

# Water Networks Technician

## Unit WNTC08 Leakage Performance Monitoring

This training specification has been developed from the water process standard. The specification details the **minimum** training specification, as agreed by industry employers, to deliver the skills and knowledge required to carry out leakage performance monitoring operations in the water sector.

The specification details the critical requirement of the activity to carry out the work outlined and does not preclude employers from adding to the skills and knowledge detailed by the specification in their own training programmes.

All work must be carried out to approved procedures and practices and in accordance with statutory health, safety and environmental requirements.

### What does this specification look like?

Water networks technicians need to be able to:

- LPM1 Use company systems to identify potential and actual leakage and plan for the efficient deployment of resources to locate any leaks in accordance with company procedures
- LPM2 Carry out leakage performance monitoring activities safely and ensure that company procedures are carried out to restore the network to its normal operating condition

### What do I need to take this module?

Candidates to be **assessed** as competent in this area should have successfully completed the modules shown below or have evidence demonstrating an equivalent level of competence.

1. National Water Hygiene Scheme
2. Carry out Network operations
3. Carry out leakage detection operations
4. Data logging operations
5. Wayleaves – operations in private land

## Performance Criteria

To achieve this unit, you will need to be able to:

### General Requirements

- P1. Identify the work area to be accessed using company documentation, systems and work instructions
- P2. Select, inspect and wear required PPE in line with company procedures
- P3. Carry out a site specific risk assessment of the work area, identifying the hazards and implementing the control measures required
- P4. Maintain accurate and up to date records
- P5. Report information and data to the designated person

### Task Specific - Leakage performance monitoring

- P6. Log on to the companies leakage monitoring system and identify areas of potential leakage
- P7. Review logging data and identify potential leakage
- P8. Plan for the deployment of leakage detection resources using company information systems for both reactive and planned events
- P9. Sample and test the leak to determine its source e.g. groundwater
- P10. Maintain and store test equipment in line with manufacturers' recommendations e.g. annual calibration

## Knowledge and Understanding

To achieve this unit, you will need to know and understand:

### General Requirements

- K1. The principles of Health, Safety and Environmental legislation in relation to working with water
- K2. The organisation's safety rules, policies and procedures relating to working with water
- K3. The hazards associated with working on the clean water network and the correct way to respond to them
- K4. How to select, inspect and use PPE when working with water
- K5. How to carry out a site specific risk assessment and identify workplace hazards
- K6. How to respond in the event of an emergency situation in the workplace environment
- K7. How to leave the work area in a safe and secure condition
- K8. The company recording and reporting process

## Task Specific - Leakage performance monitoring

- K9. How the clean water network operates at a strategic level i.e. reservoir zones, district metered areas (DMAs) and key account user monitoring
- K10. Pressure and flow monitoring data including interpretation of data
- K11. How to interpret data to identify and plan for proactive detection and monitoring
- K12. How to review trend data and analysis in order to plan efficient use of resources
- K13. How to plan and carry out leakage step testing
- K14. The different types of monitoring and measuring equipment for flow and pressure
- K15. How leakage performance parameters are monitored and how they are used in the company's investment strategy
- K16. Regulatory and company requirements and standards relating to the companies water leakage targets
- K17. The regulatory / auditing regime and have a detailed understanding of these calculations and reporting requirements
- K18. Data collection, recording, reporting and maintenance requirements

### How will it be assessed?

To achieve this unit, you will need to be able to provide evidence of the performance criteria and the knowledge and understanding requirements listed above.

Assessment types:

1. External assessment – an external accrediting body will assess against a national minimum standard
2. Internal assessment process – a company led on-going assessment against requirements
3. End-point assessment – see assessment plan for further details here (will be Energy & Utility Skills defined)

### What type of evidence will be expected?

To achieve this unit, you will need to be able to provide evidence of the performance criteria and the knowledge and understanding requirements listed above.

Evidence types:

1. On-going local assessments
  - a) Assessment plan, review, feedback, standard assessment sheets
2. Knowledge based learning
  - a) Classroom, exams, assignments, Q&A sessions, e-learning modules
3. Evidence portfolios
  - a) Learning logs, photos, observation sheets

### Assessment types and process

