

**MEMO: ENVIRONMENTAL HEALTH UNIT – NES for Assessing and Managing Contaminants in Soil to Protect Human Health (NESCO) Assessment**

BY : Carmel Mangan Contaminated Land Officer  
SUBJECT : 461 Peacockes Rd – Amberfield Development  
REFERENCE : 010.2018.9853  
DATE : 4/3/19

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**The content of this memo includes a review of:**

- NESCS required reporting
- Investigation conclusions
- Recommended conditions

**Land covered due to confirmed HAIL activities:**

The site is a greenfield site required to be considered under the NESCS regulations 5.7, 5.8 & 6.0. As a greenfield site it is more likely than not to have been subject to a variety of agricultural or horticultural practices that could have resulted in soil contamination. These assumptions were validated by information gathered as part of a Preliminary Site Investigation (PSI) done and reported by ENGEO on behalf of the applicant.

**PSI technical content review summary:**

The objective of the PSI was to establish if there was a risk to future site users from historical land uses. This objective is consistent with NESCS regulation 8 and could potentially confirm that the proposed residential subdivision is able to proceed as a permitted activity. However, a PSI is mainly quantitative so a conservative view of the possibility of risk must be taken if the Suitably Qualified and Experienced Practitioner (SQEP) is unable to confirm that it is “highly unlikely to harm human health further investigation is warranted.

The technical scope of the PSI report satisfies the NESCS requirements. The SQEP has followed MfE’s Contaminated Land Management Guidelines # 1 & 5 and used a variety of historical information to identify potential contamination sources. Multiple HAILS have been listed in section 5 of the PSI report and the risk posed factored into the exposure pathway assessment presented in the conceptual site model in Table 6. The SQEP has concluded that an intrusive investigation is necessary to determine if the concentration of contamination in soil exceeds the applicable human health standard.

**Conclusions:-** Subdivision and changing land use:

A PSI has established that regulation 8.4.b is unable to be satisfied. The weight of evidence that HAILS have occurred, and the probability of a human health risk, is sufficient enough for a convincing conclusion that further investigation is warranted.

The SQEPs recommendations to identify the nature of any contamination present on a site, and delineate its extent with intrusive works, is consistent with the NESCS requirements.

While no Detailed Site Investigation (DSI) exists, the proposal can proceed as a discretionary activity regulation 11.

These conclusions are validated by the information provided in ENGEO’s PSI Report, dated May 2018.

Giving effect to the conditions and taking the necessary action will result in the site being fit for purpose.

**Recommended conditions:**

It is considered that the implementation of these conditions will ensure the necessary investigation, remediation and/or management is done to ensure effects on the human health of future site users and the environment in general is unlikely.

Conditions

**CONTAMINATED SOILS**

1. *A suitably qualified and experienced practitioner (SQEP) with contaminated land expertise shall investigate the suitability of the land/piece(s) of land (POL(s)) for the proposed development in accordance with the requirements of the RMA (National Environmental Standards for Assessing and Managing Contaminants in Soil to Protect Human Health) (NESCS) Regulations 2011.*
2. *Prior to any soil disturbance works commencing, the consent holder shall arrange a pre-commencement meeting in relation to the soil contamination investigation. In attendance shall be: A SQEP, HCC Contaminated Land Officer and Compliance Monitoring Officer, the relevant contractors, sub-contractors and works site supervisory staff who are carrying out any works associated with the NESCS part of the project.*
3. *A Detailed Site Investigation (DSI) shall be completed in accordance with the recommendations of the Preliminary Site Investigation (PSI) Report prepared by Engeo, dated 14 May 2018. The DSI objectives and subsequent design strategy shall ensure adequate soil quality data is collected so the information is appropriate, and representative of any exposure risk posed by activities or industries described in the HAIL. The investigation shall define and delineate the extent of contamination, with an acceptable level of confidence, to determine the applicable standards in the NESCS Regulations. The investigation shall be reported on in accordance with the current edition of Contaminated Land Management Guidelines No.1 - Reporting on Contaminated Sites in New Zealand, Wellington, Ministry for the Environment. The Report shall be provided to Council's Environmental Health Manager (or nominee) for approval in a certification capacity prior to any earthworks associated with this subdivision being carried out.*
4. *If the results of the DSI indicate that the soil contamination exceeds the applicable standards a Remedial Action Plan (RAP) shall be prepared and implemented. The RAP shall be prepared in accordance with the current edition of the Contaminated Land Management Guidelines No.1 - Reporting on Contaminated Sites in New Zealand, Wellington, Ministry for the Environment. The Plan shall be provided to Council's Environmental Health Manager (or nominee) for approval in a certification capacity prior to any remediation works associated with this subdivision being carried out.*
5. *If any remediation is required, validation sampling shall be undertaken and a Site Validation Report (SVR) shall be prepared after the remediation has been completed to demonstrate that the site is suitable for the intended land use. The report shall be prepared in accordance with the current edition of the Contaminated Land Management Guidelines No.1 - Reporting on Contaminated Sites in New Zealand, Wellington. The report shall be provided to Council's Environmental Health Manager (or nominee) as soon as practicable after remediation of the*

*site has been completed. Council must be notified of any proposed variations to the RAP and any alternative methods or measures shall be proven to be consistent with the objective of the approved RAP prior to their implementation.*

- 6. In the event remedial works are undertaken, a Site Validation Report (SVR) shall be prepared that confirms the remediation targets stated in the approved RAP have been achieved. The SVR must adequately demonstrate that no unacceptable risk to human health or the environment remains at the completion of any remedial works and that the piece of land is suitable for the intended use. The report shall include confirmation that all the consenting requirements have been met and compliance approved before development of any POL(s) can occur. A copy of the SVR must be provided to Council's Environmental Health Manager (or nominee) for approval in a certification capacity as soon as practicable after remediation of the POL(s) is completed.*
- 7. Any soil exceeding the applicable NESCS standard shall be removed under controlled conditions to a licensed waste facility or landfill for disposal in accordance with the requirements of the RAP, the disposal site and the relevant authority. Receipts of transport and disposal shall be included in the Site Validation Report.*
- 8. If the results of the DSI indicates soil disturbance is required to be managed, a Site Management Plan (SMP) shall be prepared that targets the actual onsite conditions relating to human health exposure, and the actual offsite removal issues relating to appropriate transport and disposal. The SMP shall include the relevant human health-related controls to ensure minimal exposure via the applicable pathways for the duration of the soil disturbance works. The SMP shall include appropriate contingency measures for any previously unidentified contamination being discovered, and an acceptable method and timing for works completion reporting. A copy of the SMP shall be provided to Council's Environmental Health Manager. Any alternative methods or measures shall be proven to be consistent with the objective of the approved SMP prior to their implementation.*

#### Advisory notes

- a) The off-site disposal of any potentially contaminated soil may qualify as a discharge of contaminants under the Waikato Regional Plan and therefore the applicant is advised to contact Waikato Regional Council to establish if the disposal activity requires Resource consent.*