

## European Union restrictions on use of CCA-treated timber

The European Commission has published a new directive amending the 1989 decision to exempt CCA (chromated copper arsenate) wood preservatives from restrictions imposed on the use of arsenic. The new directive introduces restrictions on CCA preservatives and CCA-treated timber reflecting the outcome of a recent review which identified concerns about potential risk to the health of children in frequent contact with treated wood, risks arising from household burning of waste wood treated with CCA and risk of effects on aquatic organisms in certain marine waters.

CCA-treated wood already in place is not affected and this mirrors the position in the USA where the Environmental Protection Agency (EPA) has advised there is no reason to remove or replace existing CCA-treated structures, including decks or playground equipment. CCA-treated timber can continue to be used without restriction until the directive is implemented in the UK, latest June 2004.

CCA preservatives were developed in 1933 and have been used extensively in all parts of the world, facilitating the use of local and imported timber in situations where timber could otherwise not have been used due to fungal, beetle, termite or marine borer attack. Treated timber will be familiar from its pale green colour which develops during the drying process. In many such situations if CCA had not been available concrete, steel, aluminium or plastic would have had to be used with loss of visual appeal and adverse environmental impact.

CCA preservatives have been approved for safe use in the UK since 1986 in accordance with the Control of Pesticides Regulations introduced under the Food and Environment Protection Act 1985, and previously under the voluntary Pesticides Safety Precautions Scheme. The BWPDA publishes treatment specifications for preservatives once the Health and Safety Executive has cleared them for safe use in the UK. The BWPDA is not aware of any impact on human health from proper use, handling or disposal of CCA preservatives and CCA-treated timber but will be discussing the new EU restrictions with the HSE to ensure its recommendations remain appropriate.

In its response to the consultation on the directive prior to publication, the BWPDA made the point that it is important to ensure the continued and increased use of wood as the only truly sustainable construction material. CCA treatment has ensured the acceptability of sustainable wood species in both ground and water contact as well as above ground uses at risk of insect and fungal attack due to its highly cost-effective properties. Confidence in the durability of these otherwise perishable commercially available timber species has allowed wood to be used in such end uses as road fencing, environmental barriers, ground engineering and retaining structures where at least 40 year service life is required. Many other end uses with very long service life requirements are also served by CCA-treated timber. Wood preservatives without arsenic are available and confidence is starting to build in the service life of the treated timber. Should alternative materials (steel, concrete, plastic) be substituted for treated timber, significant adverse environmental effects are likely.

The BWPDA looks for an orderly transition to newer wood preservative types starting with those end uses where decades of reliable durability to ensure safety in use is not an essential requirement. Many treatment companies in the UK have already introduced arsenic-free treatment into their range and this trend can be expected to continue. Until the newer preservatives have demonstrated their credentials, however, CCA should continue to be accepted for the higher hazard and critical end uses.

Wood preservative suppliers have devoted years of research and development and invested a great deal of money in programmes to develop new products that offer timber treaters and their customers a choice and might prove to have the performance necessary for the long service life-critical products. This is evidence of a responsible industry ahead of, not following, the evolution of society's attitudes to health, safety and environmental protection.

The key changes to the use of CCA wood preservatives and CCA-treated timber introduced by the new directive are:

- The preservative itself must be CCA Type C. This includes the formulations normally supplied in the UK complying with BS 4072. These products are used diluted with water and the diluted solution typically contains no more than 3% preservative ingredients with 97% or more water.
- Freshly treated wood must not be placed on the market until fixation is complete. 'Fixation' describes the reactions that take place in the wood after impregnation leading to the CCA components becoming 'fixed'. It is this feature that makes CCA such a long-lasting treatment with minimum environmental impact: for example CCA-treated wood has been used in cooling towers under continuous water flow giving in excess of 25 years service.
- CCA-treated wood may be used where the structural integrity of the wood is required for human or livestock safety and skin contact by the general public during its service life is unlikely. The directive lists the following uses:
  - as structural timber in public and agricultural buildings, office buildings, and industrial premises;
  - in bridges and bridgework;
  - as constructional timber in freshwater areas e.g. jetties and bridges;
  - as noise barriers;
  - in avalanche control;
  - in highway safety fencing and barriers;
  - as debarked round conifer livestock fence posts;
  - in earth retaining structures;
  - as electric power transmission and telecommunications poles;
  - as underground railway sleepers.
- CCA-treated wood must be individually labelled "For professional and industrial installation and use only, contains arsenic". In addition, all wood placed on the market in packs shall also bear a label stating "Wear gloves when handling this wood. Wear a dust mask and eye protection when cutting or otherwise crafting this wood. Waste from this wood shall be treated as hazardous by an authorised undertaking".
- CCA-treated wood may not be used:
  - in residential or domestic constructions, whatever the purpose;
  - in any application where there is a risk of repeated skin contact;
  - in marine waters;
  - for agricultural purposes other than for livestock fence posts and structural uses;
  - in any application where the treated wood may come into contact with intermediate or finished products intended for human and/or animal consumption.

The directive will require interpretation and guidance at the national level. The BWPDA is already in discussion with the Health and Safety Executive, the Department for Environment, Food and Rural Affairs and the Environment Agency on the preparation and publication of appropriate information for treatment companies, specifiers and the public. Information will be available from the BWPDA in printed and electronic form and from the association's website [www.bwpda.co.uk](http://www.bwpda.co.uk)

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