The Benefits of Unidirectional Flushing

Conventional Flushing



From tank

Tuberculation, or build-up, on distribution pipe walls is caused by corrosion and microbial activity. Excessive tuberculation affects both the quality and quantity of water supply. Distribution system deficiencies are responsible for over 25% of waterborne disease outbreaks in the United States each year.



- A Velocity of water is significantly higher in UDF than in traditional flushing, providing far better pipe scouring.
- B Valves are opened and closed during UDF, enabling water systems to locate broken or closed valves and to learn critical information about the system. Exercising hydrants and valves in this way also prolongs their useful life.
- **c** During conventional flushing, dirty water is recirculated throughout the system, whereas UDF forces water in one direction, from a clean source through a dirty pipe, providing for superior pipe wall cleaning.
 - Sediment, corrosion, and biofilm are forcefully flushed out during UDF, whereas they remain circulating in the system in conventional flushing.
- E UDF actually uses up to 40% less water than conventional flushing.
- **F** Conventional flushing does not produce a high enough velocity to adequately scour pipe walls, whereas the increased velocity in UDF removes a significant amount of tuberculation from pipe walls. Regularly scheduled UDF is an invaluable part of a system's asset management program.

Unidirectional Flushing (UDF)

From tank

Velocity 3 ft/s or greater



Tuberculation clogs pipes, decreasing water pressure and negatively impacting distribution. Pipes that are regularly cleaned with UDF are safer, more efficient, and have a prolonged life span. UDF is one of the most cost-effective ways to maintain a safe, functional distribution system.





Unsurpassed Solutions in the Water Environment



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