

SUBMISSION to the MINISTRY for the ENVIRONMENT

Proposed Amendments to the National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health

14 October 2016

1. Environment Canterbury thanks the Ministry for the opportunity to comment on the proposed changes to the National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health (the NESCS) as set out in the September 2016 consultation document and associated technical documents.
2. The following submission is offered on the basis of Environment Canterbury's roles, functions and responsibilities under the Resource Management Act 1991 (RMA) and the Local Government Act 2002 (LGA).

Context

3. Environment Canterbury is the Regional Council for the largest geographical region in New Zealand. Canterbury has an estimated 586,500 residents (at 30 June 2015), or 13% of the national population, making it the second most populous region in New Zealand after Auckland.
4. Environment Canterbury works in close collaboration with the ten territorial local authorities (TLAs) in the region, via the Canterbury Mayoral Forum, Chief Executives Forum, Policy Forum and Planning Managers Group, and a range of other groups and networks. Given TLAs' statutory responsibilities for management of sites affected by soil contamination, Environment Canterbury has recently appointed a dedicated staff member as a contact point for TLAs for NESCS advice. This position is jointly funded with the TLAs.
5. Environment Canterbury also works in close partnership with the mana whenua of our region, Ngāi Tahu, through our Tuia Relationship Agreement with the ten Papatipu Rūnanga

of Ngāi Tahu in Canterbury and the tribal authority, Te Rūnanga o Ngāi Tahu. Tuia is a practical affirmation of Environment Canterbury's responsibilities with regard to the principles of the Treaty of Waitangi under the RMA, the LGA and other legislation including the Ngāi Tahu Claims Settlement Act 1998.

General comments

6. Environment Canterbury acknowledges the extensive work that has gone into the consultation document and supporting technical documents. However we note that councils' eventual implementation of the amended NESCS will be reliant on guidance that has not yet been provided, which includes some crucially important matters such as HAIL definitions. It has been very difficult to assess the implications of all the proposed changes to the NESCS without that guidance.
7. We note that the proposed amendments to the NESCS include a number of highly technical processes that require considerable expertise and specialist knowledge – for example, the site management tools and the option of site assessments based on site-specific bioavailability information. As we highlight in the following submission, these technical dimensions are likely to be difficult for many New Zealand councils to implement with the necessary levels of confidence. Reliance on site reports from a suitably qualified and experienced practitioner (SQEP) will not always be an adequate solution to a lack of capacity within councils as the principal regulatory agency. We note that the intent of these two technical amendments to the NESCS is 'to minimise management costs for landowners when a site is contaminated' (p 5, consultation document). While efficiency and cost-effectiveness are important aims, any amendments must be consistent with the overall purpose of the NESCS – to ensure that land affected by contaminants in soil is appropriately identified and assessed at the time of being developed, and if necessary, remediated, or the contaminants contained to make the land safe for human use (p 7). This will often require considerable expertise and experience within councils as well as via specialist consultants. The practical challenges of these highly technical processes need to be given adequate attention – most logically through a dialogue process involving local government with the Ministry and other relevant agencies and experts.
8. Environment Canterbury also notes the limited time available for councils and others to work through the extensive amounts of complex technical material, evaluate the effects of the proposed changes for our operations and science teams, and to gather evidence of the issues arising and the probable scale of impacts of the changes. The time pressures are only exacerbated by the fact that responses are required on the proposed changes over the same time period as the local government elections, with the consequent irregular timetables for councils' approval of feedback on proposed policy changes.¹

¹ We also note that the timeframe for feedback on these proposals coincides with the school holidays.

9. Environment Canterbury appreciates the opportunity for our expert staff to provide input to the process of working through the implementation issues with the current NESCS. We consider that ongoing collaborative engagement with local authorities and other professional experts will be essential to ensure that the amendments eventually determined will be effective, workable, affordable and efficient for all participants in the field. Environment Canterbury looks forward to further involvement with the Ministry to work through the issues and help deliver a practical, effective NESCS.
10. In the following submission, Environment Canterbury addresses particular questions posed in the consultation document. Detailed responses to other specific proposed amendment points are provided in the Appendix.

Section 3: Hazardous Activities and Industries List (HAIL)

11. Environment Canterbury acknowledges the intent of the proposed changes in Section 3: to improve councils' consistency in the interpretation and application of the HAIL. However we consider that the proposals as currently drafted need further attention to achieve this aim.
12. *Question 1:* Environment Canterbury supports the simplification of some descriptions. However overall it is difficult to understand whether the proposed amendments will be sufficient in the absence of the guidance material that is promised.
13. *Questions 4 and 7:* The guidance should include definitions, but also needs some tools for identifying a HAIL. The definitions alone are not sufficient for a council to know whether a PSI has reached the correct conclusion about the activities on a site without clear direction as to how to identify some of those activities. CLMG 1 and 5 simply outline the minimum requirements for an investigation, but do not provide the necessary detail on what to look for when identifying HAIL sites.

Section 4: Does the NESCS apply?

14. Environment Canterbury **supports** the general principle of appropriate risk-based assessment of a site to determine whether or not the NESCS should apply. However Environment Canterbury does not agree that this determination would not have to be made by a SQEP as outlined on p 17 of the consultation document.
15. Environment Canterbury considers that these would be significant consequences of the proposal that landowners and councils have this responsibility. These include inconsistency of decisions, inconsistencies between councils, and increased workload pressure on councils as landowners naturally seek to avoid the costs involved in engaging a SQEP. Furthermore the proposed change to regulation 5(7) would open up all HAIL sites to the landowner and council to decide on the risk.

16. Environment Canterbury **recommends** that, rather than changing the definition of ‘a piece of land’ by amending regulation 5(7), the NESCS is amended by the addition of a Preliminary Site Investigation (PSI) assessment as a permitted activity to both soil sampling and disturbance activities (as for subdivision).
17. *Question 8:* As noted above, Environment Canterbury agrees with the intention to use risk-based assessment. However we **do not support** the proposed mechanism as outlined in the consultation document, and we **do not support** this change being made at this place in the regulation. Relying on a landowner’s assessment of whether a HAIL activity has caused land contamination is flawed. Environment Canterbury **recommends** that the NESCS should allow an assessment to be made by the council and the SQEP as to whether the ‘NES activity’ (rather than the HAIL activity) is likely to cause harm to human health, as under the existing provisions under regulation 4.
18. *Question 9:* The terminology will need very careful definition. For example, ‘more likely than not’ implies a probability more than 50% of the time, which would be difficult to defend. The term ‘reasonably likely’ allows for some judgement to be made, but provides less certainty.
19. *Question 10:* The proposed changes would also impact on the methods in regulation 6. Under this proposal, a landowner could rely on council records not only to identify whether a HAIL activity has occurred, but also whether that activity has caused land contamination. Most of the time this information will not be available from a council record, although reliance on those records would satisfy the formal requirements of the regulation.
20. To ensure an appropriately robust determination of whether a HAIL activity could have contaminated a site, Environment Canterbury considers that the minimum requirement must be a PSI. The addition of regulation 6(4) will not be sufficient to ensure that these determinations are based in reliable information. This will require change to regulations 6(2) and 6(3). Regulation 6(2) needs to be amended so that subclauses (a) and (b) are linked by the word ‘and’ rather than ‘or’. This would ensure that TLAs are mandated to check regional council registers for this information.
21. However, such a change to the formal methods – a requirement for a PSI (as the only reliable way to determine whether a HAIL activity had contaminated a site) – would also need to apply for all NESCS activities. This may result in councils being faced with a significant burden to respond to requests for assessments.
22. Therefore Environment Canterbury **recommends** that the proposed change to the regulation – to allow landowners to make an assessment about the likelihood of land contamination and whether the NESCS should apply to their activity – is deleted. We **recommend** that the requirement is that a SQEP must state that the proposed activity (such as subdivision, excavation) will pose no harm to human health and the relevant council must agree with this determination.

23. *Question 11:* There are a range of potential unintended consequences arising from this proposal. The vast majority of landowners are not qualified to decide whether a HAIL activity has resulted in contaminants that could pose a risk to human health. This determination requires an in depth knowledge of the scale and nature of a HAIL activity and the characteristics of the chemicals of concern, and an understanding of the complex processes involved in soil contamination. Environment Canterbury considers that even a SQEP would struggle to make this determination on the basis of only a known HAIL activity.
24. The likely outcomes of these proposed changes are that many landowners would choose to avoid the time and costs of engaging a specialist consultant, and make the determination themselves. There is no notification requirement under this regulation, so councils would potentially not be informed of the decision. Potentially harmful activities on contaminated sites may subsequently be allowed to proceed with no controls, which could be detrimental to the health of the people involved and to the environment. This would be contradictory to the intent of the NESCS.

Section 5: NESCS activities and planning controls

25. *Proposal 5.1:* Environment Canterbury **supports** the proposal that there is no requirement for controlled activity consents for sites with contamination below guideline values. However we **recommend** an associated notification requirement with specified timeframes. For this measure to be effective there must be a clear, reliable and timely process. Reports must be required to be submitted to the council before the permitted activity commences, in order to allow councils to seek advice, have reports reviewed, and check for other consent requirements that may also be required for the development. This would also be beneficial for the landowner or developer as they will understand their regulatory obligations prior to starting their works.
26. *Proposal 5.2:* Environment Canterbury **does not support** the proposal that no NESCS resource consents would be required for soil disturbance by network utility operators.. There are no limits proposed on the scale of the activity, so potentially operators could, as a permitted activity, disturb unlimited volumes of contaminated soil. The proposed measure would rely on the council having confidence in the operators' management of that process. Environment Canterbury is aware of an example in Christchurch involving coal tar in large quantities.
27. Environment Canterbury considers that if soil disturbances by network utility operators are to be classified as permitted activities, there should at the very least be a notification requirement, with a site management plan required to be submitted to the council so that appropriate monitoring may be undertaken. Given the number of controls that would be required to enable the activity to be permitted, such activity should require consent.

28. *Proposal 5.3:* Environment Canterbury **supports** the proposed change that no NESCS resource consent would be required for subdivisions that are ‘paper-based’ or do not facilitate a current or future change.
29. *Question 14:* Environment Canterbury prefers Option 1: risk based assessments can be problematic and we consider it would be more efficient to exclude certain types.
30. *Proposal 5.4:* Environment Canterbury **supports** the proposal to treat soil disposal as a stand-alone controlled activity, on condition that the current permitted activity controls are still a requirement of a permitted activity. However we note the possibility of an unintended consequence of this measure, in that councils may require all soil to be disposed of to landfill even if it poses no risk. We **recommend** that the Ministry provide guidance to councils to ensure appropriate implementation of this rule.
31. *Proposal 5.5:* Environment Canterbury **supports** the proposal to remove the option of discretionary activity class for soil disturbance and removal or replacement of fuel tank storage systems.
32. *Proposal 5.6:* Environment Canterbury **supports** the proposal to remove the option of restricted discretionary and discretionary activity classes for soil sampling.
33. *Proposal 5.7:* Environment Canterbury **supports** the proposal to define ‘soil disturbance ratio’ in regulation 8(3), but we note that the area being disturbed will need to be defined with clarity and precision.
34. *Proposal 5.8:* Environment Canterbury **supports** the proposal to define ‘piece of land’ in regulation 8(3). However we note that this would allow for very large disturbance on a single property if the whole area is identified on the relevant HAIL. This would go against the intent of the rule to allow ‘small scale disturbances’.
35. *Proposal 5.9:* Environment Canterbury **supports** the removal of the term ‘per year’ from regulation 8(3).
36. *Proposal 5.10:* Environment Canterbury **supports in principle** the proposal to require SQEPs to use a standardised certifying statement on their reports. We note that the suggested wordings included in the consultation document are not the final version, and are only provided to promote discussion on the proposal (p 37). We suggest that only the final paragraph of the certification needs to be retained (the statement that the practitioner is suitably qualified and experienced) as the preceding paragraphs only reiterate language that is repeated in the body of the report. We **support** the proposed requirement that the SQEP appends a CV to every report.

37. Environment Canterbury cautions however that an unintended consequence of this proposed rule may be that councils do not actually read a report and only rely on the certification. We note that sometimes even SQEPs' assessments can be inaccurate or based on incomplete information. We **recommend** that the Ministry:
- provides further guidance to council on how to assess SQEPs' reports
 - encourages an accreditation scheme for practitioners
 - endorses and assists with sharing services between councils, where regional councils with expertise and experience support the TLAs in their region and share information and advice.

Section 6: Management of contaminated land

38. Environment Canterbury acknowledges the intent of Section 6 of the consultation document – and in the 2016 Revised Draft of the *Contaminated Land Management Guidelines No 1* (CLMG1) – to establish site-specific management appropriate for the risk. Nevertheless we consider that further attention is required to resolve a number of issues with the proposals.
39. Environment Canterbury notes that guidance is lacking in CLMG1 on the proposed Template Ongoing Site Management Plan (TOSMP). We also note points in the report from Golder Associates, *Site Management Options for Residential and Rural Residential Sites*, where the provisions relating to the use of a TOSMP could be made clearer or are inconsistent (see Appendix).
40. One example is with site characterisation providing statistical confidence that soil contamination is diffuse and low level and that there are no hotspots. To know what size hotspot is appropriate, and therefore the correct sampling density, and to understand whether data are statistically significant, requires an in depth knowledge of statistical analysis. Environment Canterbury notes with concern the risk that, given the highly specialised nature of the knowledge and expertise required, there would be reliance on the SQEP certification rather than appropriately rigorous scrutiny of management proposals. This could result in management options being considered that might be less than appropriate. There will be powerful economic drivers in the mix, and there will inevitably be pressure for councils to accept the most cost-effective option put forward.
41. Environment Canterbury **recommends** that the 'Site Management Decision-making Framework' be modified to include a comprehensive section on how to assess whether a site is suitable for management, before moving into assessment of the appropriate management option. Situations where management is not appropriate should be included in the flow-chart.
42. Environment Canterbury notes with concern the assumption that site management may not be appropriate for sites that 'contain buildings incorporating potentially hazardous building materials, especially lead paint or asbestos-containing materials'. However lead paint is not

a HAIL activity, and is very seldom assessed in a Detailed Site Investigation (DSI) Clarification is needed as to how councils would be expected to identify sites where lead paint is an issue such that the site is not appropriate for site management. It is estimated that as many as 251,000 New Zealand homes could have lead-based paint.² This potentially means that site management may not be an option for those homes, even if they meet all other criteria and management could be achieved. Likewise, information on sites where asbestos is present in a deteriorated condition is very difficult to obtain, and in most cases will not be assessed as part of a DSI.

43. Another matter where clarification is required is the statement that a key element of the TOSMP is to ensure that ‘the areas where children are likely to spend the majority of their time do not have unacceptable concentrations of contaminants’ (p 41, consultation document). This is an obvious principle, but implementation will need precision and consistency in the definition of what is considered ‘unacceptable’ in the context of a management plan.
44. Environment Canterbury notes that the control options presented in Table 5 of the Golder Associates report, *Site Management Options for Residential and Rural Residential Sites* (p 17), are all chemical or physical measures. No behavioural controls are included in the Table, although they are discussed in section 3.7 of that report. Behavioural controls are not described in CLMG1. More consideration and clarity is required for guidance as to what behavioural controls are appropriate in different situations, as these are often the most cost effective solution to a residential site with low level diffuse contamination.
45. Clarification is also required of the ongoing obligations established by the framework set out in Table 5 of the Golder Associates report. We note that the control options presented are predominantly long term controls, and in many cases ongoing monitoring or testing will be needed. It is not clear how a NESCS consent can ensure that long term management controls are followed. Matters to be addressed include the agency responsible and any associated enforcement requirements. It is our view that this burden will likely fall to the TLA, which would not necessarily be able to recover the costs for such work.
46. It is a serious concern that simply recording the TOSMP as a condition of consent will not be sufficient to ensure long-term visibility of its existence and its requirements after the consent expires. Relying on a property purchaser’s due diligence to look into consent conditions on past expired consents will not be reliable to ensure understanding of any contamination and adherence to the necessary measures set out in the TOSMP. Environment Canterbury **strongly recommends** that the TOSMP is given long-term formal status as part of the land information for an affected property, to ensure that future landowners and residents are aware of the requirements.

² 2008 Ministry of Health Guideline for the Management of Lead-based Paint.

47. *Question 23:* Environment Canterbury **agrees** with the proposed new soil guideline value to apply to sites with a TOSMP. However we consider that guidance is lacking, and we **recommend** that guidance is provided as to how to apply these values appropriately.
48. *Questions 27 and 28:* Environment Canterbury **agrees** with proposal 6.3 for an option to enable site-specific soil guideline values to be calculated using the site-specific bioavailable concentration of arsenic and lead. In our view the current methodology's assumption of 100% bioavailability is too conservative. The proposed change will introduce much-needed flexibility to the consideration of remedial technologies, and could help to reduce over-use of inefficient remedial options (such as 'dig and dump'). However, again we note that this proposed change will depend on the practicality of the 'appropriate methodology' to be introduced (p 45). As it will introduce another level of complexity to the regulation, it will need clear guidance and support for councils,. As noted above, it is difficult to assess the implications of proposed changes in the absence of the necessary guidance and the lack of clarity for the actual processes and support that will be available for local authorities.
49. *Question 29:* Environment Canterbury considers that the proposed option of site-specific calculations using bioavailability may pose challenges for some councils' capacities and expertise. This may result in over-reliance on the SQEP certification to satisfy the council that the site report is based in an adequate assessment. Environment Canterbury is concerned that this reliance on SQEP certification statements may lead to decisions being made in error, or being based on a biased perception of site conditions and results. In our experience site reports frequently differ in their conclusions from our technical review of the information. There is a wider risk that by including more complicated, expertise-dependent processes under the NESCS, many highly technical decisions will be made on the basis of insufficient knowledge or understanding of the consequences.
50. *Question 30:* Environment Canterbury notes that CLMG1 and CLMG5 do not provide sufficient information around a number of the technical aspects of proposal 6.3, including how to determine whether bioavailability assessment is appropriate for a site, how to collect samples, laboratory analysis requirements, quality assurance and reporting and interpretation of results. These aspects must be covered in a specific guidance document to ensure that this new option is appropriately implemented.

Conclusion

51. Environment Canterbury appreciates the opportunity to provide this feedback on the proposed amendments to the NESCS. We also value the involvement to date with the Ministry as thinking around possible improvements to the NESCS has evolved, and we look forward to ongoing participation in future dialogue.

52. Environment Canterbury supports a number of the specific proposals, as detailed in the submission above. However on the basis of our experience, particularly since the Canterbury earthquakes, we consider that a number of the proposals need some further work to be practical, achievable, and consistent with the overall intent of the NESCS.

For further enquiries:

Please contact: Davina McNickel, Team Leader Contaminated Sites
027-549-7718 / davina.mcnickel@ecan.govt.nz

APPENDIX: SPECIFIC MATTERS:

Reference:	Issue:	Comment:
Appendix 3: A1 and A11	Agrichemicals and pest control premises	Clarification is needed as to the intended scale and focus of these categories. The application of A11 only to 'authorities or commercial operators' is inconsistent with A1 which seems to have a wider scope which includes premises where 'authorities or commercial operators' have stored or prepared these substances. These categories need to avoid the unintended capture of residential sites.
Appendix 3: A10	Removal of sports turfs from HAIL	<p>While we understand the intent behind this proposal, we are concerned that this would remove potentially contaminating activity. Environment Canterbury's sports turf study showed that there were no turfs that could be excluded. We recommend:</p> <ul style="list-style-type: none"> • A10 should keep sports turfs but exclude school fields – the wording should be 'including intensively managed sports turfs'. • Definitions are needed for the terms: 'persistent', 'bulk storage' and 'intensively managed' – these definitions should be aligned with international guidance. • Guidance is needed on poultry farms as HAIL sites. • The dates of use of pesticides need to be covered in the requirements. Except for the use of copper, at some point in time persistent pesticides will no longer be an issue.
Appendix 3: A13	Petroleum storage	Definition is needed for 'bulk storage' and for the difference between a 'storage tank' (A17) and bulk storage.
Appendix 3: A14	Pharmaceutical manufacture	Environment Canterbury supports the removal of the condition 'with the potential for environmental discharges'.
Appendix 3: A17	Storage tanks	Definition is needed of the volume required. This could be linked to HSNO regulations. Volumes could be based on hazard class of the substances involved. The lack of clear definition creates inconsistency, and leaves the unintended consequence that every farm tank, pool chemicals, household hazardous substances or septic tanks could be impacted by this regulation.

Appendix 3: A18	Wood treatment or preservation	Definitions are needed for 'bulk storage' and 'storage outside' – does 'outside' include covered areas or not?
Appendix 3: B2	Electrical transformers	Definition is needed of the scale that is intended to be covered – for example, roadside transformers. What scale of 'other heavy electrical equipment' is the difference from a substation (B4)? Environment Canterbury recommends that this clause is reworded to cover <u>only</u> manufacture, repair or disposal.
Appendix 3: C2	Gun clubs or rifle ranges	This category should be revised to include shot fall zones.
Appendix 3: D2	Foundry operations	Clarification is needed as to whether this includes blacksmiths operations, and the timeframes intended to be covered.
Appendix 3: E1	Asbestos products	Identification of sites with asbestos known to be in a deteriorated condition is already problematic for councils. Guidance and support will be needed.
Appendix 3: F1	Airports	This category should be revised to include fuel conveyance.
Appendix 3: G5 & 6	Waste disposal and recycling	These categories should be revised to cover sites used for the storage and sorting of waste prior to recycling – for example, used tyres, resource recovery sites.
Appendix 3: H1	Migration of hazardous substances from adjacent land	Environment Canterbury supports the removal of the condition 'in sufficient quantity that it could be a risk'.
Golder Associates report	Inconsistencies	The Golder Associates report (p 3, section 1.4) discusses residual soil contaminant concentrations being 'low level' defined as not exceeding 50% above the SCS. However the Decision Making Framework flow chart (p 9) states: 'DSI identifies $SCS < [Coc] < 2 \times SCS$ '. This means the decisions whether the TOSMP is appropriate, using the flow chart, is based on the contaminants being less than 2 times the SCS. That is not the same as less than 50% above the SCS.