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Working Towards a Comprehensive Policy Framework for Managing Contaminated Land in New Zealand

Submission to the Ministry for the Environment
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Background to IPENZ

The Institution of Professional Engineers New Zealand (IPENZ) is the lead national professional body representing the engineering profession in New Zealand. It has approximately 10,000 Members, including a cross-section from engineering students to practising engineers to senior Members in positions of responsibility in business. IPENZ is non-aligned and seeks to contribute to the community in matters of national interest giving a learned view on important issues, independent of any commercial interest.

Executive Summary

IPENZ strongly supports the development of initiatives designed to improve the management of contaminated land and as such is generally supportive of the discussion paper. We consider that any framework should be developed from a risk management basis.

In addition to the issues raised in the discussion paper, we note the current lack of a "home" for contaminated site practitioners and regulators. We note that the Waste Management Institute of New Zealand (WasteMINZ) has formed a contaminated land sector group. We consider that a multidisciplinary body should be developed, and suggest that it might be appropriate for a learned society with a code of ethics, such as IPENZ, to host such a group. The Geotechnical Society provides a model for this – it is a multidisciplinary body of engineers and scientists and IPENZ provides it with a home.

Additionally, we are not aware of any comprehensive tertiary-level training currently available in New Zealand for contaminated land investigation, assessment and management. IPENZ is happy to discuss the possibility of promoting such a course within one or more of the universities and becoming involved in the relevant moderation.

We do not seek to meet with the Ministry to further discuss any of the points raised in this submission, but are happy to do so on the Ministry's request.

Submission

Following are our specific responses to those discussion points contained in the discussion paper where we have comments.

1. Are these the ideal key elements for a New Zealand contaminated land framework?

We consider that the key elements have largely been identified.

2. Are there any additional opportunities for change that have not been identified here? If so, what are they?
The discussion paper mentions establishing accredited auditors to audit investigation reports, as is carried out in Australia. We are not convinced that this is the appropriate way forward due to the potential for overly conservative actions and delay. However, we support a means of accrediting practitioners, both industry or consultants who carry out investigations, and regulators who assess the investigations (as part of resource consent applications or other regulatory action). An accreditation scheme (with a minimum educational and/or on-the-job experience requirement and a competence assessment) would go a long way towards raising the standard of fieldwork, risk assessment and the review of such reports. We note that this was discussed at the Wellington workshop.

Biosolids and composts frequently contain low levels of heavy metal and other contaminants. This is permitted under the Biosolids Guidelines. This should be discussed and policy developed that is consistent with the contaminated land threshold limits.

3. Are the priorities that have been assigned to each opportunity appropriate? If not, what are more appropriate priorities?
We consider that the introduction of both comprehensive tertiary-level training and an accreditation scheme should be given a high priority.

4. Is a national guideline progressing to a NES the most appropriate way to develop nationally consistent soil contaminant levels?
We would support an NES if it was a mechanism to provide consistency of:

- standard of investigation (possibly through elevating the status of the current guidelines to codes of practice)
- methodology for the derivation of generic guideline values and their use
- methodology for site-specific assessments (possibly a guideline or code of practice)
- modification of district and regional plans with the intention of removing inconsistencies and introducing a model provision for all plans

5. If a NES is considered appropriate, what should the NES contain (numerical values, methods, etc), and what should its function be?
We consider that the NES should contain the items mentioned above (in our response to question 4).

We do have some concerns with an NES containing numerical values as this may result in unachievable figures for some areas, for example, those where there are presently high amounts of substances such as cadmium.

6. If a NES for contaminated land includes soil contaminant levels, what should these levels be used for?
If it was decided to have an NES with numerical values, they should be no more than a trigger for further assessment, rather than specific clean-up levels. Also, there should be no numerical values for ecological receptors because of the danger of unnecessarily conservative (and in some cases paradoxical) outcomes.

A case in point is Auckland Regional Council, which has, in effect, inserted ecological values in its proposed plan, with the result that topsoil which is perfectly good for many uses (but

might have some impact on some soil fauna) is being converted into a waste material and being dumped into landfills as a hazardous material.

7. Should the guideline and NES criteria include ecological as well as human-health criteria?
It is appropriate to include guidance on when ecological receptors are important, and the methodology for how they should be considered. We believe that numerical values should not be included. This is because ecological assessment is very complex, consequently attempting to understand the huge number of possible ecological receptors is extremely difficult.

9. How well do the main agencies work together on contaminated land management in your region/district?
We note that the practice of contaminated site investigation in New Zealand is very inconsistent. At present there appears to be a mixture of work, ranging from high quality professional work to low quality work intended to merely 'tick the box' for the relevant local authority. In addition, the quality of assessment of site investigation reports submitted to regional or territorial local authorities (and therefore contributing to decision making) is highly variable. We consider that the NES should ensure this inconsistency is addressed.

12. Considering the guidance already developed, is there a need for further guidance? If so, what additional guidance should be developed?
See our response to question 4.

14. Which liability regime is considered the best fit?
We consider that the hierarchy regime is the most appropriate.

15. If no liability regime is established, what modifications (if any) would need to be made to the Contaminated Sites Remediation Fund (CSRF)?
The size of the fund should be increased, and it would possibly be appropriate to review the conditions for eligibility, possibly to allow applications by a territorial local authority.

With respect to the CSRF, we understand that there is a committee that decides, or provides advice to the Ministry for the Environment, on how available funds should be used. The process is not transparent and the objectives of some funded projects appear to be ill-conceived resulting in poor outcomes. The level of expertise applied to developing and approving projects may need review. In addition, we recommend that any potential conflicts of interest should by clearly stated by committee members to ensure impartiality in the decision-making process.

16. Is an accreditation system a necessary component of a contaminated land policy framework?
We consider that an accreditation system is necessary for practitioners (see also comments made under question 2). The Environment Institute of Australia and New Zealand runs a scheme for certification as CEnvP, which could be an appropriate qualification. We note that where a practitioner in this field is CPEng they are already accredited.

18. Does a lack of capability in local government form a significant barrier to the effective management of contaminated land? If so, how could local government capability in this area be improved?
We consider that lack of capability in government *is* a significant barrier. This might be improved by strengthening legislation so that councils must take contaminated land more

seriously, perhaps by amending s30 and s31 of the Resource Management Act from function to duty.

We consider training would be useful, and note that the Ministry is intending to place material on the Quality Planning website.

19. Does a lack of capability within the consulting community form a significant barrier to effective management of contaminated land? If so, how could capability in this area be improved?
We consider that there is a partial barrier, and note that there tends to be good expertise in cities, and variable to poor expertise in some other regions. Greater knowledge within councils would probably encourage the consulting community to work to a higher level. Accreditation would also assist with this issue.

20. Should national information on contaminated land in New Zealand be collected and reported? If not, why not?
We consider that such information should be recorded so that we can ensure (and prove) that we are meeting our international obligations in this area. Recording would also assist consumer protection; contaminated site information properly linked in with LIM and PIM system would assist property purchasers where sites have been investigated and/or remediated and validated.

During the Auckland workshop, the lack of information on contaminated sites at local and regional councils was raised as an issue. A potential solution was to ensure that information on contaminated sites is available on council files and databases and that there should be more clarity from central government on how to manage information on contaminated sites.

21. How could the implementation of CLMG No. 4 be supported?
We consider that a comprehensive database should be developed. We note that one of the issues that came up at the Wellington workshop was whether the Ministry should sponsor the development of a model database, perhaps based on the Environment Canterbury database.

Also see our comments under question 20.

22. To what other issues could a NES be applied to improve contaminated land management?
See previous comments.

24. Are there any key additional research areas that should be identified?
We recommend that research is undertaken in relation to landfills, particularly closed landfills, and the redevelopment and/or building onto or nearby these closed landfill sites, in terms of contaminated soil, groundwater and landfill gas. We note the Ministry's *Guide for the Management of Closing and Closed Landfills in New Zealand* (May 2001); however, in our opinion this document is outdated for assessing closed landfills in the Auckland area. For example, more reference to the CIRIA reports could be provided, for example, CIRIA Report No. C659.

Current cleanfill sites and those that have previously operated as cleanfill sites could contain soil contaminant levels that may classify them as contaminated sites. The issue of how to address this retrospectively needs to be tackled.

Conclusion

IPENZ strongly supports the development of initiatives designed to improve the management of contaminated land, and generally supports the discussion paper. IPENZ also recommends that a multidisciplinary body is developed to provide a “home’ for contaminated site practitioners and regulators and is happy to assist with this.