

# Norfolk Insider

City of Norfolk, NE

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## “Backflow Control”



Dennis Watts and his crew at the City of Norfolk Water Department work hard to deliver safe, high quality water to the citizens of Norfolk. They do all they can but the quality of water that makes its way into Norfolk homes and businesses can still be compromised in a situation called backflow.

The term “backflow” refers to a situation in which water from different sources can reenter or back siphon into the city’s water system and contaminate it.

Equipment that can cause backflow includes boilers, sewage handling systems, coils or jackets in heat

exchangers. During backflow, the fluid from these outside systems is drawn back into the pipes, which contaminates the water supply.

“If you have a garden hose laying in a low spot in your yard that might have chemicals in it from fertilizing or spraying weed killers on your yard, in the event of a water main break it could siphon those chemicals into the hose and ultimately into the water supply,” Watts said.

Some older homes have boiler heating systems where the water intake is directly connected to the city’s water supply. This can also be a source of contamination as water in the boiler can be siphoned back into the city’s water supply.

In order to ensure that the water being delivered to homes and businesses is kept clean the City of Norfolk follows the Nebraska Health & Human Services Regulation Title 179 Chapter 22 and the International Plumbing Code concerning water safety.

The Title 179 regulation lists different types of backflow assemblies and devices to be used for preventing backflow. Some of these devices are for low hazardous situations and other devices are for more high risk hazards.

Right now all houses in Norfolk are required to have anti-siphon breakers on their outside garden hose bibs or wall hydrants. These are one directional valves that let water flow in only one direction-outward. These breakers can be purchased at any hardware store.

The city also utilizes two different types of backflow prevention systems for commercial applications. One type is backflow containment and the other is backflow isolation.

Backflow containment is a system used in a commercial building where there would be a backflow preventer on the incoming water service line which keeps contaminants away from the building and the city's water system.

"We also practice what's called backflow isolation. This is where the city requires devices such as an x-ray machine to have a backflow preventer installed so people inside the building would not be exposed to contaminants," Watts said.

The city currently has approximately 550 commercial backflow preventers in buildings throughout the city. Per state regulation, these devices need tested yearly to ensure proper operation. State regulations also require that every five years a survey be done on each residential water service in the city.

Clean water is a necessity for every community and backflow preventers help ensure that high quality water continues to be delivered to homes and businesses in Norfolk.