



Australian Government

NWPNET040 Maintain and repair network assets for wastewater

Release: 2

NWPNET040 Maintain and repair network assets for wastewater

Modification History

Release 2. Alteration to PE item 9, removal of PE item 12 and alteration to KE point 15.

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 wastewater.

It includes conducting maintenance and repair on a variety of wastewater distribution assets including pipes, drains and wastewater collection assets. It also includes reviewing, reporting and recording work.

This unit applies to those working as field staff with specific responsibility for ensuring repair and maintenance of wastewater assets is completed in a safe and timely manner. 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.

1 Prepare for work

1.1 Conduct risk assessment for environmental and safety 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 networks 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 Check maintenance and repairs to assets to ensure specifications are met according to workplace procedures

2.4 Restore worksite according to environmental and workplace procedures including performing calculations

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 Companion Volume Implementation Guide.

Unit Mapping Information

This unit replaces and is equivalent to NWPNET023 Maintain and repair network assets for wastewater.

Links

Companion Volume implementation guides are found in VETNet -

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

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Assessment Requirements for NWPNET040 Maintain and repair network assets for wastewater

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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 includes:

- assisting with planning worksite including personnel, equipment and materials
- checking permits, approvals, other utilities diagrams and maps with relevant personnel
- communicating with appropriate personnel and customers
- conducting risk assessment on worksite for safety and environmental factors
- determining location, size, utilities, services from plans, specifications and workplace procedures
- identifying and responding to operational problems including main, connection chokes, pump stations and faults
- interpreting plans, instructions and procedures
- maintaining and repairing assets by:
 - maintaining pump stations
 - repairing access chambers
 - undertaking excavation
- maintaining, repairing and replacing wastewater infrastructure including at least 5 of the following:
 - clearing blockages
 - controlling flows in gravity networks
 - installing connections
 - installing pipes and fittings
 - jet cleaning
 - jet foaming
 - locating and repairing chokes
 - making joints
 - measuring and cutting pipes
 - repairing valves
 - selecting and placing bedding and backfill material
 - undertaking closed-circuit television (CCTV) inspection

- undertaking excavation
- performing work-related calculations
- preserving personal safety
- selecting and applying appropriate PPE
- using tools and equipment for work in wastewater

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:

- causes of blockages including:
 - foreign objects
 - pipe displacements
 - roots intrusion
- characteristics of pipes and fittings
- concrete placement techniques including compaction
- control system procedures
- effects of weather and conditions on construction site or plant
- environmental, health aspects and impacts
- equipment operation, capacity and limitations
- excavation techniques and requirements
- formwork preparation and positioning
- ground support systems
- infiltration of foreign matter into the wastewater system
- landscape and ground structure of work area
- lockout procedures
- pipe systems and installation requirements
- relevant legislation, regulations, policies and procedures
- relevant utilities and service bodies to identify allocation of road reserve
- risk factors and potential hazards of maintenance processes
- safety data sheets
- system hydraulics
- testing and sampling systems
- work 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 personal protective equipment currently used in industry
- applicable documentation including legislation, regulations, codes of practice, workplace procedures and operation manuals.

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