

TGN5 - DISTRIBUTION SYSTEM (ABANDONED MAINS AND CHANGED FUNCTION MAINS)

Introduction

Mains and connections which are no longer in service represent a significant risk to water quality if they are not fully decommissioned. Mains whose function is changed from carrying potable water to partially-treated or raw water also represent a potential risk to water quality if procedures for their correct identification and labelling on company GIS records are not accurately and promptly updated.

An abandoned main is a main that has been permanently decommissioned and is not required for further use.

A decommissioned main is a main that has been taken out of service either on a temporary but prolonged basis or pending abandonment.

Good Practice

Abandoned Mains

1. As soon as practicable after a main has been taken out of service for abandonment, all live connections should be physically separated from any abandoned pipework remaining *in situ*. A closed valve is not sufficient. Valves between live and abandoned mains should be removed where possible, but as a minimum they should be fitted with a blanking plate (and thrust block where necessary), buried in the closed position and the surface box removed.
2. Where abandonment of mains creates a potential for poor turnover the need for a washout facility should be considered at the end of the live main.
3. Valves and hydrants on abandoned mains should be buried and the surface box removed.
4. Abandoned or decommissioned fire-hydrants should have their marker plate removed and the Fire and Rescue Service notified.
5. Where a main is in service but a hydrant is no longer required, the hydrant (and any branch pipe) should be removed as close to the main as practicable or alternatively converted to a washout.
6. Abandoned service pipes have the potential to introduce contamination into live water mains due to backflow. They should be isolated by closing or removing the ferrule. A closed stop-tap is not a satisfactory long-term solution.
7. The details of all abandoned assets should be recorded promptly in company records and/or GIS.
8. Decommissioned mains should be clearly identified in company records and/or GIS. Procedures for their effective re-commissioning should be in place to prevent the inadvertent introduction of a decommissioned main without an appropriate risk assessment.
9. The abandonment of asbestos cement pipes requires additional consideration and should follow the Environment Agency protocol developed by the water industry with Defra and the Scottish Government. Records of the condition should be made available to anyone

proposing to work on the pipe and the disposal of any pipe must be treated as “hazardous Waste”.

Changed function mains

1. Mains whose function is changed from carrying potable water to non-potable water (i.e.: partially-treated, blended or raw water mains) should be clearly identified on company records and/or GIS.
2. Any services connected to such mains should be identified and transferred to a potable main prior to such change in function.