



Australian Government

Department of Education, Employment and Workplace Relations

RTF2024A Tend nursery plants

Release: 1

RTF2024A Tend nursery plants

Modification History

Not applicable.

Unit Descriptor

This competency standard covers the process of tending containerised nursery plants. Plant maintenance is likely to be carried out under routine supervision with intermittent checking. Responsibility for some roles and co-ordination within a team may be required. Competency is demonstrated by the application of knowledge and skills to a range of plant maintenance tasks. Maintenance of nursery plants usually follows established enterprise guidelines.

Application of the Unit

Not applicable.

Licensing/Regulatory Information

Not applicable.

Pre-Requisites

Not applicable.

Employability Skills Information

Not applicable.

Elements and Performance Criteria Pre-Content

Not applicable.

Elements and Performance Criteria

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Element	Performance Criteria
1 Maintain the nursery environment	1.1 OHS hazards in the nursery environment are identified, risks assessed and reported to the supervisor. 1.2 Plant growth and health requirements are clarified with the supervisor. 1.3 Irrigation system components are serviced and faulty parts are repaired or replaced. 1.4 Performance parameters of the irrigation system are checked to ensure optimum performance. 1.5 Temperature controls are monitored to ensure specified temperatures are maintained. 1.6 Nursery hygiene practices are followed to minimise risk of contamination.
2 Maintain nursery plants	2.1 Suitable personal protective equipment (PPE) is selected, used and maintained. 2.2 Common problems in nursery plants are recognised, and rectified and/or reported to the supervisor. 2.3 Tools and equipment are selected and used for plant maintenance. 2.4 Treatments are applied to assist plant growth as directed by the supervisor. 2.5 Water is applied in the quantity and method specified by enterprise work procedures. 2.6 Nursery operations are undertaken according to OHS requirements.
3 Complete nursery plant maintenance operations	3.1 Workplace information is recorded in the appropriate format. 3.2 Waste is collected and disposed of or recycled to minimise damage to the external environment.

- 3.3 Tools and equipment are cleaned and stored according to enterprise work procedures.

Required Skills and Knowledge

Not applicable.

Evidence Guide

What evidence is required to demonstrate competence for this standard as a whole?

Competence in tending nursery plants requires evidence that a nursery environment can be maintained, daily water requirements can be applied, plants can be treated and workplace information can be recorded.

The skills and knowledge required to tend nursery plants must be **transferable** to a different work environment. For example, if plants can be tended in a glasshouse, it must also be evident that plants can be tended in a shade house or hardening-off area.

What specific knowledge is needed to achieve the performance criteria

Knowledge and understanding are essential to apply this standard in the workplace, to transfer the skills to other contexts, and to deal with unplanned events. The knowledge requirements for this competency standard are listed below:

1. environmental requirements of a range of containerised plants growing in a nursery setting
2. applied understanding of the importance of hygiene and quality control when tending nursery plants
3. common problems that may occur with containerised plants in a controlled environment and their treatment
4. Nursery Industry Water Management Best Practice Guidelines, 1997
5. principles and operations of a range of irrigation systems used in nurseries
6. methods of disposing of waste to minimise damage to the external environment.

What specific skills are needed to achieve the performance criteria?

To achieve the performance criteria, appropriate literacy and numeracy levels as well as some complementary skills are required. These include the ability to:

- 7. participate in teams and contribute to team objectives
- 8. read and interpret enterprise work procedures
- 9. communicate effectively with team members and supervisor
- 10. measure quantities and calculate application rates
- 11. minimise noise, dust and water run-off to prevent nuisance-level environmental disturbance.

What processes should be applied to this competency standard?

There are a number of processes that are learnt throughout work and life, which are required in all jobs. They are fundamental processes and generally transferable to other work functions. Some of these are covered by the **key competencies**, although others may be added. The questions below highlight how these processes are applied in this competency standard. Following each question a number in brackets indicates the level to which the key competency needs to be demonstrated where 0 = not required, 1 = perform the process, 2 = perform and administer the process and 3 = perform, administer and design the process.

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|--|---|
| 1. How can communication of ideas and information (1) be applied? | Ideas and information relating to plant maintenance activities and problems encountered should be discussed with other members of the work team and the supervisor. |
| 2. How can information be collected, analysed and organised (1) ? | Enterprise work procedures, such as a daily watering plan, should be consulted, interpreted and applied to co-ordinate plant maintenance activities with further clarification sought from the supervisor where necessary. |
| 3. How are activities planned and organised (1) ? | Materials, tools, equipment and work activities for daily plant maintenance routines may need to be arranged before work periods, and there may be some responsibility for co-ordinating work activities with other members of the work team. |
| 4. How can team work (1) be applied? | Nursery plant maintenance activities may involve working with other members of a team to complete operations within the daily work routine. |
| 5. How can the use of mathematical ideas and techniques (1) be applied? | Calibrating spray equipment and determining quantities and application rates for treatment of nursery plants will require mathematical application. |
| 6. How can problem-solving skills (1) be applied? | Problems relating to maintenance of the nursery environment, the nursery plants, treatments, watering, tools and equipment, workplace safety and other team members may arise during the maintenance of nursery plants. |
| 7. How can the use of technology (1) be | Technology may be applied in the |

applied?

preparation, use and maintenance of
horticultural equipment and machinery.

Are there other competency standards that could be assessed with this one?

This competency standard **could** be assessed on its own or in combination with other competencies relevant to the job function, for example:

RTC2404A Treat plant pests diseases and disorders

RTC2706A Apply chemicals under supervision

RTC2016A Recognise plants

There is essential information about **assessing this competency standard for consistent performance and where and how it may be assessed**, in the Assessment Guidelines for this Training Package. All users of these competency standards must have **access** to the **Assessment Guidelines**. Further advice may also be sought from the relevant **sector booklet**.

Range Statement

Range of Variables

The Range of Variables explains the contexts within which the performance and knowledge requirements of this standard may be assessed. The scope of variables chosen in particular training and assessment requirements may depend on the work situations available

What **OHS hazards** may be associated with tending nursery plants?

Hazards may include the use of chemicals and hazardous substances, sharp tools, manual handling, solar radiation and operating spray equipment.

What areas may be considered part of the **nursery environment**?

The nursery environment may include glasshouses, shade houses and hardening-off areas.

What is covered by **plant growth and health requirements**?

Plant growth requirements may include watering, light levels, fertiliser regime, pruning and shaping, repotting, and staking.

What types of **irrigation system** may be relevant to this standard?

Irrigation systems may include ebb and flow, sprinklers, capillary beds, sprayers and drippers.

What **irrigation system components** may require servicing?

Irrigation system components may include pumps, lines, pipes, sprinklers, sprinkler heads, solenoids, filters, controllers, sprayers and drippers.

What **performance parameters** should be checked to ensure the effective operation of the irrigation system?

Checks may include identifying dry spots and blockages, water dumping, abnormal water flow, and leaking heads, lines and pipes.

What **nursery hygiene practices** should be considered when tending plants?

Hygiene practices may include removing weeds, dead or diseased plant material; washing the work area on transfer of plants; disinfecting tools, equipment and work areas, and using foot baths on entry to different work areas.

What **personal protective equipment (PPE)** may be required to tend nursery plants?

Personal protective equipment may include hat, boots, overalls, gloves, sunscreen lotion, goggles, face mask, respirator, spray jacket or suit.

What **common problems** may be encountered during plant maintenance

Common problems may include dehydration, pests, diseases, nutrient deficiencies and

operations?

deformed plants.

What types of **nursery plants** may be relevant to this standard?

Nursery plants may include containerised, balled and bagged, in-ground, aquatic, stock plants, cuttings and rootlings.

What **tools and equipment** are likely to be used for plant maintenance?

Tools and equipment may include secateurs, water spray containers, dibblers, sprayers, plant supports, ties and rubbish bins.

What **treatments** are likely to be selected and applied to nursery plants?

Treatments may include pesticides, fungicides, fertiliser, mulching, removing weeds, removing dead material, tip pruning, formative pruning, aeration, staking, tying, spacing and thinning.

What methods may be used to **apply water** to nursery plants?

Water may be applied manually or by operating the irrigation system.

What **enterprise work procedures** may apply to this standard?

Work procedures will be based on sound horticultural principles and practices and may include supervisors oral or written instructions, the Nursery Industry Accreditation Scheme, plant care program, enterprise standard operating procedures (SOPs), specifications, production schedules, routine maintenance schedules, work notes, product labels, and Material Safety Data Sheets (MSDSs); Integrated Pest Management (IPM) programs; manufacturers service specifications and operators manuals; waste disposal, recycling and re-use guidelines; and OHS procedures.

What **OHS requirements** may be relevant to this standard?

OHS requirements may include identifying hazards, assessing and reporting risks, cleaning, maintaining and storing tools and equipment, appropriate use of personal protective equipment including sun protection, safe operation of tools and equipment, safe handling, use and storage of chemicals and hazardous substances, correct manual handling, basic first aid, personal hygiene and reporting problems to supervisors.

What **workplace information** is likely to be recorded?

Records may include environmental parameters, date of treatments, type of treatment and rate of treatment.

What type of **waste** may be collected?

Waste may include left over treatments, unused containers, plant debris or faulty irrigation components.

What are the implications for the **external environment** when performing this unit?

Environmental implications may include the contamination of off-site ground water or soils from solids, nursery debris, nutrients or chemicals.

For more information on contexts, environmental implications and variables for training and assessment, refer to the Sector Booklet.

Unit Sector(s)

Not applicable.