

CONTAMINATED LAND STRATEGY REVIEW NOVEMBER 2006

The Contaminated Land Strategy, produced in August 2001, describes how East Hampshire District Council (EHDC) will identify contaminated land with the requirements of Part IIA of the Environmental Protection Act 1990. This document is the second update on the Strategy. It considers achievements since 2001 and also looks at how the Contaminated Land Strategy will be progressed over the next 3 years.

Consideration has been given to reviewing the whole of the Contaminated Land Strategy. However, as no additional funding has been made available in 2007/2008 to progress the Strategy it has been decided that there is little benefit in carrying out a full review at present.

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 describes 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.
- Contaminated land from 1900s and 1940s from Ordnance Survey
- Information from the Environment Agency (EA) i.e.
 - Licensed Landfill Sites
 - Pollution Incidents/Accidents
- Parish Councils' information on potentially contaminated sites
- Information from Environmental Health Officers to provide any additional knowledge and comments on the potentially contaminated list and to inform Environmental Health of any environmental incidents/accidents.
- Authorised Processes obtained from the Environmental Health inspection list
- Hampshire County Council Former Landfills
- Council owned/sold land
- Landmark data
 - 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

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)

- Groundwater Vulnerability Mapping (source EA)
- Hydrology/Surface Water Features (Current Ordnance Survey Mapping)
- Surface Water Quality Mapping (source EA)
- Public Abstraction Wells and Source Protection Zones (source EA)
- Private Abstraction Wells (Environmental Health Department)
- Council Owned Land (EHDC)
- Land Use
- 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 Planning Development Services (Building Control Department and Planning Development) to provide any additional knowledge and comments on the potentially contaminated sites.
- Capture data – New potentially contaminated land obtained from different sources such as Environmental Health Officers or Environment Agency will be added to GIS on a regular basis.
- Update GIS with information obtained from the Environment Agency
- Update GIS with new parishes information
- Update GIS with the Authorised Processes List
- Add investigated and remediated sites on 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.

- Potentially contaminated sites shown on GIS are listed in “EHDC_List of potentially cont.land” Excel spreadsheet. This file currently excludes Landmark Data.
- Former landfills are listed in “EHDC_Former Landfill List” Excel spreadsheet
- Private water abstraction well are listed in “EHDC_PWS_GIS” Excel spreadsheet
- Trade list data are listed in “EHDC_Trade directories_GIS” Excel spreadsheet
- Tanks and electrical substations shown on GIS are listed in “EHDC_Tanks_electrical substations”
- Petrol Stations are listed in “EHDC_Petrol Station Data” Excel spreadsheet
- Conservation sites are listed in “EHDC_SSSI_SACS” Word document

Folders

Original information provided by Parish Councils is also kept in a paper file called “Potentially Contaminated Sites – Parishes Info/EH Info”.

1.4 GIS development:

Most of Section 1.2 describes what Environmental Health will undertake on GIS and in addition the following will be carried out:

- 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.

1.5 Strategy update

- This document and the strategy timetable describing all the actions for the next months/years were reviewed in August 2005 and November 2006 and will be reviewed every 6 months.

2.0 LOCAL AUTHORITY PRIORITY ACTIONS

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), listed buildings, EHDC owned land and previously owned land
- EHDC will then 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
- Contaminated land from 1900s and 1940s from Ordnance Survey
- Licensed landfill Information
- 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

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
 - 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.
- 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.

A bid was put forward in September 2006 to obtain funding to prioritise the potentially contaminated sites in the District but unfortunately the bid was unsuccessful. This outcome means that there will be delays and limitations for the prioritisation work which should be undertaken in 2007 by an external consultant.

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

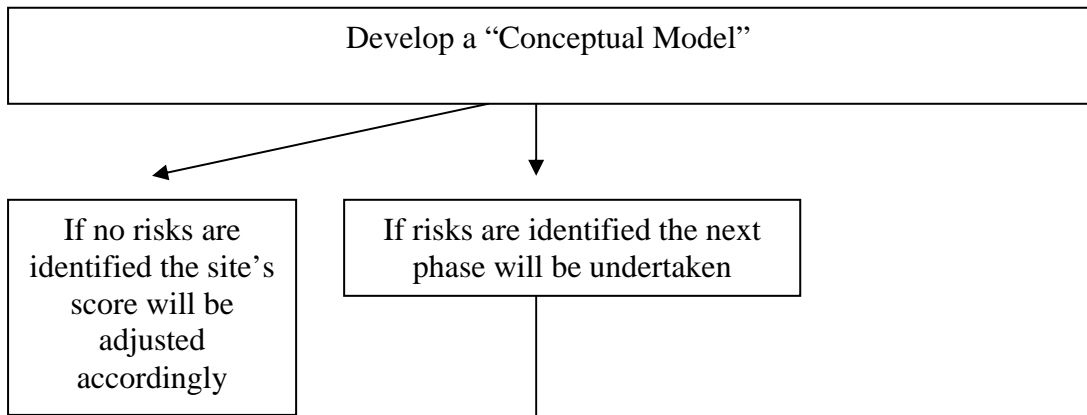
In order to quantify the risk associated with a potentially contaminated site, an intrusive physical site investigation may be required. This will be carried out by an Environmental Consultant. Funding through Supported Capital Expenditure (SCE(R)) can be obtained to undertake intrusive investigations 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.

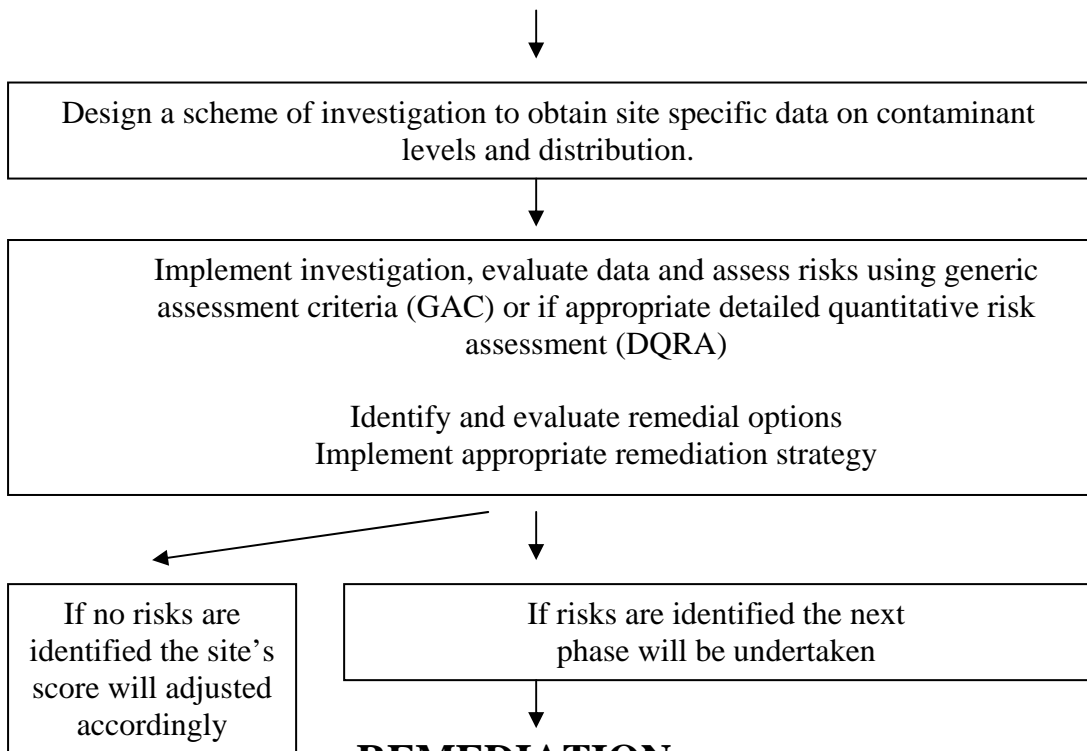
Detailed investigation and risk assessment will confirm site specific conditions, such as geology and hydrogeology, that were identified in the previous stage. The investigation should obtain representative soil, gas and water samples where appropriate, for analysis, the results of which should feed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

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

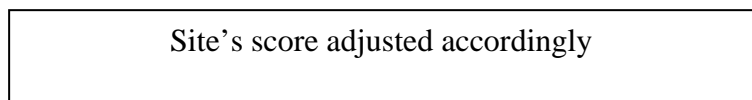
DESKTOP STUDY



SITE INVESTIGATION



REMEDIATION



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.

	Completed
	Ongoing
	Not yet started

EAST HAMPSHIRE DISTRICT COUNCIL
Strategy Timetable

	ACTIONS	2001-2005	2006	2006	2007	2007	2008	2009 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	September 2005		September 2006	February 2007	September 2007	Ongoing	Ongoing
3	Information gathering							
	Environment Agency digital information Update annually on GIS	June 2005		Updated	To Update	To Update	To Update	To Update
	Landmark historical map purchase/implementation	October 2005						
	Obtain information from Building Control, Local Petroleum, BGS, Parishes, English Nature	Ongoing	Ongoing	Ongoing	Ongoing	Ongoing	Ongoing	Ongoing
	Geology and hydrogeology information	Obtained in June 2005		Added on GIS in September 2006				
4	Development of GIS							
	Development of the Council's Geographical Information System with information gathered	October 2005						
	Data capture of new potentially contaminated land	Started in 2001	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	Started in 2005	Ongoing	Ongoing	Ongoing	Complete		
	Updating the list of potentially contaminated sites electronically	Started in 2005	Ongoing	Ongoing	Ongoing	Ongoing	Ongoing	Ongoing
	Use BV216a & BV216b to identify site of concern annual requirement to compile performance indicator		April 2006		April 2007		April 2008	April 2009
6	Qualitative risk assessment							
	Stage 1 – Basic screening				Start	Ongoing	Complete	
	Stage 2 - More detailed QRA						Start	Ongoing
	Procedures review and update			Start	Ongoing	Ongoing	Ongoing	Ongoing

EAST HAMPSHIRE DISTRICT COUNCIL
Strategy Timetable

	ACTIONS	2001-2005	2006	2006	2007	2007	2008	2009 onwards
			Jan-Jun	Jul-Dec	Jan-Jun	Jul-Dec		
7	Consultant recruiting							
	Recruit external consultants to review sites and undertake risk assessment			Recruited consultant in Aug 2006	Ongoing	Ongoing	Ongoing	Ongoing
8	Intrusive site assessment and quantified risk assessment							
	Site investigation - High-risk sites						Start	Ongoing
	Site investigation - Remaining sites							Start
9	Identify contaminated sites							
	Identify contaminated sites from site investigation and update GIS with new terminology. Site determined as contaminated land.						Start	Ongoing
10	Identify special sites							
	Identify special sites once sites are identified as contaminated sites and inform the Environment Agency						Start	
11	Public register							
	Create/update public register of S78R Contaminated Land						Start	
12	Remediation and continuation of strategy implementation							
	Remediation of contaminated sites					Start	Ongoing	Ongoing
13	Update the Environment Agency							
	Update the Environment Agency annually	Start	Ongoing	Ongoing	Ongoing	Ongoing	Ongoing	Ongoing

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