

Overview

This Standard is about disinfecting new or existing water mains or pipe work, for precautionary and reactionary purposes. It includes selecting appropriate disinfectants, and disinfection methods, making sure the section is isolated, disinfecting pipework and disposing of the disinfected water in a manner which does not affect the environment.

This Standard is for anyone who disinfects new or existing water mains or pipework for precautionary or reactionary purposes.

Performance criteria

You must be able to:

1. confirm the section of the system to be disinfected and the fittings and disinfection methods to be used, from instructions and information received
2. select the required equipment for the disinfectant to be used
3. confirm that equipment condition and installation meets manufacturers' specifications
4. confirm that required amounts of disinfectant have been added to produce specified concentration at all points on the system
5. check existing network is protected so that contamination is prevented
6. follow disinfection procedures in accordance with organisational requirements
7. dispose of disinfected water to minimise the effect on the environment, in accordance with regulatory and organisational requirements
8. dismantle, clean and store equipment in accordance with organisational requirements
9. take appropriate samples to confirm the effectiveness of disinfection procedures on water quality
10. take appropriate action when you identify problems
11. you follow safe working and hygiene practices in accordance with relevant procedures, regulatory and statutory requirements
12. inform relevant people of disinfection details in accordance with organisational procedures

Knowledge and understanding

You need to know and understand:

1. the reasons for disinfecting mains, how contamination can occur and methods used to avoid contamination
2. disinfection methods and forms of disinfectants
3. the use of disinfectants and the dangers associated with them
4. the equipment to use and how to install it
5. what is covered by manufacturers' specifications for equipment condition and installation
6. the implications of ineffective isolation and how to assess valve configuration to check that mains are isolated
7. typical problems and your responsibility for dealing with them
8. safe working and hygiene procedures with regard to the handling, storage and use of disinfectants; personal hygiene; depressurising part of the system; use of personal protective equipment; use of hand tools and equipment
9. organisational procedures for informing people of disinfection procedures
10. how to disinfect mains
11. disposal methods for chlorinated water and the damage which can be caused by incorrect disposal of it
12. safe and correct use and storage of equipment
13. testing procedures
14. water quality parameters

Developed by Energy & Utility Skills

Version Number 2

Date Approved 01 Dec 2018

Indicative Review Date 01 Dec 2021

Validity Legacy

Status Original

Originating Organisation Energy & Utility Skills

Original URN EUSDCO6

Relevant Occupations Engineer, Water Network Technician, Water Network Controller

Suite Drinking Water Supply Distribution, Water Network Construction Operations, Multi-Utility Network Construction Operations

Keywords disinfection, hygiene, clean, water
