food waste disposer may discharge through a single 1-1/2" trap. The discharge line from the dishwasher shall be not less than the size recommended by the dishwasher manufacturer. It shall either be looped up and securely fastened to the underside of the counter or be connected to a deck-mounted dishwasher air gap fitting. The discharge shall then be connected either to the chamber of the food waste disposer or to a branch inlet waste fitting between the food waste disposer outlet and the trap inlet. The discharge may also drain indirectly into a trapped standpipe or receptacle.

See Figure 7.15.3
PLUMBING FIXTURES, FIXTURE FITTINGS AND PLUMBING APPLIANCES

NOTES:
1. The water supply to a commercial food waste disposer must be protected against backspihonage by a vacuum breaker.

Figure 7.14.3
A COMMERCIAL FOOD WASTE DISPOSER INSTALLATION

7.15 DISHWASHING MACHINES

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7.15.3 Residential Sink, Dishwasher, and Food Waste Disposer
The discharge from a residential kitchen sink, dishwasher, and food waste disposer may discharge through a single 1-1/2" trap. The discharge line from the dishwasher shall be not less than the size recommended by the dishwasher manufacturer. It shall either be looped up and securely fastened to the underside of the counter or be connected to a deck-mounted dish...

2018 National Standard Plumbing Code - Illustrated
7.16.4 Commercial Dishwashing Machine
a. Commercial dishwashing machines shall be indirectly connected to the drainage system through either an air gap or an air break. When the machine is within 5 feet developed length of a trapped and vented floor drain, an indirect waste pipe from the dishwasher may be connected to the inlet side of the floor drain trap. See Figure 7.15-A.
b. Commercial dishwashers shall be permitted to discharge through a grease interceptor in accordance with Section 6.2.6.a.

7.16 FLOOR DRAINS, AREA DRAINS, AND TRENCH DRAINS

7.16.1 Compliance
Floor drains, area drains, and trench drains shall comply with ASME A112.6.3 or, if stainless steel, ASME A112.3.1.

7.16.2 Grease Free Area and Strainer or Sediment Bucket
a. The free area of the top grate or strainer grate for floor drains, area drains, and trench drains shall comply with ASME A112.6.3 based on their outlet connection size. Where floor drains and area drains receive other than clear water waste, they shall include an internal secondary outlet strainer or removable metal sediment bucket to retain solids.
b. The trap seal for floor drains shall be not less than 2 inches deep.
c. Where infrequently used floor drains are subject to evaporation of their trap seals, they shall either 1) be provided with a 4-inch deep trap seal and have an accessible means to replenish, or 2) be fed from an automatic trap seal priming device complying with ASSE 1018 or ASSE 1004, or 3) be fitted with a barrier type floor drain trap seal protection device complying with ASSE 1072.
d. Where traps are automatically primed, the priming connection shall be above the weir of the trap. See Figures 7.16.2-A through -C

7.16.3 Size of Floor Drains
Floor drains shall be not less than 2" pipe size and be sized on the drain pipe size required for the floor drain application.

7.16.4 Required Locations for Floor Drains
a. Floor drains shall be provided in the following areas:
   1. Toilet rooms containing either one water closet and one wall hung urinal, two or more water closets, or two or more wall hung urinals, except in a dwelling unit.
   2. Commercial kitchens.
   3. Common Laundry Rooms

7.16.5 Walk-in Coolers and Freezers
Floor drains located in walk-in coolers and walk-in freezers where food or other products for human consumption are
6-5-18

City of Breckenridge

Joel Hoistad Building Official

Good Morning Joel

I just want to take a minute of your time to discuss dishwasher air gaps that are now being enforced. I’ve had many sometimes heated discussions with home owners as far as why we had to drill a hole and install an above counter air gap in their beautiful and expensive counter top. Also there has been issues with some people as far as the noise emitting from the air gap. Being in the plumbing service business, we have seen many instances of the customer disconnecting them when they have gone bad and leaked on the counter. I just wanted to touch base with you to see if there are others that are experiencing the same issues, it seem to be a shame to have to have something like that protruding through the counter top. I’ve been a plumber for over 40 years and I understand that we are protecting the health of our customers but I have not had an issue with mounting them to the bottom of the counter top. The UPC allows this in many states. I have talked to many plumbers who are feeling the same as I and am wondering if this issue could possibly be brought to the table for some consideration. We would appreciate any help you could give us on this issue. Thank you for your time.

Sincerely

Tim Schmidt

Mn PM059367

ND 8901
Plumbing Board
Request for Action

NAME OF SUBMITTER: Cathy Tran, DLI

PURPOSE OF REQUEST (check all that apply):
☐ New Code
☐ Code Amendment
☐ Repeal of an existing Rule

The Minnesota Plumbing Code (MN Rules, Chapter 4714) is available at www.dli.mn.gov/CCLD/PlumbingCode.asp

Specify the purpose of the proposal: If recommendation for code change for appurtenance or method (check all that apply)
☐ Appurtenance (e.g., water conditioning equipment)
☐ Test Method
☐ Other (describe)

Does your submission contain a Trade Secret? ☐ Yes ☐ No
If Yes, mark “TRADE SECRET” prominently on each page of your submission that you believe contains trade secret information. Minnesota Statutes, section 13.37, subdivision 1(b), defines “trade secret” as follows:

“Trade secret information” means government data, including a formula, pattern, compilation, program, device, method, technique or process (1) that was supplied by the affected individual or organization, (2) that is the subject of efforts by the individual or organization that are reasonable under the circumstances to maintain its secrecy, and (3) that derives independent economic value, actual or potential, from not being generally known to, and not being readily ascertainable by proper means by, other persons who can obtain economic value from its disclosure or use.

Note that, although “trade secret” information is generally not public, the Board and its committees may disclose “trade secret” information at a public meeting of the Board or committee if reasonably necessary for the Board or committee to conduct the business or agenda item before it (such as your request.) The record of the meeting will be public.

Describe the proposed change. The Minnesota Plumbing Code (Minnesota Rules Chapter 4714) is available via the World Wide Web at http://www.revisor.leg.state.mn.us/arule/4714/

NOTE:
• Please review the Minnesota Plumbing Code and include all parts of the Code that require revision to accomplish your purpose.
• The proposed change, including suggested rule language, should be specific. If modifying existing rule language, underline new words and strike through deleted words. Please list all areas of the Minnesota Plumbing Code that would be affected.

See attached document for Chapters 3, 4, 5
Need and Reasons For the Change. Thoroughly explain the need and why you believe it is reasonable to make this change. During a rulemaking process, the need and reasonableness of all proposed rule changes must be justified; therefore, a detailed explanation is necessary to ensure the Board thoroughly considers all aspects of the proposal. See attached document for Chapters 3, 4 & 5

If your product/method standard(s) is not currently listed in both national codes, your Request For Action will not be considered by the Board or its committees, however, you are welcome to present at any Board meeting during the Open Forum section of the Agenda.

The proposal must be accompanied by copies of any published standards, the results of testing, and copies of any product listings, as documentation of the health, sanitation and safety performance of any materials, methods, fixtures, and/or appurtenances. If none are available, please explain:

Please attach electronic scanned copies of any literature, standards and product approvals or listings. Printed or copyrighted materials, along with written permission from the publisher to distribute the materials at meetings, should be sent to the Plumbing Board, c/o Department of Labor and Industry, 443 Lafayette Road No., St. Paul, MN 55155-4344.

***Please remember to attach all necessary explanations and supporting documentation*** Page 2 of 4
Primary reason for change: (check only one)

☐ Protect public, health, safety, welfare, or security
☐ Mandated by legislature
☐ Lower construction costs
☐ Provide uniform application
☐ Encourage new methods and materials
☐ Clarify provisions
☐ Change made at national level
☐ Situation unique to Minnesota
☐ Other (describe)

Anticipated benefits: (check all that apply)

☐ Save lives/reduce injuries
☐ Provide more affordable construction
☐ Improve uniform application
☐ Provide building property
☐ Improve health of indoor environment
☐ Drinking water quality protection
☐ Provide more construction alternatives
☐ Decrease cost of enforcement
☐ Reduce regulation
☐ Other (describe)

Economic impact: (explain all answers marked “yes”)
1. Does the proposed change increase or decrease the cost of enforcement? ☐ Yes ☐ No If yes, explain

2. Does the proposed change increase or decrease the cost of compliance? ☐ Yes ☐ No If yes, explain
Include the estimated cost increase or decrease, and who will bear the cost increase or experience the cost decrease:

3. Are there less costly or intrusive methods to achieve the proposed change? ☐ Yes ☐ No If yes, explain

4. Were alternative methods considered? ☐ Yes ☐ No If no, why not? If yes, explain what alternative methods were considered and why they were rejected.

5. If there is a fiscal impact, try to explain any benefit that will offset the cost of the change. If there is no impact, mark “N/A.”

6. Provide a description of the classes of persons affected by a proposed change, who will bear the cost, and who will benefit.

7. Does the proposed rule affect farming operations? (Agricultural buildings are exempt from the Minnesota Building Code under Minnesota Statutes, Section 326B.121.) ☐ Yes ☐ No If yes, explain

Yes No If yes, list:

Are there any existing Federal Standards? ☐ Yes ☐ No If yes, list:

Are there any differences between the proposed change and existing federal regulations? ☐ Yes ☐ No ☐ Not applicable ☐ Unknown If yes, describe each difference & explain why each difference is needed & reasonable.

Minnesota Statutes, section 14.127, requires the Board to determine if the cost of complying with proposed rule changes in the first year after the changes take effect will exceed $25,000 for any small business or small city. A small business is defined as a business (either for profit or nonprofit) with less than 50 full-time employees and a small city is defined as a city with less than ten full-time employees.
During the first year after the proposed changes go into effect, will it cost more than $25,000 for any small business or small city of comply with the change? ☐ Yes ☐ No If yes, identify by name the small business(es or small city(ies).
Will this proposed plumbing code amendment require any local government to adopt or amend an ordinance or other regulation in order to comply with the proposed plumbing code amendment?  Yes  No. If yes, identify by name the government(s) and ordinances(s) that will need to be amended in order to comply with the proposed plumbing code amendment.

Additional supporting documentation may also be attached to this form. Are there any additional comments you feel the Committee/Board may need to consider? If so, please state them here:

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- For copyrighted materials that must be purchased from publishers, such as published standards, product approvals or testing data, listings by agencies (IAPMO, ASSE, ASTM, etc.,) you may send just 2 copies, along with written permission from the publisher to distribute the materials at meetings, via U.S. Mail to: Plumbing Board, c/o Department of Labor and Industry, 443 Lafayette Road No., St. Paul, MN 55155-4344.
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Information for presentation to the Committee and/or Board:
- Limit presentations to 5 minutes or less.
- Be prepared to answer questions regarding the proposal and any documentation.

Information regarding Committee and/or Board function:
- The Plumbing Board or designated Committee.

I understand that any action is a recommendation to the Plumbing Board and is not to be considered final action.

NAME AND E-MAIL ADDRESS
Cathy Tran, Cathy.tran@state.mn.us

FIRM NAME
DLI

NAME, PHONE NUMBER AND E-MAIL ADDRESS OF PRESENTER TO THE COMMITTEE (if different):
651/284-5898

ADDRESS
443 Lafayette Road

CITY
St Paul

STATE
MN

ZIP CODE

PHONE
651/284-5898

SIGNATURE (original or electronic)
Cathy Tran

DATE
11/29/18

For Assistance or questions on completing this form, contact Cathy Tran, Department of Labor and Industry at 651-284-5898.

For Office/Committee Use Only
Proposal received completed?  Yes  No
Date Proposer notified of gaps:  Mode of notification (e.g., e-mail) Date returned to Proposer: Date materials re-received:

***Please remember to attach all necessary explanations and supporting documentation*** Page 4 of 4
<table>
<thead>
<tr>
<th>Code Section</th>
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</tr>
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<tbody>
<tr>
<td>4714.0301, Section 301.1</td>
<td>Delete proposed amendments under Chapter 4714.0301, Section 301.0; 301.1, 301.1.2 and recommend keeping 2018 UPC Sections 301.0, 301.1 and 301.2.</td>
<td>4714.0301, Section 301.1 is no longer needed since the UPC 2018 has addressed and removed non-plumbing language in this section which was the intent of the original amendment. 4714.0301, Section 301.1.2 is not necessary as the original amendment original removes the language regarding appendix I to avoid confusion about whether it is adopted or not. It is no longer needed since code section 4715.0050 clarifies by incorporation by reference.</td>
</tr>
<tr>
<td>301.2.5 Existing Buildings</td>
<td>In existing buildings or premises in which plumbing installations are to be altered, repaired, or renovated, the Authority Having Jurisdiction has discretionary powers to permit deviation from the provisions of this code, provided that such proposal to deviate is first submitted for proper determination in order that health and safety requirements, as they pertain to plumbing, shall be observed.</td>
<td>Previously deleted, 4714.0301, section 301.1.3. The proposed amendment deletes this UPC subsection in its entirety. Plumbing in existing buildings is addressed in part 4714.0101, subparts 3 and 6.</td>
</tr>
<tr>
<td>4714.0314 314.0 TRENCHING, EXCAVATION, AND BACKFILL</td>
<td>Delete amendments under 4714.0314, Sections 314.0, 314.2, 314.3 and 314.4 to keep 2018 UPC, Sections 314.2, 314.3, 314.4, 314.4.1 for recommending to the plumbing board for adoption. Section 314.1 remains as deleted.)</td>
<td>Section 314.2 has provisions for tunneling and driving in yards and driveways with specific requirements outlined for proper installation using tunneling and driving. Section 314.3 clarifies that open trench excavation for building drainage system within walls of a building must be utilized for proper installation. Section 314.4 and 314.4.1 adds specific requirements for underground thermoplastic pipe and fittings for sewers which previously did not. This will ensure installation will be installed correctly. These sections are needed for proper installation of building drainage system within walls of buildings and thermoplastic pipe and fittings for sewers since installation standards for plastic pipe have been eliminated in the appendixes.</td>
</tr>
<tr>
<td>Table 313.1 Hangers and Supports</td>
<td>Add note 6 to “Schedule 40 PVC and ABS DWV” row for “Horizontal” and “Vertical” columns.</td>
<td>Installation standards for plastic drain, waste, and vent no longer exists in the 2018 UPC. Furthermore, a nationally recognized standard is not yet available for expansion joints. This proposed note 6 provides acceptable offset methods to compensate for expansion.</td>
</tr>
<tr>
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<tr>
<td>UPC Table 313.1 is amended:</td>
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<td></td>
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<td><strong>Notes:</strong></td>
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<td>6. Installations shall compensate for thermal expansion and contraction.</td>
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<td>Expansion joints shall be utilized in vertical straight runs in excess of thirty (30) feet (9,144 mm) provided they are installed per manufacturer’s installation instructions.</td>
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<td></td>
</tr>
<tr>
<td>Except piping buried below ground, horizontal and vertical piping must be installed with restraint fittings or a minimum twenty-four (24) inches (610 mm) 45° offset every thirty (30) feet (9144 mm).</td>
<td>Except piping buried below ground, horizontal and vertical piping must be installed with restraint fittings or a minimum twenty-four (24) inches (610 mm) 45° offset every thirty (30) feet (9144 mm).</td>
<td></td>
</tr>
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<p>| 4714.0409, Section 409.1 Bathtubs and Whirlpool Bathtubs. | 409.1 Application. Bathtubs and whirlpool bathtubs shall comply with the applicable standards referenced in Table 1401.1. Bathtubs shall comply with ASME A112.19.1/CSA B45.2, ASME A112.19.2/CSA B45.1, ASME A112.19.3/CSA B45.4, CSA B45.5/IAPMO Z124, or CSA B45.12/IAPMO Z402. Whirlpool bathtubs shall comply with ASME A112.19.7/CSA B45.10. Pressure sealed doors within a bathtub and or whirlpool bathtub enclosure shall comply with the applicable standards referenced in Table 1401.1. ASME A112.19.15. Whirlpool pedicure tubs shall comply with general requirements and water retention sections of ASME A112.19.7, or IAPMO IGC 155, Pipeless Whirlpool Bathtub Appliances. | The proposed amendments are reflecting the additions of nationally recognized standards in the body of the code that are also referenced standards under Chapter 17 of the UPC 2018. |</p>
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<td>4714.0418, section 418.7 Garage and Parking Area Drains</td>
<td><strong>418.7 Garage and Parking Area Floor Drains.</strong> Floor area drains in open parking areas, including open areas of parking ramps, shall discharge to the storm sewer or to a place of disposal satisfactory to the sewer authority. Floor drains in parking areas that are enclosed, and floor drains in areas open or enclosed that are used for maintenance or as vehicle wash bays, shall discharge to the sanitary sewer if a municipal sewer is available. An oil and flammable liquid interceptor complying with Section 1017 shall be provided if required by sections 1009.1, 1011.1, and 1017.1. <strong>Exception:</strong> Floor drains in private garages serving one- and two-family dwellings may discharge to daylight if approved by the administrative authority.</td>
<td>The change in this proposed amendment is to clarify the correct code sections where flammable and oily are required under code sections 1009.1, 1011.1, and 1017.1, and not only Section 1017. History: This was a Minnesota amendment that added a new subsection M.R. 4714, Section 418.7 in the last rule adoption. The language requires drains in enclosed garages to discharge to the sanitary sewer while floor drains in open parking areas must discharge to the storm sewer. • Drains in enclosed garages generally do not collect rainwater, but will collect oil, grease, even vehicle wash waste, and other types of waste from vehicles that need proper treatment and discharge to the sanitary sewer. • Open areas of parking ramps will collect significant amounts of rainwater and must discharge to the storm sewer with an exception that the municipal sewer authority may determine other approved places of disposal as necessary for open parking ramp drainage.</td>
</tr>
<tr>
<td>Section 421.2 Limitation of Hot Water Temperature for Public Lavatories.</td>
<td>M.R. 4714.0421, Section 421.2. is deleted.</td>
<td>This language has been relocated to a new section of the UPC 2018, Section 407.3 and therefore, creates redundant requirement and conflicts with Section 421.2 of 2018 UPC which is now for floor sink strainers.</td>
</tr>
<tr>
<td>4714.0501, Section 501.1 Applicability</td>
<td><strong>501.1 Applicability.</strong> The regulations of this chapter as amended in this code shall govern the construction, location, and installation of fuel-burning and other water heaters heating potable water. The minimum capacity for storage water heaters shall be in accordance with the first-hour rating listed in Table 501.1(2). Design, construction, and workmanship shall be in accordance with accepted engineering practices, manufacturer's instructions, and applicable standards and shall be of such character as to secure the results sought to be obtained by this code. No water heater shall be hereinafter installed that does not comply with the</td>
<td>The proposed amendment reflects the language in the 2018 UPC adopting water heater standards for different types of water heater while deleting language “together with chimneys, vents, and their connectors” because it’s not plumbing. Adopting nationally recognized standards provides clear and consistent requirements for industry and regulators.</td>
</tr>
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<td><strong>4714.0504, Subpart 2. Section 504.6 Temperature, Pressure, and Vacuum Relief</strong></td>
<td>The installation of temperature, pressure, and vacuum relief devices, or combinations thereof, shall be installed in accordance with the terms of their listings and the manufacturer's installation instructions. A shutoff valve shall not be placed between the relief valve and the water heater or on discharge pipes between the valves and the atmosphere. The hourly British thermal units (Btu) (kW·h) discharge capacity or the rated steam relief capacity of the device shall be not less than the input rating of the water heater. Discharge piping shall be installed in accordance with Section 608.5.</td>
<td>The proposed amendment is needed to better coordinate safety relief discharge requirements to exist in one location Section 608.5. This provides consistent language with UPC 2018.</td>
</tr>
<tr>
<td><strong>4714.0507, Subpart 2. Section 507.5 Relief Valve Discharge.</strong></td>
<td>Discharge from a relief valve into a water heater pan shall be prohibited. Discharge relief valves shall terminate to a safe place of disposal or within 18 inches of the floor. <strong>Drainage Pan.</strong> Where a water heater is located in an attic, in or on an attic ceiling assembly, floor-ceiling assembly, or floor-subfloor assembly where damage results from a leaking water heater, a watertight pan of corrosion-resistant materials shall be installed beneath the water heater with not less than ¾ of an inch (20 mm) diameter drain to an approved location. Such pan shall be not less than 1½ inches (38 mm) in depth.</td>
<td>Relief valve discharge has been coordinated and relocated in section 608.5, and consistent with proposed change in section 504.6. The proposed amendment is not significant but rather reflects the necessary relocation and coordination of language in the 2018 UPC for drainage pan.</td>
</tr>
<tr>
<td><strong>4714.0508 APPLIANCES ON ROOFS.</strong></td>
<td>UPC sections 508.0 to 508.4 508.3.3 are deleted in their entirety.</td>
<td>The proposed amendment keeps section 508.4 which allows water heaters to be located in ceilings, attics and crawlspaces when installed in accordance with the requirements of 508.4 and consistent with national code standards.</td>
</tr>
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<tr>
<td>4714.0509</td>
<td>UPC section 509.15 is deleted.</td>
<td>4715.0509 deletes UPC 509.0 to 509.14, but needs to amend to include deletion of 509.15. Venting of appliances is not plumbing.</td>
</tr>
<tr>
<td>Venting of Appliance</td>
<td></td>
<td></td>
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</table>
The Minnesota Plumbing Code (MN Rules, Chapter 4714) is available at [www.dli.mn.gov/CCLD/PlumbingCode.asp](http://www.dli.mn.gov/CCLD/PlumbingCode.asp)

Specify the purpose of the proposal: If recommendation for code change for appurtenance or method (check all that apply)

☐ New Code  ☒ Code Amendment  ☐ Repeal of an existing Rule

Brent Marsolek

Name of Submitter

Purpose of Request

☐ Appurtenance (e.g., water conditioning equipment)  ☐ Test Method  ☒ Other (describe)

Other (describe)

Water service depth of cover outside of structure

Does your submission contain a Trade Secret?  ☐ Yes  ☒ No

If Yes, mark “TRADE SECRET” prominently on each page of your submission that you believe contains trade secret information. Minnesota Statutes, section 13.37, subdivision 1(b), defines “trade secret” as follows:

“Trade secret information” means government data, including a formula, pattern, compilation, program, device, method, technique or process (1) that was supplied by the affected individual or organization, (2) that is the subject of efforts by the individual or organization that are reasonable under the circumstances to maintain its secrecy, and (3) that derives independent economic value, actual or potential, from not being generally known to, and not being readily ascertainable by proper means by, other persons who can obtain economic value from its disclosure or use.

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Describe the proposed change. The Minnesota Plumbing Code (Minnesota Rules Chapter 4714) is available via the World Wide Web at [http://www.revisor.leg.state.mn.us/arule/4714/](http://www.revisor.leg.state.mn.us/arule/4714/)

NOTE:

- Please review the Minnesota Plumbing Code and include all parts of the Code that require revision to accomplish your purpose.

- The proposed change, including suggested rule language, should be specific. If modifying existing rule language, underline new words and strike through deleted words. Please list all areas of the Minnesota Plumbing Code that would be affected.

The intention of this proposal is to augment Chapter 312.6 of the Minnesota Plumbing Code by amending Chapter 609 of the Universal Plumbing Code as shown in Attachment "A", attached hereto and incorporated herein.

See attached Attachment "A"
**Need and Reasons For the Change.** Thoroughly explain the need and why you believe it is reasonable to make this change. During a rulemaking process, the need and reasonableness of all proposed rule changes must be justified; therefore, a detailed explanation is necessary to ensure the Board thoroughly considers all aspects of the proposal.

The current standard for depth of bury of water service piping outside of structures is inadequate for protection from freezing. Frost depth, as defined by MSBC Rules 1303.1600 (Attachment "B"), is divided into two sections within the State of Minnesota. The southern half of the state has a defined frost depth of 42 inches and the northern half of the state has a defined frost depth of 60 inches. With the current code and these definitions, depth of bury for water service piping outside of a structure would be 54 and 72 inches, depending on which zone the installation would take place in. Data provided by The Minnesota Department of Transportation regarding frost and thaw depths has been compiled to support the argument that this depth of bury is inadequate (Attachment "C").

Additionally, different soil types throughout the State is an important consideration in determining proper depth of bury. It is proposed that soil types and their affects on determining proper depth of bury is greatly varied throughout the State and as such local authorities having jurisdiction are best equipped to make the determination of proper depth of bury in their area of governance.

If your product/method standard(s) is not currently listed in both national codes, your Request For Action will not be considered by the Board or its committees, however, you are welcome to present at any Board meeting during the Open Forum section of the Agenda.

The proposal must be accompanied by copies of any published standards, the results of testing, and copies of any product listings, as documentation of the health, sanitation and safety performance of any materials, methods, fixtures, and/or appurtenances. If none are available, please explain:

This proposal does not seek to change any materials, methods, fixtures, and/or appurtenances beyond depth of bury for water service piping outside of structures.

Please attach electronic scanned copies of any literature, standards and product approvals or listings. Printed or copyrighted materials, **along with written permission from the publisher to distribute the materials at meetings**, should be sent to the Plumbing Board, c/o Department of Labor and Industry, 443 Lafayette Road No., St. Paul, MN 55155-4344.

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- [x] Protect public, health, safety, welfare, or security
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- [ ] Other (describe) ____________________________

**Economic impact:** (explain all answers marked “yes”)
1. Does the proposed change increase or decrease the cost of enforcement?  [ ] Yes  [x] No  If yes, explain ____________________________________________________________________________

2. Does the proposed change increase or decrease the cost of compliance?  [ ] Yes  [x] No  If yes, explain ____________________________________________________________________________
   Include the estimated cost increase or decrease, and who will bear the cost increase or experience the cost decrease:

3. Are there less costly or intrusive methods to achieve the proposed change?  [ ] Yes  [x] No  If yes, explain ____________________________________________________________________________

4. Were alternative methods considered?  [ ] Yes  [x] No  If no, why not?  If yes, explain what alternative methods were considered and why they were rejected.
   No reliable alternative methods are known at this time.

5. If there is a fiscal impact, try to explain any benefit that will offset the cost of the change. If there is no impact, mark “N/A.”  N/A

6. Provide a description of the classes of persons affected by a proposed change, who will bear the cost, and who will benefit.

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Are there any existing Federal Standards?  [ ] Yes  [x] No  If yes, list:

Are there any differences between the proposed change and existing federal regulations?  [ ] Yes  [x] No  
- [ ] Not applicable  [ ] Unknown  If yes, describe each difference & explain why each difference is needed & reasonable.

Minnesota Statutes, section 14.127, requires the Board to determine if the cost of complying with proposed rule changes in the first year after the changes take effect will exceed $25,000 for any small business or small city. A small business is defined as a business (either for profit or nonprofit) with less than 50 full-time employees and a small city is defined as a city with less than ten full-time employees.

During the first year after the proposed changes go into effect, will it cost more than $25,000 for any small business or small city of comply with the change?  [ ] Yes  [x] No  If yes, identify by name the small business(es or small city(ies).
Will this proposed plumbing code amendment require any local government to adopt or amend an ordinance or other regulation in order to comply with the proposed plumbing code amendment? □ Yes □ No. If yes, identify by name the government(s) and ordinance(s) that will need to be amended in order to comply with the proposed plumbing code amendment.

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See Attachment "A", "B", and "C"

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• The Plumbing Board or designated Committee.

I understand that any action is a recommendation to the Plumbing Board and is not to be considered final action.

NAME AND E-MAIL ADDRESS FIRM NAME
Brent Marsolek, brent.marsolek@ci.stpaul.mn.us Saint Paul Regional Water Services
NAME, PHONE NUMBER AND E-MAIL ADDRESS OF PRESENTER TO THE COMMITTEE (if different):
Dave Wagner, 651-266-6261, dave.wagner@ci.stpaul.mn.us

ADDRESS CITY STATE ZIP CODE
1900 Rice Street Saint Paul MN 55113
PHONE SIGNATURE (original or electronic) DATE
651-266-6810 11/27/2018

For Assistance or questions on completing this form, contact Cathy Tran, Department of Labor and Industry at 651-284-5898.
4714.0609 INSTALLATION, TESTING, UNIONS, AND LOCATION.
Subp. 3. Section 609. UPC section 609 is amended by the following:

609.1 Installation. Water piping shall be adequately supported in accordance with Table 313.3. Burred end shall be reamed to the full bore of the pipe or tube. Changes in direction shall be made by the appropriate use of fittings, except that changes in direction in copper or copper alloy tubing shall be permitted to be made with bends, provided that such bends are made with bending equipment that does not deform or create a loss in the cross-sectional area of the tubing. Changes in direction are allowed with flexible pipe and tubing without fixtures in accordance with the manufacturer's instructions. Provisions shall be made for expansion in hot-water piping. Piping, equipment, appurtenances, and devices shall be installed in a workmanlike manner in accordance with the provisions and intent of the code. The authority having jurisdiction shall determine the required depth of bury for all water supply service piping located outside of any structure. Building supply yard piping shall be not less than 12 inches (305mm) below the average local frost depth. The cover shall be not less than 12 inches (305 mm) below finish grade.
FROST DEPTH
MSBC RULES 1303.1600

ABOVE LINE
5 feet - 0 inches

BELOW LINE
3 feet - 6 inches

ATTACHMENT "B"
Southern Half of State
Depth of bury per UPC Code = 54 inches
Data provided by MnDOT Materials & Road Research Frost and Thaw Depths:
http://dotapp7.dot.state.mn.us/research/seasonal_load_limits/thawindex/frost_thaw_graphs.asp
Northern Half of State
Depth of bury per UPC Code = 72 inches
Data provided by MnDOT Materials & Road Research Frost and Thaw Depths:
http://dotapp7.dot.state.mn.us/research/seasonal_load_limits/thawindex/frost_thaw_graphs.asp

ATTACHMENT “C” Page 2 of 2

Specify the purpose of the proposal: (If recommendation for code change for fixture, appurtenance, material, or method, check all that apply)

☐ Appurtenance (e.g., water conditioning equipment) ☐ Test Method
☐ Other (describe) 2018 UPC Amendments

Does your submission contain a Trade Secret? ☐ Yes ☑ No

If Yes, mark “TRADE SECRET” prominently on each page of your submission that you believe contains trade secret information. Minnesota Statutes, section 13.37, subdivision 1(b), defines “trade secret” as follows:

“Trade secret information” means government data, including a formula, pattern, compilation, program, device, method, technique or process (1) that was supplied by the affected individual or organization, (2) that is the subject of efforts by the individual or organization that are reasonable under the circumstances to maintain its secrecy, and (3) that derives independent economic value, actual or potential, from not being generally known to, and not being readily ascertainable by proper means by, other persons who can obtain economic value from its disclosure or use.

Note that, although “trade secret” information is generally not public, the Board and its committees may disclose “trade secret” information at a public meeting of the Board or committee if reasonably necessary for the Board or committee to conduct the business or agenda item before it (such as your request.) The record of the meeting will be public.

Describe the proposed change. The Minnesota Plumbing Code (Minnesota Rules Chapter 4714) is available via the World Wide Web at http://www.revisor.leg.state.mn.us/arule/4714/.

NOTE:
• Please review the Minnesota Plumbing Code and include all parts of the Code that require revision to accomplish your purpose.
• The proposed change, including suggested rule language, should be specific. If modifying existing rule language, underline new words and strike through deleted words. Please list all areas of the Minnesota Plumbing Code that would be affected.

509.0-510.2.27 – Delete in entirety along with all associated figures and tables.
Need and Reasons For the Change. Thoroughly explain the need and why you believe it is reasonable to make this change. During a rulemaking process, the need and reasonableness of all proposed rule changes must be justified; therefore, a detailed explanation is necessary to ensure the Board thoroughly considers all aspects of the proposal.

If your product/method standard(s) is not currently listed in both national codes, your Request For Action will not be considered by the Board or its committees, however, you are welcome to present at any Board meeting during the Open Forum section of the Agenda.

The proposal must be accompanied by copies of any published standards, the results of testing, and copies of any product listings, as documentation of the health, sanitation and safety performance of any materials, methods, fixtures, and/or appurtenances. If none are available, please explain:

Please attach electronic scanned copies of any literature, standards and product approvals or listings. Printed or copyrighted materials, along with written permission from the publisher to distribute the materials at meetings, should be sent to the Plumbing Board, c/o Department of Labor and Industry, 443 Lafayette Road No., St. Paul, MN 55155-4344.

***Please remember to attach all necessary explanations and supporting documentation***
Primary reason for change: (check only one)

- Protect public, health, safety, welfare, or security
- Mandated by legislature
- Lower construction costs
- Provide uniform application
- Encourage new methods and materials
- Clarify provisions
- Change made at national level
- Situation unique to Minnesota
- Other (describe)

Anticipated benefits: (check all that apply)

- Save lives/reduce injuries
- Provide more affordable construction
- Improve uniform application
- Provide building property
- Improve health of indoor environment
- Drinking water quality protection
- Provide more construction alternatives
- Decrease cost of enforcement
- Reduce regulation
- Other (describe)

Economic impact: (explain all answers marked “yes”)

1. Does the proposed change increase or decrease the cost of enforcement? □ Yes □ No If yes, explain

2. Does the proposed change increase or decrease the cost of compliance? □ Yes □ No If yes, explain
   Include the estimated cost increase or decrease, and who will bear the cost increase or experience the cost decrease:

3. Are there less costly or intrusive methods to achieve the proposed change? □ Yes □ No If yes, explain

4. Were alternative methods considered? □ Yes □ No If no, why not? □ Yes, explain what alternative methods were considered and why they were rejected.

5. If there is a fiscal impact, try to explain any benefit that will offset the cost of the change. If there is no impact, mark “N/A.”

6. Provide a description of the classes of persons affected by a proposed change, who will bear the cost, and who will benefit.

7. Does the proposed rule affect farming operations? (Agricultural buildings are exempt from the Minnesota Building Code under Minnesota Statutes, Section 326B.121.) □ Yes □ No If yes, explain

Are there any existing Federal Standards? □ Yes □ No If yes, list:

Are there any differences between the proposed change and existing federal regulations? □ Yes □ No □ Not applicable □ Unknown
If yes, describe each difference & explain why each difference is needed & reasonable.
Minnesota Statutes, section 14.127, requires the Board to determine if the cost of complying with proposed rule changes in the first year after the changes take effect will exceed $25,000 for any small business or small city. A small business is defined as a business (either for profit or nonprofit) with less than 50 full-time employees and a small city is defined as a city with less than ten full-time employees.

During the first year after the proposed changes go into effect, will it cost more than $25,000 for any small business or small city of comply with the change? ☐ Yes ☐ No If yes, identify by name the small business(es or small city(ies).

Will this proposed plumbing code amendment require any local government to adopt or amend an ordinance or other regulation in order to comply with the proposed plumbing code amendment? ☐ Yes ☐ No, If yes, identify by name the government(s) and ordinances(s) that will need to be amended in order to comply with the proposed plumbing code amendment.

Additional supporting documentation may also be attached to this form. Are there any additional comments you feel the Committee/Board may need to consider? If so, please state them here:

Information regarding submitting this form:
- Submissions are received and heard by the Committee on an “as received” basis. Any missing documentation will delay the process, and your proposal will be listed as the date it was received “Complete.”
- Submit any supporting documentation to be considered, such as manufacturer’s literature, approvals by other states, and engineering data electronically to DLI.CCLDBOARDS@state.mn.us. Once your Request For Action form has been received, it will be assigned a file number. Please reference this file number on any correspondence and supplemental submissions.
- For copyrighted materials that must be purchased from publishers, such as published standards, product approvals or testing data, listings by agencies (IAPMO, ASSE, ASTM, etc.,) you may send just 2 copies, along with written permission from the publisher to distribute the materials at meetings, via U.S. Mail to: Plumbing Board, c/o Department of Labor and Industry, 443 Lafayette Road No., St. Paul, MN 55155-4344.
- For materials that must be submitted by U.S. Mail, please include a copy of your “Request For Action” form originally submitted and reference your assigned RFA file number.

Information for presentation to the Committee and/or Board:
- Limit presentations to 5 minutes or less.
- Be prepared to answer questions regarding the proposal and any documentation.

Information regarding Committee and/or Board function:
- The Plumbing Board or designated committee.

***Please remember to attach all necessary explanations and supporting documentation***
I understand that any committee action is a recommendation to the Plumbing Board and is not to be considered final action.

SUBMITTED BY NAME

FIRM NAME

SUBMITTER'S E-MAIL ADDRESS

NAME, PHONE NUMBER & E-MAIL ADDRESS OF PRESENTER TO THE COMMITTEE (if different):

ADDRESS

CITY

STATE

ZIP CODE

PHONE

SIGNATURE (original or electronic)

DATE

For Assistance or questions on completing this form, contact Cathy Tran, Department of Labor and Industry at 651-284-5898.

For Office/Committee Use Only

Proposal received completed? □ Yes □ No

Date Proposer notified of gaps: Mode of notification (e.g., e-mail) Date returned to Proposer: Date materials re-received:

***Please remember to attach all necessary explanations and supporting documentation***Page 5 of 5