



Development Department

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

**SIXTH ANNUAL REVIEW
AUTUMN 2007**

SUMMARY

The sixth 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. Significant progress has been made during the sixth year of implementation.

Contaminated Land GIS & Database (Section 2.0)

- Development on the database for storing and managing data collated at the detailed inspection stage of the Part 2A process has continued. Work is in progress to record Phase II site investigation data in relation to the soil sampling and air monitoring exercises

Development of key datasets (Section 3.0)

- Some datasets are in the process of being developed notably the digitisation of historical land use data for the remainder of the 'rest of Leeds' and Early Year Centres
- The Potentially Contaminated Land (PCL) dataset continues to be developed for those sites brought to our attention through, eg, the planning and redevelopment process and 'voluntary' remediation

Prioritisation of sites for inspection (Section 4.0)

- Priority Areas for 1a, 1, 2, 3, 4, 5, 6 and 7 have all been assessed and sites where Detailed Inspection is likely to be required have been identified and prioritised totalling 1630 sites. It should be borne in mind that other sites requiring detailed inspection may be identified at a later date for various reasons
- The 'rest of Leeds' remains to be prioritised
- Prioritisation work will continue to focus on potential human receptors, which are considered to be the most sensitive receptor
- 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 continue to address this source of contamination on a site-specific basis if necessary
- A more detailed methodology for dealing with those sites where controlled waters is a receptor 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

Detailed inspection (Section 5.0)

- Detailed inspection has progressed for Area 1a. From the original 35 sites for which detailed inspection was undertaken, 12 sites needed no further works on completion of the desk study, and soil sampling and, where necessary, air monitoring were undertaken at the remaining 23 sites. Of these 23 sites, it was

concluded that given anticipated government guidance, no further action was required at 13 sites. For the remaining 10 sites, further detailed inspection is being considered. An application for funding to support further investigation has been made to DEFRA

- ***To date, no sites in Leeds have been determined as Contaminated Land***

Dealing with Council Land (Section 6.0)

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

Urgent Sites (Section 7.0)

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

Radioactive Contaminated Land Regulations 2006 (Section 8.0)

- 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 9.0)

- 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. This BVPI is due to be revoked at the end of March 2008. It is intended to replace this BVPI with performance indicators specific to Leeds City Council.

Work Programme (Section 10.0)

- As well as the above work, other supporting work has been ongoing primarily in order to progress the Detailed Inspection work. This has included: revising and implementing a Communication Strategy; undertaking soil sampling and, where necessary, air monitoring at 23 sites in Area 1; revisiting 9 of those sites to take additional soil samples; undertaking desk studies and, corresponding with the HPA, PCT, EA and residents
- ***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
- Dataset development for the historical land use data for the 'rest of Leeds' is intended to be completed by June 2008 with the prioritisation work completed 2 months thereafter
- ***Detailed Inspection of Area 1a has progressed. If DEFRA funding is granted, further site investigation is intended for 6 of the sites in Area 1a, identified as the higher priority sites. The remaining 4 sites will be dealt with subsequently.***
- ***Detailed inspection also began on the top 30 sites from the rolling prioritisation list (based on the list from Priority Areas 1, 2 and 7 at the time). Eight sites were subject to detailed inspection involving the completion of desk studies and undertaking soil sampling and, where***

necessary, air monitoring. It is intended to continue to carry on routine inspections from sites on the rolling prioritisation list.

- Given unknown workloads and resources, it is not considered helpful at this stage in the process to estimate a completion date for this work.
- It is intended to undertake an Annual Review of the Contaminated Land Inspection Strategy for work carried out in 2008.

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 Sixth 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 earlier Annual Reviews.

1.1 Who has undertaken the Review?

The Sixth 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 sixth year of implementing the CLIS is discussed, including details of any proposed changes to procedures, timescales or targets.

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. 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

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

2.0 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.

The database for storing and managing data collated at the detailed inspection stage of the Part 2A process has been further developed. Work is in progress to record Phase II site investigation data in relation to the soil sampling and air monitoring exercises.

3.0 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.

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.

- 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 soon as resources permit.

4.0 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.

Identification and prioritisation of sites likely to required Detailed Inspection within Priority Areas for 1a, 1 to 7 have now been completed. Priority Area 1a continues to be investigated and assessed as a pilot study area. General areas covered by each of the Priority Areas are listed below:

Identification & Prioritisation of Site Completed	Priority Area	General area covered
Yes	1a	Meanwood
Yes	1	City Centre, Holbeck, Beeston, Wortley & Armley
Yes	2	Guiseley & Yeadon
Yes	7	Hunslet, Stourton & Cross Green
Yes	3	Morley, Gildersome, Middleton & East Ardsley
Yes	4	Horsforth, Pudsey & Calverley
Yes	5	Rothwell & Oulton
Yes	6	Garforth, Micklefield & Kippax
Work in progress	Rest of Leeds	Rest of Leeds not covered by Priority Areas 1a and 1 to 7

Further details on the approach towards, and progress regarding, the prioritisation work are provided below.

4.1 Selection of datasets for preliminary prioritisation - Humans

The approach to prioritisation has not changed since the Autumn 2004 Annual Review and continues to target, as far as possible, the highest priority, most sensitive receptors, ie humans. 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 lesser sensitive receptors of controlled waters, ecology and property.

4.2 Scoring system and 'rolling' prioritisation list

The scoring system and concept of the 'rolling' prioritisation list has not changed since the last Annual Review. For completeness, this is reiterated as follows. 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

4.3 Priority Areas and the rest of Leeds

Prioritisation work on Areas 1a, 1, 2 and 7 had already identified 35, 22, 143 and 210 sites, respectively, which are likely to require detailed inspection.

Prioritisation work during 2007 on Areas 3, 4, 5 and 6 sites, has identified 220, 427, 183 and 89 sites, respectively, which are likely to require detailed inspection.

It should be borne in mind that that other sites requiring detailed inspection may be identified at a later date for various reasons, for example, 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).

A total of 1630 sites are currently recorded on the database and this covers all Priority Areas and the additional site created in Priority Area 1a. Prioritisation remains to be carried out for the 'rest of Leeds'.

4.4 Potential Source - Railway line land use

The general methodology outlined in the 2006 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.

4.5 Potential Receptor - Controlled Waters

Further to the 2006 Annual Review, there is nothing further to add here. For completeness, this is reiterated as follows. 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. 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.

5.0 DETAILED INSPECTION

Detailed inspection has progressed in Area 1a (Meanwood) for 36 sites with the following results:

- *12 sites – on completion of the desk studies, no further work was considered necessary*
- *23 sites – on completion of the desk studies, soil sampling and, where necessary, air monitoring was considered necessary and carried out with the following results:*
 - *for 13 of the 23 sites, no further action was considered necessary based on anticipated guidance*
 - *for the remaining 10 sites, further detailed inspection is being considered. An application to DEFRA for funding has been made to finance work on 6 of these sites*

In Spring 2007, detailed inspection for sites on the rolling prioritisation list commenced. Of the top 30 sites on the prioritisation list at that time (had available sites digitised that covered Priority Areas 1, 2 and 7), 8 were selected for commencing detailed inspection works. Further to completion of the desk studies, soil sampling and, where necessary, air monitoring were required for all 8 sites. We are currently in the process of reviewing this data prior to reporting on outcome.

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 sites have been determined as Contaminated Land 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'.

6.0 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.

7.0 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'.***

8.0 RADIOACTIVE CONTAMINATED LAND REGULATIONS 2006

The Contaminated Land Inspection Strategy continues to take into account radioactivity under the Radioactive Contaminated Land (Modification of Enactments) (England) Regulations 2006 brought into force in August 2006, as outlined in the 2006 Annual Review (Section 9.0).

9.0 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 at least an annual basis to the performance management team for inclusion in their reports.

This BVPI is due to be revoked at the end of March 2008. It is intended to replace this BVPI with performance indicators specific to Leeds City Council.

10.0 WORK PROGRAMME

This section presents a revised work programme 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.

10.1 Work progress during the past year

During 2007, resources have been focussed on the acquisition of data through soil sampling and, where necessary, air monitoring with risk assessment, conclusions and recommendations. Work has included the following elements:

- Revising and implementing a Communication Strategy

- Completing Phase I Desk Study reports
- Undertaking soil sampling and, where necessary, air monitoring at 31 sites (PLS 1, 2, 3, 5, 6, 7, 8, 9, 10, 11, 12, 13, 18, 19, 20, 21, 25, 167, 168, 185, 351, 353, 414, 459, 460, 478, 484, 541, 542, 543, 544 and 1358), revisiting 9 of those sites to take additional soil samples
- Completing Phase II Site Investigation reports
- Corresponding with the HPA, PCT, EA and residents
- Commissioning consultancy to review part of the Area 1a work with their report supporting the application for DEFRA grant funding for additional investigation

10.2 Revised Work Programme

Taking account of the progress made during the sixth year of implementation of the CLIS, *the Work Programme for the Strategy Implementation has again been revised*. 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) Dataset development continues for the remainder of the 'rest of Leeds' for the historical land use data as outlined in Section 3.0. It is intended to try to complete this work by June 2008, but this will depend on work commitments within the team.
- (iii) Once the dataset is completed, the 'rest of Leeds' will be prioritised. It is intended to complete this exercise within 2 months of the completion of the 'rest of Leeds' historical land use dataset.
- (iv) Detailed inspection has commenced in earnest in Area 1a. If DEFRA funding is granted, further site investigation is intended for 6 of the sites in Area 1a.
- (v) Detailed inspection also began on the top 30 sites from the rolling prioritisation list (based on the list from Priority Areas 1, 2 and 7 at the time) as noted in Section 5.0. Further to completion of the desk studies, soil sampling and, where necessary, air monitoring were considered necessary at 8 of these sites. It is intended to continue with the desk studies and any necessary additional works for the remaining 22 sites.
- (vi) It is becoming increasingly 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. Any completion date will also be dependent on staff resources and on resources being made available for those sites where sampling, other investigation data and remediation might be required.
- (vii) The sampling work that has taken place in Meanwood and at the 8 sites off the priority list has provided valuable information of what work is involved in terms of time and staff resources. Although there are clearly many factors involved

which can delay inspection or conversely accelerate it should the chance occur to focus our resources it would seem that a figure of 30 sites per annum might be viewed as a probable maximum at the current rate. This can be compared with the figure in section 4.3 of 1630 sites currently identified for further investigation.

- (viii) It is intended to undertake an Annual Review of the Contaminated Land Inspection Strategy for work carried out in 2008.