

# Science for Environment Policy

## Involving communities in contaminated land decisions: researchers recommend guidelines

**A new approach giving practical guidance** for engaging communities in assessing and managing risks associated with re-development of contaminated land could help to smooth local decision making processes. It recommends a set of principles that risk managers and policymakers can use to shape their community engagement activities.

**Public concern and potential health risks** surrounding the remediation of land contaminated by chemicals or waste often leads to conflict between communities and decision makers. For example, poor risk communication about the potentially harmful effects of chemical contamination has been found to lead to fear and frustration for local residents.<sup>1</sup> More inclusive approaches to risk management could reduce conflicts between stakeholders, as well as improve risk management itself. In the approach recommended by this study, communities are involved in shaping decisions about land remediation from the beginning of the process, rather than just being given information after decisions have been made. Combining their own practical experience with the findings of previous studies on the topic, the researchers summarise guidance for improving public involvement in risk assessment and management in nine key statements:

1. *'Risk is complex and inherently uncertain'*: Perceptions of 'risk' vary from person to person, and risk managers must identify the risk estimates based on the most rational assessments. Local residents may disagree with these assessments, but can provide valuable insights into local concerns, helping to inform the decision making process.
2. *'Outrage shapes risk perceptions and behaviours'*: Policymakers and practitioners must endeavour to understand the factors that cause public outrage, potentially leading to active opposition. For example, local people may feel unfairly treated if public funds are used to remediate land that offers them no direct benefit.
3. *'Effective communication must be a two-way process'*: Risk managers should seek to engage residents in a participatory approach, rather than an 'expert-led' approach, that allows for meaningful dialogue between all stakeholders.
4. *'Effective communication is necessary, but not sufficient'*: Scientific and technical messages need to be shaped in a way that non-technical audiences can understand in order to support effective engagement.
5. *'Trust and credibility are both essential'*: Expertise about risk must be provided by a trustworthy and credible source.
6. *'Credibility is based on more than scientific and technical competence'*: Withholding or distorting information will reduce an organisation's credibility, which relies on openness, honesty and transparency.
7. *'Expectations need to be managed'*: Risk managers must make a realistic assessment of what is deliverable and communicate this without overstating what can be achieved.
8. *'What works well in one context might fail in another'*: The same best practice guidelines may not work across all projects. Therefore, messages and approaches should be piloted on relevant non-technical stakeholders to ensure that risk managers are aware of any project-specific concerns.
9. *'Differing viewpoints might be irreconcilable'*: Interaction and communication will not necessarily bring opposing views together. Contaminated land issues should be treated as negotiations in which there will be trade-offs and opportunities for mutual benefits.

Crucially, the study points out that involving the community is no guarantee that risk management processes will run smoothly. Contaminated land issues are complex. Trade-offs have to be made as to costs and benefits of remediation strategies and on their timing, financing and extent. However, imposing decisions on members of the community who have valid concerns, without involving them in those decisions, is very likely to lead to conflicts that could have been reduced, if not avoided, by effective community engagement.



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1. See, for example: Rainham, D. (2002). Risk communication and public response to industrial chemical contamination in Sydney, Nova Scotia: a case study. *Journal of Environmental Health*. 65(5): 26-32.