



# WHY WE FLUSH

## hydrants & water lines

### WHY WE FLUSH:

We flush for a variety of reasons:

- Basic water system maintenance to exercise and test the hydrants
- Response to calls about poor-quality water that is discolored or has a undesirable odor or taste
- To refresh lines that do not get a lot of flow
- After repairs are made in the water system
- To do a flow test ensuring the system has adequate pressure for newly installed fire systems
- The State of Texas through the TCEQ (Texas Commission on Environmental Quality) mandates that dead end lines (the ends of non-looped water lines) be flushed at least once a month

If we did not flush, debris from construction could stop up the water lines, discolored water would not clear, and areas of stagnant water could lose disinfection and possibly cause illnesses. Flushing can prevent these issues and also prevent discolored water from staining clothes when washed.

### HOW WE FLUSH:

We have a number of ways to flush the systems. If the entire system needs to be flushed, we use a directional flushing plan created by the district engineer and Inframark. This is implemented by opening and closing specific valves and hydrants throughout the water system until every line has been flushed. If it is a main line break, usually only the area that is around the line that was compromised and repaired will be flushed.

Dead ends are generally flushed through a 2-inch valve for as long as it takes to get clear water and a good disinfection residual. For new construction, the valve and hydrants on the new water line will be partially opened until the new section is flushed out and full. The valve will be closed when we receive a good disinfection residual. Bacteriological samples will be collected to verify disinfection.

We use four basic tools to flush a hydrant:

- A fire hydrant wrench to remove the cap off of the hydrant and to turn the valve to start the flow

- A flow diffuser is used to disperse the flow from the hydrant which reduces possible injury or property damage. Some diffusers are capable of flow measurement
- A fire hose at times when the flow from the hydrant needs to be moved to prevent any damage
- A splash plate which is used to divert the flow from the hydrant outward so the ground below the plate does not erode or wash out.

### WHEN WE FLUSH:

Inframark has a schedule for flushing that often exceeds TCEQ directives. Dead end lines are flushed at least monthly while directional flushing is generally done annually. Poor water calls, main line repairs and emergencies are done as soon as they can be done safely.

In summary, we flush your hydrants and water mains to make sure that they work properly, and the water used is safe for consumption and has no bad odors or discoloration.