



**Australian Government**

# **NWPNET031 Construct and install water distribution assets**

**Release: 1**

# NWPNET031 Construct and install water distribution assets

## Modification History

| Release | Comments                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|---------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1       | <p>This unit was released in NWP Water Training Package release 1.0 and meets the Standards for Training Packages.</p> <p>This unit supersedes and is equivalent to NWP233B Construct and install water distribution assets.</p> <ul style="list-style-type: none"><li>• Unit code updated</li><li>• Content and formatting updated to comply with the new standards</li><li>• All PC transitioned from passive to active voice</li></ul> |

## Application

This unit describes the skills required to construct and install water distribution assets.

This unit applies to those working as field and operational staff with responsibility for ensuring that water distribution assets are constructed and installed in a safe and timely manner.

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, particularly those related to manufacturer specifications, environmental requirements, WHS, construction and disinfection.

Those undertaking this unit would work independently or in a team using own familiar resources as required, while performing routine tasks in range of familiar contexts, ensuring minimum damage to the environment.

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

## Competency Field

Networks

## Elements and Performance Criteria

| ELEMENTS          | PERFORMANCE CRITERIA                                                |
|-------------------|---------------------------------------------------------------------|
| Elements describe | Performance criteria describe the performance needed to demonstrate |

|                                                                                    |                                                                                                                                                                                                                                                                                                                                                                                            |
|------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| the essential outcomes                                                             | achievement of the element. Where bold italicised text is used, further information is detailed in the range of conditions section.                                                                                                                                                                                                                                                        |
| <b>1. Plan and prepare for construction and installation</b>                       | 1.1 Determine work requirements for construction and installation of water distribution system pipes and assets from plans, specifications and instructions.<br>1.2 Perform site checks to prevent damage to other utilities.<br>1.3 Select and check equipment and tools to meet safety and work requirements of task and site.<br>1.4 Select, fit and use personal protective equipment. |
| <b>2. Construct and install distribution assets, pipes and associated fittings</b> | 2.1 Excavate and prepare trenches.<br>2.2 Lay bedding or foundation.<br>2.3 Inspect pipes and fittings, and lay or join them.<br>2.4 Install or place prefabricated components.<br>2.5 Backfill excavations according to specifications.                                                                                                                                                   |
| <b>3. Confirm work quality</b>                                                     | 3.1 Check constructed and installed distribution assets, pipes and fittings to ensure that specifications are met.<br>3.2 Check water quality testing results to ensure that organisational requirements are met.                                                                                                                                                                          |
| <b>4. Finalise work</b>                                                            | 4.1 Check, maintain and store equipment, tools and materials.<br>4.2 Restore work site.<br>4.3 Complete workplace records and as constructed drawings, and process as required.                                                                                                                                                                                                            |

## 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 |   |   |   |   | Oral communication |   |   |   |   | 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 NWP233B Construct and install water distribution assets.

## 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 NWPNET031 Construct and install water distribution assets

## Modification History

| Release | Comments                                                                                                                                                                                                                                                                                        |
|---------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1       | <p>These Assessment Requirements were released in NWP Water Training Package release 1.0 and meet the Standards for Training Packages.</p> <ul style="list-style-type: none"><li>• Assessment Requirements created drawing upon specified assessment information from superseded unit</li></ul> |

## 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.

- laying and joining pipes
- installing associated fittings and components
- identifying and responding to operational problems
- interpreting plans, instructions and standard operating procedures
- performing work-related calculations
- using tools and machinery
- identifying hazards
- constructing and installing water distribution system assets
- planning work and preparing work site safely
- checking quality of work and ensuring water quality standards
- clearing the work site
- completing documentation

## 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.

- risk factors and potential hazards of construction and installation processes
- electrical safety for disconnection and changing meters and fittings
- equipment operation, capacity and limitations
- effects of weather and conditions on operation of site or plant

- environmental aspects of construction and installation
- component parts
- shoring and levelling
- conditions for connection to live water mains
- Cathodic Protection, Denso wrap, Stopaq

## 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.

## Links

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