Modification history

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| Release | Comments |
| Release 1 | This version released with AHC Agriculture, Horticulture and Conservation and Land Management Training Package Version 4.0. |

| AHCARB211 | Apply treatments to trees |
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| Application | This unit of competency describes the skills and knowledge required to remedy common tree problems by applying treatments including alleviating tree stress and improving soil condition, application of fertilisers and soil amelioration in consideration of the environmental implications of treatment methods, techniques and procedures.  The unit applies to individuals working in a broad range of arboriculture contexts who undertake defined routine activities under supervision. They exercise limited autonomy within established and well known parameters, providing solutions to a limited range of predictable problems.  The arboriculture industry requires that all arboriculture work is undertaken according to current industry standards, including any relevant Minimum Industry Standards.  Legislation, regulations and by-laws relating to the treatment and removal of trees apply in some states and territories. |
| Prerequisite Unit | Nil |
| Unit Sector | Arboriculture (ARB) |

| 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. Prepare to apply tree treatments | 1.1 Confirm trees to be treated and work activity instructions with supervisor  1.2 Confirm workplace health and safety hazards and controls from job safety analysis (JSA) with supervisor  1.3 Select, check and use personal protective equipment  1.4 Select, prepare and carry out pre-operational and safety checks on tools and equipment  1.5 Confirm availability of first aid and emergency personnel, equipment and procedures  1.6 Select and prepare treatment tools and equipment according to workplace and biosecurity procedures |
| 2. Modify environment to maintain health and vigour of tree | 2.1 Undertake weed control measures to remove competing plants according to treatment instructions  2.2 Apply soil additives according to soil condition and treatment instructions  2.3 Apply plant-based mulch according to treatment instructions  2.4 Use tools and equipment for de-compaction of soil according to supervisor and equipment manufacturer instructions |
| 3. Apply chemical treatment | 3.1 Identify chemical treatments required from supervisor instructions  3.2 Select, prepare and calibrate application equipment  3.3 Prepare chemical treatments according to manufacturer label and workplace safety procedures  3.4 Apply chemical treatment according to workplace procedures |
| 4. Complete treatment operations | 4.1 Clean site, collect and store unused materials and dispose of waste according to workplace and environmental procedures  4.2 Clean, maintain and store equipment and machinery according to workplace and biosecurity procedures  4.3 Record and report treatment outcomes according to workplace procedures |

| 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 supervisor instructions, manufacturer instruction and procedures to identify relevant and key information for performance tasks, operator safety and procedural processes |
| Writing | * Complete reports and records using clear language, concepts and industry terminology to ensure clarity of meaning |
| Numeracy | * Perform basic calculations to determine areas, volumes and ratios for application of chemicals and soil additives |
| Navigates the world of work | * Comply with explicit biosecurity and environmental procedures, and implement application rates and safety measures on chemical labels, seeking clarification where unsure |

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| Unit Mapping Information | | | |
| Code and title current version | Code and title previous version | Comments | Equivalence status |
| AHCARB211 Apply treatments to trees | AHCARB201 Apply a range of treatments to trees | Title changed.  Prerequisite unit removed  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 AHCARB211 Apply treatments to trees |
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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 applied treatments to trees on at least one occasion according to work activity instructions for the following four situations:   * control weeds * apply soil additives and ameliorants to the tree root system * apply plant-based mulch * implement soil de-compaction procedures using tools and equipment.   There must also be evidence that the individual has:   * confirmed target trees and treatments required with supervisor * identified site hazards, assessed risks and confirmed controls with supervisor, including: * selected, checked and used personal protective equipment * confirmed availability of first aid equipment and emergency procedures * selected, prepared, calibrated and conducted pre-operational checks on tools, equipment and machinery according to operational and biosecurity procedures * identified and prepared chemical treatments according to manufacturer label instructions * carried out cleaning and maintenance tasks on site and equipment, including disposal of unused materials and waste safely according to environmental procedures * maintained records and reported according to workplace procedures.   All arboriculture work is required to be performed according to current industry standards, including any relevant Minimum Industry Standards. | |

| 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:   * practices and procedures for treating trees, including: * using maps for locating trees * tree recognition * site hazard and risk assessment for tree treatments, including: * methods for assessing risk * control strategies for managing risk attributed to treating trees * first aid personnel, equipment, emergency plans * personal protective equipment * common tree disorders and treatments, including: * weed plants and competition for growing conditions * nutrient disorders and the role of fertilisers * soil conditions and effect on tree growth * pests and diseases * basic control strategies for tree disorders, including: * fertiliser application methods * ameliorants and effect on pH, soil compaction and condition * mulch, moisture retention and nutrient tie down * managing the growing environment * chemical treatments * biological treatments * integrated pest control * methods of weed control * tools, equipment and machinery used in the treatment of trees, including: * soil de-compaction equipment * chemical sprayers and applicators * tree injection systems * fertiliser and ameliorant spreaders and applicators * pre-operational and safety checks on tools, equipment and machinery * chemicals and chemical applications, including: * interpretation and use of chemical label instructions * material safety data sheets * measurements and calculations for weighing and mixing chemicals * rates of application * dealing with chemical spills * methods of cleaning and sanitising tools and equipment, including: * methods of disease transfer * biosecurity principles and hygiene practices * calibration techniques of application equipment * chemical application techniques, usage restrictions and risk controls * environmental implications of tree treatments * waste disposal, including: * environmental protection * biosecurity and hygiene practices * records and record keeping requirements of tree treatments, including legislative and regulatory requirements. |

| Assessment Conditions |
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| Assessment of skills must take place under the following conditions:   * physical conditions: * living trees requiring treatments or an environment that accurately represents workplace conditions * resources, equipment and materials: * tree treatment equipment, including sprayers * measuring and weighing equipment * chemical spill kit * personal protective equipment * safety signage * specifications: * workplace and manufacturer instructions for tree treatment equipment * procedures for application of treatments to trees * materials safety data sheets * product labels, including chemicals.   Training and assessment strategies must show evidence of the use of guidance provided in the Companion Volume: User Guide Arboriculture. Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards. In particular, assessors must have:   * arboriculture vocational competencies at least to the level being assessed * current arboriculture industry skills directly relevant to the unit of competency being assessed. |

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