

RTC4703A**Unit Descriptor****Plan and implement a chemical use program**

Plan and implement a chemical use program

Unit Sector

No sector assigned

ELEMENT**PERFORMANCE CRITERIA**

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| 1. Identify the requirements of chemical use | 1.1 Chemical use requirements relevant to the workplace are accessed and interpreted
1.2 Legislation and safety procedures surrounding the use of chemicals are accessed and interpreted
1.3 Personal Protective Equipment is used and provided for others for transport, storage and application of chemicals
1.4 Industry standards for chemical use are identified
1.5 Appropriate insurance policy cover is confirmed or arranged |
| 2. Monitor the implementation of safety requirements | 2.1 Implementation of safety practices and rules by others is monitored
2.2 Safety incidents are investigated and reported in accordance with directions, standards and legislative requirements
2.3 Safety hazards in the transport, storage and application of the chemicals are identified
2.4 Risk control measures to minimise risk involved in chemical use
2.5 Measures for controlling residue in the environment and produce are implemented |
| 3. Plan and implement a maintenance program for chemical use equipment | 3.1 Plan for maintenance of application and personal protective equipment is established according to manufacturers instructions
3.2 Implementation of maintenance plan is supervised
3.3 Faulty or damaged equipment is identified and repaired or replaced |
| 4. 4 Determine the suitability of a chemical for use in a control program | 4.1 Integrated Pest Management (IPM) or Animal Health Strategy (AHS) is planned
4.2 Chemicals included in the Integrated Pest Management or Animal Health Strategy are selected according to situation
4.3 Alternatives to chemical treatments are considered and applied according to Integrated Pest Management or Animal Health Strategy |

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| 5. Ensure the correct selection and application of the chemical | 5.1 Chemicals suitable for situation are identified, and procedures for preparation, application and risk control are read and interpreted |
| | 5.2 Application equipment is selected in accordance with procedures |
| | 5.3 Ensure calibration of equipment is implemented according to directions and standards |
| | 5.4 Pre-operative checks and maintenance procedures are implemented |
| | 5.5 Meteorological conditions are assessed as appropriate to application prior to and during chemical application |
| | 5.6 Chemical application is conducted safely in accordance with hazards associated with the chemicals concerned |
| | 5.7 Chemical spills or accidents are dealt with according to procedures |
| 6. Ensure personnel are adequately trained in chemical use | 6.1 Training is provided to personnel who are handling or using chemicals |
| | 6.2 External training and assessment opportunities are organised for staff involved in using chemicals |
| 7. Supervise clean up following chemical application | 7.1 Clean up procedures are implemented following chemical applications |
| 8. Implement recording systems for chemical storage and use | 8.1 Records comply with legislation and regulations surrounding chemical use |
| | 8.2 Risk assessment and control strategies are recorded in accordance with requirements |

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	Procedures, policies and safety information are communicated to others in the workplace	3
Collecting analysing and organising information	On labels, Material Safety Data Sheets and legislation need to be interpreted and analysed	3
Planning and organising activities	Overall organisation management will require activities to be planned in conjunction with chemical use	3
Working with others and in teams	Working with others, internal and external to the organisation, requires teamwork	3
Using mathematical ideas and techniques	Calibration and calculation of equipment and chemicals requires mathematical techniques	2
Solving problems	Identifying hazards and potential problems that may arise during chemical use and developing suitable solutions and risk control measures	2
Using technology	May be required to record and manage chemical information	2

RANGE STATEMENT

Chemicals

may include

- insecticides
- fungicides
- herbicides
- bactericides
- algaecides
- biologicals
- nematocides
- rodenticides
- fumigants
- antimicrobial agents
- anthelmintics
- hormone growth promotants or veterinary chemicals

Legislation and safety rules

may include approved

- Pesticides Acts, Occupational Health and Safety Acts regarding hazardous substances and application equipment
- Dangerous Goods Act
- Poisons Act or Protection of the Environment Acts for chemical use

Personal Protective Equipment

may include

- boots
- overalls
- chemical resistant gloves
- aprons
- face shields
- respirators and hats

Directions and standards

may include

- the instructions on the chemical label
- in an operator's manual
- on Material Safety Data Sheets (MSDS)
- in an industry standard
- from an Occupational Health and Safety manual or other regulation
- a hazardous substances regulation

Hazards

will be listed on

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

Risk control measures

that may be implemented include

- spillage
- fire
- contact of chemical with skin or eyes
- accidental ingestion
- incorrect concentrations in mixtures
- faulty or inappropriate storage containers
- current insurance policies
- likelihood of run-off post application
- incorrectly calibrated equipment
- spray drift
- incorrect disposal of waste chemicals or faulty equipment

Situation	may include • weeds, insects, pathogens, and vertebrate animals
Application equipment	may include • hand held knapsacks or pneumatics • drench guns • spot on or power operated equipment like • boomsprayers • pressure wands or air blast sprayer • jetting race • hand jetting • shower/plunge dips
Meteorological conditions	will include • rain • wind • temperature • relative humidity • inversion or stable air conditions
External training and assessment	may include • formal training and assessment by a Registered Training Organisation (RTO) either on or off the job, or Recognition of Prior Learning process
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 select, apply and clean up the application of a specific chemical
- 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
 - supervise others working with the chemical
 - ensure that all prescribed safety directions are followed
 - monitor the implementation of the systems and procedures developed for chemical concerned
 - transfer the skills and knowledge in this standard to other work contexts

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 in 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
 - Hazards involved in the use of the specific chemical concerned and related risk control measures
 - Signs of pest damage and signs of beneficial organisms
 - Life cycle of pests and target stages
 - Pest resistance to chemicals
 - Types of chemical and modes of action
 - Maximum residue limits
 - Occupational Health and Safety legislative requirements and Codes of Practice relevant to chemical use and hazardous substances
 - Application equipment features
 - Calibration
 - Knowledge of record keeping systems
 - Knowledge and understanding of relevant control of use Acts
 - Use, maintenance and storage of personal protective equipment
 - Correct wearing/fit of personal protective equipment
 - Correct wearing/fit of personal protective equipment
 - First aid and emergency procedures
 - Insurance required for chemical use, transportation and storage
- Required skills
 - Access, accurately read and interpret conditions and labels information for chemicals
 - Communicate critical chemical information to others and ensure understanding
 - Direct others to perform tasks
 - Identifying hazardous situations

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 in 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** .