Australian Government

Department of Education, Employment and Workplace Relations

MSL946001A Implement and monitor OHS and environmental management systems

Revision Number: 1

MSL946001A Implement and monitor OHS and environmental management systems

Modification History

Not applicable.

Unit Descriptor

Unit descriptor	This unit of competency covers the ability to implement and monitor the occupational health and safety (OHS) and environmental management systems for a work group or laboratory, within the scope of a 'head officer's' responsibilities as defined in AS/NZS 2243 Set:2006 Safety in laboratories. Where the OHS management system is already established then this unit of competency may apply to the review of the system.

Application of the Unit

Application of the unit	The unit of competency is applicable to personnel in a senior technician or laboratory supervisor role. Personnel work in accordance with work instructions and standard operating procedures (SOPs) which incorporate all relevant aspects of OHS legislation and the codes, guidelines, regulations and Australian standards applying to environmental hazards and dangerous goods. This unit assumes that expert OHS and environmental advice is available, as required, either internal or external to the enterprise. Industry representatives have provided case studies to illustrate the practical application of this unit of competency and to show its relevance in a workplace setting. These can be found at the end of this unit of competency under the section 'This competency in practice'.

Licensing/Regulatory Information

Not applicable.

Pre-Requisites

Prerequisite units		

Employability Skills Information

Employability skills	This unit contains employability skills.

Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a unit of competency.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Implement requirements for the OHS and environmental management systems	1.1. Ensure OHS and environmental responsibilities and duties are documented and accountability processes are in place 1.2. Ensure OHS and environmental policies and procedures are documented and that documents are accessible to all relevant personnel 1.3. Ensure implications of any proposed changes to the OHS and environmental management systems are identified and addressed 1.4. Recognise limits of own professional expertise and consult specialists as necessary
2. Implement and maintain participative arrangements for the management of OHS and the environment	2.1. Implement and maintain appropriate participative processes with employees and their representatives in accordance with relevant OHS legislation and industry standards 2.2. Provide information to employees in a format that is readily accessible and understandable 2.3. Promptly and effectively deal with and resolve issues raised through participation and consultation 2.4. Provide information about the outcomes of participation and consultation to employees
3. Implement and maintain OHS and environmental risk management processes	3.1. Ensure hazard, incident and injury reporting and investigation processes are in place to meet prevention and legislative requirements 3.2. Implement a process of hazard identification and risk assessment 3.3. Ensure risk controls and hazard specific procedures for risk control comply with legislation and the hierarchy of control
4. Implement and maintain an OHS and environmental training program	4.1. Conduct a training needs assessment for the workgroup that takes account of legislative requirements, internal policies and procedures, skills of workgroup and risk control requirements 4.2. Develop and implement training programs to identify and fulfil employees' OHS and environmental training needs 4.3. Coordinate with relevant OHS and environment specialists
5. Implement and maintain a system for records	5.1. Identify and address the legal requirements for record keeping 5.2. Identify and access sources of OHS and environmental information

ELEMENT	PERFORMANCE CRITERIA
	5.3. Ensure that records are accurately completed, collected and stored
6. Identify areas for systems improvement	6.1. Collect data and information to evaluate management systems 6.2. Analyse data and information to identify areas for improvement 6.3. Consult with stakeholders, key personnel and expert advisors 6.4. Document and communicate outcomes of analysis to key personnel and stakeholders in an easily understood format 6.5. Recognise limits of own expertise and seek appropriate advice
7. Initiate and maintain systems improvements	7.1. Determine priorities in consultation with stakeholders 7.2. Develop an OHS and environmental plan in consultation with stakeholders 7.3. Identify and source resources required for implementation of plan 7.4. Monitor achievement against plan 7.5. Monitor effectiveness of modifications to the management systems on an ongoing basis in consultation with stakeholders

Required Skills and Knowledge

REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

Required skills

Required skills include:

- accessing and interpreting OHS and environmental legislation, regulations, codes of practice and updates
- analysing the work environment and judging OHS and/or environmental interventions
- consulting stakeholders on safety and environmental issues, hazard identification, risk assessment, selection and implementation of control measures and their review
- raising issues related to concerns with safety of work systems and work environment through consultation with management and employees
- addressing OHS and environmental management issues
- developing and implementing improvements in work practices and procedures
- providing appropriate supervision, support and information in accordance with workplace procedures
- keeping complete, current and secure OHS and environmental records
- communicating effectively with personnel at all levels of the organisation and OHS specialists
- preparing summary reports for a range of target groups

Required knowledge

Required knowledge includes:

- roles and responsibilities under OHS and environmental legislation of employers and employees, including supervisors and contractors
- legislative requirements for OHS information and consultation
- requirements for record keeping that address OHS, environmental management, privacy and other relevant legislation
- relevant national and Australian standards, including those related to OHS and environmental management systems
- guidelines for OHS and environmental management systems produced by the relevant state regulators
- principles and practices of effective OHS management, including hazard identification, risk assessment and risk control
- the hierarchy of control
- definition of risk as the chance of something happening that will result in injury or damage measured in terms of consequences and likelihood
- definition of risk management as the whole systematic process that is directed towards identifying hazards, assessing the risk, developing controls to minimise the

REQUIRED SKILLS AND KNOWLEDGE

risk, monitoring the effectiveness of the controls and taking action as required

- participative consultation processes, general and specific to OHS and environmental management systems
- hazard policies and procedures (including housekeeping and inspections)
- OHS, environmental and waste status record keeping
- enterprise purchasing policy and procedures for safety related supplies and equipment
- counselling/disciplinary/issue resolution processes
- waste minimisation, recycling of chemicals and water, by-product collection, equipment maintenance and microbiological waste disposal
- how the characteristics and composition of the workforce impact on OHS and environmental management
- sources of OHS and environmental management information, including specialist advisors
- nature of hazards relevant to the particular workplace
- key personnel within enterprise management structure and the OHS and environmental management systems
- organisational OHS and environmental management policies and procedures

Specific industry

Additional knowledge requirements may apply for different industry sectors. For example:

Biomedical sector:

- procedures and control measures for spillage of infected material in the public or non-laboratory domain

Evidence Guide

EVIDENCE GUIDE	
The Evidence Guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.	
Overview of assessment	
Critical aspects for assessment and evidence required to demonstrate competency in this unit	Assessors should ensure that candidates can: • access and interpret relevant sections of OHS and environmental legislation, regulations, codes of practice and updates • analyse the work environment and judge OHS and/or environmental interventions • consult employees and other stakeholders on safety and environmental issues, hazard identification, risk assessment, selection and implementation of control measures and their review • raise issues related to concerns with safety of work systems and work environment through consultation with management and employees • promptly address OHS and environmental management issues within their area of control • develop and implement improvements in work practices and procedures to reduce the risk of illness and injury and meet OHS legislative requirements • provide appropriate supervision, support and information in accordance with workplace procedures • keep OHS and environmental records complete, current and secure • communicate effectively with personnel at all levels of the organisation and OHS specialists • prepares summary reports for a range of target groups, including OHS committee, OHS representatives, managers and supervisors.
Context of and specific resources for assessment	This unit of competency is to be assessed in the workplace or simulated workplace environment. This unit of competency may be assessed with units dealing with communication, supervision and training, for example: • *MSL915001A Provide information to customers* • *MSL916003A Supervise laboratory operations in work/functional area*

EVIDENCE GUIDE	
	• *MAL916004A Maintain registration and statutory or legal compliance in work/functional area.* Resources may include: • relevant OHS and environmental legislation and regulations • codes of practice • workplace procedures.
Method of assessment	The following assessment methods are suggested: • review of information developed by the candidate and provided to the work group • review of records and reports generated by the candidate • feedback from team members and managers regarding provision of information and the candidate's ability to implement and monitor established management systems • written and/or oral questioning to assess underpinning knowledge and likely reactions to simulated incidents. In all cases, practical assessment should be supported by questions to assess underpinning knowledge and those aspects of competency which are difficult to assess directly. Where applicable, reasonable adjustment must be made to work environments and training situations to accommodate ethnicity, age, gender, demographics and disability. Access must be provided to appropriate learning and/or assessment support when required. The language, literacy and numeracy demands of assessment should not be greater than those required to undertake the unit of competency in a work like environment.
This competency in practice	Industry representatives have provided the case studies below to illustrate the practical application of this unit of competency and to show its relevance in a workplace setting. **Manufacturing** The smoke alarms have sounded and a general evacuation of the building has commenced. The fire brigade has been summoned in accordance with enterprise procedures. All personnel, except the

EVIDENCE GUIDE	
	designated floor wardens, have moved to the assembly area. The supervising staff report to the brigade officers that there is smoke and fumes on the first floor. The brigade officers don respirators and enter the building. A search establishes that a small fire has started in the drying oven when technicians used it to evaporate off a flammable solvent. The incident is the result of a careless mistake. With the cause of the smoke fumes identified, the brigade officers organise for the air conditioning system to exhaust the fumes. Once the building can be accessed, the laboratory supervisor prepares an incident report, organises follow-up counselling for the laboratory staff and implements measures to prevent a recurrence of the hazardous situation. **Food processing** A supervisor in the laboratory of a food processing company was concerned that an audit of the risks associated with the company's activities had never been performed. When individual risk situations were identified they were usually addressed on a case by case basis. The supervisor realised that this approach did not have the rigour to identify less obvious hazards. A risk audit was conducted in cooperation with the laboratory team to overcome this deficiency. The audit progressed well and was performed without unduly disrupting the primary functions of the laboratory. Several previously unrecognised hazards were identified. One of the more esoteric hazards concerned the use of proteases and lipases to selectively digest specific food components. Before the audit, these enzymes were thought harmless. However, it was discovered that these bacterial proteins could provoke a potentially fatal allergic reaction in sensitised individuals especially after inhalation. Furthermore, repeated exposure could induce sensitivity. After this hazard was identified, a SOP was developed for handling these enzymes. Individuals likely to come into close contact with the enzymes were required to regularly undergo an allergen sensitivity test.

Range Statement

RANGE STATEMENT	
The range statement relates to the unit of competency as a whole. It allows for different work environments and situations that may affect performance. Bold italicised wording, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.	
Codes of practice	Where reference is made to industry codes of practice, and/or Australian/international standards, it is expected the latest version will be used.

Standards. **codes**, **procedures and/or enterprise requirements**	Standards. codes, procedures and/or enterprise requirements may include:
	• Australian and international standards, such as:
	  • AS 1678 Emergency procedure guide - Transport
	  • AS 1940-2004 Storage and handling of flammable and combustible liquids
	  • AS 2252 Biological safety cabinets
	  • AS 3780-2008 The storage and handling of corrosive substances
	  • AS ISO 17025-2005 General requirements for the competence of testing and calibration laboratories
	• AS/NZS 1269 Set:2005 Occupational noise management set
	• AS/NZS 1337 Eye protection
	• AS/NZS 2161 Set:2008 Occupational protective gloves set
	• AS/NZS 2210:1994 Occupational protective footwear
	  • AS/NZS 2243 Set:2006 Safety in laboratories set
	  • AS/NZS 2865 Set:2005 Safe working in a confined space set
	• AS/NZS 2982.1:1997 Laboratory design and construction - General requirements
	• AS/NZS 4187:2003 Cleaning, disinfecting and sterilizing reusable medical and surgical instruments and equipment, and maintenance of associated environments in health care

RANGE STATEMENT	
	facilities • AS/NZS 4452:1997 The storage and handling of toxic substances • AS/NZS 4501 Set:2008 Occupational clothing set • AS/NZS ISO 14000 Set:2005 Environmental management standards set • HB 9-1994 Occupational personal protection • Australian Dangerous Goods Code • Australian Quarantine and Inspection Service (AQIS) Export Control (Orders) Regulations 1982 • Australian Quarantine and Inspection Service (AQIS) Import Guidelines • Australian Radiation Protection and Nuclear Safety Agency (ARPANSA) Codes of Practice • batch sheets • contractor and employee handbooks • emergency, fire and incident procedures • environmental incident procedures • formulas • gene technology regulations • guide to physical containment levels and facility types • handling and disposal of micro-organisms and heavy metals • hazard policies and procedures • hazardous goods manifest and substance register • immunisation registers for employees at risk • maintenance schedules • manufacturers' operating manuals • monitoring and appropriate tasking of personnel with possible infections • National Code of Practice for the labelling of workplace substances [NOHSC:2012 (1994)] • national environment protection measures • National Health and Medical Research Council (NHMRC) Guidelines • OHS national standards and codes of practice • personal protective clothing and equipment procedures

RANGE STATEMENT	
	• safety procedures • standard operating procedures (SOPs) • work instructions

RANGE STATEMENT	
Stakeholders	Stakeholders may include: • managers • supervisors • health and safety and other employee representatives • OHS committees • laboratory and production personnel • external OHS agencies • workers' families • the community

Participative processes with employees and their representatives	Participative processes with employees and their representatives may include:
	• committees:
	  • OHS
	  • consultative
	  • planning
	• employee and supervisor involvement in OHS activities such as inspections, audits and risk assessments
	• procedures for reporting hazards and raising and addressing OHS issues
	• identification of hazards
	• assessment of level of risk
	• implementation of risk control measures and review of effectiveness
	• injury and incident investigations
	• the development of policies and procedures
	• review of OHS records and statistics
	• review of registers of hazardous substances and dangerous goods
	• audits and workplace inspections
	• job safety analysis
	• consultation with workers

Characteristics and composition of the workforce which have an impact on OHS and environmental management	Characteristics and composition of the workforce which have an impact on OHS and environmental management may include: • language and literacy • communication skills • cultural background

RANGE STATEMENT	
	• gender • workers with special needs • part time, casual or contract workers

RANGE STATEMENT	

Hazard identification processes	Hazard identification processes include:
	• review of hazard and incident reports
	• workplace inspections
	• pre-purchase risk assessments
	• review of relevant internal documentation, including material safety data sheets (MSDS), manufacturer's manuals and minutes of meetings
	• review of legislation, codes of practice, standards and guidelines
	• review of publications such as:
	  • OHS regulators
	  • industry bodies
	  • journals
	  • newsletters

Risk assessment	Risk assessment is a process that involves analysing the risk to identify factors influencing the risk and the range of potential consequences and assessing: • effectiveness of existing controls • likelihood of each consequence considering exposure and hazard level • combining these in some way to obtain a level of risk A complete risk assessment will also include comparison of the determined risk with pre-established criteria for tolerance (or as low as reasonably achievable) and the subsequent ranking of risks requiring control
Hierarchy of control	Hierarchy of control, also referred to as the 'safety decision hierarchy' describes the preferred order of risk control measures from most to least preferred, that is: • elimination, or where this is not practical • substitution with a lesser hazard • isolate personnel from hazard • engineering controls • administrative controls, such as enterprise procedures and training • personal protective equipment

RANGE STATEMENT	
Data for evaluation of the management systems	Data for evaluation of the management systems may include: • hazard, incident and injury reports • workplace inspections • audit reports • formal and informal input of employees
OHS and environmental management requirements	OHS and environmental management requirements: • all operations must comply with enterprise OHS and environmental management requirements, which may be imposed through state/territory or federal legislation - these requirements must not be compromised at any time • all operations assume the potentially hazardous nature of samples and require standard precautions to be applied • where relevant, users should access and apply current industry understanding of infection control issued by the National Health and Medical Research Council (NHMRC) and State and Territory Departments of Health

Unit Sector(s)

Unit sector	Occupational health and safety

Competency field

Competency field	

Co-requisite units

Co-requisite units		

Co-requisite units		