



Australian Government

**Assessment Requirements for MSS024003
Apply an understanding of environmental
principles to a site**

Release: 1

Assessment Requirements for MSS024003 Apply an understanding of environmental principles to a site

Modification History

Release 1. Supersedes and is equivalent to MSS024003A Apply an understanding of environmental principles to a site

Performance Evidence

Evidence of competence in this unit must satisfy all of the requirements of the elements and performance criteria, and include demonstration of:

- planning and conducting at least one (1) site appraisal that involves an initial survey and assessment of site condition and a basic ecological field study
- applying relevant aspects of environmental legislative and planning framework to site appraisal
- interpreting emergency, safety or environmental management plan requirements and procedures for conducting site inspections, surveys and ecological field studies
- researching, reviewing and summarising site information, including its environmental history
- accurately observing and recording the site's significant features, including the ability to 'step back' and carefully consider observations and inferences
- assessing site condition and determining relevant parameters to be measured/sampled during ecological field study
- planning and conducting an ecological study to obtain relevant and reliable data
- setting-up, calibrating and using instruments and equipment under laboratory and field conditions
- applying specified methods and data quality procedures to accurately perform field sampling and measurements
- applying a working knowledge of relevant terminology, concepts and principles in geology, geomorphology, hydrology and ecology to provide a scientific, systematic appraisal of site environmental condition
- seeking advice when issues/problems are beyond scope of competence/responsibility
- using clear and concise verbal communication to convey information and avoid or resolve work conflicts
- preparing concise and accurate reports that contain simple conclusions and interpretations based on raw or summarised data
- following procedures for working safely, transporting and storing equipment, minimising environmental impacts and responding to emergency incidents and accidents.

Knowledge Evidence

Must provide evidence that demonstrates knowledge of:

- scientific terminology for environmental and ecological systems relevant to job role
- fundamental concepts and principles in chemistry, physics, geology and biology to support a scientific approach to basic field ecology, including:
 - structure of earth systems, including lithosphere, hydrosphere, atmosphere and biosphere (ecosphere)
 - geomorphology, climate and hydrology
 - energy and material flows and cycles, including biogeochemical cycles
- fundamentals of ecology, including:
 - ecosphere, biome and major ecosystem types
 - trophic structure of ecosystems, and hierarchies
 - organism, population, community, ecosystem hierarchy; habitat and biodiversity
 - abiotic and biotic components and their interrelationships and dependencies
 - ecological systems and dynamics; stability, succession and disruption
- specific legislation, policies and codes of practice related to ecological field activities
- ecological, chemical and physical field monitoring procedures relevant to job role
- procedures for maintaining, storing and transporting samples/specimens to ensure their wellbeing, viability and integrity
- relevant hazards; health, safety and environment requirements, including field safety/survival principles.

Assessment Conditions

- Judgement of competence must be based on holistic assessment of the evidence. Assessment methods must confirm consistency of performance over time, rather than a single assessment event.
- This unit of competency is to be assessed in the workplace, or a simulated workplace environment. A simulated workplace environment must reflect realistic operational workplace conditions that cover all aspects of workplace performance, including the environment, task skills, task management skills, contingency management skills and job role environment skills.
- Foundation skills are integral to competent performance of the unit and should not be assessed separately.
- Assessment processes and techniques must be appropriate to the language, literacy and numeracy requirements of the work being performed and the needs of the candidate.
- Knowledge evidence may be collected concurrently with performance evidence or through an independent process such as workbooks, written assessments or interviews (provided a record is kept in each case).
- Holistic assessment methods include:
 - review of data, results and site reports prepared by the candidate
 - feedback from supervisors that the candidate consistently follows workplace procedures when conducting site appraisals; works safely; accurately observes site features; and produces work outputs within agreed timeframes
 - review of candidate's responses to simulated emergency incidents, accidents and/or field survival scenarios

- oral and/or written questions to assess the candidate's understanding of scientific terminology, concepts and principles associated with appraising the environmental condition of sites; regulations and workplace procedures associated with field activities; sampling and measurement methods; and interpretation of site observations
- observation of the candidate conducting site appraisals.
- Access is required to all instruments, equipment, materials, workplace documentation, procedures, and specifications associated with this unit, including, but not limited to:
 - access to suitable sites and a vehicle
 - survey equipment, sampling/monitoring equipment, cameras, consumables, maps and flora/fauna keys
 - documentation, including site information, environmental management plans, codes of practice and field protocols, equipment manuals, workplace procedures and test/survey methods.
- Assessors must satisfy the assessor competency requirements that are in place at the time of the assessment as set by the VET regulator.
- The assessor must demonstrate both technical competency and currency.
- Technical competence can be demonstrated through:
 - relevant VET or other qualification/Statement of Attainment AND/OR
 - relevant workplace experience
- Currency can be demonstrated through:
 - performing the competency being assessed as part of current employment OR
 - having consulted with an organisation providing environmental monitoring, management or technology related services about performing the competency being assessed within the last twelve months.

Links

Companion Volume implementation guides are found in VETNet -

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