



City Development

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

**EIGHTH ANNUAL REVIEW
AUTUMN 2009**

1.0 INTRODUCTION

Under Part 2A of the Environmental Protection Act 1990, each local authority has a statutory duty to prepare, implement and keep under periodic review its Contaminated Land Inspection Strategy (CLIS). Chapter 11 of Leeds City Council's Strategy document says 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 Eighth 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 Eighth 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 City 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 eighth 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:

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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 expanded 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.

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

- '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 require Detailed Inspection within Priority Areas for 1a, 1 to 7 have now been completed. The 'rest of Leeds' HLUUD data is complete and approximately 50% of this area has been prioritised resulting in an additional 858 sites. General areas covered by each of the Priority Areas are listed below:

Identification & Prioritisation of Site Completed	Priority Area	General area covered	No of sites currently known
Yes	1a	Meanwood	36
Yes	1	City Centre, Holbeck, Beeston, Wortley & Armley	322
Yes	2	Guiseley & Yeadon	143
Yes	7	Hunslet, Stourton & Cross Green	210
Yes	3	Morley, Gildersome, Middleton & East Ardsley	220
Yes	4	Horsforth, Pudsey & Calverley	427
Yes	5	Rothwell & Oulton	183
Yes	6	Garforth, Micklefield & Kippax	89
Work in progress – approx 50% complete	Rest of Leeds	Rest of Leeds not covered by Priority Areas 1a and 1 to 7	858
TOTAL			2488

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. The justification for this approach has been included in Appendix 1 of the Autumn 2008 Annual Review.

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. Except for Priority Area 1a which has been addressed separately as the initial pilot study area, 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 will continue on the 'rest of Leeds' data and it is anticipated that this work will be completed by the end of July 2010.

It should be borne in mind that other sites requiring detailed inspection may be identified at a later date for various reasons, for example, through 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 2488 sites are currently recorded on the database and this covers all Priority Areas, the additional sites created in Priority Area 1a and 50% of the 'rest of Leeds' area. Prioritisation remains to be carried out for the remainder of 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 has not been done so far but it is anticipated that this work can be considered in August 2010 when the 'rest of Leeds' sites are expected to have been prioritised.

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 the aforementioned further guidance on the definition of Contaminated Land currently awaited from DEFRA.

5.0 DETAILED INSPECTION

All detailed inspection completed so far are outlined in the table below:

	Area 1A ⁽¹⁾	Rest of Leeds (as per the rolling prioritisation list) ⁽²⁾	Rest of Leeds (as per the rolling prioritisation list) ⁽³⁾
Financial year (Apr to Mar)	06-07	07-08	08-09
Desk Studies completed + no further work recommended OR site reprioritised OR site being redeveloped OR other reason for not progressing to limited sampling stage	12 (PLS4, 14, 15, 16, 17, 22, 23, 24, 26, 27, 27, 352 – desk studies completed by November 2006)	12 (PLS123, 172, 177, 225, 336 – sites reprioritised as on closer inspection they are adjacent only to the former potentially contaminative uses; PLS 246, 663, 198, 701 - removed from list as no pollutant linkage present based on available information; PLS 278 – on hold as site boundary needs more thought; PLS 827, 923 –on hold as being considered under the planning process)	1 (PLS1117 - on hold as being considered under the planning process)
Desk Studies completed + further work recommended. Further limited sampling completed	23 (PLS1, 2, 3, 5, 6, 7, 8, 9, 10, 11, 12, 13, 18, 19, 20, 21, 25, 351, 353, 541, 542, 543, 544 – site work completed by August 2007)	17 (PLS167, 168, 185, 414, 459, 460, 478, 484 – site work completed by October 2007 + 190, 502, 734, 764, 807, 828, 830, 896, 910 – site work completed by April 2008)	21 (PLS 700, 895, 1025, 1041, 1128, 1142, 1189, 1207, 1243, 1248, 1255, 1258, 1280, 1329, 1377, 1408, 1432, 1456, 1466, 1587, 1595 – site work completed by April 2009) 3 (PLS484, 830, 896 – further SI work completed in March 2009)
Further site investigation work required or completed	10 (PLS 5, 6, 7, 8, 9, 18, 19, 20, 21, 541 – currently in process of being completed)	4 (PLS459, 484, 830, 896 – anticipated to be carried out in 2009)	1 PLS459 – not carried out yet and anticipated to be carried out in 2010)

NB: PLS = Priority List Site

⁽¹⁾ The Area 1A data was reported in preceding Annual Review. For the remaining 10 sites in Meanwood that required further detailed inspection, a grant from DEFRA was obtained in February 2008 and a detailed site investigation carried out during August and September 2008. The detailed outcome from this investigation is currently awaited from the Council's consultants. PLS7 and 18 comprising of 41 properties in total were determined as Contaminated Land between May and July 2009. A grant

was obtained from DEFRA to carry out a Remediation Options Appraisal and prepare an Outline Remediation Design Report. This information was then used to support another application to DEFRA to obtain a grant for the detailed design and remediation of the 41 properties. This grant was awarded to Leeds City Council mid October 2009 and currently work is ongoing to set up a contract to carry out the remediation works.

- (2) In Spring 2007, the top 29 sites on the rolling list were selected for commencing routine detailed inspection works. By October 2007, 22 of the sites had been looked at. 5 were reprioritised as the potential contaminative historical land use was adjacent only. 4 were removed from the list: 2 were removed as they were hard surfaced and no pollutant linkage could be identified; 1 was removed as the suggested current land use was no longer applicable and again no pollutant linkages could be identified; and 1 was removed from the list as a conversation with the Environment Agency suggested that there had been no potentially contaminative land use present on the site. A further 3 were put on hold, 1 as the site boundary needed further consideration and 2 as the site was undergoing redevelopment through the planning process. Soil sampling and, in some cases, air monitoring were considered necessary at the 8 remaining sites. Limited site investigations were carried out at these sites in October 2007.

By March 2008, soil sampling and, where necessary, air monitoring were considered necessary at the 7 remaining sites. Limited site investigations were carried out at these sites in March and April 2008.

Overall this data was reviewed and it was concluded that, of the 17 sites subject to limited investigation, 13 of the sites required no further sampling and 4 of the sites needed some further work undertaking. At the time, it was intended to carry out this further work in 2009.

- (3) In January 2009, the top 22 sites on the rolling list were selected for commencing routine detailed inspection works. Desk studies were completed and soil sampling was carried out at 21 of those sites in March 2009. The remaining site was put on hold as this site was being considered at the time under the planning process.

Of the 4 sites needing further SI at the end of March 2008, soil sampling was undertaken for 3 of those sites in March 2009. At the time of soil sampling, it was not possible to contact the management company of the remaining site and therefore further soil sampling at this site was postponed and is anticipated to be carried out in 2010.

The SI reports for those sites where further sampling was undertaken in March 2009 are currently being drafted and are due to be completed in January 2010.

Leeds City Council continues to be closely involved with sites which are being investigated and remediated 'voluntarily' (i.e. outside of any regulatory regime) by their current landowners/occupiers. This year, two sites in Morley were remediated voluntarily. 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, 41 properties 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

The best value performance indicator for contaminated land work, BVPI216a and b, was withdrawn at the end of March 2008.

Targets for Contaminated Land work have been included in the Service Development Plan 2008/09 and 2009/10 for the Sustainable Development Unit.

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 2009, resources have generally been focussed on routine detailed inspection including the acquisition of data through desk studies, limited soil sampling and, where necessary, air monitoring with risk assessment, conclusions and recommendations. Resources have also been concentrated on completing the detailed site investigation of the 10 sites in Meanwood for which the DEFRA grants were obtained. The Meanwood work also included the determination of 41 properties covering PLS7 and PLS18 and the completion of Remediation Options Appraisals and Outlined Remediation Designs for these 2 sites. A DEFRA grant was obtained for the remediation of these properties and currently work is ongoing to set up a contract to carry out the works. Further details of work undertaken are listed below:

Detailed Site Investigation of 10 sites in Meanwood

- Reviewing and approving final interpretative reports of detailed site investigations carried out in August and September 2008
- Setting up and carrying out naphthalene monitoring work at PLS7 and PLS18 and reviewing and approving reports
- Setting up and carrying out Phase I (March 2009) and II (October 2009) delineation works and reviewing and approving final interpretative reports
- Project managing the site investigation delineation works including site and contract supervision of the works

Determination of PLS7 and PLS18

- Determining 41 properties in PLS7 and PLS18 as Contaminated Land and liaison with the property owners including drafting legal agreements
- Application for and obtaining DEFRA grant funding for the Remediation Options Appraisals and Outlined Remediation Designs for PLS7 and PLS18
- Revising and implementing a Risk Communication Strategy
- Regular meetings with the Health Protection Agency and Primary Care Trust
- Application for and obtaining DEFRA grant funding for the Detailed Design and Remediation Works for PLS7 and PLS18
- Starting the process of procuring the remediation works through competitive tender and of setting up a contract

Other ongoing detailed inspection work

- Completing Phase I Desk Study reports for the next batch of sampling work
- Undertaking soil sampling and, where necessary, air monitoring at 21 sites in March 2009 – details are shown in the table in Section 5. Preparing first drafts of the Phase II Site Investigation reports for these sites
- Undertaking further site investigation at 3 sites identified as needing this from the 2008 sampling work. Preparing first drafts of the Phase II Site Investigation reports for these sites

Database, GIS and prioritisation work

- Completing approximately 50% of the 'rest of Leeds' prioritisation work
- Completing the Phase II limited sampling reporting template

10.2 Revised Work Programme

Taking account of the progress made during the eighth year of implementation of the CLIS, ***the significant points from the Work Programme for the upcoming year is anticipated to be 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 at a later date for other less sensitive receptors within the district of Leeds, that is, controlled waters, ecology and property as defined in the legislation and guidance.
- (ii) The remainder of the 'rest of Leeds' needs to be prioritised. It is intended to complete this exercise by July 2010.
- (iii) It is intended to review all the data for the Meanwood project site investigation works including the delineation works. It is further intended to identify those properties that are likely to be determined as Contaminated Land and, where applicable, apply for a grant from DEFRA for any additional works.
- (iv) It is proposed to continue prioritising the carrying out and successful completion of remediation works at PLS7 and PLS18.
- (v) Routine detailed inspection includes completing the Site Investigation reports from the March 2009 soil sampling work. In addition, it is intended to carry out desk studies and associated limited soil sampling/air monitoring work on the next batch of sites in 2010.
- (vi) As noted in previous annual reviews, it has become increasingly difficult to estimate when detailed inspection for the whole of Leeds will be complete. This is primarily due to variable factors including:
 - a. unknown workloads, for example, where land has now been determined as Contaminated Land there has been an increase in workload meaning less resources has been spent on the routine sampling work this year
 - b. staff resources
 - c. financial resources and available budget

- (vii) In the annual review 2007, a figure of 30 sites per annum had been viewed perhaps as a probable maximum rate given the work and resources at the time. This year though, much resource has been taken up with the DEFRA-funded detailed site investigation work at the 10 sites in Meanwood and therefore completing 30 new sites through routine detailed inspection has not been possible.
- (viii) It is intended to provide a written Annual Review of the Contaminated Land Inspection Strategy in April 2011 rather than in Autumn 2010. This is to report the Part 2A work progress in line with the financial year end of 31 March 2011.