

Appendix C. RISK ASSESSMENT OF POLLUTANT LINKAGES

RISK PHRASES AND MATRICES

Classification of Probability of Risk	
Classification	Definition
High Likelihood	There may be a pollutant linkage present and an event appears very likely in the short term or almost inevitable in the long term; or there is already evidence of harm to receptor.
Likely	Pollutant linkage may be present, and it is probable that there will be a long term risk and possibly a short term risk.
Low Likelihood	Pollutant linkage may be present, and it is possible that there will be a long term risk, though not certain
Unlikely	Pollutant linkage may be present, but the circumstances are such that an event is improbable, even in the long term.
No Risk Identified	No contaminants identified above guideline values likely to pose a risk to human health, fauna, flora, the water resources or the future built environment.

Risk Matrix of Probability and Consequence		Consequences				
		Severe	Medium	Mild	Minor	None
Probability of Risk	High Likelihood	Very High	High	Moderate	Low	Very Low
	Likely	High	Moderate	Low	Very Low	Negligible
	Low Likelihood	Moderate	Low	Very Low	Negligible	Negligible
	Unlikely	Low	Very Low	Negligible	Negligible	Negligible
	No Risk identified	Very Low	Negligible	Negligible	Negligible	Negligible

Classification of Severity of Consequence	
Classification	Definition
Severe	Acute risks to human health Catastrophic damage to buildings and property Major pollution of controlled waters
Medium	Chronic risk to human health Pollution of sensitive controlled waters Significant effects on sensitive ecosystems or species Significant damage to buildings or structures
Mild	Pollution of non-sensitive waters Minor damage to buildings or structures
Minor	Requirement for protective equipment during site works to mitigate health effects Damage to non-sensitive ecosystems or species
None Identified	Damage to human health, and the wider environment not expected. Requirement for basic protective equipment during site works still required as good practice.

NOTES:

Contaminated Land Risk Assessment involves the matching of the identified potential sources of contamination to the receptors through the possible migration pathways. These links must be completed for there to be any risk associated with the site.

This assessment of pollutant linkages is presented in terms of the Source (S), Pathway (P) and Receptor (R) concept and applying a qualitative value judgement to this appraisal. The assessment assigns a level of risk to each SPR link based on the probability and potential consequence of the risk being realised. The scale of risk is based on matrices as presented in the tables.