



## National Unit specification: general information

**Unit title:** Agriculture: Environmental Awareness (SCQF level 6)

**Unit code:** H28C 12

**Superclass:** QA

**Publication date:** August 2012

**Source:** Scottish Qualifications Authority

**Version:** 01

### Summary

This Unit enables candidates to acquire knowledge and skills associated with maintaining environmental awareness during day-to-day agricultural activities. The Unit is concerned with positive steps to minimise damage to the environment, disturbance to habitats, thinking before undertaking every task and completing tasks and activities in a way that causes as little damage or disturbance as possible and within the framework of current legislation.

This is an optional Unit within the National Certificate in Agriculture at SCQF level 6, but is also available as a free-standing Unit.

### Outcomes

- 1 Explain the key environmental legislation that has an impact on agricultural practice.
- 2 Identify ways of minimising agricultural environmental damage.
- 3 Carry out procedures for dealing with farm pollution or waste incidents safely.
- 4 Perform positive environmental actions.

### Recommended entry

Entry is at the discretion of the centre.

### Credit points and level

1 National Unit credit at SCQF level 6: (6 SCQF credit points at SCQF level 6\*)

*\*SCQF credit points are used to allocate credit to qualifications in the Scottish Credit and Qualifications Framework (SCQF). Each qualification in the Framework is allocated a number of SCQF credit points at an SCQF level. There are 12 SCQF levels, ranging from Access 1 to Doctorates.*

## **General information (cont)**

**Unit title:** Agriculture: Environmental Awareness (SCQF level 6)

### **Core Skills**

Opportunities to develop aspects of Core Skills are highlighted in the support notes of this Unit specification.

There is no automatic certification of Core Skills, or Core Skills components in this Unit.

## **National Unit specification: statement of standards**

**Unit title:** Agriculture: Environmental Awareness (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**

Explain the key environmental legislation that has an impact on agricultural practice.

#### **Performance Criteria**

- (a) Identify the regulatory bodies responsible for protecting the environment from adverse agricultural activity in the UK.
- (b) Identify the legislation and codes of practice which relate to land-based diffuse and point source pollution.
- (c) Explain the impact of agricultural environmental legislation on agricultural practice.

### **Outcome 2**

Identify ways of minimising agricultural environmental damage.

#### **Performance Criteria**

- (a) Identify different sources of on-farm pollution.
- (b) Describe the effects of on-farm pollution.
- (c) Describe the control of on-farm pollution.

### **Outcome 3**

Carry out procedures for dealing with farm pollution or waste incidents safely.

#### **Performance Criteria**

- (a) Carry out an appropriate procedure for cleaning up simple spills safely.
- (b) Carry out an appropriate procedure for disposing of animal waste safely.
- (c) Carry out an appropriate procedure for disposing of general farm waste safely.

### **Outcome 4**

Perform positive environmental actions.

- (a) Identify an appropriate situation for environmental improvement.
- (b) Identify appropriate actions to complete the environmental improvement.
- (c) Implement the environmental improvement.

## **National Unit specification: statement of standards (cont)**

**Unit title:** Agriculture: Environmental Awareness (SCQF level 6)

### **Evidence Requirements for this Unit**

Written and/or recorded oral evidence is required to demonstrate that the candidates have achieved all of the Outcomes and Performance Criteria. Evidence must be obtained under supervised conditions at appropriate points throughout the Unit.

**Evidence can be holistic or Outcome by Outcome.**

#### **Outcome 1**

Candidates must provide evidence which demonstrates that they can:

- ◆ identify the following key regulatory bodies in the UK and their functions: The Environment Agency (EA), Department for Environment, Food and Rural Affairs (DEFRA), Scottish Government Rural Payments and Inspections Directorate (SGRIPD), Scottish Environmental Protection Agency (SEPA).
- ◆ identify of one environmental code of practice or piece of legislation related to each of the following: animal welfare, waste management and pesticides.
- ◆ explain the aims of one piece of legislation and its effect on agricultural practice.

#### **Outcome 2**

Candidates must provide evidence which demonstrates that they can:

- ◆ identify six different sources of environmental damage or pollution, to include:
  - two livestock
  - two crop
  - two other
- ◆ describe the effect of three different types of environmental damage to include:
  - one livestock
  - one crop
  - one other
- ◆ describe the action to be taken to control one incident of on-farm pollution.

#### **Outcome 3**

Candidates must provide evidence which demonstrates that they can carry out appropriate procedures for each of the following: cleaning up an oil spill, disposing of manure and disposing of net wrap.

Each demonstration must include:

- ◆ identification of Personal Protective Equipment (PPE) and materials and tools required.
- ◆ safe use of PPE and materials and tools in accordance with current legislation.

## **National Unit specification: statement of standards (cont)**

**Unit title:** Agriculture: Environmental Awareness (SCQF level 6)

### **Outcome 4**

Candidates must provide evidence which demonstrates that they can:

- ◆ identify least one environmental improvement and the actions required to implement it.
- ◆ select PPE, tools and materials to be used, and use them safely and in accordance with current legislation, to carry out the task.

## **National Unit specification: support notes**

### **Unit title:** Agriculture: Environmental Awareness (SCQF level 6)

This part of the Unit specification is offered as guidance. The support notes are not mandatory.

While the exact time allocated to this Unit is at the discretion of the centre, the notional design length is 40 hours.

### **Guidance on the content and context for this Unit**

This Unit is an optional Unit within the National Certificate in Agriculture at SCQF level 6, but is also available as a free-standing Unit.

In this Unit, candidates will gain skills and knowledge of the interactions between agriculture and the environment. They will learn about types of environmental pollutions/damage, legalisation and codes of good practice that are commonly used in the agricultural industry, and the governmental bodies that oversee the implementation of the legalisation. Candidates will have the opportunity to assess, plan and carry out a simple, positive environmental improvement.

This Unit should prepare candidates for progression to Higher National Agriculture Units, Scottish Vocational Units or other related land-based qualifications. Specific areas of underpinning knowledge to be covered could include those given below.

#### **Outcome 1**

The regulatory bodies responsible for the overseeing of the current legislation should be discussed. This should be UK wide and include SEPA, SGRPID, DEFRA and EA.

The key pieces of legislation should be outlined and their importance discussed. The codes of good practice for both livestock and crops should be outlined and their importance discussed in relation to agricultural practices. Legislation should relate to pollution of waterways, ground water, soil and air.

#### **Outcome 2**

This could include pollution from sheep dip, manure, slurry, silage, milk, plastics, fuels and oils, scrap, chemicals, etc.

#### **Outcome 3**

This could include simulated or real situations that may occur such as oil, fertiliser, fuel or chemical spillages, etc. Removal of dead stock, plastics, manure and general farm waste.

#### **Outcome 4**

Select the task, identify the action plan and carry out the environmental improvement. These tasks could include collection of general farm waste, cleaning of a polluted waterway or creating designated storage areas.

## National Unit specification: support notes (cont)

**Unit title:** Agriculture: Environmental Awareness (SCQF level 6)

This Unit is broadly aligned to the following National Occupational Standard (NOS) from Lantra:

CU4 Maintain Environmental Good Practice

### Guidance on learning and teaching approaches for this Unit

The Unit should be delivered in as practical a context as possible with delivery taking place both in the field to investigate causes and signs of pollution and damage and in a classroom/ICT suite, for example, to carry out research. The emphasis should always be on the practical application of knowledge and understanding.

Candidates would benefit from a balanced approach to learning by undertaking field visits to farms with a range of environmental good practice and participating in classroom activities to develop knowledge of legislation and good practice. Candidates would benefit from working in small groups, to plan and carry out positive environmental action.

By adopting the above learning and teaching approaches and/or through the Outcomes and corresponding Evidence Requirements, the Unit should provide candidates with an opportunity to develop the following essential skills for life, learning and work:

- ◆ Employability — through developing practical skills to industry standards and working on time limited tasks.
- ◆ Sustainability — through considering the use of resources, recycling, reusing.
- ◆ Organisational skills — in terms of personal management through punctuality, record keeping, organising portfolio work, etc.
- ◆ Interpersonal skills — through contact with farm staff, supervisors and class teams.

### Guidance on approaches to assessment for this Unit

A holistic approach to assessment is encouraged. This could be achieved by candidates compiling a portfolio of evidence for all Outcomes which includes:

- ◆ individual research on legislation.
- ◆ information on field visits and farm stabling audits.
- ◆ photographs/images of practical activities.

In addition, tutors could use checklists to record evidence for the practical activities in Outcomes 3 and 4.

## National Unit specification: support notes (cont)

**Unit title:** Agriculture: Environmental Awareness (SCQF level 6)

### Opportunities for the use of 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 e-checklists. Centres which wish to use e-assessment must ensure that the national standard is applied to all candidate evidence and that conditions of assessment as specified in the Evidence Requirements are met, regardless of the mode of gathering evidence. Further advice is available in *SQA Guidelines on Online Assessment for Further Education (AA1641, March 2003)*, *SQA Guidelines on e-assessment for Schools (BD2625, June 2005)*.

### Opportunities for developing Core Skills

In this Unit candidates will develop knowledge and skills in identifying different environmental factors that may cause pollution and damage. They will also have the opportunity to carry out a positive environmental task.

Candidates will:

- ◆ identify environmental pollution/damage.
- ◆ make decisions about the suitability of their actions.
- ◆ explain the appropriate codes of practice.
- ◆ make recommendations about positive environmental actions.

This means that as they are doing this Unit, candidates may develop aspects of the Core Skills *Communication* and *Problem Solving*.

In addition aspects of the following Core Skills could be developed where particular learning and teaching approaches are adopted:

- ◆ *Working with Others* — through group work to collect information
- ◆ *ICT* — through recording the information collected via images

### Disabled candidates and/or those with additional support needs

The additional support needs of individual candidates should be taken into account when planning learning experiences, selecting assessment instruments, or considering whether any reasonable adjustments may be required. Further advice can be found on our website [www.sqa.org.uk/assessmentarrangements](http://www.sqa.org.uk/assessmentarrangements)



## History of changes to Unit

Version	Description of change	Date

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