

FACT SHEET

Farm Fence Lines

On 25 September 2008 Environmental Waikato (EW) issued a written summary of discussions by EW contaminated land staff on the development of an internal policy for CCA treated posts and batons, i.e. CCA treated fence lines:

1. For any rural or urban development, sensitive land use change or subdivision EW etc will request from the Territorial Authority that any CCA fence line contamination is identified.
2. Where CCA contamination is identified RAP provided to EW demonstrating how CCA fence post and line contamination is to be remediated.
3. SVR demonstrating that remediation of CCA fence line has been successful.

Note 1: the above is summary of our discussion only. Written policy will provide greater detail and will be drafted in due course.

Note 2: It is the intention of EW to provide TA's and consultants with a copy of this policy.

EW remediation rules require for any contaminated land that is to be remediated a DSI, RAP and SVR. Therefore, from today onwards all of these reports will now require CCA fence contamination to be addressed.

Copper Chromium Arsenic (CCA) treated fence posts have about 50% of the treatment chemicals leach out of the underground portion of the fence post over a 30 year life span. The H4 treated posts contain:

5,000 – 9,000 mg/kg Copper
8,000 – 12,000 mg/kg Chromium
8,000 – 12,000 mg/kg Arsenic

The leaching of these chemicals penetrates 200 – 400 mm radially into the soil and 200 – 500 mm vertically into the soil from the base of the post. This creates a column of up to 800 mm diameter and 1300 mm long of soil with arsenic levels ranging from 30 to often over 1,000 mg/kg for all of the three heavy metals. The top portion of the post and battens leach in lesser amounts, however surface soil often contains up to 300 mg/kg of the three metals. The effect is that each 1 km of fence line contains up to 100 tons of moderate to highly contaminated soil.

This is a serious concern, which also affects many other horticultural activities such as Kiwi fruit and Grape growing as these are CCA – pole intensive activities. During harvest 5 – 10% of the poles on vineyards break and often replacement poles are placed by ramming the new post on top of the broken stump, effectively pushing the earlier post towards or into the groundwater.

With worldwide attention on the use and phasing out of CCA treated wood, future produce grown on CCA contaminated agricultural properties may become unacceptable in critical countries. In the EU the use of CCA post on organic vineyards has been forbidden for a long time, and phasing out of CCA posts on other vineyards is underway in the EU, US and Australia.

Properties with large 'residue' volumes of soil may be undervalued compared to those where the residual contamination from fence lines have been managed during the fence upgrading process. In any case for subdivisions on farms, in the Waikato, the remediation of all current and past fence lines has to be factored into the development cost.

Summary:

In relation to this fact sheet, also read the fact sheet on subdivisions. When uncertain you can ask the EPA a question for free. When anything suspect is present please note that professional advice will likely cost less than a remediation of the site at the time you want to sell it, or to counter any health effects incurred by living on the property.