



Development Department

**CONTAMINATED LAND:  
AN INSPECTION STRATEGY FOR LEEDS**

**FIFTH ANNUAL REVIEW  
AUTUMN 2006**

## **SUMMARY**

The fifth Annual Review of Leeds City Council's Contaminated Land Inspection Strategy (CLIS) has been completed. The current status of the CLIS is summarised below including changes to procedures, timescales and targets.

With the addition of a Project Officer (Part 2A) to the Contaminated Land team, significant progress has been made during the fifth year of implementation.

### **Identification of Priority Areas (Section 2.0)**

- The order of the Priority areas for dataset development, prioritisation and detailed inspection continues to be as follows (in descending order of priority): 1a, 1, 2, 7, 3, 4, 5, 6, the rest of Leeds
- Area 1a has been adopted as a pilot study area as decided at the Leader Management Team on 27 July 2006. It is anticipated to complete Area 1a by the end of this financial year. At this stage, the work undertaken during the pilot study will be reviewed and assessed amending the procedure accordingly if necessary.

### **Contaminated Land GIS & Database (Section 3.0)**

- Development on the database for storing and managing data collated at the detailed inspection stage of the Part 2A process has continued. It includes a section on monitoring progress with detailed inspection of a site, and recording details of the site walkover and Phase I Desk Study.

### **Development of key datasets (Section 4.0)**

- New datasets acquired during the year include the Arms Length Management Organisation (ALMO) boundaries, Leeds City Council's Engineering Services' site investigation data and digitised potentially contaminative historical land use data for the majority of the 'rest of Leeds' (Area 0). The latter dataset requires some additional development by the Contaminated Land team.
- The Potentially Contaminated Land (PCL) dataset has continued to be developed through the digitisation of sites brought to our attention through, eg, the planning and redevelopment process and 'voluntary' remediation
- An update of Environment Agency information was provided by the Environment Agency in January 2006 and added to the GIS.

### **Prioritisation of sites for inspection (Section 5.0)**

- Prioritisation work will continue to focus on potential human receptors, which are considered to be the most sensitive receptor.
- As work has been ongoing, further sites have been identified within the pilot study area of Priority Area 1a and the total number of sites for which Detailed Inspection is being undertaken now stands at 35.
- Prioritisation work has now been completed for Areas 1, 2, and 7 identifying to date 322, 143 and 210 sites for Detailed Inspection, respectively.
- The total number of sites identified so far for Detailed Inspection now stands at 710.
- Priority Areas 3, 4, 5, 6 and the 'rest of Leeds' remain to be prioritised.

- Further to completion of the pilot study on Priority Area 1a, when prioritisation of sites within a certain Priority Area has been completed, these sites will be combined with the list of sites available at that time so that ***there is one overall 'rolling' prioritisation list.*** The sites that represent the highest risks will be subject to detailed inspection first regardless of the area in which they are located
- Due to the extent of the railway land use, it is intended to address this source of contamination on a site-specific basis if necessary
- The definition of Contaminated Land has been amended by Government so only 'significant' and the 'significant possibility' of pollution of controlled waters requires addressing under the Contaminated Land regime as opposed to all pollution of controlled waters. Guidance on what is meant by 'significant' and 'significant possibility' is currently awaited from DEFRA. An approach for addressing potential groundwater and surface water contamination will continue to be considered, particularly in light of any forthcoming guidance on the revised definition of Contaminated Land

### **Detailed inspection (Section 6.0)**

- Detailed inspection has commenced for Area 1a. As this area has now been identified as the pilot study area, it is planned to complete Detailed Inspection on Area 1a by the end of March 2006. After this date, Detailed Inspection will be commenced on sites on the rolling prioritisation list.
- The anticipated costs of sampling works (associated with Detailed Inspection) is being examined through the Department's Revenue Budget and/or Leeds City Council's Capital Programme. All expenditure on site investigation/sampling has to be funded by the Council.
- ***To date, no sites in Leeds have been determined as Contaminated Land***

### **Dealing with Council Land (Section 7.0)**

- The Council's land contamination issues continue to be addressed through various processes including EMAS, Asset Management, Land Transactions and LEDA

### **Urgent Sites (Section 8.0)**

- To date, no sites in Leeds have been considered to be 'Urgent'

### **Radioactive Contaminated Land Regulations 2006 (Section 9.0)**

- Potential radioactive contamination is now a consideration as part of the Contaminated Land Inspection Strategy due to the Radioactive Contaminated Land Regulations 2006 coming into force on 4 August 2006.

## Best Value Performance Indicator (Section 10.0)

- In April 2005, a Best Value Performance Indicator, BVPI216a and b, was introduced to the Local Authority for land contamination work which includes Contaminated Land Inspection Strategy work.

## Work Programme (Section 11.0)

As well as the above work, other supporting work has been ongoing primarily in order to commence and continue the Detailed Inspection work. This includes: setting up a Service Level Agreement with Severn Trent laboratory; acquisition of necessary equipment; drafting internal guidance on procedures, policy on the provision of Part 2A information, communication strategy, templates for Phase I Desk Studies, etc

Timescales and procedures are as follows:

- ***The prioritisation process continues to focus on targeting the most sensitive end uses and the work programme is therefore primarily addressing human receptors at this stage***
- A work programme for addressing other less sensitive receptors will be considered at a later date
- ***Detailed Inspection of Area 1a has commenced. As this Priority Area has now been adopted as the pilot study, we are intending to complete Detailed Inspection by end of March 2007.***
- The estimated completion date for detailed inspection continues to be the end of 2015. However, this is very much dependent on maintaining resources and on resources being made available for those sites where sampling and other investigation data collected by the Council will be required. The EA is considering a Draft EU Soil Strategy which may have bearing on timescales.

## **1.0 INTRODUCTION**

Under Part 2A of the Environmental Protection Act 1990, each local authority has a statutory duty to keep its Contaminated Land Inspection Strategy (CLIS) under periodic review. Chapter 11 of Leeds City Council's Strategy document outlines how a review will be carried out after each year of the Strategy's implementation. This approach was considered to be the most efficient and effective way of making sure that the Strategy remains up-to-date and reflects current practice, but also that it is realistic and achievable. Annual reviews were deemed the best way of enabling timescales and targets to be revised appropriately.

This document comprises Leeds City Council's Fifth Annual Review of its CLIS; it is not intended to be a standalone document, but should be read in conjunction with the original CLIS document and the First (Autumn 2002), Second (Autumn 2003), Third (Autumn 2004) and Fourth (Autumn 2005) Annual Reviews.

### **1.1 Who has undertaken the Review?**

The Fifth Annual Review has been undertaken, and this document prepared, by the Contaminated Land Officer and others involved in the implementation of the CLIS within Leeds City Council's Development Department. A copy of this review has been submitted to the Environment Agency for their information.

### **1.2 Structure of the Review Document**

The layout of this review follows a similar format to that of earlier reviews, which follow the listing of the principal features of the CLIS methodology as presented in Chapter 5 of the CLIS document. For each feature, the progress made in the fifth year of implementing the CLIS is discussed, including details of any proposed changes to procedures, timescales or targets.

An additional section has been included to reflect recent changes in legislation and guidance with regard to the Radioactive Contaminated Land Regulations 2006.

### **1.3 Definitions & Terminology**

Various terms and abbreviations used throughout this document may have a specific meaning within the context of the Part 2A Contaminated Land regime and/or they have already been defined within the Glossary and text of the original CLIS document. On this basis, definitions will not be repeated here.

### **1.4 Publication**

This Review document can be viewed and/or downloaded free of charge from the Council's website at [www.leeds.gov.uk/contaminatedland](http://www.leeds.gov.uk/contaminatedland). Alternatively, a hard copy can be purchased for £10.00 from the Contaminated Land Officer at the Leonardo Building, 2 Rossington Street, Leeds LS2 8HD.

### **1.5 Enquiries**

Any enquiries about this Review, earlier Annual Reviews or the CLIS document should be addressed to:

The Contaminated Land Officer  
Minerals and Waste Planning Group  
Development Department  
Leeds City Council  
The Leonardo Building  
2 Rossington Street  
Leeds LS2 8HD

Tel: 0113 247 8154

Fax: 0113 247 6484

[minerals.contaminatedland@leeds.gov.uk](mailto:minerals.contaminatedland@leeds.gov.uk)

Further information about the CLIS can also be found at [www.leeds.gov.uk/contaminatedland](http://www.leeds.gov.uk/contaminatedland). The CLIS and subsequent annual reviews can be viewed on this website and downloaded free of charge.

## 2.0 IDENTIFICATION OF PRIORITY AREAS

The Priority Areas are illustrated on Figure AR1 in the First Annual Review document dated Autumn 2002. The prioritisation order has not changed since the last Annual Review (Autumn 2005), although Priority Area 1a is now being used as a pilot study area, as decided at the Leader Management Team on 27 July 2006.

The current prioritisation order is summarised below:

Inspection Order	Priority Area	General area covered
1 <sup>st</sup>	1a	Meanwood
2 <sup>nd</sup>	1	City Centre, Holbeck, Beeston, Wortley & Armley
3 <sup>rd</sup>	2	Guiseley & Yeadon
4 <sup>th</sup>	7	Hunslet, Stourton & Cross Green
5 <sup>th</sup>	3	Morley, Gildersome, Middleton & East Ardsley
6 <sup>th</sup>	4	Horsforth, Pudsey & Calverley
7 <sup>th</sup>	5	Rothwell & Oulton
8 <sup>th</sup>	6	Garforth, Micklefield & Kippax
9 <sup>th</sup>	Rest of Leeds	Rest of Leeds not covered by Priority Areas 1a and 1 to 7

On completion of the pilot study in Priority Area 1a, the work undertaken will be reviewed and assessed. Consideration will be given to amending the procedure based on the experiences from the pilot study.

## 3.0 CONTAMINATED LAND GIS & DATABASE

The Contaminated Land GIS and associated attributes tables have continued to be developed as and when necessary.

The 'Potentially Contaminated Land' (PCL) database referenced in the earlier annual reviews continues to be used to store site-specific information supplementary to that held in the GIS attributes tables. An outline of this dataset is included in Section 4.1 below.

The database for storing and managing data collated at the detailed inspection stage of the Part 2A process has been further developed. The database now has various sections for inputting data including the following areas of work:

- Progress details on each site
- Site walkover
- Phase I Desk Study

## 4.0 DEVELOPMENT OF KEY DATASETS

The GIS holds over 250 datasets providing a range of information relating to contaminant sources, pathways and receptors. It is intended that all the datasets will cover the whole of the Leeds District; indeed, this is already the case for the majority of the datasets. Table AR5/1 lists the datasets available; the new datasets from the fifth year of the implementation of the strategy are shown in bold.

An update on the development of new and existing datasets is provided below.

## 4.1 Contaminant Sources

### Datasets acquired

- Dataset on ALMO boundaries  
Council homes are managed on behalf of the council by Arms Length Management Organisation (ALMO). Where it is intended to undertake further investigation on properties managed by ALMOs, the ALMOs are informed of this information. This dataset is therefore useful to establish in which ALMO a property is based.
- Leeds City Council Engineering Services' site investigation data  
This dataset is an additional source of ground investigation data for use as and when necessary.
- Datasets on historical land uses for the majority of the 'rest of Leeds'  
The digitised potentially contaminative historical land use data for the majority of the 'rest of Leeds' has now been acquired.

### Datasets in the process of being acquired/developed

- Datasets on historical land uses for the remaining part of the 'rest of Leeds'  
The remaining data for the 'rest of Leeds' will be digitised and developed by the Contaminated Land team as soon as possible. The remaining area is made up of the greenfield areas of the Leeds Metropolitan District where very few Potentially Contaminated Land uses are expected. It was not considered cost effective to have these areas examined externally.
- 'Potentially Contaminated Land' (PCL) Dataset  
The PCL dataset is comprised predominantly of potentially contaminated sites that have been investigated and/or remediated through the planning and redevelopment process, through voluntary remediation or have been brought to the Council's attention through other means.  
The PCL dataset has continued to be developed during the past year. New PCL sites have been added to the dataset including digitising the site boundary onto the GIS system and inputting site-specific details into the database.

## 4.2 Receptors

### Datasets in the process of being acquired/developed

- Early Year Centres (nurseries) – private  
A list of private nurseries within the Leeds District has been made available to the Contaminated Land team from the Learning and Leisure Department. Unfortunately, the GIS data has not been provided in a polygon (site boundary) format and generally the point source data locations are inaccurate. It is intended for this dataset to be digitised and included as a Human receptor within the prioritisation process. As the dataset still requires development, work will continue on this dataset as and when necessary.

### **4.3 Environment Agency Data**

An update of Environment Agency information was provided by the Environment Agency in January 2006 and added to the GIS.

## **5.0 PRIORITISATION OF SITES FOR INSPECTION**

The GIS-based software package, GroundView™, is a tool to prioritise sites that have been identified as potentially Contaminated Land. The adopted method begins by comparing the location of areas of potential contamination with areas where there are sensitive receptors. By overlaying these two types of data, a preliminary list of sites that have two parts of a potential pollutant linkage is compiled in prioritised order. The principles and methodology behind GroundView™ are explained in Appendix F of the CLIS document.

An update on the progress regarding the prioritisation work is outlined below. For various reasons, it is still intended to focus on the human receptor. The list of datasets selected for use in the preliminary prioritisation work (focussing on human receptors) has not changed from the last Annual Review (Autumn 2005) (Section 5.1). In addition, the scoring system and concept of the 'rolling' prioritisation list has not changed since the last Annual Review (Section 5.2). Progress made to date with regard to Areas 1a, 1, 2 and 7 has been discussed (Section 5.3). Reference is made to the approach of dealing with railway land (as a potential contaminative source) and controlled waters (as a receptor) within Sections 5.4 and 5.5, respectively.

### **5.1 Selection of datasets for preliminary prioritisation - Humans**

The approach to prioritisation has not changed since the last Annual Review (Autumn 2004) and continues to target, as far as possible, the highest priority, most sensitive receptors, ie humans. The datasets for use within the prioritisation process are listed in Table AR5/2, providing various details and an appraisal (including limitations) on each dataset. A buffer zone of 5m has been placed around the source datasets in order that Groundview can readily identify those sites where potential sources and receptors lie adjacent to each other.

At a later date, it is intended to assess potential sources of contamination in relation to the less sensitive receptors of controlled waters, ecology and property.

In some instances, datasets noted in Table AR5/1 have not been included in the prioritisation process as shown by datasets listed in Table AR5/2. Datasets may not have been included at the prioritisation stage, mainly because datasets have been superseded, are already covered by other datasets or are intended for review when Detailed Inspection is being undertaken on a site.

### **5.2 Scoring system and 'rolling' prioritisation list**

The scoring system and concept of the 'rolling' prioritisation list has not changed since the last Annual Review.

### **5.3 Areas 1a, 1, 2 and 7**

Whilst undertaking detailed inspection within Area 1a, several other sites have been identified that require detailed inspection. These sites have been identified for various reasons including noting additional historical land uses that were not included within

the Historical Land Use dataset (as this dataset is derived from only 5 epochs of data). The total number of sites for which detailed inspection is being undertaken in Area 1a has increased from 28 (as reported in the last Annual Review) to 35.

Prioritisation work on Areas 1, 2 and 7 have identified 322, 143 and 210 sites, respectively, which require detailed inspection. It should be borne in mind that additional sites may be identified whilst undertaking detailed work within these Priority Areas for various reasons as outlined in the above paragraph.

The assessment of railway lines as a potential source will now be addressed in line with the revised scoring system. However, the assessment of controlled waters as a potential receptor will be addressed differently to the prioritisation process referred to above. Further details are available in Sections 5.4 and 5.5 below.

#### **5.4 Potential Source - Railway line land use**

The general methodology outlined in last year's annual review is being used when identifying sites for detailed inspection where the historical land use data highlights railway lines as a potential source of contamination.

Where potential receptor sites (eg back gardens of residential properties) are located adjacent only to current or past railway lines, it was previously stated that an attempt would be made to address these sites and add them to the prioritisation list at the time of carrying out the prioritisation process for each area. Due to workload, this is not being done and instead it is intended that this work will be done once all prioritisation work has been completed.

#### **5.5 Potential Receptor - Controlled Waters**

Further to last year's annual review, there is nothing further to add here. A more detailed methodology for dealing with these sites will be considered further in subsequent annual reviews, in particular in light of further guidance on the definition of Contaminated Land currently awaited from DEFRA.

### **6.0 DETAILED INSPECTION**

***Detailed inspection has commenced in Area 1a (Meanwood). Site walkovers have been undertaken for all 35 sites and draft or final versions of Phase I desk studies have been carried out for all 35 sites. Plans are currently in place to undertake some sampling in domestic gardens and public open space. The aim is to complete all detailed inspection for Area 1a by the end of March 2007.***

An additional check in-between finishing prioritisation and commencing the Phase I Desk Study has been included within the process of assessing detailed inspection sites to establish whether overlapping sites as shown up on the prioritisation process are further to additional work only risks from adjacent historical land uses. This process is required to assess whether there are for example digitisation inaccuracies in the datasets by reviewing the historical plans.

In addition, if a site is identified under the Contaminated Land Inspection Strategy but is still being considered under planning, then if necessary the route of enforcement will be the preferred option in attempting to deal with the site.

Detailed inspection for sites on the rolling prioritisation list will commence further to completion of the Area 1a pilot study area. This list places sites in descending order

of priority in terms of the potential risk they are considered to pose based on the prioritisation process. Once the pilot study work has been reviewed and assessed and necessary changes made to the inspection strategy, detailed inspection will commence on the prioritisation rolling list sites.

As part of the Detailed Inspection process of the regime, intrusive site investigation involving soil/water sampling and gas monitoring will be required in some cases to assess potential contamination at a given site. Leeds City Council will need to meet ALL costs incurred in inspecting the land to determine whether it is Contaminated Land. Consideration is being given to meeting the anticipated costs of investigation through the Department's Revenue Budget and/or Leeds City Council's Capital Programme.

Leeds City Council continues to be involved with sites which are being investigated and remediated 'voluntarily' (i.e. outside of any regulatory regime) by their current landowners/occupiers. In addition, many sites are investigated and/or remediated at the redevelopment stage and the government has stressed the importance of this. Section 2.51, Annex 2 of Planning Policy Statement 23 (published 2004) states that:

**'As a minimum, after carrying out the development and commencement of its use, the land should not be capable of being determined as Contaminated Land under Part 2A of the EPA 1990'.**

Given that the Council now holds detailed records on these sites, it is anticipated that the process of detailed inspection will be more straightforward in future.

As detailed in Chapter 1 of the CLIS document, the ultimate purpose of the Inspection Strategy is to identify sites which meet the definition of Contaminated Land. ***To date, no Contaminated Land sites have been determined in Leeds.*** Please refer to Section 6.0 of the First Annual Review Autumn 2002 on the Council's approach to those sites so far that have been brought to the Council's attention where there is known to be potential for Part 2A 'pollution of controlled waters'.

## **7.0 DEALING WITH COUNCIL LAND**

Please refer to Chapter 7 of the First Annual Review (Autumn 2002) with regard to the Council's key means through which it is addressing its own land contamination issues. There have been no significant changes from the earlier Annual Reviews with regard to the work undertaken in the past year for dealing with Council land.

## **8.0 URGENT SITES**

Chapter 5 of the CLIS document highlights how 'urgent sites' will be prioritised for inspection as and when they are brought to the Council's attention. Such sites can be from any part of the district and are those which are considered to present an immediate risk of serious pollution or harm to human health. ***To date, no sites have been considered to be 'Urgent'.***

## 9.0 RADIOACTIVE CONTAMINATED LAND REGULATIONS 2006

The Contaminated Land regime has been extended to include radioactivity under the Radioactive Contaminated Land (Modification of Enactments) (England) Regulations 2006 brought into force in August 2006. The extended regime provides a system to identify and remediate contaminated land where such land is causing a lasting exposure of radiation to any person or where there is a significant possibility of such exposure. The definition of Contaminated Land has been modified and it now the duty of the local authority to inspect its area to circumstances where there are reasonable grounds for believing land to be radioactively contamination land.

It is not considered that the prioritisation process needs to be revised. However, for each site that has been identified for detailed inspection, the possibility of radioactive contamination will be considered and included within the Phase I Desk Study report. Indeed, this consideration of potential radioactive contamination has been carried out in all Phase I Desk Studies to date.

## 10.0 BEST VALUE PERFORMANCE INDICATOR

In April 2005, the following best value performance indicator, BVPI216a and b, was introduced for use by Local Authorities.

### Definitions

**BV216a** – Number of ‘sites of potential concern’ [within the local authority area], with respect to land contamination.

**BV216b** – Number of sites for which sufficient detailed information is available to decide whether remediation of the land is necessary, as a percentage of all ‘sites of potential concern’.

Figures are provided on a quarterly basis to the performance management team and included in their reports.

## 11.0 WORK PROGRAMME

This section and Figure AR5/1 present a revised work programme timetable for the implementation of the Inspection Strategy. Predicted timescales are based largely on what outputs can be realistically achieved bearing in mind typical workload, financial constraints and resources.

### 11.1 Work progress during the past year

An officer was appointed in September 2005 as a Project Officer to deal solely with Part 2A work. During the year, significant progress has therefore been made on the Contaminated Land Inspection Strategy as outlined above. Work to set up the process that hasn't been included above includes the following:

- Setting up a Service Level Agreement with Severn Trent laboratory for soil and water analytical services
- Trialling, testing and acquiring various equipment, where applicable. Training has been undertaken, where necessary

- Drafting internal guidance on procedures
- Drafting and implementing a communication strategy including the production of leaflets and informing all relevant areas within the Council of this work
- Drafting and setting up site inspection, Phase I Desk Study and other templates
- Preparing a draft cost recovery policy
- Drafting a policy on the provision of Part 2A environmental information

## 11.2 Revised Work Programme

Taking account of the limited progress made during the fourth year of implementation of the CLIS, ***the Work Programme for the Strategy Implementation has again been revised*** (see Figure AR5/1). Key points to note are as follows:

- (i) The prioritisation process continues to focus on targeting the most sensitive end uses and the work programme is therefore primarily addressing human receptors at this stage. A separate work programme will be considered for other less sensitive receptors within the district of Leeds, that is, controlled water, ecology and property.
- (ii) As time and resources need to be spent on developing the database for storing and managing Part 2A data, a gap of 5 months has been inserted between finishing the Area 7 prioritisation work and commencing Area 3.
- (iii) It is difficult to estimate when detailed inspection for the whole of Leeds will be complete. This is primarily due to unknown workloads, eg, if a site is determined as Contaminated Land, there will be an increase in workload including preparing a record of determination for the site, identifying the appropriate person/s and securing its remediation. The completion date will also be dependent on maintaining the complement of staff and on resources being made available for those sites where sampling and other investigation data collected by the Council will be required. Based on the progress made during the last 12 months, ***the estimated completion date for inspection remains as the end of 2015***. The EA is considering a Draft EU Soil Strategy which may have bearing on timescales.
- (iv) The table below summarises details from the revised programme which is shown on Figure AR5/1:

Area	Anticipated date by which preliminary site prioritisation is completed and Detailed Inspection commences (subject to 'rolling' prioritisation list)
1a	Completed
1	Completed
2	Completed
7	Completed
3	Feb 2007
4	May 2007
5	Aug 2007
6	Nov 2007
Rest of Leeds	Feb 2008

## 12.0 THE NEXT 12 MONTHS

As well as the continuing day-to-day implementation of the Strategy, there are a number of key outputs/acquisitions associated with Strategy implementation that it is hoped to achieve over the next twelve months. These are detailed below:

- (i) As outlined in earlier Annual Reviews, it is evident that the most frequently encountered contaminated sites are former gas works, petrol stations and other sites where bulk storage of fuels has taken place. In order to acquire more information about these sites and, particularly, whether they have been investigated or remediated in the past, petrochemical companies and National Grid Ltd (formerly British Gas) will be contacted to see whether they are willing to provide such information about their land portfolios in the Leeds area. If acquired, such information will be held on the Contaminated Land GIS and database, and considered as part of site prioritisation and during detailed inspection.
- (ii) Although paper and/or electronic records are held detailing Council Land, this information is not yet available as a digitised GIS dataset. This dataset is still in the process of being developed and it is understood that it will be available when the Council's new GIS system is in place. Once available this dataset will prove useful for responding to enquiries regarding contamination on Council property, assisting in assessment of project work relating to Council land, but also during detailed inspection when identifying interested parties and 'appropriate persons'.

In line with the revised Work Programme, the next Annual Review of the Inspection Strategy will take place in July/August 2007.



**Table AR5/1 - Current Datasets held on Contaminated Land GIS (Page 1 of 2)**

Dataset	Description	Origin
<b>Ground Features - Potential Sources, Pathways and/or Receptors</b>		
OS Landline	Current Ordnance Survey Landline Data	Ordnance Survey
Aerial Photos	Aerial photos of Leeds MD	LCC Planning Department
Boreholes	Boreholes in LMD	BGS
Contour Lines	10m Contour Lines on OS landline for LMD	LCC Planning Department
Environment Agency Offices	EA offices, labs etc in LMD	EA
Explosive sites <sup>1</sup>	HSE licensed sites storing explosive materials (LMD)	HSE
Historic Battlefields	Historic battlefields in LMD	LCC Planning Department
Historical plans	Historical plans at 1:10,000 or 1:10,560 from 1840s to date	SiteScope
Historical plans	Historical plans at 1:2,500 or better from 1840s to date	Landmark
LMD artificial geology	Disturbed, made & worked ground in Priority Area 1	BGS
LMD Coal Line	Outcropping coal lines in LMD	BGS
LMD drift geology	Drift Geology (Alluvium, Glacial, River & Till deposits) in LMD	BGS
LMD fault lines	Geological Fault Lines in LMD	BGS
LMD fossil horizons	Outcropping fossil horizons in LMD	BGS
LMD mass movement	Geological mass movements in LMD	BGS
LMD solid geology	Solid geology in LMD	BGS
Major Hazards	Sites posing potentially major hazard risk with associated consultation areas	LCC Planning Department
NLUD	National Land Use Database classifications in LMD	LCC Planning Department
Radon Areas	Areas of radon gas issues in LMD.	NRPB (Radon Map of England)
Park and Ride UDP	Park and Ride sites in LMD taken from validated UDP	LCC Planning Department
Special Landscape UDP	Areas of special landscapes in LMD taken from validated UDP	LCC Planning Department
Supertram Line UDP	Supertram lines in LMD taken from validated UDP	LCC Planning Department
Supertram Stations UDP	Supertram stations in LMD taken from validated UDP	LCC Planning Department
Supertram Limits of Deviation	Furthest extent of proposed supertram route	LCC Highways / Metro
Urban Green Corridor UDP	Areas of urban green corridor in LMD taken from validated UDP	LCC Planning Department
<b>ALMO boundaries</b>	<b>Boundaries showing those areas within the remit of the Arms Length Management Organisations (ALMOs) that manage Council-owned homes</b>	<b>LCC Planning Department</b>
<b>Potential Receptors</b>		
<b>Buildings and Property</b>		
Grade 1 Listed Buildings UDP	Grade 1 listed buildings taken from validated UDP	LCC Planning Department
Scheduled Monuments	Class 1 scheduled monuments in LMD	LCC Planning Department
<b>Controlled Waters</b>		
Catchments	LMD river catchment areas	EA
Discharges	EA discharges to controlled water consents (LMD)	EA
Flood Plains	Flood plains of rivers in LMD	EA
Groundwater Vulnerability	Showing groundwater/aquifer vulnerability in LMD	BGS
River Centrelines	Centrelines of rivers in LMD (with some data for outside LMD)	EA
Water Abstractions	Licensed water abstractions in LMD	EA
Water Wells	Water wells in LMD	BGS
Water Quality - Biological	Biological General Quality Assessment water quality in water course in LMD	EA
Water Quality - Chemical	Chemical General Quality Assessment water quality in water course in LMD	EA
<b>Ecological</b>		
Ancient Woodland Leeds	Ancient woodland in LMD	English Nature
Conservation Areas UDP	Conservation areas in LMD taken from validated UDP	LCC Planning Department
Nature Areas UDP	Nature areas in LMD taken from validated UDP	LCC Planning Department
Nature Reserves UDP	Nature reserves in LMD taken from validated UDP	LCC Planning Department
SEGI UDP	SEGIs in LMD taken from validated UDP	LCC Planning Department
SSSI UDP	SSSIs in LMD taken from validated UDP	LCC Planning Department
<b>Humans</b>		
Areas 1- 7 Residential areas	Residential areas in Priority Areas 1 - 7	LCC Contaminated Land team
Allotments UDP	Allotments in LMD taken from validated UDP	LCC Planning Department
Historic Parks & Gardens	Historic parks & gardens in LMD	LCC Planning Department
Existing housing land UDP	Existing housing land in LMD taken from validated UDP	LCC Planning Department
Housing on open space	Designated housing land on open space in LMD taken from validated UDP	LCC Planning Department
Long term development UDP	Land for long term development in LMD taken from validated UDP	LCC Planning Department
New Housing UDP	Land for new housing development in LMD taken from validated UDP	LCC Planning Department
Water Related Leisure UDP	Water Related Leisure land in LMD taken from validated UDP	LCC Planning Department
Proposed Open Space UDP	Proposed open space in LMD taken from validated UDP	LCC Planning Department
Protected Playing Pitch UDP	Protected playing pitches in LMD taken from validated UDP	LCC Planning Department
Playgrounds	Playgrounds in LMD	LCC Leisure Services
New Schools UDP	New schools in LMD taken from validated UDP	LCC Planning Department
Early Years Centres (Nurseries)	Nurseries owned by the Council	LCC Graphics
Early Years Centres (Nurseries)	Nurseries owned privately	LCC Leisure Services
Primary Schools	Primary Schools owned by the Council	LCC Graphics
High Schools	High Schools owned by the Council	LCC Graphics
Further Education Colleges	Further Education Colleges owned by the Council	LCC Graphics
Special Schools	Special Schools owned by the Council	LCC Graphics
Community Buildings	Community Buildings owned by the Council	LCC Graphics
Sports Centres	Sports Centre owned by the Council	LCC Graphics
Private Water Supplies	Private Water Supply information from LCC Environmental Health team + digitised by Contaminated Land team	LCC Environmental Health and Contaminated Land team
LCC = Leeds City Council; BGS = British Geological Survey; EA = Environment Agency; HSE = Health & Safety Executive		
NRPB = National Radiological Protection Board; LMD = Leeds Metropolitan District		
<b>The entries shown in bold represent those datasets which were acquired in the year preceeding this Annual Review</b>		

**Table AR5/1 (cont...)- Current Datasets held on Contaminated Land GIS (Page 2 of 2)**

<b>Dataset</b>	<b>Description</b>	<b>Origin</b>
<b>Potential Sources</b>		
PCL Sites	PCL sites in LMD as defined in Contaminated Land Inspection Strategy	LCC Contaminated Land team
Area 1 Historic Land Use	Historic land use in Priority Area 1	BGS
Area 2 Historic Land Use	Historic land use in Priority Area 2	BGS
Areas 3 - 7 Historic Land Use	Historic land use in Priority Areas 3 - 7	LCC/WRc
Areas 1&2 Historic Land Use	Historic land use in Priority Areas 1&2 - 1970s epoch only	LCC/WRc
<b>Historic land use data for the 'rest of Leeds'</b>	<b>Five epochs of historical potentially contaminative land uses for the majority of the 'rest of Leeds'</b>	<b>WRc</b>
<b>Leeds City Council Engineering Services' site investigation data</b>	<b>Data to indicate where the Engineering Services team hold site investigation data</b>	<b>LCC Engineering Services</b>
Colliery Spoil Tips	Colliery spoil tips in LMD	Coal Authority
Mine Entries	Mine entries (shafts etc) in LMD	Coal Authority
Opencast Abandoned	Abandoned opencast sites in LMD	Coal Authority
Opencast Current	Current opencast sites in LMD	Coal Authority
Opencast Past	Past opencast sites in LMD	Coal Authority
Metal Recycling	Metal recyclers (scrapyards etc) in LMD	LCC Contaminated Land team
Petrol Stations	Petrol Stations in LMD	LCC Contaminated Land team
Sewage Treatment Works	Sewage treatment works in LMD	EA
Closed Sites	Closed landfill sites in LMD	LCC Planning Department
Landfill Sites	Landfill sites in LMD	EA
Licensed Waste Sites	Licensed waste management sites in LMD	EA
X-Sites	Former S143 Register data showing potentially contaminated sites in LMD	LCC Planning Department
Pollution Inventory	LMD Sites authorised under the Integrated Pollution Control Regime (IPC)	EA
LCC = Leeds City Council; BGS = British Geological Survey; EA = Environment Agency; HSE = Health & Safety Executive		
<b>The entry shown in bold represents those datasets which were acquired in the year preceeding this Annual Review</b>		

Table AR5/2 (Page 1 of 2) - Datasets used for site prioritisation

Site Prioritisation Data					
Dataset	Purpose	Limitations	Type	Origin	Date acquired
<b>Potential Sources</b>					
<b>Historic Land Use</b>					
Digitised land parcels depicting areas of previous potentially contaminating land use. Data taken from historic maps with sites identified for extraction to digital format according to land-use criteria set out in Appendix D of the Contaminated Land Inspection Strategy document. Consists of 5 separate datasets for each one of eight priority areas, each covering a different epoch (1890s, 1910s, 1930s, 1950s and 1970s/1980s)	To identify areas which may be contaminated due to previous land-uses	Data+C25 limited to five 'snapshots' in history so more detailed historical appraisal would be required at detailed inspection stage to identify any transient potentially contaminating land-uses that may have fallen between epochs. More detailed historical plans will be reviewed where necessary	Acquired	Data supplied by external company working to contract specifications set by LCC.	Various
<b>Closed Landfill Sites</b>					
Sites originally identified as closed landfill sites and monitored by the former West Yorkshire Waste Management joint authority body. Now monitored, where considered necessary, by LCC Environmental Health	To identify areas which may be contaminated due to former landfilling activities and areas which may be affected by landfill gas	Dataset considered complete although areas of infilled land may exist that LCC was possibly unaware of at time of putting together dataset	Received	Data taken from original monitoring reports written by West Yorkshire Waste Management. Dataset maintained by LCC Graphics	May-04
<b>Non-active landfill sites</b>					
Sites identified as being subject to waste management licences for landfilling. Some sites coincide with Closed Landfill Sites dataset, only those which don't are used in prioritisation dataset to avoid double counting	To identify areas which may be contaminated due to landfilling activities and areas which may be affected by landfill gas	Dataset considered complete	Received	Data from Environment Agency	May-03
<b>Petrol Stations</b>					
Sites identified as either current or former petrol filling stations	To identify areas which may be contaminated due to previous use as petrol filling stations	Dataset is considered incomplete. Petrol stations have been identified via entries in the Yellow Pages and only those which could be positively identified have been included.	Produced	Data identified and digitised by LCC Contaminated Land team	Jan-02
<b>Metal Recycling sites</b>					
Sites identified as either current or past metal recycling sites (scrapyards)	To identify areas which may be contaminated due to previous use as metal recycling sites	Dataset considered complete	Produced	Data identified by reference to Minerals Planning records of planning permissions for scrapyards and digitised by LCC Contaminated Land team	Jan-03
<b>X-Sites</b>					
Sites identified in the former s143 register as sites which may be contaminated. Compiled as required under the Environmental Protection Act 1990 when it was first introduced. The register was abandoned in its draft stage due to concerns over blight and land devaluation as s143 was repealed by the Environment Act 1995	To identify areas which may be contaminated due to previous or current land uses	Dataset considered complete	Received	Data supplied by LCC Graphics, digitised from plans in original s143 register document	Jul-01
<b>Colliery Spoil Tips</b>					
Sites identified as colliery spoil tips	To identify areas which may be contaminated due to presence of mine wastes	Dataset considered complete	Received	Data originated from Coal Authority and supplied by BGS	Jul-01
<b>Past Opencast Sites</b>					
Sites identified as former opencast coal extraction sites	To identify areas which may be contaminated due to presence of mine wastes and infill material	Dataset considered complete	Received	Data originated from Coal Authority and supplied by BGS	Jul-01
<b>Abandoned Opencast Sites</b>					
Sites identified as abandoned opencast coal extraction sites	To identify areas which may be contaminated due to presence of mine wastes and infill material	Dataset considered complete	Received	Data originated from Coal Authority and supplied by BGS	Jul-01

**Notes:**  
**Actions on limitations:-** Limitations to some datasets have been identified. Additional datasets that might address these limitations are not readily available to LCC. Any further action is not considered practicable at this stage.

LCC = Leeds City Council  
 UDP = Unitary Development Plan  
 BGS = British Geological Survey