

CONTAMINATED LAND STRATEGY REVIEW AUGUST 2005

This document is an update on the Contaminated Land Strategy which was produced in August 2001. It considers achievements since 2001 and also looks at how the Contaminated Land Strategy will be progressed over the next 3 years.

1.0 ACHIEVEMENTS SINCE 2001

1.1 Information already collated for EHDC

There are several sources of information on historical land uses and potentially contaminated land and the following list describe what Environmental Health currently holds.

- Trade lists from 1824, 1859, 1895 and 1931 from Kelly's Directories. EHDC has purchased this information which includes four volumes of Kelly's Directories from Lovell Johns.
- Information from the Environment Agency (EA) i.e.
 - Licensed Landfill Sites
 - Pollution Incidents/Accidents
- Parish Councils' information on potentially contaminated sites
- Information from several Environmental Health Officers to provide any additional knowledge and comments on the potentially contaminated list
- Authorised Processes obtained from the Environmental Health inspection list
- Hampshire County Council Former Landfills
- Council owned/sold land which may be contaminated

Environmental Health also holds information on potential sensitive receptors and pathways which will be used during the risk assessment. (See also section 3.0).

- Solid and Drift Geology (BGS)
- British Geological Survey (BGS) borehole data
- Hydrogeology (BGS)
- Hydrology/Surface Water Features (Current Ordnance Survey Mapping)
- Council Owned Land (EHDC)
- Land Use
- Surface Water Features (identified from Current O.S. Mapping)
- Surface Water Quality Mapping (source EA)
- Groundwater Vulnerability Mapping (source EA)
- Public Abstraction Wells and Source Protection Zones (source EA)
- Private Abstraction Wells (Environmental Health Department)
- Conservation Sites (English Nature)
- Listed Buildings (EHDC & County Council)

1.2 Information still being collated for EHDC

To complete the information collated Environmental Health will:

- Obtain information from Building Control department to provide any additional knowledge and comments on the potentially contaminated sites
- Add Landmark data on GIS (this is currently being undertaken)
 - County Series at 1:2 500 and 1:10 560 scale
 - National Grid at 1:2 500 and 1:10 000 scale
 - Town Plan at 1:500 scale
 - Historical land Use Data
 - Petrol Station Data
 - Historical Tank and Energy Facility data
- Data capture – New potentially contaminated land obtained from different sources such as Environmental Health Officers or Environment Agency will be added to GIS.

1.3 Storage of information

Excel and GIS

All information associated with source, pathway and receptor will be held on GIS and associated lists will be kept on Excel spreadsheet. A unique EHDC reference number will be given to all potentially contaminated sites to be able to cross refer.

- All potentially contaminated sites shown on GIS are listed on “EHDC_List of potentially cont.land” Excel spreadsheet. This file currently excludes Landmark Data.
- All former landfills are listed on “EHDC_Former Landfill List” Excel spreadsheet
- All private water abstraction well are listed on “EHDC_PWS_GIS” Excel spreadsheet
- All Trade list data are listed on “EHDC_Trade directories_GIS” Excel spreadsheet

Folders

Original information provided by Parish Councils is also kept in a paper file called “Parishes Information – Potentially Contaminated Land”.

1.4 GIS development:

- Data capture is an ongoing process and new potentially contaminated land will be added to GIS on a regular basis.
- Updating new parishes information to GIS – ongoing
- Reviewing GIS data to check general information - ongoing
- Creating a GIS tool with Source-Pathway-Receptor (S-P-R) category to be able to undertake a risk assessment – ongoing
- Adding rank on GIS for each potentially contaminated site once risk assessment has been completed

- Updating site investigation and remediation information for each potentially contaminated site on GIS

1.5 Strategy update

- The table, in this document, describing all the actions for the next months/years was reviewed in August 2005 and will be updated every 6 months.
- English Nature reviewed the Special Areas of Conservation (SACs) and Site of Special Scientific Interest (SSSIs) table on p23 in January 2005 and no sites were added or removed.
- The Whole Strategy document will be reviewed every 5 years and will be reviewed between July and December 2006.

2.0 LOCAL AUTHORITY PRIORITY ACTIONS

East Hampshire District Council (EHDC) will prioritise the potentially contaminated land sites by undertaking a risk assessment of all the sites present within East Hampshire District. EHDC will undertake site investigations and remediation work initially on the following sites:

- High risk sites to humans, groundwater, sensitive eco-systems (e.g. SSSI) and listed buildings.
- EHDC owned land and previously owned land which appears to be potentially contaminated

Then EHDC will undertake site investigation on the remaining sites.

3.0 PROCEDURES

3.1 Identification of Potentially Contaminated Sites - Source

Information gathering - source

The sources that will be considered as part of the S-P-R based qualitative risk assessment are listed below:

- Trade Lists data from 1824, 1859, 1895 and 1931
- Licensed landfill
- Pollution incidents/accidents
- Parishes Councils' information on potentially contaminated sites
- Information from Environmental Health Officers
- Authorised Processes obtained from Environmental Health inspection list
- Former landfill
- Council owned/sold land which may be contaminated
- Landmark historical maps – not currently on GIS

All the different sources listed above are included on the Council GIS.

To encompass sites, which may extend into neighbouring districts, a marginal zone of approximately 1km has been deemed to be appropriate. The district boundary will be clearly identified on all plans and by way of a layer within the GIS.

3.2 Identification of Potential Pathways

The principal sources of information on pathways that will be considered as part of the source-pathway-receptor based qualitative risk assessment for each potentially contaminated site are listed below:

- Solid and Drift Geology
- Hydrogeology
- Hydrology/Surface Water Features

All the different pathways listed above are included on the Council GIS system.

3.3 Identification of Potential Receptors

The principal sources of information on Receptors that will be considered as part of the source-pathway-receptor based qualitative risk assessment for each potentially contaminated site are listed below:

- Council Owned Land
- Land Use
- Surface Water Features
- Surface Water Quality Mapping
- Groundwater Vulnerability Mapping
- Public Abstraction Wells and Source Protection Zones
- Private Abstraction Wells
- Conservation Sites
- Listed Buildings and Ancient Monuments

All the different receptors listed above are included on the Council GIS system.

3.4 Environmental Qualitative Risk Assessment (QRA)

Once potentially contaminated sites have been identified, the qualitative risk assessment will be undertaken.

This stage has not yet been undertaken and the procedures which are available in section 4 of the Contaminated Land Strategy document will be reviewed and may be modified according to the data obtained. The Council will employ external consultant to undertake this work.

3.5 Staged Approach to Intrusive Environmental Site Assessment and Quantified Risk Assessment

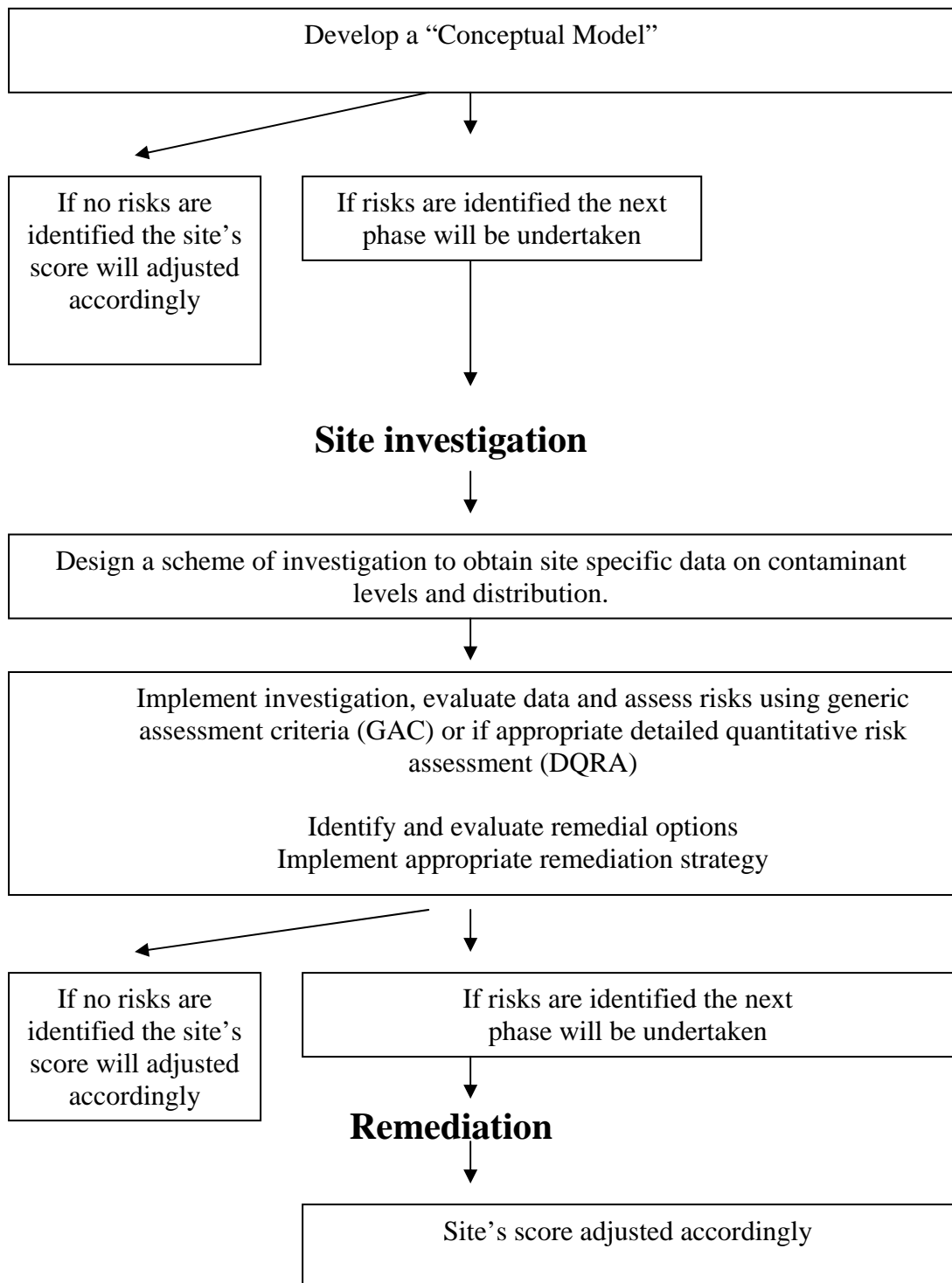
In order to quantify the risk associated with a potentially contaminated site, an intrusive physical site investigation may be required. This will be carried out by an Environmental Consultant. Funding through Supported Capital Expenditure (SCE(R)) can be obtained to undertake intrusive investigations under Part IIA of EPA 1990. The stages of an intrusive site assessment should be undertaken progressively to ensure cost effectiveness in investigation of a site.

The scope of each stage of an intrusive environmental site assessment will be site specific and dependant on the findings of the initial site assessment and qualitative risk assessment.

Detailed investigation and risk assessment will confirm site specific conditions, such as geology and hydrogeology, that were identified in the previous stage. The investigation should obtain representative soil, gas and water samples where appropriate, for analysis, the results of which should feed into the risk assessment process.

The following chart summarises the different steps which will be undertaken before, during and after site investigation.

Desktop Study



All works must be undertaken by a suitable person who can demonstrate that they possess the knowledge, skills and experience necessary to satisfy all parties.

3.6 Role of External Consultants

EHDC will employ external consultants to undertake the qualitative risk assessment and site investigation.

4.0 PROGRAMME

The table produced in August 2001 for the Strategy Report has been revised and is detailed below.

EAST HAMPSHIRE DISTRICT COUNCIL

Strategy Timetable

	ACTIONS	2004	2005	2005	2006	2006	2007	2008 onwards
			Jan-Jun	Jul-Dec	Jan-Jun	Jul-Dec		
1	Draft Strategy							
	Draft Inspection strategy issued	August 2001						
2	Final Strategy							
	Review of strategy timetable every six months Review of whole document every five years			Start/complete		Review of whole document	Start/complete	
3	Information gathering							
	Environment Agency digital information	Ongoing	Complete					
	Landmark historical map purchase/implementation	Ongoing	Ongoing	Complete				
	Obtain information from Building Control, Local Petroleum, BGS, Parishes, English Nature	Ongoing	Ongoing	Complete				
4	Development of GIS							
	Development of the Council's Geographical Information System with information gathered	Ongoing	Ongoing	Complete				
	Data capture of new potentially contaminated land	Ongoing	Ongoing	Ongoing	Ongoing	Ongoing	Ongoing	Ongoing
5	Potentially contaminated sites							
	Identify and produce a list of all potentially contaminated sites within the district electronically using information/data gathered, GIS, historical maps	Ongoing	Ongoing	Complete				
	Updating the list of potentially contaminated sites electronically			Ongoing	Ongoing	Ongoing	Ongoing	Ongoing
	Use BV216a & BV216b to identify site of concern by April 2006			Start	Finish			
6	Qualitative risk assessment							
	Procedures review and update			Start	Complete			
	Stage 1 – Basic screening			Start/Complete				
	Stage 2 - More detailed QRA			Start	Complete			

EAST HAMPSHIRE DISTRICT COUNCIL

Provisional Programme 2

	ACTIONS	2004	2005	2005	2006	2006	2007	2008 onwards
			Jan-Jun	Jul-Dec	Jan-Jun	Jul-Dec		
7	Consultant recruiting							
	Recruit external consultants to review sites and undertake site assessment			Start	Ongoing			
8	Intrusive site assessment and quantified risk assessment							
	Site investigation - High-risk sites					Start	Ongoing	Ongoing
	Site investigation - High Priority Council - owned land					Start	Ongoing	Ongoing
	Site investigation - Remaining sites						Start	Ongoing
9	Identify contaminated sites							
	Identify contaminated sites from site investigation and update GIS with new terminology						Start	Ongoing
10	Identify special sites							
	Identify special sites once sites are identified as contaminated sites and inform the Environment Agency						Start	
11	Create/update public register							
							Start	
12	Remediation and continuation of strategy implementation							
	Remediation of contaminated sites					Start	Ongoing	Ongoing
13	Update the Environment Agency							
	Update the Environment Agency on a regular basis (once prioritisation is done)						Start	Ongoing