PUBLICLY AVAILABLE SPECIFICATION

PAS 105

Recovered paper sourcing and quality for UK end markets

Code of practice

Material change for a better environment

confederation of paper industries

LARAC Local Authority Recycling Advisory Committee

British Standards Documents Document Sharing Hub

ICS code: 13.030.50

NO COPYING WITHOUT BSI PERMISSION EXCEPT AS PERMITTED BY COPYRIGHT LAW

Full document details: PAS 105:2007

This Publicly Available Specification comes into effect on July 2007

Amd. No.	Date	Comments

© BSI July 2007

ISBN 978 0 580 45246 8

Documents
Document Sharing Hub
© BSI July 2007

Full document details: PAS 105:2007

Contents

Page

ii ..... Foreword
iii ..... Introduction
iii ..... 0.1 General
iv ..... 0.2 Context

1 ..... 1 Scope

1 ..... 2 Terms and definitions

3 ..... 3 Recovered paper collection

7 ..... 4 Transportation, handling, storage and delivery

7 ..... 5 Collection systems to the paper mill

9 ..... 6 Making recycled paper (recovered paper reprocessing)

10 ..... 7 Quality of the recovered paper

13 ..... 8 Communication

14 ..... 9 Training

Annexes

16 ..... Annex A (informative) Understanding BS EN 643

17 ..... Annex B (informative) Exporting waste paper for recycling

18 ..... Bibliography

List of figures

iii ..... Figure 1 – Shows where in the recovered paper supply chain this code of practice applies

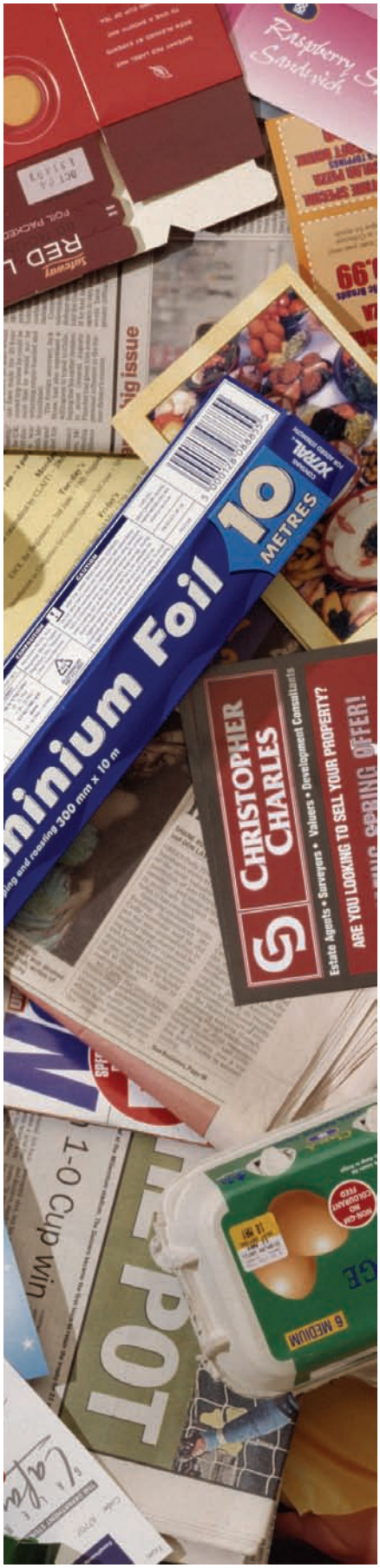
3 ..... Figure 2 – Recovered paper collection chain in the production of recycled paper

14 ..... Figure 3 – Recycle Now logo

List of tables

10 ..... Table 1 – Recovered paper grades

12 ..... Table 2 – Acceptability of common products



Documents
Document Sharing Hub

Full document details: PAS 105:2007

Foreword

This Publicly Available Specification, PAS 105, has been prepared by BSI in consultation with the Confederation of Paper Industries (CPI), Environmental Services Association (ESA), Local Authority Recycling Advisory Committee (LARAC) and the Waste & Resources Action Programme (WRAP) to provide a suitable framework of the key criteria for the quality of recovered paper destined for UK end markets, to aid understanding between mills, Local Authorities and other interested parties. It is noteworthy that this PAS only considers recovered paper from municipal sources which are the responsibility of Local Authorities.

NOTE *Not all of those consulted in the development of this PAS may agree with all of its content.*

Acknowledgement is given to CPI, ESA, LARAC, PaperChain, WRAP, and Catherine Carter (Technical Author) and the following organizations and individuals that were involved in the development of this code of practice:

- Aylesford Newsprint
- Basildon District Council
- Canterbury City Council – South East Region Recycling Forum (SERRF)
- Project Integra (Hampshire's Local Authority Waste Partnership)
- Mole Valley District Council
- Remade Scotland
- Reprocessors and Local Authorities Round Table
- SCA Recycling
- Tony Hammond – Consultant

Wider comments from other interested parties were invited by BSI. The expert contributions made by the organizations and individuals consulted in the development of this Publicly Available Specification are gratefully acknowledged.

This Publicly Available Specification (PAS) has been prepared and published by BSI, which retains its ownership and copyright. BSI reserves the right to withdraw or amend this PAS on receipt of authoritative advice that it is appropriate to do so. This PAS will be reviewed at intervals not exceeding two years and any amendments arising from the review may be published as an amended PAS and publicized in *Update Standards*. Feedback on this PAS will be gratefully received.

A PAS can be seen as a step in the process of standardization. It can be made available quickly to suit the market need of the developers and users. A PAS published by BSI, the UK's National Standards Body, is developed through a consensus building process. It is not to be regarded as a formal British Standard. A full British Standard requires several more stages of development before full consensus is achieved. This PAS will be withdrawn upon publication of its contents in, or as, a British Standard.

As a voluntary code of practice, this PAS takes the form of guidance and recommendations. It should not be quoted as if it were a specification and particular care should be taken to ensure that claims of compliance are not misleading.

This publication does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

Compliance with a Publicly Available Specification does not in itself confer immunity from legal obligations.

Documents
Document Sharing Hub
© BSI July 2007

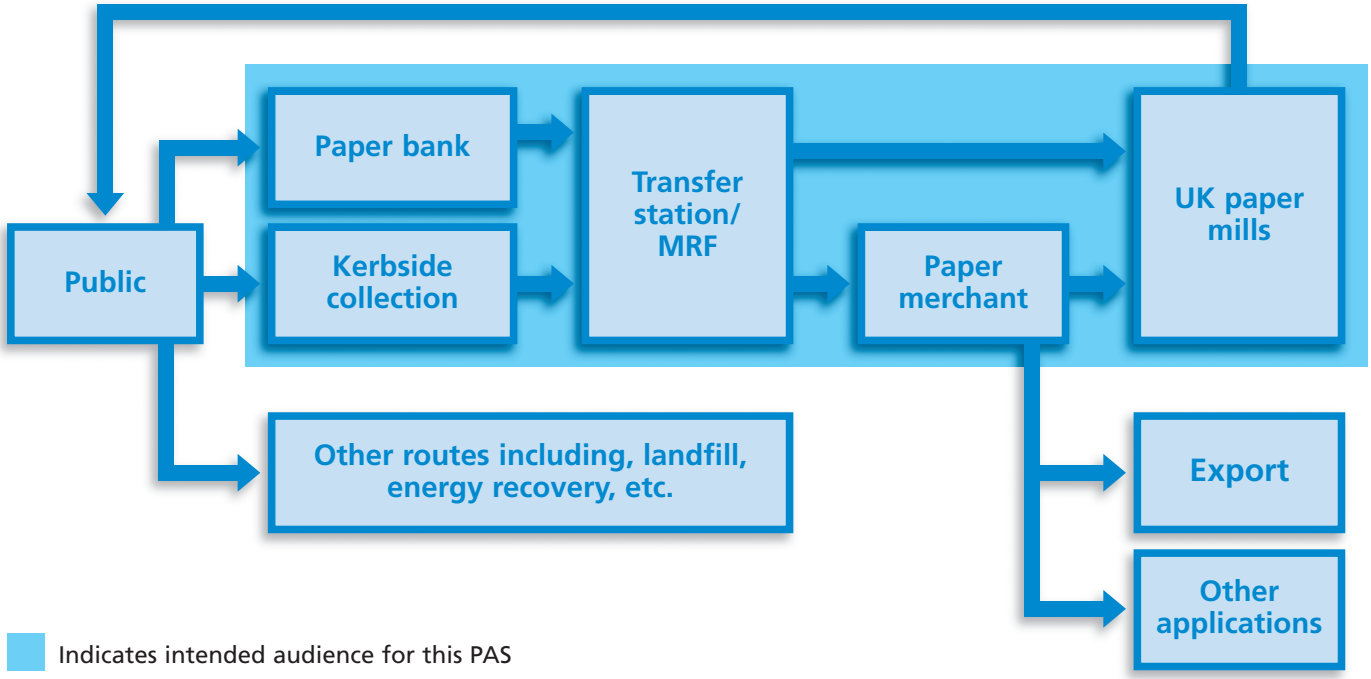
Full document details: PAS 105:2007

Introduction

0.1 General

Paper is a readily recyclable material. In the UK, recovery rates are increasing and it is important that recovered paper quality is maintained. The main aim of this PAS is to explain the key factors that influence the efficient recycling of recovered paper. This is in order to promote best practice and understanding throughout the whole process chain so as to ensure that recovered paper collected is of suitably high quality and fit for purpose.

Figure 1 – Shows where in the recovered paper supply chain this code of practice applies



Documents
Document Sharing Hub

Full document details: PAS 105:2007

0.2 Context

Many grades of paper are suitable for recycling and are used to produce other forms of paper (newsprint, packaging papers, tissue, writing papers, etc.) as well as other non-paper uses.

Recovered paper is the most important raw material for the British paper and board industry. In 2006 the UK produced 5.6 million tonnes of paper. 75 % (4.2 million tonnes) of the raw material fibre used throughout the sector was recovered paper. Recycling paper helps reduce the need for raw virgin pulp (although virgin pulp will always be required as paper cannot be recycled indefinitely). Pulping timber is very energy intensive and increasing the volume of recycled paper reduces both energy use and consequent carbon dioxide emissions.

Recycling also reduces the volume of biodegradable waste sent to landfill, reducing landfill gas emissions and helping the UK Government meet its obligations under the EC Landfill Directive (99/31/EC) [1].

Recycling paper contributes to Local Authorities meeting their statutory recycling and landfill diversion targets.

In 2006, the UK consumed 12.3 million tonnes of paper in a wide range of applications, of which around 65 % (8.0 million tonnes of paper) was recovered; the implementation of the Producer Responsibility Obligations (Packaging Waste) Regulations 2005 [2] contributed to this. The Government's Waste Strategy, published in May 2007, sets out the UK's vision for sustainable waste management.

The concept of Producer Responsibility emerged throughout the 1990s as a means of making producers accountable for the environmental impacts of their products throughout their entire life cycle. A range of policies have been based on this concept. The Government and newspaper publishers agreed to a voluntary target to increase the recycled content of newspapers consumed in the UK to 70 % by 2006. The Government has also targeted other areas such as direct mail and magazines; these also have producer responsibility agreements, focused on increasing the collection of direct mail and magazines.

In 2007, the Government published Waste Strategy for England 2007. This included an objective to decouple waste growth from economic growth and a number of challenging statutory targets for moving UK waste away from landfill. WRAP was created in 2000, the same year as the Government's first Waste Strategy was published, as one of the Government's actions to implement this strategy. WRAP's mission is to accelerate resource efficiency by creating stable and efficient markets for recycling materials and products, and removing barriers to waste minimization, reuse and recycling. WRAP's 2006-08 business plan is intended to deliver results by working closely with manufacturers, the construction sector, retailers, the waste industry, local authorities, and other stakeholders. For the paper sector, WRAP's priorities are to maintain a centre of expertise on market and technical issues, and to develop projects with the paper industry, which is already a major user of recyclate.

AVA Documents
Document Sharing Hub

© BSI July 2007

Full document details: PAS 105:2007

Recycling has formed an increasing part of the paper manufacturing process at a European level linking directly and indirectly to a large number of sectors in the European economy. The voluntary European Declaration of 2000, promoting paper recycling, made a significant impact by raising European recycling rates to 56 % by 2005.

Continuing this successful initiative, a new European Declaration covering more European countries, more European organizations and with greater ambition was launched in September 2006. In practice, this translates to groundbreaking research and development, significant investments in new capacities, a focus on quality and responsible sourcing and on raising public awareness.

Together these European sectors have agreed to develop a sustainable path in paper recycling, making it possible to reach a new target of a 66 % European recycling rate by 2010.[1)]

The Landfill Directive aims to change the way waste is disposed of in this country, and the rest of the EU, and help drive recovery up the waste hierarchy through waste minimization and increased levels of recycling. It sets demanding targets to reduce the amount of biodegradable municipal waste which is landfilled. To help the UK meet these targets, a Landfill Allowance Trading Scheme was introduced in April 2006. This should enable English local authorities to achieve their targets at minimum overall cost. The devolved administrations in Scotland, Wales and Northern Ireland are developing their own mechanisms for meeting their share of the UK targets.

Landfill tax is £24 per tonne for the financial year from April 2007 to March 2008. The Government has indicated this will rise by £8 per tonne per year, reaching £48 per tonne in 2010.

Meeting recycling targets involves everyone in the process, from domestic consumers putting their used recyclables into the recycling stream, to businesses, industrial and retail organizations to the users of recovered paper.

1) See www.paperrecovery.org

Documents
Document Sharing Hub

Full document details: PAS 105:2007

1 Scope

This Publicly Available Specification (PAS) makes recommendations for, and gives guidance on, good practice for the collection, handling and processing of recovered paper intended for recycling within UK end markets.

It is applicable to paper collected by local authorities, local authority contractors, community groups and charities from households and other sources that generate similar material to households.

2 Terms and definitions

For the purpose of this PAS the following terms and definitions apply.

2.1 biodegradable

material capable of undergoing biologically mediated decomposition

2.2 bring site/recycling centre/recycling point

publicly accessible site for depositing of recyclable materials

2.3 clean materials recycling/recovery facility (clean MRF)

MRF facility for recyclable materials only

2.4 collector

person or organization that collects and/or transports recovered paper from the source (in the case of post consumer waste, the home/kerbside or paper bank) to a central point for delivery to the reprocessor

NOTE *The central point could be a bulking station, a recovered paper depot or a paper mill (reprocessor). Onward delivery may include an intermediary step, e.g. to a recovered paper depot prior to the reprocessor.*

2.5 co-mingled

dry recyclable materials mixed together prior to separation (usually at a clean materials recycling facility)

2.6 dirty materials recycling/recovery facility (dirty MRF)

facility where recyclables and household refuse are sorted at the same time and separated into various streams

AVA Documents
Document Sharing Hub

© BSI July 2007

Full document details: PAS 105:2007

2.7 dry recyclables

materials for recycling, collected either together or separately, which do not come into contact with any liquid or compostable waste during the collection process

2.8 household waste recycling centres (civic amenity sites)

site provided by the Local Authority at which local residents may deposit their household waste for transfer for disposal or recovery

2.9 kerbside collection

collection of recyclable materials direct from the kerbside

2.10 kraft paper

strong, usually brown, paper produced by the sulphate process used most commonly for cardboard boxes

2.11 materials recycling/recovery facility (MRF)

facility for sorting, bulking and baling materials collected from various waste streams

2.12 old corrugated containers (OCC)

grade of recovered paper comprising used corrugated cases (cardboard boxes)

2.13 offcut

paper of usable size obtained as a by-product when larger sheets or reels are cut down to size

2.14 packaging (export) recovery note (PRN/PERN)

legal document issued by accredited reprocessors or exporters to show how much of a certain type of recyclable packaging material has been recovered or recycled

NOTE *Attention is drawn to The Producer Responsibility Obligations (Packaging Waste) Regulations 2005 [2].*

2.15 packaging waste

products used for the containment, protection, handling, delivery and preservation of goods, from the producer to the user or consumer

2.16 paper bank

publicly available receptacle for recovered paper

2.17 recovered paper

paper, including cardboard, coming under the definition of waste and of a sufficient quality to be recycled

2.18 recovery

processing of paper, including cardboard, coming under the definition of waste resulting in a sufficient quality to be recycled

2.19 recyclate

material resulting from the recovery process that can be directly used in the manufacture of new products

2.20 recycling

reprocessing of recovered material in a production process, including composting but excluding energy recovery

2.21 reprocessor

person or business carrying out the process of recycling

2.22 transfer station

facility for material aggregation, compaction and transportation

2.23 virgin pulp

pulp manufactured and used for the first time, most commonly from wood fibre, but also from other fibre sources such as cotton, flax and straw

Documents
Document Sharing Hub

Full document details: PAS 105:2007