

Australian Government

# **Assessment Requirements for AHCTRF403 Develop a sports turf maintenance program**

Release: 1

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#### **Modification History**

Release	Comments
Release 1	This version released with AHC Agriculture, Horticulture and Conservation and Land 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 prepared a sports turf maintenance program for play on at least one of the following:

- a single hole for a golf course with tees and surrounds, rough, fairway and green
- a bowling green
- · a cricket ground with wicket surface and outfield
- a sports field for one of Australian Rules football, soccer, rugby, lacrosse or polo
- a horse race track
- a turf farm
- a lawn tennis court
- a croquet lawn
- other natural sports turf surface.

The sports turf maintenance program must:

- include a twelve month cycle for the sports turf playing surface
- specify all maintenance practices, including:
  - irrigation
  - mowing and rolling
  - fertiliser applications
  - pesticide applications to treat pests, diseases and weeds
  - plant growth regulator applications
  - renovation practices
  - surface set-up standards and player expectations
- be implemented for a period of no less than eight weeks to verify the performance outcomes documented in the program.

There must also be evidence that the individual has:

- prepared an annual sports turf maintenance program according to budget
- assessed and incorporated into maintenance program the following: test results, optimum performance characteristics, financial constraints and resource implications
- scheduled activities and informed key stakeholders and work team of their respective roles and responsibilities
- monitored and reviewed the program to ensure program outcomes are achieved
- implemented appropriate course of action to overcome program deficiencies
- documented and reported actions and changes to maintenance program.

## **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:

- biological principles and processes of a range of sports turf species for playing surfaces, including:
  - growth habits and cultural requirements of turf grass species and cultivars under varying soil and environmental conditions
  - maintenance requirements and practices for specific turf plant species and cultivars after initial establishment
  - nutrients required by specific turf plant species and cultivars, and the effects of nutrient deficiency and toxicity on individual plant species and cultivars, including symptoms
  - plant diseases, pests and disorders and weeds of specific turf plant species and cultivars
- site evaluation techniques, including analysis of the condition of soils, plants and the site for turf maintenance activities, including:
  - · soil ameliorants required to treat common soil problems
  - the characteristics of soil and other growth media
  - types and functions of additives used to enhance the nutrition available for specific turf plant species and cultivars
  - the main simple and compound fertiliser products available
- design and development of maintenance programs within turf grass requirements, including:
  - · requirements to build healthy turf to meet national or international standards
  - standards and player expectations of the playing surface
  - availability of equipment and materials
  - financial resources
- soil and plant testing programs and their development, including:
  - types of soil and plant tissue tests used in turf management
  - field testing activities
  - · off-site and laboratory testing activities and the role of consultants
  - scheduling and timing of tests for optimum results

- sampling techniques for soils and plant tissue
- interpretation of soil and plant test results, including:
  - impact of the seasons on results
  - expected results for turf species and cultivars
  - importance of using and maintaining historical records
- turf grass species and their cultural requirements and the implication for a maintenance program, including:
  - irrigation methods and water budget
  - mowing and rolling methods, including frequency for turf play surface requirements
  - fertiliser and ameliorant application timing and impact on turf health and growth
  - pests and disease control, including pesticide application
  - impact and management of plant growth regulators and their application to turf grass
  - · planned maintenance for renovation of worn and damaged surfaces
  - maintenance implications for setting up for sports play
- management of unexpected activities and outcomes, including:
  - developing contingencies to manage unpredictable situations
  - managing adverse climatic conditions
  - adverse or unplanned turf usage
- record keeping and reporting procedures and practices.

#### **Assessment Conditions**

Assessment of skills must take place under the following conditions:

- physical conditions:
  - access to a sports turf facility or an environment that accurately represents workplace conditions on which to implement and monitor a maintenance program, and at least one of the sports turf surfaces stipulated in the performance evidence
- resources, equipment and materials:
  - access to national and international sports turf industry standards
  - access to player and user expectations for playing surface
  - access to soil and plant tissue analysis reports for interpretation
- specifications:
  - workplace documents, including procedures and brief related to development of a sports turf maintenance program, including a maintenance budget and list of the equipment, machinery and human resources available
- relationships:
  - work team
- timeframe:
  - maintenance program must span 12 months
  - implementation of a minimum of 8 weeks to verify the program outcomes.

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-bfla-524b2322cf72