



**Australian Government**

**Assessment Requirements for  
AHCLPW313 Undertake sampling and  
testing of water**

**Release: 1**

# Assessment Requirements for AHCLPW313 Undertake sampling and testing of water

## Modification History

Release	Comments
Release 1	This version released with AHC Agriculture, Horticulture and Conservation and Land Management Training Package Version 6.0.

## Performance Evidence

An individual demonstrating competency must satisfy all of the elements and performance criteria in this unit.

There must be evidence that the individual has collected, tested, prepared and dispatched at least five water samples to a laboratory. The water samples must be from at least three of the following bodies of water:

- fresh water – river or stream
- fresh water – lakes or impoundments
- storm water and drains
- marine – open ocean
- marine – coastal or intertidal
- salt lakes
- water with high turbidity
- farmland dams and impoundments
- bore water.

There must also be evidence that the individual has:

- planned a water testing and sampling program under direction according to regulatory and organisation requirements
- tested, verified accuracy and prepared equipment according to manufacturer instructions and regulatory and workplace requirements
- collected and tested water samples according to regulatory requirements, workplace procedures and industry standards, including tested for at least five of any of the following:
  - pH
  - electrical conductivity
  - dissolved oxygen
  - turbidity
  - nitrate

- phosphorous
- prepared data sheets and recorded results
- reported water testing results according to workplace procedures
- reported urgent water quality and environmental concerns observed during sampling according to workplace procedures
- ensured traceability forms have been completed for environmental protection agencies
- applied workplace health and safety practices.

## Knowledge Evidence

An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:

- water monitoring in land management, including:
  - purpose for testing water
  - types of water bodies and their related ecological and environmental characteristics
  - scheduling guidelines for testing water quality
  - standards for water quality
- methods and steps involved in collecting water samples, including:
  - water sampling equipment operation and maintenance
  - sampling techniques and procedures
  - storing water samples
  - transporting water samples
  - packaging and labelling for despatch to laboratories
  - packaging and labelling procedures for workplace testing
- purpose of water test, equipment used, methods and procedures, including for:
  - temperature (in situ)
  - pH
  - electrical conductivity
  - dissolved oxygen
  - turbidity
  - nitrate
  - phosphorous
- varied operating conditions, hazards and environmental conditions that may impact sampling and testing in the field.

## Assessment Conditions

Assessment of the skills in this unit of competency must take place under the following conditions:

- physical conditions:

- skills must be demonstrated in the field, on sites covering a range of environments indicated in the Performance Evidence
- access to a water testing laboratory or an environment that accurately represents a water testing laboratory
- resources, equipment and materials:
  - equipment and resources required for collecting and storing water samples
  - equipment and consumables used for conducting tests on water samples
- specifications:
  - workplace procedures and processes for collecting and testing water samples
  - manufacturer operating instructions for testing equipment
  - safety data sheets for chemical reagents used in testing procedures
  - workplace instructions and specifications for purpose of water sampling
  - legislation, codes of practice and industry standards for conducting tests.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

## Links

Companion Volumes, including Implementation Guides, are available at VETNet: - <https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=c6399549-9c62-4a5e-bf1a-524b2322cf72>