



## National unit specification

### General information

**Unit title:** Clear Multiple Fallen or Windblown Trees (SCQF level 6)

**Unit code:** HH53 46

**Superclass:** SG

**Publication date:** December 2016

**Source:** Scottish Qualifications Authority

**Version:** 02

### Unit purpose

This unit is designed to develop the knowledge and skills required by a chainsaw user to safely fell multiple fallen or windblown trees. It has been designed to meet the requirements of the Highways and Construction Training Association's (HCTA) Chainsaw Operators Registration Scheme. Learners must be appropriately trained and qualified in the use and maintenance of a chainsaw prior to attempting this unit.

### Outcomes

On successful completion of the unit the learner will be able to:

- 1 Prepare to clear multiple trees.
- 2 Clear multiple trees.
- 3 Complete tree clearing operations.

### Credit points and level

0.5 National unit credits at SCQF level 6: (3 SCQF credit points at SCQF level 6)

### Recommended entry to the unit

Entry to this unit is at the discretion of the delivering centre, however centres must ensure that all learners are suitably trained and qualified in the maintenance and use of chainsaws. This could be demonstrated by the achievement of units HH4N 46 "*Maintain a Chainsaw*", HH4P 46 "*Clear Lying Timber*" or equivalent.

## National unit specification: General information (cont)

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### Core Skills

Achievement of this Unit gives automatic certification of the following Core Skills component:

Complete Core Skill	None
Core Skill component	Critical Thinking at SCQF level 5 Planning and Organising at SCQF level 5

There are also opportunities to develop aspects of Core Skills which are highlighted in the Support Notes of this Unit specification.

### Context for delivery

If this unit is delivered as part of a Group Award, it is recommended that it should be taught and assessed within the subject area of the Group Award to which it contributes.

This unit is intended for use by chainsaw users such as term maintenance contractors, local authority grounds maintenance staff and those carrying out emergency works on highways. It has not been designed for the traditional forestry and arboriculture sectors, which has a much greater focus on the end use of the timber.

### Equality and inclusion

This unit specification has been designed to ensure that there are no unnecessary barriers to learning or assessment. The individual needs of learners should be taken into account when planning learning experiences, selecting assessment methods or considering alternative evidence.

Further advice can be found on our website [www.sqa.org.uk/assessmentarrangements](http://www.sqa.org.uk/assessmentarrangements).

## **National unit specification: Statement of standards**

### **Unit title:** Clear Multiple Fallen or Windblown Trees (SCQF level 6)

Acceptable performance in this unit will be the satisfactory achievement of the standards set out in this part of the unit specification. All sections of the statement of standards are mandatory and cannot be altered without reference to SQA.

#### **Outcome 1**

Prepare to clear multiple trees.

##### **Performance Criteria**

- (a) Conduct a risk assessment.
- (b) Establish own competence to proceed with planned operation.
- (c) Select appropriate working methods, tools and equipment.
- (d) Post signing and guarding equipment.
- (e) Clear the work area of obstructions.
- (f) Identify escape routes.
- (g) Ensure no persons are in the work area or likely felling direction.
- (h) Secure trees that may pose a threat of falling or rolling unexpectedly.
- (i) Comply with all relevant Health and Safety requirements and environmental good practice.

#### **Outcome 2**

Clear multiple trees.

##### **Performance Criteria**

- (a) Fell leaning or half blown trees.
- (b) Use appropriate cutting techniques.
- (c) Identify root plates that require to be secured prior to bringing down trees
- (d) Secure root plates.
- (e) Bring down hung up trees.
- (f) Use handling aids and levers to assist in bringing down trees.
- (g) Delimb or sned non-supporting branches.
- (h) Detach root plates.
- (i) Use appropriate techniques to deal with side tension.
- (j) Comply with all relevant Health and Safety requirements and environmental good practice.

#### **Outcome 3**

Complete tree clearing operations.

##### **Performance Criteria**

- (a) Clear the site of cut materials and debris.
- (b) Leave the site in a safe and tidy condition.
- (c) Comply with all relevant Health and Safety requirements and environmental good practice.

## National unit specification: Statement of standards (cont)

**Unit title:** Clear Multiple Fallen or Windblown Trees (SCQF level 6)

### Evidence Requirements for this unit

Evidence is required to demonstrate that learners have achieved all Outcomes and Performance Criteria.

Evidence is required of the learner's ability to:

**Prepare, Carry Out and Complete** a multiple tree clearing operation for a **minimum of three** fallen or windblown **trees**, including **at least one hung-up tree**.

Evidence should be generated under realistic working conditions with the trees being cleared in situ. An element of simulation may be used where opportunities to develop evidence for certain Performance Criteria do not naturally occur, for example a tree or trees may need to be deliberately hung up.

Given the obvious risks to the learners and others it is imperative that all relevant Health and Safety policies and procedures are fully complied with throughout this unit.

Evidence could consist of:

- ◆ Observation checklist of practical activities
- ◆ Completed Risk Assessment
- ◆ Written and/or recorded oral responses to questions
- ◆ Photographic/video evidence of practical activities



## National unit Support Notes

**Unit title:** Clear Multiple Fallen or Windblown Trees (SCQF level 6)

Unit Support Notes are offered as guidance and are not mandatory.

While the exact time allocated to this unit is at the discretion of the centre, the notional design length is 20 hours.

### Guidance on the content and context for this unit

This unit has been specifically written to meet the requirements of the Highways and Construction Training Association's (HCTA) Chainsaw Operators Registration Scheme (CORS) CS "Clear Multiple Fallen or Windblown Trees". Achievement of this unit in conjunction with other relevant units will demonstrate that the learner is suitably trained and qualified to undertake this work.

The key vocational knowledge and skills covered in this unit are as follows:

- ◆ Appropriate personal protective equipment (PPE)
- ◆ Appropriate ancillary equipment
- ◆ Identifying and securing potentially unstable trees
- ◆ Identify direction of fall for tree to be felled
- ◆ Safety of felling area
- ◆ Reducing trees to manageable sections
- ◆ Correct cuts to eliminate tension and compression
- ◆ Identifying potential damage to standing trees
- ◆ Appropriate actions required to deal with root plate
- ◆ Use of appropriate cuts to detach trees
- ◆ Correct use of winch and control of team as required
- ◆ Safe manual handling techniques
- ◆ Site instructions for dealing with tree stumps
- ◆ Cleaning and maintaining the saw

The centre must ensure that all learners are suitably trained and qualified in the use and maintenance of chainsaws prior to undertaking this unit.

## National unit Support Notes (cont)

### Unit title: Clear Multiple Fallen or Windblown Trees (SCQF level 6)

The following points should be covered during the delivery and assessment of this unit:

- ◆ The learners level of competence and the limits to the work they can undertake.
- ◆ Discussing any concerns with appropriate persons before undertaking work.
- ◆ Reviewing and adjusting working methods in accordance with assessed risks.
- ◆ Systematic approach to the work.
- ◆ Felling broken trees with tops attached and snapped trees with no tops.
- ◆ Removing broken tops before prior to felling.
- ◆ Additional safeguards required when felling broken standing stems with unstable root-plates.
- ◆ Safeguards required when cutting tops without severing root-plate.

### Guidance on approaches to delivery of this unit

The unit is designed to be sequential, progressing from preparation and planning through to operation and finally completion of the task and maintenance. It is recommended that the unit is delivered in this sequence; however there may be opportunities to develop evidence during naturally occurring circumstances where this is safe to do so.

Delivering centres will require access to chainsaws and Personal Protective Equipment (PPE) and to a site containing suitable trees to work on in order to allow learners to generate the required evidence. The centre should ensure that all relevant equipment has a recent valid certificate of inspection / examination.

The learner should be given ample opportunities to develop their knowledge and skills in a safe environment prior to assessment.

Given the obvious risks to the learner and others from operating a chainsaw due emphasis should be placed on the importance of conducting a thorough Risk Assessment and on complying with all relevant Health and Safety requirements and Standard Operating procedures.

Where the deliverer and/or assessor have any concerns over the safety of any activities being undertaken then all delivery and assessment should be ceased immediately until the safety concerns are satisfactorily resolved. The centre must also ensure that the work site environment and weather conditions do not create unnecessary risk.

The centre should not proceed with any delivery or assessment of this unit until they are satisfied that the learner is suitably trained in the safe use and maintenance of a chainsaw.

A learner to assessor ratio of 4:1 should not be exceeded for any practical aspects of delivery or assessment.

## National unit Support Notes (cont)

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### Guidance on approaches to assessment of this unit

Evidence can be generated using different types of assessment. The following are suggestions only. There may be other methods that would be more suitable to learners.

Assessments should be carried out in situ and the environment should mirror a realistic working environment as closely as is practicable. The centres may have to deliberately hang up some trees to ensure learners have the opportunity to meet all Performance Criteria.

Learners must complete a suitable and sufficient assessment of the hazards and risks associated with the work activity (a Risk Assessment). This should be documented in an agreed format (in line with Standard Operating Procedures) and could form part of the learner's evidence.

Evidence for the unit as a whole could be generated using a single project where the learner is required to prepare for, carry out and complete (including maintenance) the felling of multiple (a minimum of three) windblown or fallen trees. If it is not possible to produce evidence for the whole unit during a single assessment, evidence could be generated on an Outcome by Outcome basis; however the learner should still be required to demonstrate their ability to safely carry out all the tasks required in the required sequence.

A portfolio or e-portfolio could be used to store and organise a learner's evidence. If this unit is being delivered in conjunction with other related units a single portfolio could be used, cross referenced to show where evidence can be integrated across units.

Centres are reminded that prior verification of centre-devised assessments would help to ensure that the national standard is being met. Where learners experience a range of assessment methods, this helps them to develop different skills that should be transferable to work or further and higher education.

### Opportunities for e-assessment

E-assessment may be appropriate for some assessments in this unit. By e-assessment we mean assessment which is supported by Information and Communication Technology (ICT), such as e-testing or the use of e-portfolios or social software. Centres which wish to use e-assessment must ensure that the national standard is applied to all learner evidence and that conditions of assessment as specified in the Evidence Requirements are met, regardless of the mode of gathering evidence. The most up-to-date guidance on the use of e-assessment to support SQA's qualifications is available at [www.sqa.org.uk/e-assessment](http://www.sqa.org.uk/e-assessment).

### Opportunities for developing Core and other essential skills

There may be opportunities to develop the Core Skills of *Problem Solving* and *Working with Others* at SCQF level 5.

This Unit has the Critical Thinking and Planning and Organising are components of Problem Solving embedded in it. This means that when learners achieve the Unit, their Core Skills profile will also be updated to show they have achieved Critical Thinking at SCQF level 5 and Planning and Organising at SCQF level 5.

## History of changes to unit

Version	Description of change	Date
02	Core Skills Components Critical Thinking and Planning and Organising at SCQF level 5 embedded.	21/02/17

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## **General information for learners**

### **Unit title:** Clear Multiple Fallen or Windblown Trees (SCQF level 6)

This section will help you decide whether this is the unit for you by explaining what the unit is about, what you should know or be able to do before you start, what you will need to do during the unit and opportunities for further learning and employment.

This unit is suitable for you if you are required to clear multiple trees as part of your work. Before starting this unit you will need to be suitably trained and qualified in the use and maintenance of a chainsaw.

The unit contains three outcomes, the first covers the preparation and planning required before starting to clear trees, including carrying out a risk assessment. The second Outcome covers the practical work required to bring down trees safely, including dealing with hung-up trees. Finally, Outcome 3 covers completing the work and returning the site to a clean and tidy condition.

This unit has a practical focus and the assessments will reflect that, you will be observed carrying out the range of tasks required but you will also have to produce a risk assessment.

This Unit has the Critical Thinking and Planning and Organising components of Problem Solving embedded in it. This means that when you achieve the Unit, your Core Skills profile will also be updated to show you have achieved Critical Thinking at SCQF level 5 and Planning and Organising at SCQF level 5.