

NATIONAL REPORT

for the

United Kingdom



Existing training opportunities for professionals in the Solid Waste Management Industry

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Introduction

Within the UK, waste management is prevalent within the business sector. It is heavily regulated and regularly monitored – therefore, there are many training courses available, covering many different subjects, and there is also a large amount of information available to the sector. There are many formal and informal training courses available – however, very few programmes will result in any sort of certificate or qualification, accredited by a professional body and mapped to the relevant qualification framework. Official training courses are evaluated and regulated to ensure that any training materials produced is of a high quality.

The number of unregistered training courses cannot be easily identified; however the majority of waste management professionals will complete a formal, registered training course. WAMITAB and CIWM are the main awarding bodies for waste management qualifications, and WAMITAB has many qualifications for the waste industry. These qualifications are delivered by approved centers who will usually develop their own training materials in line with the qualifications that they deliver.

Brief overview of the report

This report was compiled after a survey of the current vocational education & training (VET) situation within the waste management sector in the UK was carried out.

The report contains the findings of the national survey and information collated through research into the qualification frameworks and vocational training programmes available within the UK.

To gain a clear understanding of the system within the UK, four countries had to be individually assessed; Scotland, England, Wales and Northern Ireland. Each of the countries has their own approach to VET. Each system is very similar, with only a few minor differences.

Due to the fact that the UK has a fairly advanced system, and a there is a lot of information available on the current VET systems and frameworks within each of the countries, the information within the returned questionnaires served mainly as a supporting tool for the data obtained on the system which is already established.

For the purpose of report, only waste management vocational qualifications will be evaluated. University degrees or college courses are less relevant to those already in the waste industry; vocational qualifications are the most common route, and the most common means of demonstrating competence.

Information about distribution of questionnaires

- number distributed;

Over 600 questionnaires were distributed to:

- waste management facilities
- Associations
- Training providers

- methods of distribution (by e-mail, post, telephone, meeting, etc.)

The main method of distribution was by e-mail, with the relevant questionnaire attached. A number of these were chased up by phone if no response was received. A few questionnaires were distributed and obtained through meetings.

- number collected;

In total 50 questionnaires were collected. This is a very poor result, given how many questionnaires were distributed and the effort that went in to sending out over 600 questionnaires. This could be due to a number of reasons:

- Lack of interest
- Organisations failing to see how the questionnaire is relevant to them or their business
- Organisations having no interest due to the fact that it provides no benefit to them
- People have no time, therefore the questionnaires are not a priority
- Questionnaires may seem pointless because there is already a wealth of information available on a system that is already well established, so people may feel that their opinion is irrelevant.
- Being a smaller company, individuals or organisations are less likely to contribute to our activities.
- There is a level of disconnect between the UK and other member states.

- general information about respondents (types of facilities/ institutions; positions of respondents);

There was a fair distribution of respondents, covering different facilities, institutions and positions, despite the overall result being lower than expected.

Brief description of other information sources

There are several publications and existing research collated for waste management qualifications, and labour market evaluations. Most of this information can be sourced on the internet, primarily through specific websites for waste management, e.g.

- WAMITAB
- CIWM
- EU skills
- European commission
- EU Skills

Information about the authors

Scott Crossett graduated with a B.Sc. in Biology from Paisley University, then Paisley College of Technology, in 1982 and later gained a post graduate diploma in waste management and the environment at Bell College in Hamilton.

Scott has been active within the waste management industry since 1995 and has had experience both internationally and domestically. He established the company SC Waste Management and has been working to develop the company for over 10 years. This small family run business has been involved in many waste management projects in the UK and around the world. He has recently gained his MSc in Waste and the Environment.

Scott is the Head of Centre and lead IV (Internal Verifier) for Trust Waste Management and is heavily involved in the assessment and verification of candidates.

Julie Peer graduated from University of West of Scotland in September 2008 with a BSc Forensic Science. She has been working part time with SC Waste Management Limited since 1st January 2006 and she was made a full time employee on 1st June 2008.

She returned to West of Scotland University in September 2009 where she has completed her Post-Graduate Diploma and is completed her Master of Science Degree in Waste Management and Environmental Management in 2010.

Since then, she has been employed as centre co-ordinator for Trust Waste Management Training. In this role, Julie is responsible for ensuring smooth day-to-day operations of the centre as well as overseeing Quality Assurance processes. She also fulfils training and assessment duties as required on projects.

Qualification structure & Training Methodology

Procedure for establishment of structure (who, how)

New qualifications are developed using National Occupational Standards. NOS for the waste industry are developed by Energy & Utility Skills (EU Skills) in line with labour market research. The standards are used to develop units to make up a full qualification. WAMITAB is the main body responsible for developing new waste management qualifications for England, N.Ireland and Wales. In Scotland, they are developed jointly by SQA and WAMITAB.

The awards are developed in line with the qualifications framework, and the educational requirements, relevant to each country. In Scotland, to gain the waste management SVQ level 4 (SCQF level 9, EQF level 6) the candidate must undertake at least 120 credits at the minimum of SCQF level 9.

Description of the qualification structure

A list of some examples of qualifications and their associated units can be found in annex 3.

Duration

The duration for the qualifications will depend on a number of factors.

1. Level of the qualification
2. Number of units in the qualification
3. The country of delivery
4. The candidate undertaking the award
5. Methods of assessment used by the assessor

On average it would take 6-18 months for a candidate to complete a qualification.

The formal time for the duration of each award comes from the credit rating of the units of the qualification. In Scotland, one credit point represents the outcomes of learning achieved through an estimated 10 hours of learning time. For example, the achievement of a Higher National Diploma (HND) requires the accumulation of 96 SCQF points, at least 48 of which must be at level 7. This means that it would require the input of around 960 hours of time in total, and 480 hours of that should be attaining the learning outcomes of a level seven unit. The structure of the awards may depend on any of the credit rating principles applied for any of the devolved nations where, similar to the example above, there may be a minimum number of credit points achieved at a minimum level.

Timing for different topics

There is no set duration for any topics for any given award however; the unit (covering a specific topic) will have a minimum duration attached to it, as discussed above.

Delivering training in blocks (e.g. everything at once, or with interval for home-tasks, etc.)

The delivery of the award for the most part will be left to the discretion of the assessor. The assessor will base most of the delivery methods on an evaluation of the candidate and the rest will be determined by the award structure itself. The delivery of the award will be done mostly at the candidates work over a period of 18-24 months, on average. The candidate will usually have to spend some time out-with work to carry out some of the tasks required however; in some cases the employer may designate time for the candidate to carry out those tasks during the working day. Assessment or training by the assessor will almost always be carried out at the candidate's place of work.

Training methods (e.g. combining theory and practice)

Every candidate is different in terms of their overall competence and learning abilities. The assessor must use their own initiative and evaluation of the candidate to determine the best means of assessment/delivery of training. Some of the training methods are outlined below:

- Setting written tasks (e.g. written exercises)
- Setting physical tasks
- Delivering power point training
- Using simulation for specific tasks, and evaluating the outcome
- Providing information to the candidate

In terms of assessment, the assessor will evaluate competence through a variety of assessment methods, to generate “evidence”. The evidence items include:

- Witness testimony
- Photographic evidence
- Simulation
- Written statements
- Observation of the candidate
- Questions (oral or written)
- Professional discussion with the candidate
- Physical evidence (e.g. documents, records, etc.)

Training location (e.g. on-the-job training)

Most of the training or assessment is done on-the-job, however sometimes information for the candidate is sent by e-mail and in rare cases, the candidate may meet with the assessor outside of work to provide/generate/discuss any of the evidence items listed above.

Training contents

Topics covered (for different facilities; different positions)

A list of some examples of qualifications and their associated units can be found in annex 3.

Generally, the qualification structure would include waste related topics (e.g. waste sorting, handling, storage, movement, etc.), health and safety issues, environmental impacts, a unit for maintenance/engineering activities, some topics relating to working relationships and some units relating to management skills (e.g. manage improvements, personal development, manage a team, etc.). For each unit there is a set number of mandatory units, followed many optional units to choose from to complete the award for that qualification; therefore the candidate can tailor the award to suit their job responsibility. However, by having many optional units – and the award consisting of a maximum of, for example, 12 units – the candidate may miss out on doing some valuable units.

Learning outcomes and acquired knowledge

The learning outcomes will be dependent on the award. There is often cross-over between awards of a similar nature and they will contain some of the same learning outcomes or knowledge requirements. Some examples of learning outcomes/knowledge requirements and their associated units can be found in Annex 2.

Analysis on how well the following topics are covered in the existing training programmes

TOPICS	ANALYSIS
National legal requirements concerning waste management	Well covered
Waste management policy principles	Sufficiently to well covered
Environmental Impact Assessment principles	Sufficiently covered
Integrated Pollution Prevention and Control (IPPC) principles, including procedure for IPPC permits	Insufficiently covered
Principles of waste classification	Sufficiently to well covered
Technical requirements for equipment and technologies of waste management facility / activity in concern	Insufficiently covered
State-of-the-art technologies in the area concerned	Insufficiently covered
National requirements for waste management procedures (licensing, waste accounting, reporting, etc.)	Sufficiently covered
Principles of emergency preparedness and planning of preventive corrective actions	Well covered
Monitoring requirements	Sufficiently covered
Sustainable development concept	Well covered
Sustainable consumption and production principles	Insufficiently covered
Waste/ pollution prevention principles	Well covered
Product life cycle principles	Insufficiently covered
Principles of Environmental Management	Well covered
Principles of environmental management accounting	Well covered
Corporate social responsibility principles	Sufficiently covered
Other	<ul style="list-style-type: none"> • Storage of liquids and solids; • Waste logistics; • Data security Were all noted as not sufficiently covered.

Analysis on how well the following practical skills are acquired during the existing training programmes

TRAINING PROGRAMMES	ANALYSIS
Waste management procedures in the area concerned	Very well
Environmental management procedures	Very well
Health and safety procedures	Very well
Waste minimisation methodology	Very well
Life cycle assessment methodology	Not well covered
Environmental Impact Assessment methodology	Well covered
Development of IPPC permit application	Not well covered

Evaluation of quality of existing training programmes available in the country

- a. Scope/ contents (e.g. are there any missing/ ignored competences)

For the most part, given the restrictions of the award, the quality of the training materials will fall mainly on the centre. Some centres will develop comprehensive and detailed training materials to assist a candidate through an award, but others may have a limited amount of training materials.

The candidate may have to demonstrate that they have specific knowledge, or a specific skill (in the form of competences) but these are competencies can be generic and it is, therefore, up to the centre to develop more comprehensive training materials for the candidate. An example of this would be if the learning outcome stated that the candidate must be able to correctly use waste classification procedures; these procedures would vary depending on the waste facility. The trainer/assessor could deliver a short training session on waste classification procedures for the waste types appropriate to that site, followed by a short exercise for the candidate to complete, in order that the candidate could sufficiently demonstrate competence for that learning outcome.

b. Integration of theoretical and practical training

Vocational qualifications depend largely on “on-the-job” assessment. This involves a degree of practical training, and this is mostly supported by theoretical tasks. Observing a candidate carrying out their normal activities, and asking the candidate questions about their job role, are the main means of determining competence. Determining competence will be left at the discretion of the assessor, who will be qualified, have experience in the industry, have experience with the qualifications and will be guided by the standards laid out in the award.

c. Quality of training materials

The quality of training materials will vary from centre to centre however, the awarding body will be responsible for ensuring that any supporting/training materials that have been developed by the centre are either deemed fit for purpose, or accredited. This means that there is some level of standardization and the quality is generally good to very good. However, there is no minimum requirement or standard for the training materials and are, in fact, not obligatory. It would be beneficial to have a standardized, associated training package for each qualification available.

d. Qualification of trainers

In order to be an assessor, you must hold the relevant qualification that enables you to carry out assessment work. If you deliver/present training programmes in line with the requirements of the awards delivered by WAMITAB, then you must be approved to do so. This maintains a high level of quality training throughout the industry.

e. Training facilities

Approved centres will have a base which will act as the office for the clerical side of the training, but most of the work is carried out at the work place of the candidate. It would be very unusual for a candidate to be on the premises of the approved centre. There may be cases where additional training must be carried out at the centre due to lack of facilities/restraints at the candidate’s place of work.

Cost and possible source of financing

a. Average cost

The average cost for an award will vary depending on the centre and their procedures. Generally;

- Level 4 (EQF level 6): £1,500 - £3,000
- Level 3 (EQF level 5): £1,000 - £1,500

- Level 2 (EQF level 4): £800 - £1,000

The registration fees required by each awarding body will be standard and will only change on an annual basis, if at all. A list of fees, for WAMITAB, for each of the devolved nations, is included in annex 4.

b. Availability of financial support/ subsidies for training

There are various grants available for vocational training in each of the devolved nations. Most of the grants available cover 50% of the training and are only available to SMEs and individuals. The availability of these grants will vary, as many are only available for a short period of time – especially those relating to a government scheme, where there may be a limited amount of money designated to VET. The schemes will depend on a number of factors:

- Whether you are a business or individual
- Your financial status
- Your age
- Your employment status
- Qualification
- Awarding body

For a business, the main factors that will be assessed are:

- The number of employees
- Whether you are classed as an SME or large business

There is a large amount of funding available for a range of qualifications in the waste management sector in England – more information can be found through the Skills Funding Agency. In Scotland, Skills Development Scotland is a key funding body for further development and training – particularly for SMEs and individuals.

In Wales, Professional and Career Development Loans (PCDLs) are available to individuals who would like to develop themselves and undertake training. GO Wales, a government scheme, offers some grants for further training at work.

In Northern Ireland, the Department for Employment and Learning offers various types of funding support for individuals, employers or training organisations.

c. Other relevant information about financing sources

Apprenticeships are increasingly popular, and there is a significant amount of funding that has been designated for apprenticeships across the UK. This has recently led to the development of an apprenticeship in the waste sector within Scotland.

Councils may offer schemes or grants for local SMEs to develop their business – this could include funding for vocational training.

Conclusions

The existing training programmes, which coincide with the qualifications, are fairly comprehensive. The main problem is that a manager of any facility would have to have many skills, and they are not all covered in the waste manager's awards. Also, depending on the size of the facility, the exact role of the waste manager will vary. The waste manager of a small facility may have to take on more responsibility and have more tangible skills than the manager of a larger facility who may have fewer responsibilities as these responsibilities may have been shared between different people (e.g. financing, health and safety, waste reporting, waste policy/planning).

Each approved centre will have their own support materials for each qualification they deliver. Some centres will offer additional support/training if the candidate should require it or if there was perceived gaps in competencies.

The main shortfalls in competence requirements are with;

- Some specific management skills
- Development of waste policy/strategy
- Guidance for EIA
- Product life cycle principles
- Technical requirements for equipment and technologies of waste management facility / activity in concern
- Waste logistics

It is difficult to address such a multitude of subjects in great detail, for only one qualification. It may be better to have a suite of 3-5 awards for a manager, each containing a set group of subject areas (e.g. 6 units for each qualification) and, depending on the level of management or responsibility, the candidate would have to complete the appropriate number of awards from that suite of qualifications. This would mean that a larger number of subjects would be covered, in greater detail.

References

<http://www.scotland.gov.uk>

<http://www.wamitab.org.uk/>

<http://www.sqa.org.uk>

<http://www.euskills.co.uk/>

<http://www.accreditedqualifications.org.uk/vocational-qualifications.html>

<http://www2.ofqual.gov.uk/qualifications-assessments/89-articles/517-vocational-qualifications>

<http://www.ocr.org.uk/qualifications/by-type/vocational-qcf/>

http://ec.europa.eu/eqf/compare/uk-s_en.htm#comparison

Annexes

- 0.1. Example of questionnaire
- 1.2. Examples of qualifications and units
 - i. Level 2 Certificate for Sustainable Waste Management Operative
 - ii. Level 4 Diploma Waste Manager (Treatment)
- 2.3. Examples of units and learning outcomes
 - i. Level 2 Certificate for Sustainable Waste Management Operative
 - ii. Level 4 Diploma Waste Manager (Treatment)
- 3.4. Fees for S/NVQs
 - i. Scotland Registration Fees
 - ii. Northern Ireland Registration Fees
 - iii. England and Wales Registration Fees

Annex 1: Example of Questionnaire

QUESTIONNAIRE FOR ORGANISATIONS PROVIDING TRAINING FOR WASTE MANAGEMENT FACILITIES' MANAGERS AND OPERATORS

1. What kind of vocational education and training courses, suitable for waste management professionals, do you deliver?

Training Programme	Mark with an X
Registered/Approved training programmes/courses/qualifications for waste management professionals	
Unregistered training programmes/courses on obligatory/compulsory topics (e.g. health and safety)	
Other non-obligatory training programmes/courses (e.g. "Introduction to Waste Legislation")	

2. Please indicate how well you feel the following topics are covered in the training programmes, courses or qualifications that you provide, using the key below:

- 1 = Very well covered
 2 = Well covered
 3 = sufficiently covered
 4 = Not covered

Topic	Programmes for managers	Programmes for operators
National legislation in the Waste Management Sector		
Waste classification		
Waste management policy principles and planning		
Management of specific solid waste streams		
Environmental impacts of waste management facilities		
Monitoring of environmental impacts of waste management facilities and activities		
Processes and technologies applied in waste management facilities		
Technical specification for equipment using in waste management facilities		
National requirements for waste management procedures (licensing, waste accounting, reporting, etc.)		
Principles of emergency planning and response measures		
Procedures and principles of product's		

life-cycle assessment		
Environmental management systems (EMAS and the EN ISO 14000 series)		
Business administration principles		
Health & Safety at work		
Topic: <i>Other (e.g. waste transport, management skills, technical skills)</i>	Programmes for managers	Programmes for operators

3. How have trainees and trainers evaluated the training programmes/delivery of qualifications that you have organized and implemented in solid waste management sector, using the key below?

1 = Low quality

2 = Medium quality

3 = High quality

Quality indicator	Programmes for managers	Programmes for operators
Scope/ units		
Integration of theoretical and practical training		
Quality of training materials		
Competency of trainers		
Range of assessment methods used		
Quality Indicator <i>Other (e.g. availability of assessors/trainers)</i>	Programmes for managers	Programmes for operators

4. Your opinion about the interest/ willingness of waste management facilities' professionals to attend vocational training programmes:

Low	Medium	High

5. What is the general educational level of waste management facilities' professionals who participate to vocational training programmes?

Low	Medium	High

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6. In your opinion, what are the main problems/ obstacles related to vocational training for waste management facilities' managers (e.g. lack of funding, lack of time, lack of incentives, etc.)?

THANK YOU FOR TAKING THE TIME TO COMPLETE THIS!

**PLEASE RETURN YOUR COMPLETED QUESTIONNAIRE TO
JULIE@TRUSTWASTE.COM BY 02-07-12**

Annex 2: Examples of qualifications and units

i. Level 2 Certificate for Sustainable Waste Management Operative

Qualification Structure

To achieve this qualification learners must complete 10 units in total to achieve a minimum of 33 credits.

Learners must complete all of the units in Group A (the mandatory group - consisting of 24 credits).

Learners must also choose one unit from Group B. Learners can then choose any three units from the remaining Groups ensuring that at least one of the Units is at Level 2. Learners who choose to take units from groups C, D and/or E must ensure that they choose a maximum of one unit from each of these groups.

Mandatory Units

Learners must complete all units within this group to achieve 24 credits.

- Work with others to improve customer service
- Conforming to Productive Working Practices in the Workplace
- Maintain a healthy and safe working environment for waste management activities
- Working with other people
- Contribute to the sustainability, maintenance and preservation of the environment
- Comply with emergency procedures on waste management activities

Optional Units (Group B)

Learners must complete one unit from this group.

- Set objectives and provide support for team members
- Plan, allocate and monitor work of a team
- Operate the Weighbridge
- Process received waste
- Manual collection of waste
- Transportation of waste

Optional Units (Group C)

If Learners choose this group they can take a maximum of one unit.

- Unloading a hazardous waste transport vehicle
- Unloading a non-hazardous waste transport vehicle
- Unloading an inert waste transport vehicle

Optional Units (Group D)

If Learners choose this group they can take a maximum of one unit.

- Loading a waste transport vehicle
- Loading a Hazardous Waste Transport Vehicle
- Loading a Non-Hazardous Waste Transport Vehicle

- Loading an Inert Waste Transport Vehicle

Optional Units (Group E)

If Learners choose this group they can take a maximum of one unit.

- Maintain the security of waste management facilities
- Conduct environmental monitoring on a waste management facility

Optional Units (Group F)

If no units have been selected from Groups C, D and E then the learner needs to complete three units from this group.

- Support customer service improvements
- Manage the traffic office
- Manage own professional development within an organisation
- Participate in meetings
- Support learning and development within own area of responsibility
- Resolve customer service problems
- Conform to General Workplace Environmental Requirements
- Direct Vehicle Movements on Site
- Organise the transportation of loads in a waste environment
- Contribute to the provision of customer service in a waste environment
- Validation of waste
- Acceptance of waste
- Support safety around waste collection vehicles
- General duties on waste facilities
- Direct waste delivery crews on a waste management facility
- Store waste and operating materials within a waste management facility
- Dispatch stored and received waste
- Revise planned waste transport operations
- Control and carry out landfill operations
- Clean and adjust small plant and equipment
- Oversee waste process operations
- Maintain the condition of waste process equipment
- Exchange responsibility for control of waste processing operations
- Mechanically handle waste
- Contribute to maintaining sustainable development and environmental good practice at work
- Manual handling, lifting and moving of loads in a waste environment
- Control the risk from vehicle and plant movements on waste management facilities
- Operate equipment to install, remove and replace containers for waste
- Transportation of waste

ii. Level 4 Diploma Waste Manager (Treatment)

Qualification Structure

Candidates must complete all mandatory units, then choose a treatment group from a choice of 7 (hazardous, non-hazardous, inert, biological non-hazardous, biological in-vessel composting non-hazardous, biological open wind-row non-hazardous and biological anaerobic digestion non-hazardous). Candidates must also complete one unit from the Treatment Option Group. Candidates must then choose 2 further units from Pathways Option Group 1 and 2. Candidates can take a maximum of one unit from Pathways Option Group 1, but are not required to take any units from this group. Where no units are taken, candidates must therefore take both units from Pathways Option Group 2.

In doing so candidates will complete 12 units.

Mandatory Units

Candidates must complete all units within this group, regardless of which pathway they choose.

- Monitor procedures to safely control work operations
- Manage improvements to waste management operations
- Procedural Compliance
- Provide leadership and direction for own area of responsibility
- Manage physical resources
- Manage the environmental impact of work activities

Treatment Groups

Candidates must choose one of these groups, and complete all units within their chosen group.

Treatment Hazardous Waste

Candidates who choose this group must complete all units within the group.

- Manage site operations for the treatment of hazardous waste
- Manage the reception of hazardous waste
- Manage the movement, sorting and storage of waste

Treatment Non-Hazardous Waste

Candidates who choose this group must complete all units within the group.

- Manage site operations for the treatment of non-hazardous waste
- Manage the reception of non-hazardous waste
- Manage the movement, sorting and storage of waste

Treatment Inert Waste

Candidates who choose this group must complete all units within the group.

- Manage site operations for the treatment of inert waste
- Manage the reception of inert waste
- Manage the movement, sorting and storage of waste

Treatment Biological Non-hazardous Waste

Candidates who choose this group must complete all units within the group.

- Manage site operations on a non-hazardous waste biological treatment facility
- Manage the reception of non-hazardous waste
- Manage the movement, sorting and storage of waste

Treatment Biological In-vessel Composting Non-hazardous Waste

Candidates who choose this group must complete all units within the group.

- Manage site operations on a non-hazardous waste biological in-vessel composting treatment facility
- Manage the reception of non-hazardous waste
- Manage the movement, sorting and storage of waste

Treatment Biological Open Wind-row Non-Hazardous Waste

Candidates who choose this group must complete all units within the group.

- Manage site operations on a non-hazardous waste biological open windrow composting treatment facility
- Manage the reception of non-hazardous waste
- Manage the movement, sorting and storage of waste

Treatment Biological Anaerobic Digestion Non-hazardous Waste

Candidates who choose this group must complete all units within the group.

- Manage site operations on a non-hazardous waste biological anaerobic digestion treatment facility
- Manage the reception of non-hazardous waste
- Manage the movement, sorting and storage of waste

Treatment Option Group

Candidates must choose one unit from this group.

- Manage the transfer of outputs and disposal of residues from biological open windrow composting treatment operations
- Manage the transfer of outputs and disposal of residues from biological anaerobic digestion treatment operations
- Manage the transfer of outputs and disposal of residues from inert waste treatment and recovery operations
- Manage the transfer of outputs and disposal of residues from biological in-vessel composting treatment operations
- Manage the transfer of outputs and disposal of residues from hazardous waste treatment and recovery operations
- Manage the transfer of outputs and disposal of residues from non-hazardous waste treatment and recovery operations
- Manage the transfer of outputs and disposal of residues from biological treatment operations

Pathways Option Group 1

Candidates can choose a MAXIMUM of one unit from this group. Candidates do not have to choose units from this group. If no units are taken from this group the candidate must choose two units from Pathways Option Group 2.

- Generate and retain waste and resource management business
- Manage customer care programs to improve waste management services
- Contribute to the sustainability, maintenance and preservation of the environment
- Control work activities on a waste management facility
- Manage the transfer of outputs and disposal of residues from remediation of contaminated land
- Contribute to maintaining sustainable development and environmental good practice at work
- Conform to General Workplace Environmental Requirements
- Operate the Weighbridge
- Direct Vehicle Movements on Site
- Maintain Vehicle Crew Compliance with Operational Requirements
- Control the Sale of Stocked Material or Products
- Conforming to General Safety in the Workplace
- Conform to Efficient Working Practices in the Workplace
- Manage the traffic office
- Contribute to the provision of customer service in a waste environment
- Resolve customer service problems
- Support customer service improvements
- Work with others to improve customer service
- Manage own professional development within an organisation
- Set objectives and provide support for team members
- Plan, allocate and monitor work of a team
- Participate in meetings
- Make effective decisions
- Plan waste transport operations
- Organise the Transportation of Loads

Pathways Option Group 2

If no units are taken from this group the candidate must choose two units from Pathways Option Group 2. If the candidate chooses a unit from Pathways Option Group 1 then only one unit must be taken from this group

- Manage and maintain effective systems for responding to emergencies
- Control maintenance and other engineering operations
- Identify and evaluate sustainable resources in a waste environment
- Review the quality of customer service
- Ensure compliance with legal, regulatory, ethical and social requirements
- Implement change in own area of responsibility
- Work productively with colleagues and stakeholders
- Recruit staff in own area of responsibility
- Manage and Plan an Operational Area within an Organisation
- Plan, allocate and monitor work in own area of responsibility
- Support learning and development within own area of responsibility
- Manage a budget for own area or activity of work

Annex 3: Examples of units and learning outcomes

i. Level 2 Certificate for Sustainable Waste Management Operative

Contribute to the sustainability, maintenance and preservation of the environment

Level: 2		Observation	Question and Answer	Simulation/ Realistic working environment
Credit Value: 2				
Learning Outcome	Assessment Criteria			
1. Operate and look after equipment and materials so as to reduce environmental damage	1.1 Operate and look after equipment and materials so as to reduce environmental damage: <ul style="list-style-type: none"> • Recyclable materials. • Static and mobile plant. • Pollution. • Physical disturbance. 	X	x	
	1.2 Make sure work is carried out in accordance with approved procedures and practices: Health, Safety and Environmental related to: <ul style="list-style-type: none"> • The individual and others. • The organisation. • Regulatory and statutory requirements. • Relevant company policies. • Risk assessment. 	X	x	
	1.3 Recognise any likely or actual environmental damage and take the appropriate action: <ul style="list-style-type: none"> • Pollution. • Physical. 	X	x	
	1.4 Recognise Health, Safety and Environmental incidents related to: <ul style="list-style-type: none"> • The individual and others. • The organisation. • Regulatory and statutory requirements. • Relevant company policies. • Risk assessment. 	X	x	
	1.5 Carry out work in a manner which minimises environmental damage: <ul style="list-style-type: none"> • Pollution. • Physical disturbance. 	X	x	

2. Understand operational processes to recommend improvements to maintain environmental good practice	2.1 Describe the operational processes to maintain environmental good practice	X	x	
3. Understand how to contribute to the sustainability, maintenance and preservation of the environment	3.1 Describe ways in which tools and materials should be used in order to minimise environmental damage.	X	x	
	3.2 Describe the consequences of pollution.	X	x	
	3.3 Describe how to recognise wastage of energy, equipment and materials.	X	x	
	3.4 Describe working methods that will minimise pollution and waste of resources.	X	x	
	3.5 Describe types of damage which may occur, the impact these can have on the environment and the corrective actions to be taken.	X	x	
	3.6 Describe Methods of waste disposal which will minimise the risk to the environment.	X	x	

ii. Level 4 Diploma Waste Manager (Treatment)

Manage the environmental impact of work activities

Level: 4		Observation	Question and Answer	Realistic working environment
Credit Value: 10				
Learning Outcome	Assessment Criteria			
1. Understand the legal requirements and environmental policies that impact on own area of responsibility.	1.1 Explain the legal requirements that impact on own area of responsibility.		x	
	1.2 Explain the environmental policies that impact on own area of responsibility.		x	
2. Understand how to assess the impact of work activities on the environment and how this can be minimised.	2.1 Explain what specialist advice is available to manage the environmental impact of work activities.	x	x	
	2.2 Explain how to assess the impact of work activities and resources on the environment.	x	x	
	2.3 Explain how to minimise the environmental impact of work activities.	x	x	
3. Be able to assess and report on the environmental impact of work activities in own area of responsibility.	3.1 Assess the environmental impact of work activities and resource use.	x	x	
	3.2 Produce a report on the environmental impact of work activities and resource use, with recommendations for improvement.	x		
4. Be able to organise work activities and resource use to minimise environmental impact.	4.1 Adapt the use of resources in own area of responsibility to reduce environmental impact.	x	x	
	4.2 Organise activities in own area of responsibility to reduce environmental impact.	x	x	
5. Be able to promote ongoing improvement in environmental performance.	5.1 Establish means by which individuals can identify and report opportunities for improving environmental performance.	x	x	
	5.2 Communicate environmental benefits resulting from changes to work activities.	x	x	

ii. Northern Ireland WAMITAB Registration fees



Table A2 – NORTHERN IRELAND ONLY: WAMITAB Registration and Certification Charges (Effective between 1 April 2012 and 31 March 2013)

Award/qualification type	WAMITAB fees (£)* 1 April 2012
CoTC scheme	
CoTC Level 1 (CoTC + CoP qualification)	100 (200-100)
CoTC Level 4 (CoTC + CoP qualification)	100 (200-100)
1 st CoTC (issues Level 1 or Level 4 CoP qualification)	200 (200-00)
1 st CoTC (CoTC only)	100
2 nd CoTC (CoTC only)	100
Registration Certificate (CoTC)	00
CoP qualification (no Level 1 Statutory scheme)	100
CoP qualification (no Level 4 Statutory scheme)	100
CoP qualification only for Current CoTC certificate	100
Certificate of Qualifying Experience (CoQ)	00
Pre-employment qualifications	
Entry level 1 pre-employment	00
Entry level 2 pre-employment	00
Level 1 pre-employment	00
Level 2 Pre-employment qualification	00
Level 1 and 2 non-statutory CoP qualifications	
Level 1 Street Cleaning	00
Level 2 Street Cleaning	00
Level 1 Cleaning and Support Services	00
Level 2 Cleaning and Support Services	00
Level 1 Waste Management Operations	00
Level 2 Waste Management Operations	00
Level 1 Recycling Operations	00
Level 2 Recycling Operations	00
Level 2 Wasteage Operator (4 units)	00
charge for extra optional units	10.00 per unit
Level 3 and 4 CoP qualifications	
Level 3 CoP qualification only	100
Level 4 CoP qualification only	100
Level 3 CoP qualification Management of Recycling Co-1	100
Level 4 CoP qualification Management of Recycling Co-1	100

iii. England and Wales WAMITAB Registration fees



Table A1 ENGLAND AND WALES ONLY - WAMITAB Registration and Certification Charges (Effective during the period between 1 April 2012 and 31 March 2013)

Accreditation type	WAMITAB fees (£) ^{1,2}
1 April 2012	
High Risk sites registration	
GCQ Level 3 - CoTC	215 (85-125)
GCQ Level 4 - CoTC	215 (85-125)
GCQ Level 3 and 4 with 2 nd CoTC	215 (85-125)
2 nd CoTC (CoTC only)	125
2 nd CoTC (CoTC only)	125
Replacement Certificate (CoTC)	55
GCQ any Level 3 statutory scheme	154
GCQ any Level 4 statutory scheme	154
GCQ any for listed CoTC activities	154
Medium Risk sites registration	
4 units of the GCQ qualification	75
1/2 of Level 3	75
Low Risk sites registration	
4 units of the GCQ qualification	55
Continuing Competence scheme (based about 1st test)³	
Continuing Competence test - Low risk	105
Continuing Competence test - Medium risk	105
Continuing Competence test - High risk	105
Pre-employment qualifications	
Skills level 2 pre-employment	60
Skills level 3 pre-employment	60
Level 1 pre-employment	40
Level 2 pre-employment qualification	55
Level 1 and 2 non-statutory GCQ qualifications	
Level 1 Street Cleaning	60
Level 2 Street Cleaning	67
Level 1 Cleaning and Support Services	60
Level 2 Cleaning and Support Services	67
Level 1 Waste Management Operations	60
Level 2 Waste Management Operations	67
Level 1 Recycling Operations	60



Level 2 Recycling Operators	81
Level 3 Wastewater Operator (1 unit)	75
Charge for extra optional units	£1.50 per unit
Level 3 and 4 OCF qualifications	
Level 3 OCF (no installations)	104
Level 4 OCF (no installations)	104
Level 3 OCF Management of Recycling Op's	104
Level 4 OCF Management of Recycling Op's	104
Certificate of Competence	
C.o.C only (where OCF qualification is awarded by another awarding body)	33
Replacement C.o.C	33
Apprenticeship	
Level 2 Apprenticeship with F3 registration via WAMITAB OCF centre	102
Level 2 Apprenticeship without F3 registration via WAMITAB OCF centre	107
Level 3 Apprenticeship with F3 registration via WAMITAB OCF centre	109
Level 3 Apprenticeship without F3 registration via WAMITAB OCF centre	114
Unit Registration/Verification	
<ul style="list-style-type: none"> * Unit certificate when candidate is registered for 1st OCF qualification with WAMITAB * Registration fee for single or multiple units 	No charge £12.50 per unit
Books for sale	
Paper based text – Level 1 (and 2)	20
Entry level texts – paper based	10