Professionals are supposed to help protect life limb health and property.

Page 119-120 Instructions regarding water heater safety. Thermal expansion detection and control because this is nasty and dangerous.

Specify/educate and verify that thermal expansion devices and relief valves are installed and maintained within a closed-loop plumbing system created by backflow preventers.
Reasonable and prudent SOP is to provide some amount of 1) Education 2) Specifications and 3) Verification regarding this nasty thermal expansion in a closed system.

Water damage and explosions are obvious and must be prevented. Thermal expansion robs years of life from plumbing.

SOP must be adhered to in order to protect the customers and shield the Utility from liability.

Generally
Water heaters are designed to operate on an “open system” where thermal expansion bleeds back.

Specific provisions must be made to ensure safety when systems are closed.

Shielding tools to prevent liability.

Standard Operating Procedures
“Education”
Specification,
Verification
“If the T & P valve fails and a backflow preventer is on the water line the pressure can rupture customers water pipe.”

“In Oklahoma seven people were killed when a water heater exploded”

Learn the instructions on the T &P valve tag. Rely on these instructions.

Instructions are affixed to approved safety valves.
Never close the customers system on T & P safety valves that look like this.

Post a sticker that reports annual service by a properly trained person. Just like fire extinguishers.

Insurance companies will cancel coverage.
Plugging, capping, altering, and tampering are not approved.

Code does not permit such an alteration.

Closed systems will go up against things like this. Don’t close or maintain a closed system against a water heater like this.

Here are some reasons...
March 19, 2009
Water on the floor was the reason “Workers” plugged the water heater safety.

- Explosion lifted roof
- Criminal action resulted in managers agreeing to pay $450,000 instead of going to jail.
- Civil case still pending but the factory has gone out of business.

Backflow program discovered this.

The date code specifies when to remove T & P for internal inspection.
A wrench is required!
This old house teaches follow instructions!

Anti-tamper drain line connector.

Comes apart at 10 psi back pressure. Allows the T & P to function as designed and intended before water turns to steam.

Can not close a system on a T & P with a reduced line size.
Drain line contrivance. Not permitted!

Attaching a garden hose is not permitted.

Direct to sewer not permitted.

Wrong safety valve not permitted.
Insurance coverage canceled upon this discovery.

Contrivance resulting in damages could drag net the water supplier.

Properly trained person has tools spares parts and places a report card.

Professionals place maintenance log
Public buildings require proof. Maintenance must be recorded/logged.

Water heating boiler Maintenance Logged

Pleased to take questions
Call for program development assistance
603-582-4201