From: 2023wetc@kavi.iapmo.org on behalf of Taylor Duran
To: 2023wetc@kavi.iapmo.org
Subject: [EXTERNAL][2023wetc] 2023 WEStand ROC Circulation of Comments
Date: Wednesday, June 21, 2023 4:14:40 PM
Attachments: 2023 WEStand ROC Circulation of Comments.pdf

Dear WEStand Technical Committee Members,

I have attached for your review all comments received by the initial ballot closing date. If you wish to respond, reaffirm, or change your vote after reviewing the comments, you may do so by **Monday, June 26, 2023,** as this is the final date for returning all ballots. Any affirmative voters can change their vote.

If you do not wish to change your vote, no action is required.

If you wish to vote "negative" or wish to "abstain," please include a technical reason for a negative vote and a reason statement for abstaining.

Thank you for your willingness to serve on this committee.

Best regards,

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2023 WE•Stand ROC Circulation of Comments

Ballot Name:	Item # 023 Comment 02	
Voter Name	**Vote**	**Comments**
Lenger, Markus	AFFIRMATIVE	I agree with Comment # 1.

Ballot Name:	Item # 024 Comment 01	
Voter Name	**Vote**	**Comments**
Sovocool, Kent	ABSTAIN W/COMMENT	I feel the definition adds nothing and is little more than the dictionary definition of the two words. I will not though stand in the way of others that feel this is necessary.

Ballot Name:	Item # 028 Comment 01	
Voter Name	**Vote**	**Comments**
Lenger, Markus	AFFIRMATIVE	I prefer to include details pertaining to surfaces and collection for beneficial uses.

Ballot Name:	Item # 030 Comment 01	
Voter Name	**Vote**	**Comments**
Lenger, Markus	AFFIRMATIVE	Septic tanks should not be restricted to "underground." I am voting affirmative on Comment #3.

Ballot Name:	Item # 030 Comment 02	
Voter Name	**Vote**	**Comments**
Lenger, Markus	AFFIRMATIVE	Septic tanks should not be restricted to "underground." I am voting affirmative on Comment #3.

Ballot Name:	Item # 036 Comment 01	
Voter Name	**Vote**	**Comments**
Lenger, Markus	AFFIRMATIVE	I agree with the TC action to “Accept as Amended.”

Ballot Name:	Item # 038 Comment 01	
Voter Name	**Vote**	**Comments**
Lenger, Markus	AFFIRMATIVE	I agree with the TC action to “Accept as Amended.”

Ballot Name:	Item # 039 Comment 01	
Voter Name	**Vote**	**Comments**
Lenger, Markus	AFFIRMATIVE	I agree with the TC action to “Reject” Comment #1 in favor of Comment #2.

Ballot Name:	Item # 041 Comment 01	
Voter Name	**Vote**	**Comments**
Lenger, Markus	AFFIRMATIVE	The inclusion of a definition for “public sewer” in the WEStand is unnecessary.

Ballot Name:	Item # 045 Comment 02	
Voter Name	**Vote**	**Comments**
Lenger, Markus	AFFIRMATIVE	I agree with the TC action to “Reject” Comment #2 in favor of Comment #1.

Ballot Name:	Item # 045 Comment 03	
Voter Name	**Vote**	**Comments**
Lenger, Markus	AFFIRMATIVE	I agree with the TC action to “Reject” Comment #3 in favor of Comment #1.

Ballot Name:	Item # 046 Comment 01	
Voter Name	**Vote**	**Comments**
Mann, David	AFFIRMATIVE	I am voting affirmative, but I believe any product should be manufactured and tested to a standard. Anyone who knows anything with regards to a diverter spout, knows that over time the spout will leak. What should be in the WE•Stand is: “There shall be a separate valve for both the tub spout and shower head, or an inline valve diverting the water from the head to the spout and vice versa.”
Lenger, Markus	AFFIRMATIVE	Zero leakage should be required as it is achievable.
Koeller, John	AFFIRMATIVE	What the proponent of this proposal is attempting to do is change a provision that was debated extensively and voted upon in the previous round of WE•Stand several years ago. The "substantiation" offered here by the proponent is exactly what justifies its rejection. Of course, the current provisions in WE•Stand do not "prevent" leakage in the future. This is just as a showerhead flow rate limitation requirement doesn't prevent a higher flow in that showerhead in the future, or a faucet or toilet, for that matter. What WE•Stand has provided for (and the proponent of this modification is attempting to overturn) is a specified performance when new. That is all such a specification can provide. Furthermore, there is no need to test a diverter in the "field" as the proponent inaccurately describes. The California Energy Commission already qualifies products through an independent testing process by accredited laboratories that results in a listing (just as is done for numerous other plumbing products). As such, the "substantiation" is irrelevant and does not fit the 'real world' situation with today's diverters, their testing, their listing, and their application as a water use efficiency provision.

		Zero leakage not only "should be" achievable but, in fact, is achievable and has been so for many years. In fact, in 2015, there were 360 different diverter models in the CEC listings that were "zero leakage." Today, there are over 900 such products available in the marketplace. I concur with the committee's rejection of this proposal.
Sovocool, Kent	AFFIRMATIVE	Voting affirmative here supports the committee's rejection of the proposal to eliminate the zero leakage requirement.

Ballot Name:	**Item # 047 Comment 01**	
Voter Name	**Vote**	**Comments**
Lenger, Markus	AFFIRMATIVE	Section 402.8.1 (Marking) contains necessary provisions addressing marking.
Allen, Laura	AFFIRMATIVE	The committee rejected this comment so voting affirmative rejects it also.
Barnes, Samantha	NEGATIVE W/COMMENT	I agree with the substantiations provided for both the original proposal as well as Comment #1.

Ballot Name:	**Item # 051 Comment 01**	
Voter Name	**Vote**	**Comments**
Lenger, Markus	AFFIRMATIVE	I agree with the TC action to “Reject” Comment #1 as I favor Comment #3.

Ballot Name:	**Item # 051 Comment 02**	
Voter Name	**Vote**	**Comments**
Lenger, Markus	AFFIRMATIVE	I agree with the TC action to “Reject” Comment #1 as I favor Comment #3.

Ballot Name:	**Item # 053 Comment 01**	
Voter Name	**Vote**	**Comments**
Lenger, Markus	AFFIRMATIVE	I agree with the TC action to “Reject” Comment #1 as I favor Comment #2.

Ballot Name:	**Item # 062 Comment 01**	
Voter Name	**Vote**	**Comments**
Lenger, Markus	AFFIRMATIVE	This requirement is unclear and requires significant reworking for enforceability.

Ballot Name:	**Item # 062 Comment 02**	
Voter Name	**Vote**	**Comments**
Lenger, Markus	AFFIRMATIVE	This requirement is unclear and requires significant reworking for enforceability.

Ballot Name:	Item # 064 Comment 01	
Voter Name	**Vote**	**Comments**
Lenger, Markus	AFFIRMATIVE	I agree with the TC action to “Accept as Amended.”

Ballot Name:	Item # 064 Comment 02	
Voter Name	**Vote**	**Comments**
Lenger, Markus	AFFIRMATIVE	I agree with the TC action to “Reject” Comment #2 in favor of Comment #1.

Ballot Name:	Item # 079 Comment 01	
Voter Name	**Vote**	**Comments**
Lenger, Markus	AFFIRMATIVE	I agree with the TC action to “Reject” Comment #1 in favor of Comment #3.

Ballot Name:	Item # 079 Comment 02	
Voter Name	**Vote**	**Comments**
Lenger, Markus	AFFIRMATIVE	I agree with the TC action to “Reject” Comment #2 in favor of Comment #3.

Ballot Name:	Item # 079 Comment 03	
Voter Name	**Vote**	**Comments**
Sovocool, Kent	NEGATIVE W/COMMENT	First, this is a significant improvement over the initial versions that had almost no criteria. That said, there are some real issues that still need to be resolved. First of these is storage details, most notably a maximum storage time for urine. There is still vagary in ownership and fate of collected urine. If a foreclosed home has abandoned urine storage, who is responsible for that? The Authority Having Jurisdiction? Finally, there needs to be reasonable assurance irrigation is done safely. I don't support the use of a pressurized or spray system, or handheld spray bottle, but one could do that given the new language. Materials related to graywater may be useful in resolving some of these issues. I do support the concept, but we need to get the safety aspects sorted out before the roll out of this.

Ballot Name:	Item # 108 Comment 01	
Voter Name	**Vote**	**Comments**
Lenger, Markus	AFFIRMATIVE	I agree with the TC action to “Reject” Comment #1 in favor Comment #2.
Allen, Laura	AFFIRMATIVE	This was rejected by the committee so affirmative vote rejects it in favor of Comment #2.

Ballot Name:	Item # 115 Comment 01	
Voter Name	**Vote**	**Comments**
Lenger, Markus	AFFIRMATIVE	EPA/600/R-12/618 does not explicitly provide guidelines for potable rainwater catchment systems.

Ballot Name:	Item # 116 Comment 01	
Voter Name	**Vote**	**Comments**
Lenger, Markus	AFFIRMATIVE	I disagree with the use of storm drainage requirements for rainwater catchment system drainage.

Ballot Name:	Item # 119 Comment 01	
Voter Name	**Vote**	**Comments**
Lenger, Markus	AFFIRMATIVE	HPC is not needed.
Allen, Laura	AFFIRMATIVE	The committee voted to reject the public comment. So, voting affirmative also rejects it as the proposed testing addition is not necessary and creates more barriers for installations. (The proposed new test is not for health and safety.)
Sovocool, Kent	AFFIRMATIVE	I agree that measuring HPC is not going to contribute to a reduction in risk and as such is not a good indicator. I agree with the decision to reject this proposed requirement.

Ballot Name:	Item # 124 Comment 01	
Voter Name	**Vote**	**Comments**
Tabakh, Amir	NEGATIVE W/COMMENT	The scope of ARCSA/ASPE/ANSI 63 applies to rainwater. This Appendix is for wastewater treatment for potable water reuse which is not within the scope of this standard. The water quality treatment system requirements should be left to the Authority Having Jurisdiction. Graywater treatment systems for toilet flushing and irrigation are still very challenging to get certified and approved. Adopting anything beyond language of a conceptual nature for potable water reuse is premature at this time.
Barnes, Samantha	ABSTAIN W/COMMENT	I agree with the direction of the proposal but also agree with the comments left by Amir Tabakh (City of LA Department of Water and Power).

Ballot Name:	Item # 127 Comment 01	
Voter Name	**Vote**	**Comments**
Barnes, Samantha	NEGATIVE W/COMMENT	Although I agree with the direction of this proposal, I do not agree with adding it to WE•Stand as written in this proposal, at this time. I believe that further development with the participation of the appropriate government agencies is necessary to ensure all public health concerns have been addressed. I also do not support the use of standards NSF/ANSI 55, NSF/ANSI 58, and ASSE 1086 in this context because, as defined in the scope of each of those standards, they are intended to be used on only potable water.

Ballot Name:	Item # 133 Comment 01	
Voter Name	**Vote**	**Comments**
Sovocool, Kent	AFFIRMATIVE	Denying the use of RESNET/ICC 850 in its entirety because of a disagreement over a single measure is poor policy. Especially when in most cases, it is irrelevant as most builders don't provide softeners. They are an after sale addition by the owner or tenant. While recognizing the WGA trade association sees a possible negative in RESNET/ICC 850, this same standard has proven worth and allows us to work towards cross-compatibility in "green" standards. This is a needed evolution if we are to ever get the green codes, which we have labored to bring to fruition, actually adopted and practically used. I encourage an affirmative vote on Comment #1 and a negative vote on Comment #2. Doing so will serve to redirect the issue and WGA back to RESNET/ICC 850 which is where the debate belongs.
Tabakh, Amir	NEGATIVE W/COMMENT	I agree with the other negative comments.
Koeller, John	NEGATIVE W/COMMENT	After studying this situation further and reviewing all comments, I am voting negative on the committee's action. The RESNET/ICC 850 rating system penalizes the use of a water softener if a home’s hardness is under 10 gpg; consequently, RESNET/ICC 850 discourages the use of water softeners in situations that would have unintended consequences to the health of private well owners. Furthermore, no empirical evidence of any kind has been presented in this discussion that justifies the 10 gpg threshold contained within the RESNET/ICC 850 provisions (and thereby affecting this standard). Therefore, I see no reason why such an arbitrary threshold should be adopted or permitted.
Barnes, Samantha	NEGATIVE W/COMMENT	RESNET/ICC 850 would penalize the use of a softener on water that contains 10 grains or less of hardness per gallon. Water containing 10 grains of hardness per gallon would void the warranty of many high-efficiency water appliances that are designed to save water. A 2009 study by the Battelle Memorial Institute showed that water containing 10 grains of hardness per gallon would destroy instantaneous water heaters within 4 years. Hardness scale can also damage or plug high-efficiency dishwashers and low-flow showerheads, which are designed to save water. Soft water is defined in the North American standards NSF/ANSI 44 and NSF/ANSI 330 as water containing <1 grain of hardness per gallon (or <17.1 mg/L hardness). NSF standards promote

		public health, safety, and sustainability. NSF/ANSI and NSF/ANSI/CAN standards are developed through a public process that ensures balanced input from industry representatives, public health and regulatory officials, certification bodies and testing labs, and users. These two NSF standards have been adopted by the American National Standards Institute (ANSI) and the Standards Council of Canada (SCC). Manufacturers of devices that require soft water for continuous operation rely upon this standardized definition of soft water when designing products for use in North America. Water softening also saves energy by preventing the formation of hardness scale which interferes with heat exchange. Research has shown that even small amounts of hardness scale significantly increase energy usage during water heating applications. A 2013 U.S. Department of Energy report indicates that a 1/16th of an inch (0.06 inch) coating of lime scale decreases the efficiency of heat exchange in a boiler by an average of 11%. A study by the United Kingdom of Great Britain and Northern Ireland Ministry of Health found that a scale build-up of only 1/50th of an inch resulted in a 9.4% loss in heat transfer efficiency. A sugar industry study found that a scale build-up of only 1/32nd of an inch caused an efficiency loss of 7%. I would encourage members to review the “Water Footprint of Energy” if you don’t understand how wasting energy also wastes water. (https://www.watercalculator.org/footprint/the-water-footprint-of-energy/) RESNET/ICC 850 is flawed in its approach to mitigating the water usage of softeners. There are existing North American Standards that could be referenced to promote the use of high efficiency softeners that minimize water usage, or even to restrict the use of low-efficiency softeners that waste water. Restricting the use of softening below 10 grains of hardness would be counter-intuitive to the goal of saving water because of the unintended consequences on other water-saving products that rely on soft water. All of the above-mentioned comments were submitted by WQA and by many public reviewers to the RESNET/ICC 850 committee that worked on their standard. Their standard remains flawed and should not be referenced in the WEStand.
Cudahy, Michael	ABSTAIN W/COMMENT	I would like to hear more comments about the issue.

Ballot Name:	Item # 133 Comment 02	
Voter Name	**Vote**	**Comments**
Lenger, Markus	AFFIRMATIVE	I agree with the TC action to “Reject” Comment #2 in favor of Comment #1.
Allen, Laura	AFFIRMATIVE	The committee rejected this comment. So, voting affirmative rejects it. I also support Comment #1 and not this one.
Sovocool, Kent	AFFIRMATIVE	Please reaffirm the committee’s decision not to let a trade association derail use of an entire standard because of a possible negative impact to a trade association that is unlikely to even materialize. See my comments on Item #133 Comment #1 for more information. If WQA feels the standard referenced is unfair, they should take their concerns to that standards body. That said, most trade associations don't get every single thing they desire in these processes. Other groups however don't take this extreme step of trying to bar use of a standard for a single issue.
Barnes, Samantha	NEGATIVE W/COMMENT	The amendment to the original proposal suggested in Comment #2 is justified and is necessary as RESNET/ICC 850 would penalize the use of a softener on water that contains 10 grains or less of hardness per gallon. Water containing 10 grains of hardness per gallon would void the warranty of many high-efficiency water appliances that are designed to save water. A 2009 study by the Battelle Memorial Institute showed that water containing 10 grains of hardness per gallon would destroy instantaneous water heaters within 4 years. Hardness scale can also damage or plug high-efficiency dishwashers and low-flow showerheads, which are designed to save water. Soft water is defined in the North American standards NSF/ANSI 44 and NSF/ANSI 330 as water containing <1 grain of hardness per gallon (or <17.1 mg/L hardness). NSF standards promote public health, safety, and sustainability. NSF/ANSI and NSF/ANSI/CAN standards are developed through a public process that ensures balanced input from industry representatives, public health and regulatory officials, certification bodies and testing labs, and users. These two NSF standards have been adopted by the American National Standards Institute (ANSI) and the Standards Council of Canada (SCC). Manufacturers of devices that require soft water for continuous operation rely upon this standardized definition of soft water when designing products for use in North America. Water softening also saves energy by preventing the formation of hardness scale which interferes with heat exchange. Research has

		shown that even small amounts of hardness scale significantly increase energy usage during water heating applications. A 2013 U.S. Department of Energy report indicates that a 1/16th of an inch (0.06 inch) coating of lime scale decreases the efficiency of heat exchange in a boiler by an average of 11%. A study by the United Kingdom of Great Britain and Northern Ireland Ministry of Health found that a scale build-up of only 1/50th of an inch resulted in a 9.4% loss in heat transfer efficiency. A sugar industry study found that a scale build-up of only 1/32nd of an inch caused an efficiency loss of 7%. I would encourage members to review the "Water Footprint of Energy" if you don't understand how wasting energy also wastes water. (https://www.watercalculator.org/footprint/the-water-footprint-of-energy/) RESNET/ICC 850 is flawed in its approach to mitigating the water usage of softeners. There are existing North American Standards that could be referenced to promote the use of high efficiency softeners that minimize water usage, or even to restrict the use of low-efficiency softeners that waste water. Restricting the use of softening below 10 grains of hardness would be counter-intuitive to the goal of saving water because of the unintended consequences on other water-saving products that rely on soft water. All of the above-mentioned comments were submitted by WQA and by many public reviewers to the RESNET/ICC 850 committee that worked on their standard. Their standard remains flawed and should not be referenced in the WEStand.