



Higher National Unit specification

General information

Unit title: Sustainable Resource Management: Permitting and Operational Practice (SCQF level 7)

Unit code: H65L 34

Superclass: QE

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Unit purpose

This Unit has been developed to offer learning and development opportunities for those aspiring to be, or are already employed within the waste sustainable resource management sector. The Unit is designed to ensure learners possess knowledge of: licensing and permitting; health and safety; quality management and the current policy of improving the way the waste sustainable resource management sectors are regulated.

Outcomes

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

- 1 Explain the licensing permitting and exemption system and its application to the waste sustainable resource management sector.
- 2 Examine the importance of implementing appropriate health and safety procedures within waste sustainable resource management premises.
- 3 Explain the relevance of quality standards to the waste resource management sector.
- 4 Explain the anticipated impacts of the current policy of improving the way the waste sustainable resource management sector is regulated.

Credit points and level

2 Higher National Unit credits at SCQF level 7: (16 SCQF credit points at SCQF level 7)

Recommended entry to the Unit

Entry is at the discretion of the centre.

Higher National Unit specification: General information (cont)

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Core Skills

Opportunities to develop aspects of Core Skills are highlighted in the Support Notes for this Unit specification.

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

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.

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.

Practical site visits to some waste/resource sites should be encouraged. These may be difficult for learners with disabilities; appropriate sites should be carefully selected to ensure there are no unnecessary barriers. A short film/commentary depicting waste/resource sites may be considered as an alternative.

Higher National Unit specification: Statement of standards

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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 licensing permitting and exemption system and its application to the waste sustainable resource management sector.

Knowledge and/or Skills

- ◆ Legislation relevant to the licensing and/or permitting of waste sustainable resource management facilities/activities
- ◆ Responsibilities of holding waste management licence or Pollution Prevention Control (PPC) permit
- ◆ Waste Management Licence exemptions
- ◆ The role and powers of the 'regulator'
- ◆ The consequences of non-compliance
- ◆ Best Available Techniques (BAT)
- ◆ Emission Limit Values (ELVs)

Outcome 2

Examine the importance of implementing appropriate health and safety procedures within waste sustainable resource management premises.

Knowledge and/or Skills

- ◆ The responsibilities of employers and employees in terms of health and safety
- ◆ Key risks associated with the waste sustainable resource management sector and how they are mitigated
- ◆ Diseases associated with the waste sustainable resource management sector and the importance of occupational health in their control

Outcome 3

Explain the relevance of quality standards to the waste sustainable resource management sector.

Knowledge and/or Skills

- ◆ Key features of a Quality Management System (QMS)
- ◆ How to implement QMS within an organisation
- ◆ Examine the advantages/disadvantages of a QMS
- ◆ Quality standards currently used within the industry

Higher National Unit specification: Statement of standards (cont)

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Outcome 4

Explain the anticipated impacts of the current policy of improving the way the waste sustainable resource management sector is regulated.

Knowledge and/or Skills

- ◆ Current policy for improving regulation
- ◆ The anticipated benefits of the current policy for improving regulation for the regulator and the waste resource management sector
- ◆ Audit based approach to planned inspections
- ◆ Regulator assessment of 'risk to the environment' and 'operator compliance'

Evidence Requirements for this Unit

Learners will need to provide evidence to demonstrate their Knowledge and/or Skills across all Outcomes by showing that they can:

Outcome 1

- ◆ describe the legislation relevant to the licensing and/or permitting of waste sustainable resource management facilities/activities.
- ◆ list the main responsibilities of holding a waste management license or Pollution Prevention Control (PPC) permit.
- ◆ explain four types of Waste Management Licence exemptions.
- ◆ distinguish between Simple and Complex Waste Management Licence exemptions.
- ◆ describe how the regulator uses the licensing/permit system to regulate the activities of the waste resource management sector.
- ◆ describe the consequences of 'non-compliance'.
- ◆ define the concept of 'best available technique' (BAT) and explain its importance to the waste resource management sector.
- ◆ explain emission limit values (ELVs).

Written and/or recorded oral evidence is required from learners to demonstrate this.

Assessment will be completed under open-book conditions.

Higher National Unit specification: Statement of standards (cont)

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Outcome 2

- ◆ identify the health and safety legislation of particular relevance to the waste sustainable resource management sector.
- ◆ describe the key risks and how they be mitigated, that are relevant to the waste sustainable resource management sector.
- ◆ describe the illnesses/diseases commonly associated with working in the waste management industry and the importance of occupational health in their control.

Written and/or recorded oral evidence is required from learners to demonstrate this.

Assessment will be completed under open-book conditions.

Outcome 3

- ◆ describe the key features of an environmental quality management system such as ISO 14001.
- ◆ identify the main requirements for the successful implementation of an environmental quality management system.
- ◆ assess the advantages/disadvantages of a Quality Management System.
- ◆ identify two quality management standards currently applied in the waste sustainable resource management sector.

Written and/or recorded oral evidence is required from learners to demonstrate this.

Assessment will be completed under open-book conditions.

Outcome 4

- ◆ explain the government policy for improving regulation.
- ◆ describe the benefits for the regulator and the waste sustainable resource management sector of the improved regulation policy.
- ◆ explain what is the audit based approach to planned inspections.
- ◆ describe how the regulator assess 'risk to the environment' and 'operator compliance'.

Written and/or recorded oral evidence is required from learners to demonstrate this.

Assessment will be completed under open-book conditions.



Higher National Unit Support Notes

Unit title: Sustainable Resource Management: Permitting and Operational Practice (SCQF level 7)

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 80 hours.

Guidance on the content and context for this Unit

This is a mandatory Unit for learners wishing to achieve an HNC in Sustainable Resource Management. The Unit allows learners to learn about the regulatory and quality management frameworks within which the waste/resource industry should operate.

It is important that learners understand the current policy for improving regulation known as 'better regulation' appreciating that the regulatory regime has recently changed and is now designed around the following principles:

- 1 The elimination of unnecessary provisions in legislation.
- 2 Minimising the administrative burden on companies (and regulators).
- 3 Consolidating, streamlining or merging regulatory regimes where possible.
- 4 Inspection and enforcement based on sound risk principles.
- 5 The assurance that companies who break the law will be dealt with swiftly and effectively.
- 6 Empowering regulators to enforce regulations in a fair, consistent and proportionate manner.
- 7 Promoting best practice and advice to regulated companies.

In respect of permitting and licensing, learners should evidence knowledge of the two pieces of underpinning legislation namely the Waste Management Licensing (Scotland) Regulations 2011 and the Pollution Prevention Control (Scotland) Regulations 2012, or their equivalent. Waste management licence exemptions form a small but important part of regulated waste management activities in the UK. Learners should understand the operation of the four types of Waste management licence exemptions, and be able to distinguish between simple and complex exemptions.

Learners should also understand the main aims and key measures of relevant EU and domestic legislation including the Waste Framework Directive (2008/98/EC) and the Waste (Scotland) Regulations 2012 or equivalent.

Learners should also become familiar with some of the terms used in relation to Pollution Prevention Control (PPC) activities such as 'Fit and Proper Person', Emission Limit Values (ELVs) and Best Available Techniques (BAT). The Environment Agency and SEPA provide guidance on these topics accessed at www.sepa.org.uk

Higher National Unit Support Notes (cont)

Unit title: Sustainable Resource Management: Permitting and Operational Practice (SCQF level 7)

In respect of health and safety, learners should evidence a knowledge of legislation that affects the day to day operation of waste sustainable resource management activities including, the Control of Substances Hazardous to Health Regulations 2002 (COSHH) and the Reporting of Injuries, Diseases and Dangerous Occurrences Regulations 1995 (RIDDOR). Learners should also understand the main aims and key measures of legislation including the Health and Safety at Work, etc Act 1974 and the Management of Health and Safety at Work Regulations 1999. The importance of safe working systems and appropriate Personal Protective Equipment (PPE) should be explained.

The role of the Health and Safety Executive (HSE) should be explained. The Health and Safety Executive recognises that waste management is a high risk occupation and has provided a significant amount of guidance specifically on this topic, such as 'How to manage offensive hygiene waste'. Learners would benefit from reviewing this information readily available from the HSE.

Learners should understand the correlation between 'quality management' and the 'confidence in management' that regulators look for when determining the levels of risk associated with a particular business. Learners should also appreciate the growing importance of quality standards to the waste/resource sector as it moves from landfill to reuse and recycling.

Learners should evidence knowledge of ISO 14001 (or equivalent), and be able to explain how the implementation of environmental management systems such as ISO 14001 can help companies reduce waste.

Learner should be aware of the commonalities that exist between some quality standards as frequently companies are putting in place integrated business management systems which incorporate quality (BS EN 9001:2008) environmental (EN ISO 14001:2004) and health and safety (OHSAS 18001:2007).

Not all companies can afford the costs of implementing a full Quality Management System, for smaller businesses working in the waste and resource management sectors the Environment Agency and Scottish Environmental Protection Agency (SEPA) have produced a management toolkit that will help small and medium sized businesses to develop a basic environmental management system for their activities. Learners can access this toolkit at www.netregs.org.uk

Guidance on approaches to delivery of this Unit

This Unit is likely to form part of a Group Award which is designed to provide learners with the professional and technical knowledge and skills for the waste sustainable resource management sector. In these circumstances, the Unit is likely to be delivered towards the middle of the Group Award as the information provides the background to many of the Units which make up the Group Award.

Alternatively the Unit can be undertaken as a standalone Unit for learners to support their continued professional development.

Higher National Unit Support Notes (cont)

Unit title: Sustainable Resource Management: Permitting and Operational Practice (SCQF level 7)

A range of delivery techniques can be employed including class-room based lectures and small group workshops and activities.

This Unit could be delivered by distance-learning. The use of a virtual-learning environment (VLE) is highlighted, with on-line lectures and activities; the employment of video and audio clips, social-media and other online tools is encouraged. Learners should be encouraged to use the Internet as a research tool in addition to traditional library based resources. Independent study should be encouraged by using learner-centred, resource based methodologies.

It is recommended that the legislative/regulatory content of this Unit is delivered after learners have learned about the basic legislative process in the UK and its relevant environs. They should understand the difference between a Bill and an Act, primary legislation and secondary legislation, and the various parliamentary stages (1st reading, etc.) that lead towards royal assent. It is also important that learners appreciate the influence that EC directives have on domestic legislation.

The use of 'model licence/permit' conditions would be a useful guide; these should be available on request from regulators such as the SEPA or equivalent. Reference should be made to publications regarding: the control of operations under Waste Management Licence exemptions; the four types of exemptions and the differences between simple and complex exemptions which are available from the Environment Agency, or other regulator.

The delivery of this Unit will benefit from one or more 'site' visits or observing films or listening to commentaries where learners will have an opportunity to relate actual license/permit conditions to a known activity or site. Learners should also be given the opportunity to interview and question experienced operational staff and regulators.

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.

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.

The Unit could be assessed by a single instrument of assessment that requires learners to produce a report in the region of 2,500 words. Centres may issue a case study with questions based on it or request learners to report upon their workplace using the same list of questions as issued with the case study. If centres prefer, it is possible to assess these Outcomes separately, if so a suggested word count of 700 words for each would be appropriate. Assessment by open-book would be appropriate for this Unit. It would also be appropriate for all learners to be given a copy of a 'model' permit/license containing standard conditions.

Higher National Unit Support Notes (cont)

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Please note that learners must achieve all the minimum evidence specified for each Outcome to pass the Unit.

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 are opportunities to develop the Core Skills of *Communication* at SCQF level 6 by requiring learners to respond by means of oral and written communications. *Problem Solving* at SCQF level 6 maybe developed by encouraging learners to review the relative merits of Quality Management Systems (QMS) and by means of planning and organising allowing learners to demonstrate how they would introduce QMS to an organisation. Further, *Numeracy* at SCQF level 5 and *Information and Communication Technology (ICT)* at SCQF level 5 may be developed by completing this Unit. There is no automatic certification of Core Skills or Core Skills components.

History of changes to Unit

Version	Description of change	Date

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General information for learners

Unit title: Sustainable Resource Management: Permitting and Operational Practice (SCQF level 7)

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 provides a learning opportunity for learners who are aiming to pursue an operational management role in the waste sustainable resource management sector. It will be of particular benefit to those who are anticipating employment at a landfill, waste treatment, recycling or reuse facility.

It is important that you develop an understanding for the principles of “better regulation” appreciating that the regulatory regime has recently changed and is now designed around the following principles:

- 1 The elimination of unnecessary provisions in legislation.
- 2 Minimising the administrative burden on companies (and regulators).
- 3 Consolidating, streamlining or merging regulatory regimes where possible.
- 4 Inspection and enforcement based on sound risk principles.
- 5 The assurance that companies who break the law will be dealt with swiftly and effectively.
- 6 Empowering regulators to enforce regulations in a fair, consistent and proportionate manner.
- 7 Promoting best practice and advice to regulated companies.

In respect of permitting and licensing, you will be asked to display detailed knowledge of the two pieces of underpinning legislation namely the Waste Management Licensing (Scotland) Regulations 2011 and the Pollution Prevention Control (Scotland) Regulations 2012, or their equivalent. You will develop a knowledge of the four types of Waste Management Licence exemptions and shall be able to distinguish between simple and complex exemptions. You will also develop an understanding of the main aims and key measures of relevant EU and domestic legislation including the Waste Framework Directive (2008/98/EC) and the Waste (Scotland) Regulations 2012 or equivalent.

In respect of health and safety, you be introduced to the legislation that affects the day to day operation of waste sustainable resource management activities including, the Control of Substances Hazardous to Health Regulations 2002 (COSHH) and the Reporting of Injuries, Diseases and Dangerous Occurrences Regulations 1995 (RIDDOR). Learners should also understand the main aims and key measures of legislation including the Health and Safety at Work, etc Act 1974 and the Management of Health and Safety at Work Regulations 1999.

You will learn of the relationship between ‘quality management’ and the ‘confidence in management’ that regulators look for when determining the levels of risk associated with a particular business. You will gain an appreciation of the growing importance of quality standards to the waste sustainable resource management sector as it moves from landfill to reuse and recycling.

General information for learners (cont)

Unit title: Sustainable Resource Management: Permitting and Operational Practice (SCQF level 7)

You will be given the opportunity to relate your learning to actual operational activities either at your own place of work, if appropriate, or by means of one or more site visits to licensed waste/resource management facilities where permitted activities are routinely carried out. The use of films or commentaries may be used where actual site visits are impracticable.

You will be expected to and encouraged to do self-study and independent research during this Unit. You will need to achieve all the Outcomes to pass this Unit. Assessment will be varied and will be open-book in nature. Your centre may decide to conduct assessment with one holistic assessment instrument or via four separate assessment responses.

Over the course of this Unit, there may be opportunities for you to develop Core Skills in the areas of *Communication* at SCQF level 6, *Problem Solving* at SCQF level 6, *Numeracy* at SCQF level 5 and *Information and Communication Technology (ICT)* at SCQF level 5, although there is no automatic certification of Core Skills or Core Skills components.