

Assessment Guide

Domain Forestry > Forest Foundation Skills

Unit 23000 v4 Demonstrate knowledge of plantation forest establishment operations and perform an establishment task under supervision Level 2 Credits 10

Entry information

There are no pre-requisite requirements for this unit.

Candidate to complete

| | |
|----------------|----------------------|
| Name | Company |
| NSI No. | Email / phone |

Pre-assessment confirmation

I, the **candidate**,

- Understand the assessment process and assessment requirements for this unit.
- Understand the appeals and resubmission processes.
- Believe I have the skills and knowledge to successfully complete the assessment.

Assessor to complete

| | |
|----------------------|----------------|
| Name | Company |
| Email / phone | |

Pre-assessment confirmation

- I, the **assessor**, can confirm the candidate has achieved any pre-requisite requirements.

Assessment instructions

You will need to be able to show you can:

- Demonstrate knowledge of forest establishment.
- Demonstrate knowledge of plantation tree planting.
- Demonstrate knowledge of the use of agrichemicals.
- Demonstrate knowledge of releasing of plantation trees.
- Demonstrate knowledge of fertilising plantation trees.
- Perform an establishment task under supervision.

Important information

- Carefully read through the rest of this Assessment so you know exactly what is expected.
- All evidence you provide for this assessment must be your own work.
- Clearly name and label all attached evidence.

What you need to do



Question Set 1 – Hazards



Question Set 2 – Establishment



Question Set 3 – Agrichemicals



Question Set 4 – Planting



Question Set 5 – Releasing



Question Set 6 – Fertilising



Observation Checklist

Be observed performing an establishment task. One of planting, manual releasing, chemicals releasing or fertilising.

You will need to:

- Use and wear appropriate personal protective equipment.
- Demonstrate knowledge of safety and emergency procedures.
- Establish communication processes.
- Prepare for the performance of the establishment task.
- Identify hazards and manage risks.



Worksite Verification

A worksite verifier must confirm your skills, knowledge and/or work.

You can also attach additional evidence which shows you have the required skills and knowledge, e.g. photos, worksite documents, checklists, work samples, videos.



Question Set 1 – Hazards

These questions are about planting, releasing, fertilising hazards and control their associated risks. Use your own words. Your assessor may ask you more questions to check your understanding.

1. For each hazard:



- Give **one** thing that could go wrong.
- Explain how you would prevent it.

Terrain

What could go wrong

How I would control the risk

Weather conditions

What could go wrong

How I would control the risk

Slash and logs

What could go wrong

How I would control the risk

Bending over repeatedly

What could go wrong

How I would control the risk

Fatigue

What could go wrong

How I would control the risk

Dehydration

What could go wrong

How I would control the risk

Working too close

What could go wrong

How I would control the risk

Planting spade

What could go wrong

How I would control the risk

Falling rocks

What could go wrong

How I would control the risk

Carrying heavy loads

What could go wrong

How I would control the risk

Chemical accidents

What could go wrong

How I would control the risk

Spray drifts

What could go wrong

How I would control the risk

Mixing of chemicals

What could go wrong

How I would control the risk

Transport of chemicals

What could go wrong

How I would control the risk

Assessor – record key points from candidate’s verbal answers as accurately and fully as possible.

These answers were written by:

Candidate

Assessor

Question Set 2 – Establishment

These questions are about forest establishment.

Use your own words. Your assessor may ask you more questions to check your understanding.

1. Describe how each factor can affect tree growth.

| Factor affecting tree growth | Effect on tree growth |
|---|------------------------------|
| Good seedling condition / health | |
| Competition from weeds | |
| Good land preparation | |
| Poor soil condition | |

2. Briefly describe what is involved in each operation.



| Operation | Description |
|-------------|-------------|
| Planting | |
| Releasing | |
| Fertilising | |

3. Briefly explain what effect each of the following can have on future (downstream) tree crop quality and value.



| | Affect |
|-----------------|--------|
| Tree quality | |
| Increased value | |

Decreased value

Assessor – record key points from candidate’s verbal answers as accurately and fully as possible.

These answers were written by:

Candidate

Assessor

Question Set 3 – Agrichemicals

These questions are about the use of agrichemicals.

Use your own words. Your assessor may ask you more questions to check your understanding.

1. Briefly describe the main purpose of NZS 8409:2004 Management of Agrichemicals.

2. Explain why it is important to follow the first aid instructions for different agrichemicals used.

3. Describe **two** typical first aid procedures for chemical accident



4. Name the **two** most common locations where information on first aid procedures can be found for agrichemical emergencies / accidents.



5. For each chemical type, describe the correct method of disposal for left over agrichemicals. □

| Chemical type | Disposal method |
|------------------------|-----------------|
| Diluted mixture | |
| Concentrated / unmixed | |

Assessor – record key points from candidate's verbal answers as accurately and fully as possible.

These answers were written by:

Candidate

Assessor

Question Set 4 – Planting

These questions are about plantation tree planting.

Use your own words. Your assessor may ask you more questions to check your understanding.

1. Provide a definition for each planting term.

| Term | Definition |
|-----------------------|------------|
| Tree stock | |
| Cuttings | |
| Socketing | |
| Clone trees | |
| Screefing | |
| Seedlings | |
| Container grown stock | |

| | |
|------------------|--|
| Positive pull-up | |
| Cultivation | |
| Bare root trees | |
| Hockey stick | |
| Sourcing | |

2. Answer questions 2a – 2c about the importance of keeping planting stock in good condition.

a. Why is correct stacking important?

b. Why is correct storage important?

c. Why is it important to use the correct transport method?

3. Describe how each incorrect planting technique can affect tree growth.



| Incorrect planting technique | Effect on tree growth |
|------------------------------|-----------------------|
| Trees too shallow | |
| Trees too deep. | |
| Poor soil cultivation | |
| Incorrect tree spacing | |
| Incorrect root placement | |

Assessor – record key points from candidate’s verbal answers as accurately and fully as possible.

These answers were written by:

Candidate

Assessor



Question Set 5 – Releasing

These questions are about releasing of plantation trees.

Use your own words. Your assessor may ask you more questions to check your understanding.

1. Describe each releasing method and a situation when it would be used.

Manual

Description

When it would be used

Motor manual

Description

When it would be used

2. Describe **three** advantages and **three** disadvantages of chemical releasing in a forestry operation in terms of the final crop.

Advantages

Disadvantages

3. For each herbicide type describe:



- **One** method of application.
- **Two** situations when each would be used.
- **Two** advantages.
- **Two** disadvantages.

Liquid

Method of application

When it would be used

Advantages

Disadvantages

Granules

Method of application

When it would be used

Advantages

Disadvantages

4. Describe **four** of the following methods of applying agrichemicals.



| Application method | Description |
|--------------------|-------------|
| Spotgun | |
| Knapsack | |
| Aerial | |
| Brush gun | |
| Granule applicator | |
| Wick wire | |

5. Give **two** reasons why you would add dye to chemicals.



6. Describe the effect each incorrect technique would have when chemical releasing.



| Incorrect technique | Description |
|--------------------------|-------------|
| Not allowing for wind | |
| Holding nozzle too close | |
| Holding nozzle too high | |

Assessor – record key points from candidate’s verbal answers as accurately and fully as possible.

These answers were written by:

Candidate

Assessor

Question Set 6 – Fertilising

These questions are about fertilising plantation trees.

Use your own words. Your assessor may ask you more questions to check your understanding.

1. Describe **two** advantages and **two** disadvantages of fertilising.

| Advantages | Disadvantages |
|------------|---------------|
| | |

2. For each situation:
- Describe the fertiliser application method.
 - Identify the best place to apply the fertiliser in relation to the tree.
 - Explain why it is the best place.

Flat terrain

Fertiliser application method

The best place to apply fertiliser

Why this is the best place to apply fertiliser

Slopes

Fertiliser application method

The best place to apply fertiliser

Why this is the best place to apply fertiliser

Near waterways

Fertiliser application method

The best place to apply fertiliser

Why this is the best place to apply fertiliser

Assessor – record key points from candidate’s verbal answers as accurately and fully as possible.

These answers were written by:

Candidate

Assessor



Observation Checklist

You must be observed performing an establishment task. One of planting, manual releasing, chemical releasing, or fertilising.

You will need to:

- Complete Part A of the checklist. Your assessor will complete Part B.
- Select, check, and use the correct PPE and equipment for the task.
- Confirm safety procedures with the supervisor.
- Use correct communication as specified by the supervisor.
- Use ergonomically correct methods for transporting equipment and performing the task.
- Identify hazards and control associated risks.
- Complete establishment task under supervision.
- Attach any other evidence that shows your ability to perform an establishment task such as photos or worksite documents you prepared or completed.

You may be asked additional questions to check your knowledge and may need to demonstrate skills and/or carry out tasks more than once.

Note to the assessor

- Only tick off each task when satisfied the candidate can do it safely and consistently.
- All tasks must be carried out following accepted industry practice and worksite procedures.
- Where prompted, please record details of what you observed, e.g. comments about the candidate's performance, what the candidate did or said, and specific questions and responses.
- Attach any other evidence that shows what you observed and/or that supports your decision for the candidate's competency in the tasks, e.g. photos or worksite documents.
- Check the candidate has completed Part A and has attached any required evidence.

Part A: Candidate to complete

| | |
|---|--|
| Your name | |
| Worksite / company | |
| Establishment task (tick which applies) | <input type="checkbox"/> Planting <input type="checkbox"/> Chemical releasing <input type="checkbox"/> Fertilising |

Part B: Assessor to complete

For each statement below, tick if you agree.

When performing an establishment task under supervision, the candidate:

1. Selects the correct PPE for the task.
Record PPE selected.

2. Checks selected PPE.

3. Uses selected PPE correctly.

4. Confirms safety procedures with the supervisor. Must include:
 Knowledge of emergency procedures.
 Identification of escape routes.

5. Selects correct equipment for the task.
Record equipment selected.

| | | | | | | | | | | | | | | | | | | |
|--|---|-----------------------------------|--|--|---|-----------------------------------|---------------------------------------|---|--|---|--|--|---|--|-------------------------------------|--|--|--------------------------|
| 6. | Checks selected equipment. | <input type="checkbox"/> | | | | | | | | | | | | | | | | |
| 7. | Establishes communication processes, as specified by supervisor. Record communication processes specified. | <input type="checkbox"/> | | | | | | | | | | | | | | | | |
| 8. | <p>Identifies five hazards associated with the establishment task and effectively controls associated risks. May include:</p> <table border="0"> <tr> <td><input type="checkbox"/> Terrain.</td> <td><input type="checkbox"/> Weather conditions.</td> </tr> <tr> <td><input type="checkbox"/> Slash and logs.</td> <td><input type="checkbox"/> Bending over repeatedly.</td> </tr> <tr> <td><input type="checkbox"/> Fatigue.</td> <td><input type="checkbox"/> Dehydration.</td> </tr> <tr> <td><input type="checkbox"/> Working too close.</td> <td><input type="checkbox"/> Planting spade.</td> </tr> <tr> <td><input type="checkbox"/> Falling rocks.</td> <td><input type="checkbox"/> Chemical accidents.</td> </tr> <tr> <td><input type="checkbox"/> Spray drifts.</td> <td><input type="checkbox"/> Mixing of chemicals.</td> </tr> <tr> <td><input type="checkbox"/> Transport of chemicals.</td> <td><input type="checkbox"/> Chemicals.</td> </tr> <tr> <td><input type="checkbox"/> Carrying heavy loads.</td> <td><input type="checkbox"/> Other (please write):</td> </tr> </table> <p>Record how the candidate effectively controls the associated risks.</p> | <input type="checkbox"/> Terrain. | <input type="checkbox"/> Weather conditions. | <input type="checkbox"/> Slash and logs. | <input type="checkbox"/> Bending over repeatedly. | <input type="checkbox"/> Fatigue. | <input type="checkbox"/> Dehydration. | <input type="checkbox"/> Working too close. | <input type="checkbox"/> Planting spade. | <input type="checkbox"/> Falling rocks. | <input type="checkbox"/> Chemical accidents. | <input type="checkbox"/> Spray drifts. | <input type="checkbox"/> Mixing of chemicals. | <input type="checkbox"/> Transport of chemicals. | <input type="checkbox"/> Chemicals. | <input type="checkbox"/> Carrying heavy loads. | <input type="checkbox"/> Other (please write): | <input type="checkbox"/> |
| <input type="checkbox"/> Terrain. | <input type="checkbox"/> Weather conditions. | | | | | | | | | | | | | | | | | |
| <input type="checkbox"/> Slash and logs. | <input type="checkbox"/> Bending over repeatedly. | | | | | | | | | | | | | | | | | |
| <input type="checkbox"/> Fatigue. | <input type="checkbox"/> Dehydration. | | | | | | | | | | | | | | | | | |
| <input type="checkbox"/> Working too close. | <input type="checkbox"/> Planting spade. | | | | | | | | | | | | | | | | | |
| <input type="checkbox"/> Falling rocks. | <input type="checkbox"/> Chemical accidents. | | | | | | | | | | | | | | | | | |
| <input type="checkbox"/> Spray drifts. | <input type="checkbox"/> Mixing of chemicals. | | | | | | | | | | | | | | | | | |
| <input type="checkbox"/> Transport of chemicals. | <input type="checkbox"/> Chemicals. | | | | | | | | | | | | | | | | | |
| <input type="checkbox"/> Carrying heavy loads. | <input type="checkbox"/> Other (please write): | | | | | | | | | | | | | | | | | |
| 9. | Reports hazards identified to their supervisor. | <input type="checkbox"/> | | | | | | | | | | | | | | | | |
| 10. | Performs the establishment task under supervision. | <input type="checkbox"/> | | | | | | | | | | | | | | | | |

| | | |
|---|--|---|
| 11. | Uses ergonomically correct methods for transporting equipment and performing the establishment task. May include: | <input type="checkbox"/> |
| | <input type="checkbox"/> Distributing weight evenly. <input type="checkbox"/> Shoulder straps used effectively. <input type="checkbox"/> Avoiding overreaching. <input type="checkbox"/> Steady footing. <input type="checkbox"/> Steady pace. <input type="checkbox"/> Other (please write): | |
| 12. | Completes the establishment task under supervision. | <input type="checkbox"/> |
| Throughout the observation, the candidate: | | <input checked="" type="checkbox"/> |
| 13. | Completes all the above tasks in accordance with: | <input type="checkbox"/> |
| | <input type="checkbox"/> Worksite procedures. <input type="checkbox"/> Machine and equipment manufacturer's requirements. <input type="checkbox"/> Accepted industry practice. | |
| Please provide specific comments on the candidate's ability to perform an establishment task under supervision. | | |
| | | |
| I confirm that: | | |
| <ul style="list-style-type: none"> I have observed the candidate carry out all the above tasks to the standard required. The candidate has demonstrated competency in performing an establishment task under supervision. | | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| Assessor name | | |
| | Signature | |
| | | Date |



Worksite Verification

Note to the worksite verifier

- The assessor **takes this form into account** when making their decision about the candidate's competency. It helps provide further evidence of the candidate's skills and knowledge beyond what the assessor can directly observe or where worksite requirements may vary.
- This form must be completed by someone who:
 - Has been approved by the assessor.
 - Has expertise in the assessed tasks (see Observation Checklist for details).
 - Regularly supervises or manages the candidate in their worksite or operation.
- In-house and/or provider assessors are not required to complete this form but may ask another suitable verifier to complete it if further evidence of competency is required.

Worksite verifier to complete

I confirm that :

- | | | |
|----|--|--------------------------|
| 1. | Has performed an establishment task, including. | <input type="checkbox"/> |
| | <input type="checkbox"/> Demonstrating knowledge of plantation tree planting. | |
| | <input type="checkbox"/> Demonstrating knowledge of releasing of plantation trees. | |
| | <input type="checkbox"/> Demonstrating knowledge of fertilising plantation trees. | |
| | <input type="checkbox"/> Performing an establishment task under supervision. | |
| 2. | Can consistently and safely do the above to the standard of this operation. | <input type="checkbox"/> |
| 3. | Met worksite and operational requirements. | <input type="checkbox"/> |
| 4. | Completed any attached documentation to worksite / operational requirements. | <input type="checkbox"/> |

Please comment on the candidate's ability to perform an establishment task under supervision.

Verifier name and title

Signature

Phone / email

Date

Assessment result

Post-assessment feedback

| |
|--|
| |
|--|

Assessor judgement

I, the **assessor**, have reviewed the candidate's evidence for Unit Standard 23000 v4 and judge that it is sufficient and authentic.

I confirm the candidate can competently:

- Demonstrate knowledge of forest establishment.
- Demonstrate knowledge of plantation tree planting.
- Demonstrate knowledge of the use of agrichemicals.
- Demonstrate knowledge of releasing of plantation trees.
- Demonstrate knowledge of fertilising plantation trees.
- Perform an establishment task under supervision.

Assessment result

I, the **assessor**, confirm the candidate has **achieved** this unit standard. **Stamp**

Signature

Date

Candidate response

I, the **candidate**: Agree with the assessment result. Wish to appeal.

Signature

Date