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## Overview

This national occupational standard defines the competences required to test gas network components and assets in accordance with industry standards and expectations. It includes making sure the manner in which tests are conducted and recorded meets the standards of quality assurance set by the organisation. It requires an understanding of safety requirements that need to be followed and adopted when carrying out test activities and procedures.

This standard is for those responsible for operations during gas network construction activities. These activities will usually include the leadership and direction of the members of a team and decision making regarding the approach to take when undertaking the work.

## Performance criteria

*You must be able to:*

### **Perform test activities**

1. work safely in accordance with health and safety and environment regulations and legislation
2. carry out a site specific risk assessment
3. apply control measures identified in the risk assessments
4. select, check condition, use and store the appropriate PPE
5. secure the test site from possible third party interference and trespass
6. use testing tools and equipment in accordance with work instructions and manufacturers specifications
7. make sure that equipment is functioning in accordance with system operating requirements and parameters
8. **follow drawings, plans and specifications for the specified testing of gas network components and assets**
9. calculate specified test timings and levels
10. anchor components and assets to withstand test pressures
11. set up and carry out the tests following work instructions and within agreed timescales
12. carry out all testing in compliance with approved industry and company procedures
13. follow approved procedures to identify and solve problems that arise during testing
14. review test results to establish that the performance of the system in accordance to specifications and performance parameters
15. record the results of test activity and complete test record documents following reporting systems and using documentation in accordance with company procedures and requirements

## Knowledge and understanding

*You need to know and understand:* **General**

1. the main responsibilities of the employer and employee under the Health and Safety at Work Act and how to comply with them
2. the main responsibilities of the employer and employee under environmental legislation
3. how to carry out and review risk assessments
4. the company reporting lines, roles, responsibilities and levels of authority
5. the identification and application of safe procedures for handling hazardous and non-hazardous materials
6. organisational accident recording and reporting procedures
7. the range and use of personal protective equipment for the work activity and procedures for checking PPE is fit for purpose
8. statutory, organisational and emergency reporting procedures
9. the potential dangers and hazards from medium or intermediate or high pressure systems

### **Specified testing of gas network mains and services**

10. the health, safety and environmental requirements relevant to the testing activity
11. different pressure regimes and associated methods for testing and recording
12. how to calculate specified test timings and levels
13. the importance of adequate anchorage during the testing procedure
14. the purging and commissioning specifications for components and assets
15. how to use the types of test, purging and commissioning equipment, including those used in hydraulic testing, correctly
16. how to calibrate the relevant pressure gauges, and why they need calibrating
17. how to interpret test results against specifications and codes of practice
18. the effect of atmospheric pressure and temperature on test results on components and assets

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19. the potential consequences of test failure including to the environment

EUS GNC013

Conduct Specified Testing of Gas Network Engineering Components and Assets in Gas Network Construction



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**Relevant Occupations** Gas Team Leaders, Craftspersons and Technicians

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**Suite** Gas Network Construction

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