

RTC4702A**Unit Descriptor****Unit Sector****Minimise risks in the use of chemicals**

Minimise risks in the use of chemicals

No sector assigned

ELEMENT**PERFORMANCE CRITERIA**

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| 1. Identify hazards involved in chemical use | 1.1 External guidelines and legislation concerning chemical use are identified and sourced from relevant authorities |
| | 1.2 Hazards involved in handling and application of chemicals are identified |
| 2. Assess risk and develop control procedures | 2.1 Risks associated with chemical use are assessed |
| | 2.2 Risk control measures including Emergency action plans are developed and implemented |
| | 2.3 Industry requirements for chemicals are identified |
| | 2.4 Withholding periods are identified and observed |
| | 2.5 Control procedures for transport, storage and handling of chemicals are developed |
| | 2.6 Continuous improvement strategy is implemented to minimise risk |
| 3. Implement and monitor procedures to ensure correct and safe use and application of chemicals | 3.1 Appropriate personal protective equipment is provided for people in the workplace handling chemicals |
| | 3.2 Procedures are implemented to ensure suitable application equipment is selected and used |
| | 3.3 Restrictions on use of chemicals due to weather or unsuitable workplace activities are implemented |
| | 3.4 Procedures covering chemical application rates are implemented and monitored |
| | 3.5 Procedures for decontamination and disposal of chemicals and their containers are implemented and monitored |
| | 3.6 Adherence to risk control procedures by people in workplace is monitored |
| 4. Record risk assessments | 4.1 Record keeping system is developed as required by labels, industry, legislation and authorities |
| 5. Evaluate risk control measures | 5.1 Procedures for evaluating the effectiveness of risk control measures are developed |
| | 5.2 Shortcomings in existing risk control measures are identified and rectified |

KEY COMPETENCIES

What processes should be applied to this competency standard? There are a number of processes that are learnt throughout work and life, which are required in all jobs. They are fundamental processes and generally transferable to other work functions. Some of these are covered by the key competencies, although others may be added. The questions below highlight how these processes are applied in this competency standard. Following each question a number in brackets indicates the level to which the key competency needs to be demonstrated where 0 = not required, 1 = perform the process, 2 = perform and administer the process and 3 = perform, administer and design the process.

Key Competency	Example of Application	Performance Level
Communicating ideas and information	From a range of sources concerning chemical use will be communicated to others	3
Collecting analysing and organising information	On risks involved with chemical use will be collected and analysed to develop risk control measures	2
Planning and organising activities	To handle and use chemicals will have to incorporate workplace activities and their planning	3
Working with others and in teams	Team work may be involved in implementing and monitoring procedures	3
Using mathematical ideas and techniques	Interpreting Maximum Residue Limits will involve mathematical techniques	2
Solving problems	Assessing comparative risks associated with a variety of chemicals will involve problem solving	3
Using technology	May be involved in developing and implementing procedures and monitoring outcomes	2

RANGE STATEMENT

External guidelines and legislation

may include

- Quality Assurance systems or Codes of Practice
- legislation may include Pesticide Acts
- Occupational Health and Safety Acts regarding hazardous substances and application equipment
- Dangerous Goods Act
- Poisons Act or Protection of the Environment Acts

Chemicals

involved may include

- insecticides
- fungicides
- herbicides
- bactericides
- algaecides
- biologicals
- nematicides
- rodenticides
- antimicrobial agents
- anthelmintics
- fumigants
- hormone growth promotants or a range of veterinary chemicals used to treat animals for disease

Hazards

will be listed on

- labels and the Material Safety Data Sheets (MSDS) for the chemical concerned and may include
 - flammability
 - toxicity
 - health hazards
 - damage to non-target organisms
 - environmental damage or residues in foods

Risks

- to the environment may include
 - pollution of ground or surface waters
 - damage to habitats
 - damage to off-target organisms
 - damage to community amenity due to spray drift
- risks associated with the produce include
 - chemical residue in plant produce, livestock or water
- risks associated with Occupational Health and Safety include exposure to chemicals during handling and application, and public health risks
- other risks include lack of appropriate insurance coverage

Emergencies

may include

- spills
- fire
- explosion or poisoning

Withholding periods

may include

- export slaughter interval or withholding period

Risk control procedures	may include • provision of adequate personal protective equipment • storage facilities that are suitable to be chemical • implementing buffer zones and other sensitive site strategies • erecting bunding • sufficient training in transporting, handling and storing chemicals
Personal protective equipment	may include • chemical resistant gloves • boots • overalls • breathing apparatus • goggles • face shields or hats
Application equipment	may include • knapsacks or hand held pneumatic sprayers • drench guns • spot on applicators • Controlled Droplet Application (CDA) and air assisted units • self-propelled sprayers • controllers or power operated equipment like • boomsprays • pressure wands • jetting race • shower/plunge dips • hand jetting or air blast sprayer
Procedures for evaluating	may include • analysing records to evaluate effectiveness of risk control measures

The sport and recreation industry**covers**

- industry sectors of community recreation, fitness, outdoor recreation and sport
- significant roles played by activity organisations, industry peak bodies, professional organisations
- large volunteer base
- high turnover of volunteers
- high levels of part time and casual employment
- irregular working hours
- relatively few professional positions
- workforce employed mostly in operational positions
- mainly small business or self-employed personnel
- slow to take up technology
- over 2/3 of the sport and recreation industry have no formal/recognised qualifications
- significant reliance upon industry credentials and involvement in the activity itself

EVIDENCE GUIDE**Critical aspects of evidence to be considered**

- Assessment must confirm sufficient knowledge to minimise risks associated with chemical spills,
- Assessment of performance should be over a period of time covering all categories from the Range Statements applicable to the learner's work environment
- In particular, assessment must confirm the ability to
 - transfer these skills to other work contexts
 - ensuring that damage to environment and others is minimal
 - that safety precautions and regulations are followed at all times
 - observe that the area is cleaned according to prescribed requirements

Interdependent assessment of units

- This unit must be assessed after attainment of competency in the following unit(s)
 - Nil
- This unit must be assessed in conjunction with the following unit(s)
 - Nil
- For the purpose of integrated assessment, this unit may be assessed in conjunction with the following unit(s)
 - Nil

Required knowledge and skills

- Required knowledge
 - Sources of information on chemicals, including labels, regulations, and Material Safety Data Sheets
 - Relevant industry standards, Codes of Practice, State and Territory legislation and regulations governing application, transport, handling and storage of chemicals
 - Occupational Health and Safety legislative requirements and Codes of Practice
 - Insurances required for chemical use, transport and storage
 - Correct wearing/fit of personal protective equipment
- Required skills
 - Read and interpret all appropriate relevant chemical related documents
 - Communicate procedures to others
 - Manage chemical use to comply with industry standards

Resource implications

- Physical resources - assessment of this competency requires access to
 - appropriate documentation and resources normally used in the workplace
- Human resources - assessment of this competency will require
 - human resources consistent with those outlined in the Assessment Guidelines. That is, assessors (or persons within the assessment team) should
 - be competent in this unit
 - be current in their knowledge and understanding of the industry through provision of evidence of professional activity in the relevant area
 - have attained the National Competency Standards for Assessment: BSZ401A, BSZ402A and BSZ403A
 - where this competency standard is being used as part of an accreditation or licence for purchase or use of chemicals, the assessor must meet the requirements of the issuing body
 - this may include
 - accreditation with that issuing body
 - maintenance of current competency in this competency standard
 - involvement with professional development programs comprising technical and legislative updates on an annual basis

Consistency in performance

- Competence in this unit must be assessed over a period of time in order to ensure consistency of performance over the Range Statements and contexts applicable in the work environment

Context for assessment

- This unit of competency must be assessed in the context of sport or recreation activity. For valid and reliable assessment the sport or recreation activity should closely replicate the work environment. The environment should be safe with the hazards, circumstances and equipment likely to be encountered in a real workplace
- Assessment of this unit of competence will usually include observation of processes and procedures, oral and/or written questioning on required knowledge and skills and consideration of required attitudes
- Where performance is not directly observed and/or is required to be demonstrated over a "period of time" and/or in a "number of locations", any evidence should be authenticated by colleagues, supervisors, clients or other appropriate persons

Essential Assessment Information

There is **essential information about assessing this competency standard for consistent performance and where and how it may be assessed** , in the Assessment Guidelines for this Training Package. All users of these competency standards must have **access** to the **Assessment Guidelines** . Further advice may also be sought from the relevant **sector booklet** .