

ASSESSMENT GUIDELINES

Unit 19941

Implement a soil management program in the vineyard

Level 5, Credit 10, version 2

Implement a soil management program in the vineyard

Unit standard 19941

Level 5, Credit 10, version 2

Level of performance required for this unit standard

This is a level 5 unit standard. At this level trainees are expected to demonstrate the following abilities when completing assessment tasks:

- To work within broad general guidelines; with responsibility for the achievement and standard of the outcome.
- To apply a wide range of technical skills, knowledge, and innovation to complete the task to the specified standard, in a variety of familiar and unfamiliar, routine and non-routine contexts.
- To analyse and interpret a wide range of data, and make an informed judgment.

Workplace assessment:

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

Special notes:

1. The New Zealand Horticulture Industry Training Organisation acknowledges the assistance provided by the Australian National Training Authority (ANTA) in permitting their competency unit to be used as the basis for this unit standard. This unit standard is based on the unit of competency FDFWGGMPA, *Implement a soil management program*.
2. *Workplace procedures* refers to verbal or written instructions to staff on procedures for the worksite and equipment.
3. Legislation relevant to this unit standard includes, but is not limited to, the Health and Safety in Employment Act 1992, the Resource Management Act 1991, and their subsequent amendments. Licensing requirements relevant to this unit standard include, but are not limited to, the class of driver licence appropriate to the vehicle used.
4. Equipment may include electronic measuring devices (eg calibration equipment).
5. Information systems may be paper or electronic based.

**Unit 19941: Implement a soil management program in the vineyard
(Apprentice copy)**

ELEMENT	Competent	Range of evidence an assessor should consider
Element 1 Monitor vineyard soil management requirements	Yes/No	<ul style="list-style-type: none"> ▪ Access workplace information to identify requirements (eg. in terms of site and crop characteristics). ▪ Check that equipment and materials are available and ready to use, and meets safety standards and pre-start requirements. ▪ Equipment may include electronic measuring devices (eg. calibration equipment). ▪ Monitor the vineyard and interpret results to identify vineyard soil management requirements. This may include testing for soil moisture, temperature, pH, texture; drainage, water-table levels, rainfall, vine and soil nutrient deficiencies, weed population, air temperature, vine root distribution, irrigation water quality, climatic conditions, erosion risk, soil management history, growth of mid-row sward. ▪ Calculate application rates for soil addition requirements eg. fertilisers, ameliorants. ▪ Identify and recommend appropriate soil management activities, in consultation with senior staff.
Element 2 Implement soil management program	Yes/No	<ul style="list-style-type: none"> ▪ Implement the soil management program. This may include the addition of ameliorants and fertilisers, cover cropping, mulching, cultivating, slashing, tilling, ploughing, weeding, spraying, frost management. It will include consideration of resources, including operators with appropriate skills, equipment availability and capability, materials and chemicals, maintenance programs and supplies, specific needs of individual blocks, environmental conditions, other vineyard activity.
Element 3 Evaluate effectiveness of soil management activities	Yes/No	<ul style="list-style-type: none"> ▪ Monitor soil management activities. This may include testing for soil moisture, temperature, pH, texture; drainage, water-table levels, rainfall, vine and soil nutrient deficiencies, weed population, air temperature, vine root distribution, irrigation water quality, climatic conditions, erosion risk, soil management history, growth of mid-row sward. ▪ Assess soil management activities to determine their effectiveness. This may include operator performance, operating conditions, operating results, material supplies, equipment performance. ▪ Take corrective action in response to out-of-specification results or non-compliance. ▪ Report and/or record problems and/or corrective action.
Element 4 Record and/or store information in a retrievable format	Yes/No	<ul style="list-style-type: none"> ▪ Record and/or store workplace information according to workplace procedures. This may include standard operating procedures, specifications, production schedules/instructions, work notes, Material Safety Data Sheets, manufacturers' instructions, verbal direction from manager, supervisor or senior operator. ▪ Information systems may be paper or electronic based.

(Name of Apprentice)

is **Competent / Not yet competent** in Unit Standard 19941 (version 2)

Signed (Assessor): _____

WPA Registration Number: _____ Date: _____

**Unit 19941: Implement a soil management program in the vineyard
(Assessor copy)**

ELEMENT	Competent	Range of evidence an assessor should consider
Element 1 Monitor vineyard soil management requirements	Yes/No	<ul style="list-style-type: none"> ▪ Access workplace information to identify requirements (eg. in terms of site and crop characteristics). ▪ Check that equipment and materials are available and ready to use, and meets safety standards and pre-start requirements. ▪ Equipment may include electronic measuring devices (eg. calibration equipment). ▪ Monitor the vineyard and interpret results to identify vineyard soil management requirements. This may include testing for soil moisture, temperature, pH, texture; drainage, water-table levels, rainfall, vine and soil nutrient deficiencies, weed population, air temperature, vine root distribution, irrigation water quality, climatic conditions, erosion risk, soil management history, growth of mid-row sward. ▪ Calculate application rates for soil addition requirements eg. fertilisers, ameliorants. ▪ Identify and recommend appropriate soil management activities, in consultation with senior staff.
Element 2 Implement soil management program	Yes/No	<ul style="list-style-type: none"> ▪ Implement the soil management program. This may include the addition of ameliorants and fertilisers, cover cropping, mulching, cultivating, slashing, tilling, ploughing, weeding, spraying, frost management. It will include consideration of resources, including operators with appropriate skills, equipment availability and capability, materials and chemicals, maintenance programs and supplies, specific needs of individual blocks, environmental conditions, other vineyard activity.
Element 3 Evaluate effectiveness of soil management activities	Yes/No	<ul style="list-style-type: none"> ▪ Monitor soil management activities. This may include testing for soil moisture, temperature, pH, texture; drainage, water-table levels, rainfall, vine and soil nutrient deficiencies, weed population, air temperature, vine root distribution, irrigation water quality, climatic conditions, erosion risk, soil management history, growth of mid-row sward. ▪ Assess soil management activities to determine their effectiveness. This may include operator performance, operating conditions, operating results, material supplies, equipment performance. ▪ Take corrective action in response to out-of-specification results or non-compliance. ▪ Report and/or record problems and/or corrective action.
Element 4 Record and/or store information in a retrievable format	Yes/No	<ul style="list-style-type: none"> ▪ Record and/or store workplace information according to workplace procedures. This may include standard operating procedures, specifications, production schedules/instructions, work notes, Material Safety Data Sheets, manufacturers' instructions, verbal direction from manager, supervisor or senior operator. ▪ Information systems may be paper or electronic based.

_____ (Name of Apprentice)

is **Competent / Not yet competent** in Unit Standard 19941 (version 2)

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 19941: Implement a soil management program in the vineyard

(Name of Apprentice)

is Competent in Unit Standard 19941 (version 2)

Signed (Assessor):

WPA Registration Number: _____

Date: _____