## Review of Preliminary Site Investigation Conclusions for a Property at 5 Clark Street, Dunedin

## **Background**

Dunedin City Council (DCC) has requested Stantec New Zealand to review a Preliminary Site Investigation (PSI) report prepared by e3scientific Ltd (e3) with respect to a property at 5 Clark St, Dunedin. The past usage history of this land parcel is complex but it is clear that two separate activities have taken place on the land that appear on the Ministry for the Environment's Hazardous Activities and Industries List (the HAIL) site. These are the activities of a funeral home (probably including embalming) and an aluminium joinery manufacturing business.

## The PSI and its Conclusions

The PSI prepared by e3 has concluded that it is highly unlikely that an exposure pathway will exist between residents of the reconfigured building on the site and any historic contaminants in the soils underlying the property. The site is fully sealed and this will not be compromised at the conclusion of the proposed property improvements. While there may be some exposure of workers carrying out the improvements to possible soil contaminants if soil disturbance is necessary, this is expected to be limited in extent and can be managed by suitable health & safety procedures.

In any event, heavy metals contamination is not expected to be present at anything above negligible levels and any organic contaminants (in particular, formaldehyde associated with historic embalming activities) will have long since completely biodegraded, given that the half-life of formaldehyde in soil is around 48 hours. Accordingly the risks to both workers carrying out the redevelopment works and to residents of the building are very low.

The PSI states that '... any subsurface work that may be required can be undertaken within the permitted activity volumes set out in the NESCS' although no indication is given of the expected extent of disturbance likely to be necessary.

Stantec agrees with the various conclusions reached in the e3 PSI Report. We accept that the pertinent permitted activity criteria of the National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health (the NESCS) will not be exceeded by the proposed site works at this property where any contaminants are effectively "safe by position" and are either no longer present in significant concentrations or cannot migrate such that they represent a risk to health.

Paul Heveldt

Senior Environmental Specialist

Stantec New Zealand