



Australian Government

NWPIRR014 Install meters for rural water supplies

Release: 1

NWPIRR014 Install meters for rural water supplies

Modification History

Release	Comments
1	This unit was released in NWP Water Training Package release 1.0 and meets the Standards for Training Packages. This unit supersedes and is equivalent to NWP302A Install meters for non-potable, non-urban water supplies. • Unit code updated • Content and formatting updated to comply with the new standards • All PC transitioned from passive to active voice • Unit title changed to better reflect unit outcomes • Element 2 removed • One new PC added to Element 1 • PC 1.4 removed • PC 2.4 renumbered • Element 2 and 4 merged • All PC revised

Application

This unit describes the skills required to install water meters for rural water supplies.

This unit applies to those working as field or operational staff installing meters.

The skills and knowledge described in this unit must be applied within the legislative, regulatory and policy environment in which they are carried out. Organisational policies and procedures must be consulted and adhered to.

Those undertaking this unit would work independently under direct supervision, while performing routine tasks ensuring minimum damage to the environment, in a familiar context.

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

Competency Field

Irrigation

Elements and Performance Criteria

ELEMENTS	PERFORMANCE CRITERIA
Elements describe the essential outcomes	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the range of conditions section.
1. Confirm conditions of the site for meter installation	1.1 Identify the location of the site and establish client information from work plans and job specifications. 1.2 Identify access to the site and any conditions of access. 1.3 Assess the conditions of the site. 1.4 Set out the site. 1.5 Carry out a job safety analysis and identify and control hazards.
2. Install meter facilities	2.1 Ensure that excavations provide sufficient width for movements of installation. 2.2 Install meter as set out in design and specifications. 2.3 Check fittings, seals and operation. 2.4 Install ancillary equipment and check for operation and seal. 2.5 Check meter installation for compliance with manufacturer specifications.
3. Restore site	3.1 Backfill with suitable material, moisture content and compaction to maximise compaction efficiency. 3.2 Restore the site to original site conditions.

Foundation Skills

The foundation skills demands of this unit have been mapped for alignment with the Australian Core Skills Framework (ACSF). The following tables outline the performance levels indicated for successful attainment of the unit.

ACSF levels indicative of performance:

1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
Learning					Reading					Writing NA					Oral communication NA					Numeracy				

Performance variables:

1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
Support					Context					Text complexity					Task complexity				

Further information on ACSF and the foundation skills underpinning this unit can be found in the Foundation Skills Guide on the GSA website.

Unit Mapping Information

This unit supersedes and is equivalent to NWP302A Install meters for non-potable, non-urban water supplies.

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 NWPIRR014 Install meters for rural water supplies

Modification History

Release	Comments
1	These Assessment Requirements were released in NWP Water Training Package release 1.0 and meet the Standards for Training Packages. • Assessment Requirements created drawing upon specified assessment information from superseded unit

Performance Evidence

Evidence required to demonstrate competence must satisfy all of the requirements of the elements and performance criteria. If not otherwise specified the candidate must demonstrate evidence of performance of the following on at least one occasion.

- planning meter installation and construction
- undertaking calculation of head, flow and measurements of pipes and pressure
- undertaking locational assessment and risk analysis for meter installation
- sampling and testing soil for backfill and installation structures
- analysing the impact of water infiltration on the stability of structures
- measuring the head of water to judge sufficiency for meter's accuracy
- checking power supply and links
- installing ancillary equipment
- positioning solar panels to maximise power collection
- undertaking a job safety analysis and checking hazards and safety requirements
- using and storing equipment on site
- determining excavation requirements
- calculating sump and headwall elevation and orientation
- calculating pipe and meter pit elevation, fall and presentation
- installing transducers and cabling safely
- interpreting manufacturer requirements for fitting meters in meter pits
- using techniques to protect meters from disturbance
- assessing the effectiveness of backfill
- undertaking site restoration
- identifying and analysing client requirements, site conditions and their impact on the types of meter required, and the design of the installation

- identifying and analysing environmental conditions and limitations and the impact of work to be undertaken
- identifying and analysing safety risks and hazards and responding to remove risks and hazards
- preparing sites and equipment for installation
- identifying faults, changes and failure indicators

Knowledge Evidence

Evidence required to demonstrate competence must satisfy all of the requirements of the elements and performance criteria. If not otherwise specified the depth of knowledge demonstrated must be appropriate to the job context of the candidate.

- the purpose and standards for non-urban water metering
- community expectations for water measurement and use
- standards for the installation of non-urban meters in open and closed conduit systems
- the social, environmental, economic and political responsibilities of water authorities in relation to meter installation
- requirements for checking the pattern approval of meters and compliance with meter installation standards
- meter manufacturers' guidelines and installation manual for specific meters
- the organisation's policies and procedures for water meter installation
- conditions for meter location and suitable installation assets and meters for the conditions
- causes of flow disturbance
- potential environmental causes of meter failure
- the organisation's environmental impact guidelines
- maintenance requirements for meter facility within and open channel
- relevant safety requirements including confined space

Assessment Conditions

Competency should be assessed in an actual workplace or in a simulated environment, with access to equipment and infrastructure appropriate to the outcome. Competency should be demonstrated over time to ensure the candidate is assessed across a variety of situations.

Assessors must satisfy the NVR/AQTF mandatory competency requirements for assessors.

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