

SECTION 02675

DISINFECTION OF WATERLINES

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Disinfection of potable waterlines.

1.02 UNIT PRICES

- A. No payment will be made for disinfection of waterlines. Include cost in unit price of waterlines being disinfected.

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION

3.01 GENERAL

- A. All waterlines constructed shall be promptly disinfected before any tests are conducted on waterlines and before waterlines are connected to water distribution system.
- B. Water for disinfection and flushing will be furnished without charge to Contractor.

3.02 PREPARATION

- A. Furnish all required temporary blind flanges, cast-iron sleeves, plugs, and other items needed to facilitate disinfection of new mains prior to connecting them to water distribution system. Normally, each valved section of waterline requires two each 3/4-inch taps. A 2-inch minimum blow-off is required for waterlines up to and including 6-inch diameter.
- B. Fire hydrants shall be used as blow-offs to flush newly constructed waterlines 8-inch diameter and above. Where fire hydrants are not available on waterlines, install temporary blow-off valves and remove promptly upon successful completion of disinfection and testing.
- C. Slowly fill each section of pipe with water in a manner approved by Owner's Representative. Average water velocity when filling pipeline should be less than 1 fps and shall not, under any circumstance, exceed 2 fps. Before beginning disinfection operations, expel all air from pipeline.

- D. All excavations made shall be backfilled immediately after installation of risers or blow-offs.
- E. Install blow-off valves at end of main to facilitate flushing at all dead-end water mains. Install permanent blow-off valves as per drawing.

3.03 DISINFECTION

- A. Use not less than 100 parts of chlorine per million parts of water. Introduce chlorinating material to water lines in accordance with AWWA C651. After contact period of not less than 24 hours, flush system with clean water until residual chlorine is no greater than 1.0 parts per million parts of water. Open and close valves in lines being sterilized several times during contact period.
- B. If a chemical compound is used for a sterilizing agent, it shall be placed in pipes as directed by Owner's Representative.

3.04 BACTERIOLOGICAL TESTING

- A. After disinfection and flushing of waterlines, bacteriological tests will be performed by Owner or testing laboratory in accordance with Section 01410 - Testing Laboratory Services. If test results indicate need for additional disinfection of waterlines based upon Texas Department of Health requirements, Contractor shall perform additional disinfection operations at no additional cost to the Owner.

3.05 COMPLETION

- A. Upon completion of disinfection and testing, remove risers except those approved for use in subsequent hydrostatic testing, and backfill excavation promptly.

END OF SECTION