

## **CROSS-CONNECTIONS CAN CONTAMINATE OUR SAFE WATER**

*We are all aware that certain organic and chemical substances can contaminate the safe water coming out of our faucets. Citizens and businesses, through their utility bills, contribute considerable money every year to provide and protect a safe public water supply. Cross-connections are one of the factors that threaten the safety of our water.*

**What is a cross-connection?** A cross-connection occurs when a pipe designed to carry safe drinking water is connected at some point to a pipe containing unsafe water or other liquid material. You may not think of your home as having such hazards, but if you have a hose that is submerged in a pool, car wash bucket, bathtub or laundry sink, or if you have a pesticide sprayer connected to a garden hose, you've created a cross-connection. If a water main breaks, the potential exists for unsafe substances to be siphoned back into the water supply. This means that contaminated water in a pool, carwash bucket, laundry sink, or pesticide sprayer could be drawn into the water system. Once there, the contamination could affect many.

**What is the Utility doing to prevent cross-connections?** Federal and State Laws require all water utilities to establish and implement cross-connection control programs. City ordinances have been adopted giving the Utility the authority to inspect all residences and order removal of cross-connections found. Non-compliance will result in the disconnection of water service to the user and possible fines. This includes the largest industrial plant to the smallest individual home. Protection of the water supply is critical to the health of our families. The Tawas City Water Department takes this responsibility very seriously.

**Will my home be inspected?** Homes are already being inspected. New or remodeled homes are always inspected for cross-connections during construction. In existing homes, water meters are replaced on a 20-year cycle. During the meter replacement, technicians also inspect for cross-connections. Since homes are required to be inspected every 10 years, the Water Department will also be inspecting homes at least once between each meter changing. A normal home inspection will take approximately 15 minutes.

**What will the inspectors be looking for?** One of the most common cross-connections in homes is a laundry sink with a threaded faucet for a hose connection. The hose could be submerged in the sink, which contains a toxic liquid, resulting in a health threatening cross-connection. Another common residential cross-connection can occur when a garden hose is connected to an outside hose faucet. If the other end of the garden hose is then placed in a swimming pool, or is being used to spray weed killer or liquid fertilizer on your lawn, or is simply laying in a puddle on the ground, a serious cross-connection has occurred. Another common residential cross-connection can occur if the wrong type of toilet tank ballcock assembly is used. If the wrong type is used, water can be drawn out of the toilet tank back into the house's plumbing and the Utility's distribution system.

**How will I know what is found during the inspection?** The cross-connection inspector will be completing a "Residential Cross-Connection Inspection Form". A copy of this form will be given to the property owner when the inspection is completed. On this form will be the results found during the inspection. It will show you what was found to be in compliance as well as what change(s) need to be made, if any, to protect your plumbing from possible cross-connections.

**What can prevent cross-connections from occurring?** Backflow preventers can reduce the risk and protect our community from widespread illness and disease. They are devices that prevent water from moving backward into the water system through combinations of check valves or hydraulic breaks. Backflow preventers come in many sizes, specifications and degrees of complexity, depending on the problem being addressed.

**How will I know if the backflow preventer I'm installing is an approved device?** The American Society of Sanitary Engineering (A.S.S.E.) has performed the necessary research and developed the standards accepted by the Department of Environmental Quality, and the Tawas City Water Department. Any device that has a label with "A.S.S.E. #" will be considered as an approved backflow prevention device. Toilets tank fill devices must have a label with A.S.S.E. # 1002. Different plumbing situations will require different styles of backflow preventers. The inspection form provided by the Tawas City inspector will list the required A.S.S.E. # which needs to appear on each device, depending on the type of backflow protection needed.

**How quickly do I need to make the required change(s)?** Once the cross-connection inspection has been completed, the necessary corrections need to be made within the next 30 days either by the property owner or a licensed plumber.

**What happens if a property owner doesn't make the necessary corrections or refuses to allow the inspector to check the plumbing?** Per City of Tawas City Ordinance, the Utility has the authority to disconnect the water service if it does not meet City Ordinance or State Code.

**What do I need to do after the corrections are made?** Once the required plumbing changes have been made, just call the Water Department at 989-362-8688 to schedule an appointment for a re-inspection. The appointment times available for the re-inspection are Monday through Friday. At the time of the re-inspection, the Water Department inspector will check that the necessary changes were made and note whether these cross-connections have been corrected. A copy of the inspection form noting the results will be given to the property owner at this time.

**What is the cost to the property owner?** The property owner is responsible for having the proper backflow devices installed. For an average single-family home, if the owner installs these devices themselves, their cost should be less than \$60. The initial home inspection is provided by Tawas City at no cost. If any corrections need to be made after the initial inspection and a re-inspection is required, Tawas City will also perform this re-inspection at no charge.

*Cross-connections are a serious threat to the health and safety of all water users! Consumers turn their faucets on and what they believe to be "safe drinking water" is immediately available, pure and plentiful. "Safe drinking water" is Federally mandated and regulated by the Environmental Protection Agency. However, despite these strict regulations, extremely dangerous situations could occur when backflow contaminants are inadvertently allowed to enter our safe drinking water supplies! Cross-connection control is a long-term investment, which requires a cooperative effort between plumbing and health officials, the Utility, and property owners. The Water Utility greatly appreciates your help in keeping our water supply safe.*