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To: Ministry for the Environment

From: Christchurch City Council

Proposed NES Contaminants in Soil
Ministry for the Environment
PO Box 10362
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Council Submission on Proposed National Environmental Standard for Assessing and Managing Contaminants in Soil

1.0 Introduction

- 1.1 Christchurch City Council (the Council) thanks the Ministry for the Environment (the Ministry) for the opportunity to make a submission on the proposed National Environmental Standard for Assessing and Managing Contaminants in Soil (NES).
- 1.2 The Council acknowledges the time and effort required to develop the proposed NES and the companion documents *Draft Toxicological Intake Values for Priority Contaminants in Soil* and *Draft Methodology for Deriving Soil Guideline Values Protective of Human Health*.
- 1.3 The Council's submission is organised into five parts:
- A brief background section
 - General comments on the NES
 - Specific, and often technical, comments
 - Conclusions
 - Addendum, which provides answers to questions raised in the discussion document

2.0 Background to the Council's submission

2.1 Council's role

Under the Resource Management Act (RMA) section 31 (1)(b)(ia), the Council has the function in its district of "the control of any actual or potential effects of the use, development, or protection of land, including for the purpose of ... the prevention or mitigation of any adverse effects of the development, subdivision, or use of contaminated land." The Council processes over 4,000 consents, including those for land use changes, every year.

The Council also has building control functions under the Building Act 2004 to which contaminated land issues can be relevant, as well as information functions under that Act, through the issuing of Project Information Memoranda (PIMS), and under the Local Government Official Information and Meetings Act 1987, in issuing Land Information Memoranda (LIMs). As you are aware, Regional Councils also have functions under the RMA in relation to contaminated land.

2.2 Information management

The Council maintains some information about land, land use and soil contamination within its own records. Environment Canterbury (ECan) collate information on land use and contaminated sites in their Listed Land Use Register (LLUR). Council staff have read-only access to the data in LLUR. The data collected in LLUR differs to some degree from the information the Council holds, which is a reflection of the differing RMA functions. Neither the Council's records nor ECan's LLUR contain a comprehensive register of all Hazardous Activities and Industries List (HAIL) sites within the City at this time.

3.0 Submission – General Comments

3.1 NES as the right tool

The Ministry proposes a National Environmental Standard as the best tool for effectively addressing contaminated soil in New Zealand.

The Council concurs that a National Environmental Standard is an appropriate regulatory tool to consistently and effectively manage contaminated soil.

3.2 Need for additional stakeholder involvement in NES process

The generic NES development process allows for stakeholder input regarding concepts put forth in a discussion document, but only during the submission period, as shown in the process chart on page 5. The Council is concerned that the generic NES development process, with its limited stakeholder engagement, will be inadequate to ensure that the NES is fair, robust and capable of being satisfactorily implemented.

Given the likely scope of the NES and the potentially significant costs, risks, liabilities and impacts to city/district councils, further input from councils must be sought after the submission period as the NES is being more fully developed and as the NES is being legally drafted

The Council strongly recommends that the Ministry seek further input from city/district councils prior to the final legal drafting of the NES. The Council proffers its assistance to the Ministry when seeking comment on the exposure draft from a select group of practitioners.

3.3 Impacts to councils' information management capacities

There seems to be an assumption that territorial authorities presently have robust, clear and accessible information about contaminated land matters within their domain. It is unclear whether the Ministry expects all territorial authorities to have, at the time of giving effect to the NES, all the accurately categorised and publicly available information. If that is the case there would be considerable work required, with associated staffing and resource costs, since "we don't know what we don't know", and it will take time and resources to, in the first instance, determine what gaps exist and subsequently how to address those gaps.

It is evident that should a territorial authority not have the resources and capabilities they will not be prepared or aligned with a key expectation of the NES ethos. Council information management systems are known to vary in quality, compatibility and nature. Added to this issue is the variable lexicon of terms used with regard to contaminated land matters.

In Christchurch, historical land use information, including the use/storage of hazardous substances, is not always readily available or logged in current Council data stores. This is due at least in part to the fragmented and decentralised manner in which hazardous substances (HSNO) test certificates are issued, for example:

- there are more than 30 approved HSNO test certifiers in the City;
- there is no statutory requirement that these certifiers provide information to the Council; and
- while there is a central repository of information about HSNO test certificates, city/district councils are not able to access it.

The Council feels strongly that councils must be able to access all information about HSNO test certificates within their respective cities/districts, in order to be able to adequately implement the proposed NES.

A key issue that the proposed NES poses for the Council is whether the Council actively contributes data to ECan in completing their programme of Hazardous Activities and Industries List (HAIL) identification and subsequently enhances the Council's present use of the LLUR, or whether the Council collates both existing and new information and manages its own information system. If the Council pursues the former option, there is a risk relative to reliance upon information from outside the organisation. With the proposed NES's emphasis

on the role of city/district councils, the Council may not wish to rely upon an external system. The latter option, continuing with a Council-owned data system, would result in some degree of duplication of data with that maintained by ECan, which is an inefficient use of both the Council's and ECan's resources.

The Council recommends that:

- the Ministry carefully consider the information gathering and retention requirements in developing the NES. The Council recognises the need for complete and accessible information about contaminated land but is concerned that as proposed, the NES could place a significant burden on city/district councils to develop complete contaminated land registers within a short period of time.
- the Ministry recognise that the inability to readily access information in relation to HSNO test certificates and current HAIL sites is a hindrance to the gathering of accurate information and address this shortcoming before the NES is put into effect.

3.4 Impacts to councils – data quality

Relative to the information issue raised in 3.3 above, is the issue of the quality of information associated with sites that Council has previously authorised/consented. Assimilation of contaminated sites information will mean that sites that the Council has previously authorised/consented will be included. In some instances, decisions made at the time of approval would have used methods or standards that might now be regarded as lacking rigour. Therefore the categorisation of the site to give effect to the NES could see its being listed as contaminated or managed. This will logically cause significant scrutiny and enquiry from the land owner and general public. The proposed NES is silent on this matter and provides no guidance on addressing such a scenario. The Council's view is that the NES should not be applied retrospectively.

The Council recommends that: the NES includes a provision to address past land use change authorisations and consents, subdivisions and developments with respect to soil contamination and the application of current standards, and that the NES should not be applied retrospectively.

3.5 Enforcement

The proposed NES is unclear about the associated enforcement action penalties, offence and/or monitoring provisions that are currently prescribed by the RMA should councils, landowners and/or developers fail to comply with the proposed requirements.

The Council recommends that the NES is explicit with its reference to enforcement for non-compliance under the RMA.

3.6 Relationship of NES to other laws and regulations

The Council is concerned that in its present form, the proposed NES is silent with respect to the need for contaminated land investigations to satisfy other regulation and legislation. An example relevant to contaminated land is the Building Act and specifically Building Code Clause F1-Hazardous Agents on Site (performance standard F1.3.1 states that "sites shall be assessed to determine the presence and potential threat of any hazardous agents or contaminants").

The Council recommends that a clear statement should be made that investigation and assessment of contaminated land matters may be required to satisfy other legislative requirements. The NES needs to state explicitly that where there are other regulations and laws to which the subdivision, development or land use change is subject, any requirements for resource consents, consent conditions and/or site assessments will still apply.

3.7 Implications for zoning changes in city/district plans

The discussion document addresses land use changes but does not address zoning changes as such. For example a district plan may change zoning in an area from rural to residential. The NES should clarify whether zoning changes are affected by the NES and if so, how properties within the area affected by the zone change are to be assessed, when the assessment is required and the party(ies) responsible for the assessment.

The Council recommends that the NES clarifies whether zoning changes are included within its scope, and if they are included the manner in which properties within the affected areas are to be assessed.

3.8 Roles and responsibilities of regional vs. city/district councils

The role of regional councils and their relationship to city/district councils with respect to the implementation of the NES is not clearly stated in the discussion document. Greater clarity is needed on two issues regarding the roles of the regional and city/district councils:

- the interaction between discharges/pollution and contaminated soil with regard to jurisdictional responsibilities (both between councils and between the NES and other regulations applicable to discharges/pollution)
- the retention and validation of information on contaminated soil.

With respect to the second issue, the Council views regional councils as the appropriate bodies to retain current and accurate information on contaminated soil, while city/district councils manage and enforce the provisions of the NES.

The Council recommends that:

- the Ministry clarify the roles of regional and city/district councils in implementing the NES.
- the Ministry hold regional councils responsible for maintaining reliable the data on contaminated soil, and hold city/district councils responsible for managing and enforcing other provisions of the NES.

4.0 Submission – Specific comments

4.1 Executive Summary – categorising sites

The Executive Summary clearly states the intention that local authorities in administering contaminated land information must accurately categorise land. The discussion document does not prescribe a scheme to be used by all territorial authorities without qualification or deviation. Such silence will contradict the Ministry’s wish to standardise matters across the nation.

The Council recommends that the NES explicitly states a scheme for categorising sites. There is an existing scheme in *Contaminated Land Management Guideline No. 4*, but it has acknowledged deficiencies and is furthermore prepared for use by regional councils rather than city/district councils.

4.2 Identifying the Problem (Part 2.1)

The Ministry expresses the problem to be addressed in the proposed NES in two parts (page 7):

- New Zealand has a “legacy of soil contamination” on land that needs to be “identified and assessed”; and
- to make that land “safe for human use”, contaminants must be remediated or controlled at the time that land is “being developed.”

The Council sees two weaknesses in this approach: one is the limited focus only on human health impacts, and the other is limiting applicability only to land “at the time of being developed”.

With respect to how the proposed NES addresses effects, the proposal fails to take into account adverse ecosystem impacts from contamination of soil, including but not limited to:

- plant and animal species, in particular those that are threatened or endangered or are traditional food sources;
- surface water, including lakes rivers, and estuaries;
- groundwater.

The Council acknowledges that the Ministry has taken the approach that avoiding risk to human health is a high priority but questions why adverse ecosystem effects are explicitly excluded from the NES.

The other weakness with the manner in which the problem has been identified is that activities affected by the proposed NES are limited to land that is being developed or subdivided or other change in use. The presence of contaminated soil that may represent an adverse impact to human health in existing land uses is not addressed in the proposed NES.

The “legacy of soil contamination” that is at the heart of the problem is poorly understood. The Ministry acknowledges that the “overall amount of contaminated land in New Zealand is uncertain” (page 10). It is the Council’s view that not even all HAIL sites have been fully identified presently, making it difficult for council to manage the problem. It is important to note that the investigation of land to identify contaminated land is stated in the RMA as a regional council role, but the Ministry does not clearly address what the regional council’s role is in relation to the NES, and in relation to city and district councils information gathering for the purposes of the NES.

Also not addressed in the proposed NES are the risks and management of landfill gas, which leave councils with a continued degree of exposure to liability. The discussion document is silent on this issue, neither explicitly or implicitly including or excluding it from a proposed NES.

The Council recommends that:

- the NES takes account of ecosystem effects. Effects on plant and animal species can have a direct impact on human health (e.g., adverse effects in shellfish consumed as food).
- the Ministry consider impacts to human health from contamination in soil on land as it is currently used.
- That the Ministry and/or the NES ensures that sufficient time, direction and resources is provided to councils to identify, at a minimum, past and present HAIL sites as well as contaminated sites, and clarifies the respective roles of both regional councils and city/district councils in this task.
- the Ministry consider the risks and management of landfill gas and the appropriate instrument, whether this NES or some other, to address this issue.

4.3 Policy objective (Part 2.3)

The Ministry has stated that the policy objective is to ensure that land affected by contaminated soils is “appropriately identified and assessed at the time of being developed” and the contamination remediated or contained so that the land is “safe for human use.” (page 17).

The Council agrees that consistent and adequate processes are required to effectively manage contaminated land. However the Council is concerned that the scope of the policy objective is too limited in only seeking to address risk to human health. The Council notes that best international practice with respect to contaminated soils does take ecological impacts into account, and suggests that the Ministry needs to address this in the NES.

The Council also views the term “ensuring” as being overly ambitious. A “best endeavours approach” would be more appropriate.

The comments and recommendations made above in relation to “at the time of development”, are also relevant to this part.

The Council recommends that:

- the Ministry consider soil guideline values that are more representative of best international practice, including at a minimum those that are intended to address risks to surface water and groundwater that are drinking water sources and risks to mahinga kai from contaminated soil.
- the Ministry amend the objective to reflect a “best endeavours” approach.
- the Ministry include clear definitions on terms and words used in the NES, for example “at the time of being”, “categorised”, “developed”.

4.4 Scope (Part 4.1.1)

As proposed the NES would limit the scope to “actual or potential adverse effects of contaminated soil on human health” (page 25). The Ministry is proposing to explicitly exclude on- and off-site ecology, on-and off-site effects on surface water, effects on groundwater, and effects on amenity values. Arguably all of these effects, with the exception of amenity values, can have a direct impact on human health. For example surface or groundwater pollution caused by contamination in soil can directly affect human health from both consumption of contaminated drinking water and from contact with contaminated water.

The Council recommends that:

- as a minimum, adverse ecosystem effects are included within the scope of the NES to the extent those effects can have an adverse effect on human health.
- the Ministry consider expanding the scope of the NES to introduce sections that address risks to ecosystem health in general, in accordance with best international practice.

4.5 Permitted activity – subsurface investigations (Part 4.1.2)

The Ministry proposes to make subsurface investigations of contaminants soil a permitted activity with a provision that a report of findings of the investigation are provided to the council “within 60 days of receipt of laboratory results” (page 26). The Ministry also proposes that if a report is not provided, the activity (the sub-surface investigation) would default to being a discretionary activity that would require a resource consent.

Given that the subsurface investigation would have had to at least been started, as this would have been the source of the samples for which the laboratory report would have been prepared, it is difficult to see how this would work in practice. If the report was not received, or was received after “60 days”, it may be a moot point to require a consent as the activity may have already occurred. There would seem to be little point to requiring a retroactive resource consent for a subsurface investigation that had already occurred.

The proposed NES does not indicate whether the “60 days” are 60 consecutive calendar days or 60 working days. It should be explicit about this.

The Council questions the assumption that all subsurface investigations and underground tank removals are “small-scale”. The proposed NES is silent about any other than “small-scale” subsurface investigations and underground tank removals.

With respect to the question raised in the discussion document, will the requirement actually provide a disincentive for some landowners to investigate land, the Council takes the view that the requirement to provide a report may provide some element of disincentive to some landowners on some occasions. Of greater importance may be that the proposed NES does not stipulate a sample collection methodology that encourages true and accurate reporting of soil testing. The absence of stricter controls around who and how soil testing can be

undertaken (e.g. using a reputable professional) may encourage misrepresentation of actual soil data/contamination.

With respect to the question, are there concerns that those investigating spills would incriminate themselves, the Council's view is that enforcement action should be based on a *mens rea* approach to such situations, whereby intent to contaminate soil is evidence-based. The Council has a philosophy of incremental enforcement action whereby the key focus is obtaining voluntary compliance without unnecessarily moving to tougher enforcement options. Any self-incrimination would be judged in terms of the nature and scale of the offences, public interest factors, all circumstances leading to the offence and/or the prevalence of the offence and the need for deterrence.

Regarding the question, will the requirement be difficult to monitor and enforce, the Council's view is that this will be difficult to monitor and enforce. The proposed NES does not provide early notification to Councils as to the activity occurring. Councils are advised some 60 days after the receipt of laboratory results. The Council suggests an initial step whereby Councils are provided with some form of notification encompassing brief details of intended investigations, timeframes etc.

The Council is concerned that in cases where site investigation is proposed for a site that is already known to possess significant contamination, for example a second phase of investigation at a gas works site, the restricted discretionary activity mechanism would be more apt and rigorous.

The Council recommends that:

- the Ministry reconsider its approach to subsurface investigations. At a minimum the NES should require that all subsurface investigations and related information (including site plans, sampling plans and the like) be accepted as adequate by the city/district council before the investigation commence. Therefore all investigations should be notified to city/district councils no less than 14 days before commencement of site works. Further, reports should be required to be submitted to councils no later than 60 calendar days after the laboratory results have been received.
- where the NES provides time frames, it should be explicit about whether the time period is calendar days or working days.
- The NES clarify what constitutes "small scale" investigations and tank removals.
- the NES clarifies that failure to notify the city/district councils can result in the cessation of activity at the site until such time that the requirements are met (including provision of related information such as site plan, sampling plan and the like).
- the NES provides more explicit reference to a robust methodology for sample collection.
- under a scenario where significant contamination at a site is already known to exist that subsurface investigations are controlled as restricted discretionary activities.

4.6 Permitted activity – change in use, subdivision or development (Part 4.1.3)

The Ministry proposes that a change in land use, subdivision or development is a permitted activity, as long as the site investigation report(s) have been provided to the city/district council before the land use change, subdivision or development occurs.

Although the discussion document notes that the permitted activity is "in terms of the impact of soil contamination on human health" and that development, subdivision or land use change may be "subject to other controls" (page 28) it is not clear whether the NES may take precedence over other laws and regulations with respect to the activity in question.

The Ministry also proposes to limit the "type of land subject to this permitted activity to land affected by contaminants due to its known historical use and the activities previously undertaken on it" (page 28). This shall include land use and activities listed on the Ministry's Hazardous Activities and Industries List (HAIL) and land "that is indicated on the district or regional council land-use registers as being potentially affected or affected" by soil

contamination. The Ministry then proposes that “use, development or subdivision activities on land not covered by the above” is a permitted activity. The wording is confusing, and greater clarity is needed about the extent to which land use change, subdivision or development is a permitted activity.

Further clarity is needed that land use change, subdivision or development may be subject to other standards, laws or regulations that would preclude the activity from being a permitted activity.

The Council is concerned about the fact that land-use registers are not currently complete registers of contaminated or potentially contaminated land and that not all potential HAIL sites have been identified. If all unassessed sites are deemed to be potential HAIL sites, then to give effect to the NES, territorial authorities will need to know about all the contaminated sites in their domain, be they actual or potential, before full implementation of the NES. This will place a significant burden on territorial authority resources for the short and medium terms that for many will not be part of current fiscal or staffing programmes.

The proposed NES will permit without conditions and without a requirement for site investigations the following activities (pages 28 – 29):

- “any ongoing activities or occupation of the land for the same activity of an existing use”;
- subdivisions that aren’t “associated with a change in use or a disturbance of the ground”;
- landscaping, fencing and similar activities that don’t disturb the ground;
- above-ground alterations to buildings that don’t disturb the ground; and
- change in agricultural land used for bulk food production to another agricultural use.

The proposed NES is silent on current and existing land uses at which contamination is present that may pose a risk to human health. The Council questions how the Ministry plans to address these situations.

The proposed NES would require city/district councils to assess site investigation reports to determine whether the reports contains sufficient information and furthermore, whether they have been prepared by an “appropriately experienced and qualified practitioner” according to the Ministry’s guidelines on contaminated land (page 29). The Ministry acknowledges that there is no accreditation scheme for practitioners. The Council is concerned that city/district councils will find it difficult to comply with these requirements, particularly with respect to the determination that the site investigation reports have been prepared by an “appropriately experienced and qualified practitioner”.

The Ministry states that the proposal for permitting activity for land use change, development or subdivision would “work well for those sites that have been previously assessed” (page 30). The Council reiterates its concern that that not all sites have been assessed (“adequately” or otherwise) and that the permitted activity should not commence before the city/district council has accepted the site investigation report. The Council is also concerned that it is unclear whether the Ministry intends that change in land use, subdivision or development can occur as a permitted activity “unless a change of use to a more sensitive land use” is planned (page 30). The discussion document does not indicate the circumstances contributing to a “more sensitive land use”.

Regarding whether the activity should be a controlled activity or a permitted activity (pages 30 and 31), the Council supports the approach of providing for a controlled activity for two reasons. Firstly, it would enable cost recovery for formal assessment of applications by Council. However this council function requires specialist knowledge and time to undertake. Secondly, councils’ assessments of such applications are required to ensure that high quality decisions that could impact public well being now and in the future are well informed.

The Council recommends that:

- the NES clarifies when an activity is allowed as a permitted activity.
- the NES clarifies that other standards, laws or regulations may apply to the activity which would change the activity status to one other than a permitted activity.
- the Ministry consider how to address existing activities for existing land uses where contaminated soil is present that may pose a risk to human health.
- the Ministry provide guidance for determining the expertise and qualifications of practitioners who prepare site investigation reports.
- the Ministry provide greater clarity on what types of changes in land use, subdivisions or development may be allowed to occur as a permitted activity.
- the NES defines “more sensitive land use”.
- where changes in land use are to a more sensitive land use, or when the site has not been previously assessed that land use changes, subdivision and developments are subject to additional controls so that the risk to human health is minimised.

4.7 Restricted discretionary activity – use, development or subdivision (Part 4.1.4)

The Ministry proposes to designate as restricted discretionary activities land-use changes, development or subdivision where risk to human health from soil contamination has been assessed as unacceptable for the intended land use or where there is insufficient information to confirm human health risks (page 31). The Ministry further proposes to exclude from coverage (page 32):

- “any ongoing activities or occupation of the land for the same activity of an existing use”;
- subdivision that aren’t “associated with a change in use or a disturbance of the ground”;
- landscaping, fencing and similar activities that don’t disturb the ground;
- above-ground alterations to buildings that don’t disturb the ground; and
- change in agricultural land used for bulk food production to another agricultural use.

The activities listed above may be in some circumstances occurring on contaminated land which could pose a risk to human health. Greater clarity is needed about activities that will be excluded from restricted discretionary activity status because they pose little or no human health risks. Clarity is also needed regarding coverage. If the eventual land use of a subdivision, which was excluded from coverage under the NES because it wasn’t “associated with a change in use or a disturbance of the ground”, disturbs the ground the exclusion should no longer apply.

The proposed NES will require provision of information about the nature of soil contamination at a site and the methods and means to address the contamination in the event that the contamination poses a risk to human health. As proposed in the NES, city/district councils will not be able to grant consent unless satisfied that the information about the contamination and the proposed method for addressing it are adequate. It is critical that the site characterisation is robust and that the extent of contamination and the risk to human health are fully explored. It is also critical that the means to address the contamination is appropriate for the site and adequate to mitigate risk to human health.

The need to ensure that the information is adequate raises a question with respect to consent processing times. Councils should not be penalised because they are complying with the NES. Direction is needed regarding implementation of the NES versus the requirement to meet consent processing time frames mandated under the Resource Management Act. Will the consent processing clock be stopped while councils determine the adequacy of the information provided to them in accordance with the NES?

Giving legal effect to site management plans as a consequence of granting restricted discretionary activity consent is a sound principle, but places an even greater emphasis on who should provide the plan during a property transaction. One can easily envisage the situation where a territorial authority will be regarded as the *de facto* custodian and hence provider of this information. The proposed NES is silent on where the duty of care of the

property owner/user rests on this matter, and/or whether the LIM requirements in the Local Government Official Information and Meetings Act 1987 or the PIM requirements in the Building Act 2004 are to be changed to require that councils make this information available.

The Council recommends that:

- the Ministry carefully consider circumstances that will allow land use changes, subdivisions and developments as activities excluded from restricted discretionary activity status.
- a rigorous site investigation and assessment process is included in the NES.
- mechanisms for ensuring that these steps are taking place is included in the NES.
- the NES clarifies that land-use changes, subdivisions and developments cannot proceed until councils have accepted as adequate the information that the NES required to be submitted to them.
- the NES provide direction about the applicability of consent processing time frames against the requirement to ensure that information provided in accordance with the NES is adequate.
- the NES clarify, or other legislation be amended to clarify, responsibility for ensuring ongoing knowledge of site management plans.

4.8 Acceptable/unacceptable use determination (Part 4.2)

The Ministry proposes to apply Soil Guideline Values (SGVs_(health)) to determine whether the level of contamination is at an acceptable level of risk to human health for the intended use. Section 4.2 (pages 34 – 35) and section 8 (pages 57 – 65) of the discussion document describe when and how the SGVs_(health) are to be applied, but the process is confusing. It is unclear the extent to which contaminants other than the 12 for which SGVs_(health) have been developed are to be investigated.

Adding to the confusion is an apparent inconsistent use of the term SGVs_(health). SGVs_(health) are defined on page 57 as “threshold concentrations for 12 contaminants in soil, calculated for five generic land-use exposure scenarios at which the exposure is judged to be acceptable because any adverse effects on human health for most people are likely to be no more than minor”. However this term is used elsewhere in the discussion document to refer to screening / target values that are derived for other contaminants and/or for site-specific land-use scenarios that don’t match the five generic land-use scenarios. The terminology for the former class of values in the *Contaminated Land Management Guidelines No 2* is Environmental Guideline Value (EGV). For the purposes of clarity, the terminology used in the NES should be explicit when the intention is to refer to SGVs_(health), EGV or some other screening / target value.

Regarding the issue of naturally occurring contaminants in soil that exceed the SGVs_(health) (page 35) the Council’s view is that a key tenet of this NES proposal is the making of land safe for human use. This NES proposal has the opportunity to provide some form of national consistency for naturally occurring hazards. The Council takes that view that any soil contamination levels identified over threshold values regardless of whether naturally occurring or manmade have a detrimental effect of human health. The Council supports the view that local Councils might opt to impose greater controls or invoke stricter limits where local conditions or circumstances warrant a more cautious approach.

The Council recommends that:

- the NES clarifies the process to be followed for applying screening / target values and to avoid doubt it should be explicitly stated that for other parameters or exposure scenarios, the guidance of *Contaminated Land Management Guideline No. 2* should be used.
- the NES uses clear and consistent terminology to refer to various screening / target values.
- the NES includes provisions that will allow councils to impose greater controls or invoke stricter limits where local conditions or circumstances warrant.

4.9 Costs and benefits (Part 5)

The Ministry provides a summary of an initial assessment of the costs and benefits from the proposed NES. The Ministry estimates that costs to councils would be on the order of \$10,000 to \$20,000 per council. A more in-depth cost-benefit quantification will occur well after the end of the public consultation period. As a result, the Council is not able to assess the costs and benefits in other than a cursory fashion.

It is the Council's view that the sums presented throughout the discussion document are low, particular with respect to implementation costs for city/district councils. For example, costs borne by territorial authorities in resourcing the requirements of implementing the NES (e.g. information management) is expected to be significantly greater than that cited. A rough order cost for the Council to conduct a stock take of existing information, as part of what the Council will need to do to give effect to the NES, is expected to be in the order of \$100,000 to \$200,000 or more. There would also be additional costs borne by the Council for complying with the NES (e.g., reviewing reports, updating the City and District Plans, etc).

The Council strongly recommends that the Ministry give further consideration to the costs that councils will incur to fully implement the NES.

4.10 Implementation (Part 7)

The discussion document provides a further, albeit brief, elaboration of how the NES would be implemented. Throughout Part 7, and other sections of the document, references are made to the Ministry's guidelines on contaminated land. These guidelines should, with the adoption of the NES, become mandatory.

The Council recommends that the NES explicitly makes *Contaminated Land Management Guidelines* (Numbers 1 through 5), and the associated land use documents, regulations and no longer guidance documents.

4.11 Soil Guideline Values (Part 8)

Soil Guideline Values (SGVs_(health)) described in Section 8 of the discussion document are also of concern. The proposed NES lists 12 contaminants for which SGVs_(health) have been set: arsenic, cadmium, copper, chromium, lead, mercury, boron, benzo(a)pyrene, dieldrin, DDTs, pentachlorophenol, polychlorinated dibenzo-p-furans (collectively known as dioxins, and dioxin-like polychlorinated biphenyls).

The Council has concerns that SGVs_(health) have been established for only 12 contaminants. The Council notes that two additional contaminants listed in the Ministry's companion document *Draft Toxicological Intake Values for Priority Contaminants in Soil*, total petroleum hydrocarbons and benzene, are not included in the list of SGVs_(health) in the discussion document. The discussion document does not indicate why SGVs_(health) for total petroleum hydrocarbons and benzene were excluded.

Overseas, contaminated soil guideline values have been set for a far greater number of contaminants. For example the California State Water Resources Board have identified soil screening levels for over 90 inorganic and organic chemical contaminants and the US Environmental Protection Agency's Regional Screening Levels for Chemical Contaminants at Superfund Sites includes more than 700 discrete chemical substances. While some of the substances included in those lists may not have been present in sufficient quantity to justify setting SGVs_(health) or may not have been used at all in New Zealand, the Council questions why the Ministry has chosen to limit SGVs_(health) to only a dozen inorganic and organic contaminants.

Of the 12 contaminants, greater clarity is needed for four of them. Specifically:

- whether the reference to DDT refers to the sum of DDT (Σ DDT), as per the Ministry's Sheep Dip Guidelines;
- with respect to benzo[a]pyrene (BaP) whether this means BaP equivalent, as per the Ministry's hydrocarbon guidelines, or BaP as a single compound;
- guidance for sampling dioxin and "dioxin like PCBs". The investigation and assessment of these compounds is infrequent and very costly. It is unclear whether the Ministry expects that assessment of these contaminants will become more frequent and whether the resources and cost implications on applicants have been considered.

The Council recommends that:

- the Ministry consider inclusion of additional contaminants, in line with best international practice.
- the NES clarifies requirements with respect to DDT, benzo[a]pyrene, dioxin and "dioxin-like PCBs".

5.0 Conclusion

5.1 The Council thanks the Ministry for the Environment for the opportunity to comment upon the proposed NES for assessing and managing contamination in soils.

5.2 The Council is concerned that there may be significant implications to city/district councils depending on the final form of the NES.

5.3 *The Council recommends -*

- a. in general, that:
 - a National Environmental Standard is an appropriate regulatory tool to consistently and effectively manage contaminated soil.
 - the Ministry seek further input from city/district councils prior to the final legal drafting of the NES.
 - the Ministry carefully consider the information gathering and retention requirements in developing the NES.
 - The Ministry address the shortcomings in the HSNO test certificate system prior to the effective date of the NES.
 - the NES includes a provision to address past land use change authorisations and consents, subdivisions and developments with respect to soil contamination and the application of current standards.
 - the NES should not be applied retrospectively.
 - the NES is explicit with its reference to enforcement for non-compliance under the Resource Management Act.
 - a clear statement should be made that investigation and assessment of contaminated land matters may be required to satisfy other legislative requirements.
 - the NES clarifies whether zoning changes are included within its scope, and if they are included the manner in which properties within the affected areas are to be assessed..
- b. with respect to categorising sites, that:
 - the NES explicitly states a scheme for categorising sites.
- c. regarding the identification of the problem, that:
 - the NES takes account of ecosystem effects.
 - the Ministry consider impacts to human health from contamination in soil on land as it is currently used.
 - there is sufficient time, direction and resources provided to councils to identify, at a minimum, past and present HAIL sites as well as contaminated sites.
 - the Ministry consider the risks and management of landfill gas and the appropriate instrument, whether this NES or some other, to address this issue.
- d. in reference to the policy objective, that:
 - the Ministry consider soil guideline values that are more representative of best international practice, including at a minimum those that are intended to address risks to surface water and groundwater that are drinking water sources and risks to mahinga kai from contaminated soil.

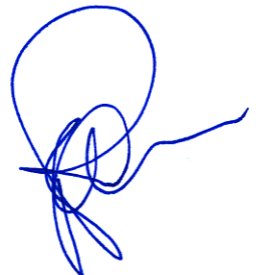
- the Ministry amend the objective to reflect a “best endeavours” approach.
 - the Ministry include clear definitions on terms and words used in the NES, for example “at the time of being”, “categorised”, “developed”.
- e. with respect to the scope of the NES, that:
- as a minimum, adverse ecosystem effects are included within the scope of the NES to the extent those effects can have an adverse effect on human health.
 - the Ministry consider expanding the scope of the NES to introduce sections that address risks to ecosystem health in general, in accordance with best international practice.
- f. in reference to subsurface investigations, that:
- the Ministry reconsider its approach, so that at a minimum the NES should require that all subsurface investigations and related information (including site plans, sampling plans and the like) be accepted as adequate by the city/district council before the investigation commence.
 - where the NES provides time frames, it should be explicit about whether the time period is calendar days or working days.
 - the NES clarify what constitutes “small scale” investigations and tank removals.
 - the NES clarifies that failure to notify the city/district councils can result in the cessation of activity at the site until such time that the requirements are met.
 - the NES provides more explicit reference to a robust methodology for sample collection.
 - under a scenario where significant contamination at a site is already known to exist that subsurface investigations are controlled as restricted discretionary activities.
- g. with respect to permitted activity status for land use changes, that:
- the NES clarifies when an activity is allowed as a permitted activity.
 - the NES clarifies that other standards, laws or regulations may apply to the activity which would change the activity status to one other than a permitted activity.
 - the Ministry consider how to address existing activities for existing land uses where contaminated soil is present that may pose a risk to human health.
 - the Ministry provide guidance for determining the expertise and qualifications of practitioners who prepare site investigation reports.
 - the Ministry provide greater clarity on what types of changes in land use, subdivisions or development may be allowed to occur as a permitted activity.
 - the NES defines “more sensitive land use”.
 - where changes in land use are to a more sensitive land use, or when the site has not been previously assessed that land use changes, subdivision and developments are subject to additional controls so that the risk to human health is minimised.
- h. where the NES proposes restricted discretionary activity for land use changes, that:
- the Ministry carefully consider circumstances that will allow land use changes, subdivisions and developments as activities excluded from restricted discretionary activity status.
 - a rigorous site investigation and assessment process is included in the NES.
 - mechanisms for ensuring that these steps are taking place is included in the NES.
 - the NES clarifies that land-use changes, subdivisions and developments cannot proceed until councils have accepted as adequate the information that the NES required to be submitted to them.
 - the NES provide direction about the applicability of consent processing time frames against the requirement to ensure that information provided in accordance with the NES is adequate
 - the NES clarify, or other legislation be amended to clarify, responsibility for ensuring ongoing knowledge of site management plans
- i. in reference to acceptable/unacceptable use determinations, that:
- the NES clarifies the process to be followed for applying screening / target values and to avoid doubt it should be explicitly stated that for other parameters or exposure scenarios, the guidance of *Contaminated Land Management Guideline No. 2* should be used.
 - the NES uses clear and consistent terminology to refer to various screening / target values.

- the NES includes provisions that will allow councils to impose greater controls or invoke stricter limits where local conditions or circumstances warrant.
 - j. regarding the cost-benefit assessment that:
 - the Ministry give further consideration to the costs that city/district councils will incur to fully implement the NES.
 - k. in reference to implementing the NES, that
 - the NES explicitly makes *Contaminated Land Management Guidelines* (Numbers 1 through 5), and the associated land use documents, regulations and no longer guidance documents.
 - l. with respect to Soil Guideline Values ^(health), that:
 - the Ministry consider inclusion of additional contaminants, in line with best international practice.
 - the NES clarifies requirements with respect to DDT, benzo[a]pyrene, dioxin and “dioxin-like PCBs.
- 5.4 Please contact Jenny Ridgen, Strategy and Planning Group, for any queries regarding this submission:
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Yours faithfully



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Addendum

Response to the Ministry's questions in the discussion document

1. *Have the priority problems been defined correctly?*
There has not been adequate consideration of the relationship between ecosystem impacts due to contaminated soil and the effects these can have on human health. See section 4.2 of the Council's submission.
2. *Are there other problems you can think of that need to be addressed as a priority?*
Impacts to ecosystems need to be addressed, at least as these can affect human health. Landfill gas also should be addressed. See section 4.2 of the submission.
3. *Do you agree with the policy objective?*
The Council agrees with the policy objective in principle but has some concerns, as outlined in Section 4.3 of the submission.
4. *Should the objective be limited to ensuring that land is safe for human use? If not, why not?*
The objective should not be limited, as it currently worded. See sections 4.2 and 4.3 of the submission.
5. *Do you agree with the preferred option?*
The Council agrees that an NES is the preferred option. See section 3.1 of the submission.
6. *Is there an alternative option that has not been considered?*
The Council does not have other alternatives to propose.
7. *Are you aware of any other costs or benefits of the alternative options?*
The Council is not aware of other cost/benefits to the alternatives suggested.
8. *Do you see any problems complying with the proposed NES or with enforcing it?*
The Council has identified issues with complying with and enforcing the NES. See sections 3.3, 3.4, 3.5, 3.6, 4.5, 4.6, 4.7, 4.8 and 4.11 of the submission.
9. *Are the thresholds for determining whether resource consent is required clear and appropriate?*
The requirements are unclear. See sections 4.5, 4.6 and 4.7 of the submission.
10. *Is the permitted activity – subsurface investigation requirement to provide a site investigation report appropriate?*
The Council has concerns about this requirement. See section 4.5 of the submission.
11. *Have we adequately defined the land that should be subject to a condition requiring site investigation?*
The Council has concerns about this requirement. See section 4.5 of the submission.
12. *Have we adequately provided for activities that should not be caught by the requirements of this NES?*
The Council has concerns about this requirement. See section 4.5 of the submission.
13. *How do you think the NES should ensure the adequacy of site investigation?*
The Council has made recommendations in sections 4.5 and 4.8 of the submission.
14. *Is the permitted activity – use, development and subdivision better provided as a controlled activity or another alternative?*
The Council supports the approach for providing for a controlled activity. See section 4.6 of the submission.

15. *How should the NES address site-specific assessment for produce consumption?*

Clear guidelines are needed. See sections 4.8, 4.10 and 4.11 of the submission.

16. *How should the NES address naturally occurring elements in soil?*

The Council takes that view that any soil contamination levels identified over threshold values regardless of whether naturally occurring or manmade have a detrimental effect of human health. See section 4.8 of the submission.

17. *Have we accurately reflected the range of costs and benefits arising from the proposals for an NES, and who might bear the costs or receive the benefits?*

It is the Council's view that sums presented throughout the discussion document are low . See section 4.9 of the submission.

18. *Are there any costs and benefits we have overlooked?*

The cost-benefit section of the discussion document is not robust enough to assess. See section 4.9 of the submission.

19. *Do you have information that you would like to see included in the cost-benefit analysis that will be carried out after the submissions are received and analysed?*

The costs for territorial authorities to both comply with and enforce the NES need to be fully accounted for, including costs for information management and personnel/expertise. See sections 3.3, 4.2, and 4.6 of the submission.