

## What is a Risk Assessment?

A risk assessment is the essential starting point for the management of contaminated land. A well-designed risk assessment provides a structured mechanism for identifying potential problems and making judgments about the consequences. Assessing risks from land contamination underpins the "suitable for use" approach adopted by the UK contaminated land regulatory regime and supports planning policy.

The definition of contaminated land under Part IIA of the Environmental Protection Act 1990 specifically requires local authorities to carry out a risk assessment. The aim is to decide whether there are any unacceptable risks to people or the wider environment, including property.

Risk assessments can be very detailed, particularly where risks are complex. In the case of land contamination there are a range of specific technical approaches for different contaminants and circumstances. However, these all broadly fit within a general process that can be seen as a tiered approach. Each tier is applied to the circumstances of the site under consideration, with an increasing level of detail required by the assessor in progressing through each tier. The three tiers, or stages, are:

1. Preliminary risk assessment
2. Risk assessment using generic criteria and assumptions – where a contamination concentration is compared against a generic Soil Guideline Value (SGV)
3. Risk assessment using specific criteria and assumptions – where a detailed site-specific approach is used.

Once the need for a risk assessment has been identified, it will always be necessary to go through the preliminary risk assessment stage. However, depending on the circumstances, it may not be necessary to do a more detailed assessment, or it may be appropriate to use only one of the two approaches to detailed risk assessment rather than both. This will depend on the complexity of the pollutant linkages – some could be assessed with generic criteria, others may need site-specific criteria to be developed for the site.

For more information and documents detailing current UK Best Practice on carrying out Risk Assessments please see the CIRIA (Construction Industry Research and Information Association) Contaminated land Web Portal and Environment Agency Web sites.