



September 28, 2017

Katie Papadimitriu, Chairman
Illinois Pollution Control Board
1021 N. Grand Ave. East
PO Box 19274
Springfield, IL 62794-9274

Re: Industry response for Public Water Supplies: Proposed New 35 Ill. Adm. Code 604 SUBPART O: CROSS CONNECTIONS, Board Docket R18-17

Dear Chairman Papadimitriu,

I write to you today as the Chairman of the Illinois Section of the American Water Works Association's Backflow Committee (ISAWWA:BC) in response to board docket R18-17 Proposed New 35 Ill. Adm. Code 604, specifically SUBPART O: CROSS-CONNECTIONS (Section 604.1500 thru 604.1515). The ISAWWA:BC has reviewed the new proposed rules and would request the following concerns be documented and commented on before a decision is made on rulemaking:

1. SUBPART O: Cross-Connections (604.1500 thru 604.1515) states that the term "backflow prevention device(s)" is used continually throughout the proposed section. We propose a technical change from backflow prevention device(s) to simply "backflow preventer" to be consistent with Illinois Plumbing Code Section 890.120's definition of "Backflow Preventer: A device or an assembly used to prevent contamination of the potable water supply through an actual or potential cross-connection." The definition of a backflow prevention device leaves out the definition of a backflow assembly. By changing the term this will encompass all testable and non-testable backflow devices and backflow assemblies.
2. 604.1500 Cross Connections Subpart b states "No unprotected cross-connection shall be allowed whereby an unsafe substance may enter a community water supply". We propose adjustment language to state, "No cross-connection shall be allowed, whereby, any non-potable source may enter a community water supply." This slight adjustment will take into consideration not just unsafe substance, but also non life-threatening substances from being connected to a potable water supply.



3. 604.1505(b)(4) should be updated to reflect record keeping for testable backflow preventers. Proposed language could be "The community water supply shall maintain records of annual testing of all testable backflow preventers."
4. 604.1510 Cross Connection Control Device Inspectors:

ISAWWA:BC believes that the proposed rule needs to change throughout the document from "Cross-Connection Control Device Inspectors (CCCDI)," (including 604.1510 heading) to "Certified-Cross Connection Control Tester (CCCCT)" to be consistent with the definition of "Plumbing Inspector" in the Illinois Plumbing Code Section 890.120 which defines Plumbing Inspector as "employee or agent of state or local government who holds a valid Illinois plumbing license and is authorized to inspect plumbing." Based on the definition under 890.120, a CCCDI is not an inspector, because they do not have the ability to inspect plumbing. American Backflow Prevention Association (ABPA), American Society of Sanitary Engineering (ASSE), American Water Works Association (AWWA), Backflow Prevention Manufacturers Association (BPMA), and University of Southern California's Foundation for Cross-Connection Control and Hydraulic Research (USC-FCCCHR), International Association of Plumbing & Mechanical Officials (IAPMO), and the International Code Council (ICC) all reference Certified Cross-Connection Control Tester, not Cross-Connection Control Device Inspector. This will be more consistent with industry and national standards. In addition, we would request that the word "inspect" be replaced with the word "test" where it appears throughout Subpart O. Backflow devices are being tested to ensure their proper workability. This is not an inspection, but an actual physical test.

- a. 604.1510(a) should have language replacement that states "At a minimum; backflow preventers shall be tested upon installation, annually and immediately after repair, or when returned to service. The test shall be performed by a trained and Certified Cross-Connection Control Tester. The backflow test shall include physical testing in accordance with manufacturer's instructions and specifications."
- b. 604.1510 New proposed subsection that requires all cross-connection control device annual test results be forwarded to the community water supply within 10 business days.
 - i. A current survey of community water supply personnel state that they do not receive results within a timely manner, which in turn puts the water supply out of compliance as well as the consumer at risk.
- c. 604.1510 New proposed subsection that requires all failed and deficient backflow preventers must be righted within 30 days. Currently, there is no requirement for a failed backflow preventer to be repaired. When a backflow preventer is in a failed state, it puts the whole community water supply at risk of having contaminated substances enter the potable water system.



- d. 604.1510(a)(3) has a list of items required for the maintenance log. All items currently proposed are accurate, but more required items are needed for community water supplies to comply with proposed section 604.1505. We propose the following items to be added:
- i. Final Pass or Fail Results
 - ii. Backflow Test Kit Calibration Date, Manufacturer, Model and Serial Number
 1. Backflow Test kits are to be calibrated on an annual basis by Illinois Plumbing Code 890, and is recommended by each manufacture as well. Currently without this information on the maintenance log, municipal personnel do not know if the test kit is in compliance with the manufacturers requirements.
 - iii. Licensed Plumbing Contractors information, including 055 license number that the CCCDI is employed by
 1. This will reassure both water utilities and the general public, that the CCCDI is properly bonded, licensed and insured by IDPH.
 - iv. Type of Water Service the Device is servicing
 - v. Make, Model, Size and Serial Number of backflow preventer
 1. Currently this is not mandated and water utilities have incomplete data to enforce annual testing requirements.
 - vi. Location of the backflow preventer on the premises
 - vii. Backflow Preventer used for isolation or containment purposes
 - viii. Name and Certified Approval Number of the person performing the test
- e. Backflow Test Kit Requirements currently are not required either in proposed section 604, or current-cross connection control rules 653.801 thru 653.805. All backflow test kit manufacturers require annual backflow test kit calibrations to ensure proper results when testing a backflow preventer. Adding language, to that affect, would result in accurately tested backflow preventers and optimal protection of our public water supply.
- f. 604.1510(b)(1)(A) Current language reads that you must have qualifications to inspect plumbing and plumbing systems. This current language would require every CCCDI to be a Certified Plumbing Inspector while according to the definition is to inspect plumbing under Illinois Plumbing Code 890.120. Most currently approved CCCDI's would not meet this qualification. We propose the qualifications to be "a person authorized to perform plumbing". This will allow licensed plumbers to meet those qualifications without having to be a certified plumbing inspector.

604.1510(b)(1)(B) has a mandate that all training to become a CCCDI must be completed by the Environmental Resource Training Center (ERTC). While we highly respect ERTC and the work that they do, we are concerned that at some point in the future they may lack funding and/or staff to supply the



necessary training. With that being said, we suggest language be added to provide for other training providers in the event that ERTC would no longer be able to provide services. That provider (s) would need to be approved by IDPH with the advice and consent of the Illinois Plumbing Code Advisory Council, and the Board of Plumbing Examiners.

"Must complete a training course offered by the Environmental Resource Training Center or another agency approved course on cross connection control devices, which includes hands on practice testing of different types of backflow preventers and proper maintenance and repair."

- g. 604.1510(b)(1)(D) states that you must have the understanding of backflow knowledge to pass the test. In all reality, an understanding does not mean an individual is competent to pass the exam. New proposed language update is below:

"Must successfully complete both written and performance examinations demonstrating competency of the following: the principles of backflow and back-siphonage; the hazard presented to a potable water system; locations which require installation of cross-connection control; identifying, locating, testing, maintaining and repairing cross-connection control methods and devices in-line, as located throughout each system which connects to a community public water supply."

- h. 604.1510(b)(1)(E) would be a new proposed section requiring all CCCDI's to re-certify for their licenses every three years. Currently, a CCCDI, after receiving approval, never has to show their ability to test in the future. The failure of IEPA and IDPH programs to ensure re-certification of all CCCDIs every three years (which is a national standard) has allowed for individuals to pass backflow preventers during a failure state and putting all potable water systems at risk. Currently, the State of Illinois is the lone state within our nation that does not require a re-certification course every three years to keep their CCCDI license. In our industry, water utilities and regulatory agencies have all seen falsified test reports from CCCDI's purely because of a lack of education and training. By instilling a one-day re-certification every 3rd year, all CCCDI individuals would be required to pass a test that proves they still have the ability to perform such work; and, in turn will insure our community water supplies are always safe. Proposed language provided below:

"CCCDI's are required to complete an eight hour recertification course every three years from their original issuance date of their CCCDI license. The course shall include a written and practical exam demonstrating competency in backflow prevention testing and be completed through Environmental Resources Training Center or an approved course by the agency or plumbing advisory council"

- i. 604.1510(c), 604.1510(c)(1), 604.1510(c)(2) technical change. In language referencing "inspection" of a backflow preventer, the word "inspection" should be replaced with "tested" as there is no



inspection being done under industry standard and Illinois Plumbing Code definition. A CCDI is not inspecting a backflow preventer to make sure it's in working order; they are testing the backflow preventer to make sure it's in working order.

The Illinois Section of American Water Works Association's Backflow Committee thanks you for your consideration of our proposed comments. If there is any other information we can provide to help facilitate these changes, please feel free to contact myself.

Best Regards,

Richard Marvel
ISAWWA Backflow Committee Chair