

Pre Demolition Testing

Building and Environmental Health Unit

A1. Background

Within Tweed shire, chemical treatment using Organo Chlorine pesticides beneath structures such as dwellings to provide an effective barrier to termites was only a recommendation. Nevertheless it was a method that was used extensively from pre 1960's until the use of such pesticides was banned around July 1995.

Organo Chlorine pesticides are known to persist in the environment for upwards of seventy (70) years and therefore it is possible that given their residual nature, they may remain within the soil material beneath structures such as dwellings where they were predominantly applied beneath concrete slabs.

Exposure to high levels of Organo Chlorine pesticides may lead to serious health concerns in humans and as a consequence this may pose an issue when considering applications for the demolition of structures where their use in providing a barrier to termites may have been possible.

Where chemical treatment involving the use of Organo Chlorine termiticides to the soil material beneath the structure may have been carried out Tweed Shire Council must consider the requirements of State SEPP (Resilience and Hazards) 2021 in determining any development applications to demolish a structure.

A2. Requirements

Should the applicant agree that contamination of the site is likely due to the presence of pesticides, and only the presence of pesticides due to termite control practices described within this note, the following protocol will be adopted:

A satisfactory Preliminary Site Remediation Action Plan shall be submitted as part of the development application. The plan shall set objectives and document the process to remediate the site including details of specific on site burial or treatment method and shall also include, but not be limited to, the minimum requirement to undertake the following assessment prior to release of the construction certificate:

- Prior to the **disturbance/removal of the concrete slab** commencing on site, a minimum of four (4) sample points shall be selected for the sampling of the soil material beneath the structure, the sample points shall be appropriately separated so as to provide a representative distribution pattern. The soil material shall ideally be accessed via breaching of the slab either by drilling or other method that will not lead to undue disturbance of the soil material beneath.
- Accessing the soil material from the sides of the slab is not an accepted sample method as the 0-150mm layer beneath the slab is unlikely to be intercepted.
- Samples of the soil material shall be taken from each of the four (4) sample points at the following depths: 0-150mm, 150-300mm and 300-500mm.

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- Where the soil material is considered to be homogeneous at the four sample points and at each of the required depths, the samples from the same depth at each of the four points may be mixed to form a composite sample for analysis. Using this method will yield three (3) composite samples for analysis each consisting of four (4) sub-samples from each corresponding depth layer.
- The samples shall be sent under appropriate chain of custody documentation to a NATA (National Association of Testing Authorities) certified laboratory for analysis of Organo-Chlorine pesticides (eg; dieldrin, aldrin, heptachlor, chlordane etc.)
- Laboratory analysis results shall be submitted to Council for further consideration and **written approval prior to the disturbance/removal of the concrete slab.**

An amended Remediation Action Plan (Final) is to be submitted if required by Council's Officer.

- Where composite sampling is utilized then results are to be adjusted and reported to reflect composite sample results.

A3. Note

The above procedures are to be carried out by a suitably qualified consultant with experience in contaminated soil sampling.