



Australian Government

**Assessment Requirements for
ACMGEN404 Design, construct and
maintain aquascapes**

Release: 1

Assessment Requirements for ACMGEN404 Design, construct and maintain aquascapes

Modification History

Release	Comments
Release 1	This version released with ACM Animal Care and Management Training Package Version 4.0.

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:

- designed and constructed at least two aquascapes, including:
 - installed, secured and tested lighting, heating and filtration systems as required in design specifications
 - introduced live aquatic animals in the aquascape
 - used safe and environmentally responsible procedures for handling aquatic animals
- documented maintenance arrangements for each aquascape
- maintained records and documentation for each aquascape.

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:

- types of aquatic animals, including:
 - fish
 - aquatic invertebrates (including crustaceans and corals)
 - amphibians
 - turtles
- common names for fish, reptile and/or amphibian species commonly held in facilities
- species compatibility
- environmental requirements for commonly held species
- aquatic animal biology related to the care and wellbeing of commonly held species
- normal and abnormal behaviour of aquatic species, including behaviours and conditions that could be indicative of possible aquatic animal health problems
- safe aquatic animal handling techniques and procedures

- aquaria and aquascapes design and building elements, including:
 - heating, lighting and filtration systems
 - plants, features and substrate materials
- maintenance of ideal water conditions and quality for a range of aquatic animals, including:
 - water characteristics, including pH, nitrate, nitrite, ammonia, salinity, calcium and/or hardness
 - water sampling, testing and analysis procedures and techniques
 - water quality adjustment procedures and chemicals used to correct water conditions of aquascapes
- principles of animal welfare and ethics relevant to aquatic animals and aquascapes/aquaria
- signs of common aquatic animal diseases and parasitic infestations and their transmission between aquatic animals
- safe work practices, including:
 - appropriate use of personal protective equipment (PPE)
 - infection/disease control and hygiene standards
 - handling chemicals and cleaning agents
- general maintenance and cleaning requirements of aquascapes, including:
 - waste management strategies
 - cleaning techniques, equipment and materials used in aquascapes/aquaria
 - workplace guidelines and approaches to environmental sustainability.

Assessment Conditions

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

- physical conditions:
 - an animal care facility or an environment that accurately represents workplace conditions
- resources, equipment and materials:
 - live aquatic animals specified in the performance evidence
 - materials, tools and products for designing, constructing and maintaining aquascapes, including lighting, heating and filtration systems
 - record-keeping system or resources
- specifications:
 - workplace policies, procedures and specifications or plans related to aquascape design, construction and maintenance
- relationships:
 - clients and/or carer.

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=b75f4b23-54c9-4cc9-a5db-d3502d154103>