



Australian Government

NWPCAD017 Operate and maintain salt interception works

Release: 1

NWPCAD017 Operate and maintain salt interception works

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 operate and maintain salt interception works.

It includes operating and maintaining salt water interception works.

This unit applies to field staff with the responsibility for making decisions relating to maintenance, repairs and operations as well as providing detailed reports on performance and optimisation of the salt interception works. Those undertaking this unit will work independently under appropriate supervision while performing routine tasks in a range of familiar contexts.

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

Pre-requisite Unit

Not applicable.

Competency Field

Catchment and Dams

Unit Sector

Not applicable.

Elements and Performance Criteria

ELEMENTS

Elements describe the essential outcomes.

1 Prepare work

PERFORMANCE CRITERIA

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

1.1 Collect data to determine ground water levels

1.2 Determine evaporation pond water balance capacity

	1.3	Develop salt interception plan according to workplace procedures
2 Operate salt interception works	2.1	Identify, set and adjust pump station components according to manufacturer instructions
	2.2	Conduct routine security inspections according to workplace procedures
	2.3	Operate pump station according to manufacturer instructions
3 Maintain salt interception works	3.1	Conduct routine maintenance of salinity pump stations including locking and tagging out of equipment
	3.2	Conduct acid dosing of salinity lines
	3.3	Maintain saline water collection and disposal pipelines
	3.4	Conduct repairs to pipelines and valves according to workplace procedures
4 Enhance salt interception performance	4.1	Optimise salt interception performance by adjusting system processes
	4.2	Undertake hydraulic performance of saline collection and disposal pipelines
5 Compile salt interception reports	5.1	Collect required data from monitoring points
	5.2	Report salt interception works performance to relevant personnel

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 NWPSOU033 Operate and maintain salt interception works.

Links

Companion Volume implementation guides are found in VETNet -

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

Companion Volume implementation guides are found in VETNet -

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

Companion Volume implementation guides are found in VETNet -

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

Assessment Requirements for NWPCAD017 Operate and maintain salt interception works

Modification History

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

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:

- collecting samples and conducting water tests
- gathering groundwater data
- locking and tagging out of equipment
- maintaining bores and piezometers
- maintaining one of the following pieces of equipment including:
 - dose acids
 - piezometers
 - pipes
 - pumps
 - valves
- optimising pipelines and pump stations
- repairing pipelines and valves
- storing, handling and using chemicals

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:

- chemical handling and dosing procedures and requirements
- groundwater data collection
- groundwater hydraulics
- legislation relating to salt interception works
- maintenance scheduling
- methods for collecting and reporting on data
- optimisation principles for pump stations and pipelines
- pipeline hydraulics
- pump performance
- relevant legislation, regulations and workplace procedures

- valve selection and operation

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.

Links

Companion Volume implementation guides are found in VETNet -

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

Companion Volume implementation guides are found in VETNet -

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

Companion Volume implementation guides are found in VETNet -

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