



Australian Government

AHCSOL501 Monitor and manage soils for production projects

Release: 1

AHCSOL501 Monitor and manage soils for production projects

Modification History

Release	TP Version	Comment
1	AHCv1.0	Initial release

Application

This unit of competency describes the skills and knowledge required to monitor and manage soils for production projects.

This unit applies to individuals who analyse information and exercise judgement to complete a range of advanced skilled activities and demonstrate deep knowledge in a specific technical area. They have accountability for the work of others and analyse, design and communicate solutions to a range of complex problems. All work is carried out to comply with workplace procedures.

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

Pre-requisite Unit

Nil.

Unit Sector

Soils and media (SOL)

Elements and Performance Criteria

Element	Performance criteria
Elements describe the essential outcomes.	Performance criteria describe the performance needed to demonstrate achievement of the element.
1. Research information about soil	1.1 Research and analyse soil type, characteristics and properties 1.2 Identify particular soil properties that are relevant to the workplace and research for further enquiry 1.3 Determine, from published data and records, acceptable soil physical and chemical parameters for a specified crop 1.4 Identify relevant properties of soils and areas of homogenous soils for testing

Element	Performance criteria
	1.5 Take soil samples from the land under production 1.6 Collect, package, label and dispatch soil samples according to testing agency requirements
2. Apply information from soil testing to production and/or management plan	2.1 Classify soil types from the sample area according to standards for soil classification 2.2 Compare results from soil testing with the identified soil physical and chemical parameters for the specified crop 2.3 Compare results from soil testing with soil records and production history 2.4 Review the comparative results and record differences 2.5 Develop production or management plan and record testing and comparative results
3. Develop soil amendment practices	3.1 Identify soil properties capable of being ameliorated 3.2 Identify relevant soil ameliorants or cultural practices and include in production plan 3.3 Cost soil ameliorating activities and include in production plan 3.4 Quantify and purchase soil ameliorants
4. Monitor soil amendment practices	4.1 Sample areas of ameliorant activities for testing across a representative sampling area 4.2 Analyse results to measure the performance of soil amelioration activities 4.3 Record monitoring program and include in the production plan
5. Review and document the soil management plan	5.1 Record analysis of the sampling methods and amend methods as required 5.2 Review monitoring program, amend for effectiveness and record 5.3 Document production plan incorporating reviews and reports

Foundation Skills

Foundation Skills essential to performance are explicit in the performance criteria of this unit of competency.

Range of Conditions

Unit Mapping Information

This unit is equivalent to AHCSOL501A Monitor and manage soils for production.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=c6399549-9c62-4a5e-bf1a-524b2322cf72>

Assessment Requirements for AHCSOL501 Monitor and manage soils for production projects

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Performance Evidence

The candidate must be assessed on their ability to integrate and apply the performance requirements of this unit in a workplace setting. Performance must be demonstrated consistently over time and in a suitable range of contexts.

The candidate must provide evidence that they can:

- identify particular soil properties that are relevant to the workplace and research for further enquiry
- apply information from soil testing to production and/or management plan
- develop and conduct soil improvement programs
- document the soil management plan or production plan
- interpret soil analytical data for the purposes of developing management or production plans
- review and analyse ongoing soil monitoring programs

Knowledge Evidence

The candidate must demonstrate knowledge of:

- principles and practices for managing soils for production
 - basic soil field tests
 - interpreting laboratory results
 - plant nutrition through soil management
 - soil chemical properties
 - soil conservation strategies and sustainable production techniques
 - soil physical properties
 - soil sampling techniques
 - soil types
 - techniques to ameliorate soil properties

Assessment Conditions

Assessors must satisfy current standards for RTOs.

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