

New study into treating ink waste may have wider impacts for hazardous waste

A new study looking at diverting ink waste from landfill could have implications for treating a wider range of hazardous wastes, including contaminated soils.

The study, being led by Adelaide-based waste technology company Ziltek Pty Ltd, was prompted when global packaging manufacturer Amcor sought a sustainable solution for more than 1000 tonnes of ink waste generated by its various packaging plants in Victoria each year.

Funding of \$75,000 has been granted by the Victorian Government's HazWaste Fund, to be matched by industry. The study will utilise experts from the compost industry and two leading Australian research organisations.

Dr Richard Stewart, CEO of Ziltek, says the study will look at two main approaches to divert the ink waste from landfill.

The first approach involves 'stripping' the copper out of the waste by bioleaching. This process is used by the mining industry worldwide to extract metals from ore. It utilises the power of bacteria to make the process economical



John Newton of Amcor Australasia with Dr Richard Stewart of Ziltek

and environmentally friendly.

The second approach involves converting the waste into a useful soil conditioner product using a modified composting process. The product could be used beneficially on copper deficient soils.

Ziltek owns the intellectual property from the trials and will aim to patent any resulting technologies. Amcor will have access to these technologies for use at its various plants across Australia.

"We still have a lot of work to do, but any technologies resulting from the study may also have wider applications than just ink waste," Dr Stewart says. "For example, the technologies could be used to remove heavy metals from contaminated soils to open up possibilities for soil reuse."

Ziltek's related company, Remediate Pty Ltd, will be used to implement the commercial technologies in the marketplace.