

RESIDENTIAL FIRE SPRINKLER TESTING

CITY OF ROCKWALL
Public Works
Department



Residential Fire Suppression System Backflow Testing Requirement

The residential fire suppression system at your property requires a testable backflow prevention assembly. The Texas Commission on Environmental Quality (TCEQ) and the City of Rockwall strictly enforce these safety regulations.

Because fire protection systems contain stagnant water that poses a severe health risk, this setup must undergo a physical test. Moving forward, this physical backflow test is required annually on this same anniversary date.

 **Why is this Device Required?** A residential fire suppression system requires a backflow preventer because the water sitting inside fire sprinkler pipes is highly stagnant and toxic, posing a severe health hazard if it reverses into your drinking water supply.

The Problem: "Dead" Water

Unlike the pipes feeding your kitchen sink, fire sprinkler lines are closed loops where water sits undisturbed for years. Over time, this trapped water causes several dangerous reactions:

- **Bacterial Growth:** The warm, dark environment inside the pipes breeds harmful bacteria and pathogens.
- **Chemical Contamination:** Pipes leech hazardous heavy metals like lead, mercury, and zinc directly into the stagnant fluid.
- **Sludge and Odor:** The liquid degrades into a thick, black, foul-smelling oily sludge filled with rust and scaling.

The Catalyst: Hydraulic Pressure Flips

Water normally flows from the high-pressure city main into your home's lower-pressure plumbing. However, sudden drops in municipal water pressure—caused by a water main break or fire crews opening a nearby fire hydrant—create a vacuum or "siphon" effect. Without a mechanical block, this pressure drop will violently suck the toxic sprinkler sludge backward into the municipal water line or your home's fresh drinking taps.

The Solution: The Backflow Assembly

A backflow prevention assembly consists of spring-loaded mechanical check valves that act as strictly one-way gates. They allow clean water to pressurize your fire system but instantly slam shut if they detect any backward drop in pressure, ensuring cross-contamination is impossible.

Action Steps Required by the Homeowner

1. **Hire an Approved Tester**
 - Hire a licensed Backflow Prevention Assembly Tester (BPAT).
 - The operator must be registered with Rockwall via SC Tracking Solutions.
 2. **Execute the Physical Test**
 - The tester must physically test the safety valves to verify mechanical function.
 3. **Electronic Report Submission**
 - Your tester must upload the digital passing report directly to the SC Tracking Solutions Database within 48 hours.
 - *The city no longer accepts paper or email form*
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Where to Find Registered City Testers

- **Public Backflow Tester Directory:**
 - Visit the live, up-to-date registry online at the SC Tracking Solutions Public Directory at www.sctrackingsolutions.com and then by selecting the "Need a Service Provider" menu.
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Enforcement Notice

Failure to maintain annual compliance will result in code enforcement action. The City of Rockwall reserves the right to issue legal citations, apply monetary fines, or terminate municipal water service to non-compliant properties.

Questions & Support

- **Database & Portal Tracking Help:**
Contact SC Tracking Solutions at (866) 232-0174.
- **City Code & Enforcement Regulations:**
Contact the City of Rockwall Service Center at (972) 771-7734.