

September 30, 2022

Ms. Gabriella Davis,
IAPMO Standards Council Secretary
4755 East Philadelphia Street
Ontario, California 91766

Subject: Appeal request regarding the development of the 2024 editions of the Uniform Plumbing and Mechanical Codes.

Dear Ms. Davis.

This appeal is on behalf of Gerald Smith and Patsy Root, both representing ourselves.

First, about Gerald Smith: I am retired from the Minnesota Department of Health, Public Health Engineer. My primary State responsibilities included the implementation of the Safe Drinking Water Act (SDWA) for Minnesota noncommunity public water systems. I also had national SDWA regulatory and policy responsibilities of several SDWA rules including the Groundwater Rule, Surface Water Treatment Rule, Revised Total Coliform Rule, Lead and Copper, and Capacity Development. It should be noted that the water infrastructure serving noncommunity public water systems consists of premise plumbing. Premise plumbing systems also being governed by the State Plumbing Code. I have extensive experience related to providing technical guidance and support to building water system owners and operators on managing water quality of their potable water systems.

Secondly, about Patsy Root: I am the senior government affairs managing with IDEXX Water, responsible for ensuring Federal, State and local laws and regulations protect our environmental water and public health. I am one of the original authors of ASHRAE 188 and participate in many other consensus standards organizations and am a Board chair member for the national environmental laboratory accreditation in the United States. I chair legislative committees for ASHRAE and AWT (Association of Water Treaters) and am certified to teach Legionellosis prevention standard ASSE 12080.

The nature of this appeal is to request certain actions be taken by IAPMO as follows:

1. The proposed language changes targeted to the control and management of Legionella for the 2024 code cycle of the Uniform Plumbing Code Appendices N (Item 305), and P (Item 307) be placed on hold for further discussion and consideration in the 2027 code cycle.
2. For failed motions proposed and voted upon by the Association in September:
 - a. Acceptance of the motion made for Item 305 (UPC) to accept public comment 2

- b. Acceptance of the motion made for Item 323 (UMC) to accept public comment 10.
3. Support for public comment 1 for proposed motions 325– 329 (UMC)
4. The proposed language changes for Appendices H (Item 321), and J (Items 323-330) (relabelled as F (Item 321)) be placed on hold for further discussion and consideration in the 2027 code cycle.
5. Building on the public comments received for the 2024 code cycle, we recommend IAPMO take immediate action(s) to form an advisory work group that includes building water system stakeholders, waterborne disease prevention experts, ASHRAE 188 members and other stakeholders in preparing for possible re-submission in the 2027 code cycle.

Since the original appeal request, dated August 22, 2022, several actions have been taken by IAPMO that may influence this request. We commend IAPMO for those actions taken. Starting with the Technical Committee votes in May, ROC ballots in August and Association actions (motions) in September, below summarizes the areas of the UPC and UMC where actions have been taken that are included in the earlier appeal.

1. Item #324, Association motion to approve and accept by hand vote Public Comment 2
2. Item #325 Association motion to approve and accept by hand vote Public Comment 1
3. Item #326 Association motion to approve and accept by hand vote Public Comment 1
4. Item #327 Association motion to approve and accept by hand vote Public Comment 1
5. Item #328 Association motion to approve and accept by hand vote Public Comment 1
6. Item #329 Association motion to approve and accept by hand vote Public Comment 1
7. Item #330 Association motion to approve and accept the removal of professional qualifications
8. Item #307 Association motion to approve and accept the removal of professional qualifications

We understand that the next step in the 2024 Code development cycle will be for these successful motions to be voted upon by the respective UPC and UMC Technical Committees. The Technical Committee members are not bound by the hand vote taken in September 2022, however; those positions should be strongly considered by the Technical Committees. Should the Technical Committee's affirm the Association motion, this will reduce the scope of this appeal. For example, should the Technical Committee vote to accept the motion made to UPC Item 307 and UMC Item 330, that

satisfies the appeal request specific to professional qualifications in the 2024 Code cycle. If the Technical Committee member's vote does not confirm the Association hand vote, this appeal request remains unchanged.

For any remaining issues, we respectfully submit the following as justification as substantiation for this appeal:

1. We participated in the Plumbing and Mechanical Technical Committee meetings on May 2 through May 5, 2022. The initial tone of the May meetings led one to believe there was significant bias regarding ASHRAE 188 and other commenters prior to starting the conversation starting. The perceived primary goal of the May meetings seemed to focus on finishing the calls within the time allotted versus listening to all commenters and substantiations. This negative atmosphere did not allow for open conversation nor consideration of public comments that were presented in person. There was no substantive effort made by the Technical Committees to hear, address and resolve all the public commenters objections and rationale for their objections. With the complexity of issues being raised, and insufficient time allotted for meaningful discussion, the Technical Committee could have (and should have) made the recommendation to place a hold on the proposed language, and revisit in the 2027 code cycle. As written today, there is the potential for unintended, negative consequences that will have real public health and safety consequences.
2. Harmonization of guidelines and guidance's. Today there is a patchwork of national, state, and local work on the topics covered in the proposed Codes, including very good technical/guidance documents that cover building water system responsibilities. IAPMO, by paraphrasing and altering text of existing resources, has produced appendices for the 2024 UPC and UMC that are not harmonized with existing, and well used, technical documents and guidelines. Such deviation from well-used documents and guidelines has the real potential of creating confusion to users. By placing a hold on the proposed language for the 2027 code cycle there will be an opportunity to have the UPC and UMC appendices better harmonized with existing resources and, thus, better adoption of the new Codes by states, industry and other stakeholders.

For example, IAPMO and the American Water Works Association recently requested public input for the development of a manual of recommended practices for the safe closure and reopening of building water systems. Primarily due to COVID, a number of guidelines and manuals have been developed regarding how to safely close and reopen building water systems. Like the proposed code additions identified for the 2024 code cycle, this could have been an opportunity for harmonizing resources. By delaying the changes to UPC and UMC, the committees can better align with existing documents.

3. The proposed text in Appendix H is based on New York codes for the prevention of Legionnaires' disease. Using a single state code does not take into consideration any other existing state or local rules, or implementation of policies in other jurisdictions. It also does not take into consideration any regional or national temporal climatic differences that exist in the management of building water systems and equipment.

We appreciate the creation of consistency between the UPC and UMC in addressing Legionella growth in building water systems. It must be noted that Appendix H was developed based on Appendix N of the UPC. It should be further noted that the original intent of the Appendix N was to provide guidance on scald hazard protection and Legionella growth. The applicability of scald protection and Legionella growth are not the same for cooling tower systems as it is for a potable building water system. For the 2024 code cycle Appendix H (UMC) and Appendix N (UPC) have been expanded upon to include supplemental distinction treatment. Appendix H has further been expanded upon to include a separate section minimizing Legionella Growth Potential in Cooling Towers and Other Mechanical Systems. The title of Appendix H is no longer representative of the content of the guidance within the appendix. Also, there is inconsistency in guidance for specific mechanical systems. For all other mechanical systems other than cooling towers, there is an immediate reference to ASHRAE 188. Why is guidance being expanded upon for cooling towers and not for other mechanical systems?

4. Professional qualifications, water management and infection control risk assessment for building systems. This does not belong in the UPC (Appendix P 307) or UMC (Appendix J 330). This opinion is not to be viewed as opposition to education and training. Experience, education and training are all essential components of water management planning. However, it has never been the intent of the Codes to direct specific certifications/licensing as that is the jurisdiction of the state or authority having jurisdiction.

There are other qualification processes available besides the ASSE, to avoid conflict with proprietary issues, either all should be listed or none.

5. In general, the theme throughout the proposed changes to the UPC and UMC emphasized the need to align with ANSI/ASHRAE 188. With regard to specific training, it must be noted that the proposed professional qualifications are in direct conflict with the requirements of ANSI/ASHRAE Stand 188 and ANSI ASHRAE Guideline 12, which state that no additional compliance, training, or certification in any hazard analysis, risk assessment, or risk management methodologies is required.

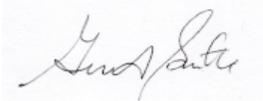
In summary, in Gerald's 30 plus years' experience in the implementation of the SDWA, the harmonization of resource content is an essential component to the successful

implementation of regulation or regulatory intent. IAPMO has an opportunity to advance and support such harmonization. What is being proposed in the 2024 code cycle has the real potential to cause confusion for users. Should that happen, there is opportunity for unintended consequences, which have real public health and safety consequences.

It is our strong recommendation that IAPMO pause these proposed changes to the 2024 UPC and UMC for reasons stated above. Our thanks to the IAPMO UPC and UMC Legionella technical committee members. they should be commended for their efforts. All records created by these committee members should be preserved and used as a starting point for discussion of the 2027 code cycle.

Thank you for your time and consideration of our comments. We are available for any questions or if IAPMO would like to discuss this topic further. Thank you for your acceptance and consideration of this appeal

Regards,



Gerald Smith
612-790-4976
bsmithg@mac.com



Patsy Root
Senior Manager Government Affairs, IDEXX Water
207-523-0835
Patsy-Root@idexx.com