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COPPER CHROME ARSENATE (CCA) TIMBER TREATMENTS

QUESTIONS AND ANSWERS

This document provides current information on Copper Chrome Arsenate (CCA) timber treatments, used in Australia for preserving timber.

These materials have been used in Australia for over 20 years. However, due to new information on these products, regulatory authorities in Australia and overseas are reassessing their use.

The reassessment in Australia will be completed by the end of 2003.

Further information on these products is presented in the following Questions and Answers.

What is CCA and how is it used ?

CCA together with some other arsenic based timber treatments, are chemical preservatives used to protect wood from rotting and being attacked by fungus, termites, or other wood-boring insects. CCA contains forms of the chemicals chromium, copper, and arsenic and is largely used to pressure treat timber intended for outdoor uses such as home, school, and community playgrounds, decks, and landscape timbers. CCA-treated timber is also used in building structures and other industrial uses.

In Australia, CCA treatments are primarily used on pine. Without CCA treatment, pine used in the ground could rot in less than 12 months. CCA treatment protects pine for as long as 20 years.

CCA timber treatments have been used for over 60 years around the world, and were registered by State governments in Australia in the 1980s.

How are products such as CCA timber treatments regulated in Australia ?

The Australian Pesticides and Veterinary Medicines Authority (APVMA) is the Australian Government agency responsible for evaluating, registering and regulating agricultural and veterinary (agvet) chemicals. In fulfilling these functions, the APVMA consults and liaises with other Commonwealth, state and territory agencies.

Before new agvet chemical products can be approved for supply in Australia, the APVMA undertakes extensive assessment of all available information to ensure that they are safe for people, animals and the environment, and that they won't pose an unacceptable risk to trade.

The APVMA also has a program for reviewing the registration of older chemicals that are currently on the market. Reviews are undertaken where there is new information which raises potential concerns about its ongoing use. This is the process currently being undertaken for CCA products.

Why is the APVMA reviewing CCA ?

In March 2003 the APVMA made a decision to review CCA and arsenic timber treatments. The basis of this decision was new international information, made available in January 2003, that raised questions about the potential for human health and environmental effects from the use and disposal of arsenic treated timber.

In July 2003, after seeing how much scientific information had been received, and mindful of the level of community interest in this issue, the Board of the APVMA decided to accelerate the review of arsenic timber treatments. The Board advised industry of its intention to stop certain uses of arsenic timber treatments in domestic situations (such as decking and children's playground equipment) by the end of 2003, unless there is information demonstrating no unacceptable risk to human health.

The timing of the APVMA review is in step with similar reviews in North America and Europe.

Under the review, the APVMA will thoroughly investigate all available information and will continue to liaise with overseas regulators.

Is CCA treated timber used around the home or for playground equipment ?

Sometimes. There are several types of wood, including treated and untreated, that can be used around the home and to make playground equipment. Consumers can verify with the manufacturers before purchase whether treated wood is being used.

How can I tell if my playground equipment or deck contains arsenic?

Wood that is freshly treated with CCA has a greenish tint, which fades over time. However, some other wood treatments may also have a green colour. Historically, CCA has been the principal chemical used to treat wood for decks and other outdoor uses around the home. Generally, unless your deck has been constructed with hardwood or cedar, it is possible that the deck was constructed with CCA-treated wood. Alternatively, if you know who the building contractor or wood retailer was, you may want to call and ask.

Is it safe for my child to play on CCA-treated playground equipment ?

At this stage there is no conclusive information that it is unsafe. This is the key issue that the APVMA and overseas regulators are investigating. To date no overseas regulator has required the demolition of CCA treated structures.

What can I do to decrease my child's exposure ?

Trace amounts of arsenic are commonly found in the environment, in foods and in drinking water. The World Health Organisation has set a tolerable daily intake for this natural element. What is not clear however is whether regular exposure to certain uses of CCA treated timber may add an additional level of exposure to arsenic.

Children can be exposed to arsenic from playground equipment primarily through hand-to-mouth contact when they touch the wood and then place their hands in their mouths.

However, arsenic is not readily absorbed through the skin.

As always, parents should manage risks to their children and follow basic good hygiene practices such as washing hands thoroughly after activities involving contact with various surfaces including treated wood, animals and soil, especially prior to eating and drinking. Washing hands has been shown to remove traces of arsenic.

Do not put food in direct contact with treated wood, for example when eating from picnic tables.

Should Playground equipment be dismantled ?

There is currently no information to support this. For example, current US EPA advice is that it does not believe there is any reason to remove or replace CCA-treated structures, including decks or playground equipment, and it is not recommending structures or surrounding soils be removed.

What about arsenic from landscape timbers getting into the vegie patch ?

The APVMA is currently assessing this issue.

Some scientific studies have shown that arsenic may leach from treated timber into soil, but this is very variable depending on a number of factors. Uptake of arsenic by plants is also variable depending on several factors.

A precaution that could be taken is to insert a plastic liner between the soil and the timber.

Should I paint CCA treated timber ?

Information about the benefits of painting treated timber is limited. Some scientific studies indicate that certain penetrating coatings, such as oil-based semitransparent stains, when used on a regular basis may reduce the potential for CCA exposure. However, film-forming or non-penetrating stains have not been recommended due to possible peeling and flaking.

What precautions I should take when working with treated timber ?

To minimise excessive exposure when working with treated timber, for example sawing, sanding or machining wood, you should follow normal good practices, including work outdoors and wear protective equipment such as gloves, mask and goggles. After working with the treated timber, follow normal hygiene practices such as carefully washing hands and other exposed areas of your body.

Sawdust and scraps of timber should not be burnt, composted or mulched.

What are the alternatives to Arsenic treatments ?

There are arsenic-free alternative timber treatment products available. These products control a similar range of pests, however very few are applied via pressure impregnation, as is the case with CCA products.

What is happening overseas ?

Significant action has been taken internationally in relation to the continued availability and use of CCA products:

The **US EPA** is facilitating a voluntary industry phase out of CCA-treated timber for use in domestic situations by January 2004. They are undertaking a review of these compounds.

Canadian regulatory authorities are working in collaboration with the US EPA to effect similar actions in Canada.

The EU has issued a directive on CCA-timber treatments to achieve the same result by 30 June 2004.

New Zealand regulatory authorities have determined that there was insufficient evidence at this stage to conclude that these products pose an unacceptable risk, but did support a move away from using CCA treated timber on children's playground equipment.

Further information

This web page will be updated as further information becomes available.

Acknowledgements

This advice has drawn on information from Health Canada, US Consumer Products Safety Commission and USA Environmental Protection Agency.