



**City of Huntington Beach**  
Department of Community Development  
**DISINFECTION OF NEW AND ALTERED WATER SYSTEMS**  
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The Building Division Inspectors enforces the disinfecting of new and altered water systems pursuant to the 2006 Uniform Plumbing Code and the 2007 California Plumbing Code sections 609.9, 609.9.1, 609.9.2, 609.9.3 and 609.9.4.

The following guidelines for the disinfection of water systems shall be as follows:

- **Method for Existing Water Systems:** Existing water systems that are being altered by adding additional plumbing fixtures or appurtenances such as a new bathroom, a kitchen remodel, a new water service, a relocated water heater or laundry facilities, a complete or partial repipe, etc. shall be deemed disinfected by flushing of the water system until only potable, non-malodorous water appears at the point of outlets. This method is a normal plumbing practice and should only be written as a correction if upon inspection non-potable (discolored or malodorous) water is detected.
- **Method for New Water Systems:** New potable water systems partnered with all new construction will be required to be disinfected with water – chlorine solutions. The entire new system is to be disinfected from the Reduced Pressure Principle Backflow device (**if such device is required to be installed**) all the way upstream to the furthest water outlet on the new system. One method described by the plumbing codes is to fill the system with a mixture of 50 (fifty) parts per million chlorine to water and allowing the system to sit undisturbed for a period of 24 (twenty-four) hours. An alternate method described by the code calls for filling the system with a mixture of 200 (two hundred) parts per million chlorine to water solution and allowing the system to sit undisturbed for a period of 3 (three) hours. Following the allowed standing time, the system shall be flushed with clean, potable water until the chlorine disinfecting residual in the water coming from the system does not exceed the chlorine residual in the flushing water. A disinfection declaration **shall** be required to be filled out by the person or persons performing the disinfection of the system. The declaration shall include the date and starting time of disinfection, person or persons names and company who performed the disinfection, the mixture method used and the length of time the system was flushed. This declaration may be hand – written or typed but must be wet signed by the person(s) who performed the disinfection. This declaration **must** be provided for acceptance of final plumbing inspection.
- **Bacteriological Testing:** A Bacteriological (Bac – T) test tells you if your water system is free from disease – causing bacteria. The test is an analysis to see if the water system has the presence of coliform bacteria. Occasionally some of our larger jobs such as motels and hotels, multi – family residences, health clinics, schools, restaurants, etc. will be required to submit to a bac – t test of the water system **after disinfection of** the system has been performed. The bac- t test must be performed by an approved agency (an analytical laboratory). The disinfection procedure shall be repeated if it is shown by the bacteriological examination made by the approved agency (laboratory) that coliform bacteria contamination persists in the system. The bac – t testing will be repeated until results show that no contamination exists. The paperwork from the approved agency (laboratory) declaring the water system free of coliform bacteria shall be required to obtain a final plumbing approval. **The requirement for the bac – t testing will always and only be stated on the approved, stamped set of plumbing plans.** The field inspector will not request the bac – t testing in the field unless he suspects a severe contamination of the potable water system. At that time he is to contact his supervisor or principal inspector who at that time will make the determination if a bacteriological test is required.