

ASSESSMENT GUIDELINES

Unit 22189

Maintain an irrigation system used in
horticulture

Level 3, Credit 5, version 1

Maintain an irrigation system used in horticulture

Unit standard 22189

Level 3, Credit 5, Version 1

Level of performance required for this unit standard

This is a level 3 unit standard. At this level trainees are expected to demonstrate the following abilities when completing assessment tasks:

- To work under general supervision, with some independence; with significant responsibility for the standard of the outcome achieved.
- To apply technical skills and knowledge to complete the task to the specified standard, in a familiar context.
- To interpret available information, and use discretion and judgment.

Workplace assessment:

For guidelines on Workplace Assessment, please refer to the NZHITO Workplace Assessors Manual, and for further information, please contact: NZHITO, P O Box 8638, Christchurch. Ph 03 9644 735, fax 03 9644 737, website www.hortito.org.nz

Special notes:

- 1 *Workplace procedures* refer to verbal or written instructions to staff on procedures for the worksite and equipment.
- 2 Legislation relevant to this unit standard includes but is not limited to the Health and Safety in Employment Act 1992 and the Resource Management Act 1991.

**Unit 22189: Maintain an irrigation system used in horticulture
(Apprentice copy)**

ELEMENT	Competent	Range of evidence an assessor should consider
Element 1 Clean and maintain two filters. Range: may include but not limited to – O ring (disc), mesh, gravel or sand, cartridge, hydrocyclone.	Yes/No	<ul style="list-style-type: none"> ▪ Describe filters in terms of their working principles and maintenance requirements. ▪ Clean, service and maintain two standards filters.
Element 2 Repair a leaking/broken irrigation pipe. Range: two of the following – alkathene, PVC, threaded galvanised piping.	Yes/No	<ul style="list-style-type: none"> ▪ Repair damaged pipe with correct replacement equipment. ▪ Seal leaks so that there is no water or pressure loss. ▪ Restore pipe to its original position.
Element 3 Manage pre-season maintenance of an irrigation system.	Yes/No	<ul style="list-style-type: none"> ▪ Check and clean system to ensure good working order. Range: check all joiners and emitters; flush out the system; clean all filters; replace any damaged irrigation components.
Element 2 Maintain an irrigation system	Yes/No	<ul style="list-style-type: none"> ▪ Inspect the irrigation daily, identify any blocked emitters and leaks, and report them in accordance with workplace procedures. ▪ Complete and record a diary of maintenance work done on the irrigation system for three consecutive months ▪ Stop, move and start a portable irrigation system, if necessary, ensuring that no damage occurs to the crop or the irrigation equipment. ▪ Maintain irrigation components with manufacturer’s recommended replacement items, so that there are not leaks or pressure variation. ▪ Measure regularly and record output from an emitter or per unit area in accordance with workplace procedures

_____ (Name of Apprentice)

is **Competent / Not yet competent** in Unit Standard 22189. (version 1)

Signed (Assessor): _____

WPA Registration Number: _____ Date: _____

**Unit 22189: Maintain an irrigation system used in horticulture
(Assessor copy)**

ELEMENT	Competent	Range of evidence an assessor should consider
Element 1 Clean and maintain two filters. Range: may include but not limited to – O ring (disc), mesh, gravel or sand, cartridge, hydrocyclone.	Yes/No	<ul style="list-style-type: none"> ▪ Describe filters in terms of their working principles and maintenance requirements. ▪ Clean, service and maintain two standards filters.
Element 2 Repair a leaking/broken irrigation pipe. Range: two of the following – alkathene, PVC, threaded galvanised piping.	Yes/No	<ul style="list-style-type: none"> ▪ Repair damaged pipe with correct replacement equipment. ▪ Seal leaks so that there is no water or pressure loss. ▪ Restore pipe to its original position.
Element 3 Manage pre-season maintenance of an irrigation system.	Yes/No	<ul style="list-style-type: none"> ▪ Check and clean system to ensure good working order. Range: check all joiners and emitters; flush out the system; clean all filters; replace any damaged irrigation components.
Element 2 Maintain an irrigation system	Yes/No	<ul style="list-style-type: none"> ▪ Inspect the irrigation daily, identify any blocked emitters and leaks, and report them in accordance with workplace procedures. ▪ Complete and record a diary of maintenance work done on the irrigation system for three consecutive months ▪ Stop, move and start a portable irrigation system, if necessary, ensuring that no damage occurs to the crop or the irrigation equipment. ▪ Maintain irrigation components with manufacturer’s recommended replacement items, so that there are not leaks or pressure variation. ▪ Measure regularly and record output from an emitter or per unit area in accordance with workplace procedures

_____ (Name of Apprentice)

is **Competent / Not yet competent** in Unit Standard 22189. (version 1)

Signed (Assessor): _____

WPA Registration Number: _____ Date: _____

Please send this page to your NZHITO Regional Manager, who will forward it to National Office to register the credits on your NZQA Record of Learning.

Unit 22189: Maintain an irrigation system used in horticulture

(Name of Apprentice)

is Competent in Unit Standard 22189. (version 1)

Signed (Assessor):

WPA Registration Number: _____

Date: _____