Meeting Minutes SOUTH DAKOTA PLUMBING COMMISSION Meeting via Microsoft Teams

July 31, 2025, 1:30 p.m. CDT

Chair Duane Levanen called the meeting to order at 1:35 pm. Program Director Nielsen called the roll. A quorum was present.

Board Members present: Duane Levanen, Jim Bailey, Jon Kist, and Jeff Leuning.

Board Members present via Teams: Brian Cooper.

Others Present electronically: Mandy Nielsen, Program Director; Carol Ames, Senior Secretary; Jennifer Doubledee, Attorney; Daryl Aston, Inspector; Corey Foster, Inspector; Ron Healy, Inspector; Joe Vermeulen, Inspector; and Kristie Brunick, Executive Vice President of South Dakota Association of Plumbing, Heating, and Cooling Contractors.

Bailey moved to approve the agenda. Leuning seconded. MOTION PASSED.

Leuning nominated Jon Kist for chair. Bailey nominated Leuning for vice chair. Bailey moved to approve nominations. Levanen seconded. **MOTION PASSED**. Kist nominated Nielsen for secretary-treasurer. Bailey seconded. **MOTION PASSED**.

Levanen moved to approve the May 29, 2025, meeting minutes. Bailey seconded. **MOTION PASSED.**

Chair Kist opened the floor to public comment. Kristie Brunick with the SD PHCC spoke.

Inspectors presented reports on their districts to the Commission.

The Commission reviewed the Quarterly financial reports.

The Commission reviewed the Quarterly applications received report.

The Commission reviewed the Quarterly inspection report.

The Commission discussed application timelines. Bailey moved that deficiencies are sent when application is reviewed, and applicants will have 30 days to respond or their application will expire. Leuning seconded. **MOTION PASSED**.

The Commission discussed the examination process. Levanen moved to keep the process as it currently in Administrative Rule that applications for exam expire 6 months after approval and if the applicants do not pass or take the exam in that time they will need to reapply. Bailey seconded. **MOTION PASSED**.

Program Manager Nielsen presented her report to the commission.

Levanen moved to set the next quarterly meeting for October 23, 2025 at 10 am via Teams. Cooper seconded. **MOTION PASSED.**

Bailey moved to adjourn. Leuning seconded. **MOTION PASSED.**

Chair Kist adjourned the meeting at 3:02 pm.





[EXT] Rules Adoption

From Blain, Justin

Date Mon 9/22/2025 3:46 PM

To Nielsen, Mandy <Mandy.Nielsen@state.sd.us>

Mandy,

Looking at the rules adoption,

#36 - "Dwellings units are exempt from this requirement unless an expansion tank is installed" – should this be added to the end of section **609.11**, instead of 609.10?

#40 – "Not to exceed one-third of the total permitted length of a vent shall be permitted to be installed in a horizontal position" - this also shows up in section 904.2, not sure if you want to amend that section as well.

Thanks,



I am writing as a licensed plumber in the State of South Dakota to express my opposition to the proposed amendments to horizontal wet venting in the **2024 Uniform Plumbing Code (UPC)**, specifically items (53), (54), and (55). These amendments are inconsistent with the science and engineering principles on which the UPC is built, redundant with existing provisions, and in some cases, directly contradictory to the function of a horizontal wet vent system. They also raise serious concerns about ethics and enforcement within the trade.

1. Redundancy in Proposed Items (53) and (55)

- Item (53) adds a requirement that "all horizontal wet vents shall have a minimum grade of ¼ inch per foot until vertical."
- Item (55) repeats the same slope requirement.

This is unnecessary. The slope requirement is already clearly addressed in **UPC 708.1**, which mandates that drainage piping less than 4 inches in diameter be installed at a minimum slope of ¼ inch per foot. Repeating this requirement within the wet vent section serves no purpose other than to clutter and confuse the code.

Worse still, Item (55) permits slope "up to centerline." This allowance goes against the engineering science of horizontal wet venting. In a horizontal wet vent, the top two-thirds of the pipe cross-section is reserved for air movement to protect trap seals, while the lower one-third carries liquid waste. Allowing a branch to roll up to or above centerline eliminates the air space needed for venting, which defeats the very purpose of the horizontal wet vent. Adopting this language would legalize installations that fail to perform as intended.

2. Contradiction in Proposed Item (54)

- Item (54) states: "If a wet vent is upstream of a toilet, then a minimum three-inch pipe shall be used as the wet vent section."

This amendment directly contradicts **UPC 908.2.2**, which already establishes wet vent sizing based on drainage fixture unit (DFU) values. Under the code:

- Wet vents may be 2 inches in diameter for 4 DFU or fewer.
- Wet vents must be 3 inches only when 5 DFU or more are present.

The existing fixture unit method is an engineering-based standard that protects both waste flow and trap seal integrity. The blanket three-inch requirement ignores fixture unit counts entirely, disregards the proven method of the UPC, and imposes additional cost without any performance benefit. There is no technical justification for this change outside of personal opinion.

3. Practical and Financial Impact

The proposed three-inch requirement would unnecessarily increase costs across the state. Larger pipe sizes drive up material and labor costs, which ultimately fall on customers. This amendment introduces expense and inconsistency rather than solving any identified problem.

4. Ethical Concerns in Enforcement

It is troubling that some inspectors are heavily reported to be enforcing code based not on the written UPC, but on personal interpretation and/or opinion. This practice is unethical and undermines the entire regulatory framework. Inspectors have a duty to enforce the adopted code consistently, not to substitute individual opinion.

The concept of "**Authority Having Jurisdiction (AHJ**)" exists to address unusual conditions or structural conflicts where professional judgment is required. It was never intended to bypass or override clear, written code provisions. When inspectors apply personal preference instead of the adopted code, they not only create confusion but also erode trust in the inspection process and place an unfair burden on contractors and customers.

5. Conclusion

The 2024 UPC already provides a clear, engineering-based framework for horizontal wet venting. It establishes proper sizing through fixture unit counts (908.2.2), proper slopes through 708.1, and protections for air space within the vent design (908.2.4). The proposed amendments are redundant, contradictory, and in some cases harmful to system performance.

For these reasons, I respectfully urge the Commission to reject the proposed amendments and uphold the Uniform Plumbing Code as written.

Sincerely,

Brad Tunge

Licensed [Contractor/Master] Plumber

State of South Dakota

From: Leah Christie

Sent: Monday, September 22, 2025 10:43 PM

To: DLR Plumbing Commission <SDPlumbing@state.sd.us>

Subject: [EXT] Proposed amendments

To the State Plumbing Commission,

I am writing in regard to proposed amendments 53, 54, and 55 to the 2024 Uniform Plumbing Code (UPC). As a plumbing professional with over two decades of experience in the field, I have significant concerns about how these amendments affect horizontal wet venting systems.

The foundational principle of horizontal wet venting relies on the top two-thirds of the pipe serving as the vent or free air space, while the bottom one-third carries the waste. Allowing the horizontal wet vent to be above the centerline or "rolled up" off of the horizontal branch compromises the venting of the most downstream fixture — the water closet. This change would violate the basic design and function of horizontal wet venting. Maintaining horizontal and lateral continuity is essential to preserving the necessary air space in the system, ensuring both functionality and code compliance. Also, why the redundancy of ¼ per foot minimum grade for horizontal wet venting? The 2024 UPC clearly states in chapter 7, ¼ per foot minimum grade for pipe smaller than four inches.

Additionally, I would like to address Amendment 54, which states:

"If a wet vent is upstream of a toilet, then a minimum three-inch pipe shall be used as the wet vent section."

What is the basis for this requirement? It appears to be more opinion-based than code-based. According to the 2024 UPC, vent sizing is determined by Drainage Fixture Units (DFUs), not fixture type or sequence. A two-inch pipe is sufficient for wet venting up to four DFUs, while a three-inch pipe is required only when DFUs exceed that threshold. Introducing a blanket requirement for a three-inch pipe is unnecessary and inconsistent with established UPC guidelines.

In conclusion, I respectfully recommend that Amendments 53, 54, and 55 be removed from consideration. I urge the Commission to adopt the horizontal wet venting provisions exactly as written in the 2024 UPC, which are based on sound engineering principles and proven field performance.

Thank you for your consideration

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To the State Plumbing Commission,

I am writing with concern over the proposed horizontal wet venting (HWV) amendments #53, #54 and #55, to the adoptions of the 2024 UPC. I have been in the plumbing field since 1992 with over 30 years of plumbing experience. Since the 2015 UPC code was adopted by the state of SD, the correct way to install a horizontal wet vented bathroom group has been misunderstood and incorrectly installed. Prior to 2015 when HWV was transitioning from group venting to HWV, portions of the wet vent were rolled up. When the 2015 code came out, it was determined the horizonal section of the wet vent from its end at the most downstream connection to the point where it turns vertical should stay in a horizontal plane from its lateral connection. Over the years other plumbers and I have pointed out to inspectors we encountered that HWV is not being installed correctly or enforced by inspectors as referenced in the code book. The normal response was" this is how we were told to do it, or this is how we were taught". No inspector ever took the time to listen to the concerns that proper HWV codes were not being enforced. Correct HWV is based off combination waste and vent (CWV) engineering principles. The main wet vented waste pipe is required to stay in the horizontal plane with the branches entering laterally and horizontal. This concept was used to develop HWV in 2015.

Please refer to the diagrams in the Illustrated 2024 UPC code book. Pgs. 316 & 31.

Illustrations 908.2A,908.2B,908.2.1. B and 908.2.1.C

The commentary in the UPC Illustrated training manual and what is taught in the 2015 IAPMO online HWV course are very specific that the toilet is the most downstream fixture at the end of the wet vent. Either ending at the heel of the wye connecting the toilet trap arm or a wye with the toilet trap arm entering up stream of the end of the wet vent branch. The wet vented section is then run horizontal at a ¼" per foot slope to the point where it turns vertical. The connections to the trap arms are the same as in CWV, made laterally and in the horizontal plane. This is why the proposed amendment #55 should not be adopted, allowing the different branch center lines to be off set up. The pipe sizing is modified so there are fewer DFU's to allow the free flow of air on the top portion of the WV section. A 2" waste line in HWV can carry only 4 DFU's, 3" is required for 5 or more DFU's. One of the proposed amendments requires a 3" wet vet section regardless of the DFU's are at or below 4 DFU's which most likely an opinion and not sound engineering.

Approximately 2 years ago other local plumbers and I took continuing ed class online that covered HWV. We learned that rolling up the wet vented section as we were taught was incorrect and could cause a disruption of air flow on the top of the pipe and diminish trap seal protection. Again, the information we learned was presented to the plumbing inspection team in Sioux Falls and to our surprise they responded, "they will review HWV".

A short time later I became aware the SF plumbing inspection team reviewed the code on HWV with the information in the code book and the training lesson from IAPMO and started to enforce the code as it is written. They started out with a learning period where they would educate on proper HWV. This action by the city of Sioux falls inspection team has been criticized by other plumbing inspectors in nearby jurisdictions. The proposed HWV amendments were drafted by someone who doesn't understand the engineering principle used in the design of HWV. The proposed amendments are based on opinion and misunderstanding of correct HWV. I feel strongly that before the commission decides, the members review what is taught in the code book and training manual commentary on HWV. The proposed amendments #53, #54 and #55 should not be adopted and the section of the code concerning HWV should be followed and enforced as written.

Best regards,

Tom Enderson