



Australian Government

**DEFMIL090 Assist in the preparation,
construction, operation and maintenance of
a field water-point**

Release: 1

DEFMIL090 Assist in the preparation, construction, operation and maintenance of a field water-point

Modification History

Release	Comments
1	This unit was released in DEF Defence Training Package release 1.0 and meets the Standards for Training Packages. This unit supersedes and is equivalent to DEFCA319 Assist in the preparation, construction, operation and maintenance of a field water point. • Unit code updated • Content and formatting updated to comply with the new standards • All PC transitioned from passive to active voice • PC 3.4 removed • PC 1.4 reworded

Application

This unit describes the skills required to assist in testing for water quality, selecting a suitable work site and preparing, constructing and operating a field water point. The unit also includes the assembly and operation of water purification equipment, and the production and storage of potable water to meet the requirements of personnel and equipment deployed into an area without adequate water supply.

This unit applies to combat engineer personnel required to assist in testing for water quality, selecting a suitable work site and preparing, constructing and operating a field water point in a deployed operational environment.

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 typically work as part of a team under direct supervision, but may be responsible for completing individual tasks. They use discretion and judgement, and take responsibility for the quality of their outputs while performing complex tasks in a broad range of unpredictable contexts.

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

Competency Field

Military Skills

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. Locate a supply of water	1.1 Locate a water supply within a designated area. 1.2 Test water for compliance with quality standards. 1.3 Assess suitability of water sources to be used for collection, treatment and storage. 1.4 Prepare site after gaining approval.
2. Prepare a field water point	2.1 Select and wear personal protective equipment. 2.2 Check equipment, tools and materials for serviceability and report faults. 2.3 Locate and mark local utility assets such as water, electricity and gas pipelines to prevent damage and liaise with local authorities as required. 2.4 Handle, prepare, test and store water point chemicals in accordance with standard procedures and report faults. 2.5 Establish and maintain contact with appropriate agencies to facilitate construction activities, when mechanical excavation equipment is required. 2.6 Construct water point and compact/backfill site using manual or mechanical equipment. 2.7 Construct structures such as water towers and storage tanks. 2.8 Assemble, operate and maintain field water supply equipment and accessories.
3. Operate a water point to produce potable water	3.1 Produce, store and distribute potable water. 3.2 Calibrate, service, operate and maintain water treatment and testing equipment. 3.3 Collect and test water samples. 3.4 Record information related to chemical supply, usage and disposal. 3.5 Collect, record, maintain and report process and performance data. 3.6 Inspect and maintain equipment in accordance with manufacturer's instructions.

4. Refurbish water point site	4.1 Restore work site to normal, when required. 4.2 Dispose of chemicals.
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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 NA					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 DEFCA319 Assist in the preparation, construction, operation and maintenance of a field water-point.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=6bdbab1e-11ed-4bc9-9cba-9e1a55d4e4a9>

Companion Volume implementation guides are found in VETNet -

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Assessment Requirements for DEFMIL090 Assist in the preparation, construction, operation and maintenance of a field water-point

Modification History

Release	Comments
1	These Assessment Requirements were released in DEF Defence 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.

- assembling, operating and disassembling water supply and purification equipment
- calculating and recording water flows
- following instructions/directives and reporting information
- analysing water quality data
- handling water purification chemicals

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.

- WHS requirements
- effects of weather on water quality and the operation of the site and plant
- risk factors and potential hazards of surface water systems
- safe handling and disposal of chemicals
- team work principles and strategies
- composition of teams and roles and responsibilities of team members
- verbal and non-verbal communication techniques
- written communication to a level required to complete workplace forms and reports
- basic numeracy, such as addition, subtraction and multiplication
- formulae and method for calculating water flow and volume

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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