Out-of-Scope (OS) Resolution Report on ANSI Public Review Comments – Second Public Review

CSA/ICC B805 Rainwater Harvesting Systems

CSA/ICC Joint Technical Committee on Rainwater Harvesting Systems - IS-RCSDI

Second Public Review: 11/1/2016-1/2/2017

The following comments received during the Second Public Review were deemed to be outside the scope of the Second Public Review. The portions of the Second Public Review Draft subject to comment were designated as described below, from the cover page of the document:

> "**Please note that only those sections of the document that were changed substantively from the First Public Review Draft are subject to public comment during this Second Public Review Period. The sections of the document that underwent change and are therefore eligible for comment are denoted in yellow highlighting. If comments are submitted on sections that were not changed, they will not be accepted."**

Accordingly, all comments included in this Out-of-Scope Resolution Report were Disapproved by the IS-RCSDI Joint Committee during Meeting #9 on June 7 and 8, 2017.

PR2 No.	Name	Clause	Comments	Proposed change
4	Wilson Chu	0	Third paragraph, first sentence "...the Standard does not require sampling and testing..".	Additional wording should be added to indicate the local authority having jurisdiction may ask for sampling, testing and/or reporting.
8	Raymond Wilkinson	1.4	Shouldn't Imperial units be used for the SI units instead of U.S. units since this is a Canadian publication?	The units of record in this Standard are SI units. Imperial customary units are shown in parentheses for information only.
9	Rosanna Breiddal	1.4	Units of Measurement (page 12) – if the units of record in this Standard are SI units, showing U.S. customary units in parenthesis for informational purposes only, makes the document unnecessarily complicated to read especially in Annex D	Exclude U.S. units
41	Wilson Chu	5.1.13.1	The section does not speak to requirements for reuse of any piping.	Add a paragraph - Any repurposing of piping that was used for a rainwater harvesting system shall be subject to approval by the local authority having jurisdiction.

42	Wilson Chu	5.1.13.2	Section (a) contradicts section 5.1.6.1. To prevent contamination of the potable water supplies and distribution system, all system piping should be separated by air gap.	(a) all system piping connected to a utility provided water system shall be separated by air gap.
43	Jeffrey Hugo	5.1.13.2	Decommisssioning of a rainwater harvesting system should point out the importance that a fire protection system was connected and if the rainwater system. If decommissioned, the fire code needs to be followed.	Rainwater harvesting systems removed from service shall comply with the requirements of the applicable local codes.When fire protection systems are connected to the rainwater harvesting system, decommissioning shall in accordance with the fire code. In addition, when a rainwater harvesting system is seasonally or temporarily removed from service, (a) all system piping connected to a utility-provided water system shall be locked out or disabled; (b) the storage tank shall be secured from unauthorized access; (c) inlet piping shall be redirected to approved drain systems; and (d) electrical power shall be shut down
45	Wilson Chu	5.1.6.1	Section 5.1.6.1 contradicts 5.1.6.2. At this time, there is insufficient evidence to demonstrate that a backflow preventer is sufficient to prevent contamination of the potable water supplies and distribution system.	Remove 5.1.6.2 (b) - Potable water systems connected to rainwater harvesting systems shall be protected against backflow by an air gap.
46	Stephen Little	5.1.6.2	Article 2.7.1.1 of the National Plumbing Code of Canada 2010 (NPCC) prohibits interconnection of non-potable water systems and potable water systems. As per the NRC - Construction technical query response below, no exception is made under NPCC Section 2.7, meaning the presence of a backflow preventer does not make the interconnection acceptable under the code. As it stands, the current clause(s) in CSA B805 regarding direct connection of potable water back-up to non-potable systems is in contravention of the requirements of the National Plumbing Code of Canada and causes tremendous confusion amongst AHJs. We look forward to the resolution of this item and consistency between CSA B805 and the NPCC. Note, the Ontario Plumbing Code does allow interconnection of potable water systems and non-potable water systems provided an RPBA or AG is installed. Your question: The National Plumbing Code Article 2.7.1.1 states 'A non-potable water system shall not be connected to a potable water system'. Can you confirm this statement implies there shall be no cross-connections, as defined by CSA B64.10, unless a suitable backflow preventer is installed? Are such connections permitted when the potable and non-potable systems are	N/A - See comment above for committee resolution/adoption.

			interconnected with the appropriate backflow prevention device as specified by CSA B64.10 and/or in accordance with local by-laws? Codes Canada response: The intent (purpose) of Sentence 2.7.1.1.(1) of the National Plumbing Code (NPC) 2010 is "To limit the probability that the interconnection of non-potable and potable water systems will lead to contamination of potable water systems, which could lead to harm to persons.". Sentence 2.7.1.1.(1) indicates that non-potable water systems cannot be connected to potable water systems. No exemptions to this are given under Section 2.7. of the NPC.	
47	Wilson Chu	5.1.6.2	Section 5.1.6.1 contradicts 5.1.6.2. At this time, there is insufficient evidence to demonstrate that a backflow preventer is sufficient to prevent contamination of the potable water supplies and distribution system.	Remove 5.1.6.2 (b) - Potable water systems connected to rainwater harvesting systems shall be protected against backflow by an air gap.
48	Wilson Chu	5.1.6.2	Changes to this clause will be required if the proposed change to the secondary water supply is accepted. If a utility-provided potable drinking water supply is required as a secondary water supply to the distribution system then such a supply must be provided through an approved air gap into a potable water storage tank that provides potable water to the distribution system. Specific references from the National Plumbing Code of Canada 2010 also prohibits direct connections of a Potable and Non-Potable system.	Potable water systems connected to rainwater/storm-water harvesting systems shall be protected against backflow by an approved air gap in accordance with plumbing code.
56	Wilson Chu	5.2.1.1	Last paragraph - The common end use applications listed are for reference only. Some of the listed uses may not be approved for use in all jurisdictions. All end uses shall be subject to approval by the local jurisdiction having authority.	Add a statement to the last paragraph: All end uses are still subject to approval by the local authority having jurisdiction.
109	Edward Van Giesen	7.3.7.1	need wording to refer to backflow prevention	7.3.7.1 General Where an uninterrupted water supply is required for the intended application, a secondary source shall be provided. When installed, secondary water may be supplied by means of a makeup water system to refill the storage tank(s) or a bypass system that provides water directly to the distribution system protected by a reduced pressure principle backflow preventer.
110	Wilson Chu	7.3.7.1	Under what circumstances would an uninterrupted water supply be required? Who should be the one to deem it required? Appropriate air gaps should be required for the	Reword to: Where an uninterrupted water supply is approved by the local jurisdiction having authority for the intended application, a secondary source shall be provided. When installed, secondary

			make up water and bypass systems.	water may be supplied by means of a makeup water system to refill the storage tank(s) with an air gap or a bypass system with an air gap that provides water directly to the distribution system.
126	Edward Van Giesen	7.5.2	Overly prescriptive. I many cases when sending water to the top of a building the pressure requirement calls for much higher pressures. Recommend striking this provision.	7.5.2 Water pressure-reducing valves or regulators Where the water pressure supplied by the pumping system exceeds 550 kPa (80 psi) static, a pressure-reducing valve shall be installed to reduce the pressure in the rainwater distribution system piping to 550 kPa (80 psi) static or less. Pressure-reducing valves shall be specified and installed in accordance with the plumbing code.
141	Edward Van Giesen	8.2.3	How can one take sample at the point of use in toilets for example. Provision should read sample take after the last component on the filtration/treatment train of a rainwater system.	8.2.3 Multi-family residential applications Any filter, UV lamp or other consumable component shall be replaced in accordance with the manufacturer's recommendations. Water quality monitoring shall include weekly inspection of the rainwater system and where chlorine is used, ongoing automatic monitoring measurement of chlorine residual shall be provided.turbidity and UVT of water leaving the treatment system, chlorine residual at the after the last component on the filtration/treatment train of a rainwater system. point of use and, for systems serving 500 or more people, grab samples for HPC and culturable enterococci to ensure treatment processes are operating within control limits. Where treatment processes are not operating within control limits, corrective action shall be taken.