

PIL304A Carry out animal care and maintenance programs in a permaculture system

This competency standard covers the functions required to carry out animal care and maintenance programs in a permaculture system.

It requires the application of knowledge and skills to accurately diagnose the type and scope for animal care and maintenance needs and administer appropriate programs. Competency requires an awareness of legislative requirements with regard to animal welfare. The work in this standard is likely to be carried out under routine supervision within enterprise guidelines.

Element		Performance Criteria	
1	Prepare for care and maintenance of animals	1.1	Animals requiring care or treatment are identified and the type and scope of health care is determined
		1.2	Equipment and materials required for the treatment of animals are identified, prepared and maintained to manufacturers specifications and enterprise requirements
		1.3	Existing and potential hazards in the workplace are recognised, risk assessed and controlled according to OHS requirements
2	Carry out animal care and maintenance programs	2.1	Suitable personal protective equipment is selected, used and maintained according to OHS requirements
		2.2	Animals are safely handled and restrained without causing harm or injury to animal or handler
		2.3	Treatment is administered hygienically and consistently according to manufacturers specifications, homoeopathic administration techniques and supporting husbandry, OHS and industry Codes of Practice
		2.4	Withholding periods are observed and treated animals are identified to ensure isolation from non-treated animals

3	Complete care and maintenance program	<p>3.1 Animal health and condition are monitored post-treatment and abnormalities reported according to enterprise requirements</p> <p>3.2 Environmental implications associated with the care and treatment of animals are identified, assessed and controlled according to enterprise requirements</p> <p>3.3 Equipment and worksite are cleaned and waste is disposed of according to OHS and enterprise requirements</p> <p>3.4 Health treatments are stored to manufacturers recommendations, industry and enterprise requirements</p> <p>3.5 Relevant information is documented according to industry and enterprise requirements</p>
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Range of Variables

The Range of Variables explains the range of contexts within which the performance and knowledge requirements of this standard may be assessed. The scope of variables chosen in training and assessment may depend on the work situations available.

What types of animals may be covered by this standard?	This may include poultry and other birds such as ostrich, emu , sheep, goats, deer, alpaca, rabbits, guinea pigs, cattle (both beef and dairy) , pigs and kangaroos.
What factors may be considered in determining and preparing animal treatments ?	This may include assessing the dosage and rates appropriate to the identified type of animal, its body weight and severity of infestation. It may also involve checking the expiry dates on health preparations for validity.
What range of equipment and materials may be prepared for use?	This may include drench guns, yards, drenches, scales, races, gates, backpacks, faeces collection plastic bags, sample jars, water pump, sharpening stone, tanks. Preparation may include the calibration of equipment to check accuracy of dose rates.
What enterprise requirements may apply to this standard?	Industry standards, product labels, manufacturers specifications, MSDS, enterprise policies and procedures including waste disposal, recycling and re-use and reporting requirements.

<p>What existing and potential hazards may be encountered in the workplace?</p>	<p>Movement and handling of difficult animals, exposure to hazardous noise, dust, solar radiation, injury hazard (crushing etc.) and veterinary chemicals.</p>
<p>What may be included under animal care and maintenance programs?</p>	<ul style="list-style-type: none"> • Maintenance of animal housing & enclosures covering hygiene and welfare • Ensuring availability of suitable forage & fodder and adjust stocking rates, ranging and rotation schedules to suit • Coordinating integration of animal ranging and maintenance with plant production systems (e.g. ranging in orchard to manure trees, reduce weeds, pests, eat windfall fruit, tractoring systems, compost manures and housing litter, maintain firebreaks) • Researching, assessing, sourcing and preparing supplementary stock feed requirements, feeding quantities & schedules • Identifying likely contraindications including disease, parasites, predator vulnerability, escapement, negative impact on environment • Identifying and applying appropriate prophylactic measures to reduce vulnerability to contraindications • Researching and applying organic alternatives for treating stock in compliance with organic certification authorities, these may include herbal and homoeopathic treatments, mineral and vitamin supplements, permitted medications <p>Developing appropriate handling procedures to reduce stress</p> <p>Harvesting, sourcing and handling useable products (eg milking, collecting eggs)</p>
<p>What personal protective equipment may be relevant to this standard?</p>	<p>This may include boots, hat/hard hat, overalls, gloves, protective eyewear, hearing protection, respirator or face mask, and sun protection.</p>
<p>What environmental implications may be relevant to this standard?</p>	<p>Negative environmental impacts may result from the unsafe use and disposal of veterinarian chemicals and any consequent residual chemicals, for example, in excreta.</p>

What storage requirements may be observed?	Storage requirements may include safety, access, warning signs, temperature control, and security for spillage.
What relevant information might be recorded and reported?	This may include details of equipment and materials used, the performance of equipment, faults and malfunctions, number of treated livestock and details of treatment, any testing carried out and results, expiry of withholding periods, evaluation of treatment effectiveness and observed abnormalities or behaviour in livestock.

Evidence Guide

What evidence is required to demonstrate competence for this standard as a whole?

Competence in this standard requires evidence of the ability to implement effective preventative health regimes for the control of parasites. It involves the ability to safely handle animals, determine the type and scope of treatment, observe withholding periods, and monitor animals for treatment effectiveness and abnormalities. Competence must be demonstrated in safe and positive environmental workplace practices.

The skills and knowledge required must be **transferable** to another environment. For example, if competence is evident in carrying out a parasite control program for sheep, it must also be evident that these skills may be adapted to a program for goats and beef cattle.

What specific knowledge is needed to achieve the performance criteria?	<p>Knowledge and understanding are essential to apply this standard in the workplace, to transfer the skills to other contexts and to deal with unplanned events. The knowledge requirements for this competency standard are listed below:</p> <ul style="list-style-type: none"> • Application procedures and effects of veterinary chemicals • Types of health preparation treatments • Animal health and nutritional requirements • Types of parasite infestation, their symptoms and seasonal incidence. • Drenching equipment, drenches and their efficiency • Relevant Codes of Practice with regard to the safe use and handling of hazardous substances • Withholding periods for treated animals • Animal handling and restraint techniques • OHS legislative requirements • Relevant Codes of Practice with regard to
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environmental protection.

What specific skills are needed to achieve the performance criteria?

To achieve the performance criteria, appropriate literacy and numeracy levels as well as some complementary skills are required. These include the ability to:

- Select and apply chemicals appropriate to treat parasites
 - Arrange and co-ordinate equipment and resources
 - Weigh and drench livestock
 - Assemble, check and calibrate drenching equipment
 - Demonstrate safe and environmentally responsible workplace practices
 - Provide due care and humanely handle animals
 - Return animals to prepared and clean environments
 - Read and interpret chemical and veterinary health labels, manufacturers specifications and MSDS
 - Communicate verbally with the work team and the manager
 - Calculate animal numbers and measure treatment dosage and rates.
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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.

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| 1. How can communication of ideas and information (1) be applied? | Information with regard to animal care and maintenance programs may be discussed and confirmed with veterinary medicine suppliers and animal health personnel. |
| 2. How can information be collected, analysed and organised (2) ? | Information on animal testing may be collected and organised by reports for future analysis of parasite control and management. |
| 3. How are activities planned and organised (2) ? | The treatment process may be planned and co-ordinated with work schedules and timeframes or sequenced as required. |
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4. How can team work (1) be applied?	In the application of methods and procedures to complete the treatment program within timeframes and deadlines.
5. How can the use of mathematical ideas and techniques (1) be applied?	Mathematical techniques may be used to calculate treatment dosage and rates for the size of the infestation.
6. How can problem solving skills (1) be applied?	Problems of large infestations may be resolved by isolation procedures.
7. How can the use of technology (2) be applied?	Technology may be used to communicate, source information and to estimate levels of infestation.

Are there other competency standards that could be assessed with this one?

This competency standard could be assessed on its own or in combination with other competencies relevant to the job function.

For information about assessing this competency standard for consistent performance and where and how it may be assessed, refer to the **Permaculture International Ltd Course Documentation**.