CCA treated timber

What is CCA treated timber?

CCA (copper chrome arsenate) timber treatments are primarily used on pine timber as protection from rotting and attack by fungus, termites or other wood boring insects. CCA timber has been used for over 60 years around the world, and has been registered in Australia for more than 20 years. CCA treated timber has long been used for outdoor structures such as playgrounds, decks, garden furniture, picnic tables, exterior seating and handrails. Other uses include fencing, retaining walls, garden edges and pergolas and handrails. However, concerns have been raised over time regarding the potential heatlh risk of CCA timber.

Is CCA treated timber a risk?

In 2005, the Australian regulator of agricultural and veterinary chemicals, the Australian Pesticides and Veterinary Medicines Authority (APVMA) recommended that CCA treated timber not be used for high contact structures such as:

- playground equipment
- garden furniture and exterior seating
- picnic tables
- patios and domestic decking
- handrails

In 2012, the APVMA implemented further precautionary restrictions prohibiting the use of CCA for the fabrication of any new items listed above and labelling requirements for CCA products at point of sale.

The department's approach

Although the APVMA has not banned other common uses of CCA treated timber such as building construction, fencing, poles, landscaping timber, water structures and signage, the department decided to **prohibit** these uses of CCA treated timber in any new school structures. Alternative products are to be be used.

This requirement is **not** retrospective - there is no requirement at present for any existing CCA fabricated play or other structures to be removed.

Schools and P&C Associations should also be aware of these requirements during any major maintenance or repair activities. Schools should contact their Infrastructure Advisor or QBuild for advice regarding new installations, appropriate products and maintenance options for existing facilities.

CCA alternatives

There are several timber treatments that are alternatives to CCA that do not contain arsenic or chromium. These are suitable for use at schools where timber is exposed to the weather and insect pests:

- LOSP – light organic solvent preservative – suitable only when timber is not in contact with the ground.
- ACQ – Alkaline Copper Quaternary – suitable whether timber is in contact with the ground or not.
- CuAz – Copper Azole –suitable whether timber is in contact with the ground or not.

These timber products are sold with various trade names. The product label and safety data sheet (SDS) are to be reviewed for the product to ensure there is no CCA or creosote present (refer to SDS section 3 to see ingredients; creosote is prohibited for schools). Timber in Australia is treated to six levels called Hazard Classes. These treatment levels indicate where the treated product may be installed.

Selection of the correct product should be made with consideration to how/where the product will be used. Treated timber “hazard classes” commonly encountered are:

- H3: commonly used for palings, veranda posts and handrails – exposed to the weather, but kept clear of the ground
- H4: commonly used in landscaping, and edging – exposed to the weather, or continually damp and in contact with ground
- H5: used as for H4 timber – exposed to the weather and running water, or where more protection is needed than H4 gives

In the school environment, it is recommended that a H4 or H5 (CCA free) class timber treatment is used for timber items that are in contact with the ground. A H5 class treatment should have a slightly greater life than a H4 class treatment in the same circumstances.

Safe practices with existing CCA timber structures

The APVMA has not made any recommendations regarding the treatment of **existing** structures that fall under the category of coming into close contact with persons, particularly children.

Schools should implement safe practices to minimise the level of exposure to CCA treated timber including:

- Basic hygiene practices; including hand washing with soap and drying thoroughly; before eating and after school breaks
- Do not put food in direct contact with treated timber surfaces.

Schools may seek to apply and maintain penetrating coatings (such as oil-based semi-transparent stains) to CCA for extra protection from skin contact.Technical advice should be sought (e.g. from QBuild) to ensure that appropriate products are used.

Where to from here?

The APVMA will continue to provide scientific information to agencies such as the Department of Energy and Public Works (DEPW). The DEPW is responsible for providing technical advice to government to assist in decision making regarding future use of treated timber.

Further information

- CCA Treated Timber structures on school sites (available via OnePortal only)
- Building design standards for DoE facilities
- Prohibited and high risk chemicals in department workplaces
- New playground installations are to comply with Australian Standard: ASNZS 4685.0:2017, Playground equipment and surfacing – Part 0: Development, installation, inspection, maintenance and operation.
- Guidance on timber treatments based on hazard (H) classes can be found in AS/NZS 1604: Australian Timber preservation standards ‘hazard classes’