Modification history

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| Release | Comments |
| Release 1 | This version released with AHC Agriculture, Horticulture, Conservation and Land Management Training Package Version 5.0. |

| AHCSoL4XX | Provide information on fertilisers and soil ameliorants |
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| Application | This unit of competency describes the skills and knowledge required to gather and provide information on fertilisers and soil ameliorants, and provide appropriate service or product.  The unit applies to individuals who apply specialist skills and knowledge to provide information on fertilisers, soil ameliorants and related environmental information. This includes applying and communicating non-routine technical solutions to predictable and unpredictable problems.  All work must be carried out to comply with workplace procedures, health and safety in the workplace requirements, legislative and regulatory requirements, and sustainability and biosecurity practices.  No licensing, legislative or certification requirements apply to this unit at the time of publication. |
| Prerequisite Unit | Nil |
| Unit Sector | Soils and media (SOL) |

| Elements | Performance Criteria |
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| Elements describe the essential outcomes. | Performance criteria describe the performance needed to demonstrate achievement of the element. |
| 1. Gather information on the requirements of the customer | 1.1 Identify basis of fertiliser or soil ameliorant requirement  1.2 Evaluate planned use of fertiliser or soil ameliorant according to legislative requirements, local productivity and environmental guidelines and food safety regulations  1.3 Take individual soil, plant tissue and water samples for customer  1.4 Provide customer with relevant sampling kits and advice on sampling procedures |
| 2. Provide information on nutrient management program | 2.1 Provide information and referrals about the fertiliser and soil ameliorant products including workplace health and safety, biosecurity, food safety and environmental and sustainability issues according to workplace procedures and chemical safety legislation and regulation requirements  2.2 Provide information on use of nutrient management tools  2.3 Provide information on application method or timing  2.4 Research and update knowledge and understanding of fertilisers, soil, ameliorants and related products from authoritative sources  2.5 Research local workplace and district requirements for fertilisers, soil, ameliorants and related products |
| 3. Provide appropriate service or product | 3.1 Refer customer to a specialist adviser if required  3.2 Provide customer with information regarding transporting, storing and handling fertiliser and soil ameliorants  3.3 Arrange transport, handling and storage of fertiliser and soil ameliorants  3.4 Supply fertiliser and soil ameliorants according to workplace health and safety and manufacturer requirements, chemical safety and food safety legislation and regulations, and productivity, biosecurity and environmental guidelines  3.5 Record details of transaction |

| Foundation Skills  This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria. | |
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| Skill | Description |
| Reading | * Interpret textual information from a range of sources to identify relevant and key information about fertilisers, soil ameliorants and related products, and legislative requirements * Read and interpret fertiliser and soil ameliorant product labels |
| Writing | * Record transaction details |
| Oral communication | * Use clear language with customers to gather information and evaluate planned product use, explain sampling procedures and product use, transportation, storage and handling |

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| Unit Mapping Information | | | |
| Code and title current version | Code and title previous version | Comments | Equivalence status |
| AHCSOL4XX Provide information on fertilisers and soil ameliorants | AHCMER406 Provide information on fertilisers and soil ameliorants | Unit code and sector changed  Performance criteria clarified  Foundation skills added  Assessment requirements updated | Equivalent unit |

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| Links | Companion Volumes, including Implementation Guides, are available at VETNet: <https://vetnet.education.gov.au/Pages/TrainingDocs.aspx?q=c6399549-9c62-4a5e-bf1a-524b2322cf72> |

| TITLE | Assessment requirements for AHCSOL4XX Provide information on fertilisers and soil ameliorants |
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| Performance Evidence | |
| An individual demonstrating competency must satisfy all of the elements and performance criteria in this unit.  There must be evidence that the individual has provided information on fertilisers and soil ameliorants on at least three occasions and has:   * taken soil, plant tissue and water samples * applied applicable workplace health and safety procedures, manufacturer requirements, chemical safety and food safety legislation and regulation, and productivity, biosecurity and environmental guidelines for using, transportation, storage and handling of fertiliser and soil ameliorants, and providing information on fertiliser and soil ameliorant use, environmental stewardship and human safety * used and explained use of nutrient management tools * applied workplace health and safety procedures for the safe handling of fertilisers and soil ameliorants. | |

| Knowledge Evidence |
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| An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:   * crop nutrient requirements, including 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 * 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 * workplace health and safety and environmental procedures in operating sampling equipment * packaging and dispatch procedures for samples * physical, chemical and biological properties related to a healthy soil and environment * sampling tools and methods, including: * soil, plant tissue and water tests * yield monitoring * electrical conductivity survey * impact of climate on soil productivity * environmental impacts, including: * soil structural decline * fertility decline * acidification and salinity * erosion * loss of organic matter * water quality * fertiliser and soil ameliorant impurities * greenhouse gas emissions * workplace health and safety procedures, manufacturer requirements, chemical safety and food safety legislation and regulation, and productivity, biosecurity and environmental guidelines for using, transportation, storage and handling of fertiliser and soil ameliorants, and providing information on fertiliser and soil ameliorant use, environmental stewardship and human safety. |

| Assessment Conditions |
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| Assessment of skills must take place under the following conditions:   * physical conditions: * a workplace setting or an environment that accurately represents workplace conditions * resources, equipment and materials: * fertilisers and soil ameliorants * soil, plant tissue and water sampling tools * nutrient management tools * specifications: * workplace health and safety procedures, manufacturer requirements, chemical safety and food safety legislation and regulation, and productivity, biosecurity and environmental guidelines applicable to fertiliser and soil ameliorant use, transportation, storage and handling, and providing information on fertiliser and soil ameliorant use, environmental stewardship and human safety * relationships: * customers, specialist adviser.   Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards. |

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