CONSERVATION
TE PAPA ATAWHAI

CONSERVATION ADVISORY SCIENCE NOTES

No. 43

USE OF CCA TANALISED TIMBER IN OR NEAR WATERWAYS

(Short Answers in Conservation Science)

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USE OF CCA TANALISED TIMBER IN OR NEAR WATERWAYS

BACKGROUND

1 Copper, chromium and arsenic (CCA) treating of wood products is an inorganic method used for preserving the life of the wood product. Mixing these salts in specific ratios ensures complete fixation of these toxicants in the wood.

2 This treatment is favoured because of its "paintability" and lack of objectionable odours.

3 Although research into the leaching rates of the chemical from submerged treated wood is in its early stages, some aspects are clear. That is, the ph of the water is important - acidic waters greatly accelerate the leaching.

4 All three elements are toxic to aquatic biota, at certain concentrations.

5 In large bodies of non-acidic and constantly mixing waters, the dilution effect is enormous and combined with the fixative properties of the tanalising agent pose very little risk to native freshwater biota.

6 The greatest environmental threats posed by CCA are during and immediately after application of the preservative and when the treated wood has performed its service, not while it is in service.

RECOMMENDATIONS

1 We be aware of the hazards of treated timbers fully submerged or partially submerged in any waters on the native biota.

2 We advocate for due and reasonable care when planning permission, etc, sought for such structures in or near waters. Recommendations to include:

a ensure treated wood is shipped clean of surface sludge; and

b ensure fixation process complete by a test over plastic and subsequent analysis for CCA in water (done by Ministry of Forestry or supplier).

3 In acidic wetlands/bogs or areas of a very limited volume of water where dilution effect is small or where water mixing is limited, we advocate for thorough research before construction of any treated structure in the water body.

4 We advocate for monitoring in cases where we perceive there is a risk to the biota.

5 We communicate our legitimate concerns to the appropriate agencies (Otago Regional Council, Dunedin City Council, etc) on a case by case basis, and perhaps via the CMS process also.

In summary, there are four components to this issue:

1 become fully aware ourselves;
2 advocate;
3 research; and
4 monitor.

Brian Patrick
Conservancy Advisory Scientist

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SOME USEFUL REFERENCES

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CONTACT ADDRESSES

Otago University, Zoology Dept	Dr Stuart Mitchell Box 56 DUNEDIN	Phone: (03) 479 7973
Forest Research Institute	Mr Tony Bergervoet Private Bag 3020 ROTORUA	Phone: (07) 347 5899 Fax: (07) 347 9380
Ministry for the Environment	84 Boulcott Street Box 10 362 WELLINGTON	Phone: (04) 473 4090 Fax: (04) 471 0195
Department of Conservation	Dr Chris Pugsley Science & Research Div Box 10 420 WELLINGTON	Phone: (04) 471 0726 Fax: (04) 471 3279
	Dr John Waugh Estate Protection Division Box 10 420 WELLINGTON	