



COPPER CHROMIUM ARSENIC (CCA) TREATMENT OF TIMBER

REPORT FROM THE ENVIRONMENTAL RISK MANAGEMENT AUTHORITY

2 May 2003

Background

1. CCA is one amongst a number of substances that are monitored by the staff of the Environmental Risk Management Authority (the Authority), in terms of regulatory action overseas and the case for any regulatory action in New Zealand. New concerns about the use of Copper Chromium Arsenic (CCA) as a timber treatment were raised in a report by a U.S. scientist, Dr Richard Maas, that the Authority became aware of in November 2002. As soon as the Authority had knowledge of the Maas report a decision was taken to conduct an investigation into any public health issues arising from the use of CCA treated timber, looking not just at the Maas report but at other available information as well. The review was undertaken by Dr Deborah Read, a public health specialist, and comprehensively peer-reviewed.
2. The review report is released in conjunction with this statement. The report reaches a number of conclusions and these are referred to where relevant in the further text below. The principal conclusion is that the extent of any risks arising from CCA remains unclear, and that the Maas report has not in itself altered that situation. An additional factor to consider is that there are a variety of other sources, both natural and otherwise, for arsenic in the environment. The review report nevertheless provides a basis for deciding on actions that should be taken to better manage the use of CCA in New Zealand. This statement sets out the views of the Authority on this.

Reassessment

3. The principal regulatory action available to the Authority under the Hazardous Substances and New Organisms (HSNO) Act for dealing with existing chemicals like CCA, is to determine whether there are grounds for reassessment, and then carry out a reassessment if grounds are confirmed **and** if an application to do so is made. Although the Authority cannot carry out a reassessment on its own initiative, it can certainly do so on the basis of an application made by the Authority's Chief Executive.

4. In this case the Authority has decided that a reassessment is not the most appropriate way forward at this time. There are three main reasons for this and they are as follows:
 - (a) The report by Dr Read does not indicate that there is information available that would significantly alter current assessments of the risks posed by CCA as a timber treatment. It would in particular be difficult for CCA to meet the requirements of s62(a) of the Act for the triggering of a reassessment.
 - (b) The HSNO Act does not currently provide for the breadth of action that might be needed to deal effectively with CCA. This is expected to be dealt with through a Government strategy for improving the workability of the hazardous substance elements of the Act, so that reassessment remains a longer term possibility.
 - (c) There are, on the other hand, a number of actions available now that provide a clear and constructive way forward.

Actions proposed

5. CCA treated wood has been in use for many years without discernible health effects. However, there is no question that CCA is a toxic chemical. Where its use is justified, that use must continue to be managed to ensure that any risks are at an acceptable level. It is also prudent to identify and implement alternative chemicals where these are less toxic and can achieve the same benefits in use.
6. There are a number of actions that can be taken to achieve these outcomes and they are set out below.
7. The Building Industry Authority (BIA) is currently reviewing the requirements for the use of treated and untreated timber in buildings. The BIA's review includes an examination of the appropriate uses of CCA treated timber and will determine the future use of CCA treated timber in playgrounds, decks and domestic structures. As part of the BIA review of the requirements, an eight-week public consultation period will occur. The Authority will await the conclusion of the BIA's consultation process and review the submissions made to the BIA on treated timber before taking any further initiatives, beyond those set out in the current statement.
8. In the interim, there are further issues that warrant investigation. It is stressed that the Read report deals only with public health risks. The additional matters to be investigated include (at least):
 - (a) the possible environmental effects of CCA;
 - (b) risks arising from occupational exposure with particular emphasis on those employed in timber treatment and the building industry;

- (c) issues and problems in the timber industry, including the extent to which industry is following approved codes and industry guidelines on safe wood treatment practices;
 - (d) the availability of alternatives to CCA, their technical and economic feasibility and the wider impact of introducing alternatives; and
 - (e) the practical limitations on retrospective action, i.e. to deal with treated timber already in use, if necessary.
9. The Authority is in process of discussing with the Government and other agencies, how this further work should be coordinated and carried out. Discussions also need to occur with industry. When this further investigation has been completed, and after the conclusion of the BIA consultation, further steps including regulatory action under the HSNO Act may be indicated.
10. Whatever the outcome of this further investigation, there are prudent initiatives that can be taken immediately and that do not necessarily require regulatory action. In some cases, action has already been agreed and in others discussions are in train:
- (a) It is desirable that CCA treated timber is labelled, possibly as an extension of the “Woodmark” programme, and that information on both the possible risks of CCA treated timber and immediately available alternatives is available at all points of sale. Any practical limitations on achieving this need to be resolved with the industry. The BIA will be promoting action to this end.
 - (b) The Ministry of Health is already disseminating public health information on CCA and will continue to be the primary point of contact for public health issues. However, a more proactive role is required (information is currently provided on request) and the Ministry of Health will look at ways of achieving that. There is a link here with the provision of information at the point of sale. The Ministry will work with other agencies to develop questions and answers on health issues relating to CCA treated timber and provide this information on the Ministry's website.

The Ministry of Health will also undertake an analysis of cancer incidence and mortality data for builders and other high-risk occupational groups exposed to CCA and CCA-treated timber. The data analysis can then be used by other agencies, such as OSH to determine whether there is any need for further action.
 - (c) It is important that a proactive approach is also taken to informing those in the building industry.

Items (a), (b) and (c) above all include the provision of information on CCA and CCA treated timber to various sectors. The agencies involved will look at whether a single publication or pamphlet might meet all of these needs.

- (d) Firmer action should be taken to monitor the implementation of industry best practice documents on timber treatment, and ways of achieving this will be further discussed.
- (e) While it has not been established that there is a health risk from CCA treated timber in public areas, including playgrounds, there is, nevertheless, a understandable level of public concern over this matter. The Authority's view, based on the evidence to date, is that while there is no reason to take action on existing facilities, the appropriate authorities need to be aware of the actions available (such as the use of coatings) for reducing exposure from existing structures, if they wish to take a precautionary approach and allay these public concerns. Also, they need to be aware of the alternative materials available for the construction of new structures.

In this context, the Ministry of Education will be asked to work with Boards of Trustees to deal with facilities in schools, and discussions will occur with local authorities, to assist in appropriately managing other public areas. Some local authorities have already shown a lead on this by using alternative materials.

11. The Read report suggests that more research should be done to establish a better database on the incidence of cancers that could be correlated with occupational factors, such as the use of CCA treated timber. Research of this type would certainly add in a valuable way to our knowledge and the commitments being made by the Ministry of Health (see paragraph 10 (b)) above are noted. The Authority's view is that the lack of such research should **not** delay appropriate actions in relation to CCA.

Comparisons with other countries

12. The actions proposed in New Zealand are consistent in a broad sense, with those being taken overseas. However, comparisons need to take account of local circumstances. The Read report contains a significant amount of detail on recent international regulatory approaches to this matter. Key actions can be summarised as follows:
 - **European Union:** The European Commission has announced a partial prohibition on the use of CCA-treated timber, to take effect by 30 June 2004, unless structural integrity of the timber is needed for human or livestock safety and skin contact by the public is unlikely. Situations in which CCA preservatives may not be used include residential or domestic constructions. The directive does not apply to CCA-treated timber already in use.

- **United States:** The US Environmental Protection Agency (EPA) has announced its agreement to a voluntary request from industry to cancel the registration of CCA products for treating wood for use in most residential settings in favour of new alternative wood preservatives. From January 2004, CCA treated timber will not be allowed to be used for uses such as play-structures, decks, picnic tables, landscaping, residential fencing and walkways. The EPA, however, does not recommend that existing structures made with CCA-treated timber, or the soil surrounding such structures be removed. The US Consumer Products Safety Commission is also in the process of assessing the possible health risk to children associated with CCA-treated timber in playground equipment, based on a report prepared by its staff.
- **Australia:** The Australian Pesticides and Veterinary Medicines Authority has announced that it will conduct a review of arsenic based timber treatments in light of international reports of new scientific information on possible risks associated with their use. This review is expected to cover similar ground to the Read report, but will also examine environmental risks.

Conclusion

13. The package of measures set out above have been discussed with the Minister for the Environment, those government departments with an interest, the BIA and local government representatives. Taken as a whole they represent a positive and constructive approach to ensuring the appropriate management and use of CCA, both immediately and in the future.

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