

Wastewater Network Technician

Unit WWNC02 Wastewater Network Design

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 understand wastewater network design in the water sector.

The specification details the critical requirements of the activity to establish competence 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?

Wastewater network technicians need to be able to:

- WWND1 Understand wastewater network maps and plans and use them to identify a range of network assets
- WWND2 Demonstrate an understanding of the design, operation and maintenance of assets on the wastewater network

What do I need to take this module?

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

1. SHEA water or equivalent

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 PPE in line with company procedures
- P3. Carry out a site specific risk assessment of the work area, identifying the hazards and the control measures required
- P4. Maintain accurate and up to date records
- P5. Report information and data to the designated person

Task Specific – Wastewater Network Design

- P6. Identify features of plans, drawings and symbols, including:
 - a) Asset numbering systems
 - b) Company records
 - c) Identification of other utilities and services

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 wastewater
- K2. The organisation's safety rules, policies and procedures relating to working with wastewater
- K3. The hazards associated with working with wastewater and the correct way to respond to them
- K4. How to select, inspect and use PPE when working with wastewater
- 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 – Wastewater Network Design

- K9. The key elements of different types of wastewater network and drainage systems, including:
- Foul drainage
 - Surface water drainage
 - Combined drainage
 - Culverted watercourse
 - Land drainage
 - Sustainable Urban Drainage Systems (SUDS)
 - Rising mains and pumped systems
- K10. The different components that are likely to be encountered while working on public and private wastewater network systems, why they are installed, how they operate and common maintenance and operational issues. Including but not limited to:
- Sewers & drains
 - Manholes
 - Gullies
 - Interceptors
 - Siphons
 - Pipe bridges
 - Flow control devices
 - Storage tanks
 - Septic tanks
 - Combined Sewer Overflow
- K11. The factors which contribute to the selection and installation of different wastewater network systems and assets, including flow, population and environment
- K12. 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

