

# KIRKLEES DEVELOPMENT TEAM

## ADVICE FOR DEVELOPERS

### CHECKLIST FOR CONTAMINATED LAND REPORTS – ADVICE FOR DEVELOPMENT

#### Preliminary risk assessment /Phase 1 Reports

- Purpose and aims of study
- Site location and layout plans
- Appraisal of site history
- Assessment of environmental setting to include: Geology, hydrogeology, hydrology
- Information on coal workings (if appropriate)
- Information from Environment Agency on abstractions, pollution incidents, water quality classification, landfill sites within 250metres etc.
- Assessment of current / proposed site use and surrounding land uses (including site reconnaissance).
- Review of any previous site contamination studies (desk-based or intrusive) or remediation works.
- Preliminary (qualitative) assessment of risks.
- Appraisal of potential contaminant sources, pathways and receptors
- Conceptual site model
- Recommendations for intrusive contamination investigation (if necessary)

#### Site Investigation / Phase 2 Reports

- Review of any previous site contamination studies (deskbased or intrusive) or remediation works.
- Site investigation methodology
- Methods of investigation
- Plan showing exploration locations
- Justification of exploration locations
- Sampling and analytical strategies
- Results and findings of investigation
- Ground conditions (soil and groundwater regimes, including made ground)
- Discussions of soil / groundwater / surface water contamination (visual, olfactory or analytical).
- Conceptual site model
- Risk assessment – as a minimum based on contaminant pathway- receptor model. Should take account of severity of consequences and likelihood of occurrence.
- Justification of any Quantitative Risk Assessment Models used.
- Recommendations for remediation – justification should relate to proposed site use, risk assessment findings as well as technical and financial appraisal.

- Recommendations for further investigation (if necessary) Remediation statements (must be submitted before remediation commences)
- Objectives of the remediation works
- Detailed outline of the works to be carried out.
- Description of ground conditions (soil and groundwater)
- Type, form and scale of contamination to be remediated
- Remediation methodology
- Site plans/drawings
- Phasing of works and approximate timescales.
- Consents, agreements and licences (discharge consents, waste management licence etc.)
- Site management procedures to protect site neighbours, environment and amenity during works, should include where appropriate:
  - Health and safety procedures
  - Dust, noise and odour controls
  - Control of surface run-off
- Details of how any necessary variations from the approved remediation statement arising during the course of the works will be dealt with, including notification to Environmental Service.

Details of how the works will be validated to ensure the remediation objectives have been met, should include details on:

- Sampling strategy
- Use of on-site observations, visual/olfactory evidence
- Chemical analysis
- Proposed clean-up standards (i.e. contaminant concentrations) Validation Reports (submitted following remediation)
- Include information as per previous section
- Details of who carried out the work
- Details and justification of any changes from original Remediation Statement
- Substantiated data – should include where appropriate: Laboratory and in-situ test results
- Monitoring results from groundwater and gases
- Summary data plots and tables relating to clean-up criteria
- Plans showing treatment areas and details of any differences from original Remediation Statement
- Confirmation that remediation objectives have been met.