



Australian Government

MSS025017 Assist with assessing site environmental indicators

Release: 1

MSS025017 Assist with assessing site environmental indicators

Modification History

Release 1. Updated unit code. Changes to elements and performance criteria. Range of conditions removed. Assessment requirements amended. Equivalent outcome.

Application

This unit describes the skills and knowledge to assist environmental scientists and engineers with determining the environmental condition of a site or locality. Personnel are required to locate and assess relevant data sets and reports; interpret the magnitudes and trends in measured environmental parameters; and determine and report on the potential significance for site or locality activities. This includes knowledge of environmental science to interpret measurements involving the atmosphere, biodiversity, land and water.

This unit applies to environmental technicians working in a range of industry sectors, including environmental monitoring, and sampling; environmental compliance, auditing and inspection; groundwater and clean water; water treatment, storm and wastewater management; solid and hazardous waste management; site remediation; management of contaminated sites; geotechnical services and civil engineering; 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

MSS024015 Apply an understanding of environmental principles to a site

Competency Field

Environmental monitoring

Unit Sector

Environmental

Elements and Performance Criteria

Elements describe the essential outcomes.

Performance criteria describe the performance needed to demonstrate achievement of the element.

1 **Read and interpret existing**

1.1 Confirm the scope of the proposed project and details of the site or locality

Elements describe the essential outcomes.		Performance criteria describe the performance needed to demonstrate achievement of the element.	
site or locality information		1.2	Identify legislative, regulatory and planning requirements
		1.3	Access, read and interpret available information about the site or locality
		1.4	Summarise existing data and relate it to legislative, planning and organisational requirements
2	Identify relevant environmental indicators for site or locality	2.1	Determine which environmental indicators and statutory environmental quality concentration limits are relevant to the proposed project and requirements of the site or locality
		2.2	Identify core environmental indicators and collect and collate data
		2.3	Identify statutory environmental quality concentration limits and collect and collate data
		2.4	Identify additional site, locality or project specific environmental indicators and collect and collate data
		2.5	Identify gaps in available data and refer to supervisor for further action
3	Read and analyse data to establish site condition	3.1	Ensure compatibility of data sets and seek advice
		3.2	Compare compatible data with core environmental indicators, established standards, regulatory limits, and statutory environmental quality concentration limits
		3.3	Apply environmental chemistry and biodiversity concepts and principles to estimate the environmental health of the site or locality
		3.4	Identify significant trends in environmental data and correlations and differences with indicators
		3.5	Make a final assessment of site condition

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| 4 | Report findings | 4.1 | Report the assessment of environmental condition in the required format and expected timeframe |
| | | 4.2 | Brief supervisor and stakeholders about the environmental assessment process and outcomes |

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential to performance.

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

Unit Mapping Information

Release 1. Supersedes and is equivalent to MSS025001 Assist with assessing site environmental indicators.

Links

The MSS Sustainability Companion Volume implementation Guides are available from VETNet: -

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

Assessment Requirements for MSS025017 Assist with assessing site environmental indicators

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Performance Evidence

There must be evidence the candidate has completed the tasks outlined in the elements and performance criteria of this unit, and:

- located and analysed environmental data, reports, indicators and limits and used scientific concepts and principles to provide a systematic, reliable appraisal of the environmental condition for at least 1 site or locality.

Knowledge Evidence

There must be evidence the candidate has knowledge of:

- scientific terminology relevant to job role, use of environmental indicators, assessment of environmental pollution and environmental degradation
- fundamental concepts and principles in chemistry, physics, geology and biology to support a scientific, systematic approach to the evaluation of environmental degradation
- fundamentals of environmental chemistry, including:
 - natural and modified hydrologic cycle
 - aquatic chemistry in natural and polluted waters
 - water pollutants, including heavy metals, inorganics, organics, nutrients and pesticides
- atmosphere and its composition, structure and circulation
- atmospheric stability and instability, including lapse rates and inversions
- atmospheric pollutants, including particulates, inorganic air pollutants and organic air pollutants
- concepts of climate change
- soil chemistry
- hazardous wastes and toxicological chemistry
- concepts of biodiversity stresses, including:
 - land clearing and loss of habitat
 - threatened and vulnerable species and ecological communities
 - introduced species
- specific legislation, strategies, policies and codes of practice related to environmental pollution and biodiversity
- hazards, health, safety and environment requirements for work role.

Assessment Conditions

Skills must have been demonstrated in the workplace or in a simulated environment that reflects workplace conditions and contingencies. The following conditions must be met for this unit:

- use of facilities, equipment and resources, including:
 - State of the Environment Reports, national environment protection measures, ANZECC Core Environmental Indicators documentation
 - environmental databases (electronic, web-based and hardcopy)
 - national and state/territory environmental management strategies, guidelines and regulations
 - documentation, including site information, environmental management plans, codes of practice and workplace procedures.

Assessors must satisfy the NVR/AQTF mandatory competency requirements for assessors.

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