Water Networks Technician

Unit WNTC14 Data Logging Operations

This training specification has been developed from the water process technician standard. The specification details the **minimum** training specification, as agreed by industry employers, to deliver the skills and knowledge required to carry out data logging 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:

DL1 Confidently select, set-up, maintain and operate appropriate data logging equipment to undertake clean water network (data) investigations in accordance with company procedures

DL2 Control hydrant operations on distribution networks and understand the potential impact to the network

DL3 Correctly operate valves and hydrants to minimise potential impact on the network and customers (calm network)

DL4 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. WNTC05 - Valve and Hydrant Operations
3. WNTC09 - Pumping station operations

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 – Data Logging Operations

P6. Confirm the data type needed, this must include:
  a) Flow
  b) Pressure
  c) Turbidity
P7. Use company mapping systems, site specific information and location equipment to detect required data logging points (hydrants, meter installations, pumping stations etc.)
P8. Confirm the type of logging device and ancillaries to be installed, these must include:
  a) Flow
  b) Pressure
  c) Turbidity
P9. Access data logging points
P10. For hydrant fitted loggers only, carry out valve and hydrant operations in line with company procedures
P11. Install a logging device to:
  a) Hydrant
  b) Meter
  c) Quick release pressure tapping;
  and make live. Check there is zero leakage as a result of this activity
P12. Confirm that the logging device is active using hand held equipment and record logging points
P13. Retrieve data logging devices and view data with analyst
P14. Access company telemetry systems for permanent logging devices such as DG2 points, flow monitoring points etc. and produce data relating to that logging point
P15. Maintain and store data logging 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 – Data Logging Operations

K9. Specific health & safety requirements relating to data logging points
K10. Different types of data logging points, this must include:
    a) Hydrants
    b) Pressure tappings
    c) Quadrina type (insertion probe) loggers
K11. The different types of data loggers and their attachments to the network, this must include:
    a) Flow
    b) Pressure
    c) Turbidity
K12. The need to log data from up and down stream points of an asset
K13. The company procedures for data analysis
K14. The impact and consequence of data logging on the distribution network e.g. where deployment is incorrect and causes leaks, bursts, turbidity
K15. Potential ingress and contamination issues and company control procedures
K16. 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