

apprenticeship FRAMEWORK

Sustainable Resource Management (England)

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Sustainable Resource Management (England)

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Framework summary

Sustainable Resource Management

Intermediate Level Apprenticeship in Sustainable Resource Management

This framework includes information on Personal Learning and Thinking Skills

Pathways for this framework at level 2 include:

Pathway 1: Intermediate Level Apprenticeship in Sustainable Resource Management

Competence qualifications available to this pathway:

- C1 - Level 2 Certificate for Sustainable Waste Management Operative (Waste Collection Driver) (QCF)
- C2 - Level 2 Certificate for Sustainable Waste Management Operative (Waste Collection) (QCF)
- C3 - Level 2 Diploma for Sustainable Waste Management Operative (Weighbridge Operative) (QCF)
- C4 - Level 2 Diploma for Sustainable Waste Management Operative (Waste Site Operative) (QCF)
- C5 - Level 2 Diploma for Sustainable Recycling Activities (QCF)
- C6 - Level 2 Certificate for Sustainable Waste Management Operative (QCF)
- C7 - WAMITAB Level 2 Certificate In Front Line Environmental Services (QCF)
- C8 - WAMITAB Level 2 Diploma for Sustainable Waste Management Operative (Team Leader) (QCF)

Knowledge qualifications available to this pathway:

- K1 - Level 2 Certificate in Principles of Sustainable Resource Management (QCF)

Combined qualifications available to this pathway:

N/A

This pathway also contains information on:

- Employee rights and responsibilities
- Functional skills

Sustainable Resource Management

Advanced Level Apprenticeship in Sustainable Resource Management

This framework includes information on Personal Learning and Thinking Skills

Pathways for this framework at level 3 include:

Pathway 1: Advanced Level Apprenticeship in Sustainable Resource Management

Competence qualifications available to this pathway:

- C1 - Level 3 Diploma for Sustainable Recycling Activities (Supervisory) (QCF)
- C2 - Level 3 Diploma for Waste Supervisor (QCF)

Knowledge qualifications available to this pathway:

K1 - Level 3 Certificate in Principles of Sustainable Resource Management (QCF)

Combined qualifications available to this pathway:

N/A

This pathway also contains information on:

- Employee rights and responsibilities
- Functional skills

Framework information

Information on the Issuing Authority for this framework:

Energy and Utility Skills

The Apprenticeship sector for occupations in electricity, gas and water supply, and waste management (also includes gas utilisation, recycling and waste water collection and treatment)

Issue number: 7	This framework includes:
Framework ID: FR02398	Level 2 Level 3
Date this framework is to be reviewed by: 28/02/2017	This framework is for use in: England

Short description

The waste management and recycling industry faces some key challenges:

- Public perception of a dirty and low skilled industry
- Legal and environmental drivers pushing for more sophisticated waste management solutions
- Developing a workforce capable of operating and maintaining high tech plant & processes
- Increasingly, new recruits need higher levels skills
- Industry expansion

The purpose of the Intermediate and Advanced Apprenticeship is to support the industry to address these challenges by developing occupational competence in a wide range of Operative and Supervisor level job roles in the collection, transfer, treatment and final disposal of waste and resources.

Contact information

Proposer of this framework

Employer engagement has been instrumental to framework development. The Waste Management, Recycling and Resource Recovery Industry Skills Initiative (WRRRISKI) chaired by Simon Catford, HR Director at Viridor and facilitated by EU Skills has acted as the steering group for this development. The following organisations are represented on WRRRISKI at HR Director level:

Biffa, Cory Environmental, Cylch, FCC Environmental, Grundon, London Waste, May Gurney, Serco, Shanks, Veolia and Viridor.

The purpose of WRRRISKI is to address the strategic skills issues across the waste management, recycling and resource recovery sector, with particular emphasis on the skills activities for medium (2-5 years) and long term (5-20 years) collaborative action. WRRRISKI will support the sector wide delivery of a long term, sustainable, skilled workforce.

Consultation with employers on the framework and qualification content was conducted through 1:1 site visits and through the waste management industry Training Managers Forum. The employers listed above are represented on the Training Managers Forum.

Expertise elicited through this engagement enabled the Training Managers Forum to provide recommendations for framework content to WRRRISKI who gave final sign off.

This framework is proposed by EU Skills and the employers listed above on behalf of the waste management industry.

Developer of this framework

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Revising a framework

Contact details

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Why this framework is being revised

The Apprenticeship framework is being revised to remove the level 4 Higher Apprenticeship pathway in line with new policy. The Higher Apprenticeship in Sustainable Resource Operations and Management now sits in a stand alone framework.

Summary of changes made to this framework

The Higher Apprenticeship pathway has been removed.

Qualifications removed

The following qualifications have been removed:

WAMITAB Level 4 Diploma In Systems and Operations Management (QCF) - 600/8139/9

WAMITAB Level 4 Diploma In Systems and Operations Management: Small Scale Operations (QCF) - 600/8103/X

Qualifications added

No qualifications have been added.

Qualifications that have been extended

There have been no qualifications extended within this framework.

Purpose of this framework

Summary of the purpose of the framework

Defining Apprenticeships

An Apprenticeship is a job with an accompanying skills development programme, designed by employers in the sector. It allows the apprentice to gain technical knowledge and real practical experience, along with personal skills, required for their immediate job and future career. These are acquired through a mix of learning in the workplace, formal off the job learning and the opportunity to practice and embed new skills in a real work context. This broader mix differentiates the Apprenticeship experience from training delivered to meet narrowly focused job needs.

All apprentices commencing their Apprenticeship must have an Apprenticeship Agreement between the employer and the apprentice. This can be used to reinforce the understanding of the requirements of the Apprenticeship.

On completion of the Apprenticeship the apprentice must be able to undertake the full range of duties, in the range of circumstances appropriate to the job, confidently and competently to the standard set by the industry.

Profile of the Industry

The UK waste management and recycling industry may be defined as: "The collection, transport, disposal and recycling of waste, including the supervision of such operations and the after-care of disposal sites, and including actions taken as a dealer or broker."

It has been estimated that there are currently (2012) approximately 142,550 individuals directly employed in the UK waste management and recycling industry which comprises "local authorities, a relatively small number of large private employers, a plethora of small to medium sized enterprises (SMEs) who often offer specialist services in local markets, and an active third sector of community and voluntary organisations."

The industry is undergoing a substantial period of change, driven by a range of political, economic, social, technological, legal and environmental drivers which include:

Political Drivers:

- European policy and strategy (e.g. European Union Landfill Directive)
- UK policy and strategy (e.g. Landfill Tax Escalator and increasing anaerobic digestion capacity)
- Development of waste infrastructure

Economic Drivers:

- Entrants from the European marketplace
- Global economic downturn
- Price of energy, raw materials and recyclables
- Local authority spending and procurement
- Financial incentives and penalties

Social Drivers

- Lifestyle/household structure
- Increased public awareness and concern in relation to environmental issues
- Increased commercial focus on environmental policy technological drivers
- Recovering energy from waste
- Improved processing and treatment processes
- Success of new technologies in organisations/abroad resulting in these being adopted on a larger scale

Legal Drivers

- Employment legislation
- Health and safety

Environmental Drivers

- Low carbon
- Energy and resource efficiency
- Lack of landfill space/landfill substance bans
- Environmental protection

Based on widespread agreement on the trend towards the use of more advanced technologies and automation of processes, it has been estimated that at least 195,950 people will be employed in the industry by 2020. Industry experts have identified a range of current skills gaps including:

Professional and technical roles: Additional need for technically skilled employees to maintain and operate treatment facilities is expected as more are built. The demand for highly qualified engineers, operational managers and processing technicians is expected to grow significantly in the immediate future.

Operative and maintenance roles: Corresponding to the advancing skills requirements for more senior positions, increasing skill levels are expected for supporting roles.

Elementary roles: The large manual base currently retained within the industry has traditionally required a low level of skills. However, as more technology is deployed throughout the industry, there will be a growing demand for higher levels of competence.

In order to meet future labour demands brought about by both growth and changes in the skills needs of the industry, the following priorities need to be met:

Up-skilling the current workforce: Through up-skilling of the current workforce it is believed to be possible to meet some of the new skills needs within the industry. This is anticipated to be especially appropriate for manual, operative and lower level technical roles.

Recruiting new entrants: A traditionally poor image of the industry is perceived to have hampered recruitment in the past. There is now an acute need to recruit a significant number of new entrants into the industry over the next decade. The need to attract young new entrants is widely recognised as the industry workforce ages and employees with a wealth of technical expertise approach retirement.

Apprenticeship in the Industry

The Apprenticeship in Sustainable Resource Management provides a key opportunity to address the current and future skills shortages identified by the industry. It will attract new entrants by providing a structured route to job competence and career progression and can also be used to up skill existing staff. It provides the ability for employers to “grow their own” workforce where technically competent individuals are increasingly difficult to recruit. The Apprenticeship enables employers to identify managers of the future and support succession planning whilst delivering tangible benefits such as reduced staff turnover. The Apprenticeship provides an opportunity to improve perceptions by raising standards and supporting the professionalisation of the industry.

Aims and objectives of this framework (England)

Aim:

- To contribute to the development of a sustainable workforce for the UK waste management and recycling industry.

Objectives:

- To attract new workers to the industry.
- To develop occupational competence in a wide range of Operative and Supervisor level job roles in the collection, transfer, treatment and final disposal of waste and resources.
- To facilitate progression within the industry.
- To support the Government's priority outlined in Skills for Sustainable Growth, to ensure Apprenticeship frameworks offer high-quality, economically-relevant provision.

Entry conditions for this framework

The Apprenticeship in Sustainable Resource Management does not impose any restrictions to entry. Responsibility for selection and recruitment of apprentices lies with the employer who will have a clear idea of their requirements.

Employers must be confident that the potential Apprentice has the learning potential/capacity, motivation and aptitude to achieve all of the mandatory outcomes of the framework.

Employers are asked to be flexible when recruiting people onto the Apprenticeship. Where employers/providers have robust learner support systems in place (such as tutorials and mentoring programmes), an individual who historically has not done particularly well at reading, writing and numeracy may thrive on an Apprenticeship where the relevance and application of these subjects is understood.

Individuals with the following characteristics and attributes (in no particular order of preference) are likely to be suitable for this Apprenticeship:

- The waste management industry is potentially very dangerous so the safety of apprentices, their work colleagues and the public are of the utmost importance in this job. Apprentices must be very safety conscious and have a very responsible attitude to work, working in accordance with company health and safety procedures at all times.
- Apprentices must be prepared to wear the Personal Protective Equipment (PPE) provided when required.
- These may be physically demanding jobs that involve bending, lifting and manual handling so a basic level of fitness is important to be able to conduct the job efficiently.
- Many of these jobs involve work outdoors, so apprentices should be prepared to work in any kind of weather.
- Some job roles will require shift work to ensure plant and equipment is operational 24 hours a day. Apprentices therefore need to be adaptable and flexible.
- A driving licence is desirable as some facilities are in remote locations.
- Most of these job roles involve dealing with the general public on a day-to-day basis so apprentices should be presentable and have a polite and courteous manner. Apprentices will need excellent verbal communication skills and be able to provide a good level of customer care.
- Ability to work as part of a team.
- Ability to perform a range of tasks and duties under direction from management
- Ability to operate machinery and equipment which you have received training on.
- Clean and tidy by nature with good self-discipline and timekeeping.
- Apprentices will need a standard of numeracy and literacy skills that will enable them to successfully complete the qualifications included within this Apprenticeship.
- Basic computer keyboard skills.
- Ability to carry out instructions and requests with accuracy and effectiveness.

Initial Assessment

Initial assessment will be used to identify prior learning and experience to tailor the Apprentice's Individual Learning Plan as appropriate. In the case of APL for the combined qualification, the Apprenticeship programme will be tailored to allow the Apprentice to undertake new learning, including learning at a higher level and develop new skills.

Level 2

Title for this framework at level 2

Intermediate Level Apprenticeship in Sustainable Resource Management

Pathways for this framework at level 2

Pathway 1: Intermediate Level Apprenticeship in Sustainable Resource Management

Level 2, Pathway 1: Intermediate Level Apprenticeship in Sustainable Resource Management

Description of this pathway

The Intermediate Level Apprenticeship in Sustainable Resource Management requires a minimum total of 60 credits to be achieved. These are broken down as follows:

Competence - 31

Knowledge - 19

Functional Skills - 10

Entry requirements for this pathway in addition to the framework entry requirements

There are no additional requirements other than the general entry conditions.

Job title(s)	Job role(s)
Environmental Services Operative	Performing a range of local environmental services which may include collection and loading of waste and recyclable materials, sorting and preparation of recyclable material for processing, manual or mechanical removal of waste and detritus from public highways, treating highways and land for ice.
Reuse Collection Driver	Driving the reuse collection vehicle and the loading and unloading of materials.
Reuse Collection Operative	Collect, loading and unloading of reuse materials. Manual handling usually plays a significant part. Involves contact with the public and provision of advice on reuse and recycling activities. Sort goods and select items for reuse.
Reuse Operative/Reuse Sales Operative	Manual handling usually plays a significant part. Involves contact with the public and providing advice on reuse and recycling activities. Sort goods and select items for reuse and/or resale.
Recyclables Collection Driver	Driving the recyclables collection vehicle and the loading and unloading of material.
Waste Collection Driver	Driving the refuse collection vehicle and the loading and unloading of material.
Refuse Collection Loader	Loading and unloading of waste as part of a kerbside collection team. Manual handling usually plays a significant part. Involves contact with the public and providing advice on recycling activities.
Weighbridge Operative	Operation of the weighbridge and associated administrative duties.
Transfer Station Operative	Involves both manual and mechanical handling of waste and transfer to containers for processing. May involve some sorting and re-processing.
Compost Operative	Involves both manual and mechanical handling of green waste and transfers to containers for processing. May involve some sorting and reprocessing.
Materials Recycling Facility Operative (Picker/Sorter)/ Recycling Operative (Reception & Segregation/ Processing)	This is normally a manual occupation and involves the abstraction of selected material from mixed waste and recyclables.
Household Waste Recycling Centre (HWRC) Operative	Maintains HWRC (civic amenity) sites in an orderly and tidy state. Will assist manually and/or mechanically in the loading and offloading of materials and containers. Involves directing the general public on the best practice for sorting waste and recyclables.

Recycling Operative (Waste Electrical and Electronic Equipment - WEEE)	Collection, sorting and segregation of WEEE. Responsible for routine operations that may involve a number of tasks i.e. sorting, disassembly, cleaning, component retrieval.
Recyclables Collection Loader	Loading and unloading of recyclables as part of a kerbside collection team. Manual handling usually plays a significant part. Involves contact with the public and providing advice on recycling activities.
Team Leader	Managing the day to day operational activities of a small team.

Qualifications

Competence qualifications available to this pathway

C1 - Level 2 Certificate for Sustainable Waste Management Operative (Waste Collection Driver) (QCF)					
No.	Ref no.	Awarding organisation	Credit value	Guided learning hours	UCAS points value
C1a	501/1475/X	WAMITAB	33	267	N/A
C1b	501/2368/3	City & Guilds	33	267	N/A
C1c	600/2252/8	Pearson Edexcel	33	257-267	N/A

C2 - Level 2 Certificate for Sustainable Waste Management Operative (Waste Collection) (QCF)					
No.	Ref no.	Awarding organisation	Credit value	Guided learning hours	UCAS points value
C2a	501/1476/1	WAMITAB	33	237-267	N/A
C2b	501/2367/1	City & Guilds	33	237-267	N/A
C2c	600/2136/6	Pearson Edexcel	33	267	N/A

Competence qualifications available to this pathway (cont.)

C3 - Level 2 Diploma for Sustainable Waste Management Operative (Weighbridge Operative) (QCF)					
No.	Ref no.	Awarding organisation	Credit value	Guided learning hours	UCAS points value
C3a	501/1477/3	WAMITAB	46	267-282	N/A
C3b	501/2141/8	City & Guilds	46	267-282	N/A
C3c	600/2131/7	Pearson Edexcel	46	267-282	N/A

C4 - Level 2 Diploma for Sustainable Waste Management Operative (Waste Site Operative) (QCF)					
No.	Ref no.	Awarding organisation	Credit value	Guided learning hours	UCAS points value
C4a	501/1478/5	WAMITAB	37	283-293	N/A
C4b	501/2369/5	City & Guilds	37	283-293	N/A
C4c	600/2162/7	Pearson Edexcel	37	283-293	N/A

C5 - Level 2 Diploma for Sustainable Recycling Activities (QCF)					
No.	Ref no.	Awarding organisation	Credit value	Guided learning hours	UCAS points value
C5a	501/2182/0	WAMITAB	37	296-320	N/A
C5b	600/1502/0	City & Guilds	37	276-320	N/A
C5c	600/1718/1	Pearson Edexcel	37	296-320	N/A

Competence qualifications available to this pathway (cont.)

C6 - Level 2 Certificate for Sustainable Waste Management Operative (QCF)					
No.	Ref no.	Awarding organisation	Credit value	Guided learning hours	UCAS points value
C6a	501/1855/9	WAMITAB	33	229-253	N/A
C6b	600/0646/8	City & Guilds	33	229-253	N/A

C7 - WAMITAB Level 2 Certificate In Front Line Environmental Services (QCF)					
No.	Ref no.	Awarding organisation	Credit value	Guided learning hours	UCAS points value
C7a	600/0025/9	WAMITAB	31	310	N/A

C8 - WAMITAB Level 2 Diploma for Sustainable Waste Management Operative (Team Leader) (QCF)					
No.	Ref no.	Awarding organisation	Credit value	Guided learning hours	UCAS points value
C8a	501/1446/3	WAMITAB	38	283-293	N/A

Knowledge qualifications available to this pathway

K1 - Level 2 Certificate in Principles of Sustainable Resource Management (QCF)					
No.	Ref no.	Awarding organisation	Credit value	Guided learning hours	UCAS points value
K1a	501/1357/4	WAMITAB	19	190	N/A
K1b	501/2350/6	City & Guilds	19	190	N/A
K1c	600/1750/8	Pearson Edexcel	19	190	N/A

Combined qualifications available to this pathway

N/A

Relationship between competence and knowledge qualifications

K1 provides the underpinning knowledge and understanding for C1-C8.

Apprentices must complete the competence qualification appropriate to their job role. These are as follows:

C1 - Waste Collection Driver/ Recyclables Collection Driver

C2 - Refuse Operative/Collection Loader

C3 - Weighbridge Operative

C4 & C6 - Transfer Station Operative, Compost Operative, Materials Recycling Facility Operative (Picker/Sorter), Household Waste Recycling Centre Operative.

C5 - Recyclables Collection Loader, Recycling Operative (Reception and Segregation/Processing/WEEE), all Reuse roles - Apprentices must complete the appropriate reuse pathway of this qualification and the knowledge qualification.

C7 - Environmental Services Operative

C8 - Team Leader

Learners that have already achieved competence and/or knowledge qualifications before entry to the Apprenticeship must select relevant options which will equip them with new skills and learning.

Transferable skills (England)

Functional Skills / GCSE (with enhanced functional content) and Key Skills (England)

Apprentices must complete or have completed one of the English transferable skills qualifications and one of the Mathematical transferable skills qualifications listed below in order to successfully complete their Apprenticeship and this will carry the QCF five credit values. If they do not have these qualifications as part of their evidence an Apprenticeship certificate cannot be awarded.

English	Minimum level or grade	Credit value
Functional Skills qualification in English	1	5
GCSE qualification in English (with enhanced functional content)	E	5
Key Skills qualification in Communication achieved either before September 2013 as part of the Apprenticeship, or...*	1	5
GCSE Qualification in English*	C	N/A
A' Level or AS Level qualification in English Language*	E	N/A
A' Level or AS Level qualification in English Literature*	E	N/A
A' Level or AS Level qualification in English Language and Literature*	E	N/A
GCSE or O' Level qualification in English Language**	A	N/A
A' Level or AS Level qualification in English Language**	A	N/A
A' Level or AS Level qualification in English Literature**	A	N/A
A' Level or AS Level qualification in English Language and Literature**	A	N/A

* achieved before September 2012 and within the 5 years immediately prior to starting an Apprenticeship.

** achieved before September 2012, otherwise at any time prior to starting the Apprenticeship.

Mathematics	Minimum level or grade	Credit value
Functional Skills qualification in Mathematics	1	5
GCSE qualification (with enhanced functional content) in Mathematics	E	5
Key Skills qualification in Application of Number achieved either before September 2013 as part of the Apprenticeship, or...*	1	5
GCSE qualification in Mathematics*	C	N/A
A' level or AS Level qualification in Mathematics*	E	N/A
A' Level or AS Level qualification in Pure Mathematics*	E	N/A
A'Level or AS Level qualification in Further Mathematics*	E	N/A
GCSE or O'Level qualification in Mathematics**	A	N/A
A' Level or AS Level qualification in Mathematics**	A	N/A
A' Level or AS Level qualification in Pure Mathematics**	A	N/A
A' Level or AS Level qualification in Further Mathematics**	A	N/A

* achieved before September 2012 and within the 5 years immediately prior to starting an Apprenticeship.

** achieved before September 2012, otherwise at any time prior to starting the Apprenticeship.

Inclusion of Information and Communications Technology (ICT)

Occupationally specific ICT skills are important for apprentices and as such these skills are delivered through the competence qualification.

The ICT skills delivered through Functional Skills qualifications are not essential to effective performance in the job role and therefore the Functional Skills qualification in ICT is not a mandatory requirement of this Apprenticeship.

Progression routes into and from this

pathway

Progression routes into the pathway:

Applicants may come from a range of routes including:

- Relevant work or work experience
- Training and/or experience which could include a portfolio showing what they have done
- Academic qualification(s) such as one or more GCSEs
- Achievement of Key Skills or Functional Skills
- Successful completion of a (14-19) Diploma i.e. the Diploma in Environmental and Land-Based Studies
- The Foundation Learning Curriculum

Individuals must meet the entry conditions (see entry conditions) of the Intermediate Level Apprenticeship and the recruiting employer.

Existing members of the workforce may also progress into this Intermediate Level Apprenticeship.

Progression routes out of the pathway:

The apprentice's knowledge about career pathways, information sources and the names of relevant professional bodies are developed as part of the Employee Rights and Responsibilities component of this Intermediate Level Apprenticeship.

Throughout any career in the waste management industry, individuals will be provided with the necessary on-going on and off job training, including refresher training and new skills training, to enable them to carry out their job role competently.

On completion of the Intermediate Level Apprenticeship under normal circumstances apprentices may continue to work as a competent operative in their current job role.

Completion of the Intermediate Level Apprenticeship supports progression onto the Advanced Level Apprenticeship in Sustainable Resource Management. Apprentices can also progress horizontally within the industry to complete competence qualifications at the same level or complete components of the Advanced Level Apprenticeship such as level 3 competence units relevant to the job role.

For the right individual, this Intermediate Level Apprenticeship can provide a springboard to an exciting career in environmental protection.

For further information on careers in the waste management industry please visit

www.euskills.co.uk

Employee rights and responsibilities

Within this Intermediate Level Apprenticeship the nine national outcomes/standards for ERR are met through a mandatory QCF unit included in the knowledge qualifications.

The unit title is Employment Rights and Responsibilities in the Energy & Utility Sector.

Reference number: R/602/2775. Credits: 2. GLH: 20

EU Skills has developed an ERR workbook with Adams Associates to support delivery of this unit. Use of this workbook is optional and completion of the workbook does not need to be evidenced at the point of certification.

The workbook can be downloaded from EU Skills' website: www.euskills.co.uk

Level 3

Title for this framework at level 3

Advanced Level Apprenticeship in Sustainable Resource Management

Pathways for this framework at level 3

Pathway 1: Advanced Level Apprenticeship in Sustainable Resource Management

Level 3, Pathway 1: Advanced Level Apprenticeship in Sustainable Resource Management

Description of this pathway

The Advanced Level Apprenticeship in Sustainable Resource Management requires a minimum total of 88 credits to be achieved. These are broken down as follows:

Competence - 46

Knowledge - 32

Functional Skills - 10

Entry requirements for this pathway in addition to the framework entry requirements

There are no additional requirements other than the general entry conditions.

Job title(s)	Job role(s)
Reuse Supervisor	Supervising reuse operations including collections, storing, sorting and sales activities.
Recycling/Refuse Collection Supervisor (Team Leader)	Responsible for over-seeing the work of one or more teams on recycling/refuse collection operations. Motivating staff and maintaining high standards are key to this role.
Transfer Station Supervisor	Responsible for day to day supervision of operations at a transfer station including maintaining compliance with health and safety and environmental standards. Supervising work teams is central to the role.
Treatment (Physical/ Chemical/ Thermal) Supervisor	Responsible for overseeing the work of one or more teams on treatment plant operations. Motivating staff and maintaining high standards are key to this role.
Biological Treatment (In Vessel Composting/ Open Windrow/ Anaerobic Digestion) Supervisor	Responsible for overseeing the work of one or more teams on biological treatment operations. Motivating staff and maintaining high standards are key to this role. This role includes a range of technical support operations.
Materials Recycling Facility (MRF)/ Household Waste Recycling Centre (HWRC) Supervisor	Responsible for overseeing the work of one of more teams on a MRF/HWRC site. Motivating staff and maintaining high standards are key to this role. One of the key features of this role is to ensure efficient and effective plant operation.
Landfill Supervisor	Responsible for overseeing day to day operations on a landfill site. Motivating staff and maintaining high standards are key to this role. A key feature of this job is interfacing with customers, regulators, local residents and other interested parties.
Sustainability Officer	This role involves considering all aspects of environmental management in an organisation, including management systems, sustainable procurement, looking at waste minimisation and the best ways to treat waste and recyclables following the waste hierarchy and other principles.

Qualifications

Competence qualifications available to this pathway

C1 - Level 3 Diploma for Sustainable Recycling Activities (Supervisory) (QCF)					
No.	Ref no.	Awarding organisation	Credit value	Guided learning hours	UCAS points value
C1a	501/2185/6	WAMITAB	46	272-273	N/A
C1b	600/1006/x	City & Guilds	46	248-319	N/A
C1c	600/1727/2	Pearson Edexcel	46	272-273	N/A

C2 - Level 3 Diploma for Waste Supervisor (QCF)					
No.	Ref no.	Awarding organisation	Credit value	Guided learning hours	UCAS points value
C2a	501/1853/5	WAMITAB	59	301-509	N/A
C2b	600/1474/x	City & Guilds	59	311-572	N/A
C2c	600/2266/8	Pearson Edexcel	59	311-324	N/A

Knowledge qualifications available to this pathway

K1 - Level 3 Certificate in Principles of Sustainable Resource Management (QCF)					
No.	Ref no.	Awarding organisation	Credit value	Guided learning hours	UCAS points value
K1a	501/2343/9	City & Guilds	32	295	N/A
K1b	501/1421/9	WAMITAB	32	320	N/A
K1c	600/1720/X	Pearson Edexcel	32	320	N/A

Combined qualifications available to this pathway

N/A

Relationship between competence and knowledge qualifications

K1 provides the underpinning knowledge and understanding for C1-C2.

Apprentices must complete the competence qualification appropriate to their job role. An apprentice in the role of Recycling Collection Supervisor (Team Leader) or Reuse Supervisor must complete qualification C1. Apprentices in a reuse role must complete the appropriate reuse pathway of qualifications C1 and K1. Qualification C2 is appropriate for all other job roles covered by this Advanced Level Apprenticeship.

Learners that have already achieved competence and/or knowledge qualifications before entry to the Apprenticeship must select relevant options which will equip them with new skills and learning.

Transferable skills (England)

Functional Skills / GCSE (with enhanced functional content) and Key Skills (England)

Apprentices must complete or have completed one of the English transferable skills qualifications and one of the Mathematical transferable skills qualifications listed below in order to successfully complete their Apprenticeship and this will carry the QCF five credit values. If they do not have these qualifications as part of their evidence an Apprenticeship certificate cannot be awarded.

English	Minimum level or grade	Credit value
Functional Skills qualification in English	2	5
GCSE qualification in English (with enhanced functional content)	C	5
Key Skills qualification in Communication achieved either before September 2013 as part of the Apprenticeship, or...*	2	5
GCSE Qualification in English*	C	N/A
A' Level or AS Level qualification in English Language*	E	N/A
A' Level or AS Level qualification in English Literature*	E	N/A
A' Level or AS Level qualification in English Language and Literature*	E	N/A
GCSE or O' Level qualification in English Language**	A	N/A
A' Level or AS Level qualification in English Language**	A	N/A
A' Level or AS Level qualification in English Literature**	A	N/A
A' Level or AS Level qualification in English Language and Literature**	A	N/A

* achieved before September 2012 and within the 5 years immediately prior to starting an Apprenticeship.

** achieved before September 2012, otherwise at any time prior to starting the Apprenticeship.

Mathematics	Minimum level or grade	Credit value
Functional Skills qualification in Mathematics	2	5
GCSE qualification (with enhanced functional content) in Mathematics	C	5
Key Skills qualification in Application of Number achieved either before September 2013 as part of the Apprenticeship, or... *	2	5
GCSE qualification in Mathematics*	C	N/A
A' level or AS Level qualification in Mathematics*	E	N/A
A' Level or AS Level qualification in Pure Mathematics*	E	N/A
A'Level or AS Level qualification in Further Mathematics*	E	N/A
GCSE or O'Level qualification in Mathematics**	A	N/A
A' Level or AS Level qualification in Mathematics**	A	N/A
A' Level or AS Level qualification in Pure Mathematics**	A	N/A
A' Level or AS Level qualification in Further Mathematics**	A	N/A

* achieved before September 2012 and within the 5 years immediately prior to starting an Apprenticeship.

** achieved before September 2012, otherwise at any time prior to starting the Apprenticeship.

Inclusion of Information and Communications Technology (ICT)

Occupationally specific ICT skills are important for apprentices and as such these skills are delivered through the competence qualification.

The ICT skills delivered through Functional Skills qualifications are not essential to effective performance in the job role and therefore the Functional Skills qualification in ICT is not a mandatory requirement of this Apprenticeship.

Progression routes into and from this

pathway

Progression routes into the pathway:

Applicants may come from a range of routes including:

- Intermediate Level Apprenticeship in Sustainable Resource Management
- Relevant work or work experience
- Training and/or experience which could include a portfolio showing what they have done
- Academic qualification(s) such as one or more GCSEs
- Achievement of Key Skills or Functional Skills
- Successful completion of a (14-19) Diploma i.e. the Diploma in Environmental and Land-Based Studies

Individuals must meet the entry conditions (see entry conditions) of the Advanced Level Apprenticeship and the recruiting employer.

Existing members of the workforce may also progress into this Advanced Level Apprenticeship.

Progression routes out of the pathway:

The apprentice's knowledge about career pathways, information sources and the names of relevant professional bodies are developed as part of the Employee Rights and Responsibilities component of this Advanced Level Apprenticeship.

Throughout any career in the waste management industry, individuals will be provided with the necessary on-going on and off job training, including refresher training and new skills training, to enable them to carry out their job role competently.

On completion of the Advanced Level Apprenticeship and under normal circumstances apprentices will continue to work in their current job role.

Progression will depend on the performance and motivation of the individual and the vacancies/opportunities available within the company. It is possible for supervisors to move across to other industry areas or to become the managers of the future.

Successful completion of the Advanced Level Apprenticeship supports progression to the Higher Apprenticeship in Sustainable Resource Operations and Management - Level 4.

Apprentices could progress to complete the following qualifications recognised by the Chartered Institute of Wastes Management.

- Institute of Leadership and Management (ILM) Certificate in First Line Management with Wastes Option delivered by Carnegie College and Hackney College
- Higher National Certificate (HNC) in Wastes Management delivered by Andrew Carnegie

Business School - Carnegie College, Cardiff School of Health Sciences - University of Wales Institute and the University of Northampton.

- Foundation Degree (FdSc) in Sustainable Waste and Environmental Management delivered by Myerscough College and the University of Northampton

For the right individual, this programme can provide a springboard to an exciting career in environmental protection.

For further information on careers in the waste management industry please visit www.euskills.co.uk

UCAS points for this pathway: Not applicable

Employee rights and responsibilities

Within this Advanced Level Apprenticeship the nine national outcomes/standards for ERR are met through a mandatory QCF unit included in the knowledge qualifications.

The unit title is Employment Rights and Responsibilities in the Energy & Utility Sector.

Reference number: R/602/2775. Credits: 2. GLH: 20

EU Skills has developed an ERR workbook with Adams Associates to support delivery of this unit. Use of this workbook is optional and completion of the workbook does not need to be evidenced at the point of certification.

The workbook can be downloaded from EU Skills' website: www.euskills.co.uk

The remaining sections apply to all levels and pathways within this framework.

How equality and diversity will be met

Under-representation in the industry

The under-representation of women and those from black or minority ethnic (BME) background remains a key priority for the industry. Females constitute only 19% of the workforce compared to the 43% UK average. In addition, only 4% of the waste management industry workforce is from a black or minority ethnic (BME) background compared to 8% of the UK workforce.

Barriers to entry and progression

Unfounded but widespread perceptions of the waste management industry provide the main barrier to entry and progression for these under-represented groups.

Actions being taken to address barriers to take up and progression

Apprentices are seen as a vital route to encourage and facilitate a greater diversity of individuals into the industry. This Apprenticeship does not discriminate. Employers/providers must be able to demonstrate that there are no overt or covert discriminatory practices in selection and employment. All promotion, selection and training activities must, as a minimum, comply with relevant legislation, in particular, the protected characteristics of the Equality Act 2010. For guidance please refer to:

www.equalityhumanrights.com/advice-and-guidance/new-equality-act-guidance/

Equal opportunities policies and procedures will contribute to the Employee Rights and Responsibilities component of this Apprenticeship. It is recommended that employers/providers conduct an exit interview if the Apprentice leaves the Apprenticeship before completion.

The larger employers in the industry are actively involved in initiatives to increase the representation of women and BME groups in the industry. Energy & Utility Skills will support these initiatives by promoting specifically to these groups. Take up will be monitored through analysis of statistical returns from the Data Service and through certification data. Where questions arise concerning policy and practice, Energy & Utility Skills will work closely with NAS to identify causes and to implement positive action where appropriate.

EU Skills will continue to host stands at careers fairs and participate in skills competitions where we can promote this Apprenticeship to all groups including females and BME. In addition EU Skills is developing a number of case studies of successful women working in the industry which will be used to encourage new female entrants.

These case studies can be accessed at: <http://www.euskills.co.uk/>

On and off the job guided learning (England)

Total GLH for each pathway

GLH attached to the Apprenticeship refers to the time taken by the apprentice to develop the practical skills and underpinning knowledge to demonstrate competence in their job role.

GLH must be delivered during contracted working hours. The working week for an apprentice is recommended to be 30 hours, unless an Apprentice has a part time employment contract in which case apprentices must work a minimum of 16 hours a week. Where this is the case, the Apprenticeship must be extended in order for the apprentice to complete the GLH.

For apprentices aged:

- 16 - 18, the Apprenticeship must last at least 12 months;
- 19 and over, the Apprenticeship must be at least 12 months, unless relevant prior learning is recorded. Where this is the case, Apprenticeships will not be less than six months and must include new skills and new learning.

GLH:

- must be planned, reviewed and evaluated jointly between the apprentice and tutor, teacher, mentor or manager;
- must allow access as and when required by the apprentice either to a tutor, teacher, mentor or manager;
- are delivered through one or more of the following methods: individual and group teaching, e-learning, distance learning, coaching, mentoring; feedback and assessment; collaborative/networked learning with peers; guided study;
- Apprenticeship delivery must be planned to make full and effective use of the duration, including the opportunity for apprentices to embed and extend their learning through repeated workplace practice;
- completed in relation to accredited components of the framework achieved prior to the that apprenticeship training may count towards the GLH requirement for the framework;
- where an apprentice completes an Apprenticeship part way through the final 12 month period (which is after the first 12 months), an apprentice must receive a proportion of the minimum of 280 GLH which is at least equal to the proportion of the final 12 month period spent on the Apprenticeship.

The industry would expect the Intermediate Level Apprenticeship to take a minimum of 22 months to complete. Where this is the case a minimum of 582 GLH must be completed over

the duration of the Apprenticeship of which a minimum of 280 GLH must be completed in the first year.

The industry would expect the Advanced Level Apprenticeship to take a minimum of 30 months to complete. Where this is the case a minimum of 717 GLH must be completed over the duration of the Apprenticeship of which a minimum of 280 GLH must be completed in the first year and a minimum of 280 GLH must be completed in the second year.

Minimum off-the-job guided learning hours

Off the job GLH are the hours associated with learning that takes place “away from the immediate pressures of the job” for example, in a training room on the employers’ premises.

Over the duration of the Intermediate Level Apprenticeship a minimum of 353 GLH must be completed off the job. It is anticipated that these GLH will be broken down as follows:

14 GLH - induction

190 GLH - knowledge qualification

45 GLH - level 1 Functional Skills in Maths

45 GLH - level 1 Functional Skills in English

30 GLH - related to completion of the Personal Learning and Thinking Skills (PLTS) logbook

7 GLH - progress reviews (at least one hour every 12 weeks for the duration of the programme)

22 GLH - mentoring (at least one hour every month for the duration of the programme)

Over the duration of the Advanced Level Apprenticeship a minimum of 469 GLH must be completed off the job. It is anticipated that these GLH will be broken down as follows:

14 GLH - induction

295 GLH - knowledge qualification

45 GLH - level 2 Functional Skills in Maths

45 GLH - level 2 Functional Skills in English

30 GLH - related to completion of the Personal Learning and Thinking Skills (PLTS) logbook

10 GLH - progress reviews (at least one hour every 12 weeks for the duration of the programme)

30 GLH - mentoring (at least one hour every month for the duration of the programme)

How this requirement will be met

Delivery and recording of off the job GLH:

Off the job GLH are the hours associated with learning that takes place “away from the immediate pressures of the job” for example, in a training room on the employers’ premises.

Off-the-job GLH will be delivered through the knowledge qualification, Functional Skills, PLTS, ERR, progress reviews and mentoring. This could include GLH delivered through access to a computer through working hours, day release, block release etc.

EU Skills recommends that a plan is developed at the outset of the Apprenticeship to determine how the GLH requirement will be met. GLH should be recorded by the apprentice; for example through a diary or portfolio.

Evidence of completion of the total off the job GLH:

Off-the-job GLH will be evidenced through:

- Certificate of achievement for the relevant knowledge or combined qualification
- Certificate of achievement for the Functional Skills
- Completed ERR workbook sign off sheet (level 4 only)
- Completed Personal Learning and Thinking Skills (PLTS) logbook sign off sheet

This evidence need to be submitted in order to apply for an Apprenticeship completion certificate. In addition, when claiming an Apprenticeship completion certificate, providers will be required to submit an Apprentice Declaration and Authorisation form to EU Skills via Apprenticeship Certification England (ACE - <http://ace.apprenticeships.org.uk/>). As part of this form, Apprentices and the claimant of their completion certificate must sign to declare that the apprentice has received the required minimum levels of Guided Learning Hours (GLH) as set out in this framework. This form can be downloaded from www.euskills.co.uk

Minimum on-the-job guided learning hours

On the job GLH refer to the time taken to develop the practical skills applied in the context of the apprentices' day to day job role. It can be seen as the time the apprentice spends undertaking activities that are routine for their job role and that provide the opportunity to learn, develop and practice skills.

The minimum on the job GLHs vary dependent on the pathway and competence based qualification chosen.

- Over the duration of the Intermediate Level Apprenticeship a minimum of 229 GLH must be completed on the job.
- Over the duration of the Advanced Level Apprenticeship a minimum of 248 GLH must be completed on the job.

How this requirement will be met

On-the-job GLH will be delivered and evidenced through successful completion (demonstrated through a certificate of achievement) of the relevant competence or combined qualification.

This evidence need to be submitted in order to apply for an Apprenticeship completion certificate. In addition, when claiming an Apprenticeship completion certificate, providers will be required to submit an Apprentice Declaration and Authorisation form to EU Skills via Apprenticeship Certification England (ACE - <http://ace.apprenticeships.org.uk/>). As part of this form, Apprentices and the claimant of their completion certificate must sign to declare that the apprentice has received the required minimum levels of Guided Learning Hours (GLH) as set out in this framework. This form can be downloaded from www.euskills.co.uk

GLH must be recorded by the apprentice, for example through a log, diary or portfolio.

Personal learning and thinking skills assessment and recognition (England)

Summary of Personal Learning and Thinking Skills

This Apprenticeship addresses Personal Learning and Thinking Skills (PLTS) through a logbook. The purpose of the logbook is to act as a central location for apprentices to record examples of where and how they have used PLTS to get tasks done in the workplace; it also provides an opportunity for apprentices to record their recognition of their own PLTS development throughout their Apprenticeship. Examples of PLTS will be found in the activities apprentices conduct on a day to day basis as part of their job role, as well through extra curricular activities such the Duke of Edinburgh's Award.

Completion and assessment of the logbook is a mandatory requirement for all apprentices. PLTS are assessed, recognised and evidenced through the logbook which will be evidenced at the point of certification through a signed declaration which must be uploaded to ACE before an Apprenticeship completion certificate can be issued. The logbook is not accredited.

The apprentice must be made aware of the requirement to complete PLTS during their induction to the Apprenticeship. The assessor is expected to guide the apprentice through the logbook to ensure they fully understand the requirements. The assessor must be familiar with the PLTS framework so that they are able to confirm that the apprentice has covered all of PLTS within the Apprenticeship. The assessor will compare the examples recorded by the apprentice in the logbook with the PLTS framework to ensure that all PLTS are covered. Space is provided in the logbook specifically for the assessor to comment on the PLTS achievements by apprentices.

The PLTS Logbook and PLTS framework can be downloaded from www.euskills.co.uk

Creative thinking

The outcome statements for the Creative Thinking group of skills state that apprentices:

- generate ideas and explore possibilities
- ask questions to extend their thinking
- connect their own and others' ideas and experiences in inventive ways
- question their own and others' assumptions
- try out alternatives or new solutions and follow ideas through
- adapt ideas as circumstances change.

Independent enquiry

The outcome statements for the Independent Enquiry group of skills state that apprentices:

- identify questions to answer and problems to resolve
- plan and carry out research, appreciating the consequences of decisions
- explore issues, events or problems from different perspectives
- analyse and evaluate information, judging its relevance and value
- consider the influence of circumstances, beliefs and feelings on decisions and events
- support conclusions, using reasoned arguments and evidence.

Reflective learning

The outcome statements for the Reflective Learning group of skills state that apprentices:

- assess themselves and others, identifying opportunities and achievements
- set goals with success criteria for their development and work
- review progress, acting on the outcomes
- invite feedback and deal positively with praise, setbacks and criticism
- evaluate experiences and learning to inform future progress
- communicate their learning in relevant ways for different audiences.

Team working

The outcome statements for the Team Working group of skills state that apprentices:

- collaborate with others to work towards common goals
- reach agreements, managing discussions to achieve results
- adapt behaviour to suit different roles and situations, including leadership roles
- show fairness and consideration to others
- take responsibility, showing confidence in themselves and their contribution
- provide constructive support and feedback to others.

Self management

The outcome statements for the Self Management group of skills state that apprentices:

- seek out challenges or new responsibilities and show flexibility when priorities change
- work towards goals, showing initiative, commitment and perseverance
- organise time and resources, prioritising actions
- anticipate, take and manage risks
- deal with competing pressures, including personal and work-related demands

- respond positively to change, seeking advice and support when needed
- manage their emotions, and build and maintain relationships.

Effective participation

The outcome statements for the Effective Participation group of skills state that apprentices:

- discuss issues of concern, seeking resolution where needed
- present a persuasive case for action
- propose practical ways forward, breaking these down into manageable steps
- identify improvements that would benefit others as well as themselves
- try to influence others, negotiating and balancing diverse views to reach workable solutions
- act as an advocate for views and beliefs that may differ from their own.

Additional employer requirements

There are no additional employer requirements.

apprenticeship
FRAMEWORKS ONLINE

For more information visit
www.afo.sscalliance.org