

## Appendix A Glossary

**Conceptual model:** a representation of the characteristics of the site diagrammatic or written form that shows the possible relationship between contaminants, pathways and receptors.

**Contaminant:** A substance that is in, on or under the land and that has the potential to cause harm or to cause pollution of controlled waters.

**Contaminated land:** Defined in s78A (2) of EPA 1990 as 'any land that appears to be the local authority in whose area it is situated to be in such a condition, by reason of substances in, on or under the land, that

- (a) Significant harm is being caused or there is a significant possibility of such harm being caused, or;
- (b) Pollution of controlled waters is being, or is likely to be caused'.

**Controlled waters:** defined by Water Resources Act 1991, Part 111, section 104, which includes all groundwater, inland waters, estuaries and coastal water to three nautical miles from the shore.

**Detailed quantitative risk-assessment:** Risk assessment carried out using detailed site-specific information to estimate risk or to develop site-specific assessment criteria.

**Detailed site investigation:** Main stage of intrusive site investigation, which involves the collection and analysis of soil, surface water, groundwater, soil gas and other media as a means of further informing the conceptual model and the risk assessment. This investigation may be undertaken in a single or a number of successive stages.

**Durability:** The extent to which a remediation treatment is likely to be effective in reducing or controlling unacceptable risks to a defined level over a period of time.

**Effectiveness:** The extent to which a remediation treatment successfully reduces or controls unacceptable risks to a defined level.

**Environmental impact:** The effect of remediation treatments on the quality of the environment during or following remediation.

**Evaluation criteria:** (risk assessment) Parameters used to judge whether or not particular harm or pollution is unacceptable.

**Ex-situ:** Where contaminated material is removed from the ground prior to above ground treatment or encapsulation and/or disposal on or off site.

**Hazard:** A property or situation that in particular circumstances could lead to harm or pollution.

**In-situ:** Where contaminated material is treated without prior excavation (of solids) or abstraction (of liquids) from the ground.

**Land affected by contamination:** Land that might have contamination present, which may, or may not, meet the statutory definition of contaminated land.

**Monitoring:** A continuous or regular periodic check to determine the ongoing nature and performance of remediation, which includes measurements undertaken for compliance purposes and those undertaken to assess performance.

**Monitoring criteria:** Measures (usually, but not necessary, expressed in quantitative terms) against which compliance with monitoring objectives will be assessed.

**Monitoring objectives:** Site-specific objectives that define the monitoring programme needed to demonstrate the short-and long-term performance of remediation or to track contaminant behaviour and movement.

**Pathway:** A route or means by which a receptor could be, or is exposed to, or affected by a contaminant.

**Pollutant linkage:** The relationship between a contaminant, pathway and receptor.

**Practicability:** The extent to which it is possible to implement and operate a remediation option or strategy given practical constraints, such as treatment area, access, and availability of support services.

**Quality criteria:** Measures of the sufficiency, relevance, reliability and transparency of the information and data used for risk management purposes.

**Quality management:** The systematic planning, organisation, control and documentation of projects.

**Receptor:** In the general terms, something that could be adversely affected by a contaminant, such as people, an ecological system, property or a water body.

**Remediation:** Action taken to prevent or minimise, or remedy or mitigate the effects of any identified unacceptable risks.

**Remediation objective:** A site-specific objective that relates solely to the reduction or control of the risks associated with one or 'more pollutant linkages.

**Remediation criteria:** Measures (usually, but not necessarily, expressed in quantitative terms) against which compliance with remediation objectives will be assessed.

**Remediation option:** A means of reducing or controlling the risks associated with a particular pollutant linkage to a defined level.

**Remediation strategy:** A plan that involves one or more remediation options to reduce or control the risks from all the relevant pollutant linkages associated with the site.

**Risk:** A combination of the probability, or frequency of occurrence of a defined hazard and the magnitude of the consequences of the occurrence.

**Risk assessment:** The formal process of identifying, assessing and evaluating the health and environmental risks that may be associated with a hazard.

**Risk estimation:** Predicting the magnitude and probability of the possible consequences that may arise as a result of a hazard.

**Risk evaluation:** Deciding whether a risk is unacceptable.

**Risk management:** The processes involved in identifying, assessing and determining risks, and the implementation of actions to mitigate the consequences or probabilities of occurrence.

**Site-specific assessment criteria:** Values for concentrations of containments, pathways and receptors and that correspond to relevant criteria in relation to harm or pollution for deciding whether there is an unacceptable risk.

**Stakeholders:** Individuals or organisations with an interest in the scope, conduct and outcome of a risk management project.

**Uncertainty:** A lack of knowledge about specific factors in a risk or explosive assessment including parameter uncertainty, model uncertainty and scenario uncertainty.

**Verification:** The process of demonstrating that the risk has been reduced to meet remediation criteria and objectives based in a quantitative assessment of remediation performance.

**Verification report:** Provides a complete record of all remediation activities on site and the data collected as identified in the verification plan to support compliance with agreed remediation objectives and criteria.