



Australian Government

MSS024032 Document simple geological information for a site

Release: 1

MSS024032 Document simple geological information for a site

Modification History

Release 1. Unit code changed. Unit title changed. Application changed. Performance Criteria changed. Foundation Skills populated. Assessment Requirements changed. Workplace outcome changed. Supersedes and is not equivalent to MSS024020 Recognise common geological landforms and samples.

Application

This unit describes the skills and knowledge required to recognise, interpret and document geological landforms and related geological and ecosystem interactions of a site.

This unit applies to environmental technicians and similar roles who are required to recognise common geological landforms and relate these to basic geological processes and other ecosystem components of a site, obtain and classify near surface samples of common rocks, minerals and soils and identify factors that can affect site revegetation or rehabilitation.

This unit applies in a range of industry sectors including but not limited to environmental services; environmental compliance, auditing and inspection; groundwater and clean water management; solid and hazardous waste management; management of contaminated sites; site remediation or rehabilitation; geotechnical services and civil engineering; and natural resource management.

No licensing or certification requirements exist at the time of publication. Relevant legislation, industry standards and codes of practice within Australia must be applied.

Pre-requisite Unit

Nil

Competency Field

Environmental monitoring and technology

Unit Sector

Not applicable

Elements and Performance Criteria

Elements	Performance Criteria
Elements describe the essential outcomes.	Performance criteria describe the performance needed to demonstrate achievement of the element.
1. Prepare for field work	1.1 Review job request to identify the equipment involved, samples to

Elements	Performance Criteria
Elements describe the essential outcomes.	Performance criteria describe the performance needed to demonstrate achievement of the element.
	be collected and test methods 1.2 Identify hazards associated with the site, test methods and equipment used and read safe work procedures to determine action to be taken 1.3 Confirm site location, access, timing and any client requirements 1.4 Assemble all required equipment and materials and check that they are fit for purpose 1.5 Stow equipment and materials to ensure their safe transport 1.6 Arrange transport to site 1.7 Liaise with relevant personnel on arrival at site to ensure safety and minimise disruption to others 1.8 Seek input from colleagues and/or manager/s to confirm understanding of work requirements
2. Recognise geological structures and processes	2.1 Recognise common landforms and related geological processes 2.2 Read and interpret simple geological maps, diagrams and aerial photos to identify topography and geological structures 2.3 Apply principles of geological processes and the geological timescale to explain the formation and occurrence of common rocks, minerals, soils and aquifers
3. Identify common rocks and minerals	3.1 Sort handheld specimens of common sedimentary, igneous and metamorphic rocks by observing their textural, structural and mineralogical properties 3.2 Identify handheld specimens of common rocks and minerals by comparing their physical properties with classification charts and tables
4. Identify common soil types and their properties	4.1 Obtain soil samples using specified sampling equipment and methods 4.2 Examine soil colour, texture and properties of soil components to classify common soils 4.3 Identify and describe simple soil profiles at field sites 4.4 Recognise influences of rock type, drainage, age and climate on development of soil profiles 4.5 Recognise common forms of soil degradation
5. Relate local geology to flora and fauna and	5.1 Interpret and describe sites in terms of basic relationships between parent material, climate, topography, soils and living ecosystem

Elements	Performance Criteria
Elements describe the essential outcomes.	Performance criteria describe the performance needed to demonstrate achievement of the element.
land use	components 5.2 Recognise how local geology and relationships can influence the revegetation and rehabilitation of sites
6. Maintain a safe work environment	6.1 Use safe work procedures and protective equipment to ensure personal safety and that of others 6.2 Minimise environmental impacts of sampling and/or testing and generation of waste 6.3 Collect and/or dispose of all waste in accordance with environmental and quarantine requirements and workplace procedures
7. Report data and finalise documentation	7.1 Report field data in the required formats and expected time frame 7.2 Complete all required documentation 7.3 Maintain the security and confidentiality of data and documentation in accordance with workplace requirements

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential to performance but not explicit in the performance criteria.

- Reading skills to interpret job requests, workplace procedures, sampling and test methods
- Writing skills to record data and observations
- Oral communication skills to liaise with site personnel
- Numeracy skills to take readings and measurements.

Other foundation skills essential to performance are explicit in the performance criteria of this unit.

Unit Mapping Information

Release 1. No equivalent unit.

Links

Companion Volume Implementation Guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=5b04f318-804f-4dc0-9463-c3fb9a3fe998>