
Overview

This Standard is about locating and avoiding supply apparatus for utilities network construction. Supply apparatus could be above or below ground services, built structures, and the natural environment including foundations, tree roots or natural watercourses. It could apply to Network construction operations for a single utility or in a multi-utility environment.

It involves using appropriate search and detection methods, keeping updated records, identifying and avoiding risks of damage to services and danger to people, and following safe work practices. Supply apparatus in the context of this national occupational standard relates to supply apparatus for utilities and other agencies.

This Standard is for anyone who locates and avoids supply apparatus for utilities network construction in a single or multi-utility environment.

Performance criteria

You must be able to:

1. interpret work instructions and utility plans to determine the extent of the work site and to enable the supply apparatus to be marked
2. carry out site specific risk assessment, and review in accordance with company procedures
3. use surface evidence, electronic location equipment, trial holes, and drawings to enable supply apparatus to be marked
4. mark the position and type of supply apparatus and sub-structures on the work site in accordance with work instructions and statutory and regulatory codes of practice
5. mark risks of damage to supply apparatus and sub-structures in accordance with statutory and regulatory codes of practice
6. record positions and types of supply apparatus and sub-structures in organisational information systems
7. communicate details of the position and type of supply apparatus and substructures to appropriate people in accordance with instruction and organisational requirements
8. check with appropriate people any circumstances where information appears incorrect
9. report deviations in the position of equipment and identification of other structures in accordance with instruction and organisational requirements
10. maintain the position and condition of supply apparatus within the work site in accordance with their specification and codes of practice
11. ensure working practices within the work site avoid damage to supply apparatus
12. ensure exposed supply apparatus are supported, protected and secure in compliance with their specification and to approved procedures
13. report any damage to supply apparatus to appropriate people and make the area safe without delay
14. resolve day-to-day problems within your area of responsibility, referring those that you cannot resolve to appropriate people
15. take precautions to protect people and equipment from the effects of damage to supply apparatus in accordance with approved procedures and practices
16. ensure all work complies with latest specifications, statutory regulations and

company codes of practice

17. follow all procedures for the health and safety of yourself and others at all times

Knowledge and understanding

You need to know and understand:

1. relevant statutory and regulatory requirements relating to health and safety, excavations, roads and street works, location of supply apparatus where this exposes other services, hazardous materials, lone working, accidents and personal protective equipment
2. the risks associated with not maintaining the safety and integrity of supply apparatus and actions to take in the case of damage
3. the regulations governing the type of hazard associated with different supplies
4. industry procedures and practices for confirming the location and marking of supply apparatus
5. the key physical properties and methods of identification of supply apparatus for utilities and other agencies including size (diameter), colour, material, resistance to impact, typical locations and depths
6. the physical properties of the medium being carried by supply apparatus for utilities and other agencies including ignition characteristics, density relative to air, electrocution, reaction to water damage
7. methods of visually locating and identifying underground supply apparatus including markers, signs and features, existing records
8. the implications of damage to supply apparatus including danger to self or others, damage to the environment, cost of repair and delay in job progress
9. roles and responsibilities of the organisations involved in the work and how to liaise with them including which people or organisations to notify in the case of damage to supply apparatus or other underground structures
10. methods of marking out for excavation work and the outcomes of incorrect marking out including costs, loss of time, and material wastage
11. the importance of providing adequate support and protection for supply apparatus during excavation work and methods of providing temporary and permanent support
12. safe procedures for handling the necessary equipment
13. how to use and interpret the results of electronic detection equipment readings and the effects of external influences on readings
14. when trial holes can be used to locate underground supplies
15. the importance of referring problems outside your responsibility and when to do so

16. the procedures for reporting and recording job progress, problems and deviations to work programmes

Developed by	Energy & Utility Skills
Version Number	2
Date Approved	31 Mar 2024
Indicative Review Date	31 Mar 2027
Validity	Current
Status	Original
Originating Organisation	Energy & Utility Skills
Original URN	MUNC06
Relevant Occupations	Water Network Construction, Gas Network Construction, Multi Utility Network Construction
Suite	Water Network Construction Operations, Multi-Utility Network Construction Operations, Sewerage and Drainage Maintenance
Keywords	locate, avoid, supply, apparatus, utility, utilities, network, construction, gas, water, operations, LPG, hydrogen, multi-utility