Nephi City
21 East 100 North
Nephi, Utah, 84648

Learn about Cross Connection Prevention

Water Is Life

PROTECT YOUR DRINKING WATER

LEARN ABOUT PROTECTING YOUR HOME FROM THE DANGERS ASSOCIATED WITH CROSS CONNECTIONS!

What is a Cross Connection?

A Cross Connection is a physical connection (piping configuration) between the public drinking water system and anything else, including another water supply that can allow pollutants or contaminants to backflow into the public drinking water system.

What is Backflow?

Backflow is the reversal of flow from a residential or commercial system back into the public drinking water system. A backflow incident could carry dangerous pollutants or contaminants into our public drinking water supplies making them unsafe to use.

Backflow can occur if your plumbing system is physically connected (a cross connection) to any source of contamination or pollution. Examples of possible cross connections include landscape sprinkler systems, hose attachments for utility sinks, chemical tank trucks, chemical sprayers, and garden hoses.

The International Plumbing Code, as adopted by the state of Utah and the Utah Public Drinking Water Rules requires that all cross connections be eliminated or protected against backflow by installing an approved backflow prevention device or assembly.

What Can Backflow Into Your Water?

Many public drinking water systems are contaminated each year by pollutants or contaminants that backflow into the water system through unprotected cross-connections. Identifying and eliminating or protecting cross connections is a matter of public health!

Backflow Prevention Assemblies

Backflow prevention assemblies provide protection against contamination or pollution. A cross connection is defined as, “Any actual or potential connection between a potable water system and any other source or system through which it is possible to introduce into the public drinking water system any used water, industrial fluid, gas or substance other than the intended potable water.” Cross connections and backflow incidences in the State of Utah have resulted in dangerous, highly contaminated water unexpectedly entering public drinking water systems. Irrigation waters, oil, toxic boiler compounds, sewage, pesticides, and other extremely dangerous contaminants have found their way into Utah public drinking water systems due to cross connections.

WHAT YOU CAN DO TO HELP PREVENT CROSS CONNECTIONS

There are many connections to our water distribution system. When connections are properly installed and maintained, the concerns are very minimal. However, unapproved and improper piping changes or connections can adversely affect not only the availability, but also the quality of the water. A cross connection may let polluted water or even chemicals mingle into the water supply system when not properly protected. This not only compromises the water quality but can also affect your health. So, what can you do? Do not make or allow improper connections at your homes. When the cross connection is allowed to exist at your home, it will affect you and your family first.

Your Garden Hose and Threaded Potable Outlets

A large majority of backflow incidents are created by the common garden hose. Modern plumbing codes require that all threaded .potable water outlets (hose bibs or sill cocks), except water heater drains and clothes washer connections, be protected by a non-removable hose bib vacuum breaker or an atmospheric vacuum breaker. The installation of a hose bib vacuum breaker (HBVB) is an inexpensive way to protect against contamination happening through your garden hose.

Stock water trough

When utilizing culinary water to fill stock water troughs, it is essential to ensure that the filling apparatus, typically a garden hose, is not left submerged in the trough. An air gap must be maintained that is at least twice the diameter of the filling hose or a minimum of 1 inch above the flood rim of the trough. In the event of backflow, contaminants within the trough, including but not limited to bacteria, vegetation, or animal waste, could be drawn into your home or those nearby.

Pools and hot tubs

Swimming pools and hot tubs contain various chemicals that are unsafe for human consumption. When homeowners fill or add water, they often just place a hose into the pool or hot tub. While this may appear harmless, in the event of a backflow, all those chemicals and bacteria can easily flow back into your home or into the municipal water supply, potentially affecting other residences as well.

Boiler or Radiant heat

A boiler or radiant heating system might incorporate various chemicals, including anti-corrosion additives, which have the potential to be inadvertently siphoned into the drinking water supply, posing health risks.

Water Softener Drain Line

Drain lines from water softener and water conditioners are typically connected to the sewer line. An air gap must be provided between the end of the drain line and the sewer line eliminate the possibility of siphoning raw sewage back into the drinking water system.

Landscape Sprinkler Systems

The Plumbing Code requires that all landscape sprinkler systems connected to the public water system be equipped with an approved backflow prevention device or assembly.

Any sprinkling system that can utilize both public drinking water supplies and secondary water supplies must follow specific plumbing regulations to prevent raw water from entering the drinking water system!

Irrigation systems may accumulate stagnant water near the sprinkler heads, which can harbor fertilizers, pesticides, or bacteria. In the event of backflow, these substances could be drawn back through the sprinkler heads into your residence or the municipal main lines.

For Questions and to Learn more about Cross Connection Prevention:

Contact Us

435-623-0822

https://nephi.utah.gov/199/Back-Flow

Nephi City

Water System Address

Nephi, Utah, 84648