

Meeting Minutes: Plumbing Board

Date: January 21, 2020
Time: 9:30 a.m.
Minutes by: Lyndy Logan
Location: Minnesota Room, Department of Labor and Industry
443 Lafayette Road No., St. Paul, MN 55117-4344

Members

Richard Becker
Michael Dryke
Kent Erickson
John Flagg (Vice Chair)
Mike Herman (Secretary)
Rick Jacobs (Chair)
Justin Parizek
Phillip Sterner
Cathy Tran (DLI Commissioner's Designee)
David Wagner
David Weum (DOH Commissioner's Designee)

Members Absent

Jeff Brown

DLI Staff & Visitors

Suzanne Todnem (Gen. Counsel, DLI)
Lyndy Logan (DLI)
Brad Jensen (DLI)
Chuck Olson (DLI)
John Roehl (DLI)
Adam Hanson (ABC)
Bryan Miko (ADS)
Mike Johnson (J-Berd)
Gary Thaden (MMCA)

DLI Staff & Visitors continued

Stephanie Menning (MUCA)
Mark Hines (MUCA)
Scott Thompson (My Plumbing Training)
Fonda Ruth Thompson (My Plumbing Training)
Riley Dvorak (Forterra)
John Sanber (Prinsco)
Trevor Ogilvie (City of Minneapolis)
Monty Schreier (County Materials)
Chris Sandstrom (Hancock Concrete)
Austin Zapka (Hanson Concrete)
David Ybarra (MN Pipe Trade Association)
Paul Grimes (Ferguson Waterworks)
William Adams (City of St. Cloud)
Jennifer Schaff (County Materials Corp)
Adam Ganson (ADS)
Chris Soderholm (Water Control Corp)
David Radziej (Metro PHCC)
Gary Schick (City of Rochester)
Nick Erickson (Housing First MN)
Jim Grothaus (Hancock Concrete)
Jason Kruger (MN Concrete Pipe Assoc.)
Brennan Doherty (MIFAB) – via teleconference
Allen Inlow (IAPMO) – via teleconference

1. Call to Order

The meeting was called to order by Chair Jacobs at 9:41 a.m. Roll call was taken by John Flagg; a quorum was declared with 10 of 11 voting members, and one non-voting member, present in person.

2. **Approval of meeting agenda**

A motion was made by Herman, seconded by Becker, to approve the agenda as presented. The vote was unanimous with 10 votes in favor; the motion carried.

3. **Approval of previous meeting minutes**

A motion was made by Herman, seconded by Flagg, to approve the October 15, 2019, meeting minutes as presented. The roll call vote was unanimous with 10 votes in favor; the motion carried.

4. **Regular Business**

Approval of expense reports – Jacobs approved the expenses as presented.

5. **Committee Reports**

A. **Department Updates**

None

B. **Construction Codes Advisory Council**

No update. Representative: Mike Herman / Alternate: John Flagg

6. **Special Business**

A. **Board members can review/view Open Meeting Law and Data Practices videos on Dept. of Admin website:** <https://mn.gov/admin/data-practices/news/events/webinars/>

B. **Review the 01/16/2020 draft of possible proposed amendments to chapter 4714, proposed adoption of 2018 UPC with amendments – The rule draft can be found on the department’s website at:** <https://www.dli.mn.gov/about-department/rulemaking/rulemaking-docket-minn-r-chpt-4714-2018-upc>

Comments received in response to the Request for Comments can be viewed on the department’s website at: <https://www.dli.mn.gov/sites/default/files/pdf/4714-comments.pdf>

- **Appendix M**

The Board reviewed David Williams’ comment to add Appendix M, Peak Water Demand Calculator. There is concern Appendix M is a performance-based option where current sizing methods are prescriptive. Appendix M method is not referenced in the body of the 2018 UPC like other approved water pipe sizing methods. This was added in an appendix at the national level and not added in the body of the code (in Chapter 6) for reasons not yet vetted at the national level. The Plumbing Board agreed that they do not want to include Appendix M. Could still use Appendix M as an alternate method with consideration from the administrative authority but not add this in the code.

- [PB0125](#)

Brennan Doherty, MIFAB, addressed the Board via teleconference regarding PB0125. Doherty noted that he did not meet the Board’s deadline for submission. He said secondary siphonic roof drainage system would perform better than a gravity secondary traditional gravity drainage system. Jacobs said the Plumbing Code is based on a minimum of 4 inches of rainfall per hour not a hundred-year event. Jacobs asked Tran what ASPE Standard 45 refers to and Tran said an engineered siphonic roof drainage system can be found in the current Minnesota Plumbing Code. Tran said the department proposed language to state that engineered siphonic roof drainage system must not be used in the design of secondary roof drainage systems since secondary roof drains do not function like primary roof drains. Secondary roof drains basically function independent of each other in that they will only receive water when the primary roof drain is blocked. One or even two secondary roof drains may receive water at the same time but not all the secondary roof drains. The issue is when multiple secondary roof drains are connected or manifolded together, the system would not operate full bore and not function as a siphonic roof drainage system from water not entering the multiple roof drains, and therefore, in the department’s opinion, would be a misapplication of ASPE Standard 45. Doherty does not dispute secondary roof drains not siphoning when water does not enter the connected secondary roof drains but stated that siphonic roof drainage is more efficient than traditional gravity drainage system. High velocity of secondary siphonic roof drain discharge is also a concern since secondary drains are required to discharge outside to grade and can be problematic. Tran also stated the ASPE Standard 45 should be revised to reflect the allowance of secondary roof drainage system for use as a siphonic secondary roof drainage system if that is the intent of the standard. Mr. Jacobs said he is going to rely on PB0125 submitted by Tran, DLI. Becker said he agreed with the department’s recommendation, the Board thoroughly discussed the matter when it considered PB0125 and the committee’s recommendation, and the Board unanimously decided to accept PB0125 previously proposed by Tran. There was Board consensus to maintain their position on PB0125.

- David Wagner addressed the Board regarding the following:

4714.0609 INSTALLATION, TESTING, UNIONS, AND LOCATION.

Subp. 2. Section 609. UPC section 609 is amended by the following:

609.11 Water Meters. Water meters shall be located in an approved location. When located inside a building, the meter shall be located

close as possible to the point of entrance of the potable water supply pipe, installed at least 12 inches above the finished floor, and readily accessible. All water meter installations shall be rigidly supported with a permanent support in order to prevent the meter from vibrating when the water is passing through it. When meters are located outside a building,

~~Exceptions: Where installation inside a building is not possible,~~ the water meter may shall be installed

in an enclosed structure not subject to flooding, high groundwater, or surface drainage runoff; provided that the meter is shall be 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.

Jacobs thanked Wagner for addressing the Board. There was discussion and concern over removing the emphasis on installing water meters above grade when possible. Due to the lateness of the submittal to tweak the proposed change, the Board didn't want to make the proposed change. Wagner's proposed changes were not accepted.

- **PB0142 and [PB0123](#)**

The Board reviewed Prinsco's comments.

- Bryan Miko and Aaron Ganson, ADS, and Stephanie Menning, MUCA, addressed the Board separately. Miko provided context of some of the proposed changes the Board is entertaining, such as adding additional standards that would allow certain materials (e.g., large diameter pipes) to be used in more applications (e.g., storm sewer) than in the 2018 UPC model code. Miko requests the Board to revert back to the original PB0123 recommendation. Neither polypropylene nor polyethylene pipes are in the UPC but are in the IPC. The Board added the testing requirement because these products were new to the Minnesota Plumbing Code and the UPC. Miko stated that polyethylene was approved in the previous plumbing code (Chapter 4715). Menning stated there is a cost to the contractors for the testing. There is no current issue with these materials that have been used in these applications for a long time. Menning stated the contractors who install these plastic pipes are well-trained and do good work. Menning also stated that there is lack of evidence of massive installation failures. Discussions on value of the mandrel test including not all plastic pipes are made the same and if the proposal warrants the mandrel test. Becker noted that mandrel testing is not required for PVC pipe. After lengthy discussion, Jacobs asked the two industries to work together to come up with something they both agree on and then resubmit to the Board within 30 days. Jacobs charged representatives from the concrete pipe and plastic pipe industries to meet. The industry representatives (Miko and Menning) agreed, as did the Board.
- Todnem reviewed changes the Revisor's Office did not catch – found in **red font** in the posted 1/16/20 [rule draft](#). Todnem said there were no substantive changes and references to reflect new numbering were modified.
- Todnem said that 4714.1702, subp. 20 is being repealed because it can be found in the 2018 UPC, page 254, as section 1601.6 Operation and Maintenance Manual. Jacobs said he questions the term "expansion loop" on page 7 and 8, Section 313. The Board discussed changing "expansion loop" to "expansion joint" and footnote 6 on line 7.8 of the Jan. 16, 2020, rule draft would need to be modified as well.
- The Board agreed with changes noted in red of the 1.16.2020 rule draft with the following modifications:
 - Page 7, line 7.8, footnote 6 was amended to read as follows: ⁶For expansion joints~~loops~~, see Table 313.3.1.
 - Add a new subpart to Chapter 8 as follows: **811.9 Plastic Waste and Vent. Expansion and contraction compensation shall be provided for thermoplastic**

pipng as shown in Table 313.3.1.

- Changed 2013 to 2018 on page 45, line 45.17, and Page 53, line 53.22, as follows: “City Engineers Association of Minnesota, ~~2013~~2018 edition...”
 - Revisor’s draft: 712.4 Negative Test. Change reference 1109.2.2 to 1107.2.3(b) due to renumbering.
 - Revisor’s draft: 712.4 Negative Test and Table 1701.1. Change all references to ASTM Standards C1214-13 and C1244-11 to updated versions: C1214-19 and C1244-17.
 - Line 40.7, Board confirmed that the sentence beginning with “Where vehicles are serviced and not stored...” should be in the proposed rule draft.
 - Page 55, line 55.17 was amended to read: Storm drainage systems of abandoned rainwater catchment systems must comply with chapter 11, Storm Drainage, as amended.
 - Line 41.16, IS 5 and IS 9 are deleted because they are not in the 2018 UPC.
 - Page 8, Line 8.16 and 8.17, first sentence was stricken as follows: ~~**403.3.1 412.1.1 Nonwater Urinals.** Nonwater urinals shall be listed and comply with the applicable standards referenced in Table 1401.1 1701.1.~~
 - Tran will contact Jason Shank or John Parizek for clarification to section 408.3, specifically items (3) and (4). Language is confusing and contradicting.
 - Soderholm added clarification for the Board: ASSE 1016 is for type T and P valves – doesn’t mean they have both mechanisms to it. Controls temperature changes. 1016T thermostatic mechanism that can accomplish the same thing. 1070 has a wider temperature range.
 - Page 1, line 1.7, remove item C, as follows: “...UPC appendices A, B, C, and I,...”
- Sterner proposed a change to water softeners that would require appliances that regenerate by demand control and are certified by a third-party rating organization; however, it was not part of a previously submitted RFA and the deadline for RFA submittals has passed and there was concern over cost and lack of information. The Board agreed the proposal should not be considered at this time.

C. Discuss cost analysis of proposed amendments to chapter 4714

Todnem asked the Board members to start thinking about costs and referred to [Minnesota Statutes, section 14.127](#) and read aloud: *An agency must determine if the cost of complying with a proposed rule in the first year after the rule takes effect will exceed \$25,000 for: (1) any one business that has less than 50 full-time employees; or (2) any one statutory or home rule charter city that has less than ten full-time employees. For purposes of this section, "business" means a business entity organized for profit or as a nonprofit, and includes an individual, partnership, corporation, joint venture, association, or cooperative.*

Todnem said the Statement of Need and Reasonableness must be prepared per [Minnesota Statute 14.131](#). Todnem asked the Board to begin thinking about other cost analyses such as who will bear the costs of the proposed rule, probable costs of complying with the proposed rule, and the Board's determination as to the \$25,000 threshold.

Todnem provided an overview of the rulemaking process.

7. Complaints

Nothing to report.

8. Open Forum

None

9. Correspondence

None

10. Board Discussion

None

11. Announcements

A special meeting was set for March 16, 2020; the next regularly scheduled meeting is scheduled for Tuesday, April 21, 2020, at 9:30 a.m., in the Minnesota Room.

12. Adjournment

A motion was made by Becker, seconded by Flagg, to adjourn the meeting at 2:59 p.m. The roll call vote was unanimous with 9 votes in favor of the motion (Sterner was no longer present); the motion passed.

Respectfully submitted,

Mike Herman

Mike Herman, Board Secretary