



20-D-02015

s 9(2)(a)

Tēnā koe, s 9(2)(a)

Total Petroleum Hydrocarbons in soils

Thank you for your email correspondence of 27th October 2020. While your correspondence was initially acknowledged as an Official Information Act request, the Ministry has decided to address your questions via this letter. You have asked some questions relating to composite soil samples you have taken from your back garden and subsequently had analysed by a laboratory for Total Petroleum Hydrocarbons (TPH)

With respect to baseline TPH concentrations in New Zealand soils, there are many types of naturally occurring TPH in New Zealand. Concentrations of TPH vary and depend on the local soil type. For example, samples of the peaty soils taken during the investigation into the leak from the Refinery Auckland Pipeline in Northland returned samples results of >30,000 mg/kg of natural hydrocarbons.

In response to your questions 2 and 3:

The Ministry for the Environment has produced Guidelines for assessing and managing petroleum hydrocarbon contaminated sites in New Zealand (revised 2011) available on our website here: <https://www.mfe.govt.nz/publications/hazards/guidelines-assessing-and-managing-petroleum-hydrocarbon-contaminated-sites-new>. These guidelines include risk-based soil acceptance criteria, and information on developing and applying the generic soil acceptance criteria and information on potential exposure scenarios.

The Tier 1 soil acceptance criteria for TPH in residential soils depends on the depth of contamination and the soil type where the contamination exists. In terms of the samples you have taken, compositing samples for volatile contaminants - such as TPH - is not appropriate, as the mixing of the samples increases the potential for contaminant loss. Secondly, TPH does not provide contaminant-specific information and therefore makes it very difficult to determine the toxicity of any soil on the site.


In response to your question 4:

For further advice on investigating potentially contaminated land and assessing the significance of your soil sample results, we suggest you contact Taranaki Regional Council (TRC) at info@trc.govt.nz or phone 0800 736 222.

Regional councils have a function under the Resource Management Act (1991) to investigate land for the purposes of identifying and monitoring contaminated land. They will be able to advise you whether further investigation is necessary to determine the extent and significance of contamination at your site, and what that process involves.

TRC will also be able to advise if any relevant legislation applies to your site, such as the Resource Management (National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health) Regulations.

Nāku noa, nā

A handwritten signature in black ink that reads "G. Wigley". The signature is written in a cursive style with a large initial "G" and a stylized "Wigley".

Glenn Wigley

Director – Regulatory and Policy – Waste and Resource Efficiency

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