

Pressure tests shall not be made until the pipe has been backfilled as indicated in the preceding section. Testing shall not be made until at least 36 hours after the last concrete thrust or reaction backing has been cast with high early strength cement or at least 7 days after the last concrete thrust or reaction backing has been cast with standard cement.

Sterilization

The system shall be disinfected in accordance with the AWWA Standard C 651-99 with the following modifications:

1. A chlorine concentration of approximately 100 parts of chlorine per million parts of water (PPM) is introduced into the water mains *. This shall produce a residual chlorine concentration of not less than 25 PPM after 24 hours **. All methods of chlorination included in AWWA Standard C 651-99 are approved except that the tablet method will not be used where a continuous run of 2,500 feet is to be chlorinated, nor for mains over 12 inches in diameter, nor where trench water or foreign material has entered the system as determined by the City *.

Silicone or any non-soluble adhesives are not allowed for adhering chlorine tablet to the interior of water mains during construction.

2. 24 to 48 hours ** after introduction of chlorinated water, treated water (minimum 25 PPM) residual chlorine required) is flushed from the water mains (residual chlorine to be less than one milligram per liter) *. Flushing water is to be discharged into an approved location, authorized by the Public Works Department.

No water is to accumulate on public rights of way or easements or in any manner as to create a potential hazard to existing public improvements or under construction.

3. 48 hours ** after flushing the system, water samples may be taken by the City or a State of California Department of Health Services Certified Laboratory Agency at the cost of the contractor for bacteriological test *.

Laboratory fees will be based on cost recovery for time and material. City of Merced staff or a State of California Department of Health Certified Laboratory may collect water samples. The Public Works Director or his designee shall have sole discretion as to which approved entity is to collect samples on any given project or site. The Clarks Presence / Absence test shall be used for all bacteriological testing of water samples. No other testing method is approved or allowed. Should any water be removed from the new system during this 48-hour period, the test will be invalidated resulting in restarting test procedures at Step 1. Sampling points will be at a maximum spacing of 200 feet. Sampling points shall be as directed by the City.

Should a water service be designated as a sampling point, the contractor shall make the service accessible for testing. The standard number of samples (may be more or less as determined by the City) shall be one for each 1,000 feet of main plus one for each 10 services plus one for each 10 fire hydrants. Testing locations are to be evenly distributed with a minimum of 4 samples taken. Each dead end main will be sampled at a minimum of two locations. No hose will be permitted at sampling point.

Unless otherwise directed by the City, one sample shall be taken at each sampling point .

ENGINEERING DEPARTMENT		CITY OF MERCED, CA.		
WATER SYSTEM - CONSTRUCTION SPECIFICATIONS		W-20		
DRAWN: KGE	APPROVED BY: <i>David L. Tucker</i>			DATE: 11/15/04
DATE: 5/82				
REVISED: 9/17/04	CITY ENGINEER			
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