SWEETWATER AUTHORITY

Water Quality Committee May 19, 2025



Update on Efforts to Upgrade all Fire Service Lateral Single Swing-check by July 1, 2034 to Align with State Water Resources Control Board Requirements

CONCLUSION

This is an informational item.

OVERVIEW

A decade prior to the State recognizing the potential hazard of fire services, the Authority's Cross-Connection Control section researched the issue and determined fire services to be a potential hazard to the Authority's water system. Staff discovered that the American Water Works Association Research Foundation conducted a study that found water quality within existing wet-pipe fire sprinkler systems exceeds the primary standard for lead and cadmium and secondary standards for iron, manganese, total dissolved solids, sulfate, color, and odor. Soluble lead appeared to be originating from check valves that had lead-weighted clappers, leaded fittings, machined leaded brass valve bodies, and other accessories. (Duranceau S, Poole J., Foster J.V. (1999). Distribution systems Wet-Pipe Fire Sprinklers and Water Quality. American Water Works Association)

Furthermore, Section 1003 of the Uniform Plumbing Code states: "No person shall install any water-operated equipment or mechanism, or use any water-treating chemical or substance, if it is found that such equipment, mechanism, or substance may cause pollution or contamination of the domestic water supply. Such equipment or mechanisms may be permitted only when equipped with an approved backflow prevention device or assembly."

At the April 25, 2018 meeting, Staff presented the findings and the Board approved amending the Rates and Rules and adopting Resolution 18-07. The resolution established a requirement that all fire service laterals with single swing-check valves be brought above ground and retrofitted with an approved Reduced Pressure Principle Backflow Prevention Detector Assembly by April 25, 2023. At that time, staff identified that approximately 380 of the 772 private fire service laterals did not have an approved backflow prevention device and were not in compliance.

At its June 8, 2022 meeting, the Board approved a two-year extension for the deadline stipulated in Resolution 18-07. This resolution mandated the replacement of all single swing-checks on fire service laterals with an approved Reduced Pressure Principle Backflow Prevention Detector Assembly by April 25, 2025, due to unforeseen economic impacts related to the pandemic.

On December 19, 2023, the State Water Resources Control Board adopted the Cross-Connection Control Policy Handbook (CCCPH) to go into effect July 1, 2024. Pursuant to the CCCPH Article 2, Section 3.2.2, (e) Except as noted below, a Public Water System (PWS) must ensure its distribution system is protected with no

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less than Double -Check (DC) Assembly protection for a user premises with a fire protection system within 10 years of the effective date of the CCCPH.

With the effective date of the CCCPH being July 1, 2024, this would extend the Authority's currently established due date for the required replacement of all single swing-checks on fire service laterals with an approved Reduced Pressure Principle Backflow Prevention Detector Assembly to July 1, 2034. The CCCPH stipulates that failure to comply with this requirement would require that the Authority isolate the private fire lateral from its distribution system as stated in section 4.3 in Sweetwater Authority's Rates and Rules. If the private fire service lateral is turned off for non-compliance the appropriate fire agency will be notified.

Annual reminder notices were sent to property owners based on the initial upgrade plan established in 2018. Property owners were notified via letters on:

- 380 Letters mailed on October 1, 2018
- 370 Letters mailed on October 1, 2019
- 355 Letters mailed on October 1, 2020

At the end of 2020, with only 25 upgrades completed, staff increased the outreach effort to property owners to include reminder postcards along with annual reminder notices on:

- 355 Reminder postcards mailed on April 23, 2021
- 350 Letters mailed on October 1, 2021
- 345 Reminder postcards mailed on April 22, 2022
- 325 Letter mailed on October 1, 2022
- 316 Reminder postcards mailed on April 23, 2023
- 307 Letters mailed on October 1, 2023
- 291 Letters mailed on October 1, 2024

At this time, 101 customers have complied with the upgrade requirement out of the 380 fire services originally identified. The remaining 279 fire services still need to be upgraded. Customers with an existing fire protection system that lacks an approved backflow prevention device are required to upgrade their fire protection to comply with current standards. It should be noted that there are no state funding provisions available to assist with fire service backflow upgrade measures. Consequently, all expenses associated with these upgrades are the sole responsibility of the customer.

To effectively inform, educate, and assist property owners in complying with fire service lateral backflow prevention requirements, the Authority will enhance communication strategies and digital outreach.

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In addition to the annual reminder notifications sent in October, the following actions will be implemented:

- A year prior to the compliance deadline, we will increase the distribution of reminder postcards. Instead of sending only one postcard during the six-month period following the annual notifications in October, we will now send them in the fourth month (February) and the eighth month (June), effectively doubling our outreach efforts.
- 2. A dedicated compliance landing page will be launched on our public website. This page will feature instructions for compliance, a searchable list of Authority approved backflow testers, timelines, permit requirements, a contact form for customer support, and a FAQ sheet.
- 3. We will create easy-access QR codes, located on the annual notification letters and reminder postcards, directing customers to the Sweetwater Authority website, providing a valuable resource for cross-connection compliance information and updates on state legislation.
- 4. Educational information will be provided at Sweetwater Authority-hosted Community Open Houses and at community events staffed by the Authority.
- 5. We will inform and educate local chambers of commerce, city governments, property managers, and homeowners about the need for these upgrades. Starting in 2032, annual reminder notices will be sent via certified mail.

The Authority reached out to local fire agencies in Chula Vista, National City, and Bonita to identify and address any concerns regarding the impact of these upgrades and the potential consequences of turning off the water to the fire service laterals if a property is found to be non-compliant. The following is an update on our efforts:

- National Fire Department: The Division Chief/Fire Marshal was contacted by phone, and he informed the Cross-Connection Control Supervisor that our inquiry has been forwarded to a different Chief, who is currently on leave and will respond upon their return.
- Chula Vista Fire Department: Fire Division Chief and Director of Fire Prevention responded via email with their input on the impact of these upgrades.
- Bonita-Sunnyside Fire Department: The Fire Marshal was contacted via email and responded that their agency was not interested in participating in this matter.

FISCAL IMPACT

The fiscal impact for the postcards is \$350 for printing and postage.

The fiscal impact for the upgrade is paid by the property owner, per the Authority's Rates and Rules.

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Based on estimates from the contractors and property owners who have upgraded their fire service lateral the cost was between \$30,000 to \$60,000.

CONCLUSION

This is an informational item.

Staff Contact: Carlos Quintero, General Manager Leticia Munguia, Interim Director of Administrative Services Gregg Harpenau-Parks, Customer Service Manager Sarah Hargis, Field Services Supervisor

SUPPORTING INFORMATION

Strategic Plan

Goal #1 Water Quality (WQ) Provide high quality water that meets regulatory requirements.

• WQ4: Administer the Authority's Standard Specifications Section 17 Cross-Connection and Backflow Prevention Ordinance to protect the public water supply from contamination.

Past Board Actions

April 23, 2025	The Governing Board approved extending the due date of all fire service lateral swing check upgrades to July 1, 2034 to align with the State Water Resource Control Board requirements. At the meeting, the Board requested staff contact the local fire agencies to address any concerns or considerations relating to the impact of these upgrades as well as what actions the Authority is taking to educate and inform customers.
June 8, 2022	The Governing Board approved a two (2) year extension of the due date until April 25, 2025, for customers with a non-compliant backflow prevention device on the fire service lateral to bring the device into compliance.
April 25, 2018	The Governing Board adopted Resolution 18-07 to approve the amended Rates and Rules regarding the enforcement plan for private fires service lateral backflow prevention requirements.