

Sunnyslope County Water District

Emergency Response Plan

Water Main Repair Disinfection

Water Main Break Disinfection

Leaks or breaks that are repaired with clamping devices while the mains remain full of water, and under pressure present little danger of contamination and require no disinfection.

1. Analyze all emergencies to determine the proper course of action.
2. Implement protection measures where applicable.
3. Notify your Supervisor.
4. Dispatch crew where applicable.
5. Contact Underground Service Alert (USA) 800-642-2444 to locate the following utilities: Gas, Electric, Telephone, Cable TV, Sewer
6. Dispatch equipment Backhoe, Dump Trailer, Air Compressor, Leak Truck.
7. Isolate the leaking water main section from the distribution system by closing the valves that supply that section.
8. Locate leaking section and excavate
9. Drain water into a sump pit and pump to waste.
10. **DO NOT ALLOW WATER TO BACK FLOW INTO WATER MAIN.**
11. Spray and swab the interior of all pipe and fittings used in making the repair with a 12.5% Sodium Hypochlorite Solution before they are installed.
12. Though flushing shall be started as soon as the repairs are completed and continued until discolored water is eliminated.
13. **IF CONTAMINATED WATER WAS ALLOWED TO ENTER THE OPEN WATER MAIN.** In addition to the above disinfection procedures, the section of water main in which the break is located shall be isolated, all service connections turned off and the section of water main shall be flushed until the discolored water is eliminated. The water main shall be filled with a 300-mg/l chlorine dose for a minimum contact time of 15 minutes. Flushing shall be continued until the discolored water is eliminated and the chlorine residual is not any higher than the surrounding distribution system. If valving and hydrant locations permit, flushing from both directions is recommended. Open the service connections and return main to service.
14. Bacteriological samples shall be taken after repairs to provide a record by which the effectiveness of the procedures used can be determined. If the direction of flow is unknown, samples shall be taken on each side of the main.
15. All significant water outages (widespread and lasting more than eight hours or disinfection failure) will be reported to the Department of Health Services.
16. Order parts to replace inventory parts used during repair.
17. Keep downtime to a minimum.
18. Critique the response plan after the repair is completed.