Modification history

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| Release | Comments |
| Release 2 | This version released with AHC Agriculture, Horticulture and Conservation and Land Management Training Package Version 3.0. |
| Release 1 | This version released with AHC Agriculture, Horticulture and Conservation and Land Management Training Package Version 1.0. |

| AHCPMG413 | Define the pest problem |
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| Application | This unit of competency describes the skills and knowledge required apply a strategic pest management approach to defining a pest problem for a target area through consultation and analysis and may include weeds, vertebrate or invertebrate pests.The unit applies to individuals who take personal responsibility for their own work. They exercise autonomy in undertaking complex work and analyse, design and communicate solutions to sometimes complex problems.No occupational licensing, legislative or certification requirements are known to apply to this unit at the time of publication. |
| Prerequisite Unit | Nil |
| Unit Sector | Pest Management (PMG) |

| Elements | Performance Criteria |
| --- | --- |
| Elements describe the essential outcomes. | Performance criteria describe the performance needed to demonstrate achievement of the element. |
| 1. Establish the background to the target pest problem | 1.1 Determine landscape and land use within target area1.2 Consult with stakeholders to identify and record views and issues for target pest1.3 Define desired environmental management and production outcomes1.4 Collect and record information about management or production processes relating to pest problem1.5 Determine non-target species populations in target area |
| 2. Analyse the target pest problem in the area  | 2.1 Establish and document stakeholder views on the distribution of target pest within affected area2.2 Source and analyse information to validate stakeholder views for target pest population, damage, and distribution2.3 Identify environmental and pest biology factors which influence the target pest population and distribution2.4 Document the target pest lifecycle, optimum times, locations and behaviours that impact program effectiveness 2.5 Identify non-target species populations and distribution2.6 Identify hazards, risks and controls for non-target species, environment, ecology and production in target area2.7 Identify potential ecological role of target pest |
| 3. Determine critical control points for management of the target pest problem | 3.1 Determine timing of control activities for periods of least risk to off target activities and conditions3.2 Identify periods of significant vulnerability during target pest lifecycle3.3 Determine appropriate time period for pest management activity  |
| 4. Define and document the impacts of the target pest | 4.1 Estimate economic losses and environmental impacts of the pest presence4.2 Conduct a cost-benefit analysis of managing pest4.3 Prepare a report on outcomes of investigation for stakeholders according to workplace procedures4.4 Assess whether the pest problem warrants the need for a pest management plan |

| Foundation SkillsThis 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 | * Critically analyses documents and data from a variety of sources and consolidates information to determine requirements for management plans
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| Writing | * Documents outcomes of consultations and incorporates details into report
* Documents report using industry relevant terminology, structure and format
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| Numeracy | * Performs mathematical calculations to analyse costs and values to accurately create a cost benefit analysis
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| Oral Communication | * Determines and confirms client views and opinion using collaborative and inclusive techniques including active listening and questioning and reading of verbal and non-verbal signals to convey and clarify information and to confirm understanding
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| Navigate the world of work | * Works independently or with others in making decisions to achieve organisation outcomes
* Takes full responsibility for following, procedures and legislative requirements
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| Get the work done | * Accepts responsibility for planning and sequencing complex tasks and workload, negotiating key aspects with others taking into account capabilities, efficiencies and effectiveness
* Applies systematic and analytical decision making processes for complex and non-routine situations
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| Unit Mapping Information |
| Code and title current version | Code and title previous version | Comments | Equivalence status |
| AHCPMG413 Define the pest problem  | AHCPMG413 Define the pest problem  | Updated to meet Standards for Training PackagesMinor changes to Performance Criteria for clarity  | 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 AHCPMG413 Define the pest problem |
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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 on at least one occasion the individual has demonstrated that they have produced a written report that details the pest problem in a target area including:* identified and consulted with stakeholders
* defined the pest problem in consultation with stakeholders
* determined the target pest population and distribution and factors impacting population and distribution
* determined non-target species populations and distribution in area
* identified appropriate times for pest control activities
* conducted a cost-benefit analysis for managing target pest
* applied animal welfare considerations to assessment of pest problem
* identified environmental impact of pest presence and pest management activity.
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| 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:* impact of pests on environment, land use, land management and production processes
* behaviour of target pests, particularly those behaviours that impact pest susceptibility to being effectively managed
* Animal Welfare Codes of Practice and Standard Operating Procedures
* pest biology and lifecycles of target pests
* land management and production processes of targeted area
* ecology of targeted area
* performance criteria for measuring land management and production outcomes
* techniques used to validate the target pest population and distribution data supplied by stakeholders and sources of relevant data
* measuring or estimating economic implication and environmental impacts of pests
* potential ecological role some pests provide
* potential disease or toxicity risks
* relevant parts of local, regional, State or Territory and national pest management strategies
* target pest biology and lifecycles
* principles that underpin the strategic approach to managing pests
* factors that influence pest population and distribution
* periods of vulnerability in the lifecycle of pests
* critical control points for management of pest problem
* range of pests, non-target species, plant pests and diseases.
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| Assessment Conditions |
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| Assessment of skills must take place under the following conditions: * physical conditions:
* skills must be demonstrated in a workplace setting or an environment that accurately represents workplace conditions
* resources, equipment and materials:
* site with pests to evaluate
* technology and resources for documenting reports and cost benefit analysis
* specifications:
* use of specific workplace documents including policies, procedures, processes
* use of research materials and data for pests
* use of workplace instructions and job specifications
* access to specific legislation and codes of practice
* relationships:
* stakeholders.

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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