

MSS70211 Vocational Graduate Certificate in Environmental Management

This qualification covers the skills and knowledge required by technical specialists who already have a relevant higher education or vocational qualification, or have extensive vocational experience without formal qualifications and require the competence to coordinate environmental monitoring and management activities at a site, or for a significant environmental management program or project.

This qualification was developed in response to a widespread industry shortage of technicians and (para) professionals who have the detailed knowledge and practical skills required to oversee day-to-day environmental monitoring and management programs and remediation or rehabilitation activities. It has strong industry support.

Job roles/employment outcomes

The MSS70211 Vocational Graduate Certificate in Environmental Management provides training in advanced environmental monitoring, technology and data analysis techniques for individuals who have some previous training or work experience in environmental monitoring and technology at AQF V or higher. Job roles targeted by this qualification include environmental site coordinators, environmental managers and senior environmental officers employed by enterprises/authorities in a wide range of industry sectors, such as:

- environmental monitoring and management services (e.g. air, water, soil and noise)
- environmental compliance, auditing and inspection
- geotechnical services
- natural resource management
- occupational hygiene monitoring (e.g. air, noise and radiation)
- water supply and treatment, storm and wastewater management
- solid and hazardous waste management
- site remediation or rehabilitation
- resource efficiency consultancy (e.g. energy, water and waste auditing).

Note that the term 'manager' is used to refer to management of a function, project and /or program and does not necessarily imply line management.

The specific job role of personnel will depend on whether they are employed in the private or public sector and which industry sector. They may individually, or as part of a team:

- interpret and implement environmental monitoring, management and/or sustainability policies, plans and strategies for sites, catchment areas and regions
- plan, resource and execute a wide range of environmental management activities (e.g. sampling, monitoring, impact/risk assessments, remediation and rehabilitation) for sites, catchment areas and regions
- undertake complex environmental management project work
- monitor legislative requirements and develop responses on behalf of the enterprise/authority
- ensure enterprise legislative compliance through performance monitoring and auditing
- process, verify and analyse monitoring data
- develop and trial environmental management options
- liaise with regulatory bodies about permits, approvals and compliance matters
- liaise with local stakeholders, contractors and consultants about environmental issues and/or technical matters
- present environmental information to clients and members of the community
- contribute to environmental decision making
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provide information and training to site personnel (e.g. environmental management obligations and responsibilities, specific sampling/monitoring methods and instrument use)

- develop, implement and improve procedures and work instructions for enterprise personnel who conduct, sampling, field testing, hazard control, waste minimisation, site remediation and environmental audits/inspections
- define and solve complex problems by investigating, developing and/or testing alternatives that may involve incomplete or ill-defined information
- contribute to improving enterprise/authority environmental performance
- prepare costings and proposals, and manage project finances
- report environmental performance and the progress and outcomes of projects within broad scope of accountability.

Environmental site coordinators, environmental managers and senior environmental officers require a detailed knowledge of the environmental management policies and legislative requirements that are relevant to their enterprise or authority's business activities and must be able to explain these to other site personnel. They require highly specialised knowledge of environmental monitoring methods, instrumentation and processing of large data sets. They must also understand the complexity of industry processes and/or ecosystems that they are working with; the likely environmental impacts of development and human activities (e.g. air, soil, noise, water and resource use); as well as strategies for minimising these impacts and the remediation or rehabilitation of sites/areas. They need well developed operational planning and complex problem-solving skills, supervision and communication skills along with liaison, negotiation skills and report writing skills. They work under broad direction from environmental scientists, engineers and planners.

Application

This qualification applies to environmental site coordinators, environmental managers and senior environmental officers who oversee environmental monitoring and management activities at a site or for a significant environmental management program or project.

Entry requirements

Entrants to the MSS70211 Vocational Graduate Certificate in Environmental Management are required to have one of the following:

- relevant extensive vocational practice without formal qualifications
- a relevant Diploma, such as MSS50211 Diploma of Environmental Monitoring and Technology, together with significant relevant vocational practice
- a Bachelor Degree in Environmental Management, Environmental Science or Science in a relevant discipline, such as chemistry, ecology or geology
- a relevant higher education qualification, with relevant vocational practice.

For the purposes of this qualification, the term 'vocational practice' is defined as performing a wide range of environmental sampling, monitoring, field-testing, inspection/auditing and/or data processing tasks for enterprises in any of the industry sectors listed above.

Licensing considerations

There are no specific licences that relate to this qualification. However, depending on the jurisdiction, licensing or regulatory requirements may apply to the use of some units in this qualification. Local regulations should be checked for details.

Packaging Rules

To be awarded the MSS70211 Vocational Graduate Certificate in Environmental

Management, competency must be achieved in a total of **twelve (12)** units of competency.

- **five (5)** core units of competency
- **seven (7)** elective units of competency, as specified below.

The **core** units listed below are considered to be essential for all environmental site coordinators, environmental managers and senior environmental officers. The units listed as **electives** may only apply to some personnel according to the size and scope of their particular enterprise and the industry sectors that they work in.

Note : Units with prerequisites are marked with an asterisk. Refer to the unit for details.

Core units of competency

- Complete all **five (5)** of the following units of competency.

Unit code	Unit title	P
MSS027001A	Coordinate environmental management activities	
MSS027002A	Apply environmental legislation, codes and standards	
MSS027003A	Provide environmental advice to clients	
MSAENV472B	Implement and monitor environmentally sustainable work practices	
MSL944001A	Maintain laboratory/field workplace safety	

Elective units of competency

- Complete **seven (7)** elective units of competency, made up of:
 - a minimum of **three (3)** units from Group A
 - the balance of units, to a maximum of **four (4)** , may be selected from:
 - Group A units, not previously selected
 - Group B units, listed below.

Group A: Elective units

Unit code	Unit title	P
MSS027004A	Contribute to environmental decision making	
MSS027005A	Contribute to improving environmental performance	
MSS027006A	Coordinate water quality management activities	*
MSS027007A	Coordinate air quality management activities	*
MSS027008A	Coordinate noise management activities	*
MSS027009A	Coordinate site remediation or rehabilitation activities	*
MSS027010A	Undertake complex environmental project work	
MSS027011A	Select, commission and maintain environmental monitoring instruments	
MSS027012A	Implement and monitor the site OHS management system	*

MSAENV672A	Develop workplace policy and procedures for sustainability	
BSBOHS605B	Apply occupational hygiene principles to control OHS risk	
LGAPLEM506A	Improve community knowledge and skills in environmental management practices	
PUAWER010B	Lead a workplace emergency initial response team	
RIINHB408A	Supervise environmental drilling operations	
RIIPRM501A	Implement, monitor, rectify and report on contracts	

Group B: Elective units

Unit code	Unit title	P
MSS015005A	Develop required sustainability reports	
MSS015018A	Inform and advise organisation and community representatives on sustainability issues	
MSS025005A	Produce site maps	*
MSS025006A	Collect and evaluate groundwater data	
MSS025007A	Perform sampling and testing of soils	*
MSS025008A	Monitor and evaluate noise	
MSS025009A	Perform sampling and testing of air	
MSS025010A	Assist with odour source assessment	
MSS025011A	Assist with odour field assessment	
MSS025013A	Assist with assessing and monitoring wetlands	
MSS025014A	Perform sampling and testing of contaminated sites	*
MSS025016A	Perform sampling and testing of stationary emissions	
MSS024005A	Collect spatial and discrete environmental data	
MSS024006A	Perform sampling and testing of water	
MSS024007A	Collect and evaluate meteorological data	
MSS024008A	Recognise common geological landforms and samples	
MSS024009A	Assist with assessing and monitoring stormwater systems	
MSL974007A	Undertake environmental field-based monitoring	
MSL974009A	Undertake field-based, remote sensing	
MSL975011A	Design and supervise complex environmental field	*

	surveys	
PSPRAD707A	Monitor radiation	

A maximum of **two (2)** Group B units may be chosen from this Training Package, other endorsed Training Packages and accredited courses, where those units are available at Diploma level and above.

Employability Skills for MSS70211 Vocational Graduate Certificate in Environmental Management

The following table contains a summary of the employability skills for this qualification. This table should be interpreted in conjunction with the detailed requirements of each unit of competency packaged in this qualification. The outcomes described here are broad industry requirements that may vary depending on the packaging options.

Employability Skill Communication	<p>Industry/enterprise requirements for this qualification include:</p> <ul style="list-style-type: none"> • Liaise with local stakeholders, contractors and consultants about complex environmental issues and/or technical matters • Liaise with regulatory bodies about permits, approvals and compliance matters • Present environmental information to clients and members of the community • Liaise with suppliers about technical matters (e.g. equipment, samples and laboratory test results) • Interpret complex sampling, monitoring and test methods and environmental management procedures • Explain environmental management responsibilities and specified management actions to site personnel • Prepare complex technical reports and contributions to major project documents • Obtain sign-off for results and/or outputs from relevant persons
Teamwork	<ul style="list-style-type: none"> • Work autonomously or as part of a team • Contribute to complex risk/impact assessment studies and environmental decision making • Contribute to developing and/or validating sampling, monitoring and field testing procedures • Contribute to improving environmental performance at sites
Problem solving	<ul style="list-style-type: none"> • Analyse and solve coordination problems to improve the effectiveness and efficiency of day-to-day environmental management activities • Investigate data quality issues • Determine root causes of problems with sampling, monitoring and/or field-testing procedures and/or instrument performance • Evaluate options for improving environmental performance and quality, including corrective and/or preventative actions
Initiative and enterprise	<ul style="list-style-type: none"> • Research current and new environmental management case studies or technical developments and assess their significance for the site, project, program or own job role • Network with other technical specialists to extend personal knowledge • Recognise opportunities improving environmental performance and quality and recommend improvement strategies

- Planning and organising**
- Prioritise, plan and coordinate environmental management activities
 - Determine resource requirements for activities, projects, programs and organise/optimize resource use in work area
 - Organise schedules to optimise work outputs without sacrificing quality
 - Adjust plans to suit new information, changing conditions and priorities
- Self management**
- Manage own time and establish own work schedule
 - Monitor and evaluate own work quality
 - Maintain professional and ethical standards in own work
 - Comply with legislative requirements, codes of practice and organisational policies and procedures
- Learning**
- Identify opportunities for continuing learning and development
 - Maintain knowledge of environmental issues, current management strategies and new developments in environmental monitoring instruments and techniques relevant to job role
- Technology**
- Set up and optimise sampling, monitoring and field-testing instruments/equipment to obtain reliable results
 - Conduct routine maintenance of monitoring instruments used in job role and conduct straightforward repairs
 - Use instrument control software, enterprise information management systems, information directories, databases, online data search facilities and computer networks