



Australian Government

Department of Education, Employment and Workplace Relations

AHCLSK506A Design livestock effluent systems

Release: 1

AHCLSK506A Design livestock effluent systems

Modification History

Not Applicable

Unit Descriptor

Unit descriptor	This unit covers the process of the design and planning of livestock effluent systems and defines the standard required to: meet the requirements of statutory, local government and environment authorities for effluent disposal; identify factors affecting the design of effluent systems; conduct a cost benefit analysis of a livestock effluent management system; design an effluent system that meets environmental standards and enterprise requirements and; evaluate the effectiveness of a range of livestock effluent management systems.
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Application of the Unit

Application of the unit	This unit applies to intensive production unit managers or related specialists who design effluent disposal systems.
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Licensing/Regulatory Information

Not Applicable

Pre-Requisites

Prerequisite units		

Employability Skills Information

Employability skills	This unit contains employability skills.
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Elements and Performance Criteria Pre-Content

Not Applicable

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA

ELEMENT	PERFORMANCE CRITERIA
1. Determine the feasibility of an effluent management system	1.1.Planning parameters that affect the design of effluent management system are identified. 1.2.Statutory, local government and environment authority requirements for effluent disposal are identified. 1.3.The environmental implications of livestock effluent disposal are identified. 1.4.Effluent recycling options are evaluated in accordance with the whole farm plan. 1.5.Processing options are analysed on the basis of their merits and suitability for the environment. 1.6.Information is obtained from effluent management specialists on all relevant aspects of effluent management. 1.7.An effluent management system is selected on the basis of a cost benefit analysis.
2. Design an effluent management system	2.1.The volume of livestock effluent is calculated according to established guidelines. 2.2.The volume of water flowing into the effluent management system is calculated. 2.3.Storage requirements are calculated. 2.4.Professional assistance is obtained, appropriate to the complexity of the task and the financial risk involved. 2.5.Plan and layout include provision of access, availability and the incorporation of technological innovations. 2.6.Occupational Health and Safety (OHS) hazards are identified, risks assessed, safe systems established, and OHS risk assessment records maintained. 2.7.The effluent management system design reflects the requirements of the business plan, production plan and the whole farm plan.

Required Skills and Knowledge

REQUIRED SKILLS AND KNOWLEDGE

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

REQUIRED SKILLS AND KNOWLEDGE**Required skills**

- identify all factors affecting the design of a livestock effluent system
- evaluate the effectiveness of a range of livestock effluent management systems
- research the latest innovations in livestock effluent management
- use literacy skills to fulfil job roles as required by the organisation. The level of skill may range from reading and understanding documentation to completion of written reports
- use oral communication skills/language competence to fulfil the job role as specified by the organisation including questioning, active listening, asking for clarification, negotiating solutions and responding to a range of views
- use numeracy skills to estimate, calculate and record complex workplace measures
- use interpersonal skills to work with others and relate to people from a range of cultural, social and religious backgrounds and with a range of physical and mental abilities.

Required knowledge

- the role of differing components of a livestock effluent management system
- the options available and the relative advantages and disadvantages of differing effluent management systems
- different methods of managing large quantities and reducing the quantity of effluent water in effluent management
- financial considerations including the availability of low interest loans and incentives for expenditure on facilities to treat and retain livestock effluent
- relevant legislation and regulations relating to effluent management
- relevant OHS legislation, codes of practice and enterprise procedures.

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	The evidence required to demonstrate competency in this unit must be relevant to workplace operations and satisfy holistically all of the requirements of the performance criteria and required skills and knowledge and include achievement of the following: • meet the requirements of statutory, local government and environment authorities for effluent disposal • identify factors affecting the design of effluent systems • conduct a cost benefit analysis of a livestock effluent management system • design an effluent system that meets environmental standards and enterprise requirements • evaluate the effectiveness of a range of livestock effluent management systems.
Context of and specific resources for assessment	Competency requires the application of work practices under work conditions. Selection and use of resources for some worksites may differ due to the regional or enterprise circumstances.

Range Statement

RANGE STATEMENT	
The range statement relates to the unit of competency as a whole.	
Effluent disposal systems may include:	• ponding and spreading on paddocks to improve pasture growth • recycling water for yard wash-down • generation of methane gas for water heating • applying to crops and trees as a soil conditioner • composting

RANGE STATEMENT

	• worm farming.
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Unit Sector(s)

Unit sector	Livestock
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Co-requisite units

Co-requisite units		

Competency field

Competency field	
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