

# National unit specification

### **General information**

**Unit title:** Clear Lying Timber (SCQF level 6)

Unit code: HH4P 46

Superclass: SG

Publication date: December 2016

**Source:** Scottish Qualifications Authority

Version: 02

### **Unit purpose**

This unit is designed to develop the learner's ability to safely reduce fallen trees to manageable sections for clearance using appropriate chainsaw cross cutting techniques and limbing using basic felling cuts.

This unit is suitable for chainsaw users wishing to demonstrate their ability to safely clear lying timbers and forms part of the Highways and Construction Training Association (HCTA) Chainsaw Operators Registration Scheme (CORS).

#### **Outcomes**

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

- 1 Plan tree clearance operations.
- 2 Prepare for tree clearance operations.
- 3 Fell boughs.
- 4 Clear fallen trees.

# 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 in order to carry out the chainsaw maintenance required in Outcome 4 learners must have completed or be actively working towards unit HH4N 46 "Maintain a Chainsaw" or equivalent.

# National unit specification: General information (cont)

**Unit title:** Clear Lying Timber (SCQF level 6)

### **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.

## National unit specification: Statement of standards

**Unit title:** Clear Lying Timber (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**

Plan tree clearance operations.

#### **Performance Criteria**

- (a) Identify relevant Personal Protective Equipment (PPE), safety equipment and ancillary equipment
- (b) Conduct a risk assessment to assess the site situation and determine suitability for clearing operations
- (c) Select working methods suitable for tree species and condition and in accordance with assessed risks
- (d) Identify boughs in the air which require felling to ground level
- (e) Determine the felling direction of boughs

#### Outcome 2

Prepare for tree clearance operations.

#### **Performance Criteria**

- (a) Ensure the felling area is clear
- (b) Ensure no obstructions in the crown of bough
- (c) Determine safe escape routes
- (d) Prepare bough for felling including:
  - Ensure all required equipment is available
  - Ensure base of tree clear of tripping obstructions
  - ♦ Remove lower branches
  - ♦ Sink wedge cut
- (e) Comply fully with all relevant Health and Safety requirements and environmental good practice

## National unit specification: Statement of standards

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### **Outcome 3**

Fell boughs.

#### **Performance Criteria**

- (a) Check that the felling area is clear of personnel
- (b) Ensure area safe to commence fell
- (c) Complete felling cut
- (d) Utilise felling aids as necessary
- (e) Determine felled bough is safe for removal
- (f) Comply fully with all relevant Health and Safety requirements and environmental good practice

#### **Outcome 4**

Clear fallen trees.

#### **Performance Criteria**

- (a) Clear small branches by hand in recognised sequence.
- (b) Clear large branches with chainsaw in recognised sequence.
- (c) Identify and safely deal with wood under:
  - ♦ Pressure
  - ◆ Tension
- (d) Use appropriate boring cuts to initiate either tension or compression cuts
- (e) Operate chainsaw using:
  - Pulling chain
  - Pushing chain
- (f) Ensure site, working conditions and procedures remain safe throughout operations.
- (g) Refuel and maintain chainsaw, guide bar and chain as necessary.
- (h) Stack or load produce for subsequent operations.
- (i) Ensure chainsaw and other equipment is left in a well maintained condition when operations are complete.
- (j) Ensure site is left in a clean and safe condition and brash stacked, removed or broken down.
- (k) Comply fully with all relevant Health and Safety requirements and environmental good practice.

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

**Unit title:** Clear Lying Timber (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:

- conduct a risk assessment.
- plan operation in accordance with identified risks.
- clear timber including felling boughs.
- complete operations and return site to clean and safe condition.

Evidence should be generated in situ or within a suitable practical training site, where lying timber is available and site conditions are appropriate. A chainsaw with a minimum guide bar length of 300mm should be used.



## **National unit Support Notes**

**Unit title:** Clear Lying Timber (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). 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 centre must ensure that all learners are suitably trained and qualified in the maintenance of chainsaws prior to undertaking this unit. This could be through achievement of unit "Maintain a Chainsaw" or other recognised qualifications.

Key vocational knowledge and skills covered in this unit includes:

- ◆ Appropriate personal protective equipment (PPE)
- Appropriate ancillary tools and equipment
- Site risk assessment and risk reduction strategies
- Reducing timber sections to enable safe removal
- ♦ Appropriate cuts to remove compression and tension
- Use of handling aids
- Use of safe manual handling techniques
- Cleaning and maintaining the saw

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

- ♦ How tree species, form and condition can affect the timber clearing operations
- Why it is important to leave a clean stem after delimbing
- How to deal with brash and branches after delimbing
- Risks to the environment and how these can be minimised
- Appropriate and safe manual handling techniques and limitations
- Methods of making boring cuts and the safeguards required
- How to deal with timber above and below guide bar length

## **National unit Support Notes**

**Unit title:** Clear Lying Timber (SCQF level 6)

### 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 the 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.

# 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.

## **National unit Support Notes**

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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 clearing of lying timber. 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 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.

# 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 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 Lying Timber (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 in you are required to clear lying timber as part of your work.

Before starting this unit you will need to be suitably trained and qualified in the maintenance of a chainsaw.

The unit contains four Outcomes, the first covers the planning required before starting, including carrying out a risk assessment. The second Outcome covers preparation and Outcome 3 the practical work. Finally, Outcome 4 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.