

## **Underground Pipework Chlorination Guidance**

In order to safeguard water quality and public health, it is a requirement that private supply pipes which fall into certain categories are disinfected (chlorinated) and tested as detailed overleaf, before a connection is allowed to the water main. All disinfection needs to be completed by a competent person and in accordance with BS8558-2011. These are requirements of the Water Supply (Water Fittings) Regulations 1999.

After pressure testing and flushing, systems shall be chlorinated in any of the following instances:

- a) A service pipe is greater than 50mm internal diameter (63mm OD),
- b) A service pipe length is longer than 50m in length
- c) Where it is suspected that contamination may have occurred, e.g. fouling by sewage, drainage or animals
- d) Where a system has not been in regular use and not regularly flushed
- e) Where the supply is being converted from a private water supply

Disinfection must be carried out a maximum of 30 days before the connection date.

If this procedure is not met we have a right to refuse the final connection, and the pipework must be re-disinfected to meet our requirements.

Contact us at <a href="mailto:developer.services@southeastwater.co.uk">developer.services@southeastwater.co.uk</a> to send your certificates or for us to answer any questions that you may have



New supplies should be flushed, filled with chlorinated water not less than 50mg/l and allowed to stand for 1 hour. Following which the level of chlorine shall be recorded, the chlorinated water flushed out until the chlorine residual has returned to the original background level of the feed water and the pipe refilled. After standing for at least **30 minutes** a sample is taken and onsite tests are undertaken.

The following must be submitted to our Developer Services Team prior to the connection being made:

- A disinfection certificate (mandatory)
- The sample results (mandatory)
- A method statement of the disinfection process carried out (optional)

The 'certificate' must indicate the name of the company performing the disinfection, date of disinfection, confirmation that the pipe has been flushed prior to disinfection, a 'hypochlorite' solution has been used, the chlorine level of the source water, the chlorine level after dosing, the contact time, the chlorine level after contact, and the chlorine level after flushing.

It must also detail the onsite test for appearance, odour and taste. The certificate must clearly state that the disinfection has been carried out in accordance with BS8558 (previously BS6700). The 'sample results' must include E coli, total coliforms, turbidity, and plate counts taken at both 22°C and 37°C. The sample results must be from a 'UKAS' accredited laboratory.

The post flush measurements of free and total chlorine residuals, taste, odour and visual appearance may be taken on-site. At the end of the contact period and prior to flushing the level of free chlorine must be measured at the downstream end of pipe. If this level is more than 5 mg/l (ppm) lower than the measured value at the start of the contact period the disinfection process must be repeated.

