

Disinfection of New Water Service Pipework

1. Prior to the commission of any new water supply the system must be flushed to ensure the removal of any debris that may within the pipework.
2. It **MAY** also be necessary to disinfect the pipe work depending upon the size, location, installation conditions, etc.
3. Under normal considerations for a new domestic house Northumbrian Water would **NOT** usually require the service pipe or any internal plumbing to be disinfected.
4. Northumbrian Water **WILL** however require the disinfection of new or existing supply pipes when:-
 - The new connection is to an existing premise domestic or otherwise that has been originally connected to a non-Northumbrian Water supply. (i.e. springs borehole or other source). Refer to Guidance Note 5.
 - The new water pipe is of 50mm internal diameter or greater.
 - The new water pipe is 50 metres or more in length.
 - The water pipework has not been in regular use for some time.(Installed and left or just isolated for a long period ie 28 days).
 - The pipe has been installed in such a manner as to give concern (i.e. contaminated land, foul conditions, may have been subject to ingress by pests).
 - The pipework may have been subject to contamination by virtue of its location particularly for repairs or extensions in industrial situations.
5. The method of disinfection should be in accordance with BS 6700 and the following is a typical method acceptable to Northumbrian Water.
 - The water pipework should be swabbed where possible. The swab having been immersed in a sodium hyperchlorite (Chloros) solution of 1000ppm (1% Chloros) or similar.
 - The pipework should then be flushed out to waste until the water is clear and free of air.
 - Inject the pipe work with a disinfection solution equivalent to 20 ppm of chloros and when fully charged leave to stand for a minimum period of 20 to 24 hours.
 - Flush out the chlorinated water disposing safely to drain (not to a watercourse) until the background of the chlorine reaches that of wholesome water.
 - Once again leave to stand fully charged for 20 to 24 hours contact time.
 - Have samples taken by a certificated UKAS laboratory (see over) and analysed for bacteriological satisfaction. For satisfaction the bacteriological results should not exceed

A	Total coliforms	0 per 100 ml
B	E Coli (Escherichia or Faecal Coliforms)	0 per 100 ml
C	Colony count @ 37° Celsius	50 per ml
D	Colony count @ 22° Celsius	300 per ml
 - In addition the free and total chlorine residuals must be measured and recorded on site prior to the sample being taken for bacteriological analysis.
 - If samples are clear the test results should be submitted to Northumbrian Water (ON THE ACCREDITED LABORATORY'S TEST CERTIFICATE).
 - If the test results fail it will be necessary to repeat the chlorination procedure.
6. **The new supply may be connected or reconnected to the public water supply only after approval by Northumbrian Water Ltd.**
7. A list of UKAS accredited testing laboratories within the north east is given overleaf.

Water Supply (Water Fittings) Regulations 1999 Guidance Note 4



Customer Services: 0845 7171100

UKAS accredited testing laboratories

Further information available from:- www.ukas.org

Alcontrol Laboratories
North East Laboratory
3 Lancaster Road
Hartlepool
TS24 8LN
Tel 01429 891333

Pattinson Scientific Services
Public Analysts Laboratory
Scott House
Penn Street
Scotswood Industrial Estate
Newcastle upon Tyne
NE4 7BG
Tel 0191 226 1300

Analytical & Environmental Services
Horsley Laboratory
Horsley
Newcastle upon Tyne
NE15 0PA
Tel 01661 855600

NEWTEC Laboratories Ltd
Belasis Court
Belasis Hall Technology Park
Greenwood Road
Billingham
TS23 4AZ
Tel 01642 370321

Norpath Laboratoryies Ltd
Unit 14
Enterprise Court
Seaham Grange Industrial Estate
Seaham
SR7 0PS
Tel 0191 521 4411

North Environmental Microbiology Services
The James Cook University Hospital
Department of Microbiology
Marton Road
Middlesbrough
TS4 3BW
Tel 01642 282601

North Environmental Microbiology Services
Health Protection Agency
Newcastle Laboratory
Institute of Pathology
General Hospital
Westgate Road
Newcastle upon Tyne
NE4 6BE
Tel 0191 273 2070