



Australian Government

NWPNET061 Maintain and repair network assets for drinking water

Release: 1

NWPNET061 Maintain and repair network assets for drinking water

Modification History

Release 1. This is the first release of this unit of competency in the NWP National Water Training Package.

Application

This unit involves the skills and knowledge required to maintain and repair network assets for drinking water.

It includes conducting maintenance and repairs on a variety of water distribution assets including storages, pumping stations, dosing stations and pipelines. It also includes reviewing, reporting and recording work.

This unit applies to those working as field staff with specific responsibility for ensuring the repair and maintenance of water assets. Those undertaking this unit would work under appropriate supervision while performing routine tasks in a familiar context and ensuring minimum damage to the environment.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

Not applicable.

Competency Field

Networks

Unit Sector

Not applicable.

Elements and Performance Criteria

ELEMENTS

Elements describe the essential outcomes.

PERFORMANCE CRITERIA

Performance criteria describe the performance needed to demonstrate achievement of the element.

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| 1 Prepare for work | 1.1 Conduct risk assessment for environmental, safety and water quality factors to ensure worksite is safe to work |
| | 1.2 Determine work requirements, materials and configuration from plans, specifications, instructions and workplace procedures |
| | 1.3 Check coordination issues with relevant personnel, including isolations, licences and permits to work |
| | 1.4 Identify network system operation requirements |
| | 1.5 Identify, notify and communicate with customers according to workplace procedures |
| | 1.6 Select, fit and use personal protective equipment (PPE) |
| 2 Conduct maintenance and repairs | 2.1 Isolate infrastructure according to workplace procedures |
| | 2.2 Determine appropriate repair method from job specifications and instructions |
| | 2.3 Ensure materials, pipes and fittings are appropriately disinfected prior to installation |
| | 2.4 Flush assets according to workplace procedures |
| | 2.5 Check maintenance and repairs to assets to ensure specifications are met according to workplace procedures |
| | 2.6 Dispose of waste generated by flushing according to workplace policies and procedures, as required |
| | 2.7 Restore worksite according to environmental and workplace procedures |
| 3 Review and report work | 3.1 Tag and report faulty equipment and tools and advise appropriate personnel |
| | 3.2 Store equipment, tools and materials according to manufacturer and workplace instructions |

Foundation Skills

Foundation skills essential to performance are explicit in the performance criteria of this unit of competency.

Range of Conditions

Range is restricted to essential operating conditions and any other variables essential to the work environment.

Non-essential conditions may be found in the NWP National Water Training Package Companion Volume Implementation Guide.

Unit Mapping Information

This unit replaces and is equivalent to NWPNET039 Maintain and repair network assets for drinking water.

Links

Companion Volume Implementation Guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=26336bc0-04e5-49d9-8c31-46c49b6a0037>

Assessment Requirements for NWPNET061 Maintain and repair network assets for drinking water

Modification History

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Performance Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy all the requirements of the elements and performance criteria on at least one occasion and include:

- applying disinfection according to workplace procedures
- assisting with worksite planning, including personnel, equipment and materials
- checking permits, approvals, other utilities diagrams and maps with relevant personnel
- communicating with appropriate personnel and customers
- conducting appropriate flushing techniques
- conducting risk assessment on worksite for safety and environmental factors
- determining location, size, utilities, services from plans, specifications and workplace procedures
- ensuring system hygiene and water quality
- interpreting plans, instructions and procedures
- maintaining and repairing assets
- performing work-related calculations
- selecting and applying appropriate personal protective equipment (PPE)
- using appropriate tools and equipment for work to be undertaken.

Knowledge Evidence

Evidence required to demonstrate competence in this unit must be relevant to and satisfy all the requirements of the elements and performance criteria and includes knowledge of:

- characteristics of pipe materials
- concrete placement techniques, including compaction
- control system procedures
- disinfection of systems and chemical usage
- effects of weather and conditions on construction worksite or plan
- environmental health aspects and impacts
- equipment operation, capacity and limitations
- excavation techniques and requirements
- ground support systems
- landscape and ground structure of work area

- lock-out procedures
- pipe systems and installation requirements
- relevant legislation, policies and procedures
- relevant utilities and service bodies to identify allocation of road reserve
- requirements and differences of flushing techniques
- requirements and disposal methods of waste generated by flushing assets
- risk factors and potential hazards of maintenance processes
- safety data sheets (SDS)
- system hydraulics
- testing and sampling processes
- workplace drawings, plans, specifications and instructions.

Assessment Conditions

Assessors must hold credentials specified within the Standards for Registered Training Organisations current at the time of assessment.

Assessment must satisfy the Principles of Assessment and Rules of Evidence and all regulatory requirements included within the Standards for Registered Training Organisations current at the time of assessment.

Assessment must occur in workplace operational situations where it is appropriate to do so; where this is not appropriate, assessment must occur in simulated workplace operational situations that replicate workplace conditions.

Assessment processes and techniques must be appropriate to the language, literacy and numeracy requirements of the work being performed and the needs of the candidate.

Resources for assessment must include access to:

- relevant and appropriate materials, tools, equipment and PPE currently used in industry
- applicable documentation, including legislation, regulations, codes of practice, workplace procedures and operation manuals.

Links

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