



**Australian Government**

# **MSS70211 Graduate Certificate in Environmental Management**

**Release: 2**

# **MSS70211 Vocational Graduate Certificate in Environmental Management**

## **Modification History**

Not applicable.

## Description

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
- 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.

## **Pathways Information**

Not applicable.

## Licensing/Regulatory Information

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.

## 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.

## Employability Skills Summary

The following table contains a summary of the employability skills as identified by industry 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 reflect skill requirements for this level.

| Employability Skill | Industry/enterprise requirements for this qualification include:   |
|---------------------|--|
| Communication       | <ul style="list-style-type: none"><li>• Liaise with local stakeholders, contractors and consultants about complex environmental issues and/or technical matters</li><li>• Liaise with regulatory bodies about permits, approvals and compliance matters</li><li>• Present environmental information to clients and members of the community</li><li>• Liaise with suppliers about technical matters (e.g. equipment, samples and laboratory test results)</li><li>• Interpret complex sampling, monitoring and test methods and environmental management procedures</li><li>• Explain environmental management responsibilities and specified management actions to site personnel</li><li>• Prepare complex technical reports and contributions to major project documents</li><li>• Obtain sign-off for results and/or outputs from relevant persons</li></ul> |

|                           |   |
|---------------------------|---|
| Teamwork                  | <ul style="list-style-type: none"> <li>• Work autonomously or as part of a team</li> <li>• Contribute to complex risk/impact assessment studies and environmental decision making</li> <li>• Contribute to developing and/or validating sampling, monitoring and field testing procedures</li> <li>• Contribute to improving environmental performance at sites</li> </ul>  |
| Problem solving           | <ul style="list-style-type: none"> <li>• Analyse and solve coordination problems to improve the effectiveness and efficiency of day-to-day environmental management activities</li> <li>• Investigate data quality issues</li> <li>• Determine root causes of problems with sampling, monitoring and/or field-testing procedures and/or instrument performance</li> <li>• Evaluate options for improving environmental performance and quality, including corrective and/or preventative actions</li> </ul> |
| Initiative and enterprise | <ul style="list-style-type: none"> <li>• Research current and new environmental management case studies or technical developments and assess their significance for the site, project, program or own job role</li> <li>• Network with other technical specialists to extend personal knowledge</li> <li>• Recognise opportunities improving environmental performance and quality and recommend improvement strategies</li> </ul>  |
| Planning and organising   | <ul style="list-style-type: none"> <li>• Prioritise, plan and coordinate environmental management activities</li> <li>• Determine resource requirements for activities, projects, programs and organise/optimize resource use in work area</li> <li>• Organise schedules to optimise work outputs without sacrificing quality</li> <li>• Adjust plans to suit new information, changing conditions and priorities</li> </ul>  |
| Self-management           | <ul style="list-style-type: none"> <li>• Manage own time and establish own work schedule</li> <li>• Monitor and evaluate own work quality</li> <li>• Maintain professional and ethical standards in own work</li> <li>• Comply with legislative requirements, codes of practice and organisational policies and procedures</li> </ul>   |
| Learning                  | <ul style="list-style-type: none"> <li>• Identify opportunities for continuing learning and development</li> <li>• Maintain knowledge of environmental issues, current management strategies and new developments in environmental monitoring instruments and techniques relevant to job role</li> </ul>  |
| Technology                | <ul style="list-style-type: none"> <li>• Set up and optimise sampling, monitoring and field-testing instruments/equipment to obtain reliable results</li> <li>• Conduct routine maintenance of monitoring instruments used in job role and conduct straightforward repairs</li> <li>• Use instrument control software, enterprise information management systems, information directories, databases, online</li> </ul>   |

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|  | data search facilities and computer networks |
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## 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                         | * |
| MSAENV672B  | Develop workplace policy and procedures for environmental 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  |   |

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|--|--|---|
| 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 <b>two (2)</b> 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. |  |   |

## Custom Content Section

Not applicable.