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Trainer Handbook

for the identification,
quantification and handling
of wood packaging materials



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1 Introduction

The aim of this training programme is to support the adoption of the protocol for the verification of wood packaging recycling. The protocol aims to provide confidence in the claimed level of wood packaging waste recycled in the UK. Ultimately, the protocol will only be as effective as the ability of those who actually perform the identification and quantification tasks.

This training session will enable participants to identify wood packaging in a load and estimate the wood packaging waste content of incoming loads in a manner which ensures a consistent approach across the UK. It is envisaged that the training will be provided to the operators of all accredited wood recycling sites.

2 How to use the training pack

The training pack has two main elements:

- **Overheads:** provided on a disc as a Power Point presentation and a Word document. The presentation can be played through a projector, printed onto acetates for an overhead projector or printed onto paper. It is advisable not to give out a copy of the overheads at the start of the session as this will encourage trainees to have a quick flick through and then switch-off.
- **Lesson plans:** these provide a structure to the training programme, to ensure that there is some consistency in the subject areas which are covered.

The material is designed to be flexible and trainers are encouraged to make the programme company specific, e.g. by introducing your own reporting forms and encouraging discussion on site-specific procedures.

3 Training materials and facilities

The following items are required:

- A training room which is free from interruption.
- PowerPoint projector, overhead projector or paper based copies of the overheads.
- Flip chart: useful to jot down the outcome of discussions.
- Samples of softwood, hardwood and board material for session 2.
- Sample load to practice on in session 4.
- Copies of the quiz question paper (section 7), for use in session 4.

4 How to run a good training programme

A good training programme is one which achieves its objective, in this case enabling participants to accurately identify, quantify and record wood packaging materials in a consistent manner. Other factors which will contribute to whether the training is perceived to be a success include:

- Is it enjoyable for the participants?
- Is it enjoyable for the tutor?
- Does it have a lasting effect?

The following suggestions may help to maximise the success of the session.

4.1 Involvement

Different people learn in different ways. For example, training for a highly academic group of accountants is likely to be entirely classroom based with a large amount of information being conveyed by overheads.

The audience for our training programme will typically not feel particularly comfortable in the class room and may not have had a sit down lesson since school days. They will prefer practical learning which needs to be of relevance to their daily tasks. Concentration spans are likely to be limited and pictures will be more effective than volumes of text.

Particular attention will be needed to the following adage about training:

Tell me and I will forget
Show me and I may remember
Involve me and I will understand

If we simply talk at the participants, their eyes will quickly glaze over as they start to think about the weekend and forthcoming holidays. Their concentration span will be lengthened if we give some practical demonstrations, but in order to keep them interested throughout the session, it is necessary to involve them, e.g.:

- Make it clear at the very start of the session that it is informal and interactive. Questions are always welcome.
- Get them to relax: a major barrier to interaction will be the fear of saying something which makes them appear stupid. Emphasise that there is no such thing as a stupid question or answer.
- Give them a reason to participate: emphasise what is in it for them.

- Encourage discussion throughout the event: rather than simply introducing a new topic on an overhead, it is beneficial to discuss the topic first, to encourage participants to become involved and do some thinking.

For example, if we simply tell the participants that there are three main types of wooden materials for packaging purposes (softwood, hardwood and board material), they will soon forget. A better approach is to start by asking them to name some types of wooden materials. If there is a poor response, get them to think about the wooden materials they see at home or at work. Ask them to name some types of wooden material which are present in the chairs, desks or walls of the class room. If they were building some shelves at home, what would they make them from? Then use the overhead to reinforce the answers which you have drawn out of the group.

The training plans provide some suggestions on potential questions to encourage discussion. Over time you will undoubtedly develop your own questions which are better suited to your own style or the circumstances of your particular company/employees.

4.2 Motivation

The majority of people go to work simply to earn money. Sitting in a classroom is often perceived to be an easier way to earn money compared to performing the normal day job. Therefore, we need to motivate the participants to play an active role and this motivation must be generated in the first few minutes of the training. A good way of encouraging motivation is to address the issue of 'what's in it for me' - showing participants what they will gain personally from the training session.

One of the early overheads suggests that there will be a number of personal benefits.

- Recognition of your skills: showing participants that the company recognises that their job is an important one which requires skills.
- Certificate of competence: some of the participants will not have many formal qualifications and will appreciate the fact that they get a certificate of competence upon successful completion of the course.
- Job security: their role is crucial to the success of the company - on which their job security depends.

4.3 Enthusiasm

The enthusiasm of the trainer is vital to ensuring that the session is an enjoyable, stimulating and interesting half day rather than an unbearable eternity! Enthusiasm can be conveyed by smiling, the use of a varied vocal range and a degree of animation on the part of the trainer.

4.4 Confidence

It is vital that the trainer is perceived to have a good grasp of the subject area and of the training programme itself. Before running the training session for the first time, it is highly recommended that you present it to an empty class room. This will give you confidence in the structure of the programme, the questions you will use to encourage discussion and the sequence of the training materials. A good knowledge of the technical content of the subject will also promote confidence.

4.5 Organisation

Preparation is a vital ingredient of a session which runs smoothly and conveys a confident trainer. Prior to running the training consider the following:

- Which overheads do you need to alter to suit your particular company?
- Are you up to speed with the technical issues such as the packaging regulations? Background information is provided in Chapter 6.
- Do you have the required materials and facilities? (see Chapter 3).
- Have the participants and their managers been informed of the training well in advance?

4.6 Tests

If participants know that they are to be tested on the subject, they will pay more attention. Therefore, it is useful to have an ongoing series of verbal tests at the end of each section or upon the return from a break.

In addition, a 20 question quiz has been developed for the end of the training session to ensure that there has been a good grasp of the subject materials. Ten of the most important questions receive two marks each, whilst the others receive one. Consequently, the test is out of 30 and a pass mark of 24 is suggested to successfully complete the course. A training certificate can then be issued to successful candidates, a draft of which is attached in Chapter 8.

5 Lesson plans

The training programme is broken down into four sessions:

- Introduction (30 minutes).
- Wood and packaging identification (65 minutes).
- Wood and packaging quantification and recording (55 minutes).
- Practical exercise and test (75 minutes).

A lesson plan is provided for each of the four sessions. Each plan summarises the main aim of the session and provides a number of intended outcomes. The main elements of the lesson are then highlighted to provide a structure and to illustrate the resources which are required. The use of such lesson plans will help to ensure consistency of training across the country.

In order to promote interaction, there are plenty of suggestions regarding discussions. For example, in session 2, the resources column suggests 'Discussion, then Slide 9' and the corresponding entry in the content column suggests 'Discussion: what different types of wood are there?'

The aim is to encourage the participants to start thinking about the topic (wood types) and to discuss their thoughts, prior to moving onto slide 9 which highlights the main types of wood. The process of getting participants to think about the topic prior to covering it, will significantly increase the chance of the content sticking when compared to simply rattling through the overheads. The technique also encourages involvement rather than just listening.

A suggestion for an end-of-course handout is attached in Chapter 8. This could either be given to each participant and/or placed on a notice board.

Session 1	Introduction		
Aim	Introduce the course, generate motivation and provide background information		
Intended outcomes	Candidates will be able to: <ul style="list-style-type: none"> • Identify the reasons why correct packaging identification is important • Briefly summarise the packaging regulations (1 or 2 sentences) • State the use of a packaging waste recovery note 		
Duration	20 minutes		
Time	Topic	Content	Resources
9.00	Welcome	<ul style="list-style-type: none"> • Introduction to the training event • Duration, format, quiz, overview of topic • Interactive session: <ul style="list-style-type: none"> • Participant views are very important • Need to stimulate interaction via conversation at the start • Emphasise practical nature of the session 	Slide 1 Discussion, e.g. <ul style="list-style-type: none"> • What was the last training you had? Did you enjoy it and why? • How much training have you had on this topic?
		<ul style="list-style-type: none"> • Aims 	Slide 2
		<ul style="list-style-type: none"> • Discussion: why is it important to get accurate packaging figures? • Driving forces for the training • Brief summary of protocol 	Discussion, then Slide 3
9.10	Legislation	<ul style="list-style-type: none"> • Duty of Care places duties on our company and our customers <ul style="list-style-type: none"> • Transfer notes are a legal requirement from each customer either annually or for each trip. They specify the type of waste involved • Therefore, contaminants may make your site and the customer non-compliant • European Waste Catalogue numbers are now required - 6 digits. The correct EWC numbers are a legal requirement • Customer contract specifies acceptable materials. Price is dependent upon quality so the company needs to pay attention to what it receives • Must work together to ensure that only the correct types of material are placed in containers • Discussion: what type of contaminants have you found in loads of wood waste? 	Slide 4 Discussion

	<ul style="list-style-type: none"> • Packaging regulations <ul style="list-style-type: none"> • Aim of the regime • Implications for packaging users 	Slide 5
	<ul style="list-style-type: none"> • Packaging recovery notes and accredited reprocessors • Also mention the difference between reuse and recycling: <ul style="list-style-type: none"> • Reuse: e.g. milk bottles being used many times for the same purpose • Recycling - reprocessing for reuse, e.g. processing pallets to make board material 	Slide 6
	<ul style="list-style-type: none"> • Waste legislation summary <ul style="list-style-type: none"> • Aim to draw out the practical implications • Emphasise the need for waste to be the same as the transfer note, EWC code and customer contract 	Slide 7
	<ul style="list-style-type: none"> • Discussion: what benefits does the training bring to the company? What benefits to you as an individual? • Need to gain motivation by emphasising what the participant can gain from the training 	Discussion, then Slide 8
	<ul style="list-style-type: none"> • Consequences of mistakes for the company and individuals 	Slide 9

Session 2	Wood packaging identification		
Aim	Provide knowledge and practical experience of identifying wood types and wooden packaging materials		
Intended outcomes	Candidates will be able to: <ul style="list-style-type: none"> Identify different types of wood Distinguish between packaging and non-packaging 		
Duration	65 minutes		
Time	Topic	Content	Resources
9.30	Wood identification	<ul style="list-style-type: none"> Discussion: what different types of wood are there? 3 main types of wood UK consumed c7.8 mil tonnes (2001), 18% of which went into packaging (WRAP, 2003) 	Discussion, then Slide 10
		<ul style="list-style-type: none"> Softwood Pass an example around; what products do you typically see it used in? Top picture - pine board Bottom picture - pine off-cuts 	Slide 11 Sample
		<ul style="list-style-type: none"> Hardwood Top picture - beech planks awaiting conversion into a product e.g. furniture Bottom picture - process waste off-cuts 	Slide 12 Sample
		<ul style="list-style-type: none"> Board material 1 Top picture shows (left to right) <ul style="list-style-type: none"> Medium density fibreboard Plywood Melamine-faced chipboard (MFC) x 2 Bottom picture: MFC process waste off-cuts 	Slide 13 Sample
		<ul style="list-style-type: none"> Board material 2 <ul style="list-style-type: none"> Left picture: Oriented Strand Board (OSB) mainly used for construction purposes Right picture: chipboard (rear) and MFC (front) 	Slide 14
		<ul style="list-style-type: none"> Treated timber - discussion What are the problems? What is the company's method of dealing with it? Top picture - sleepers Bottom picture - mixed treated timber including telegraph poles 	Slide 15

9.45	Packaging identification	<ul style="list-style-type: none"> • Discussion: name some types of wood packaging • Run through list of wooden packaging materials with examples 	Discussion, then Slide 16
		<ul style="list-style-type: none"> • Photos of actual packaging • Clockwise from top left: softwood pallets, bearers, chipboard pallets and reels 	Slide 17
		<ul style="list-style-type: none"> • Discussion: name some types of wood which are not packaging? • Run through list of wooden non-packaging materials with examples 	Discussion, then Slide 18
		<ul style="list-style-type: none"> • Photos of actual non packaging • Clockwise from top left: <ul style="list-style-type: none"> • MFC off-cuts from furniture manufacturing • 'Slab wood' - lengths of outer tree removed at the start of fence panel manufacture • Softwood raw materials discarded by a door manufacturer • Timber frame house partition wall sections 	Slide 19
10.10	Exercise	<ul style="list-style-type: none"> • 5 practice slides for wood and packaging identification • Ask trainees to identify: <ul style="list-style-type: none"> • What types of wood are present?" • Are the materials packaging or not? 	<p>Show a slide</p> <p>Give participants a chance to think of their answer</p> <p>Discuss the results</p>
		<ul style="list-style-type: none"> • 1: Sheets of chipboard (in this case for conversion into furniture) <ul style="list-style-type: none"> • The main boards are not packaging • The bearers are packaging • There may be a cover board at the bottom of each pack which is packaging and will be discarded 	Slide 20
		<ul style="list-style-type: none"> • 2: Mixed load of wooden material <ul style="list-style-type: none"> • Some packaging such as chipboard pallets, softwood pallets (right hand side) and plywood pallet (in front of worker) • Much of the rest might be packaging but we would need to know the source 	Slide 21
		<ul style="list-style-type: none"> • 3: Wood waste from a civic amenity site <ul style="list-style-type: none"> • Little if any packaging as the load consists of doors, broken furniture and unidentifiable wood scrap 	Slide 22

		<ul style="list-style-type: none"> • 4: Mixed load of contaminated wooden material • Some packaging such as a reel (top centre) and pallets (right) • Some off-cuts which might be packaging but we would need to know the source • Contamination such as soil (left) and metal (centre) 	Slide 23
		<ul style="list-style-type: none"> • 5: Softwood • A small amount of identifiable packaging e.g. blue pallet • The remainder is largely softwood which might be packaging but we would need to know the source • In fact, the consignment was from a pallet reconditioner and the load is virtually all packaging • Mention that process off-cuts from a pallet reconditioner (i.e. the off-cuts from the new material they are using to make the repair) would not count as packaging 	Slide 24
10.25	The importance of source	<ul style="list-style-type: none"> • Therefore, can agree what is wood and what type of wood it is • Some items are clearly packaging, others may or may not be • How can we be sure? 	Discussion, then Slide 25
10.30	Summary	<ul style="list-style-type: none"> • Questions and answers/discussion, then 	Slide 26

Session 3	Wood and packaging quantification and recording		
Aim	Ensure understanding of basic quantification and the records which are generated by the process		
Intended outcomes	Candidates will be able to: <ul style="list-style-type: none"> • Understand percentages • Quantify wooden packaging material • Record the findings of their assessments 		
Duration	55 minutes		
Time	Topic	Content	Resources
10.35	Recap	<ul style="list-style-type: none"> • Quick series of questions on sections 1 & 2, e.g. <ul style="list-style-type: none"> • Why is correct packaging identification important? • Briefly explain the packaging regulations • What is a PRN? • Name some different types of wood • How can we decide if a piece of wood is packaging or not? 	
10.40	Packaging quantification	<ul style="list-style-type: none"> • Discussion: who enjoys maths? Are you happy with percentages? • Basic summary of percentages <ul style="list-style-type: none"> • Represents number as a proportion of 100 • If a sample represents half it equals 50% 	Discussion, then Slide 27
		<ul style="list-style-type: none"> • The blue zone represents a pile of wood waste which has roughly been divided into ten segments • The number of segments dominated by wood packaging can then be estimated to help with the visualisation of a percentage figure 	Slide 28
		<ul style="list-style-type: none"> • Questions <ul style="list-style-type: none"> • Answer 1: 70% as 2/3 of the material is packaging but 66% is rounded up to nearest round figure • 40%: only the damaged pallets are recycled. There are 50 pallets, so multiplying the number by 2 will give the percentage 	Slide 29
		<ul style="list-style-type: none"> • Discussion: the above is fine in theory, but what problems are there in practice? • Densities of wood types vary: softwood 500 kg/m³, chipboard 650 kg/m³, hardwood 800 kg/m³ (weights applicable to solid blocks with no air gaps) • Air gaps vary: e.g. cable reels, pallets, vegetable crates 	Discussion, then Slide 30

		<ul style="list-style-type: none"> • 3 practice slides for quantification • Provide the details of the source given below • Ask participants to jot down an estimate of the amount of packaging • Then general discussion of results 	<p>Show a slide</p> <p>Give participants a chance to think of their answer</p> <p>Discuss the results</p>
		<ul style="list-style-type: none"> • <i>Information for trainees</i> 'A load of packaging received from a door manufacturer'. • <i>Background for trainer</i> - as the doors open there appears to a small amount of packaging (c10%) in the form of wooden pallets. • However, the load needs to be spread to show that there are a good number of one trip pallets made up of a sheet of board material on softwood bearers. Total packaging content estimated around 20% 	Slide 31
		<ul style="list-style-type: none"> • <i>Information for trainees</i> 'In the foreground is a load from a pallet recycling company' • <i>Background for trainer</i> - there is plenty of identifiable packaging and the unidentifiable pieces of wood were generated by a pallet recycling company. These smaller pieces were typically used in appearance, rather than virgin off-cuts. Therefore, this load was estimated to contain 100% packaging wood 	Slide 32
		<ul style="list-style-type: none"> • <i>Information for trainees</i> 'Firstly consider the amount of packaging if this load is received from a furniture manufacturer. Secondly consider the amount if it is received from a pallet recycling company'. • <i>Background for trainer</i> - this load contains a small amount of recognisable packaging. In reality, it did come from a pallet recycling company and was estimated to contain 100% packaging as there were no obvious process waste off-cuts. • If it had been received from a furniture manufacturer, the estimate would have been 10% 	Slide 33
11.00	Inspection procedures and records	<ul style="list-style-type: none"> • Discussion: what procedure do we follow for a load entering the site? 	Discussion, then Slide 34
		<ul style="list-style-type: none"> • Inspection and assessment • Mention the need to recognise the presence of contaminants (e.g. metals) in a load 	Slides 35 and 36
		<ul style="list-style-type: none"> • Documentation (company to insert own form or use the basic example on slide 35) • Nature of form • How to complete 	Slide 37 or own slide
11.15	Summary	<ul style="list-style-type: none"> • Brief recap on the main points of the session 	Slide 38
11.25	Overview of final session	<ul style="list-style-type: none"> • Provide details of the practical exercise - location, duration and what the trainees are expected to do 	
11.30	Finish	<ul style="list-style-type: none"> • Move to area for exercise 	

Session 4	Practical exercise and test		
Aim	Ensure complete understanding of training and ability to apply knowledge on site		
Intended outcomes	Candidates will be able to: <ul style="list-style-type: none"> • Apply training to their job • Pass exam 		
Duration	75 minutes		
Time	Topic	Content	Resources
11.30	On-site exercise	<ul style="list-style-type: none"> • Participants to tip and assess actual load • Need to record figures on the company reporting form 	1 load for assessment Provision of details on source Safe area in which to tip and assess
		<ul style="list-style-type: none"> • Discussion of estimates and findings • Physical separation and re-weighing of recyclable packaging or non-packaging element 	Weighbridge
12.15	Test	<ul style="list-style-type: none"> • 20 multiple choice questions 	
12.30	Conclusion	<ul style="list-style-type: none"> • Run through answers and allocate marks • Look forward - what is expected in future from trainees 	
12.45	Close		

6 Background information

This section provides more detailed information on waste legislation and the packaging regulations. The section is provided for trainers to ensure that they have sufficient depth of knowledge to be able to handle most questions during the sessions.

6.1 Duty of Care

The Duty of Care regarding waste originated from the Environmental Protection Act 1990, Part II. The regime recognises that a chain of individuals are involved in the life-cycle of waste. This will start with the holder of the waste, who will consign the waste to a registered waste carrier, who might take it to a recycling or disposal site. The Duty of Care was introduced in 1992 to prevent the incorrect storage, handling, treatment or disposal of waste throughout this life-cycle, thus preventing harm to human health or the environment. It seeks to do this by placing a duty on sites to ensure that:

- They do not commit an offence themselves.
- They do not allow others in the chain to commit an offence.

The system is designed to be essentially self-regulating, with the burden of proof being on your site to show that it has fulfilled its duty. The duty applies to anyone who produces, imports, carries, keeps, treats or disposes of controlled waste, or as a broker has control of such waste.

The duty is not really a single duty, but four interconnected duties:

- **To prevent the unlawful disposal of the waste by anybody**
As a waste recycler, your site must take all reasonable steps to prevent unlawful disposal of the waste by any third parties .
- **To make sure that waste does not escape your control or that of any other person**
Similarly, this is an extended responsibility. It requires your site to handle and store the waste correctly on site. The duty also requires that the waste is placed in suitable containers for any transport or storage.
- **Only to transfer the waste to 'authorised person'**
Authorised persons for this purpose are the waste collection authority or, more commonly, a registered waste carrier.
- **To give the person taking the waste a written description which will enable them to deal lawfully with the waste** (i.e. meet his/her own duty of care).
This duty involves the use of transfer notes to create an audit trail of waste movements.

The transfer note needs to contain sufficient information to enable any person subsequently handling the waste to know enough for the purposes of containing, keeping, treating and disposing of it correctly. The following details will typically be required:

- Nature of containment.
- Quantity of waste.
- Time/place of transfer and names and addresses of the parties to the transfer.
- Whether the transferor is the generator (or importer) of the waste.
- If one of the parties is the holder of a waste disposal/management license.
- Registered waste carrier details.

The waste producer, the waste carrier and your recycling site are all under a duty to ensure that transfer notes are in place and relevant details are recorded. Transfer notes can either be issued annually (in the case of regular consignments of the same type of material) or for each trip.

6.2 European Waste Catalogue code numbers

All wastes must now be designated with a code from the European Waste Catalogue. Each comprises a six figure number, which is made up of three sets of two numbers:

- The first two denote the industry type - for example '03' refers to 'Wastes from wood processing and the production of panels and furniture pulp, paper and cardboard'.
- Second two denote the sub headings of the EWC - e.g. '01' refers to 'wastes from wood processing and the production of panels and furniture'.
- Third set of two digits denote the individual waste. '04' refers to 'sawdust, shavings, cuttings, wood, particle board and veneer containing dangerous substances'.

Thus the full code for sawdust containing dangerous substances, e.g. derived from treated timber, would be 03-01-04. This category also has an asterisk next to its listing, showing that the waste would be classed as 'special/hazardous' if the level of contaminants exceeds the relevant thresholds.

6.3 Producer Responsibility Obligations (Packaging Waste) Regulations 2005

Producer Responsibility is the concept of making producers¹ responsible for obtaining some value from their materials, products and wastes via reuse, recovery and recycling. The first target area has been packaging waste and other areas are following such as end-of-life vehicles and waste electrical equipment.

The Producer Responsibility Obligations (Packaging Waste) Regulations 2005 apply to companies that handle more than 50 tonnes of packaging p.a. and have a turnover of more than £2 mil p.a. Companies exceeding these thresholds incur an obligation to recover/recycle a certain proportion of their packaging waste.

¹ Typically a manufacturer or importer.

A specific meaning is given to 'packaging handled' by the regulations. It includes packaging upon which an activity is performed prior to passing the packaging onto another stage in the packaging chain.

For the purposes of the regulations, the packaging chain is split down into four parts each of which has a percentage activity obligation (which collectively total 100%):

Raw material manufacturers (e.g. those making cardboard sheets)	6%
Converters (e.g. those turning sheets into boxes)	9%
Packer fillers (e.g. those putting furniture into the boxes)	37%
Sellers (those selling the filled boxes to the end users of the packaging)	48%

By the time the packaging reaches a recycling company, the organisations involved in the packaging chain will between them have incurred 100% obligation upon the material. In order to prove that they have funded the recovery and recycling of the required amount of packaging, each obligated company will need to acquire packaging recovery notes (PRNs).

PRNs can only be issued in respect of packaging waste which has been recovered or recycled. Thus, initial obligations are only incurred on packaging material and they can only be met by recovering and recycling packaging waste. For this reason, wood waste reprocessors have to be certain that they only issue PRNs in respect of packaging waste as opposed to process waste. It can be difficult to tell the difference between the two material streams, hence the importance of this training package.

7 Quiz: Identification, quantification and handling of wooden packaging materials

Questions in *highlighted boxes* receive double points

		A	B	C	D
1	Correct identification of wooden packaging waste will help the company to comply with which of the following?	National Protocol on wooden packaging	Producer Responsibility Obligations (Packaging Waste) Regulations 1997	Waste legislation	A to C
2	What is the most common type of wood used for packaging material?	Hardwood	Softwood	Board material	Chipboard
3	Packaging Recovery Notes (PRNs) can only be issued in respect of?	Wood	Pallets	Packaging material	Reused packaging
4	Failure to correctly identify the amount of wooden packaging in a load could lead to?	Prosecution by the Environment Agency	Loss of accredited reprocessor status	Loss of confidence in the wood recycling chain	A to C
5	Treated timber must be dealt with separately because?	It contains hazardous substances	It is not packaging	It is typically only present on very thick timber	The treatment can be recycled and used again
6	Which of the following is a softwood?	Chipboard	MDF	Teak	Pine
7	A wood recycling PRN is typically worth	£0.00	£2-£20	£35.00	£50.00
8	Which of the following is likely to have the least weight (for similar sized loads)?	Pallets	Sleepers	Vegetable crates	Softwood off-cuts
9	Which of the following are always packaging?	Fragments of damaged pallets	Softwood off-cuts	Planks of hardwood	Forestry timber waste
10	Which of the following may or may not be packaging depending upon the source?	Assorted sheets of chipboard	Furniture manufacturing off-cuts	Softwood off-cuts	A and C
11	Why is it essential that loads are weighed before they are tipped?	To ensure vehicles are not overloaded	To provide a tonnage to multiply by the % packaging content	To meet the requirements of the packaging regulations	B and C
12	The aim of an initial weighbridge inspection is?	To ensure that the load is full	To estimate the packaging content	To identify any obviously contaminated loads	To verify the weight
13	What information would you use to decide whether a load contained packaging timber?	Visual inspection and reference to source of material	Visual inspection	Information on source	Discussion with driver
14	What level of accuracy is required for packaging estimates?	Nearest 1%	Nearest 5%	Nearest 10%	Nearest 25%

		A	B	C	D
15	A load consists of three equal parts pallets, packaging cases and off-cuts from a furniture manufacturer. What would be the rough estimate of packaging?	30%	50%	70%	90%
16	A load of timber from a pallet reconditioner consists of broken pallets and a few loose pieces of wood. The rough % of packaging is likely to be?	0%	20%	50%	100%
17	A load of timber from a door manufacturer consists of softwood off-cuts along with a small proportion of one trip pallets. The rough % of packaging is likely to be?	0%	20%	50%	100%
18	A load of timber from a civic amenity site consists of doors, tables, kitchen cabinets and assorted broken pieces of wood. The rough % of packaging is likely to be?	0%	20%	50%	100%
19	What is the correct procedure to deal with treated timber?	Segregate and record	Treat it as any other type of wood	Place it with the other mixed wood	Put it in a general waste skip
20	The aim of today's training session is to:	Enable the accurate identification and quantification of wood packaging	Gain brief understanding of the packaging regime	Gain recognition of skills which are essential to the job	A-C

Answers

1	D
2	B
3	C
4	D
5	A
6	D
7	B
8	C
9	A
10	D

11	D
12	C
13	A
14	C
15	C
16	D
17	B
18	A
19	A
20	D

8 Suggested certificate for successful completion



WoodRecyclers'
Association

Certificate for the identification,
quantification and handling of wood
packaging materials

Jason Yardley

Successfully completed this half day course designed
to support the adoption of the protocol for the
verification of wood packaging recycling

The protocol aims to provide confidence in the claimed
level of wood packaging waste recycled in the UK

Course completed:

Signed:

Trainer:

9 Course handout

The main points to remember about packaging wood waste identification and quantification:

- Packaging Recovery Notes (PRNs) demonstrate that recycling and recovery has occurred:
 - PRNs can only be issued in respect of packaging waste.
 - PRNs can only be issued by accredited reprocessors.
 - Accredited reprocessors are legally required to keep accurate records.
- Wood waste types:
 - Softwood, hardwood, board and treated.
 - Source of material is an important factor in deciding whether a piece of wood is packaging.
- Quantification:
 - Estimate packaging content to the nearest 10%.
 - Consider density and air gaps.
 - Reporting forms must be used to record the % packaging.

10 References

DEFRA (2003): The User's Guide; The Producer Responsibility Obligations (Packaging Waste) Regulations 1997 as amended.

www.defra.gov.uk/environment/waste/topics/packaging/pdf/userguide.pdf

DEFRA (2003): Wood packaging waste fact finding report.

www.defra.gov.uk/environment/waste/topics/packaging/pdf/factfind.pdf

WRAP (2003): Wood market study - UK wood flows and recycled wood markets.

www.wrap.org.uk

WRAP (2005): Protocol for the verification of wood packaging recycling in England, Wales, Scotland and Northern Ireland.

www.wrap.org.uk

11 Useful sources of additional information

Alistair Bromhead: independent environmental, health and safety consultant specialising in wood based industry.

www.abromhead.co.uk

Department for Environment, Food and Rural Affairs.

www.defra.gov.uk/environment/waste/topics/packaging/index.htm

Environment Agency: regulator of waste and packaging issues in England and Wales.

www.environment-agency.gov.uk

Envirowise: a Government programme that offers free, independent and practical advice to UK business to reduce waste at source and increase profits.

www.envirowise.gov.uk

Scottish Environment Protection Agency: SEPA is the regulator of waste and packaging issues in Scotland.

www.sepa.org.uk

Waste & Resources Action Programme: WRAP is a national Government programme established to promote sustainable waste management by tackling the barriers to increased recycling.

www.wrap.org.uk

Wood Panel Industry Federation: the WPIF is a representative organisation acting on behalf of board manufacturers in the UK and Ireland.

www.wpif.org.uk

Wood Recyclers' Association: the WRA is the trade association of the wood recycling industry.

www.woodrecyclers.org