EUSLDC4

Analyse data to identify potential leakage

Overview

This Standard is about analysing data to identify potential leakage. This includes obtaining relevant data, analysing it against expectations and identifying the need for further investigations. It also includes identifying areas of potential leakage and calculating potential water loss.

This Standard is for anyone who evaluates data to identify potential leakage.

Performance criteria

You must be able to:

1. obtain complete sets of data from specified control and monitoring activities 2. establish flow and pressure in specified areas using control and monitoring data from different points on the distribution system to obtain a comprehensive picture of flow and pressure in specified areas 3. analyse the data against expected data patterns taking into account any relevant additional information about network condition, network operations or consumption variations 4. establish the type and nature of any differences which appear in data analysis in accordance with approved procedures and practices 5. identify the need for further investigations when a viable explanation of identified differences cannot be found 6. report details of the need for further investigations to relevant people 7. analyse data from control and monitoring activities to form conclusions about the way the distribution system is operating highlight and inform relevant people about any areas which appear to be exhibiting leakage problems 8. estimate water loss from specified areas according to data analysis and conclusions reached 9. record detail of area characteristics and water loss calculations in appropriate formats in accordance with approved procedures and practices

Knowledge and understanding

You need to know and understand:

1. regulations, company procedures and processes relating to health, safety, environment and emergencies 2. the purpose of control and monitoring activities 3. the consequences of incorrectly performing control and monitoring activities 4. how to interpret data from different control and monitoring activities including flow and pressure, fast frequency, data from fixed installations or temporary installations 5. how to interpret other data including historic data, results from previous investigations, water quality tests and customer contacts factors which affect network performance including abnormal events 6. how to read and interpret information about flow, pressure, water quality and customer contacts, 7. how to accurately analyse and interpret data 8. why you may be unable to analyse data 9. reporting procedures including the use of feedback from previous investigations 10. typical areas of further investigation including equipment performance, area characteristics 11. types of leakage problems and ways they manifest themselves on the network 12. sources of information on network condition, network operations, consumption variations, previous investigations and area characteristics 13. how to relate analysed data to network plans 14. how to calculate water loss 15. recording and reporting requirements 16. the factors to be taken into account when making a judgement about leakage problems 17. health, safety and hygiene requirements

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