

Water Main Disinfection and Bacteriological Sampling

Location: Portland Water Bureau, 1900 N Interstate Ave, Portland, OR
Date: TBD
Schedule: One hour class, no breaks
Format: PowerPoint presentation, lecture and handouts

Topics Covered:

- 1.0 Regulatory Background – Oregon requirements & AWWA Standard *10 min*
- 2.0 Disinfecting New Mains *20 min*
 - 2.1 Sanitary construction practices
 - 2.2 Sequence of steps
 - 2.3 Flushing
 - 2.4 Addition of disinfectant – continuous feed method
 - 2.5 Chlorine measurement – high range test
 - 2.6 Record of disinfection
 - 2.7 Determining when main can be put into service
- 3.0 Disinfecting Existing Mains *10 min*
 - 3.1 Mandatory Process (high contamination risk)
 - 3.2 Normal process (low contamination risk)
- 4.0 Sampling and Testing for Presence of Bacteria *20 min*
 - 4.1 Coordination with lab (bottles, hold times)
 - 4.2 Acceptable sample taps
 - 4.3 Field measurements
 - 4.3.1 Chlorine residual – potable range test
 - 4.3.2 Temperature
 - 4.4 Sterile sampling method

Handouts provided:

- 1 Field process flow charts for new and existing main disinfections*
- 2 Water Main Disinfection Record (field form)*
- 3 Bacteriological Sampling Procedure*