Modification history

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| Release | Comments |
| Release 1 | This version released with Forest and Wood Products Training Package Training Package Version 7.0. |

| FWPFGM2XXX | Apply tree seed treatment |
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| Application | This unit of competency describes the skills and knowledge required to apply tree seed treatment technologies for disease control, insect pest control and yield enhancement. Seed applied technologies include inoculants, herbicide safeners, micronutrients, plant growth regulators, seed coatings and colorants.  The unit applies to individuals who use seed treatment processes in commercial tree production nurseries.  All work must be carried out to comply with workplace procedures according to state/territory health and safety and food safety regulations, legislation and standards that apply to the workplace.  No licensing, legislative or certification requirements apply to this unit at the time of publication. |
| Prerequisite Unit | Nil |
| Unit Sector | Core |

| 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 for seed treatment | 1.1 Determine job requirements from work order or instruction, and where required, seek clarification from appropriate personnel  1.2 Confirm safety and environmental requirements for the task according to workplace procedures  1.3 Identify, assess and take actions to mitigate risks and hazards associated with tree seed treatments  1.4 Confirm emergency procedures for responding to unintended exposures, spills or accidents  1.5 Consult with team members to ensure that seed treatment operations are coordinated effectively  1.6 Confirm seed treatment method  1.7 Organise seeds, seed treatment products and equipment required for seed treatment process |
| 2. Verify quality and suitability of seed, seed treatment products and equipment | 2.1 Check quality of seed to be used in treating processes according to workplace procedures  2.2 Verify quality and suitability of seed treatment products according to workplace procedures  2.3 Verify seed treatment equipment is capable of accurately and uniformly applying the chosen product to seed with acceptable physical properties of the treated seed  2.4 Report non-compliant seed, seed treatment products and equipment to appropriate personnel |
| 3. Implement seed treatment process | 3.1 Confirm seed species and quantity and seed treatment method according to work order  3.2 Identify factors that may affect product integrity and product control  3.3 Identify critical control points in seed treatment process  3.4 Prepare seed treatment products according to workplace procedures and manufacturer instructions  3.5 Calibrate equipment and adjust equipment settings for lot changes, as required  3.6 Implement seed treatment process according to workplace procedures and manufacturer instructions  3.7 Follow changeover procedures when switching from one product or mixture to another  3.8 Follow workplace procedures and manufacturer instructions for handling, control and proper disposal of leftover and unused treatment product components, packaging materials, rinse water from treatment equipment, wastes and treated seed  3.9 Monitor seed treatment to verify application rate, ensure product appearance and quality and compliance with production targets  3.10 Package, label and store treated seed according to workplace procedures |
| 4. Maintain seed treatment records | 4.1 Record production outcomes, treatment records and seed treatment application rate according to workplace procedures  4.2 Maintain records of equipment calibration, maintenance and equipment faults or malfunctions and corrective actions taken according to workplace procedures  4.3 Tag and report faulty and/or defective equipment 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 complex written, technical information in operating manuals to confirm equipment operations and perform troubleshooting |
| Writing | * Complete routine workplace records related to quality, equipment calibration, maintenance and faults and product quality |
| Oral communication | * Use active listening and questioning techniques to convey and clarify information |
| Numeracy | * Perform routine calculations related to time, ratio, weight, production capacity, volume and number |

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| Unit Mapping Information | | | |
| Code and title current version | Code and title previous version | Comments | Equivalence status |
| FWPFGM2XXX Apply tree seed treatment | Not applicable | New unit | Not applicable |

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| Links | Companion Volumes, including Implementation Guides, are available at VET Net: <https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=0d96fe23-5747-4c01-9d6f-3509ff8d3d47> |

| TITLE | Assessment requirements for FWPFGM3XXX Apply tree seed treatment |
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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 one occasion, the individual has applied a tree seed treatment for disease control, insect pest control and / or yield enhancement. | |

| 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:   * types and applications of tree seed treatments * inoculants * herbicide safeners * micronutrients * plant growth regulators * seed coatings * colorants * sources of information on tree seed treatment * reasons for using tree seed treatment * pest control * insect pest control * yield enhancement * tree species where chemical seed treatments are used * methods for * verifying quality and suitability of seed, seed treatment products and equipment * selecting seed treatment method * identifying critical control points in seed treatment process * monitoring seed treatment process * safe use, handling, storage and transport of chemicals * packaging, labelling, transporting and storing treated seed * assessment of treated seed properties * uniformity of treatment coating of individual seeds * presence and amount of treated seed dust * environmental sustainability issues as they relate to the work task * legal, ethical and work health and safety (WHS) requirements specific to the work task |

| Assessment Conditions |
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| Assessment of the skills in this unit of competency must take place under the following conditions:   * physical conditions: * skills must be demonstrated in a forest or wood products work environment or an environment that accurately represents workplace conditions * resources, equipment and materials: * a commercial quantity of tree seed for treatment * equipment and seed treatment products * specifications: * workplace procedures for setting up, operating and maintaining seed sewing line * access to workplace policies and procedures which cover current Work Health and Safety Acts or Occupation Health and Safety Acts, regulations and related industry standards and codes of practice applicable to forestry nursery production * access to workplace policies and procedures which cover current Environment Protection Acts, regulations and related industry standards and codes of practice applicable to forestry nursery production   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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Verify equipment is capable of accurately and uniformly applying the chosen product to seed with acceptable physical properties of the treated seed