

## 5.5 Standards relating to the environmental characteristics of wood-based panels and/or their constituent materials

### 5.5.1 Standards for the certification of sustainably managed forests

(These standards are mentioned here because they are, as a generic concept, an essential pre-requisite to the application of a further class of standards which detail the conditions under which wood-based products are labelled to denote that the wood materials they contain are derived from certified sustainably managed forests).

At the national, European or global levels, many governmental, non-governmental, regulatory or voluntary bodies have produced standards reflecting their policies on sustainable forest management practices and/or the certification of sustainably-managed (environmentally well-managed) forests.

The two bodies operating internationally (both are non-governmental organisations, or environmental NGOs) whose systems of forest certification or product labelling are most supported by industrial or commercial sectors in the United Kingdom and Ireland are:

**The Forest Stewardship Council (FSC).** FSC-accredited certifying companies certify woodlands managed in accordance with FSC standard principles. The FSC scheme also enables finished products (e.g. panel products, wooden furniture and paper) to be certified that are made from recycled wood fibre and / or timber that has been assessed and certified under the FSC standards.

**The Programme for the Endorsement of Forest Certification (PEFC).** Companies accredited by national accreditation schemes on behalf of PEFC will certify woodlands managed in accordance with national or regional schemes which comply with the PEFC's Common Elements and Requirements.

In the United Kingdom, forests will normally be certified as being managed in accordance with the UK Woodland Assurance Standard (UKWAS), which was established under the auspices of the **Forestry Commission** in June 1999 and is recognised by the Forest Stewardship Council as consistent with the FSC's own standards of sustainable forest management. Certification to the UKWAS standard by FSC-accredited certifiers therefore entitles a forest management to label timber sourced in the certified forest with a label incorporating the FSC logo at the point of transfer. The PEFC Council also recognises and approves the UKWAS standard with similar results for any forest requiring a PEFC label and certified by nationally accredited certifiers.

The organisations sponsoring this PanelGuide support, from a world-wide perspective credible timber certification schemes based on publicly available forestry standards drawn up in a fully participatory, transparent and objective manner and backed by independent auditing. The organisations prefer, in general, timber and wood products sourced from forest areas certified under these schemes, and it is important to bear in mind that only forest certification schemes of this nature can be the foundation for product certification schemes based on standardised control of materials through the wood processing chain (wood chain of custody).

However, where independent certification of timber is not available, the organisations will prefer timber and wood products from suppliers that have adopted a formal and adequate **environmental purchasing policy** covering those products and can provide evidence of commitment to such a policy.

### **5.5.2 Standards for verification of the chain of custody and certification and labelling of products**

Standardised policies such as those of the FSC or the PEFC incorporate elements, known generally as “chain of custody” rules specifying criteria for the assessment and verification of the progress of certified virgin wood and reclaimed wood through the chain of custody (i.e. the successive phases of processing and control) and its conformance with minimum percentage levels up to and including the finished product as sold to the retail customer. The functions of verification and certification are carried out by certifiers accredited by or on behalf of the bodies operating the connected forest certification systems.

In the United Kingdom the classes of raw materials processed by the sawmilling and panelboard sectors, and the phases of the chain of custody (including those sectors) from timber harvesting through to finished products, have been defined by the United Kingdom Forest Products Association and the Wood Panel Industries Federation, and these standard definitions have been agreed with independent certifiers to be appropriate for the purpose of qualifying products from the defined chain of custody for the relevant environmental labels (that is, labels incorporating the logo of e.g. the FSC or the PEFC).

### **5.5.3 Standards governing the quality and safety of recycled wood**

The use of recycled wood in the manufacture of particleboard or MDF requires deliveries of the material to the processor to be free from incompatible waste elements such as stone, metal and plastics. It is also desirable that producers and traders should observe state-of-the-art practices to ensure that reclaimed raw materials and the finished panel product are strictly controlled in respect of contaminating chemical elements and compounds that might be present at unacceptable levels in recycled wood.

Freedom from visible and separable physical contaminants is assured by the purchasing and delivery conditions imposed by the panel manufacturer and by the decontaminating and cleansing processes operated by both merchant and manufacturer.

With respect to chemical contamination, a number of national quality control schemes exist, the most prominent in Europe being the German criteria defined for purposes of the RAL-Gütezeichen label “Recyclingprodukte aus Gebrauchtholz”. In the United Kingdom the wood-based panels sector supports the European Panel Federation’s (EPF) **“Industry Standard for delivery conditions of recycled wood”**, which is based on a “responsible care” approach. The EPF limit values in the main reflect (with a few additions) what are considered to be the most appropriate safety levels adopted in any sector, namely those laid down in EN 71-3 “Safety of Toys”.

The full list of EPF contaminant limit values in g/kg of recycled wood and further extracts from the Industry Standard are as follows:

Elements/Compounds	Limit values (g/kg)
Arsenic (As)	0,025
Cadmium (Cd)	0,075
Chromium (Cr)	0,06
Copper (Cu)	0,04
Lead (Pb)	0,09
Fluorine (F)	0,1
Chlorine (Cl)	1
Pentachlorophenol (PCP)	0,005
Creosote (Benzo(a)pyrene)	0,0005

The Industry Standard provides a list of reference test methods for the chemical analysis of recycled wood, and the range of appropriate test methods is in a continuing programme of development and improvement.

Recently published in the UK under the auspices of WRAP is the BSI's Publicly Available Specification, PAS 104 "Wood recycling in the panelboard manufacturing industry", a specification for quality and guidance for good practice for the supply of post-consumer wood for consumption in the manufacture of panelboard products. Copies are obtainable from WRAP [[www.wrap.org.uk](http://www.wrap.org.uk)].