

EUSMUNC06 (SQA Unit Code - FG2W 04)

Locate and avoid supply apparatus for Utilities Network Construction



Overview

This national occupational standard defines the competence involved in locating and avoiding supply apparatus by using appropriate search and detection methods, keeping updated records, identifying and avoiding risks of damage to services and danger to personnel, and following safe work practices. Supply apparatus in the context of this national occupational standard relates to supply apparatus for utilities and other agencies.

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Performance criteria

You must be able to:

Locate supply apparatus

- P1 use work instructions and interpret utility plans to determine the extent of the work site and to enable the supply apparatus to be marked
- P2 carry out site specific risk assessment, and review in accordance with company procedures
- P3 use surface evidence, electronic location equipment, trial holes, and drawings to enable supply apparatus to be marked
- P4 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
- P5 mark risks of damage to supply apparatus and sub-structures in accordance with statutory and regulatory Codes of Practice
- P6 record positions and types of supply apparatus and sub-structures in accordance with instructions and organisational requirements
- P7 communicate details of the position and type of supply apparatus and sub-structures to personnel in accordance with instruction and organisational requirements
- P8 report deviations in the position of equipment and identification of other structures in accordance with instruction and organisational requirements
- P9 carry out all work to approved procedures and practices and in compliance with statutory requirements

You must be able to:

Maintain the safety and integrity of supply apparatus

- P10 maintain the position and condition of supply apparatus within the work site in accordance with their specification and Codes of Practice
- P11 ensure working practices within the work site avoid damage to supply apparatus
- P12 ensure exposed supply apparatus are supported correctly, protected safely and securely, in compliance with their specification and to approved procedures
- P13 take precautions to protect personnel and equipment from the effects of damage to supply apparatus in accordance with approved procedures and practices
- P14 ensure all work complies with latest specifications, statutory regulations and company Codes of Practice

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You must be able to:

Use and communicate data and information

- P15 check with designated personnel any circumstances where information appears incorrect
- P16 use organisational information systems to record and store data and information
- P17 follow all procedures where you are a lone worker

You must be able to:

Resolve problems that arise during work activities

- P18 report promptly, to the designated person, any damage to supply apparatus and make area safe.
- P19 resolve day-to-day problems within the area of responsibility of the job holder
- P20 advise colleagues or managers where situations need them to intervene
- P21 refer matters outside the responsibility of the job holder to the designated people using approved procedures

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Knowledge and understanding

You need to know and understand:

General

- K1 the main responsibilities of the employer and employee under the Health and Safety at Work Act
- K2 the health and safety guidance governing work in excavations
- K3 the safe procedures for handling hazardous materials
- K4 organisational accident recording and reporting procedures
- K5 the range and use of personal protective equipment for the work

You need to know and understand:

Supply apparatus and sub-structure

- K6 typical locations and depths of the usual range of underground supply apparatus
- K7 methods of marking underground supply apparatus e.g. identification tape
- K8 the type of hazard associated with different supplies and actions to take in the case of damage.
- K9 the persons or organisations to be notified in the case of damage to supply apparatus or other underground structures
- K10 methods of marking out for excavation work to ensure the accurate location of the required excavation.
- K11 the outcomes of incorrect marking out of the excavations, including costs, loss of time, and material wastage
- K12 the importance of protecting supply apparatus exposed during excavation work
- K13 methods of providing temporary and permanent support to protect supply apparatus exposed during site excavations
- K14 the main sources of legislation relating to highways operations in the proximity of other supply apparatus.
- K15 methods of visually locating and identifying underground supply apparatus, including markers, signs and features, and the use of existing records
- K16 principles of operation and method of use of electronic detection equipment
- K17 the safe procedures for handling the range of equipment necessary to carry out the task in hand
- K18 how to interpret the results of electronic detection equipment readings
- K19 the possible effects of external influences on electronic detection equipment readings
- K20 the situations where trial holes can be used to locate underground supplies
- K21 regulations governing the location of supply apparatus where this exposes other services

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- K22 the precautions to be observed during supply location works, including statutory and regulatory requirements.
- K23 industry procedures and practices for confirming the location and marking of supply apparatus
- K24 roles and responsibilities of the various organisations involved in the work and how to liaise with them effectively
- K25 the key physical properties of the supply pipeline or component, size (diameter), colour, material and its resistance to impact from excavation activities, methods of identification of supply apparatus for utilities and other agencies' .
- K26 the physical properties of the contents of the medium being carried by the supply apparatus, ignition characteristics, density relative to air, electrocution, water damage.
- K27 the risks associated with not maintaining the safety and integrity of supply apparatus
- K28 the possible effects of damage to the supply apparatus
- K29 implications of damage to the supply apparatus that could include personal danger to the health or life of the operatives, or to others on site
- K30 the implications of damage to the supply apparatus that could include damage to the environment or additional job costs in repair and delay to job progress
- K31 how the requirements of the legislation applicable to new roads and street works apply
- K32 the importance of providing adequate support and protection for supply apparatus
- K33 the importance of referring problems outside the area of the job role responsibility to designated people
- K34 the procedures for reporting and recording job progress, problems and deviations to work programmes

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Additional Information

Behaviours

Behaviour which underpins effective performance

You work in a manner in which you:

1. are vigilant to possible risks and hazards
2. treat people with civility

Glossary

Supply apparatus- the supply apparatus for utilities and other agencies, above and below ground services, built structures, and the natural environment (e.g. foundations, tree roots, natural watercourses)

Approved procedures and practices –environmental, statutory regulatory, emergency, operational, health and safety, organisational and company procedures, and risk assessments

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