

Meeting Minutes: 2024 UPC ad hoc Chapter 15 Rulemaking Committee of the Plumbing Board

Date: Sept. 9, 2025
Time: 9:00 a.m.
Minutes by: Lyndy Logan
Location: DLI, 443 Lafayette Rd. No., St. Paul, MN 55155

Committee Members

1. Karl Abrahamson (Committee Secretary)
2. Jonathan Lemke
3. Rick Wahlen (Chair) – WebEx
4. Mike Westemeier (DLI CO's Designee)

Committee Members Absent

None

DLI Staff & Visitors

Ken McGurran (Board Counsel, DLI)
Lyndy Logan (DLI)
Tom Eisert (DLI) – WebEx
Steve Neubel (DLI)
Ryan Rehn (DLI) – WebEx

DLI Staff & Visitors continued...

Anita Anderson (Dept. of Health) – WebEx
Lew Anderson (City of Mpls) – WebEx
Jason Bethke (City of Blaine) – WebEx
Dan Engsborg (Distributor Reps)
Kent Erickson (Plumbing Board) – WebEx
John Galt (MDH) – WebEx
Grace Greene (Housing First)
Rich Hibbard (City of St. Paul) – WebEx
Rick Jacobs (City of St. Paul)
Stephanie Menning (DIGIN Midwest) – WebEx
Bradley Peters (City of Rochester) – WebEx
David Radziej (MN PHCC)
Nancy Rice (MDH) – WebEx
Scott Thompson

1. Call to Order

- A. Chair Wahlen called the meeting to order at 9:01 a.m. and Secretary Abrahamson took roll call. A quorum was declared with 4 of 4 Committee members present in person.
- B. Announcements/Introductions
 - Everyone present in person and remotely can hear all discussions.
 - All votes will be taken by roll call if any member is attending remotely.
 - All handouts and WebEx instructions are posted on the Committee's website.

2. Approval of meeting agenda

A motion was made by Abrahamson, seconded by Lemke, to approve the agenda as presented. The roll call vote was unanimous, with 4 votes in favor; the motion carried.

3. Approval of previous meeting minutes

N/A

4. Regular Business

Expense reports were approved.

5. Special Business

Chapter 15, Alternate Water Sources for Nonpotable Applications

- 1501.0 General
- 1501.1 Applicability – Keep as shown in the 2024 UPC

- 1501.1.1 Allowable Use of Alternate Water – **Tabled, Abrahamson & Westemeier will submit an RFA.**
 - Comments: There is ongoing uncertainty regarding how irrigation systems are addressed in the Plumbing Code. While Chapter 16 currently excludes irrigation systems, that exclusion has led to confusion in past code cycles—specifically, the mistaken belief that any piping serving irrigation systems is also excluded from the Plumbing Code. In reality, all piping up to the point where the system becomes irrigation (e.g., before the first solenoid or shutoff valve) is still governed by the Plumbing Code, particularly when potable or non-potable water is involved. Given this nuance, any proposed exclusion in Section 1501.1.1 must be carefully worded to avoid misinterpretation. Additionally, the broader context—such as whether the system uses reclaimed, greywater, or on-site water—has not yet been finalized. Therefore, it is recommended that Section 1501.1.1 be tabled until an RFA is submitted. This will allow time to review the language used in Chapter 16 and ensure consistency and clarity in how irrigation-related systems are addressed.
- 1501.2 System Design and 1501.3 Permit – **Tabled, Westemeier will submit an RFA**
 - Comments: Sections 1501.2 (System Design) and 1501.3 (Permit) should be tabled to allow time for an RFA that aligns the language with Chapter 16 of the Minnesota Plumbing Code. The current language may conflict with broader code requirements and could unintentionally exclude qualified professionals—such as licensed septic designers—who are not registered design professionals or licensed plumbing contractors. Chapter 16 was previously amended to clarify that system design can be performed by individuals licensed or deemed competent by the authority having jurisdiction. Tabling these sections will allow for consistent, inclusive language that reflects the full range of qualified system designers and avoids confusion around permitting and design responsibilities.
- 1501.4 Component Identification – Keep as shown in the 2024 UPC
- 1501.5 Maintenance and Inspection, Table 1501.5 Minimum Alternate Water Source Testing, Inspection, and Maintenance Frequency, 1501.5.1 Frequency, 1501.5.2 Maintenance Log, and 1501.5.3 Maintenance Responsibility – **Tabled, Lemke will submit an RFA**
 - Comments: The authority having jurisdiction (AHJ) is the building official. In jurisdictions where responsibilities are divided, the building official may delegate authority to a plumbing inspector or a city engineer, provided they are enforcing the plumbing code. While delegation is allowed, the ultimate responsibility for the enforcement of these systems always falls back to the building official. Section 1501.5 and its table should be tabled to allow time for an RFA that addresses several important considerations:
 - Seasonal Use: The current 12-month inspection interval may not be appropriate for systems that are only operational seasonally. Language similar to Chapter 16, which accounts for seasonal startup and monthly inspections during active use, should be considered.
 - Inspection Responsibility: The section currently places inspection responsibility on the property owner, but clarification is needed on when professional inspections are required, especially for critical components.
 - Cross-Connection Testing: The table should include a requirement for annual cross-connection inspections performed by a Minnesota-licensed plumber with an ASSE 5120 certification, due to the high risk of cross-connections in complex systems. Tabling this section will allow for a more comprehensive and accurate update that reflects real-world system usage and ensures public health protections are maintained.
- 1501.6 Operation and Maintenance Manual – Keep as shown in the 2024 UPC
 - Comments: Discussed whether additional language was needed to clarify that the operations and maintenance manual should be 1) Available to the Authority Having Jurisdiction (AHJ) during inspection and 2) Provided to the building owner at or before system startup. Concerns were raised that explicitly stating these requirements might be redundant, as inspectors already verify documentation per code. **Ultimately, it was agreed that the current language is sufficient and no changes are necessary.**

- 1501.7 Minimum Water Quality Requirements – **Tabled, Anita Anderson will submit an RFA and comments regarding Chapter 15**
 - Comments: Section 1501.7 should be tabled to allow time for an RFA that incorporates updated and health-based water quality standards. The current code references NSF 350 and IGC 324, but newer versions and more refined approaches—such as log reduction targets based on source and end use—have been developed by expert committees and adopted in Chapter 16. These standards move away from end-point testing and instead focus on treatment performance based on intended use (e.g., irrigation vs. toilet flushing). Incorporating this approach into the Plumbing Code would improve clarity and public health protection but would require training and guidance for inspectors and code officials. Anita Anderson agreed to draft and submit an RFA to propose appropriate updates for consideration at a future meeting.
- 1501.8 Material Compatibility – Keep as shown in the 2024 UPC with the following revision: Alternate water source systems shall be constructed of materials that are compatible with the type of pipe and fitting materials, water treatment, and water conditions in the system, and listed within the plumbing code.
 - Comments: Section 1501.8 states that alternate water source systems must be constructed of materials compatible with the pipe and fitting materials, water treatment, and water conditions in the system. While the intent is straightforward—no one would intentionally use incompatible materials—the enforcement and interpretation could benefit from added clarity. There was discussion about how inspectors would determine compatibility and whether this section should explicitly reference existing material standards in the Plumbing Code. The consensus was that the language should be revised to reinforce that materials must also be **listed and approved within the Plumbing Code**, referring back to the appropriate chapters (e.g., Chapter 6 for water piping, Chapter 7 for drainage). A simple revision to the existing language—such as adding “and listed within the plumbing code”—would clarify enforcement expectations without requiring a full RFA.
- 1501.9 Commercial, Industrial, and Institutional Restroom Signs – Keep as shown in the 2024 UPC
- 1501.9.1 Equipment Room Signs – Keep as shown in the 2024 UPC
- 1501.10 System Controls – Keep as shown in the 2024 UPC
- **1502.0 Inspection and Testing**
- 1502.1 General – Keep as shown in the 2024 UPC
- 1502.2 Supply System Inspection and Test – Keep as shown in the 2024 UPC
- 1502.3 Annual Cross-Connection Inspection and Testing – Keep as shown in the 2024 UPC
- 1502.3.1 Visual System Inspection – Keep as shown in the 2024 UPC
- 1502.3.2 Cross-Connection Test – Keep as shown in the 2024 UPC with the following revision: “The procedure for determining cross-connection shall be followed by the applicant plumbing contractor in the presence of the Authority Having Jurisdiction and other authorities having jurisdiction to determine whether a cross-connection has occurred...”
- 1502.3.3 Discovery of Cross-Connection – Keep as shown in the 2024 UPC
- 1502.3.4 Annual Inspection – **Tabled, Abrahamson will submit an RFA**
 - Comments: May want to discuss with industry professionals for their input
- 1502.4 Separation Requirements – Keep as shown in the 2024 UPC
- 1502.5 Abandonment – Keep as shown in the 2024 UPC
- 1502.5.1 General – **Tabled, revisit pending review of RFA 161 by the full Plumbing Board**
- 1502.5.2 Underground Tank – Keep as shown in the 2024 UPC
- 1502.6 Sizing – Keep as shown in the 2024 UPC
- **1503.0 Gray Water Systems – Section was tabled, unless noted otherwise. Need input from MPCA and/or MDH**
- 1503.1 General – Keep as shown in the 2024 UPC

- 1503.2 System Requirements – **Review with 1501.7**
 - Comments: Section 1503.2, which addresses the use of gray water for irrigation, should be tabled for the reasons shown below. Until these issues are resolved and aligned with state regulations, Section 1503.2 should remain tabled and reviewed in conjunction with the RFA for 1501.7.
 - Enforcement Concerns: The current language prohibits gray water use for irrigating food crops that come into contact with the soil. However, it's unclear how building officials would enforce this restriction, especially after system installation or property ownership changes.
 - Overlap with Section 1501.7: Since 1503.2 ties directly into water quality standards and treatment requirements outlined in 1501.7, it makes sense to review both sections together for consistency.
 - Regulatory Conflict: Preliminary input from the Minnesota Department of Health suggests that the uses listed in 1503.2 may not align with current MPCA (Minnesota Pollution Control Agency) rules. Specifically, subsurface irrigation with gray water may not be considered an approved disposal method under existing regulations.
 - Need for Agency Coordination: Before moving forward, clarification is needed from MPCA regarding allowable uses, as well as related requirements for surge capacity, diversion, and backwater valves.
- 1503.2.2 Diversion
- 1503.2.3 Backwater Valves
- 1503.3 Connections to Potable and Reclaimed (Recycled) Water Systems – Keep as shown in the 2024 UPC
- 1503.4 Location
- Table 1503.4 Location of Gray Water System
- 1503.5 Plot Plan Submission – **Delete in its entirety**
- 1503.6 Prohibited Location
- 1503.7 Drawings and Specifications
- 1503.8 Procedure for Estimating Gray Water Discharge
- 1503.8.1 Single Family Dwellings and Multi-Family Dwellings
- 1503.8.2 Commercial, Industrial, and Institutional Occupancies
- 1503.9 Gray Water System Components
 - 1503.9.1 Surge Tanks
 - 1503.9.2 Gray Water Pipe and Fitting Materials
 - 1503.9.3 Subsoil Irrigation Field Materials
 - 1503.9.4 Subsurface Irrigation Field and Mulch Basin Supply Line Materials
 - 1503.9.5 Valves
 - 1503.9.6 Trap
 - 1503.9.7 Backwater Valve
- **1504.0 Subsurface Irrigation System Zones – Section was tabled, need input from MPCA & MDH**
 - 1504.1 General
 - 1504.2 Required Area of Subsurface Irrigation Fields, Subsoil Irrigation Fields, and Mulch Basins
 - Table 1504.2 Design of Six Typical Soils
 - 1504.3 Determination of Maximum Absorption Capacity
 - 1504.4 Groundwater Level
 - 1504.5 Subsurface and Subsoil Irrigation Field Design and Construction
 - 1504.5.1 Subsurface Irrigation Field
 - 1504.5.2 Minimum Depth
 - 1504.5.3 Filter
 - 1504.5.4 Emitter Size
 - 1504.5.5 Number of Emitters

- Table 1504.5.5 Subsurface Irrigation Design Criteria for Six Typical Soils
- 1504.5.6 Controls
- 1504.5.7 Maximum Pressure
- 1504.6 Mulch Basin Design and Construction
- 1504.6.1 Single Family and Multi-Family Dwellings
- 1504.6.2 Size
- 1504.6.3 Minimum Depth
- 1504.6.4 Maintenance
- 1504.7 Subsoil Irrigation Field
- 1504.7.1 Minimum Pipe Size
- 1504.7.2 Filter Material and Backfill
- 1504.7.3 Subsoil Irrigation Field Construction
- Table 1504.7.3 Subsoil Irrigation Field Construction
- 1504.8 Gray Water System Color and Marking Information
- 1504.9 Other Collection and Distribution Systems
- 1504.9.1 Higher Requirements
- 1504.10 Testing
- 1501.11 Maintenance

The Committee will continue with the review of Chapter 15 at the next meeting, as follows:

- **1505.0 Reclaimed (Recycled) Water Systems**
- 1505.1 General
- 1505.2 Permit
- 1505.2.1 Plumbing Plan Submission
- 1505.3 System Changes
- 1505.4 Connections to Potable or Reclaimed (Recycled) Water Systems
- 1505.5 Water Pressure
- 1505.6 Initial Cross-Connection Test
- 1505.7 Reclaimed (Recycled) Water System Materials
- 1505.8 Reclaimed (Recycled) Water System Color and Marking Information
- 1505.9 Valves
- 1505.10 Hose Bibbs
- 1505.11 Required Appurtenances
- 1505.12 Same Trench as Potable Water Pipes
- 1505.13 Signs
- 1505.14 Inspection and Testing
- **1506.0 On-Site Treated Nonpotable Water Systems**
- 1506.1 General
- 1506.2 Plumbing Plan Submission
- 1506.3 System Changes
- 1506.4 Connections to Potable or Reclaimed (Recycled) Water Systems
- 1506.5 Water Pressure
- 1505.6 Initial Cross-Connection Test
- 1506.7 On-Site Treated Nonpotable Water System Materials
- 1506.8 On-Site Treated Nonpotable Water Devices and Systems
- 1506.9 On-Site Treated Nonpotable Water System Color and Marking Information
- 1506.10 Design and Installation
- 1506.10.1 Listing Terms and Installation Instructions
- 1506.10.2 Minimum Water Quality

- 1506.10.3 Deactivation and Drainage
- 1506.10.4 Near Underground Potable Water Pipe
- 1506.10.5 Required Filters
- 1506.11 Valves
- 1506.12 Signs
- 1506.13 Inspection and Testing

At the next meeting, the agenda will begin with Chapter 15, Section 1505.0, and will include any other relevant sections and topics. The Committee will also schedule tabled items, RFAs, and other related matters. Additionally, potential rulemaking recommendations for the Plumbing Board may be discussed.

6. Announcements

- The Committee scheduled three upcoming meetings. Notices will be distributed to the Plumbing Board's interested parties one week in advance. To be added to this email group, please send your request to lyndy.logan@state.mn.us
- The meetings will be held in person at DLI in the Isanti Room. Remote attendance options include WebEx and phone. Meetings will start at 9 a.m. and conclude by noon. Please check agendas for updates or refer to the [Committee's webpage](#).
 - Weds., Oct. 1, 2025
 - Weds., Nov. 5, 2025
 - Tues., Dec. 2, 2025

7. Adjournment

A motion was made by Lemke, seconded by Westemeier, to adjourn the meeting at 11:29 a.m. The vote was unanimous, with 4 votes in favor of the motion; the motion passed.

Respectfully submitted,

Karl Abrahamson

Karl Abrahamson, Committee Secretary

Green meeting practices

The State of Minnesota is committed to minimizing in-person environmental impacts by following green meeting practices. DLI is minimizing the environmental impact of its events by following green meeting practices. DLI encourages you to use electronic copies of handouts or to print them on 100% post-consumer processed chlorine-free paper, double-sided.