



Australian Government

Department of Education, Employment and Workplace Relations

AHCMER406A Provide information on fertilisers and soil ameliorants

Release: 1

AHCMER406A Provide information on fertilisers and soil ameliorants

Modification History

Not Applicable

Unit Descriptor

Unit descriptor	This unit covers the processes required to: provide information on fertilisers and soil ameliorants and defines the standard required to: take soil, plant tissue and water samples; use and explain use of nutrient management tools; provide information on the relationship between soil types, water, crops, fertiliser and soil ameliorant use; describe legislative requirements relating to use of fertiliser and soil ameliorants.
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Application of the Unit

Application of the unit	This unit applies to employees in a sales role in an agricultural or horticultural support enterprise who provide information on fertilisers, soil ameliorants and related environmental information to primary producers and the provision of services and products that improve the nutrition and benefit the physical, biological and chemical nature of a soil.
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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

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1. Gather information on the requirements of the client	1.1. Basis of customer's fertiliser or soil ameliorant requirement is identified. 1.2. Planned use of fertiliser or soil ameliorant is evaluated against legislative requirements, local productivity and environmental guidelines and food safety regulations. 1.3. Individual soil, plant tissue and water samples are taken for each customer. 1.4. Where appropriate, customer is provided with relevant sampling kits and advice on required sampling processes to be followed.
2. Provide information on nutrient management program	2.1. Information and referrals about the fertiliser and soil ameliorant product are provided to customer, with particular reference to Occupational Health and Safety (OHS), food safety and environmental issues and according to industry codes of practice. 2.2. Use of nutrient management tools is recommended where necessary. 2.3. Changes to application method and/or timing are suggested if necessary.
3. Provide appropriate service or product	3.1. Customer is referred to an appropriately qualified specialist adviser if required. 3.2. Customer is supplied with information and recommendations regarding transporting, storing and handling fertiliser and soil ameliorants in a safe and environmentally responsible manner. 3.3. Where required by customer, the transport, handling and storage of fertiliser and soil ameliorants in a safe and environmentally responsible manner are arranged. 3.4. Fertiliser and soil ameliorants are supplied that meet legislative requirements and productivity, food safety and environmental guidelines. 3.5. Details of transaction are recorded according to enterprise and industry guidelines.

Required Skills and Knowledge

REQUIRED SKILLS AND KNOWLEDGE

REQUIRED SKILLS AND KNOWLEDGE

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

Required skills

- taking soil, water and plant tissue samples
- analysing soil and plant tissue tests to determine nutrient requirements
- using safe and environmentally responsible work practices
- use literacy skills to read, interpret and follow organisational policies and procedures, develop sequenced written instructions, record accurately and legibly information collected and select and apply procedures to a range of tasks
- 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 routine and more complex workplace measures and data
- 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

- crop nutrient requirements - both macro and micro nutrients
- effect of soil ameliorants in dispersion and adjustment for acidity or alkalinity (pH)
- fertiliser and soil ameliorant application methods, including timing and frequency of fertiliser and soil ameliorant application to minimise losses
- fertiliser and soil ameliorants availability and relative costs
- industry production regimes and fertiliser practices
- sources of technical information
- major nutrient management risks of leach, run-off, load, blow, mine and how these impact on the environment
- nutrient management advisory tools and processes used by advisers in making a crop nutrition recommendation
- organisational OHS and environmental procedures, practices and policies in operating sampling equipment
- packaging and dispatch procedures for samples
- physical, chemical and biological properties related to a healthy soil and environment, including texture, structure, slaking, dispersion, organic matter and pH
- rainfall patterns in local area
- sampling tools and methods, including soil, plant tissue and water tests; yield monitoring; and electrical conductivity survey
- environmental impacts such as soil structural decline, fertility decline, acidification and salinity, erosion, loss of organic matter, water quality, fertiliser and soil ameliorant impurities, and greenhouse gas emissions

REQUIRED SKILLS AND KNOWLEDGE

- transport, handling and storage requirements of fertiliser and soil ameliorants in terms of legislation, codes of practice, environmental stewardship and human safety.

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:

- take soil, plant tissue and water samples
- use and explain use of nutrient management tools
- provide information on the relationship between soil types, water, crops, fertiliser and soil ameliorant use
- describe legislative requirements relating to use of fertiliser and soil ameliorants.

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.

Fertiliser or soil ameliorants may include:

- the range of fertiliser or soil ameliorants that form part of a nutrient management plan covering inorganic or organic solids and fluids applied directly to soil or plant via foliar sprays.

Unit Sector(s)

Unit sector

Merchandising and sales

Co-requisite units

Co-requisite units		

Competency field

Competency field	
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