Carry out maintenance of utility network assets



Overview

This national occupational standard defines the competence for managing maintenance of the network. It requires familiarity with the network conditions and its operation, and instructing personnel on their work activities and responsibilities. A high level of attention to personnel and environmental safety is required.

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Performance criteria

You must be able to:

Prepare for operational maintenance to be carried out safely

- P1 follow the network operating instructions to organise and carry out all operational maintenance work
- P2 arrange for all materials, tools and parts to be available as recommended by manufacturers
- P3 issue instructions to the designated personnel for organising different work activities
- P4 arrange for operational maintenance on equipment and instruments requiring isolations to be done at a time appropriate to network use
- P5 take steps to confirm safe working practices are known and understood by personnel planned for the work

You must be able to:

Restore equipment and the network environment to operable conditions

- P6 make sure work is carried out safely and with equipment and tools and procedures specific to the site
- P7 follow manufacturers' specifications and safety procedures for dealing with machinery and equipment
- P8 confirm safety monitoring procedures and equipment are in place and functioning throughout the maintenance work
- P9 monitor work practices to make sure safety is maintained at all times
- P10 confirm the work team will start and subsequently put assets back online as specified in procedures
- P11 use work methods which maintain the network operating conditions in a stable condition throughout the maintenance work
- P12 follow the employer's tools and parts accounting procedures
- P13 restore operational performance by servicing machinery and equipment and replacing components where required
- P14 return the condition of the network environment to the asset owner's specification when the maintenance is finished
- P15 make sure waste materials and unwanted components are disposed of in accordance with safe working practices and approved procedures

You must be able to:

Use and communicate data and information

- P16 provide reports to designated personnel where decisions outside your authority are required
- P17 inform the designated personnel in advance of the planned maintenance by agreed methods of communication
- P18 communicate regularly with the personnel doing the work to ensure work

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- underway is according to plan
- P19 use performance checks, observation, noise, heat, vibration and remote monitoring to help identify malfunctions or other maintenance which might be required
- P20 record maintenance work accurately in the designated place
- P21 maintain up-to-date data audit trails and make sure they are accessible

You must be able to:

Resolve problems arising from the maintenance

- P22 deal with malfunctions of instrumentation, machinery, and equipment in the network environment promptly
- P23 arrange for specialist skilled personnel to be available where malfunctions and maintenance requirements require exceptional work to be carried out
- P24 put temporary arrangements in place to protect the operation of the network until problems are resolved
- P25 resolve situations where maintenance over-runs the agreed timescales

Carry out maintenance of utility network assets

Knowledge and understanding

You need to know and understand:

General

- K1 network engineering principles and processes
- K2 health, safety, and environmental issues
- K3 legislative and regulatory frameworks
- K4 maintenance principles and processes
- K5 organisational procedures and systems
- K6 quality assurance principles and systems
- K7 resource management methods

You need to know and understand:

Network maintenance

- K8 the importance of working safely and use of risk assessments
- K9 how to ensure PPE is used effectively
- K10 how to ensure safe working with tools and equipment
- K11 the importance of protecting people and the environment from pollutants
- K12 how to deal with statutory inspectorates
- K13 how to deal with emergency situations
- K14 the safe working practices for dealing with machinery and equipment, instrumentation and environment which may have exceptional malfunctions and maintenance requirements
- K15 how to apply maintenance authorisation procedures and limits of responsibility and authority
- K16 the potential faults and difficulties which can occur during maintenance situations
- K17 the effects of inadequate maintenance
- K18 the effects of machinery, equipment and instrumentation breakdown
- K19 the characteristics of faulty machinery, equipment and instrumentation
- K20 how to identify malfunction, operational and maintenance requirements in the machinery, equipment, instrumentation and network environment
- K21 the role and purpose of data audit trails for quality assurance and regulatory requirements
- K22 the importance of using information systems, how to use them, and how to record data in them

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Behaviours

You work in a manner which:

- 1. is positive and creative to setbacks
- 2. develops an atmosphere of professionalism and mutual support

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