

Plumbing Board Request for Action Summary for Chapter 6

MINNESOTA DEPARTMENT OF HEALTH, DRINKING WATER PROTECTION
SECTION

Plumbing Board Request for Action Summary for Chapter 6

Minnesota Department of Health
Drinking Water Protection Section
PO Box 64975
St. Paul, MN 55164-0975

Prepared 1/10/2019

651-201-4700
health.drinkingwater@state.mn.us
www.health.state.mn.us

Plumbing Board
 c/o Department of Labor and Industry
 443 Lafayette Road North
 St. Paul, MN 55155-4344
 www.dli.mn.gov

Plumbing Board Request for Action

PRINT IN INK or TYPE

NAME OF SUBMITTER Alex Bartley	PURPOSE OF REQUEST (check all that apply): <input checked="" type="checkbox"/> New Code <input checked="" type="checkbox"/> Code Amendment <input checked="" type="checkbox"/> 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)	
<input checked="" type="checkbox"/> Appurtenance (e.g., water conditioning equipment) <input type="checkbox"/> Test Method	
<input checked="" type="checkbox"/> Other (describe) <u>Requests for Amendments to Chapter 6 of the MN Plumbing Code, Response to adopting 2018 Universal Plumbing Code</u>	

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 Table for specific requests in Chapter 6. Not all of these requests require a formal RFA, however they are included with justification. Where otherwise unmentioned in the attached Table, it is recommended by MDH-DWP to do the following with changing standards in Chapter 6 of the UPC:

- 1) If 2015 MN Plumbing Code that is not amended in MN Rules 4714:
 - a) Update language to 2018 UPC requirements.
- 2) If MN Rules 4714 amendments to the UPC exist:
 - a) Maintain MN Rules 4714 Amendments

Office Use Only			
RFA File No. PB0114	Date Received by DLI 1.10.2019	Dated Received by Committee	Date of Forwarded to Board
Title of RFA	By:		
Committee Recommendation to the Board: <input type="checkbox"/> Accept <input type="checkbox"/> Reject <input type="checkbox"/> Abstain			
Board approved as submitted: <input type="checkbox"/> Yes <input type="checkbox"/> No		Board approved as modified: <input type="checkbox"/> Yes <input type="checkbox"/> No	

PLUMBING BOARD REQUEST FOR ACTION SUMMARY FOR CHAPTER 6

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).

Please remember to attach all necessary explanations and supporting documentationPage 2 of 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 Table for specific requests in Chapter 6.

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 documentationPage 3 of 5

Primary reason for change: (check only one)

- | | |
|--|---|
| <input checked="" type="checkbox"/> Protect public, health, safety, welfare, or security | <input type="checkbox"/> Mandated by legislature |
| <input type="checkbox"/> Lower construction costs | <input checked="" type="checkbox"/> Provide uniform application |
| <input type="checkbox"/> Encourage new methods and materials | <input type="checkbox"/> Clarify provisions |
| <input type="checkbox"/> Change made at national level | <input checked="" type="checkbox"/> Situation unique to Minnesota |
| <input type="checkbox"/> Other (describe) _____ | |

Anticipated benefits: (check all that apply)

- | | |
|--|---|
| <input checked="" type="checkbox"/> Save lives/reduce injuries | <input type="checkbox"/> Provide more affordable construction |
| <input checked="" type="checkbox"/> Improve uniform application | <input type="checkbox"/> Provide building property |
| <input checked="" type="checkbox"/> Improve health of indoor environment | <input checked="" type="checkbox"/> Drinking water quality protection |
| <input checked="" type="checkbox"/> Provide more construction alternatives | <input type="checkbox"/> Decrease cost of enforcement |
| <input type="checkbox"/> Reduce regulation | <input type="checkbox"/> 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.
See proposed change to 604.2 Lead Content

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. Responsible parties for plumbing installations may be affected. Responsible parties for plumbing installations may benefit from some changes, and consumers of the water supply 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:
Safe Drinking Water Act (Referring to Section 604.2 Lead Content)

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).

Please remember to attach all necessary explanations and supporting documentationPage 4 of 5

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.

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
Alex Bartley, alex.bartley@state.mn.us	MDH-Drinking Water Protection Section

NAME, PHONE NUMBER AND E-MAIL ADDRESS OF PRESENTER TO THE COMMITTEE (if different):			
ADDRESS	CITY	STAT E	ZIP CODE
625 Robert St N	St. Paul	MN	55155
PHONE	SIGNATURE (original or electronic)	DATE	
651/201-4699	Alex Bartley	1/9/2019	

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? <input type="checkbox"/> Yes <input type="checkbox"/> 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 documentationPage 5 of 5

Minnesota Department of Health, Drinking Water Protection Section (MDH-DWP) Request for Action Summary for Chapter 6 of the Universal Plumbing Code (UPC) Changes and Amendments

Code Section	Proposed Change	Justification	Require RFA?
603.2 Approval of Devices or Assemblies (MN Rules 4714 Section 603)	[Recommend no change.] Maintain MN Rules amendments to UPC, but update Table 603.2 to 2018 UPC contents.	Inclusion of ASSE 1011, ASSE 1052, and ASSE 1053 hose bibb type backflow preventers. These devices are allowed under 301.2 in the 2015 MN Plumbing Code. Updating the table to the 2018 UPC with installation instructions will make code compliance more straightforward.	No, maintaining MN Rules 4714 amendment, and updating the un-amended Table 603.2 to the current UPC Code.
603.5.18 Potable Water Outlets and Valves (MN Rules 4714 Section 603, Subpart 4)	Subp. 4. Section 603.5.1817. UPC section 603.5.1817 is amended to read as follows: 603.5.1817 Potable Water Outlets and Valves. Potable water outlets, freeze-proof yard hydrants, combination stop-and-waste valves, or other fixtures that incorporate a stop-and-waste feature that drains into the ground shall not be installed underground except for a freeze-proof yard hydrant that is located at least two feet above the water table and at least ten feet from any sewer or similar source of contamination.	The section for Potable Water Outlets and Valves has changed in the 2018 UPC	Yes, amending MN Rules 4714.
603.5.21 Chemical Dispensers (2018 UPC Code Section)	(2018 UPC Section Reference) <u>603.5.21 Chemical Dispensers. The water supply to chemical dispenser shall be protected against backflow. The chemical dispenser shall comply with ASSE 1055 or the water supply shall be protected by one of the following methods:</u>	Inclusion of ASSE 1055 standard for chemical dispenser backflow prevention. ASSE 1055 may not be subject to continuous pressure or backpressure. A pressure bleeding device must be installed downstream in permanent installations to comply with ASSE 1055.	No, updating un-amended 2012 UPC language to 2018 UPC language.

PLUMBING BOARD REQUEST FOR ACTION SUMMARY FOR CHAPTER 6

Code Section	Proposed Change	Justification	Require RFA?
	<p>(1) <u>Air gap</u> (2) <u>Atmospheric vacuum breaker (AVB)</u> (3) <u>Pressure vacuum breaker backflow prevention assembly (PVB)</u> (4) <u>Spill-resistant vacuum breaker (SVB)</u> (5) <u>Reduced-pressure principle backflow prevention assembly (RP)</u></p> <p>(2015 MN Rules 4714 Reference)</p> <p>603.5.17 Special Equipment. Portable cleaning equipment, and dental vacuum pumps, and chemical dispensers shall be protected from backflow by an air gap, an atmospheric vacuum breaker, a spill-resistant vacuum breaker, or a reduced pressure principle backflow preventer.</p>	<p>More specific language can be made to emphasize this if needed. The ordering of the code sections is different between MN Rules 4714 (2012 UPC) and the 2018 UPC.</p> <p>ASSE 1055 installations are currently approved under 301.2 of MN Rules 4714.</p>	
<p>603.5.22 Barometric Loop,</p> <p>603.5.23 Installation of Testable Backflow Prevention Assembly</p> <p>(MN Rules 4714, Subpart 5)</p>	<p>[Recommend no change.] Maintain amended additions to 2018 UPC</p>	<p>Barometric loops offer backsiphon protection without relying on a mechanical device that may fail. Useful for large diameter piping installations (e.g. a water treatment plant).</p> <p>Definitions and standards for testable backflow devices should be included these standards are not present in the 2018 UPC.</p>	<p>No, maintaining MN Rules 4714 amendment.</p>

Code Section	Proposed Change	Justification	Require RFA?
<p>604.1 Pipe, Tube, and Fittings</p>	<p>[Recommend adopt 2018 UPC.]</p>		<p>No, updating 604.1 to 2018 UPC.</p>
<p>604.11 Lead Content (604.2 in 2018 UPC)</p>	<p>4714.0604 MATERIALS. UPC section 604.112 is amended to read as follows: 604.11 Lead Content. Water pipe and fittings with a lead content which exceeds a weighted average of 0.25 percent in the wetted surface material, as established in the Safe Drinking Water Act, section 1417(d), shall be prohibited in piping systems used to convey potable water.</p> <p>(2018 UPC Code Below)</p> <p><u>604.2 Lead Content. The maximum allowable lead content in pipes, pipe fittings, plumbing fittings, and fixtures intended to convey or dispense water for human consumption shall be not more than a weighted average of 0.25 percent with respect to the wetted surfaces of pipes, pipe fittings, and fixtures. For solder and flux, the lead content shall be not more than 0.2 percent where used in piping systems that convey or dispense water for human consumption.</u></p> <p><u>Exceptions:</u></p> <p>(1) <u>Pipes, pipe fittings, plumbing fittings, fixtures, or backflow preventers used for nonpotable services such as manufacturing,</u></p>	<p>2018 UPC sections have been reordered. 604.2 Lead Content (Previously 604.11) now has equivalent coverage to the Safe Drinking Water Act, while the addition of 604.2.1 provides a lead standard outside of the Safe Drinking Water Act (SDWA). This offers more protection of drinking water supplies from lead for distribution main gate valves over 2”, where the SDWA excludes the “lead-free” requirement.</p> <p>Alternatively, MN Rules 4714.604 can be amended to reference 604.2.1 of the 2018 UPC.</p>	<p>Yes, repealing MN Rules 4714.0604</p>

Code Section	Proposed Change	Justification	Require RFA?
	<p><u>industrial processing, irrigation, outdoor watering, or any other uses where the water is not used for human consumption.</u></p> <p>(2) <u>Flush valves, fill valves, flushometer valves, tub fillers, shower valves, service saddles, or water distribution main gate valves that are 2 inches (50 mm) in diameter or larger.</u></p> <p><u>604.2.1 Lead Content of Water Supply Pipe and Fittings. Pipes, pipe fittings, valves, and faucets utilized in the water supply system shall have a maximum of 8 percent lead content.</u></p>		
<p>604.10 Plastic Materials (604.09 in MN 4714)</p>	<p>604.910 Plastic Materials. Approved plastic materials shall be permitted to be used in building supply piping, provided that where metal building supply piping is used for electrical grounding purposes, replacement piping therefore shall be of like materials.</p> <p>Exception: Where a grounding system acceptable to the Authority Having Jurisdiction is installed, inspected, and approved, metallic pipe shall be permitted to be replaced with nonmetallic pipe.</p> <p><u>604.10.1 Tracer Wire.</u> Plastic materials for building supply piping outside underground shall have a blue insulated copper tracer wire or other approved conductor installed adjacent to the piping. Access shall be provided to the tracer wire or the tracer wire shall terminate aboveground at each end of the nonmetallic piping. The tracer wire size shall be not</p>	<p>2018 UPC includes tracer wire requirements as their own section rather than defined by exception in the existing 2015 MN Plumbing Code.</p>	<p>No, updating un-amended plumbing code language to 2018 UPC.</p>

PLUMBING BOARD REQUEST FOR ACTION SUMMARY FOR CHAPTER 6

Code Section	Proposed Change	Justification	Require RFA?
	less than 18 AWG and the insulation type shall be suitable for direct burial.		
607.3 Venting (2018 UPC)	607.3 Venting. Tanks used for potable water shall be tightly covered and vented in accordance with manufacturer’s installation instructions. Such vent shall <u>open downward and</u> be screened with a corrosion-resistant material of not less than number 24 mesh. <u>The vent opening shall not be located in an environment that can contaminate the water supply.</u>	Maintain 2018 UPC language with additions. Overturned vents protect against rainwater (if venting outdoors), debris, animals, and other contaminants. Venting, whether to indoor or outdoor environments, must be located so that the vent does not expose the water supply to contamination.	Yes, amending 2018 UPC.
607.4 Overflow (2018 UPC)	607.4 Overflow. Tanks shall have not less than a 16 square inch (0.01 m²) <u>an overflow that opens downward and is</u> screened with a corrosion-resistant material of not less than 24 mesh. <u>The overflow pipe shall be of sufficient diameter to permit waste of water in excess of the maximum filling rate. No overflow may be connected directly to any drain, sanitary sewer, or storm sewer.</u>	An overturned overflow protects against rainwater (if outside), debris, animals, and other contaminants. An overflow should be protected from backflow conditions from sewers and storm drains. Limiting the required minimum sizing at one value may not be effective in preventing overflow conditions.	Yes, amending 2018 UPC.
609.6 Location (MN Rules 4714.0609 Subpart 1)	[Recommend no change.] Keep amended language in MN Rules 4714.	Water supply distances from contamination should remain established and defined in order to protect public health.	No, maintaining MN Rules 4714 amendment.
609.11 Water Meters (MN Rules 4714.0609 Subpart 2)	609. 11 <u>12</u> Water Meters. Water meters shall be located inside a building, installed at least 12 inches above the finished floor, and readily accessible. All water meter installations shall be rigidly supported	Maintain MN amendment, but the 2018 UPC includes an unrelated standard under 609.11 (Pipe Insulation), and a new section must be added.	Yes, revising MN Rules 4714.0604 to update to the new code.

PLUMBING BOARD REQUEST FOR ACTION SUMMARY FOR CHAPTER 6

Code Section	Proposed Change	Justification	Require RFA?
	<p>with a permanent support in order to prevent the meter from vibrating when the water is passing through it.</p> <p>Exceptions: Where installation inside a building is not possible, the water meter may be installed in an enclosed structure not subject to flooding, high groundwater, or surface drainage runoff, provided the meter is protected from freezing. Provisions shall be made to install the meters above grade when possible. When installed below grade, the top of the structure shall be located at least 12 inches above the finished grade, be secured, and be accessible. This structure shall not be connected to any storm or sanitary sewer system</p>		
<p>611.0 to 611.3 (MN Rules 4714.0611)</p>	<p>[Recommend no change]. Keep amended language.</p>	<p>MN Rules 4714.0611 better protects the public health from negative impacts of treatment installations, while allowing more standards and certifications than NSF.</p>	<p>No, maintaining MN Rules 4714 amendment.</p>
<p>Sections not mentioned.</p>	<p>Unless mentioned above, it is recommended by MDH-DWP to do the following with changing standards in Chapter 6 of the UPC:</p> <ol style="list-style-type: none"> 1) If 2015 MN Plumbing Code that is not amended in MN Rules 4714: <ol style="list-style-type: none"> a) Update language to 2018 UPC requirements. 2) If MN Rules 4714 amendments to the UPC exist: <ol style="list-style-type: none"> a) Maintain MN Rules 4714 Amendments 		<p>No</p>