

# Contaminated Land Strategy 2012-2017

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Approved by Councillor Barrie Hargrove, Cabinet Member for the Environment, Transport & Recycling under the Individual Decision Making (IDM) December 2012

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#### **EXECUTIVE SUMMARY**

Across the UK, there are thousands of sites that have been contaminated by previous industrial use, often associated with traditional processes which are no longer used. These sites may present a hazard to the general environment, but there is a growing need to reclaim and redevelop them.

This situation is true of Southwark where our landscape today is changing rapidly. Large areas of the borough are subject of regeneration and redevelopment. Increasing value is being placed upon the built environment, public realm and access to high quality green spaces. There is growing need to reclaim and reuse our land. To ensure the best use is made of our scarce land resources we must understand our past and plan for the future.

This document provides this council's second update and revision of its land contamination strategy, first published in 2001. It sets out this council's strategic approach "to inspecting its area" for the purpose of determining and managing contaminated land in accordance with Part 2A of the Environmental Protection Act 1990. It tackles the problems associated with historic land contamination and the risk it can pose to human health and environmental receptors.

#### Our strategy sets out:

- To provide a formalised system for the identification and remediation of land, contaminated as a result of historic polluting land use;
- To ensure that contaminated land is made safe for current use and that public health, controlled waters, identified receptors and the wider environment are protected;
- To make safe "Brownfield" sites and seek to bring them back into beneficial and sustainable use;
- To ensure that the cost of redevelopment of contaminated land is proportionate and employs best available techniques or methods without incurring excessive costs;
- To protect historic sites and their environment; and
- To prevent future contamination of land.

This update reports that we have now completed the desk top study and preliminary assessment of more than two thousand local sites or areas identified for further investigation. To date no site has been formally declared as "contaminated land" nor has it been necessary to serve any remediation notices to make any of our sites safe. Additionally, no "special sites" (sites due to the nature of contamination would be enforced and managed by the Environment Agency) have been declared.

To date we have successfully effected contaminated land remediation via the planning system and by voluntary remediation. We have implemented a system of work which ensures that all historically contaminated or Brownfield sites are properly investigated and remediated, where required, with responsibility to properly address contamination found lying initially with the owner and or the developer of the site.

Since our last review, there have been a number of legislative and other developments, especially around the identification and remediation of land that is contaminated by virtue of radioactivity. These are addressed within this document.

The publication of this revised strategy also follows the release of revised Statutory Guidance prepared by the Department of the Environment, Food and Rural Affairs (Defra). The council has considered its content and confirmed that our continued approach remains consistent with the guidance. The council will continue to keep abreast of all policy and legislative development

We are committed to protecting public health and to making Southwark a place where people will want to live, work and visit.

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#### **SECTION ONE – ABOUT SOUTHWARK**

- 1.1. Southwark is London's most historic borough. It has witnessed and participated in a wide variety of important events over the centuries, playing a crucial role not only in London's history but shaping the very world we live in today.
- 1.2. Southwark is made up of a number of very distinctive neighbourhoods that extend along the river Thames and down into southeast London. The borough encompasses some of London's top attractions (e.g. Tate Modern, the Globe Theatre and the London Dungeons); creative hotspots (e.g. Camberwell College of Arts and the Design Museum); and acclaimed green spaces (e.g. Peckham Rye and Dulwich Park).
- 1.3. Southwark also offers a wide-range of leisure and cultural opportunities, including a vibrant late night-economy; which makes a significant economic and employment contribution to the local community. The north of the borough, with considerable development currently taking place (e.g. the London Bridge and Blackfriars Station redevelopments; the Shard; and More London) is recognized as one of London's fastest growing tourist quarters and a thriving business location.
- 1.4. The 2011 census indicated that Southwark's population had reached 288,300, representing a 12.3% increase since the 2001 census. Southwark has a large percentage of its population aged between 25 and 34. 12.4% of residents are aged between 25 and 29, the single highest five year age band in Southwark. The total number of households in Southwark is estimated as 120,400, an increase of 13.8% since 2001. Southwark has the ninth highest population density in England and Wales at 9,988 per square kilometre.
- 1.5. The population has a young demographic profile and demonstrates rich ethnic and cultural diversity, with around one-third of the population from black or ethnic minority communities. Southwark is arguably one of the most diverse areas in the capital.
- 1.6. Southwark has its fair share of challenges. The 2010 Index of Multiple Deprivation (IMD) shows that Southwark, overall, is the 4<sup>th</sup> most deprived London borough and the 33<sup>rd</sup> nationally. Consequently, the borough faces many challenges associated with meeting the complex health and social needs of an inner-city population. Southwark's unemployment rate is 10.5% compared with the London rate of 9.1% and 7.7% nationally. The percentage of the working population claiming benefits in Southwark is 14.2%
- 1.7. The council is the major land owner in the borough with the majority of property owned by the housing department followed by education & leisure, social services, highway and infrastructure and to a lesser extent property section which holds 'surplus' land.
- 1.8. There are currently 39 conservation areas, approximately 3000 listed buildings, 7 ancient monuments, an unspecified number of unscheduled, but significant, archaeological sites, 15 Allotments and 9 major park gardens.
- 1.9. Southwark has a long and complex history as an 'industrial part' of London. There were once thriving industries such as tanning and chemical works, sulphur, lead and gas works.

- 1.10. Historically the northern part of the borough has formed the industrial hub going back to Roman times. This was mostly due to its easy access to the river Thames. During the middle ages it was tradition for most of the "dirty" and disreputable trades to be kept out of the City. Southwark was most strategically placed to accommodate these industries.
- 1.11. One of the oldest and dirtiest of these industries was the leather industry which produced noxious effluent from animal residues. These residues were stored in tanks or pits that could cause long term contamination to land and ground water. Many of these substances are carcinogenic and associated tanks or pits must be removed or decommissioned properly. Southwark was also the home of the world largest hat maker (Christy's in Bermondsey). Hat makers used considerable amounts of dyes and mercury compounds which are contaminants that can cause harm to receptors. Other industries along the river included gasworks, brewing, glassworks and paper. All these industries are known for possible carcinogenic contamination. The nineteenth century saw a big growth in the printing industry with several printing presses occupying that area of the borough which potentially can cause land contamination from spillage, disposal of sludges and other residues produced by this process.
- 1.12. There were also a thriving ship building industry, food industry, paint and chemical manufacturers and factories set up on small sites throughout the northern part of the Borough. All these industries have potential for causing land contamination. Our desk top studies also showed numerous back street workshops and factories scattered around Peckham. Camberwell and East Dulwich.
- 1.13. Industrial expansion continued on new sites in Camberwell and Peckham through the early twentieth century. The two world wars also added to the legacy of contaminated land as the area was heavily bombed and was used to make batteries for army purposes, components for shells and asbestos.
- 1.14. The decline in the industrial sector began around the 1950's. This co-incided with a decrease in transportation through the London Docks with the trade moving through the bigger and newer sea ports of Southampton and Felixstowe. Also air freight was beginning to have an increasing share of the market.
- 1.15. Today the situation is reversed as Southwark is fast becoming one of London's most regenerated Boroughs with large projects covering over 40% of the Borough taking place in over eleven areas. Through the 1980s and 1990s we have witnessed the Docklands reclamation. Today, major regeneration projects cover Bankside, Peckham, Aylesbury Estate, Bermondsey and Canada Water and the Elephant & Castle.
- 1.16. The breadth and pace at which regeneration and development are taking place within the borough is having the consequential effect that much of the industrial and potentially contaminated land within Southwark is being investigated and remediated as a matter of course, through the planning process.



Figure 1 – Map of Southwark

#### **SECTION TWO - STRATEGY CONTEXT**

2.1. Activities and practises of the past have adversely impacted on the quality of many areas of land and can be seen to affect sustainable development in the present and the future. There is a general desire to reduce environmental and health risks to an acceptable level and to bring polluted land back into beneficial economic use, at costs proportionate to risks and based on the 'polluter pays' principle.

#### **Environmental Protection Act 1990**

- 2.2. The principal legislation dealing with contaminated land is the Environmental Protection Act 1990, Part 2A (Sections 78A to 78YC), which came into force on the 1<sup>st</sup> April 2000 under the Environmental Act 1995.
- 2.3. This Act made it a duty for each local authority to produce a strategy for the purpose of inspecting its area to identify contaminated land and to do this in accordance with the Guidance issued by the Department of the Environment, Food and Rural Affairs (latest version April 2012).
- 2.3. The Act established the:
  - Definition of contaminated land;
  - Process to identify contaminated land;
  - Process to bring about the remediation of contaminated land;
  - Method of determination of appropriate persons and liability;
  - Process for remediation action by the Local Authority and the Environment Agency;
  - Process for recovery of cost;
  - Requirements for public registers; and
  - Procedure relating to the designation and remediation of special sites.
- 2.4. Secondary legislation, regulations, technical and non-statutory guidance completes the framework (see appendix B).
- 2.5. This council formally adopted and published its initial contaminated land inspection strategy in June 2001. The first review of the strategy took place in 2004. This latest revision of the policy follows the second review.

#### **Statutory Guidance**

- 2.6. On 6 April 2012, Defra issued revised statutory guidance on contaminated land. This new guidance replaced Circular 01/2006. The new statutory guidance main purpose is to simplify the process of determining contaminated land and offers more support to landowners.
- 2.7. The revised Guidance covers:
  - The objectives of the part 2A regime
  - LA inspection duties
  - Risk assessments
  - The definition of contaminated land:
  - The determination of contaminated land;
  - The remediation of contaminated land;

- Exclusion from, and appointment of, liability for remediation; and
- The recovery of the costs of remediation.
- 2.8. The amended guidance has not impacted upon the detailed methodology of our inspection strategy as set out in this document. This was centred on the approach contained in the Contaminated Land Report 6 (CLR6) that was produced by the then Department of the Environment (DoE) and remains appropriate.

#### Our aims and objectives

- 2.9. The aims of the Southwark Contaminated Land Strategy 2012-2017 reflect those of our initial strategy:
  - To fulfill the council's duty in relation to the control of contaminated land;
  - To publish a formalised system for the inspection, identification, prioritisation and remediation of land that has been contaminated in the past;
  - To ensure that system provides a transparent, accountable, rational and efficient process for dealing with contaminated land;
  - To ensure that contaminated land is made safe for the current use of the site, or does not pose unacceptable risk to public health or identified receptors in the wider environment;
  - To seek to bring damaged land back into beneficial use;
  - To protect historic sites;
  - To encourage the voluntary remediation of sites where this is possible;
  - To adopt a cost benefit assessment and approach to the remediation of contaminated land;
  - To ensure that actions taken in respect of contaminated land are proportionate to the seriousness of any actual or potential risk to known receptors;
  - To prevent any future contamination of land; and
  - To establish a process for dealing with any complaint with respect to contaminated land.
- 2.10. Since our original strategy was first published we have made considerable progress in the identification and remediation of contaminated land in our area. This is detailed in sections 5 of this document. There are currently no identified high-risk sites awaiting attention. Having arrived at this position, the current objectives of the Southwark Contaminated Land Strategy for 2012-17 are:
  - To maintain an up to date record of all sites that have been identified and remediated under Part IIA requirements;
  - To review each new land development proposal brought through the planning process to ensure land is made suitable for use when redeveloped;
  - To ensure that other new information regarding potential land contamination within Southwark is assessed and remediation of land is effected where this is identified as necessary; and
  - To ensure that every complaint in respect of contaminated land is recorded and investigated and appropriate action is taken.

#### **Reviews**

- 2.11. The first review of the strategy in 2004 considered:
  - The timetable for inspection, or remediation and identifying priority areas;
  - Procedures and difficulties encountered in the management of the regime;
  - Any feedback received from developers, landowners, polluter or anyone affected by the requirements of the strategy or the new regime;
  - The management of information acquired and held in the course of inspection;
     and
  - Review and update of any assumptions, interpretation of guidance, changes in legislation and any related subject.
- 2.12. This second review of the strategy commenced in 2011. This review sets out among other things:
  - The progress made so far in inspecting the borough;
  - Legislative changes;
  - Procedural changes; and
  - Future Strategic plans.

#### A fairer future for all

- 2.13. This strategy supports the six underlying principles of the fairer future commitment in the council plan as detailed below:
  - Creating a fairer borough A healthy natural environment is essential for our economy, for jobs and for economic prosperity. The remediation of contaminated land supports both the public health agenda and smarter, greener growth.
  - Making Southwark a place to be proud of The maintenance of our natural environment is important for several reasons. It provides a source of personal relaxation and enjoyment and generates community pride.
  - Realising potential The process for identification and remediation of contaminated land process enables brownfield sites to be brought back into best use, ensuring best use of our local resources and protecting Greenfield sites from development demands;
  - Spending money as we would our own The remediation of contaminated land is undertaken on the basis of the polluter pays with responsibility firstly moving to the land owner where this is not possible.
  - Transforming public services This strategy establishes a process which
    provides for effective partnership working with internal and external partners to
    improve local outcomes on the natural environment.
  - Being more transparent This strategy sets out the current position regarding land contamination in Southwark. It explains the process the council is following to identify and assess local contaminated land and the steps that are taken to ensure that land is remediated to make it fit for the proposed use.

#### SECTION THREE - DEFINITION OF CONTAMINATED LAND

3.1. Section 78A(2) of Part IIA of the Environmental Protection Act 1990 defines 'contaminated land' as:

"Any land which appears to the local authority in whose area it is situated to be in such a condition, by reason of substances in, on or under the land that —

- (a) Significant harm is being caused or there is a significant possibility of such harm being caused; or
- (b) Significant pollution of control waters is being caused or there is a significant possibility of such pollution being caused".
- 3.2. The Part IIA definition was extended in 2006 to include radioactively contaminated land. However the current guidance does not apply to radioactive contamination of land. This is subject to future guidance.
- 3.3. 'Harm' is defined as "harm to the health of living organisms or other interference with the ecological systems of which they form part, and in the case of man, includes harm to his property".
- 3.4. The statutory guidance explains broadly what is meant by significant harm to human health and sets out categories of harm that should be considered to be significant harm. It also explains the basis on which local authorities should decide whether there is a significant possibility of significant harm (SPOSH), whilst allowing considerable discretion. For instance:
  - It explains that significant harm to human health includes death, disease, serious injury, genetic mutation, birth defects or impairment of reproductive functions. In this context disease means an unhealthy condition of the body or a part of it and can include, for example, cancer, liver dysfunction or extensive skin ailments; and
  - It explains that SPOSH, in relation to toxic effects on human health, would exist if the amount of the pollutant to which a person might be exposed would represent an "unacceptable" intake or "unacceptable" direct bodily contact, assessed on the basis of relevant information on the toxicological properties of that pollutant. The concept of "unacceptable" relates directly to SPOSH i.e. an unacceptable intake of contaminants is an intake which would result in a significant possibility of significant harm. The statutory guidance does not explain what significant/unacceptable means; and
  - There is similar guidance on what would constitute *significant* harm or SPOSH in relation to property, the environment and non-toxic effects on humans.
- 3.5. Local authorities are required to make decisions on significance in accordance with this guidance.
- 3.6. This council will follow the new guidance on interpreting the conditions for contaminated land

#### SECTION FOUR - METHODOLOGY, RISK-ASSESSMENT & POLLUTION LINKAGES

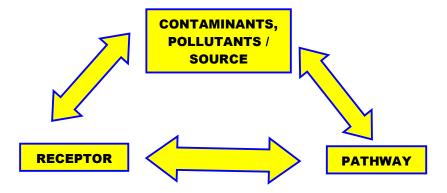
- 4.1. In exercising its duty to inspect its area under section 78B (1) of the Act, the council has placed emphasis on the following principles:
  - Be rational, ordered and efficient:
  - Be proportionate to the seriousness of any actual or potential risk;
  - Seek to ensure that the most pressing and serious problems are located first;
  - Ensure that resources are concentrated on investigating in areas where the authority is most likely to identify contaminated land;
  - Ensure that the council efficiently identifies requirements for the detailed inspection of its area; and
  - Encourage and promote voluntary remediation of land where possible.
- 4.2. Our "Inspection Strategy 2001" established how the inspection and remediation of our area would be carried out. This is simplified and outlined in diagram 1 on the following page. Our process involved the following steps;
  - Dividing the borough into three main areas namely Areas 1-3;
  - Identify all potentially contaminated sites via desk top study of the historic and industrial databases described above. This process is recorded as Action Levels 1-4:
    - Action 1 is the desk top study process of identifying the sites using the data sources:
    - Action 2 involved visiting the identified sites to confirm the details identified in the desk study;
    - Action 3 involved carrying out risk assessments so that the sites could be prioritised; and
    - Action 4 involved sampling or carrying out intrusive investigation if required;
  - Prioritising of the identified sites into categories A-D with category A being "special sites" and B-D rated according to risk level with B most at risk because the pollution linkage is likely or is present and D least at risk to receptors;
  - Carry out detailed site investigation to determine sites that were "special sites" and contaminated land or uncontaminated land;
  - Follow the process of determining liability, remediating the identified sites and placing sites on remediation registers; and
  - Schedule monitoring of remediation measures if appropriate
- 4.3. Risk assessment is the key principle behind the contaminated land regime. It is also the key principle that this council applies when determining whether a land is contaminated. The council applies the Contaminated Land Exposure Assessment Model (CLEA) (as amended by the Environment Agency) to assess the risks arising from the contamination of land.
- 4.4. It is important to note that while the council has regard to CLEA the CLEA guidance is non-statutory and does not form part of the legal framework.

Entire Borough Area 3 Area 2 Area1 Preliminary Investigation ❖ Action Level 1-3 Category C Category A Category B Category D Environment **Priority Sites** Agency **Detail Investigation** Remediation Monitoring

Diagram 1 - Procedure for inspecting the local authority area

4.5. The risk assessment process has been conducted in accordance with the process set out in our original strategy documents. In each case it has involved the examination and assessment of the three components referred to as 'pollution linkages', namely contaminants or source, pathway and receptors. All three of these components must exist for a pollution linkage to occur (see diagram 2 below).

Diagram 2 : The risk-assessment model



4.6. The council recognises that circumstances may change. For example a receptor may be introduced to the site or neighbouring areas or the characteristic of remedial measures may change with time. Given this, a pollution linkage may be created at any time. As a result the council may re-inspect and re-determine sites or areas as set out in our strategy.

#### **SECTION FIVE - PROGRESS MADE TO DATE**

- 5.1. The council has completed the preliminary investigation of potentially contaminated sites within Southwark using the land use database. This is described as Action levels 1-3 in the "Strategy".
- 5.2. In 2008/9, a total of 2016 potentially contaminated sites were identified through examination of historic maps and other database, as indicated in the procedure.
- 5.3. The sites were placed into categories A-D. From the 2016 sites identified, 1356 were found to be subject to sites uses that were considered non-polluting or low risk such as offices, dry goods warehouses, finish clothes manufacturing etc. The remaining sites are currently categorised as shown in table 1 (below).
- 5.4. In our previous review it was recorded that there were three potentially high risk sites. Table 1 now shows that there are none. Additional data collected since our previous review has enabled these to be properly classified within category C.
- 5.5. The figure in brackets in table 1 indicates potential sites earmarked for further investigation.
- 5.6. It is important to note that this figure may increase, as further information on land in the borough is examined.

Table 1 – Category of sites					
Category	Α	В	С	D	
No of Sites	0	0(1)	310	350	

## **SECTION SIX – PRIORITY ACTIONS AND TIMESCALES**

6.1. Table 2 sets out detail of the implemented programme.

Table 2 – Implemented programme				
Action Phase	Status / Comments	Revised Deadline		
Action Level 1 - Desk Study	Completed. Using the data sources detailed, 2016 sites with commercial / likely polluting land uses were identified. However, position may change as new information is received. The number of sites may increase.	This will be an ongoing action as the council exercises its duty to inspect the area. Also we intend to act on new information received		
Action Level 2 - Reconnaissance	Completed. Site visits have been made and preliminary risk assessment carried to establish pollution linkages. This has led to the category A-D classifications being confirmed.	This will be ongoing as more information about other sites are obtained		
Action Level 3 – Risk Assessment	Completed, except for one site which requires more detailed investigation.	The site referred to is an ex MoD site, the use of which the MoD has not yet confirmed. Ongoing duty to inspect.		
Action Level 4 – Sampling / Investigation	Ongoing. Appropriate actions to be taken as identified contaminated sites come to light through the planning and other processes. Part of our ongoing inspection duty will be to look at the integrity of the remedial measures proposed, especially in the infilled areas of the borough.	Ongoing.		
Action Level 5 – Results, Remediation prioritisation	Ongoing. Dependent on the outcome of investigation into the site concerned.	Ongoing		

#### SECTION SEVEN – DETAILS OF ACTIONS

7.1. The priority actions, as stated below, were carried out as part of the inspection strategy methodology.

#### Action 1 – Desk top study (Completed)

- 7.2. The purpose of this initial action was to determine former site uses and other useful background information that would assist in the identification and classification of contaminated land. The sites identified were found using the following data sources:
  - British Geological Survey (BGS);
  - Landmark digitalised maps;
  - Library searches of 60 inches maps;
  - Cities Revealed data 'the Geo-Information group';
  - Information held by internal departments and from the results of any previous investigation
- 7.3. This Service had neither referral nor complaint of contaminated land.
- 7.4. The information obtained was inputted into Groundview (risk software) and linked to MapInfo GIS system. The site previous uses were compared with lists of known contaminated usages (Appendix H page 35) and CLR documents. Sites were then identified for the next line of action.
- 7.5. At this stage we held information on:
  - The current & historic use of the sites within the borough;
  - The geology and hydrogeology of the area including abstraction locations;
  - An idea of potential contaminants; and
  - An idea of potential receptors and pathways.

#### Action 2 - Reconnaissance (Completed)

- 7.6. The main purpose of this action level was to gather physical evidence that can substantiate the findings of the preliminary investigation or Action level 1. This was described as a reconnaissance process as officers visited where necessary to verify some of the following;
  - Existing land use and visual condition via preliminary on site investigation;
  - Identification of the potential receptors;
  - Identification of potential pathway; and
  - Details of site ownership, site security and details of adjoining property will be recorded.
- 7.7. The information obtain was inputted onto our GIS system.

# Action 3 – Risk-assessment (Completed for the purpose of this part of the strategy – Ongoing as part of our duty to inspect)

- 7.8 This process involved the estimation and evaluation of risk. The council followed a scientific method involving the use of conceptual models and computer base assessment software where required.
- 7.9. The information obtained in the reconnaissance stage was used as the basis of the data input for a scientific risk value or rating.
- 7.10. Where there was no pollution linkage present, detailed risk assessment was not required. The council recognises that there is a degree of error in applying the model and will consider their results against the background information contained in the geological report, the reconnaissance details and the presence of receptors where necessary.
- 7.11. Some sites that have been remediated prior to this regime using standards such as the ICRCL and Dutch standards may be subject of further evaluation as the CLEA assessment model is being developed and improved future guidance likely.
- 7.12. Sites that, based on historic uses, have potential substances that are currently capped by current land use, will be placed on our GIS and monitored via the planning process. Any redevelopment will trigger the need for detailed investigation and possible remediation. Currently most of the sites in the infilled areas meet these criteria.

#### Action 4 – Sampling / Investigation (Ongoing)

- 7.13. After the priority sites have been determined the next step is to carry out a more detailed investigation. Currently there is one site that may require further investigation primarily because it is understood to be a first world war Ministry of Defence site. This site is not yet located.
- 7.14. To date, third party testing and investigation required to inform the planning process has been used to categorise the sites we have identified. This pattern is likely to continue as the fast rate of development and regeneration in the borough continues.
- 7.15. The council will consult the landowner before inspecting land where it considers there is a reasonable possibility that a significant contaminant linkage exists but may undertake its own detailed investigation if
  - It considers there is a reasonable possibility that a significant contaminated linkage exists on that site and;
  - If after consulting any owner there has been no report of any previous detailed investigation or information for that site that will clearly confirm its condition or none is forthcoming or;
  - The site is classified as an 'orphan site' (i.e. a potentially contaminated site where the owner or polluter cannot be found).

#### Action 5 – Results, remediation, prioritisation (Ongoing)

7.16. This action is dependent on the sites identified. Currently through the planning process we were able to obtain third party sampling and investigation results. This

action will, however, be ongoing as the council continue to exercise its duty to inspect the borough to identify contaminated land.

#### **SECTION EIGHT - ACCESS TO INFORMATION & PROCEDURES**

#### Management of information & Public Register

- 8.1 The council has a legal requirement under section 78R of the Act to keep a public register. The council will organise the register in a manner that all entries pertaining to a site or address will be kept together.
- 8.2. The register is currently available in hard copy. We are presently working on making these documents available electronically. The contents of the register can be viewed during office hours via prior appointments. The register is currently located at Chaplin Centre, Thurlow Street, SE17 2DG. We will also look at making the register readily assessable to other departments via the corporate GIS or the intranet.
- 8.3. The register will contain information on contaminated sites that have been remediated and will contain the following information:
  - Site location;
  - Current use;
  - Reasons for classification of contaminated land or pollutant linkages identified on that site:
  - Remediation information, copies of notices, declarations or remediation statements or details of remediation claimed to have been carried out (please note that such an entry in no way represent an endorsement or confirmation that the remediation has been carried out nor, therefore that the land is no longer contaminated land; and
  - Reference to site investigation report, which may be held within our filing system.
- 8.4. Access to any site investigation report will be subjected to an appointment system made with staff working in environmental protection team and can only be referred to if the request is made in accordance with the Environmental Information Regulations.
- 8.5. Information on special sites includes;
  - The notice making that designation;
  - Notice given to the Environment Agency;
  - Any site specific information of guidance issued by the Environment Agency;
  - Appeals against a remediation and / or charging notices; and
  - Convictions.

#### Procedure for dealing with reactive complaints

- 8.6. Once it is brought to the council's attention that a piece of land is potentially contaminated, the council will first consult the landowner before carrying out any inspection unless there is immediate risk and the landowner cannot be found.
- 8.7. Authorised officers from the environmental protection team will carry out a preliminary investigation within three days or other published response times. The preliminary

investigation will follow the actions as described in section 4 above, in accordance with part 2A guidance.

- 8.8. The purpose of the preliminary investigation is to determine the types of receptors present on the site or has access to the site and any other information as described in the Action Level 1-3, guidance above;
- 8.9. The officers will make a judgement as to whether the site needs to be made secure to prevent any receptors from coming into contact with any of the site hazards pending a more detailed investigation.
- 8.10. In cases where there are receptors on site and there is a likely risk to human health and the environment, then the council will follow the procedure on communication of risk (section 10.21) whilst further determination is carried out.
- 8.11. The officer will carry out further investigation to establish a risk factor for that site and to determine the owner and or polluter of the land. If the investigation indicates a likelihood that the land is contaminated then an intrusive site investigation will be carried out.
- 8.12. The Public Health Unit of the Lambeth, Southwark & Lewisham Health Authority will be informed if the complaint is substantiated.

# Dissemination of information or response to request for information on contaminated land.

- 8.13. The council will undoubtedly become a major source of information on land condition within the borough. It is likely to receive requests for information from developers seeking to develop sites; environmental consultants undertaking desktop studies; solicitors (conveyance); and prospective purchasers of properties and residents. The council maintains a corporate GIS system, which is intended to contain comprehensive information on land with potentially contaminated usages. This information will be made accessible to most departments.
- 8.14. The council also has a duty to set up and maintain a public register for the purpose of keeping details of remediation notices which have been served on the appropriate person for the purpose of bringing about the remediation of land. This register is currently kept at the community safety office at Chaplin Centre, Thurlow Street, SE17 2DG. The register can be viewed on hard copy during office hours. An electronic version is currently being developed.
- 8.15. The council will include information on remediation notices and information about the condition of the land. The details on the condition of the land will be limited to the results of any desktop study and/or site investigation. The public will have free access to the public register.
- 8.16. The council will answer all enquiries regarding contaminated land in accordance with The Environmental Information 1992 and The Environmental Information (Amendment) Regulations 1998 regulation 4(2)
- 8.17. There may be cases where the council will not be able to give out information. This is because the information may be based on anecdotal account, in draft format or it may be confidential.

- 8.18. For the purpose of clarification the information is treated as confidential if, and only if, it is information the disclosure of which-"
  - Would affect international relations, national defence or public security
  - Would affect matters which are, or have been, an issue in any legal proceedings or in any enquiry (including any disciplinary enquiry), or are the subject matter of any investigation undertaken with the view to any such proceedings or enquiry:
  - Would affect the confidentiality of the deliberations of any relevant person;
  - Would involve the supply of a document or other records which is still in the course of completion, or of any internal communication of a relevant person". For example the council will not be able to give details of a draft site investigation notes to a third party.
- 8.19. Response to question 16A on CON29 questionnaire will be answered by Land Charges section based on information held in the public register.
- 8.20. Requests for information can be made via phone on 0207 525 5000, on the Southwark website, <a href="www.southwark.gov.uk">www.southwark.gov.uk</a> or by email <a href="mailto:environmental.protection@southwark.gov.uk">environmental.protection@southwark.gov.uk</a> . There is an administrative charge currently £46.00 for providing the information.

#### Procedure for communicating risks

- 8.21. The communication of risks posed by contaminated land is key to the success of this strategy. This is because how such risks is communicated can affect people perception of their area, have severe financial and legal implications to affected parties and can affect the effective management of contaminated land. Also there are several factors to consider when determining what happens to a contaminated land site. Several lines of communication need to be considered. The most important ones are;
  - The party undertaking investigation (chemist, engineer, environmental analyst) to the developer;
  - The developer or the above party to the council (environmental health, planning and/or building control)
  - Any of the above to the current users or future users of the site;
  - Any of the above to the media (newspaper, radio interest groups & television)
- 8.22. The council's risk communication policy will recognise that it is difficult to satisfy the differing views of organisations, people's emotions, priorities, expectations and anxieties. It nevertheless will be open and sensitive with respect to providing information in hand providing that such information is factual and reflects procedure and definitions lay down by the appropriate legislation and statutory guidance. In so doing we will aim to ensure that the information communicated will be defensible and transparent.
- 8.23. The council is committed to ensuring that it receives the community approval for remediation measures and will provide and utilise all available means to achieve this aim.

#### Communication involving analyst, chemist, developers & council officers

8.24. The council expects the person carrying out a site investigation to be suitably qualified and experienced to undertake the task. The organization and the testing laboratory

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should also be suitably accredited and quality assured. The council also expects that the report from that body or individual will cover thoroughly a risk assessment, a risk management of the current situation and implementation procedure.

- 8.25. All information regarding contaminated land should be copied or sent to the environmental protection team promptly.
- 8.26. The council will set up before hand, a team for the communication of 'major risks' (those that have immediate risk to health) associated with contaminated land. That team will consist of a representative from the council press or public relations office; a representative from the local health authority; council officers and some stakeholders.
- 8.27. Once the council receives information regarding risks posed as a result of contamination the team will act immediately and communicate such details to likely affected stakeholders. In cases involving external organisation such as the Environment Agency, a representative from that organisation will be invited to be part of that team.

#### Communication involving stakeholders

- 8.28. The details communicated will include and explain the following;
  - The pollutant (s) or contaminant (s) involved and likely source;
  - The health implications and likely quantity or concentration that will bring such health effects:
  - Possible symptoms;
  - What to do if anyone experiences the symptoms;
  - What immediate action is taken;
  - Possible social and economic impact; and
  - If possible, a likely timescale for the resolution of the problem.
- 8.29. Please note that this procedure does not vary the council's emergency procedures. It will be followed for incidents where the environmental protection team or the contaminated land project team is the responsible unit for the handling of the occurrence.

#### Detailed Inspection using statutory power of entry-Section 108 EA 1995

- 8.30. The council will consider using its statutory powers of entry, to enter land and carryout detailed inspections where;
  - The owner refuses an authorised officer or any company authorised by the council for the purpose of carrying out an inspection, access to land;
  - The council is satisfied that there is a reasonable possibility that a significant contaminant linkages exists;
  - There is no appropriate detailed information on the condition of the land forthcoming;
  - There are no offers to provide such information within a reasonable and specified time; and
  - Such information was not provided within the specified time.
- 8.31. The council will carry out any intrusive investigation in accordance with appropriate good practice and technical procedures for such investigations.

#### **SECTION NINE - EXTERNAL CONSULTATION**

#### Consultation with other organisations:

- 9.1. The council recognises the need to consult with other organisations for the purpose of:
  - Sharing and or obtaining information on land in its area that can assist in the determination, inspection and the prioritisation of sites;
  - Obtaining specialist knowledge that has a bearing on the determination of contaminated land, determination of liability, bringing about remediation and choice of effective remediation; and
  - Ensuring consistency of approach.
- 9.2. Appendix J details the range of external agencies with which this authority will have regular contact.

#### **SECTION TEN - MOVING FORWARD**

- 10.1. We will continue to progress our inspection strategy in accordance with the principles and process described within this document.
- 10.2. As the regeneration process gathers pace further sites will be identified as contaminated but will be remediated via the planning process. The council will only use part 2A where no appropriate alternative solution exists.
- 10.3. We will continue to work in partnership with other London boroughs, agencies and other bodies having interest in contaminated land.
- 10.4. We will review and update any assumptions, interpretations of guidance, changes in legislation or technical and scientific development as and when necessary
- 10.5. We will review this strategy and our progress against it in 5 years and ensure that the principles of this strategy feed into any future strategic plans for the borough

#### SECTION ELEVEN - TARGETS AND PERFORMANCE

- 11.1. We will judge our performance against the following indicators:
  - Land development proposals referred through the planning process considered in terms of potential land contamination in accordance with the planning process timetable – Target 100% of cases;
  - New information regarding potentially contaminated sites assessed Target 100% of cases;
  - Appropriate action taken in each case where remediation measures are identified as necessary – Target 100% of cases;
  - Complaints of potentially contaminated land received by the council Target 100% of cases investigated and appropriate action taken in accordance with corporate response times;
  - All new relevant information updated on public register –Target within 3 working days.

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#### **SECTION TWELVE - MONITORING**

#### Monitoring & analyzing strategy delivery & impact

- 12.1. The council will continue to monitor and analyse the effectiveness of this strategy and will further review the strategy in five years or in the light of any earlier change in legislation, guidance or circumstance.
- 12.2. The council will be mindful of any indicators and targets developed by Defra and / or the Environment Agency in assessing overall progress in the implementation of the strategy.

#### Appendix A - Glossary

#### **Appropriate Person**

Any person who is determined in accordance with section 78F of the Act, to bear responsibility for any thing which is to be done by way of remediation in any particular case.

Harm

Refers to harm to the health of living organisms or other interference with the ecological systems of which they form part and, in the case of man, includes harm to his property.

Significant harm

Any harm which is determined to be significant in accordance with the statutory guidance in Chapter A which describes types of harm in Table A.

**Risk Assessment** 

A qualitative and/or quantitative examination and evaluation of a defined hazard to determine:

- (a) the probability, or frequency, of its occurrence (e.g. exposure to a property of a substance with the potential to cause harm);and
- (b) the magnitude (including the seriousness) of the consequences.

**Pollution Linkage** 

The relationship between a contaminant, pathway and a receptor

**Contaminants** 

A substance that is in, on or under the land and has a potential to cause harm or to cause pollution of controlled waters.

**Controlled waters** 

Waters defined under Part III (section 104) of the Water Resources Act 1991. This includes territorial and coastal waters, inland fresh waters and ground waters.

**Current Use** 

Any use which is currently being made, or is likely to be made, of land and which is consistence with any existing planning permission (or is otherwise lawful under Town and Country planning legislation). This definition is subjected to the following qualifications;

(a) the current use should be taken to include

any temporary use, permitted under the town and country planning legislation, to which that land is, or is likely to be, put from time to time;

- (b) the current use includes future uses developments which do not require a new or amended, grant of planning permission;
- (c) the current use should, nevertheless, be taken to include any likely informal recreational use of land, whether authorised by the owners or occupiers or not, (e.g. children playing on the land); however, in assessing the likelihood of such informal use, the local authority should give due attention to measures taken to prevent or restrict access to the land; and
- (d) in the case of agricultural land, however, the current agricultural use should not be taken to extend beyond growing or rearing of the crops or animals which are habitually grown or reared on the land.

The Environmental Protection Act 1990.

The Act

### Appendix B – Regulatory Framework

#### **Primary Legislation**

The Environmental Protection Act 1990 Part IIA (which was inserted into the Act by Section 57 of the Environment Act 1995.)

#### **Secondary Legislation**

Environmental Protection Act 1990 (Isles of Scilly) Order 2006

Water Act 2003(WA2003)

Clean Neighbourhoods and Environment Act 2005 (Commencement No2) (England) Order 2006

Radioactive Contaminated Land (Enabling Powers) (England) Regulations 2005

Radioactive Contaminated Land (Modification of Enactments) (England) Regulations 2006

Contaminated Land (England) Regulations 2006

Radioactive Contaminated Land (Modification of Enactments) (England) Amendment Regulation 2007

Radioactive Contaminated Land (Modification of Enactments) (England) Amendment Regulations 2008

#### **Circular/Statutory Guidance**

**Circular 01/2006**; the Department of the Environment, Food and Rural Affairs This is now replaced by Part 2A Statutory Guidance April 2012

This contains further guidance on the;

- Government Policy
- Description of the new regime
- The definition of contaminated land
- The identification of contaminated land
- The remediation of contaminated land
- Exclusion from, and Apportionment of , Liability for remediation
- The recovery of cost of remediation
- A guide to the Contaminated land (England) Regulation

#### Non statutory guidance. Technical Notes, /Risk Assessment Models

- Defra Guidance on the legal definition of contaminated land July 2008
- Department of the Environment research project (CLR) series
- CLAN (Contaminated Land Advice Notes)
- CLEA Risk model
- Inspection strategy etc.
- Industrial profiles
- Others

#### Appendix C – Legislative Amendments

- Since the last review, the Part IIA regime has been modified to include the identification and remediation of radioactive contaminated land, under the extended regime. The new statutory guidance does not include radioactive 2008. Radioactive contamination will be dealt with under new guidance to be published.
- 2. 'Special sites' are areas of contaminated land under the Part 2A regime for which the Environment Agency (EA), rather than the local authority, is the main regulator. They are not necessarily the most contaminated of sites, but they comprise cases of contamination that the government considers the EA are better placed to deal.
- 3. There are four main categories of 'special site' within the regulations:
  - Some water pollution cases areas of contaminated land affecting drinking water supply or (potentially) affecting controlled waters within a major aquifer;
  - Industrial cases Includes specific circumstances such as acid tar lagoons, sites
    where explosives were manufactured, or a site for an authorised process under
    the Environmental Permitting (England & Wales) Regulations and its
    predecessor regimes;
  - Defence cases Including most land currently owned by the Ministry of Defence and those of visiting forces; and
  - Radioactivity cases Where land is contaminated land by virtue of radioactivity which can include nuclear sites.
- 4. The Clean Neighbourhoods and Environment Act 2005 (commencement no 2) (England) Order 2006 brought into force section 104 of the Clean Neighbourhoods and Environment Act 2005, in England. This amended the arrangements for appeals to remediation notices served by Local Authorities on or after 4 August 2006. An appeal now has to be made to the Secretary of State rather than the Magistrate Court.

#### Appendix D – Explaining the Components of the Risk-Assessment Model

A contaminant is defined as "a substance, which is in, on or under land and which, has the potential to cause harm or to cause significant pollution of controlled waters". A "substance" means, whether in solid or liquid form or in the form of a gas or vapour, any substance which contains radionuclides which have resulted from after-effects of a radiological emergency or which are or have been processed as part of a past practice or past work activity, but shall not include radon gas or the following radionuclides: Po-218, Pb-214, At-218, Bi-214, Rn-218, Po-214 and T1-210.

#### 2. A receptor is either:

- "A living organism, a group of living organisms, an ecological system or a piece of property which;
- Is in a category listed in Appendix 1 page 24;
- Is being or could be harmed by a contaminant; or
- Is being exposed to, or affected by, a contaminant, or
- Could be so exposed or affected.
- 3. A pathway is "one or more routes or means by, or through, which a receptor:
  - Is being exposed to, or affected by, a contaminant, or
  - Could be "so exposed or affected".
- 4. These three components are considered under a risk model in order that a scientific and quantifiable risk rating is achieved. This will assist in the determination as to whether a risk is significant. The result will be compared or analysed using the DEFRA (former DETR) guidelines as to what constitute harm and significant harm.
- 5. The council re-emphasises that CLEA should be used to make site-specific determination. This council would not accept report conclusion and remediation strategy based on the earlier Interdepartmental Committee on the Redevelopment of Contaminated Land (ICRCL) guidance and the Kelly Indices. Where the necessary soil guideline values are not present, engineers are encouraged to make determination based on current Contaminated Land Research Reports (CLR) documents. See appendix E page 32 for DEFRA guidelines on this matter.

#### Appendix E – Issues Relating to Risk-Assessments

- 1. The Contaminated Land Research Reports (CLR 7-10) have been used, together with the CLEA software and the Soil Guideline Values (SGV) for individual substances, as the key tools in determining acceptable concentration of substances as a measure of risks to human health.
- 2. It should be noted, however, that it has not proved practical to develop SGV for all substances which occur on land. As a result operatives are expected to use generic values for contaminants in accordance with CLR 9 & 10 documents and using site specific conceptual model to inform the process.
- 3. It should also be noted that at present, despite the work on this matter undertaken by the Task Force of stakeholder agencies. There remains great uncertainty in the quantitative assessment and determination of contaminated land. As a result of this situation, our process of risk assessment may have to be revisited in the future, as the search for a technical solution and more direct guidance from Defra is pursued.

#### **Appendix F - Prioritisation Category**

**Category A -** Land that will be designated special sites. This is because the land contains contaminants that is/are affecting or likely to affect controlled waters and their quality or it meets the use category specified as special sites. The Environment Agency will regulate these sites. Land description for this category is set out in Regulations 3 and include cases where:

- The wholesomeness of drinking water is affected.
- Controlled waters are being affected are not likely to or do not meet the relevant surface water classification
- Pollutants or substances contained in schedule 1 of the Contaminated Land (England)
   Amendment Regulations 2001 is/are affecting major aquifer
- This is a high priority site that will be regulated initially by Pollution Control team (as much as required to declare the site as a special site) and the Environment Agency.

**Category B** - Land that is contaminated by virtue of meeting the contaminated land criteria after been risk assessed. Its current use put or is likely to put receptors at risks. Action may be needed urgently or in the near to medium term to protect the receptors. This will be another high priority site and Pollution Control team will be responsible for the legal remediation of that site

**Category C** - Land that is currently derelict and potentially contaminated and has been earmarked in the UDP, or planning or regeneration process for redevelopment for sensitive use or it is currently being developed. It is considered suitable for current use. These lands will have a medium priority and the process of remediation will lead by the Pollution Control team and Development & Building Control team.

**Category D -** Land that is currently occupied by receptors and is considered suitable for present use. Contaminants may be present but very unlikely to have an unacceptable impact on receptors. These sites may also include those that have been remediated within the last 10-25 years. No action is needed provided the site remains undisturbed and for its present.

This will be a low priority site that will be coded so as to alert pollution control team of any changes in circumstances that will change the risk factor. The remediation of that site will lead by development need and the contamination issues will follow planning PPG23 guidelines.

## Appendix G - Receptors

Potentially sensitive receptors				
RECEPTOR	LAND USE TYPES			
Human beings	Allotments Residential with gardens Residential without gardens Schools or nurseries Recreational / parks, playing fields, open space Commercial / industrial			
Ecological systems or living organisms forming part of a system within protected locations	Sites of Special Scientific Interest (SSSI) National nature reserves, Marine nature reserves, Areas of special protection for birds European sites Special Areas of Conservation (SAC) Special Protection Areas (SPA) Candidate SACs and SPAs Ramsar sites Nature reserves			
Property in the form of buildings	Ancient Monuments Buildings			
Property in other forms (crops, livestock, home-grown produce, owned or domesticated animals, wild animals subject to shooting or fishing rights)	Agricultural land Allotments and gardens Forestry areas Other open spaces, rivers, lakes etc			
Controlled Waters	Surface waters Drinking Water Abstractions			
	Source Protection Zones Ground waters – Private Abstractions Ground waters – Major Aquifers			

#### Appendix H - Potentially contaminative land uses

- 1) Airports and Airfields
- 2) Animal and Animal Products Processing Works (includes Tanneries)
- 3) Asbestos Manufacturing Works
- 4) Cement, Ceramics and Asphalt
- 5) Manufacturing Works
- 6) Charcoal Works
- 7) Chemical Works: Coatings (paints) and Printing Inks Manufacturing Works
- 8) Chemical Works: Cosmetics and Toiletries Manufacturing Works
- 9) Chemical Works: Disinfectant Manufacturing Works
- 10) Chemical Works: Explosives, Propellants and Pyrotechnics Manufacturing Works
- 11) Chemical Works: Fertilizer Works
- 12) Chemical Works: Fine Chemicals Works
- 13) Chemical Works: Inorganic Chemicals Works
- 14) Chemical Works: Linoleum, vinyl and bitumen-based Floor Covering Works
- 15) Chemical Works: Mastics, Sealants, Adhesives & Roofing Felt Works
- 16) Chemical Works: Organic Chemicals Works
- 17) Chemical Works: Pesticides Works
- 18) Chemical Works: Pharmaceuticals Works
- 19) Chemical Works: Rubber Processing Works
- 20) Chemical Works: Soap & Detergents Works
- 21) Dockyards & Dockland
- 22) Dry Cleaners
- 23) Engineering Works: Aircraft Making Works
- 24) Engineering Works: Electrical & Electronic Equipment Manufacturing Works
- 25) Engineering Works: Mechanical Engineering and Ordnance Works

- 26) Engineering Works: Railway Engineering Works
- 27) Engineering Works: Shipbuilding & Repair and Shipbreaking Yards
- 28) Engineering Works: Vehicle Making Works
- 29) Fibreglass and Fibreglass Resin Works
- 30) Gas Works, Coke Works and other Coal Carbonisation Plants
- 31) Glass Manufacturing Works
- 32) Metal Manufacturing, Refining & Finishing Works: Electroplating Works
- 33) Metal Manufacturing, Refining & Finishing Works: Iron & Steel Works
- 34) Metal Manufacturing, Refining & Finishing Works: Lead Works
- 35) Metal Manufacturing, Refining & Finishing Works: Non-ferrous Metal Works
- 36) Metal Manufacturing, refining & Finishing Works: Precious Metal Works
- 37) Oil Refineries & Bulk Storage of Crude Oil and Petroleum Products
- 38) Photographic Processing Works
- 39) Power stations (not nuclear)
- 40) Printing & Bookbinding Works
- 41) Pulp & Paper Manufacturing Works
- 42) Railway Land
- 43) Road Vehicle Servicing & Repair Works,
- 44) Garages & Filling Stations, Haulage Centres
- 45) Sewage Works and Sewage Farms
- 46) Textile Works & Dye Works
- 47) Timber Products Manufacturing Works
- 48) Timber Treatment Works
- 49) Waste Recycling, Treatment & Disposal Sites: Drum/Tank Cleaning & Recycling Plants
- 50) Waste Recycling, Treatment & Disposal Sites: Hazardous Waste Treatment Sites
- 51) Waste Recycling, Treatment & Disposal Sites: Landfills
- 52) Waste Recycling, Treatment & Disposal Sites: Metal Recycling Sites (incl. Scrap Yards)

53) Waste Recycling, Treatment & Disposal Sites: Solvent Recovery Works

# Appendix I - ICRCL withdrawal

#### NOTE ON THE WITHDRAWAL OF ICRCL TRIGGER VALUES

This briefing note, prepared with the help of the Environment Agency, explains the background to the decision by Defra formally to withdraw ICRCL Guidance Note 59/83, 2nd edition, dated July 1987. The decision was conveyed in a letter dated 20 December 2002 which has been sent to local authorities and other stakeholders, and placed on the Defra web pages about contaminated land.

#### **Background**

In March 2002, the Department for Environment, Food and Rural Affairs (Defra) and the Environment Agency published a comprehensive package of technical guidance relevant to the assessment of human health risks arising from long-term exposure to contaminants in soil. The Government's view is that this package supersedes, in respect of human health, earlier work published by the Interdepartmental Committee on the Redevelopment of Contaminated Land (ICRCL), and in particular, the Trigger Values set out in ICRCL 59/83.

The CLEA package, consisting of the main reports CLR 7 - 10, the CLEA 2002 software and the Soil Guideline Values for individual substances (SGV) are now considered to represent the key instruments for generic assessment of the health risks from land contamination. They represent a cross-government consensus on the technical approach to undertaking such assessments and are based on the latest scientific knowledge and thinking.

The ICRCL Guidance Notes have represented an important source of guidance to practitioners dealing with the many hazards and different types of historical contamination that can be found in the UK. The most well-known of these documents is Guidance Note 59/83, revised in July 1987, which sets out a number of Trigger Values (threshold and action concentrations) for contaminants in soil including ten metals, cyanides, sulphates, PAHs and phenols.

The Trigger Values were intended to provide an indirect method of assessing the risk from levels of contamination in soil according to land-use. For each contaminant three possible concentration zones were set out - namely, areas of acceptable and unacceptable risk separated by a zone for professional judgement. In theory, threshold and action values based on the total concentration of the contaminant in soil would establish the boundary between these zones. In practice, for many of the common metal contaminants only the threshold values were established and over time their purpose has been confused with that of remediation standards.

The new CLEA package deals with the direct assessment of risks to human health from soil contamination. They are based on:

- Toxicological criteria that establish a level of unacceptable human intake of a
- contaminant derived from soil.
- Estimates of human exposure to soil contamination based on generic land-use,
- which take into account the characteristics of adults and children, their activity
- patterns and the fate and transport of the contaminant in soil.

Soil Guideline Values for individual substances have been published covering a similar range of contaminants to those set out in ICRCL Note 59/83.

SGV are generic assessment criteria. They are indicators for "intervention" either in the form of further detailed risk assessment and/or remediation. The approach taken is in line with

Government policy objectives and guidance, for example the DETR/Environment Agency/Institute for Environment and Health "Guidelines for Environmental Risk Assessment and Management", published in July 2000, available at www.defra.gov.uk/environment/eramguide/index.htm (also available from The Stationery Office); and the approach closely relates to the requirements in the Statutory Guidance for Part IIA of the Environmental Protection Act 1990 (Part IIA).

#### Why withdraw ICRCL 59/83?

The ICRCL Guidance, and in particular the trigger values set out in Note 59/83 were last revised in July 1987. In 1990 the House of Commons Select Committee on the Environment identified problems with this guidance in their report on contaminated land. The Committee called for a system of statutory soil quality objectives and standards, more scientifically-based guidance, and general improvements in professional standards.

The Government's response accepted that more work was needed on the development of guidance in the assessment of land contamination. However, it rejected the idea of statutory objectives and standards covering all circumstances. The Government focused research effort towards the development of more extensive guidance covering a number of different aspects of risk assessment, including the development of the new CLEA package of technical guidance relevant to considering the direct risks to human health.

The ICRCL trigger values are not suitable for assessing the "significant possibility of significant harm to human health" in the context of the Part IIA regime. In our view they do not meet the requirements for guideline values set out in paragraph B.47 of the Part IIA statutory guidance. Their derivation is not consistent with the type of harm described in Tables A and B of that guidance. In contrast the new SGV take full account of the statutory guidance and have been developed to be consistent with the modern approach to such assessments set out under Part IIA.

Against this background, it has been decided to withdraw ICRCL Note 59/83 in its entirety. It is recognised that the new SGV do not represent an exact replacement of every Trigger Value in Note 59/83. In some cases this is a function of the substance, land-use or hazard concerned. However, it is our view that a phased approach to the replacement of ICRCL Trigger Values on a like for like basis poses a number of problems and would represent an unacceptable source of uncertainty and confusion to UK practitioners. Examples of these problems are outlined below:

- In ICRCL Note 59/83, Trigger Values for polyaromatic hydrocarbons (PAHs) are presented. At the time of publication, this was a pragmatic solution to limitations in our understanding of PAHs and our ability to differentiate individual PAHs in soil analysis. However, there will not be a Soil Guideline Value to directly replace this Trigger Value. Instead SGV are currently in preparation for a number of individual PAHs, focusing in particular on those that pose the most significant risk to health such as benzo[a]pyrene. Currently the analysis of individual PAHs in soil is a fairly routine procedure. In addition, advice from the Department of Health is that the potential health risks of PAHs should not be considered as a group. Given these factors it is difficult to support the continued use of a Trigger Value for PAHs.
- In ICRCL Note 59/83, Trigger Values are provided for a "parks, playing fields, and open spaces" and a "landscaped areas" land-use. These are not currently considered in the CLEA package and no SGV have been specifically set although further work is planned on considering leisure uses in 2003. It should be noted however that for substances where SGV have already been established there is a considerable mismatch with related Trigger Values. For example, for chromium VI the Trigger Value for "parks, playing fields, and open spaces" is 25 mg.kg-1, a value nearly ten times lower than the corresponding SGV for "residential"

without plant uptake". Clearly the latter is likely to be the more sensitive land-use and therefore the ICRCL Trigger Value significantly overestimates the potential risk to health. For selenium, the Trigger Value for "parks" is 6 mg.kg-1, a factor of 6 lower than the SGV for "residential with plant uptake" and a factor of 40 lower than the SGV for "residential without plant uptake".

### What if no SGV is available?

Soil Guideline Values are intended to be just that: guidelines for consideration early and often in the process of risk-based management of sites. They serve a useful purpose in encouraging a transparent and consistent approach and can also be helpful in focusing resources on situations that require more detailed assessment. However, they do not stand alone. SGV therefore inform judgements about the need for action but sit within a wider risk-based approach set out in Part IIA and the statutory guidance, and supported by the CLR documents 7–10. Thus, even where a SGV has been published it should only be used after the assessor has satisfied him/herself that all the conditions assumed are appropriate for the site.

It will never be practicable to devise SGVs for all substances which occur in land contamination cases. CLR7 paragraph 4.15 indicates that where no SGV has been published, a risk assessment at the site using site-specific criteria should be considered, and refers to CLR 9 and 10 in this respect. This means an approach based on a conceptual site model as described in CLR10. In this way, an appropriate level of site-specific risk assessment can be used to inform the decision-making process. CLR 7 also refers to further proposed guidance - "Model Procedures" – the revised draft of which is now well advanced.

#### Why not withdraw all ICRCL notes?

Clearly, the ICRCL guidance consists of much more than Note 59/83 and it recognized that many of the other notes provide more general information useful to the assessor, relevant to contaminant hazards not considered by the CLEA package, such as phytotoxicity and subterranean fires, or which discussed the investigation of certain historical land-uses that informs the wider assessment process. In our view continuing to support this wider guidance would not cause any confusion with the CLEA package1.

We do, however, consider that ICRCL Notes should not be used as the sole source of information on which decisions are based. Rather they are one of a range of different sources of information, including more recent guidance, which can be used in undertaking assessments.

#### Conclusion

ICRCL Guidance Note 59/83, 2nd edition, and especially Table 3 and Table 4, should no longer be quoted or used. Copies will however remain available on request for their historical relevance.

Contaminated Land Branch Defra December 2002

# Appendix J – Consultation with other agencies

# The Environment Agency

- 1.2. This agency holds vital information on property based in the borough as a result of their role in dealing with the protection of groundwater and special industries. The agency has signed a Memorandum of Understanding (with regard to the Part IIA Contaminated Land Regulations) with the London Government Association to supply local authorities with information that will assist them in the preparation and implementation of their contaminated land strategy. To this effect this department has received digitized data on disc which has been incorporated within our GIS system. This includes information on:
  - Aguifer locations and characteristics:
  - Surface and groundwater quality, surface and ground water resources including pollution incidents and abstraction licences;
  - Location and type of discharge consents and Groundwater Regulations authorisation:
  - Location (current & historic) IPC authorised sites and brief details on the authorised process / substances;
  - Location of licensed nuclear sites and sites where radioactive substances are regulated;
  - Location of closed landfill sites and waste management licensed sites and brief description on the types of waste deposited / waste management activity; and
  - Site specific soil investigation that can determine degree of contamination.
- 1.3. We will work closely with the agency in the determination of contaminated sites, especially any declared as a special site within the borough. The council has a duty under Section 78B of the 1990 Act to inspect its area "from time to time" for the purpose of identifying contaminated land and to determine which land should be designated as a "special site. Co-operation is required to take enforcement action on contamination, which occurs as a result of a breach of licensing conditions, or legislation enforced by the agency, e.g. The Water Act or Waste management licenses.
- 1.4. Where there is redevelopment of waste management sites the council shall consult with the agency on any application for development which is within 250 metres of a site which has been used in the last 30 years to deposit waste.
- 1.5. The council consulted with the agency on our initial strategy and subsequent reviews.
- 1.6. The council will also provide information to the Agency on land in its area, which can assist the agency in the preparation and publishing a report on the state of contaminated land in England.

# **English Heritage & Natural England**

1.7. These two statutory bodies have a special role in the preservation of sites of historic or special scientific nature within the borough. In some cases they are also the owners of particular sites. Sites of these natures are classified as receptors and protected within the contaminated land regime. The council recognises the expertise and specialist

knowledge that exists within these organisations on ecological system and as a result these bodies will be directly involved in the remediation of such sites that may be contaminated.

## **English Partnership**

1.8. This organisation has been actively involved in the regeneration of areas that are derelict and may be contaminated. There are also cases where they can assist in part funding certain projects. We will work together with the Partnership where necessary.

## **Health Authority**

1.9. The health authority will be notified and consulted on contaminated land occurrences where there is or likely to be immediate effect on public health. We will work together in investigating, calculating and communicating the risks involved to those affected and the media.

#### Greater London Authority (GLA) - London Development Agency (LDA)

1.10. The Council will also work closely with the requirements of the GLA and in particular the LDA (one of its nine regional bodies), both as a landowner and strategic authority, to ensure that the implementation of this strategy will be in line with the Mayor strategies such as the economic development and regeneration.

#### Department for Environment, Food and Rural Affairs (Defra)

1.11. The council will work closely with this ministry in tackling contamination found on agricultural land and any pollutant or contaminant that is likely to affect livestock. Also there is a potential that the historic practice of creating Anthrax pits can be unearthed and it is important that such liaison and partnership is established with this organisation so that the handling of such or similar occurrences are done efficiently.

### **Neighbouring boroughs**

1.12. The council recognises the need to work with and consult with neighbouring boroughs, especially for land along its boundary. We will consult with Tower Hamlets, City of London, Lewisham, Lambeth, Croydon and Bromley as necessary. This process is made easier by the cluster group dealing with contaminated land. The council will also undertake benchmarking exercises with these boroughs to determine more efficient ways to manage contaminated land.

#### Internal consultation

1.13. It is recognised that there are also various internal stakeholders. During the process of updating this strategy, views have been sought from the Burgess Park Director; the Director of Regeneration; the Head of Building Control; the Head of Development Control; the Head of Environment & Leisure Procurement; the Head of Strategy, Planning & Performance; the Land Charges Manager; the Planning Policy Manager; the Public Realm Asset Manager; the Senior Planning Lawyer; and the Senior Planning Policy Officer.

# Appendix K - Roles & Responsibilities

#### **Environmental Protection Unit**

The principal duty to inspect the borough lies within the environmental protection unit (see Appendix N). Unless resource capacity is changed that role will be part of an officer duty or in some cases a consultant employed for that purpose. The programme of inspection will nonetheless follow the details contained in this strategy. This unit's role will also include;

- The classification of site:
- The regulatory process for bring about the remediation of the site;
- To advice planners and developers on remediation proposals and standards;
- To work with Conservation officer & Archaeologist on sites falling within this strategy;
- To maintain public registers and update land charges records with respect to contaminated land;
- To answer enquiries regarding land that may or may not be contaminated; and
- To work with the press office in communicating risk.

#### **The Environment Agency**

The Environment Agency will regulate all sites that are classified as "Special sites" (see Appendix 6, page 36 for address). The Agency responsibility will also include:

- Regulate and bring about remediation of land that is subject to licence and regulated by the Agency e.g. pollution to controlled waters caused due to the non compliance with licence conditions or the Water Resources Act 1991.
- Assist in the determination or identification of contaminated land
- Provide site specific guidance to Local Authorities on contaminated land
- Publish periodic reports on contaminated land; and
- Carry out technical research and in conjunction with DETR (now DEFRA) published scientific & technical advice.

### **Planning & Development Control**

Planning and Development Control has the principal role of ensuring that all new development or redevelopment that constitute a change of use is properly assessed and the development incorporates any necessary remediation. This role is in keeping with their requirement under the Town and Country Planning Act 1990 and the National Planning Policy Framework (NPPF).

Stipulating and issuing section 106 agreement and placing conditions on sites that need remediation.

The formal discharging of conditions after the completion of remediation.

Taking enforcement action where there is a breach of conditions or section 106 agreements. Preparation of internal procedure notes and setting up of system to facilitate the implementation of the regime requirement

#### **Conservation and Archaeology**

Southwark Council maintains a Conservation and Archaeology group within the East Area Development Control Team in the Development and Building Control Business Unit, Regeneration and Environment Department.

The main responsibilities of the group are to provide specialist advice to the Development Control Teams, and applicants, regarding the implications for the historic environment posed by development proposals. Advice is also given to other Council departments where the Council owns, or seeks to redevelop its own land.

For the purpose of this strategy, the historic environment comprises Listed buildings, Scheduled Ancient Monuments, significant unlisted historic buildings (including industrial structures) sites of historic manufacture, non-scheduled archaeological monuments and deposits, historic parks and gardens, World Heritage Sites. These are all classified as receptors in accordance to the DETR (now DEFRA) guidance notes (Appendix 1, page 31) This group will work jointly with building control officers or any approved building inspector to ensure that remediation work will protect these receptors.

# **Building Control**

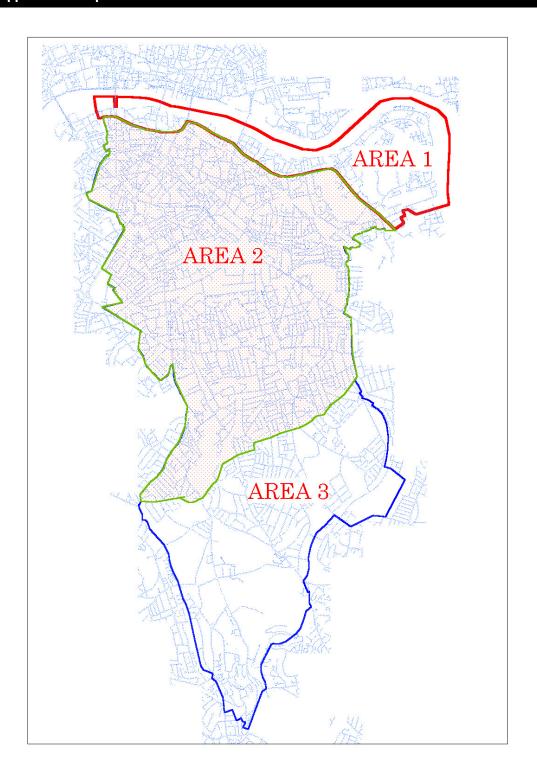
Building Control Unit has the most direct role of inspecting and enforcement of remediation measures. This will be done in close consultation with pollution control and planning section. The inspecting of remediation measures is not intended for the purpose of providing a guarantee that all of the remediation works have been carried out, or the effectiveness of the measures undertaken. The intention is for the inspector to take notes of what remediation process were undertaken at the time of inspection and whether any of the practice observed meets expected standards.

Regulations made under the Building Act 1984 outline measures for the protection of building fabric and future occupants from the effects of contamination such as gases, metallic and liquid contaminants arising out of previous land use. These are contained in the "Approved document part C (site preparation and resistance to moisture).

Building Control inspectors may be called upon by pollution control and/or planning and development control in accordance with the Statutory Guidance circular 2/2000, to inspect remediation work on sites that do not fall within the control of Building Regulations.

In addition, sites that are inspected or under the control of independent "Approved Inspectors" it will be the responsibility of those inspectors to provide to the Council details and confirmation that the remediation works have been inspected and conforms to what was agreed.

# Appendix L - Map of Areas



# Appendix M - Useful Addresses

Greater London Sites and Monuments Record (GLSMR) 23 Savile Row, London W1X 1AB 020 7973 3000 Environmental Protection Unit PO Box 64529, SE1P 5LX 020 7525 5000  Thames Water Environment and Quality Gainsborough House (RBH2) Manor Farm Road, Reading, Berks RG2 0JN	The British Geology Survey Nicker Hill, Keyworth, Nottingham Nottinghamshire, NG12 5GG 0115 936 3143  Lambeth, Southwark and Lewisham Health Authority 1 Lower Marsh, London SE1 7NT 020 7716 7000  English Heritage 23 Savile Row, London W1X 1AB 020 7973 3000
The Environment Agency Firmley House, Swift House Firmley Business Park Camberley, Surrey GU16 7SQ 01276 454300	Planning and Regeneration Council Offices, 160 Tooley Street SE1 .2TZ 020 7525 5000

# **Appendix N - References**

**Department of the Environment (1995)** Potential contaminants for the Assessment of Land, Consultants in Environmental Sciences Limited

Department of the Environment (1995) Prioritisation and Categorisation Procedure for Sites which may be Contaminated CLR Report No 06

Department of the Environment (1995) Industry Profile

Department of the Environment Transport and the Regions (2000)-circular 02/2000. The Stationary Office Limited

**Department of the Environment Transport and the Regions (2000)-** *Draft Inspection Strategies for Contaminated Land* 

# Department for Environment Food and Rural Affairs (2006)

Assessing Risks from land contamination—a proportionate Approach the way forward

Environmental Protection Act 1990, The Stationary Office Limited

Environmental Protection Act 1990: Part 2A Contaminated land statutory guidance (2012) HM Government

Environment Act 1995, the Stationary Office Limited

The Water Act 2003, The stationary Office Limited

Scotland & Northern Ireland Forum For Environmental Research (SNIFFER) (April 2000) Framework for deriving targets to minimise the adverse human health effects of Long-term exposure to contaminants in soil. Land Quality Management Scheme, The University of Nottingham.

Interdepartmental Committee on the Development of Contaminated Land (1987)

Guidance on the assessment and redevelopment of contaminated Land. Note
59/83. DOE.

Scotland & Northern Ireland Forum for Environmental Research, (1999)

Communicating Understanding of Contaminated Land Risks.

**British Standard** 10175:2001 Investigation of potentially contaminated sites –Code of Practice