

Impact of restrictions on the use of CCA-treated wood in Sweden

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The CCA-type wood preservative was introduced in Sweden in the early 1950s. For about 40 years the well-known Boliden K33 formulation (a CCA type B according to AWWPA Standard P5) dominated. In the early 1990s there was a shift to CCA type C formulations which contain less arsenic.

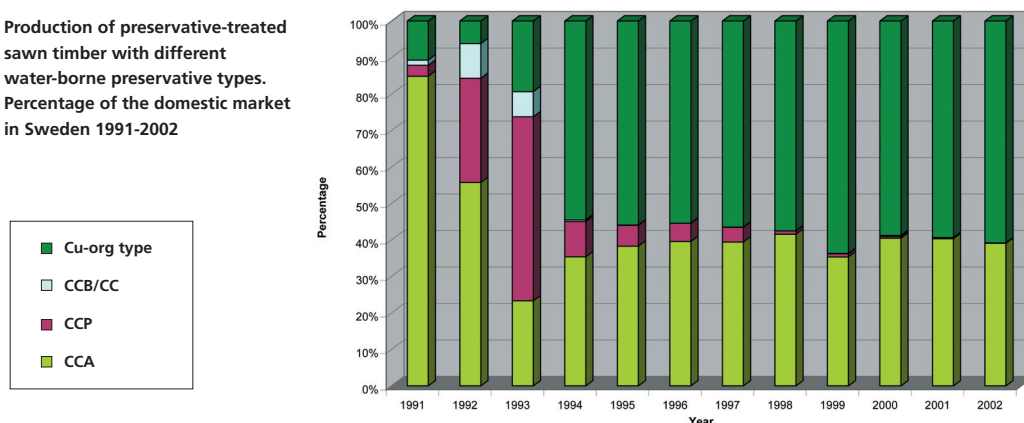
With the aim of reducing the use and distribution of potentially environmentally dangerous substances, the Swedish Chemicals Inspectorate (KemI) already in 1992 introduced restrictions for the use of wood treated with arsenic and chromium containing wood preservatives. In the KemI Code of Statutes KIFS 1990:10 it was stated that such treated wood was restricted for use accordingly:

- When the wood is buried in, or otherwise in permanent contact with damp soil or water;
- When the wood is used for the construction of jetties or other marine applications;
- When the wood is permanently installed as safety devices to protect against accidents;
- When the wood is used for the interior of constructions where it is difficult to replace and where there is a risk of accidental wetting, e.g. ground plates on plinths and concrete slabs, ground-floor joists, etc
- All other use of such treated wood is prohibited.

During a transition period 1992–1993 wood treated with chromium-containing preservatives was allowed also for other end-uses than the ones mentioned above.

The KemI restrictions had a dramatic impact on the use of CCA-treated sawn timber on the domestic market for preservative-treated wood. It decreased from approximately 85 % before 1992 to below 40 % in 1994, whereas the arsenic and chromium free preservatives increased their market share from about 10 % to nearly 60 % during the same period, see Figure.

Production of preservative-treated sawn timber with different water-borne preservative types. Percentage of the domestic market in Sweden 1991-2002



Since 1994 the market share of CCA-treated sawn timber on the domestic market has been fairly constant just below 40 %. During the transition period 1992-1993 the use of CCP-preservatives, i.e. those containing copper, chromium and phosphorous compounds, had a remarkable peak.

It is expected that the coming restrictions against CCA in the European Union, effective 1 July 2004, will further reduce the use of CCA-treated wood in Sweden.