STRATEGY FOR THE IDENTIFICATION OF CONTAMINATED LAND

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Forward

This is the council's strategy for the inspection of land within the London Borough of Tower Hamlets (the council) to determine the presence of any contaminated land, as defined by statute. The strategy sets out the local characteristics of the borough, historic land use ranging from dockland activity to local gas works and the inspection regime that is planned to identify local unacceptable risks to human health and/or the environment.

The strategy outlines the legal framework within which we are working and how information gathered will be managed, to ensure that the whole process is open and clear. This will enable the local community, developers and landowners to know and understand the law that exists to protect our environment and how the council is implementing the Government's national policy.

Regeneration of the East End and improving the quality of life for all those who live or work in the borough are key priorities for the council. This strategy forms an important part of that process. As the strategy is implemented, the information gathered will help landowners and developers understand local conditions within the borough. This will give confidence in redeveloping brownfield sites, making full use of the ever-increasing shortage of land in Tower Hamlets.

We will continue to work together with our neighbouring boroughs, the Mayor for London and the Environment Agency, all who have important roles to play in the successful implementation of this strategy.

Executive Summary

The aim of the current revision is to amend the existing Strategy to comply with changes in local strategic planning and technical guidance since the last revision.

The London Borough of Tower Hamlets is committed to identifying and dealing with local areas of contaminated land and any unacceptable risks to human health or the wider environment, which may arise.

In Tower Hamlets there is a legacy of land contamination across the Borough as a result of widespread past industrial activity, particularly around the former docks. Industrial activities included shipbuilding and dock-related activities, and chemical, metal and gas works.

Part 2A of the Environmental Protection Act 1990 and relevant guidance came into effect in April 2000. The legislation requires each local authority to inspect their borough and identify contaminated land that requires remedial work. The first strategy was prepared and submitted to the Environment Agency in July 2001 and detailed out how we will identify contaminated land in a rational, ordered and efficient manner. The legislation also requires the strategy to be updated periodically and this document represents the fourth update.

The strategy aims to find and deal with the most seriously contaminated sites first. Contaminated land is where the land in its current condition is causing, or is likely to cause, significant harm to human health and/or the environment and controlled waters

The process to identify contaminated sites is a staged risk based approach:

a) Sites are prioritised by applying a risk model. This applies weighting factors according to the risks associated with a site's historic industrial use and how sensitive the current land use would be to contamination effects. The result is a score or risk rating of sites where there is a "potential pollutant linkage". The sites which have the greatest potential for contamination to be causing significant harm to human health and/or the environment, are identified at this first stage.

b) The second stage is to investigate the highest priority sites and to establish an "actual pollutant linkage". This investigation will involve carrying out a detailed desk based assessment of available information and a walkover survey of the site.

c) The final stage is to confirm, without doubt, the presence or absence of "a significant pollutant linkage". This may involve carrying out an intrusive site investigation, for example, taking soil, water and/or ground gas samples for chemical analysis to determine the extent, location and concentrations of contaminants in the soil and or water.

Legislation, regulations, statutory and technical guidance set out clear criteria that must be established before any site can be formally designated as contaminated land. Information on sites that are formally designated must be kept on a public register available for inspection.

Once a site has been designated as contaminated land, the council will find the most appropriate methods to clean up the site. Interested parties will be consulted throughout the process. An equality analysis checklist has been undertaken as part of this review in compliance with relevant legislation.

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1. THE PURPOSE OF THIS STRATEGY

1.1. Introduction

This strategy sets out how the London Borough of Tower Hamlets (the council) proposes to identify contaminated land within its Borough in accordance with the requirements of Part 2A of the Environment Protection Act 1990 (Part 2A). The intention of the strategy is to ensure that unacceptable risks to human health or to the wider environment, from exposure to contaminated land, are addressed in an appropriate and cost-effective manner. This is in accordance with the council's Community Plan to create "*A healthy and supportive community".*

The strategy was initially developed by consultants W.S. Atkins and then amended and adapted to the needs and priorities of the council by the Pollution Team.

The Part 2A legislation and the corresponding obligations of local authorities are described in Section 2. The council is committed to the effective implementation of the requirements of the legislation and to ensure proper protection of human health and the environment within the borough.

Land contamination is not a new issue for the council. It is already considered through the use of planning controls. For example, if former industrial land is to be redeveloped for housing, the developer needs to satisfy the council, as the planning authority, that land contamination has been properly defined and appropriate mitigation measures are incorporated into the development of the land. This includes making the land suitable for the proposed use and addressing any wider environmental risks.

The requirements of Part 2A complement the planning controls. It also represents a more pro-active and strategic approach to identifying contaminated land and a risk-based approach to securing remedial action that may be needed to return the land to such a condition that unacceptable risks to human health and the environment no longer arise. The first stage is to identify contaminated land. This Strategy sets out how the council proposes to carry this out.

The aim of the current revision is to amend the existing Strategy to comply with changes in the Local Plan and statutory and technical guidance since the

last revision in April 2013, and also the statutory requirement to update the Strategy periodically.

1.2 Aim of the Strategy

The aims of the strategy have been outlined below:

- to comply with the requirements of Part 2A of the Environmental Protection Act (1990);
- to ensure the effects of historic and present contamination are not causing significant risks to human health and/or the environment;
- to encourage redevelopment of brownfield sites in accordance with government objectives and strategy;
- to complement the planning control system that ensures that risks associated with contamination on a site are appropriately dealt with during redevelopment;
- to provide information and respond to requests from the public, businesses and community organisations with increased efficiency and accuracy;
- to provide accurate information to the Environment Agency for its National Report on contaminated land;
- To compile accurate and up to date information on land contamination in a central location;
- to facilitate and encourage information exchange between council departments and regulatory authorities thereby minimising duplication of work; and
- to protect historic sites and the historic environment, especially 'designated historic sites' and areas of local importance.

2. SUMMARY OF LOCAL AUTHORITY DUTIES

2.1. Overview of Duties

Part 2A of the Environmental Protection Act (1990), inserted by Section 57 of the Environment Act (1995), introduce statutory requirements for the identification and remediation of contaminated land. This came into effect on the 1st April 2000 along with the Contaminated Land Regulations 2000, made under the 1990 Act. The Statutory Guidance (Defra, 2012) provides an outline of the local authorities' responsibilities under the Act along with other guidance on statutory requirements.

The responsibility for the implementation of the legislation is assigned to local authorities who are responsible for the identification of contaminated land and deciding whether any such land is required to be designated as a special site. For most sites, local authorities will also be responsible for establishing the appropriate person(s) to bear financial responsibility for any remediation required; deciding the nature of that remediation; and recording regulatory actions. A summary of the local authority's responsibilities is provided in Table 1at page 76 . This responsibility will be co-ordinated by the Pollution Team. For certain classes of sites, identified by the local authority as 'special sites', legislative powers are transferred to the Environment Agency (Refer to Section 8.1 for more information).

There are also requirements for the local authority to consult with external organisations. These include the Environment Agency (i.e. where controlled waters may be at risk of pollution or where a site is a potential candidate for designation as a special site), English Nature, English Heritage, Department for Environment, Food and Rural Affairs (DEFRA), Food Standards Agency (FSA), Public Health England (PHE) and the Health and Safety Executive (HSE).

If the council identifies land which it considers (if the land were to be determined as contaminated land) would be likely to meet one or more of the descriptions of a special site set out in the Contaminated Land (England) Regulations 2006 (as amended in 2012) the council will consult the Environment Agency and, subject to the Agency's advice and agreement, arrange for the Agency to carry out any intrusive inspection of the land on its

behalf. All the council's legislative powers will be transferred to the Environment Agency.

These duties can be summarised in the table below

Table 1 Key Statutory Duties on Local Authorities under Part 2A

- **Adopt and Implement this strategy.**
- **Consult various other parties.**
- **Identify contaminated special sites (for regulation by the Environment Agency).**
- **Prepare and serve notifications of contaminated land (which effectively starts the consultation process as to what remediation is necessary).**
- **Serve remediation notices where appropriate (remediation by voluntarily agreed action being preferred).**
- **Determine exclusion from, and apportionment of, liability for remediation and address cost recovery.**
- **Compile and maintain a public register.**
- **Provide key information to the Environment Agency, so it can produce a national report on the 'State of contaminated land.'**

2.2. Duty to Identify contaminated land

The duty to identify contaminated land is established in Section 78B of the Environmental Protection Act 1990 as follows:

78B (1) "Every local authority shall cause its area to be inspected from time to time for the purpose-

(a) of identifying contaminated land; and

(b) of enabling the authority to decide whether any such land is land which is required to be designated as a special site."

A statutory definition of contaminated land is also introduced for the first time in s78A (2), based on the likelihood of significant harm or the pollution of controlled waters, as follows:

78A (2) contaminated land is 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 controlled waters is being, or is likely to be, caused.

and, in determining whether any land appears to be such land, the local authority shall act in accordance with guidance issued by the secretary of state.

The assessment of contaminated land needs to take account of the statutory guidance and technical guidance that incorporates the principles of risk assessment. The risk assessment approach is to identify current unacceptable risks to health or to the environment including ecology and buildings. Significant harm includes unacceptable risk to human health, specified harm to protected ecological systems, controlled waters, substantial damage to or failure of buildings and specified damage to or loss of crops or livestock (Refer to Section 4, page 23 of this report for more information on the risk assessment methodology applied to identify contaminated land). Appendix B also provides a definition of significant harm as detailed in the statutory guidance (Defra, 2012).

2.3. Duty to Prepare a Strategy

Local authorities are required by the statutory guidance to take a strategic approach to the identification of contaminated land which:

- is rational, ordered and efficient;
- is proportionate to the potential seriousness of the risk and seeks to locate the most serious problems first;
- focuses on where contaminated land is most likely to be found;
- establishes an efficient framework for detailed inspection;
- involves consultation with the Environment Agency and other relevant bodies;
- is documented, adopted, published, implemented and periodically reviewed at least every 5 years.

The aims of the strategy must be specified and include objectives taking into account the local characteristics and their influence on the strategy, proposed time scales and resources, arrangements for consultation, managing information received, and a review and update procedure.

Local Authorities are also required to consider local circumstances and local factors, as demonstrated in Table 2 below.

Table 2 Local Factors to be Considered in the Strategy

- The distribution of specified receptors across the Borough (e.g. housing or ecological receptors etc.) and the extent to which receptors are likely to be exposed to a potential pollutant;
- The history, scale and nature of industrial activities;
- The nature and timing of past redevelopment;
- Current information on land contamination;
- Existing evidence of significant harm and pollution of controlled waters;
- Previous remediation carried out and any remediation that is expected to be carried out in the context of pending redevelopment;
- Related studies carried out by other authorities.

3. CHARACTERISTICS OF THE BOROUGH AND IMPLICATIONS FOR THE STRATEGY

3.1. Characteristics of the Borough

3.1.1. Location, Population and Size

The London Borough of Tower Hamlets is an inner city borough which shares boundaries with the City of London and the London Boroughs of Newham and Hackney. The east side of Tower Hamlets is bordered by the River Lea. The River Thames flows along the south of the borough separating it from the Royal Borough of Greenwich and the London Borough of Southwark.

Tower Hamlets is made up of places with distinct and unique characteristics, from the major international business centres of Canary Wharf and parts of the City Fringe, to residential areas with traditional East End character such as Bow and Stepney, historic Whitechapel, and vibrant Shoreditch. Alongside these places are major leisure attractions and landmarks such as Brick Lane, Spitalfields Market, the Tower of London and Victoria Park.

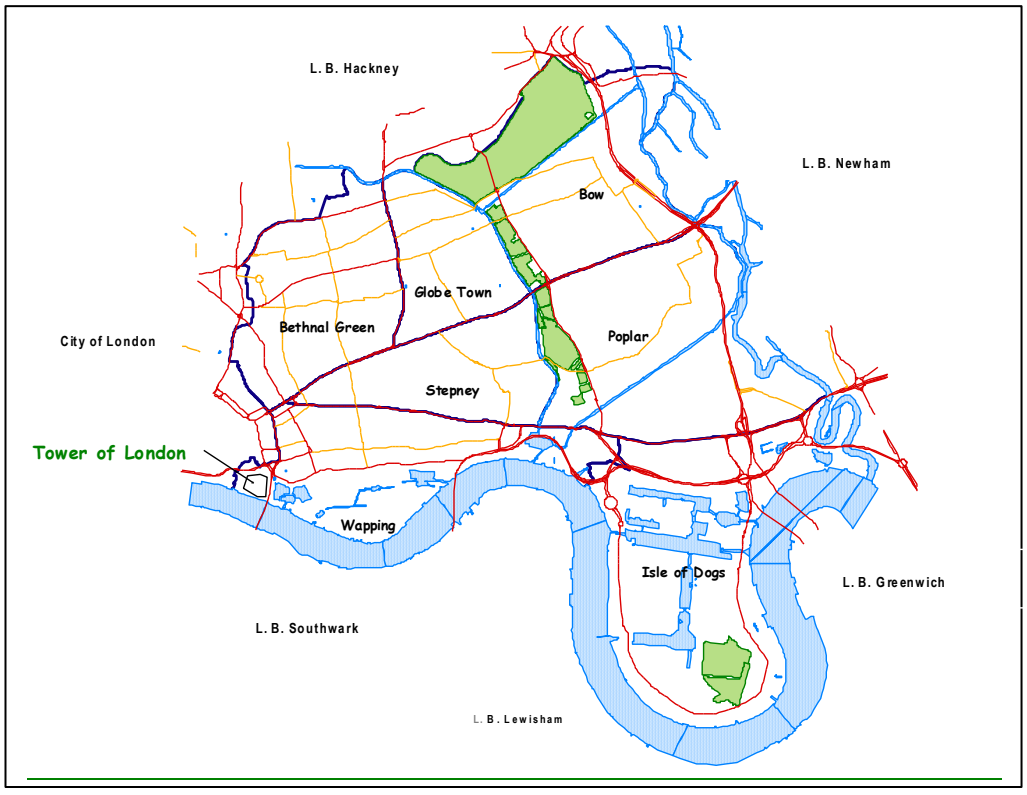


Figure 1 Geographical Location

The Borough is approximately 2150 hectares in size and, at the 2011 census had a population of 254,100 which represents a 29.6% increase on the 2001

Census results of 196,121. In 2016 the population has risen further to 296,300 Figure 2 presents the population distribution by wards from the 2011 Census (LBTH, 2012). Within Tower Hamlets, about 45% of the dwellings are local authority owned (34,538 dwellings) with a further 13% being owned by housing associations or other public bodies. In terms of percentage of land, approximately 18% of the land in Tower Hamlets is owned by the Council and approximately 2% by THCH (Tower Hamlets Community Housing) and HARCA (Registered Social Landlords) (LBTH, 2012).

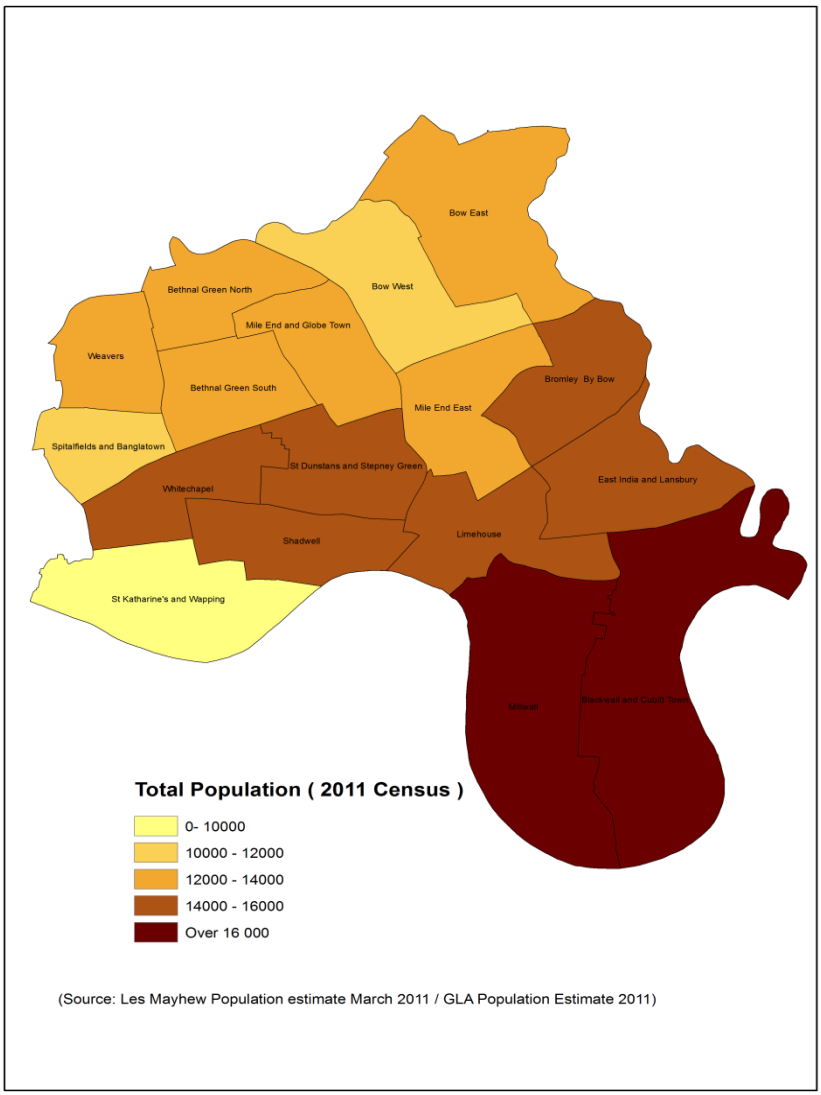


Figure 2 Population Distribution

Table 3 contains some (not indicative of all land uses) of the general current land use characteristics relevant to the Part 2A assessment within the borough.

Table 3 Land Use in Tower Hamlets

Land Use	% of land in Tower Hamlets
Residential	31
Allotments	0.11
Parks/open spaces	10.6
Schools	3.37
Commercial	8.55
Industrial	5.77

3.1.2. Modern History of Development

Tower Hamlets has undergone substantial change in the past decade, with billions of pounds from public and private investment being contributed to regeneration. The Isle of Dogs, which includes West India, Millwall and East India Docks, has become a prime commercial development area. Canary Wharf, one of the largest commercial developments in Europe, is at the very heart of the new Docklands and is the world's leading finance centre.

In 1981, The London Docklands Development Corporation (LDDC) was established with funding from the central government to regenerate the Docklands. In Tower Hamlets this included all of the Isle of Dogs and part of Wapping, (south of the Highway and East of the Tower of London- See Figure 3). Regeneration was secured by bringing land and buildings into use, encouraging industry and commerce, creating an attractive environment and assisting the provision of housing and social facilities to encourage people to live and work in the area. Major Roads were constructed along with the Docklands Light Railway (DLR) to improve the infrastructure of the area and encourage regeneration.

The LDDC was also made the Local Planning Authority for control of development within its area (See Figure 3). When the LDDC was disbanded in 1997 its planning control functions were returned to Tower Hamlets.

Tower Hamlets now has one of the most dynamic economies in the country. 11,440 local businesses provide approximately 251,000 jobs in the borough with the majority being located in the City Fringe/ Whitechapel and Canary Wharf/Isle of Dogs areas.

The borough's transport infrastructure will be boosted by the arrival of Crossrail in 2018.

The City Fringe area of Tower Hamlets, including Tech City, is emerging as one of London's most significant areas for economic growth, providing considerable opportunities for new and emerging sectors of the economy. The council's Whitechapel Vision Masterplan is driving forward regeneration in Whitechapel including new homes and job opportunities, public realm improvements and a new civic hub for Tower Hamlets.

The Isle of Dogs and South Poplar has been identified as an Opportunity Area by the Mayor of London in the London Plan to potentially accommodate a minimum of 10,000 new homes and 110,000 jobs.

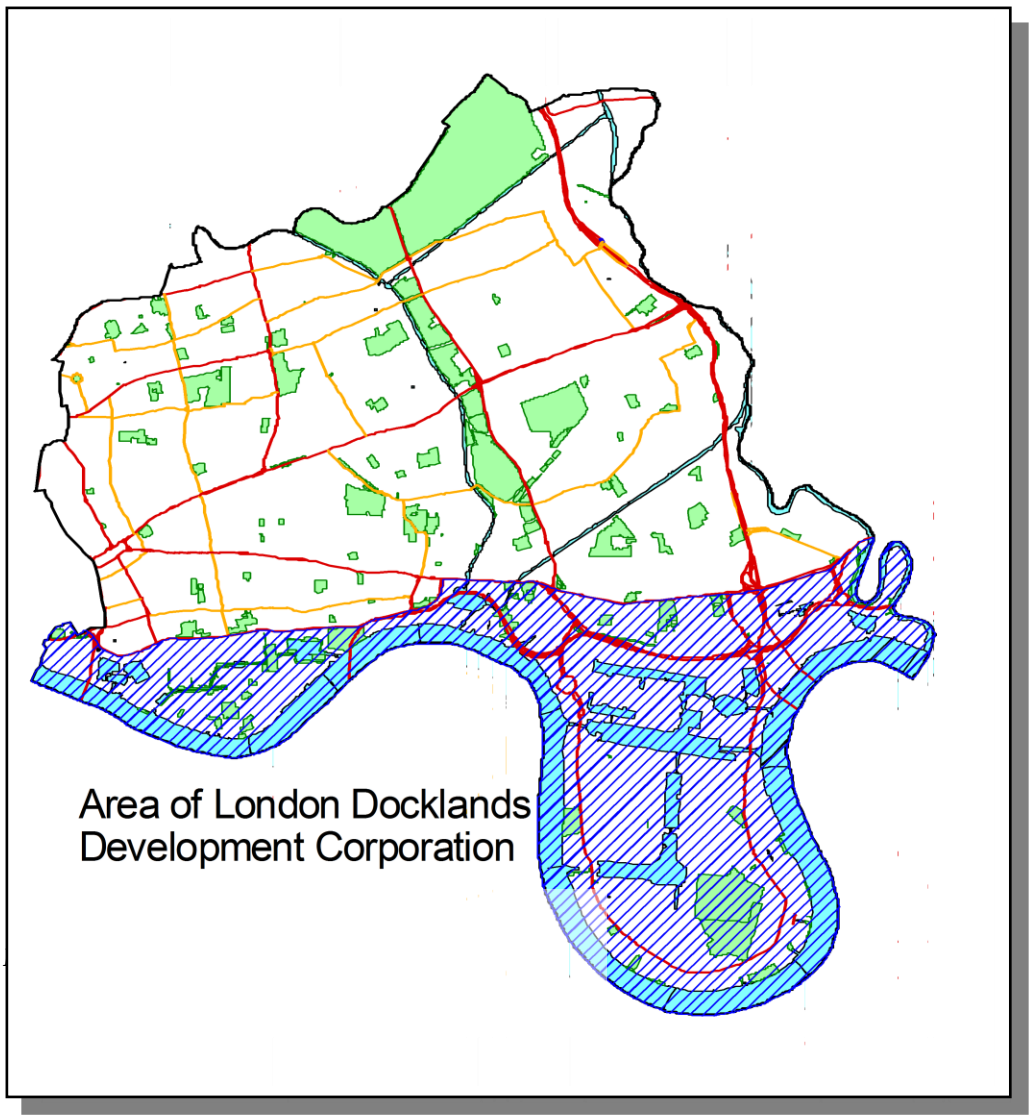
In Tower Hamlets, the Lower Lea Valley Opportunity Area comprises the areas of Hackney Wick/Fish Island, Bromley-by-Bow and Poplar Riverside Housing Zone which will use brownfield land as the basis of much of the redevelopment. The LLDC is the planning authority to determine planning applications within Hackney Wick/Fish Island and the Olympic Legacy Area.

In this area, the Olympic Legacy has been a catalyst attracting development opportunities and investment especially to promote affordable housing, jobs and social infrastructure for local communities in the area.

More recently, the Poplar Riverside Housing Zone is an initiative of the GLA to drive forward growth located on the redevelopment of former industrial land and existing social housing estates.

3.1.3. Historical Industrial Land Use

The historical land use in Tower Hamlets was largely rural until the 16th Century when the maritime industry began to grow and areas along the River and main road transport routes became built up with industries including breweries, smithies and roperies such as Ropemakers Fields. By the 18th Century, shipbuilding was one of the main industries to be carried out at Docks in Blackwall, Wapping and Ratcliff with more than a dozen shipbuilding yards in existence in 1860. Industries to support this grew up around these areas and included Ironworks that would have produced sheet and rod iron, anchors and mounting chains. In 1853 it was estimated that there were 8 Chemical Works, 6 Iron Works and 3 Ropemakers on the Bank of the Thames between Limehouse and Blackwall.



In 1994, a study of former industrial land in Tower Hamlets See Section 4.3.2 of this report) identified over 900 industrial sites. Many were located along the River Thames, particularly along the periphery of the Isle of Dogs. Other areas identified were the banks of the Limehouse Cut and Bow, particularly the area south of Hampton Wick, the historic centre of the British chemical industry. Table 4 below provides a summary of industry types found in this study.

Table 4 Summary of Former Industrial Land in Tower Hamlets (1994 study)

Industry Type	Number of Sites
Metal works	80
Roperies	12
Gas Works	13
Chemical Works	180
Engineering	91
Waste Sites	40

3.1.4 Current Planning Controls

The redevelopment of potentially contaminated historical industrial sites is undertaken through the planning regime. Where contamination is likely to affect the proposed end use of the development, planning permission will normally be granted subject to planning conditions. Usually, these conditions require the developer to carry out a desk study, walkover survey, intrusive investigation and risk assessment to determine the nature and extent of contamination within the ground. Any contamination identified is assessed against appropriate assessment criteria for the proposed land use scenario to assess whether remediation is required. A proposal for any required remedial works must then be submitted and approved by the council before work begins on site. This is carried out in accordance with the National Planning Policy Framework (NPPF) (DCLG, 2012).

The NPPF contains 12 core planning principles, including encouraging the re-use of existing resources, conversion of existing buildings and re-using land which has been previously developed ("brownfield" land). In relation to contaminated land, the NPPF states that:

i. *Where a site is affected by contamination, responsibility for securing a safe development rests with the developer and/or landowner*.
ii. *After remediation, as a minimum, land should not be capable of being determined as contaminated land under Part 2A of the Environmental Protection Act 1990*.
iii. *Adequate site investigation information, prepared by a competent person, must be presented*.

The thread running throughout the NPPF is that there should be sustainable development, which is viable and deliverable. Obligations and policy burdens should not threaten viability of development.

3.1.5 Other Regulatory Controls

The Environmental Damage (Prevention and Remediation) Regulations 2009 come into force in England on 1 March 2009. The Regulations implement EU Directive 2004/35/EC on environmental liability with regard to prevention and remedying of environmental damage.

Tower Hamlets is the enforcing authority for all *land damage* (contamination of land) from any economic activity that results in a significant risk of adverse effects on human health except where the land is a Site of ~Special Scientific Interest (SSSI). The Regulations only apply to damage which occurred after they came into force, and are only applicable to operators of economic activities. Therefore any *land damage* from contamination resulting from an economic activity from March 2009 onwards will be assessed and remediated if necessary under the Environmental Damage (Prevention and Remediation) Regulations.

The regulations are based on the *'polluter pays principle'* so those responsible for causing pollution are required to prevent and remedy environmental damage, rather than the taxpayer paying.

3.1.6 Protected Sites and Ecology

Tower Hamlets has two statutorily protected nature sites. These are Tower Hamlets Cemetery Park and Ackroyd Drive and Mudchute Park and Farm

which have been designated as Local Nature Reserves under Section 21 of the National Parks and Access to the Countryside Act 1949.

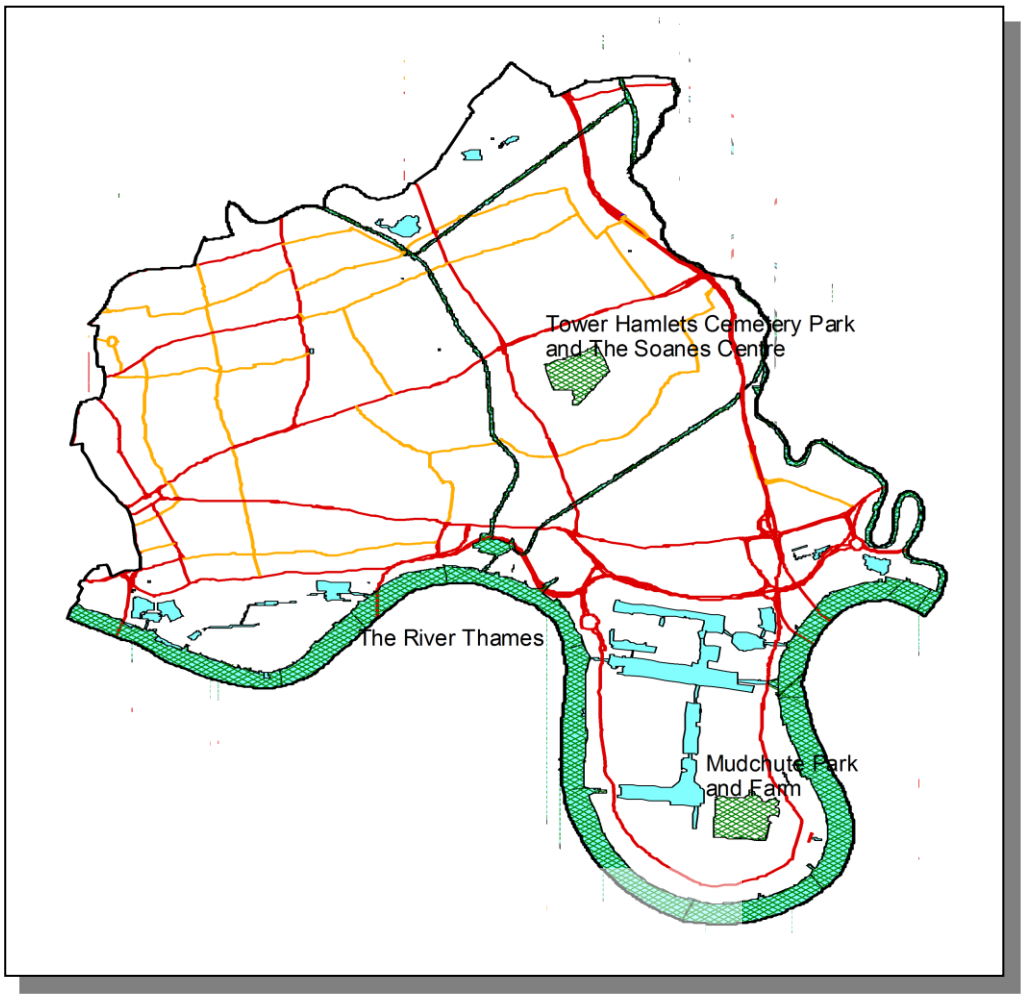


Figure 4 ***Sites of Metropolitan Importance***

Local Nature Reserves are generally sites that are managed to conserve nature, which may be of special interest locally and/or nationally. They also aim to encourage opportunities for study, research and enjoyment of nature. There are also ecological sites that have been protected in the council's Local Plan. For the purposes of this discussion, there are three categories of sites of nature conservation importance in the Local Plan:

a) Sites of Metropolitan Importance (Refer to Figure 4), contain the best example of London's habitats and rare species and are therefore the highest priorities for protection. In Tower Hamlets there are 5 sites including Mudchute Park and Farm, Tower Hamlets Cemetery and the major waterways – the Lea, the Lee Navigation and Canals;

b) Sites of Borough Importance (Refer to Figure 5) are important in a borough perspective and damage would mean a significant loss to the borough. There are approximately 19 sites in this category; and

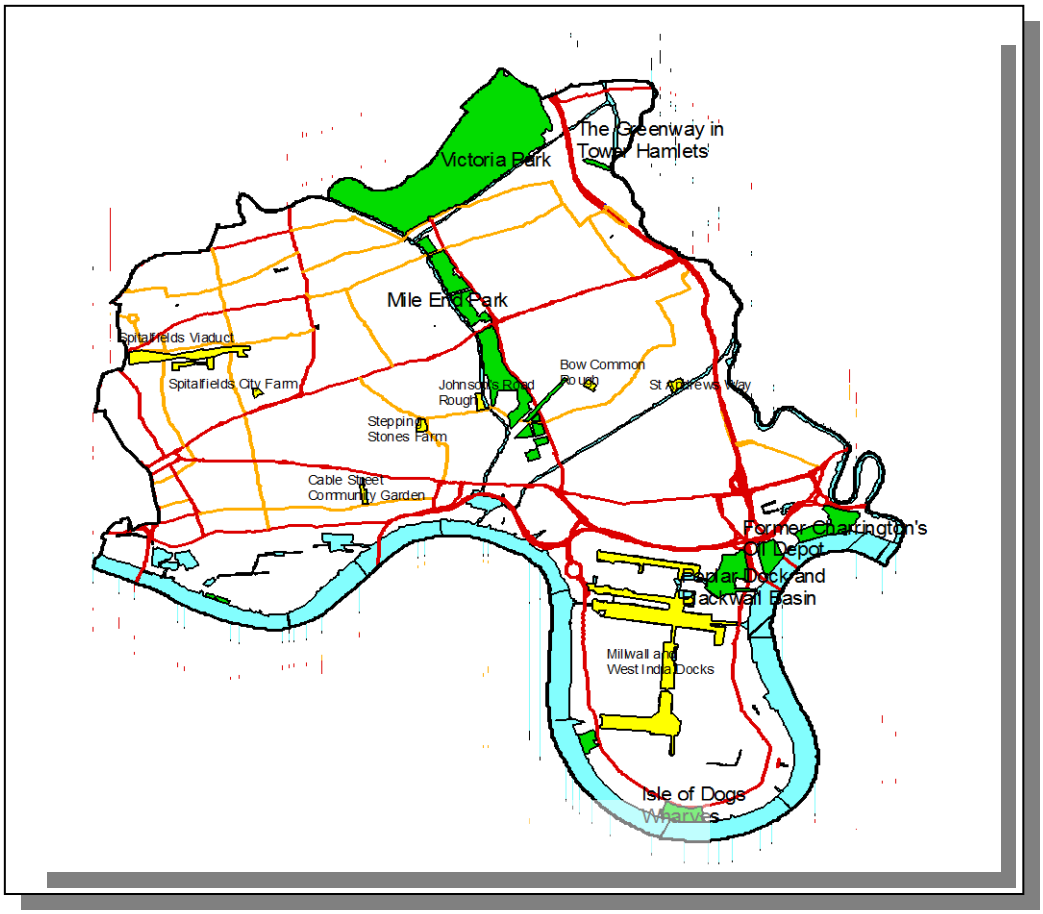


Figure 5 Sites of Borough Importance

c) Sites of Local Importance which are, or may potentially be of particular value to nearby residents or schools.

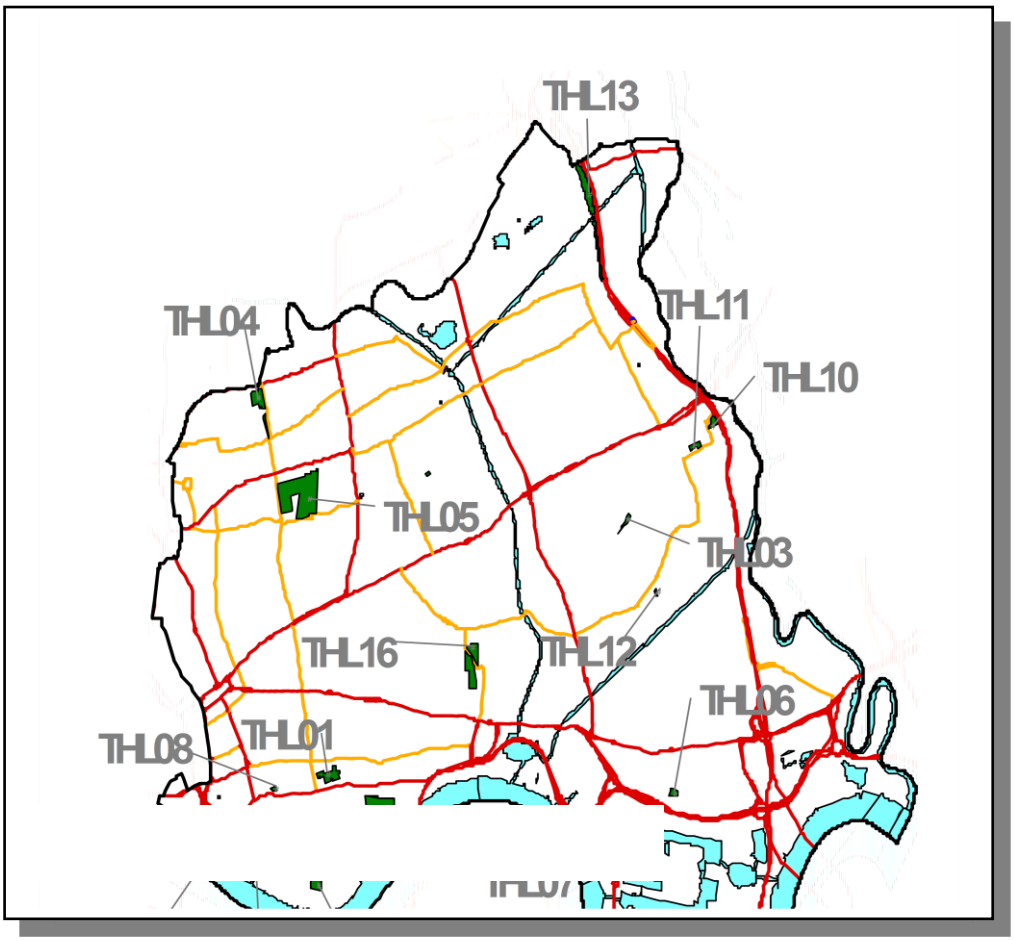


Figure 6 Sites of Local Importance

Table 5 Sites of Local Plan importance identified in Figure 6.

Number	Name	Number	Name
THL01	St George's in the East Church Gardens	THL09	Bancroft Road Nature Garden
THL02	Wapping Park	THL10	St Leonards Adventurous Playspace
THL03	Old railway at Fairfoot Road	THL11	Bruce Street Grassland
THL04	Ion Square Gardens	THL12	Perring Community Garden
THL05	Weavers Fields	THL13	Disused railway from Old Ford Road to Victoria Park
THL06	Stoneyard Lane	THL14	Hermitage Basin
THL07	Shadwell Basin	THL15	St Katherine's Dock
THL08	Wellclose Street Park	THL16	St Dunstan's Churchyard and nearby land

Within this strategy, the Local Plan designated sites are all called sites of 'local importance'.

There are approximately 40 conservation areas in Tower Hamlets, the largest of which is located around Victoria Park. Conservation areas are designated largely to protect and improve the Borough's built environment as well as open spaces and trees within those areas.

The following are historical sites that are of national importance and are statutorily protected by virtue of their inclusion on the Schedule of Ancient Monuments:

The Tower Of London,
Tower Hill West,
Section of London Wall running from Tower Hill Underground Station to Tower Hill,
Priory and Hospital of St. Mary Spital, Spitalfields.

The following standing structures are also on the schedule:

Bonner Hall Bridge, Regent's Canal,
Three Colts Bridge, Gunmaker's Lane,
Parnell Road Bridge[3].

This strategy aims to protect such designated sites, which includes ancient monuments, listed buildings, parks and gardens and conservation areas. It is also recognised that other sites, which are not designated, may also require protection. The council's conservation officer will be contacted to help identify such sites.

3.1.7 Local Geology

The Solid Geology (Refer to Figure 7) underlying Tower Hamlets consists of London Clay, which in some areas is in excess of 25 metres thick. Below the clay lies Chalk, which is a Principal Aquifer and supplies drinking water to the area. The clay is an aquitard (very low permeability) and therefore prevents contamination filtering from the overlying Secondary Aquifers. This is with the exception of the Isle of Dogs, which mainly consists of the Lambeth Group and a small area of Thanet Sands formations.

The superficial deposits (refer to Figure 8) are deposits, which have been formed by the River Thames and overlie the London Clay. These consist of alluvium, the youngest deposit, which covers the southern half of the borough; River Terrace Gravel called Taplow Gravel across the centre; and Hackney gravels in the northwest corner of the Borough. Up until the 18th Century the Isle of Dogs was marshland, which was frequently flooded. As a result, in some parts of the Isle of Dogs, deposits of Peat have formed.

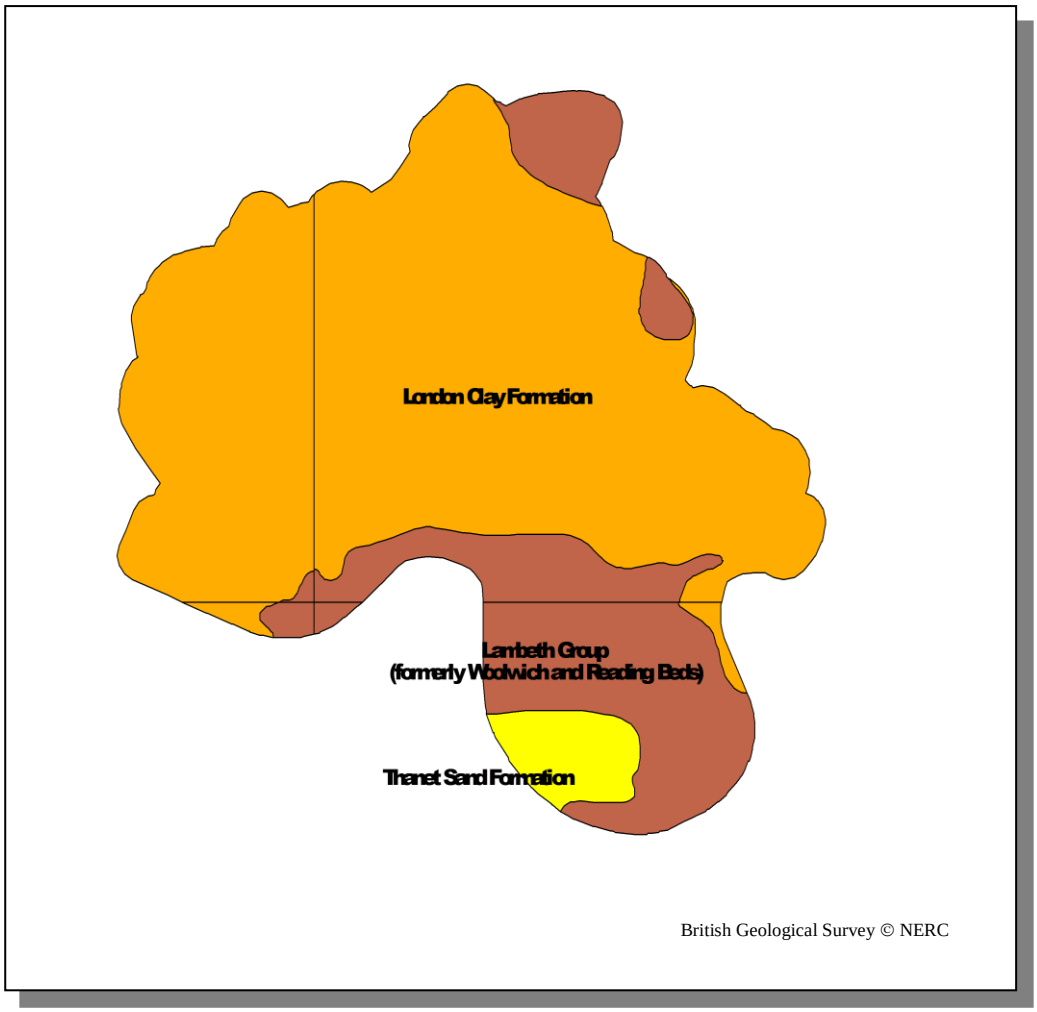


Figure 7 Local Geology

3.1.8 Local Hydrogeology

The groundwater source in Tower Hamlets has been designated by the Environment Agency as a Secondary Aquifer (River Terrace Gravels) of High Vulnerability. The 'Secondary' refers to the aquifer's variable permeability. This means it cannot easily transport contaminants. The High Vulnerability indicates that the aquifer can be easily polluted because the overlying soil layers are likely to be very permeable and polluted especially in urban areas. As a result mobile contaminants can migrate quickly through the superficial soils to contaminate the aquifer below.

It is also important to note that such aquifers can be important for local water supplies, abstractions and in supplying base flow to rivers and streams.

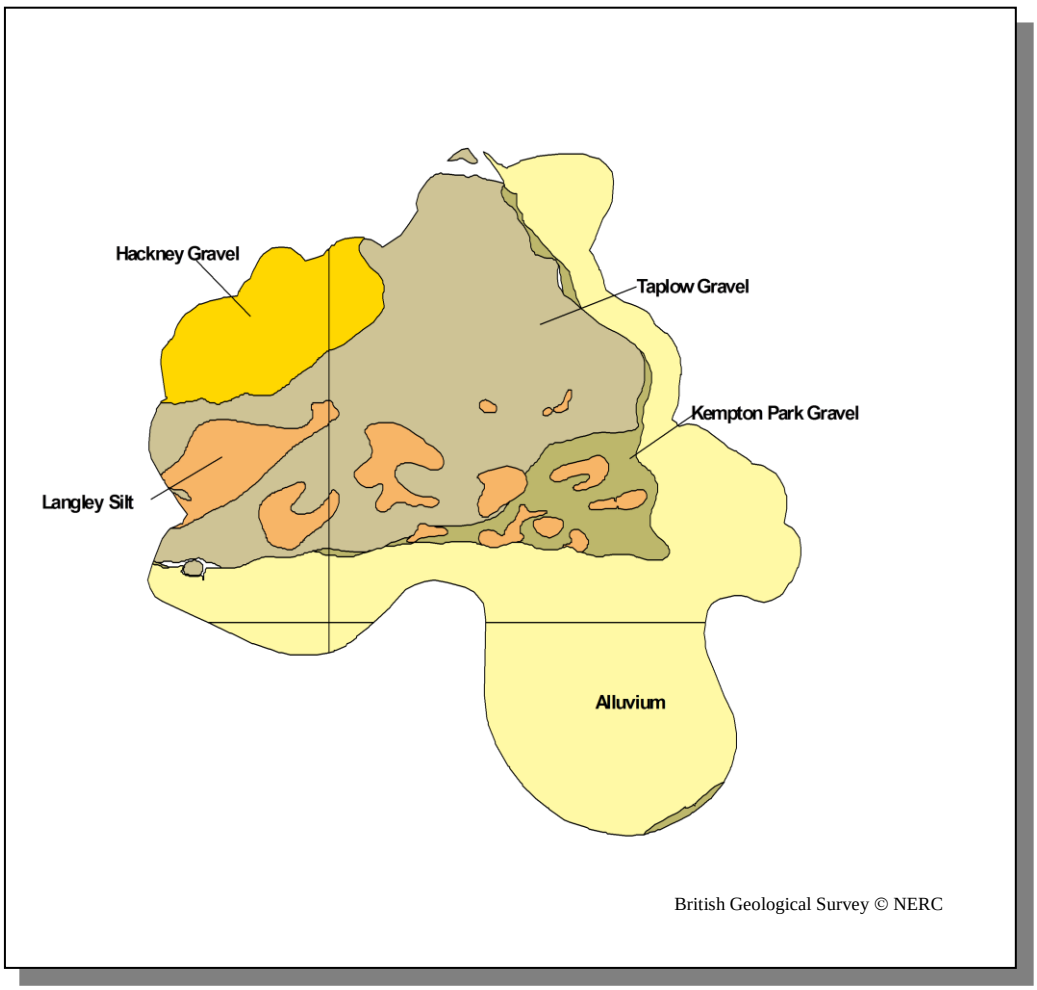


Figure 8 Superficial Geological Deposits

Fourteen water abstraction licenses have been issued in Tower Hamlets by the Environment Agency (EA). Eight of these allow abstraction from groundwater while the remainder abstract from the River Thames and the docks. Most abstractions are for industrial use. Abstraction points or boreholes require careful consideration, as they are possible pathways through which contamination can migrate to the underlying aquifer. One abstraction license has been issued to Thames Water on the border of Tower Hamlets and Newham for public water supply. The Environment Agency has designated source protection zones around this abstraction point for the protection of the groundwater quality.

3.1.9 Local Hydrology

Surface water bodies include the River Thames, a number of Docks in Wapping and the Isle of Dogs along with a number of canals, mainly the Regent's and Grand Union Canal and Hertford Canal (Refer to Figure 9). Rivers and surface water features are potential receptors for contamination and may also act as a pathway between contaminant sources and other receptors.

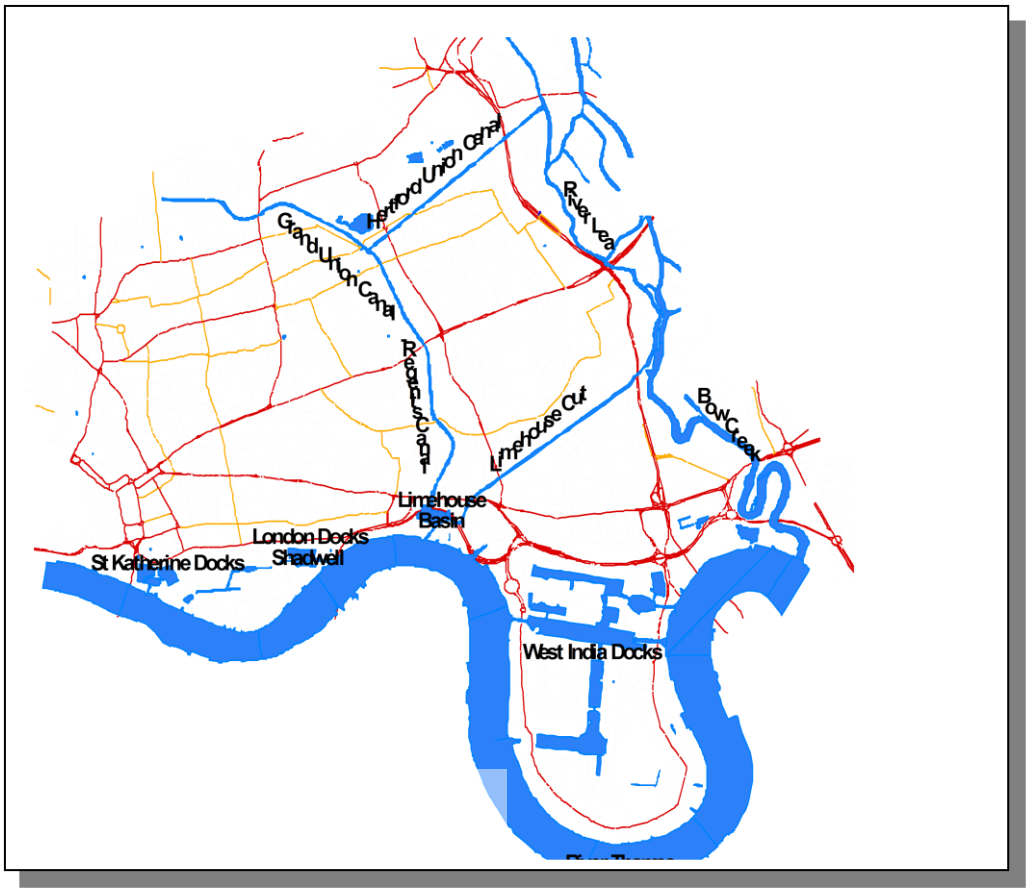


Figure 9 Local Hydrology

3.2. Implications for the Strategy

Tower Hamlets is comprised of a mixture of and residential redevelopment on the Isle of Dogs and also older residential areas in the north of the Borough. The Council has adopted the ArcMap Geographic Information System (GIS to identify and analyse areas of contaminated land across the borough. The GIS works in conjunction with the GeoEnviron contaminated land database, in which site information is recorded.

Land in Tower Hamlets contaminated after March 2009 will be dealt with using its enforcing powers under the Environmental Damage (Prevention and Remediation) Regulations 2009.

4. APPROACH TO IDENTIFYING CONTAMINATED LAND

4.1. The Risk Assessment Approach

The Part 2A process of identifying and assessing land contamination uses a risk based approach throughout each stage. The risk is considered in relation to the *current use* of the land. The DEFRA statutory guidance defines 'risk' as:

a) the likelihood that harm, or pollution of water will occur as a result of contaminants in, on or under the land; and
b) the scale and seriousness of such harm or pollution if it did occur

For a risk to be relevant and warrant further assessment under Part 2A there needs to be one or more contaminant-**pathway-receptor** linkages – *'contaminant linkage'* by which a receptor might be affected by contaminants in, on or under the land under investigation. This means that, for a risk to exist, there must be contaminant (s) present in, on or under the land in a form and quantity that poses a hazard, and also one or more pathways by which they might significantly harm people, the environment or property or controlled waters.

The statutory guidance defines:

(a) A '**contaminant**' as a substance which is in, on or under the land which has the potential to cause significant harm to a relevant receptor or to cause significant pollution to controlled waters.
(b) A '**receptor**' as something that could be adversely affected by a contaminant, for example a person, an organism, an ecosystem, property or controlled waters.
(c) A '**pathway**' as a route by which a receptor is or might be affected by a contaminant.

Contaminant Linkage(s): for a risk to exist it must be significantt for land to be designated as contaminated land.

A pollutant linkage must exist in relation to a specific site before the land can be considered to be potentially contaminated land under Part 2A. This must be followed by a risk assessment to establish whether a "*significant possibility of significant harm"* (SPOSH) exists before a land may be determined as contaminated land.

The understanding of the risks is developed through a staged approach involving a preliminary risk assessment informed by desk-based study; a site visit and walkover; a generic quantitative risk assessment; and various stages of more detailed quantitative risk assessment to create a *"conceptual site model".*

The process should normally continue until it is possible for the local authority to decide:
(a) that there is insufficient evidence that the land might be contaminated land to justify further inspection and assessment; and/or
(b) whether or not the land is contaminated land.

The council's risk assessment approach starts with a site prioritisation exercise. The approach uses a decision support tool or risk model (See Section 4.3.6.) which assigns scores (risk ratings) to various sites based on suspected hazard from historical industrial uses on the land and the susceptibility of receptors currently using the land. This involves a series of stages which will act as filtering processes to allow contaminated land to be identified. The site prioritisation exercise will also help to assess, prioritise and manage the allocation of resources in the most cost effective manner.

The council's approach will also ensure that the highest risk sites can be dealt with first and this is consistent with the broad objectives of the Part 2A regime.

In line with statutory guidance receptor types have been separated into four categories: Human, Groundwater, Surface Water and Ecology, they have been risk ranked and are treated separately. This has allowed us to identify sites where significant harm with respect to human health is likely to be occurring and to give these sites priority.

4.2 The Three-Stage Conceptual Model

Table 6 The Three-Stage Conceptual Model for Risk Assessment

- *Stage 1*: Identify potential pollutant linkages.
- *Stage 2*: Establish actual pollutant linkage and
- *Stage 3*: Establish significant pollutant linkages.

4.3. Stage 1: Identify Potential Pollutant Linkages

Stage 1 involves identifying 'sources' and 'receptors' of potential contamination.

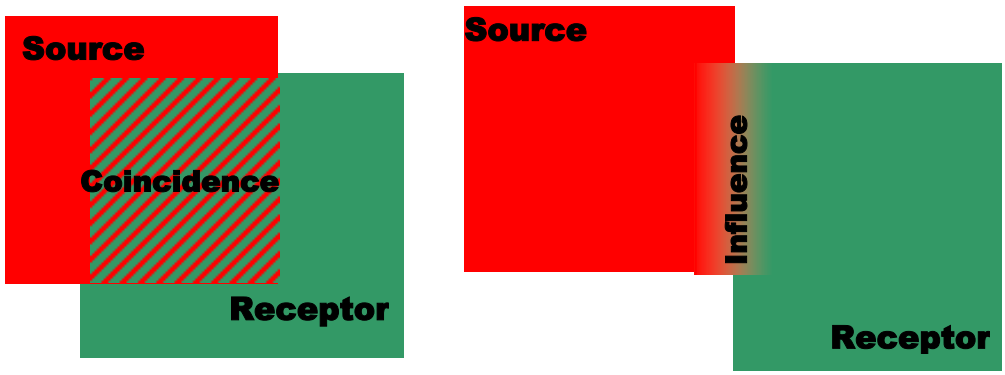
Furthermore, a pathway which is a spatial relationship (correlation) between source and the receptor must also be identified in order for a pollutant linkage to be established. It is, however, only in the subsequent Stages 2 and 3 that the actual presence of a pollutant linkage can be established.

In LBTH the Stage 1 process was undertaken by combining sources of existing information held by the council and obtained from others such as the Environment Agency, British Geological Survey and Ordnance Survey which were obtained for this purpose.

4.4. The Use of a Geographical Information System (GIS)

GIS has been a key tool in the implementation of the various stages of this strategy. The extents of sources and receptors can be shown on a map, and the spatial relationship between the features examined. The relationship may be coincidence or influence, as shown in Figure 10 below:

Figure 10 Spatial Relationship between Source and Receptor



Coincidence – where source and receptor occupy the same space

Influence – where there is an assumed or known zone of influence affecting the source and receptor

The ArcMap GIS has been used to implement Stage 1 identification of potentially contaminated sites.

The key datasets required for the Stage 1 identification process were:

- Sources – the location of sites, which may potentially contain elevated concentrations of contaminants of concern.
- Receptors – the location of receptors as defined by the statutory guidance.

4.5 Historical Industrial Land Use (Source) Dataset

The sources dataset represents areas of past or present industrial activity that may, by nature of the industrial process, have caused contamination. The primary datasets used to establish the location and type of historical and present land use are listed in Table 7 below.

Table 7 Origin and Format of Source Datasets

Sources Dataset	Stage of use	Origin	Format
LBTH Historical Industrial Sites	Stage 1 Pass 1	LBTH	Digital
LBTH Landfill sites	Stage 1 Pass 1	LBTH	Digital
Historical land use	Stage 1 Pass 1	Landmark	Digital
EA Landfill sites	Stage 1 Pass 2	EA	Digital
EA Waste Sites	Stage 1 Pass 2	EA	Digital

The council undertook a study into the legacy of industrial development within the Borough. This was reported in March 1994 entitled "Dealing with the Legacy of Industrial Development". This survey does not identify sites that are explicitly contaminated or polluted, but rather shows the location of land used for industrial purposes, where the processes used have had the potential to cause contamination. This involved reviewing historical maps held by the council and also other records such as those held by the former London Docklands Development Corporation and trade directories.

4.6 Receptor Datasets

The receptor datasets represent areas occupied by human, surface water, groundwater or ecological receptors. Like the source dataset, the human receptor dataset was compiled from a number of different primary data such as Ordnance Survey mapping, aerial photography and a three-day walk around the borough. The aim was to identify large areas of similar current land use that could then be digitised on the GIS. The controlled water dataset consists of rivers, surface water features and groundwater aquifers, which exist in digital form from a number of third parties including the Environment Agency. The ecological dataset represents areas designated for nature conservation. These primary datasets are listed below in Table 8 showing the relevant stage of use.

Include OS MasterMap in GIS Layers this identifies residential Council Schools layer

Table 8 Origin and format of receptor datasets

Receptor Dataset	Stage of use	Origin	Format
Human receptors			
OS Topographic mapping	Stage 1 Pass 1	LBTH	Digital
LBTH UDP zones	Stage 1 Pass 1	LBTH	Digital
LBTH Open space	Stage 1 Pass 1	LBTH	Digital
Cities Revealed Air photo 1998	Stage 1 Pass 1	LBTH	Digital
LBTH Estate plans	Stage 1 Pass 2	LBTH	Digital
Controlled waters			
Aquifers	Stage 1 Pass 1	BGS	Digital
Surface water	Stage 1 Pass 1	BGS	Digital
Boreholes	Stage 1 Pass 1	BGS	Digital
Groundwater Vulnerability	Stage 1 Pass 1	BGS	Digital
Drift Geology	Stage 2	BGS	Digital
Surface Geology	Stage 2	BGS	Digital
Source Protection Zones	Stage 2	EA	Digital
Water Abstraction Points	Stage 2	BGS	Digital
Ecological receptors			
SSSI/NMR/NNR	Stage 1 Pass 1	English Nature	Digital
Site of Nature Conservation	Stage 1 Pass 1	LBTH	Digital

4.7 Classification of the Source/Receptor Datasets

The historical data from Landmark and 'The Interim Report on the Survey into Past Industrial Activity' has been analysed and catalogued into potentially contaminative uses based on the classifications set out by the Department of the Environment in their 1st Consultation Paper (May 1991) on the former proposal for Section 143 Registers (supplemented by additional categories as appropriate). Where no classification is possible (e.g. unidentified works) then this has been identified separately as 'unknown works' or similar.

The list of contaminative uses has been divided into four hazard classes and given scores from 1 to 4 based on the contaminative potential. These hazard categories were devised by W.S. Atkins and are based on a group consensus, which consisted of senior contaminated land professionals.

The receptor dataset was divided into four components: human, surface waters, groundwater, and ecological. This enables the analysis of each to be undertaken independently and allowed risks of harm to human health to be prioritised in accordance with the statutory guidance. Properties, in the form of crops/livestock/animals and in the form of buildings, are also considered as receptors in the statutory guidance. These receptors were not considered at this stage as it was thought that any significant adverse effects would have become evident by now. The human health receptor datasets have been broken down into further categories including allotments, houses with gardens, flats complex, flats with gardens, open ground, parks, commercial etc.

4.8 Building and Applying the Risk Model

A GIS model was constructed and assigned numerical scores, 1 to 4, to sources depending on their hazard and, similarly, scores, 1 to 4, were assigned to receptors based on their susceptibility. Sources (industrial sites) have each been given a score according to their likely hazard. For example a gas works site is allocated the highest score, 4, because it is likely to contain high concentrations of toxic contaminants. A receptor such as a house with garden is assigned the highest susceptibility score because there is a greater chance of people coming into direct contact with contamination in the soil by gardening, for example. On the other hand, car parks have been allocated a score of 1 because people cannot come into direct contact with any contaminated soil, as it will be contained beneath a tarmac or concrete surface.

The model was constructed for each receptor type (human health, surface waters, groundwater and ecology) and gave an indication of the probability of a pollutant linkage being present, i.e. where there is an overlap between a source, (i.e. a former industrial site), and a receptor, (i.e. housing development). For example, a high source hazard score combined with high receptor susceptibility score equates to the highest likelihood of the existence of a significant pollutant linkage. This is illustrated by the risk matrix in Section 4.3.6 below. The values in the coloured matrix cells were the final risk scores allocated to each site that is likely to have a pollutant linkage present, i.e. both a receptor and a source. (Appendix A contains a list of the risk classifications for the various industrial land uses and receptor classes).

The risk model is a method by which sites are prioritised for further detailed inspection. It is an indication that the site may contain elevated contaminant concentrations, which could be causing harm to a receptor. Stage 2 and Stage 3 investigations will allow a determination of the presence of contaminants which are causing or are likely to cause significant harm to human health and/or significant pollution of controlled waters. Land cannot be designated as contaminated land following the completion of Stage 1 assessment.

4.9 Matrix of Likelihood of Pollutant Linkage Being Present

Table 9 Risk Score Matrix

Risk Scores		***Receptor susceptibility***			
		4 (high)	3	2	1 (low)
Source Hazard	4 (high)	**7**	**6**	**5**	**4**
	3	**6**	**5**	**4**	**3**
	2	**5**	**4**	**3**	**2**
	1(low)	**4**	**3**	**2**	**1**

The model was then applied across the area of the Council using a geo spatial tool (ArcGIS) to classify each source and receptor according to the appropriate risk class based on spatial coincidence (i.e. where there is an overlap or influence between a source and a receptor). This has resulted in each site being allocated a 'risk score', which reflects the likelihood of existence of a significant pollutant linkage. Sites were selected for stage 2 assessment in order of their highest maximum risk score and highest intercept score.

4.10- Revision of the Risk Prioritisation Exercise- GeoEnviron/ArcGIS

The Environmental Health and Trading Standards Service have obtained a database management system called GeoEnviron to revise the earlier site prioritisation list which was generated by the Atkins GIS based model.

ArcGIS, together with GeoEnviron will allow new data (such as from development control on site remediation and change of use) to be incorporated into the site risk prioritisation exercise.

4.11. Stage 2: Identify Actual Pollutant Linkages

Where sites are found to have a potential pollutant linkage these progress on to Stage 2 which involves a desk-based study and a walkover survey to validate the information and risk classification identified during Stage 1.

The aim of the Stage 2 process is to:

a) Determine the existence of actual pollutant linkage.

b) Determine whether the pollutant linkage could either:
   i. Result in significant harm to the receptor or present a significant possibility of significant harm to the receptor; or
   ii. Result in the significant pollution of controlled waters, or are likely to result in such significant pollution.

At each stage of the process, the issue is whether or not there is sufficient evidence to progress the assessment of the site into the next tier within this Strategy.

It is useful to view the Stage 2 process at three levels:

Stage 2A: This involves a walkover survey that serves to validate the basic data and interpretation that has come from Stage 1. If it is concluded that there may be a pollutant linkage, the site will be progressed to Stage 2B for further consideration.

Stage 2B: A formal desk study is carried out which involves consultation with external bodies such as the Environment Agency and British Geological Society. The objective of Stage 2B process is to consider whether there is sufficient evidence for the identified potential pollutant linkages at Stage 2A to warrant further assessment at Stage 3 of this strategy.

Stage 2C- This involves consultation with other council departments e.g. Planning . Before sites are passed onto Stage 3, it is important to ensure that all available information has been collected, particularly on the actual presence or absence of contamination and/or remediation. The owners and occupiers of the site, the developer who built the development and any

identified appropriate persons will also be contacted and asked whether they hold any further information, and will be advised that the next proposed action will be to carry out an intrusive investigation. However, this will not be carried out if information presented, as a result of the consultation, confirms that the site is unlikely to be contaminated land.

The Stage 2 inspection of sites began in 2001. As the Stage 1 and 2 work progressed, it became apparent that large volumes of information would be collected and that the use of GIS alone for the storage of data collected would be unsuitable. GeoEnviron, a database that links to ArcView GIS, was purchased to effectively store and manage this data. As more data is added to the system, for example, on sites remediated through the Development Control system, it is intended to re-run the risk prioritisation of sites periodically.

Stage 2 will result in the development of a conceptual model for each site, which will outline all possible potential pollutant linkages. Sites will then be reprioritised for Stage 3 inspection.

4.12. Stage 3: Identify Significant Pollutant Linkage

This stage establishes whether there is a significant pollutant linkage present. This may require an intrusive investigation (i.e. sampling of soil, groundwater and/or ground gas) particularly if there are no previous ground investigation reports available.

The investigations will be designed on a site-specific basis taking account of all relevant information of the site including the potential for contamination or actual presence of elevated concentrations of contaminants from the preceding stages of the assessment.

Statutory powers of entry can be used (Environment Act 1995) if needed to gain access into properties where the council is of the opinion that there is a high likelihood of existence of imminent risk to health and access is denied. The same powers of entry will be granted for the Environment Agency for intrusive investigative works on Special Sites where they are the enforcing authority.

4.13 Risk Assessment to Identify Significant Pollutant Linkage

The process of risk assessment involves understanding the risks presented by land, and the associated uncertainties. The understanding of the risks is

developed through a staged approach to risk assessment and the process should normally continue until it is possible for the council to decide:

(a) that there is insufficient evidence that the land might be contaminated land to justify further inspection and assessment; and/or

(b) whether or not the land is contaminated land.

In all cases the council will carry out intrusive investigations by commissioning a suitably experienced and independent consultant to carry out the investigation.

Until the site has been determined as contaminated land the council will pay for all such investigations and, where possible, will apply for Government funding.

4.14. Summary of Stages 1 to 3

In summary, a conceptual model as part of risk assessment has been developed involving a three-stage identification process using GIS and a custom database (GeoEnviron) to manage the spatial data. This addresses the identification sequence of potential pollutant linkage, actual pollutant linkage and significant pollutant linkage.

Figure 11 below summarises the staged approach adopted by the council in the site prioritisation exercise.

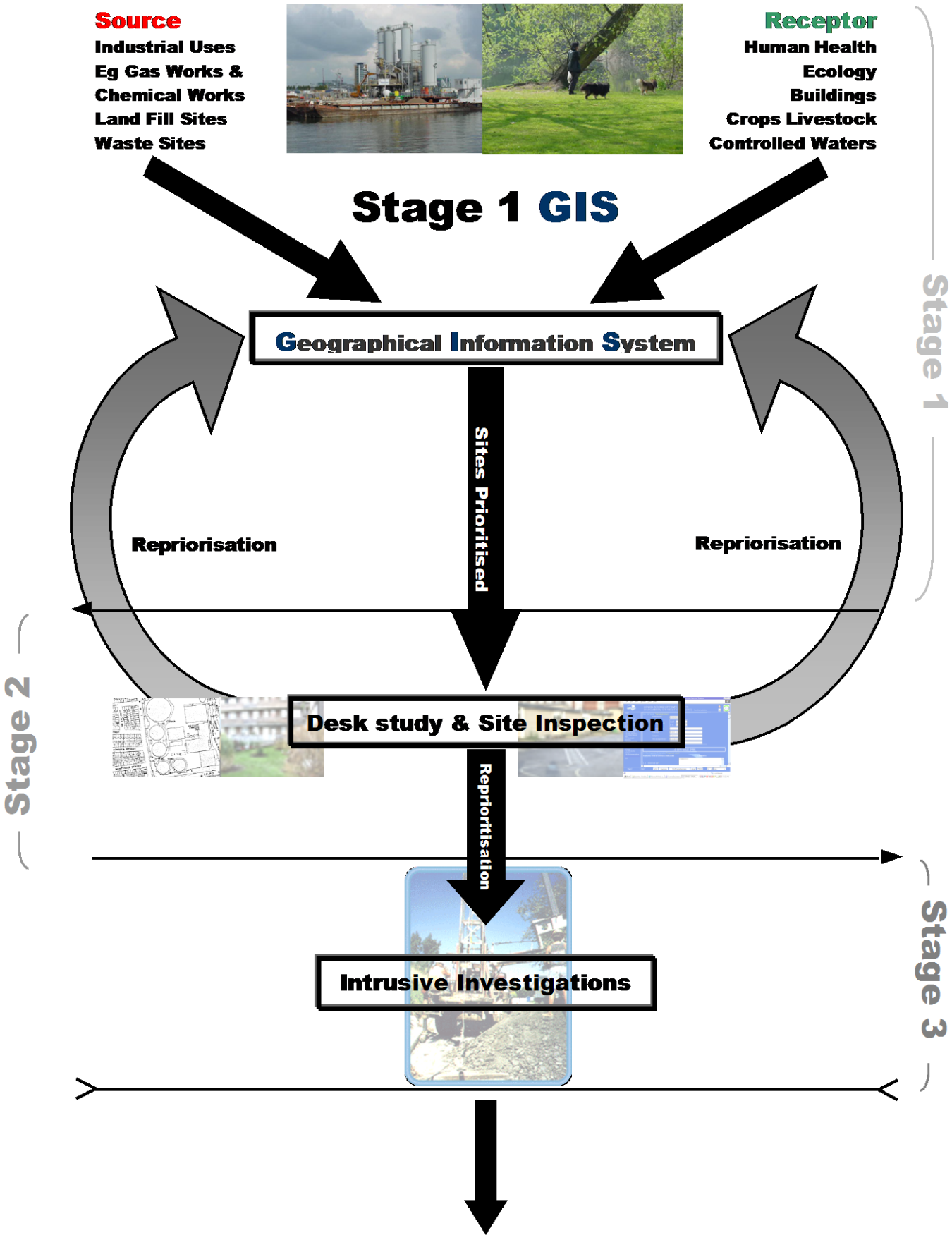


Figure 11 *Summary of the Stages of Identifying contaminated land*

5 DETERMINATION OF CONTAMINATED LAND

The council has the sole responsibility for determining whether any land within its area appears to be contaminated land. This statutory responsibility cannot be delegated (except in accordance with Section 101 of the Local Government Act 1972. However, in making such decisions the council will rely on information or advice provided by other bodies such as the Environment Agency, or a suitably qualified experienced practitioner appointed for that purpose.

The council will consider the following four possible grounds for the determination of land as contaminated land (with regard to non-radioactive contamination) (Defra, 2012):
(a) Significant harm is being caused to a human or relevant non-human, receptor.
(b) There is a significant possibility of significant harm being caused to a human, or relevant non-human, receptor.
(c) Significant pollution of controlled waters is being caused.
(d) There is a significant possibility of significant pollution of controlled waters being caused

Before making any determination, the council would have identified one or more significant contaminant linkage(s), and carried out a robust, appropriate, scientific and technical assessment of all the relevant and available evidence. If at any stage of the assessment the council considers that conditions for considering land to be contaminated land do not exist, it would not determine that the land is contaminated land.

Before making a determination, the council will inform the owners and occupiers of the land and any other person who appears to the authority to be liable to pay for remediation of its intention to determine the land. This is to give such persons time to make representations (for example to seek clarification of the grounds for determination, or to propose a solution that might avoid the need for formal determination) taking into account: the broad aims of Part 2A regime; the urgency of the situation; any need to avoid unwarranted delay; and any other factor that the council considers to be appropriate.

6 TIMESCALES

The statutory guidance required local authorities to prepare, formally adopt and publish a strategy to identify contaminated land within 15 months of the implementation of the Contaminated Land Regulations (i.e. by July 2001). This section outlines all the actions (completed and yet to be completed) which fulfils the council's statutory obligation under the legislation.

Table 12 Timescale for the Implementation of the LBTH CL Strategy

Year	Activity	Status	Responsibility
2001-02	Publish and adopt strategy	Completed	Contaminated Land Officer
2004-2005	Review strategy	Completed	Contaminated Land Officer
2012-ongoing 2012- 2018	Carry out Stage 3 assessments for highest priority sites to find significant pollutant linkages Issue notifications of contaminated land and remediation notices as necessary. Use capital funding as necessary to support the remediation as necessary of publically owned land	Work in Progress	Contaminated Land Officer / Contaminated Land – Technical Officer
2017	Review Strategy	Completed	Contaminated Land Officer
2018-2020	Rerun risk model after completion of above stage 3 assessments. Carry out Stage 2 assessments sites and carry out selective Stage 3 investigations.	Commence in 2018	Contaminated Land Officer
2023	Refresh Strategy	Commence in 2022	Contaminated Land Officer

7. LIAISON WITH OWNERS AND OCCUPIERS OF LAND

The adopted approach to identifying contaminated land within this strategy means that the council, or its consultants, will be required to visit and carry out a detailed inspection for only a small proportion of the land within the borough. This is land where the earlier stages of assessment suggest the possibility of the existence of pollutant linkages which could render the land as being contaminated land. The detailed investigations will be prioritised according to the risk of exposure to potential contaminants by residents and will include a visit to a particular area, and sampling of soil, groundwater and/or ground gas at a designated site.

The reasons why the council may need to liaise with owners and occupiers of land are as follows:

- to carry out a walkover survey. This will allow a check of current receptors and, in some cases, may be sufficient for the council to decide whether or not further assessment is required;
- to request relevant information that the owner or occupier may hold. This could include historical information or previous studies (desk studies or intrusive investigations) and its availability may avoid the need to undertake independent intrusive investigations. Alternatively, the owner may offer to provide information on the condition of the land within a reasonable and specified timescale;
- to agree access and timing for the council or its consultants to carry out an intrusive investigation or take samples where considered necessary. In some circumstances an authorised person can ask other people questions, which they are obliged to answer, and make copies of written or electronic records;
- In response to enquiries from interested parties.

In each case, the purpose of liaising with owners/occupiers will be to assist the council in obtaining sufficient information to make a determination on whether land appears to the council to be contaminated land. If necessary, Section 108 of the Environment Act 1995 gives the council the power to authorise a person to exercise specific powers of entry.

The Contaminated Land Officer, or their delegate, will also discuss with the owner/occupier the reasons for carrying out the intrusive investigation and

communicate risk in accordance with the "Contaminated Land Risk Assessment Communication Strategy".

The council will also liaise with the owner(s) and occupier(s) of land in the following circumstances:

- where information has been received by business, voluntary organisations or members of the public on the possibility that the particular land might be contaminated land and the council considers that further investigations are warranted. How this information is to be dealt with and over what probable timescale will be agreed with the owner/occupier;
- where findings of the assessment show that there exists unacceptable risk, the council will inform the owners and occupiers of the land and any other person who appears to be liable to pay for remediation before making a determination of any land as contaminated land;
- where the owner or occupier is identified as an appropriate person, a remediation notice will be issued, specifying the most appropriate method of remediation selected by the council and a reasonable timescale for the completion of the required work. The issues of exclusion from liability apportionment are complex and are addressed in the Hardship and Cost Recovery Policy which is included as an addendum to this Strategy;
- where contaminated land has been determined, a written record of the determination will be provided to the landowner and occupier, providing a justification for the determination, including details on all the available site investigation reports and other assessments in accordance with the statutory guidance. Notice will also be given to each person who appears to be an appropriate person to bear responsibility for any remediation required in accordance with the tests for exclusion and apportionment of liability in the statutory guidance.

The general approach will be to seek to reach voluntary agreement in preference to serving a remediation notice. However, where negotiations are not successful and warning letters have not resulted in agreement, the council will issue the appropriate remediation notices, in accordance with its statutory duty, taking account of statutory guidance on liability apportionment and cost recovery issues. If the land is not considered contaminated using the legal definition, the person responsible for causing the contamination or the land owner could be responsible for dealing with the contamination.

8. CONSULTATION WITH OTHER AGENCIES

8.1. Environment Agency

A copy of this strategy and any subsequent revisions will be provided to the Environment Agency. Details of sites with a risk ranking and copies of site investigation reports and risk assessments will be sent to the Environment Agency. Notifications of the identification of contaminated land and remediation notices will also be provided to the Environment Agency.

Tower Hamlets will take account of any guidance and specific site information that may be issued by the Environment Agency in particular, the Environment Agency will be consulted for specific site information if potentially contaminated land, is likely to be so classified by virtue of pollution of controlled waters or is likely to be a *Special Site*. (See Appendix C for the definition of Special Sites).

The Environment Agency has provided specific information which has been included in the contaminated land identification process. This includes:

- information on groundwater vulnerability, source zone protection maps;
- information on surface water quality, abstraction licences and specific pollution incidents;
- information on location of closed landfills and currently licensed waste management facilities; and,
- details of the types of site that, if designated as contaminated land, would be categorised as Special Sites (including current and historic IPPC authorised sites).

As discussed earlier in Section 4, the data has been produced in digital format and incorporated into the GIS model (eg. groundwater vulnerability). Some of this data was also examined during the desk studies (eg. specific pollution incidents).

Information will also be provided to the Environment Agency to assist them in compiling a report on the state of contaminated land if required. The information could include this Strategy and information on all Tower Hamlets sites with a risk ranking and those sites designated as contaminated land. Copies of notices, remediation statements and declarations will also be provided to the Environment Agency when issued.

8.2. English Nature

English Nature was previously contacted to take account of relevant information that it may hold. This included the acquisition of datasets relating to ecological receptors of relevance in considering significant harm.

8.3. London Ecology Unit

The London Ecology Unit was previously contacted to establish the importance of sites for ecological importance in the borough and the nature of their designations.

8.4. Department for Environment, Food and Rural Affairs

DEFRA will contacted to update them on the revisions of this strategy.

8.5. Food Standards Agency

The Food Standards Agency (FSA) will be consulted as part of the Strategy for their comments on the suitability of the technical assessment methodology regarding food safety related pollutant linkages (risks) on all investigative works within the borough. The FSA has responsibility for food safety including the safety for consumers of food that may be affected by contamination. This includes food grown in domestic gardens and allotments. The FSA should be contacted for advice and information should there be any implications for food safety during the identification and remediation of contaminated land.

8.6 Thames Water

Thames Water will be immediately notified where a potential pollutant linkage includes a public water supply source as a receptor.

8.7 Public Health England

Public Health England (PHE, formerly the HPA) will be consulted as part of the Strategy for their comments on the suitability of the technical assessment prior to making a determination of contaminated land.

9. HANDLING INFORMATION RECEIVED FROM THE PUBLIC, BUSINESSES, VOLUNTARY ORGANISATIONS AND THE ENVIRONMENT AGENCY.

The purpose of this strategy is to adopt a systematic approach to the identification of contaminated land. However, this will take time to complete due to the complex nature of the risk assessment, continuous change in the technical guidance and uncertainty regarding securing funding from central government. In the meantime, it is important to be able to respond to and investigate specific concerns that are raised by members of the public, businesses and voluntary organisations.

9.1. Complaints

Complaints may be received from the public or other bodies regarding land contamination. Complaints will be dealt with following the same procedure as other complaints to Environmental Health. The complaint will be investigated in line with this inspection strategy and all efforts will be made to keep the complainant informed of progress and to resolve the complaint as efficiently and effectively as possible.

9.2. Obtaining/Receiving Information

Information may be provided by members of the public, site owners/occupiers, environmental organisations and the Environment Agency, which may be sufficient to identify land as contaminated land directly or to suggest that detailed inspection and possibly intrusive investigations are required. Alternatively, following assessment, a decision may be made that no action is required because the concern does not appear to be well founded or the absence of receptors is sufficient to determine that land is not contaminated.

The council's approach in assessing this information and deciding how to proceed will include taking account of the following factors:

- the strength of the evidence already available to suggest that the land is contaminated land (for example visual evidence, Stage 2 assessments, previous investigations and anecdotal information that is considered likely to be well-founded);
- the apparent urgency of the matter (priority will be given to concerns about human health in accordance with the council's primary duty);

- whether or not the information is provided anonymously;
- whether the information appears to be driven specifically by commercial considerations. A prospective purchaser may seek to be assured that land they are seeking to acquire will not be identified as contaminated land. In this context, the enquirer will be encouraged to employ his own independent advice to make a judgement, except where the request is consistent with complying with this strategy. Information available on former uses of land, site risk rating and records of investigations (if any) will be made available to the enquirer;
- the apparent motivation of the person supplying information where there are grounds to suspect that information may not be well founded.

When information is received, the following steps will be taken to keep various parties informed:

- receipt will be acknowledged within 5 days;
- the anonymity of the originator of the information will be preserved, where appropriate (normally until such time as legal action may be necessary);
- owners and occupiers of land to which the information relates, or potential appropriate persons, will be advised that it has been received and how it will be dealt with, with an indication of timescale;
- other relevant regulatory authorities will be informed where the information received relates to matters outside Tower Hamlet's statutory responsibilities (i.e. the Environment Agency, where powers under the Water Resources Act 1991 may applied);
- advising the person(s) who provided the information and owners/ occupiers/appropriate persons previously contacted of the final outcome of the council's investigation.

Where land is determined as contaminated land, the details will be maintained on a public register. The council may be asked for information about land that has/has not been determined as contaminated land, whether as part of a 'local search' or for other reasons. The Environmental Information Regulations 2004 require that information on land contamination held by the Local Authority must be made available on request from 1 January 2005.

The council will provide all available information to the individual or body requesting the information. However, in circumstances where information is being collected and assessed, but is incomplete, only factual information will be provided and the council will take account of its own legal advice.

10. HANDLING REQUESTS FROM THE PUBLIC FOR INFORMATION ON CONTAMINATED LAND

The process of implementing this strategy has, and will continue, to result in the collection and storage of a significant amount of data and information about the borough. In addition to the obligations set out in the Environmental Information Regulations (2004) governing the availability of environmental data, Tower Hamlets will adopt a transparent process, by the public, to factual data and information relating to the Part 2A legislation and statutory guidance including:

- historical maps
- historical land use
- current land use
- geological and hydrogeological data
- ecological data
- records of previous site investigations, remediation and validation (if available)

Interpretative information is that which is derived from the risk model input and output. The input data includes the individual hazard and susceptibility ratings of individual sites and risk ranking values. This type of information and any data that is derived through an interpretative process must also be disclosed to the public under the new regulations. However, this information must be qualified as interpretative when disclosed to the public in accordance with legal opinion obtained by the council.

10.1 Register of contaminated land

A register of land designated as contaminated with respect to Part 2A will be maintained by the Contaminated Land Officer and/or their delegate and will be available to the public. This public register, as required under Part 2A of EPA 1990 and the Contaminated Land (England) Regulations 2012, will only contain information on sites determined as contaminated land and where subsequent actions on the site have or will occur. The register also contains all data and information used to support the designation of the land as contaminated land. This will be available for inspection by contacting:

Environmental Health and Trading Standards
London Borough of Tower Hamlets
John Onslow House
Ewart Place
London E3

The Contaminated Land Register is maintained for public inspection on the council's web site along with a summary of the findings of the investigation(s), risk assessment and any recommended remedial works.

11. LAND FOR WHICH THE COUNCIL IS DIRECTLY RESPONSIBLE

The Stage 2 process has identified land where the council may have a responsibility due to its current or former ownership or occupation for the investigation and clean-up (if required) of that land. This includes council owned land, which has had former industrial use and/or land for which the 'original polluter' (Class A person as defined in the statutory guidance) may no longer be identifiable. Such land, if determined as contaminated land, will be addressed by the council.

The council may also be the owner of former (closed) landfill sites and may have responsibilities in this regard.

The council is committed to applying the same principles to contaminated land in its current or former ownership as those applied to any other contaminated land. In particular, the staged approach to identification described in Section 4 is equally relevant to land in council ownership. Should the council, as landowner, become aware of specific concerns, these will be progressed on a similar basis of priority and risk assessment as for land in other ownership.

In addition central government funding is available in the form of the Contaminated Land Capital Projects funding to address contaminated land. The council will apply for this funding where appropriate.

12. REVIEW AND UPDATE PROCEDURES

The council recognises that its strategy for the identification of contaminated land is based on a probabilistic approach. The aim is not to prove the status of every piece of land within the borough but rather to adopt a logical, robust and defensible approach in which effort is proportional to risk and priorities are set appropriately. This approach is in line with the broad objectives of the Part 2A regime.

Periodic reviews of the strategy are therefore necessary, or at least every five years. The following types of review and update are likely to occur:

- review of any amendments to, or publication of, new legislation and/or statutory guidance which may have an impact on the on-going implementation of this strategy;
- review of the scientific assumptions made in later stages of the assessment process (i.e. Stage 3 intrusive investigations and risk assessment). Such a review will focus on changes in the understanding of the behaviour of potential pollutants (changes in technical and authoritative guidance).
- re-assessment of the inspection findings in relation to particular land. For example, there may be a change in the land use (the receptor) or because of reported health effects apparently associated with the land;
- review of any opportunities to increase the range of datasets used in the Stage 1 identification process. Additional datasets can be added to the GIS/GeoEnviron model at a later stage. There are also opportunities to add datasets maintained by other council departments (i.e. opportunities for residential and mixed-use development datasets created by Development Control for the new Local Plan). The addition of new datasets will help refine the risk based model and increase accuracy;
- update of the GIS/GeoEnviron model to reflect additional information that may become available (eg from the Environment Agency in relation to groundwater or surface water abstractions and information from development-related site investigations).

Information systems related to the identification of contaminated land are to be viewed as essentially ‘live’ systems. Although updates are expected to be made periodically for reasons of efficiency (about every 3 months), where any new information is expected to have potential implications for human health

this will be reviewed as a priority and the implications to the risk model examined.

This strategy was reviewed in 2005 and 2013 following its adoption in June 2001 and subsequent revisions in 2003 and 2004. The objective of each update will be to ensure that the strategy remains relevant, up to date with current statutory and technical guidance and is efficient and effective in the application of resources to the identification of contaminated land. The update will seek to ensure that the approach taken remains consistent with current best practice.

ABBREVIATIONS

A.O.N.B.	Area of Outstanding Natural Beauty.
C.L.E.A.	contaminated land Exposure Assessment.
D.E.F.R.A.	Department of Food and Rural Affairs
D.E.T.R.	Department of Environment, Transport and Regions.
E.A.	Environment Agency.
F.S.A.	Food Standards Agency.
G.I.S.	Geographical Information System.
H.A.R.C.A.	Housing and Regeneration Community Association.
I.P.P.C.	Integrated Pollution Prevention and Control.
L.B.T.H.	London Borough of Tower Hamlets.
L.D.D.C.	London Docklands Development Corporation.
M.A.F.F	Ministry of Agriculture, Fisheries and Food.
S.A.C.	Special Area of Conservation.
S.N.I.F.F.E.R.	Scotland and Northern Ireland Forum for Environmental Research.
S.P.A.	Special Protection Areas.
S.P.Z.	Source Protection Zone.
S.R.B.	Single Regeneration Budget.
S.S.S.I.	Site of Special Scientific Interest.
T.H.C.H.	Tower Hamlets Community Housing.

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GLOSSARY

Apportionment	Any determination by the enforcing authority, that is a division of the costs of carrying out remediation action between two or more parties.
Building	Any structure or erection, and any part of a building including any part below the ground, but not including plant or machinery comprised in a building.
Contaminant	Any substance, which is in, on or under the land and which, has the potential to cause harm or to cause pollution of controlled waters.
Contaminated Land	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, that – a) significant harm is being caused or there is a significant possibility of such harm being caused, or; b) pollution of controlled waters is being, or is likely to be, caused.
Controlled waters	Defined by reference to Part III (section 104) of the Water Resources Act 1991, which 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 the land and which is consistent with any existing planning permission (or otherwise lawful under town and country planning legislation). This definition is subject to the following qualifications: a) The current use should be taken to include any temporary use, permitted under town and country planning legislation, to which the land is, or is likely to be, put from time to time; b) The current use includes future uses or 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 the land, whether authorised by the owners or occupiers or, (e.g. children playing on the land); however, in assessing the likelihood of any 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, the current agricultural use should not extend beyond the growing or rearing of the crops or animals, which are habitually grown or reared on the land.

Harm	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.
Intrusive investigation	An investigation of land (e.g. by exploratory excavations) which involves actions going beyond simple visual inspection of the land, limited sampling or assessment of documentary information.
Owner	A person (other than a mortgagee not in possession) who, whether in his own right or a trustee for any other person, is entitled to receive the rack rent of the land, or where the land is not let at a rack rent, would be so entitled if it were so let.
Pathway	One or more routes or means by which, or through which, a receptor: a) is being exposed to, or affected be a contaminant, or b) could be exposes or affected.
Pollutant	A contaminant which forms part of a pollutant linkage.
Pollutant Linkage	The relationship between a contaminant, pathway and a receptor.
Remediation	defined as: a) the doing of anything for the purpose of assessing the condition of – i) the contaminated land in question; ii) any controlled waters affected by that land; or iii) any land adjoining or adjacent to that land; b) the doing of any works, the carrying out of any operations or the taking of any steps in relation to any such land or waters for the purpose- i) of preventing or minimising, or remedying or mitigating the effects of any significant harm, or any pollution of controlled waters, by reason of which the contaminated land is such land; or ii) of restoring the land or waters to their former state; or c) the making of subsequent inspections from time to time for the purpose of keeping review the condition of land or waters."
Significant Harm	Any harm which is determined to be significant in accordance with Section 4.1 of Statutory Guidance (Defra, 2012)
Significant Possibility	Of Significant Harm: Any possibility of significant harm as determined by four (4) Category test in Section 4.2 of the Statutory Guidance (Defra, 2012)

Appendix A – Risk Classification

Table A Source Classification

DOE Class	Description	Hazard
C1	Agriculture	3
C1A	Agriculture: Burial of diseased livestock	3
C2	Extractive Industry	3
C2A	Extractive Industry: Extracting, handling and storage of carbonaceous materials such as coal, lignite, petroleum, natural gas, or bituminous shale (not including the underground workings)	3
C2Ai	Extractive Industry: Coal storage and depot	2
C2Aii	Extractive Industry: Mining of coal/lignite	3
C2Aiii	Extractive Industry: Oil, petroleum & gas refining & storage	4
C2B	Extractive Industry: Extracting, handling and storage of ores and their constituents	3
C2Bi	Extractive Industry: Mining/quarrying general	3
C2Bii	Extractive Industry: General quarrying	3
C2Biii	Extractive Industry: Mineral railway	2
C2Biv	Extractive Industry: Sand/clay/gravel pits	3
C2Bv	Extractive Industry: Heap of quarry waste	2
C3	Energy Industry	4
C3A	Energy Industry: Gas manufacture & distribution	4
C3B	Energy Industry: Reforming/purifing/refining of gas	4
C3C	Energy Industry: Other processes	4
C3D	Energy Industry: Thermal power station (inc nuclear)	3
C3E	Energy Industry: Electricity production & distribution [inc large transformers]	2
C4	Production of Metals	4
C4A	Production of Metals: Production/refining/recovery(ex.mining)	4
C4B	Production of Metals: Metal casting/foundries	4
C4C	Production of Metals: Heavy product manufacture - rolling and drawing of iron, steel and ferroalloys	2
C4D	Production of Metals: Finishing treatments	4
C5	Prodn. Non-metals	3
C5A	Prodn. Non-metals: Prodn/refining of ore	3
C5B	Prodn. Non-metals: Prodn/processing of mineral fibres	4
C5C	Prodn. Non-metals: Cement, lime and gypsum manufacture, brickworks and associated processes	2
C5Ci	Prodn. Non-metals: Clay bricks & tiles [manufacture]	2
C5Cii	Prodn. Non-metals: Cement, lime & plaster products [manufacture]	2
C6	Glass & Ceramics	3
C6A	Glass & Ceramics: Glass & glass products exc. flat glass [manufacture]	2
C6B	Glass & Ceramics: Ceramics manuf	2
C7	Chemical prodn/use	4
C7A	Chemical prodn/use: Plastic goods, all general manufacture, including building, packaging and tubing	4
C7B	Chemical prodn/use: Production, refining and bulk storage of organic or inorganic chemicals, inc. fertilisers, pesticides, pharmaceuticals, cosmetics, dyestuffs, pyrotechnic materials or recovered chemicals	4
C7Bi	Chemical prodn/use: Paints, varnishes, printing inks, mastics & sealants [manufacture]	4

C7Bii	Chemical prodn/use: Animal by-products [i.e. gelatine, soap, glue etc.]	2
C7Biii	Chemical prodn/use: Chemical manufacturing general	4
C7Biv	Chemical prodn/use: Dyes & pigments [manufacture]	4
C7C	Chemical prodn/use: Industrial gases	4
C8	Engineering and Manufacturing Processes	4
C8A	Engineering and Manufacturing Processes: Manufacture of metal goods, including mechanical engineering industrial plant or steelwork, motor vehicles, ships, railway or tramway vehicles, aircraft, aerospace equipment or similar equipment	2
C8Ai	Engineering and Manufacturing Processes: Construction materials	2
C8Aii	Engineering and Manufacturing Processes: Transport : light manufacture	2
C8Aiii	Engineering and Manufacturing Processes: Machinery: engines, building and general industrial [manufacture]	2
C8Aiv	Engineering and Manufacturing Processes: Transport manufacturing and repair	3
C8B	Engineering and Manufacturing Processes: Storage, manufacture or testing of explosives, propellants, ordnance, small arms or ammunition	4
C8Bi	Engineering and Manufacturing Processes: Weapons/ammo	4
C8Bii	Engineering and Manufacturing Processes: Military Land	4
C8C	Engineering and Manufacturing Processes: Electrical equip.	2
C8Ci	Engineering and Manufacturing Processes: Computer/office machines	2
C8Cii	Engineering and Manufacturing Processes: Batteries etc.	4
C8Ciii	Engineering and Manufacturing Processes: Domestic appliance	2
C8Civ	Engineering and Manufacturing Processes: Insulated wire/cable	2
C8Cv	Engineering and Manufacturing Processes: Navigation/medical/general	2
C9	Food processing industry	1
C9A	Food processing industry: Petfood/animal feed manuf	1
C9B	Food processing industry: Animal by-prod processing	1
C9C	Food processing industry: Food processing - major	1
C9D	Food processing industry: Spirit distilling & compounding	1
C9E	Food processing industry: Animal slaughtering & basic processing of meat [other than poultry]	3
C9F	Food processing industry: Brewing & malting	1
C9G	Food processing industry: Sugar refine/tobacco	1
C10	Paper & Printing	3
C10A	Paper & Printing: Making of paper pulp, paper or board, or paper or board products, including printing or de-inking	3
C10Ai	Paper & Printing: Misc. printing (not newspaper)	3
C10Aii	Paper & Printing: Newspaper printing	3
C10Aiii	Paper & Printing: Paper packaging products [manufacture]	3
C10Aiv	Paper & Printing: Packaging	3
C10Av	Paper & Printing: Recycling/photo processing	3
C11	Timber & Products	4
C11A	Timber & Products: Chemical treatment and coating of timber and timber products	4
C11Ai	Timber & Products: Saw mill	1
C11Aii	Timber & Products: Sawmilling, planing & impregnation [i.e.	4

	treatment of timber]	
C12	Textile Industry	4
C12A	Textile Industry: Leather working	4
C12B	Textile Industry: Natural and man-made textile manufacture and products	3
C12C	Textile Industry: Floor coverings	3
C13	Rubber Industry	4
C13A	Rubber Industry: Natural & synthetic inc. tyres	4
C14	Infrastructure	3
C14A	Infrastructure: Railways	3
C14B	Infrastructure: Transport support & cargo handling	3
C14C	Infrastructure: Dismantling, repairing or maintenance of road transport or road haulage vehicles	4
C14Ci	Infrastructure: Road haulage	4
C14Cii	Infrastructure: Retail sale of fuel	4
C14Ciii	Infrastructure: Motor vehicles: maintenance & repair e.g. garages	3
C14D	Infrastructure: Air & space	3
C14E	Infrastructure: Pipelines	3
C15	Waste Disposal	4
C15A	Waste Disposal: Treating of sewage or other effluent	3
C15Ai	Waste Disposal: All outfalls	2
C15Aii	Waste Disposal: Sewage	3
C15B	Waste Disposal: Sludge storage/treatment/disposal	4
C15C	Waste Disposal: Treating, keeping, depositing or disposing of waste, including scrap (to include infilled canal basins, docks or rivercourses)	4
C15Ci	Waste Disposal: Refuse disposal inc.incinerators	4
C15Cii	Waste Disposal: Unknown Filled Ground (Pond, marsh, river, stream,dock etc)(seeWF)	3
C15Ciii	Waste Disposal: Metal/scrap recycling	3
C15Civ	Waste Disposal: Unknown Filled Ground (Pit, quarry etc)	4
C15D	Waste Disposal: Storage/disposal of radioactive materials	4
C16	Miscellaneous	3
C16A	Miscellaneous: Dry cleaning	3
C16B	Miscellaneous: Education/research laboratories	3
C16C	Miscellaneous: Demolition of buildings/plant	2
C16D	Miscellaneous: Hospitals	3
C16E	Miscellaneous: Airshafts	1
C16F	Miscellaneous: Cemetery or Graveyard	1
C16G	Miscellaneous: Factory or unspecified works	3

Table B – Human -Receptor Susceptibility Classification

Type	Susceptibility	Description
Allotments	4	Small plots of land that are farmed and kept by local people.
Building Site	3	Construction area, with open ground and semi-finished structures (e.g. Buildings.
Canal/River & Embankment	3	Water features other than lakes.
Car Park	1	Multi-storey or single level- includes non-tarmac car park.
Church	2	The building itself plus ground and graves.
College	2	Educational Facility plus some grass areas and open space.
Commercial	2	Business areas (e.g. IT, Consultancy) and Shops. Some shops are on ground level with residential above.
Community Centre	2	Community buildings (e.g. Islamic Centres).
Council Buildings	2	Council-run establishments.
Emergency Services	2	Hospitals, police stations, Fire Stations.
Flats	2	Multi-storey building owned as flats, with very little grass or open space.
Flats Complex	2	A collection of flats often with small parks, a playground and communal gardens.
Flats With Gardens	4	Multi-storey buildings, which may have originally been single occupancy, housed, with gardens, rear or front.
Garages	1	To park cars. Mostly in residential areas.
Gas Works	1	Heavy industrial area based around gasworks. Probably of open spaces surrounding the buildings and machinery.
Grass	3	Areas of open grass other then parks.
Health Centre	2	Health service buildings, generally non-emergency (e.G.0 Doctors Surgery).
Houses	2	Houses often several stories, no garden.
Houses with Gardens	4	Houses with gardens, front or rear
Industry	1	Industrial areas (e.g. Textile manufacturers, metal work, recycling plants).
Lake	3	Closed area of water.
Library	2	Library Building.
Open Ground	3	Non-grassed areas, often revealing underlying superficial rocks/soil, or possibly tarmaced. Often in disuse.
Park	3	Grass areas open to public, often with trees, recreational facilities.
Park (Island)	3	Island on a lake, in a park.
Playground	2	Children's play area, grassed or covered (e.g. Tarmac).

Type	Susceptibility	Description
Playing Fields	3	Grassed area for sport activities.
School	2	Educational facilities with playground, almost always some grassed areas.
Stables	3	Areas where horses are kept.
Swimming Pool	2	Recreational facility.
Tennis Courts	1	Recreational facility (majority tarmaced).
Tower Block	2	Very tall, freestanding building.
Tower Block Complex	2	Area, often with other residential building such as flats and houses, that contains at least one tower block. Similar in susceptibility to flats Complex with its grassed area and open spaces.
Tower of London	3	Mixture of commercial, residential and grassed areas.
Transport	2	London Underground Tube Stations, train station, bus stations.
Vegetation	3	Grassed area with shrubs and trees.
Water	3	Mostly dock area.

Table C Groundwater Classification

Type	Susceptibility
Major High	6
Major Middle	5
Major Low	4
Minor High	3
Minor Middle	2
Minor Low	1
Non-aquifer	0

Table D Ecology Classification

Type	Susceptibility	Description
International	3	e.g. Ramsar
National	2	e.g. SSSI
Local	1	e.g. Sites of Nature Conservation Importance. Local Plan

Appendix B -

Definition of Significant Harm(SH)

&

Significant possibility of Significant Harm (SPOSH)

1.0 Significant harm to human health

The paragraphs below set out categories of harm that should be considered to be significant harm to human health (Defra, 2012). In all cases the harm should be directly attributable to the effects of contaminants in, on or under the land on the body(ies) of the person(s) concerned.

Conditions for determining that land is contaminated land on the basis that significant harm is being caused would exist where: (a) the local authority has carried out an appropriate, scientific and technical assessment of all the relevant and available evidence; and (b) on the basis of that assessment, the authority is satisfied on the balance of probabilities that significant harm is being caused (i.e. that it is more likely than not that such harm is being caused) by a significant contaminant(s).

The following health effects would always be considered to constitute significant harm to human health: ***death; life threatening diseases (e.g. cancers); other diseases likely to have serious impacts on health; serious injury; birth defects; and impairment of reproductive functions*** (Defra, 2012).

Other health effects may be considered by the Council to constitute significant harm. For example, a wide range of conditions may or may not constitute significant harm (alone or in combination) including: physical injury; gastrointestinal disturbances; respiratory tract effects; cardio-vascular effects; central nervous system effects; skin ailments; effects on organs such as the liver or kidneys; or a wide range of other health impacts. In deciding whether or not a particular form of harm is significant harm, LBTH would consider the seriousness of the harm in question: including the impact on the health, and quality of life, of any person suffering the harm; and the scale of the harm. LBTH would only conclude that harm is significant if it considers that treating the land as contaminated land would be in accordance with the broad objectives of the regime as described in Section 1 of the Statutory Guidance (Defra, 2012).

If the Council decides that harm is occurring but it is not significant harm, it would consider whether such harm might be relevant to consideration of whether or not the land poses a significant possibility of significant harm (SPOSH). For example, this might be the case if there is evidence that the harm may be a precursor to, or indicative or symptomatic of, a more serious form of harm, or that repeated episodes of minor harm (e.g. repeated skin ailments) might lead to more serious harm in the longer term (Defra, 2012).

2.0 Significant possibility of significant harm to human health (SPOSH)

In deciding whether or not a significant possibility of significant harm to human health exists, LBTH would first understand the possibility of significant harm from the relevant contaminant linkage(s) and the levels of uncertainty attached to that understanding; before it goes on to decide whether or not the possibility of significant harm is significant (Defra, 2012).

Possibility of significant harm to human health

In assessing the possibility of significant harm to human health from the land and associated issues, the council would act in accordance with the advice on risk assessment in Section 3 of the Statutory Guidance (Defra, 2012).

The term "possibility of significant harm" as it applies to human health, for the purposes of this guidance, means the risk posed by one or more relevant contaminant linkage(s) relating to the land. It comprises:
(a) The estimated likelihood that significant harm might occur to an identified receptor, taking account of the current use of the land in question.
(b) The estimated impact if the significant harm did occur i.e. the nature of the harm, the seriousness of the harm to any person who might suffer it, and (where relevant) the extent of the harm in terms of how many people might suffer it.

In estimating the likelihood that a specific form of significant harm might occur the Council would, among other things, consider:
(a) The estimated probability that the significant harm might occur: (i) if the land continues to be used as it is currently being used; and (ii) where relevant, if the land were to be used in a different way (or ways) in the future having regard to the guidance on "current use" in Section 3.
(b) The strength of evidence underlying the risk estimate. It should also consider the key assumptions on which the estimate of likelihood is based, and the level of uncertainty underlying the estimate. Having completed its estimation of the possibility of significant harm, the council would produce a risk summary in accordance with Section 3 of Defra (2012).

Deciding whether a possibility of significant harm is significant (human health)

The decision on whether the possibility of significant harm being caused is significant is a regulatory decision to be taken by the council. In deciding whether the possibility of significant harm being caused is significant, consideration would be given as to whether the possibility of significant harm posed by contamination in, on or under the land is sufficiently high that regulatory action should be taken to reduce it, with all that would entail.

In deciding whether or not land is contaminated land on grounds of significant possibility of significant harm to human health, the council would use the four categorisations test described in paragraphs 4.17 of the Statutory Guidance (Defra, 2012). Categories 1 and 2 would encompass land which is capable of being determined as contaminated land on grounds of significant possibility of significant harm to human health. Categories 3 and 4 would encompass land which is not capable of being determined on such grounds. Below are the definitions of the four category test in the Statutory Guidance:

Category 1: Human Health

The local authority should assume that a significant possibility of significant harm exists in any case where it considers there is an unacceptably high probability, supported by robust science based evidence that significant harm would occur if no action is taken to stop it. For the purposes of the Guidance, these are referred to as "Category 1: Human Health" cases. Land should be deemed to be a Category 1: Human Health case where:

(a) the authority is aware that similar land or situations are known, or are strongly suspected on the basis of robust evidence, to have caused such harm before in the United Kingdom or elsewhere; or

(b) the authority is aware that similar degrees of exposure (via any medium) to the contaminant(s) in question are known, or strongly suspected on the basis of robust evidence, to have caused such harm before in the United Kingdom or elsewhere;

(c) the authority considers that significant harm may already have been caused by contaminants in, on or under the land, and that there is an unacceptable risk that it might continue or occur again if no action is taken. Among other things, the authority may decide to determine the land on these grounds if it considers that it is likely that significant harm is being caused, but it considers either:

> (i) that there is insufficient evidence to be sure of meeting the "balance of probability" test for demonstrating that significant harm is being caused; or
> (ii) that the time needed to demonstrate such a level of probability would cause unreasonable delay, cost, or disruption and stress to affected people particularly in cases involving residential properties.

Category 4: Human Health

The local authority should not assume that land poses a significant possibility of significant harm if it considers that there is no risk or that the level of risk posed is low. For the purposes of the Statutory Guidance, such land is referred to as a "Category 4: Human Health" case. The authority may decide that the land is a Category 4: Human Health case as soon as it considers it has evidence to this effect, and this may happen at any stage during risk assessment including the early stages.

The local authority should consider that the following types of land should be placed into Category 4: Human Health:

(a) Land where no relevant contaminant linkage has been established.

(b) Land where there are only normal levels of contaminants in soil, as explained in Section 3 of the Guidance.

(c) Land that has been excluded from the need for further inspection and assessment because contaminant levels do not exceed relevant generic assessment criteria in accordance with Section 3 of the Guidance, or relevant technical tools or advice that may be developed in accordance with paragraph 3.30 of the Guidance.
(d) Land where estimated levels of exposure to contaminants in soil are likely to form only a small proportion of what a receptor might be exposed to anyway through other sources of environmental exposure (e.g. in relation to average estimated national levels of exposure to substances commonly found in the environment, to which receptors are likely to be exposed in the normal course of their lives).

The local authority may consider that land other than the types described as category 4 should be placed into Category 4: Human Health if following a detailed quantitative risk assessment it is satisfied that the level of risk posed is sufficiently low.

Categories 2 and 3: Human Health

For land that cannot be placed into Categories 1 or 4, the local authority should decide whether the land should be placed into either: (a) Category 2: Human Health, in which case the land would be capable of being determined as contaminated land on grounds of significant possibility of significant harm to human health; or (b) Category 3: Human Health, in which case the land would not be capable of being determined on such grounds.

It should also be mindful of the fact that the decision is a positive legal test, meaning that the starting assumption should be that land does not pose a significant possibility of significant harm unless there is reason to consider otherwise. The authority should then, in accordance with paragraphs 4.26 to 4.29 of the Guidance, decide which of the following two categories the land falls into:

(a) Category 2: Human Health. Land should be placed into Category 2 if the authority concludes, on the basis that there is a strong case for considering that the risks from the land are of sufficient concern, that the land poses a significant possibility of significant harm, with all that this might involve and having regard to Section 1. Category 2 may include land where there is little or no direct evidence that similar land, situations or levels of exposure have caused harm before, but nonetheless the authority considers on the basis of the available evidence, including expert opinion, that there is a strong case for taking action under Part 2A on a precautionary basis.

(b) Category 3: Human Health. Land should be placed into Category 3 if the authority concludes that the strong case described in 4.25(a) does not exist, and therefore the legal test for significant possibility of significant harm is not met. Category 3 may include land where the risks are not low, but nonetheless the authority considers that regulatory intervention under Part 2A is not warranted. This recognises that placing land in Category 3 would not stop others, such as the owner or occupier of the land, from taking action to reduce risks outside of the Part 2A regime if they choose. The authority should consider making available the results of its inspection and risk assessment to the owners/occupiers of Category 3 land.
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Appendix C -
Definition of Special Sites

Definition of Special Sites

When land is designated as contaminated land, the Council must determine whether the contaminated land should be designated as a special site and thus be passed to the Environment Agency for regulation and enforcement. The rules on what land is to be regarded as special sites, and various rules on the issuing of remediation notices, are set out in the Contaminated Land (England) Regulations 2006.

Appendix D

Hardship & Cost Recovery Policy

Non-Technical Summary

This policy has been written to set out how the council intends to recover the cost of cleaning up or making safe land (remediating) that has been determined as Contaminated Land. The policy needs to be in place to allow the council to apply for central government funding to pay for any clean up works where the recovery of costs would cause financial hardship to the general public, landowners and commercial businesses.

In the first instance, the council will attempt to ensure the company or person responsible for the contamination, pay the costs of cleaning up the land under the 'polluter pays principle'. However, in some cases the company has stopped trading or the person has died and the liability for any clean up may pass to the present owner/occupier of the land. The council has a duty to be reasonable and fair when recovering these costs and this policy sets out how we will do this.

If the owner/occupier has an insurance policy in place to cover the costs of any clean up works, then this should be used to cover the costs in the first instance.

The council can pay for the cost of clean-up works up front (i.e. works in default) and recover costs at a later date. When the Council decides that costs cannot be recovered it can apply for central government funding to pay for the full or partial cost of any works [subject to the grant being available]. The Council will not support costs where it is intended to be recovered at a later date. Any action to allocate funding would have to be subject to approval from senior management and relevant committees.

In line with the statutory guidance on contaminated land the Council will apply the following tests when recovering costs:

(1)Reasonable and Fairness Tests

(a) Any person(s) who bought land/property before June 2001(which is the date the council adopted in the Contaminated Land Strategy) will not be considered liable for the cost of any necessary clean up works.

(b) Any person(s) who bought land/property after June 2001 will not be considered liable providing they took reasonable precautions to check for contaminated land before buying it. For example, by having environmental searches undertaken and any such information acted upon.

(2) Hardship Test

Any person(s) who does not meet the criteria set in (1)(b) above can apply for 'hardship' if costs are to be recovered. Hardship is considered to mean hardness of fate or circumstance or severe suffering. The council will assess all such applications in line with this policy and decide whether the costs should be waived or reduced.

If, as a result of applying these tests, a decision by the finance team is made to waive or reduce the recovery of any costs, we will apply for central government funding to pay for the clean-up work.

The council will only pay for any clean-up costs if it has caused the contamination or owns the land and no original polluter can be found. Again, the council is eligible to apply for central government funding to pay for any clean up.

1 Introduction

1.1 This ‘Statement of Policy’ sets out London Borough of Tower Hamlets’ (hereafter referred to as the “council”) position in regards to the possibility of it waiving or reducing the costs associated with the remediation (clean up or making safe) of contaminated land. The policy is based on the relevant sections of the primary legislation, regulations and associated statutory guidance. However, it is recognised that there is likely to be a wide variation in the circumstances associated with potentially contaminated land (including its history, ownership and liability for its remediation) therefore the adopted approach is to view nationally published guidance in terms of *principles* and *approaches* rather than set rules. This policy statement defines how these principles and approaches will be interpreted and applied by the council.

2 Purpose

2.1 To clearly set out the council’s policy on the recovery of costs and consideration of hardship.

2.2 To provide a consistent, transparent, fair and equitable approach to the recovery of costs from persons who have to meet the cost of remediation including the national taxpayers.

2.3 The policy should be in accordance with both the primary, secondary legislations and any associated statutory guidance as set out in section 4 of this policy document.

2.4 To ensure, wherever possible, that the cost of remediation is borne by the original polluter or the one who knowingly permitted the pollution (Class A appropriate persons) under the “polluter pays” principle.

3 Application

In general it is the council's intention, where appropriate person(s) have either:

(a) satisfied the 'reasonable and fairness tests' for reducing or waiving cost recovery as detailed in this policy; or

(b) satisfied the 'financial test of hardship' as detailed in this policy;

to apply for central Government funding (capital grant) under the Contaminated Land Capital Projects Programme (CLCPP) to pay for remedial works prior to any work being carried out. If the application is successful there will be no requirement for the council will carry out the works and invoke the cost recovery procedure also set out in this policy. It should be noted however that the CLCPP Team expect Local Authorities to use their cost recovery powers to the full. They also reserve the right to request further information on cost recovery options before assessing whether the support for remedial works should be given.

3.1 The policy applies to any remedial action(s), both retrospective and proposed, for the purposes of remediating "Contaminated Land". The policy applies to the following parties (not exhaustive):

(a) Owner/Occupiers of residential properties – both freehold and leasehold
(b) Owners of land
(c) Commercial enterprises
(d) Charities
(e) Trusts
(f) Registered Providers of Social Housing Landlords

3.2 The policy applies to person(s) who have originally caused or knowingly permitted the pollution ("the polluter", Class A persons) and current owners of the land (Class B persons) who were not responsible for the pollution.

3.3 Class B parties are only liable for remediation of contamination within the boundaries of their property and cannot be held liable for any pollution of controlled waters. In these instances an application will be made for funding from CLCPP to fund any necessary remedial works.

3.4 Responsibility for cleaning up of contaminated land will only fall on the council when no liable parties can be found for the site in question; so termed "orphan site" (this is

only the case when the council is not regarded as a potential Class A or B party). Should this be the case, the council can apply to central government for financial assistance in covering any reasonable costs incurred with remediation.

3.5 This policy places no requirement on the council to pay for remediation for which it is not itself liable, only to consider reducing or waiving cost recovery.

4 Legislative Review

4.1 Primary Legislation

4.1.1 Part 2A (Section 78) of the Environmental Protection Act 1990 (as inserted by Section 57 of the Environment Act 1995) introduced a duty for all authorities to identify and remediate land where contamination is causing unacceptable risks to human health or the wider environment.

4.1.2 Relevant Sections

(a) Section (78E) of the above Act covers the "Duty of enforcing authority to require remediation of contaminated land etc."
(b) Section (78P) of the above Act covers the "Recovery of, and security for, the cost of remediation by the enforcing authority "

4.1.3 Please refer to the following website addresses for the entire Acts:
The Environmental Protection Act 1990
http://www.opsi.gov.uk/ACTS/acts1990/ukpga_19900043_en_1

Section 57 of the Environment Act 1995
http://www.opsi.gov.uk/acts/acts1995/ukpga_19950025_en_1

4.2 Statutory Regulations

4.2.1 The Contaminated Land (England) Regulations (2006) set out provisions relating to the identification and remediation of contaminated land under Part 2A of the Environmental Protection Act 1990 ("the 1990 Act").

4.2.2 Relevant Sections

Grounds of appeal against a remediation notice

7. — (1) The grounds of appeal against a remediation notice under section 78L(1) are any of the following—

(a) that the enforcing authority, in considering for the purposes of section 78N(3)(e) whether it would seek to recover all or a portion of the cost incurred by it in doing some particular thing by way of remediation—

(i) failed to have regard to any hardship which the recovery may cause to the person from whom the cost is recoverable or to any guidance issued by the Secretary of State for the purposes of section 78P(2); or

(ii) whether by reason of such a failure or otherwise, unreasonably determined that it would decide to seek to recover all of the cost;

4.2.3 Please refer to the following website addresses for the complete regulations: http://www.opsi.gov.uk/si/si2006/20061380.htm

4.3 Statutory Guidance

4.3.1 The Defra Contaminated Land Statutory Guidance came into force on 6th April 2012 and replaced Defra Circular 01/2006 which came into force on the 4th August 2006.

4.3.2 Relevant Sections of the Guidance

The Meaning of the Term "Hardship"

[8.2] The term "hardship" is not defined in Part 2A, and therefore carries its ordinary meaning – hardness of fate or circumstance, severe suffering or privation. The term has been widely used in other legislation, and there is a substantial body of case law about its meaning. For example, it has been held appropriate to take account of injustice to the person claiming hardship, in addition to severe financial detriment although each interpretation is subject to the particular facts of the case.

[8.6] In general the enforcing authority should seek to recover all of its reasonable costs. However, the authority should waive or reduce the recovery of costs to the extent that it considers this appropriate and reasonable, either: (i) to avoid any undue hardship which the recovery may cause to the appropriate person; or
(ii) in making such decisions, the authority should bear in mind that recovery is not necessarily an "all or nothing" matter (i.e. where reasonable, appropriate persons can be made to pay part of the authority's costs even if they cannot reasonably be made to pay all of the costs).

[8.7] In deciding how much of its costs it should recover, the enforcing authority should consider whether it could recover more of the costs by deferring recovery and securing them by a charge on the land in question under section 78P. Such deferral may lead to payment from the appropriate person either in installments (see Section 78P(12) of the Act) or when the land is next sold.

4.3.3 Please refer to the following website addresses for the complete statutory guidance document:
http://www.defra.gov.uk/publications/files/pb13735cont-land-guidance.pdf

5 The Policy

5.1 Underlying Principles

The recovery of costs incurred by the Council for remediation works shall:

- where possible be sought from the original polluter or the one who knowingly permitted the contamination under the "polluter pays" principle
- be recovered in full where reasonable
- be fair and equitable
- have due consideration to hardship where the decision to waive or reduce costs to the appropriate person(s) will be to the extent needed to ensure that the appropriate person(s) in question bears no more of the cost of remediation than it appears reasonable to impose.
- not normally consider waiving or reducing cost recovery from Class A appropriate person(s)

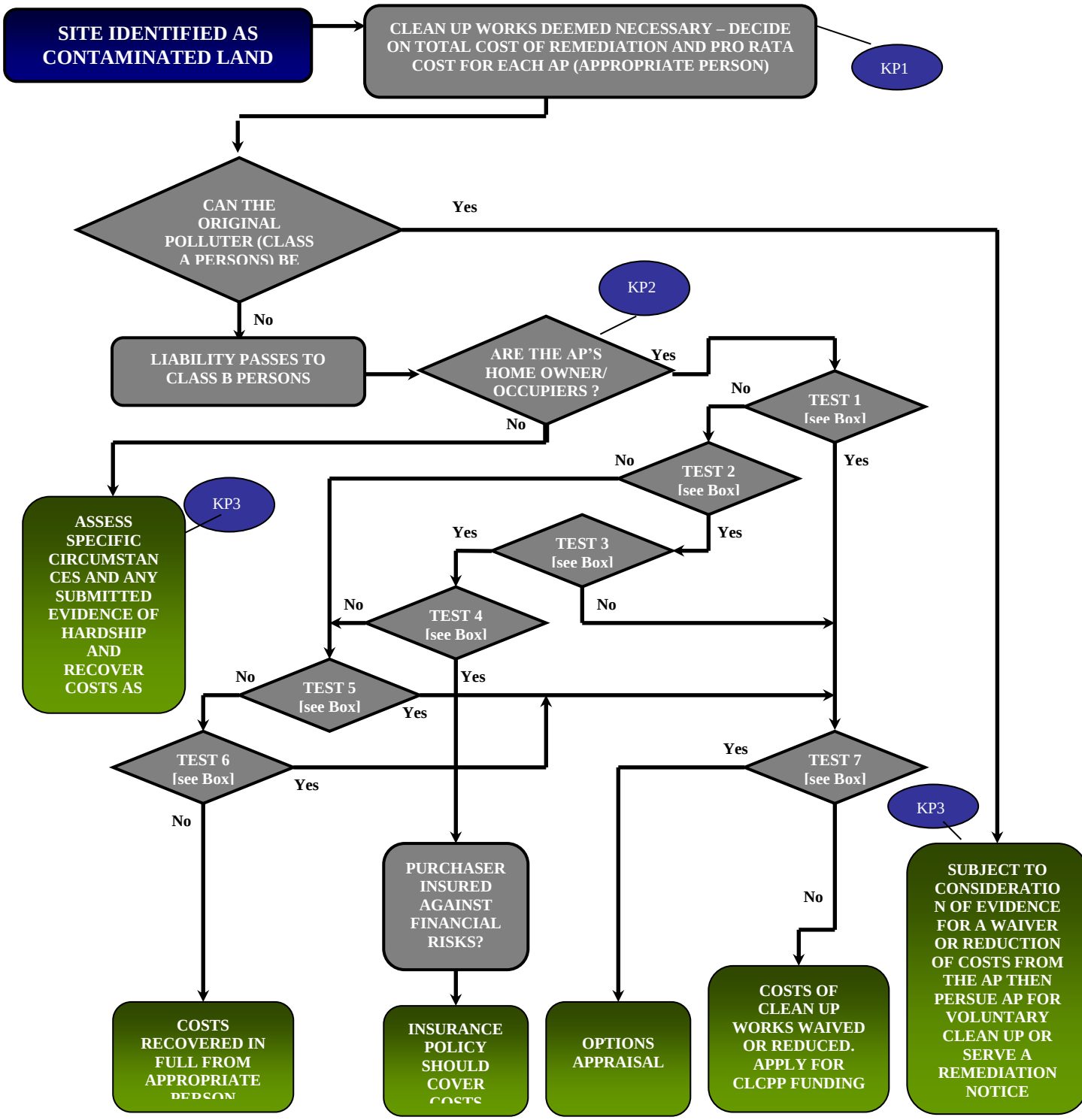
- be in accordance with all relevant acts, regulation and guidance.
- where the recovery of costs is undertaken the Council shall provide suitable opportunities for the appropriate person to provide evidence for their need of financial support. The appropriate person(s) shall be responsible for providing the Council with sufficient evidence to support a claim for financial support from the CLCPP Team.

5.2 Assessment Criteria

Decisions relating to the recovery of costs for remediation will have regard to the following:

- the estimated cost of remediation in relation to the value of land
- the estimated cost of remediation in relation to the income, capital and outgoings of an appropriate person(s).
- whether at the time the land was acquired reasonable precautions were taken by the purchaser to ensure that the land was not likely to be blighted by contamination.
- the burden on local/national taxpayers.
- the estimated cost of remediation in relation to the solvency of a business and the associated affect on the local community and economy should a business be rendered insolvent as a result of recovering costs for remediation.

6 The Procedure



Test 1 - Was land acquired prior to June 2001?
Test 2 - Were reasonable precautions taken in respect to previous industrial uses?
Test 3 - Was contamination identified?
Test 4 - Was the information acted on by the purchaser?
Test 5 - Would the appropriate person(s) suffer hardship if costs recovered?
Test 6 - Is the land value less than the cost of clean up works?
Test 7 - Is non recovery a burden to national taxpayers?

KP1- Establishing reasonable costs in carrying out remediation works

The main purpose of this is to establish the pro rata cost of the remediation works for each appropriate person to enable TESTS 5, 6 & 7 to be applied for all appropriate person(s)

The Council will ensure that the following is carried out:

(a) identification of a minimum of three feasible remedial options for any necessary remediation works; and
(b) evaluation of a minimum of two feasible remedial options for any necessary remediation works sufficient to obtain a budget estimate for the cost of remediation; and
(c) selection of one remedial option proposed for implementation on the site to refine costs and finalise a budget; and
(d) utilise at least one environmental consultant to propose and estimate remediation costs.

The output of the above should be an outline remediation cost for the project. This cost should be broken down to the individual pro rata for each appropriate person(s). Costs should be fairly distributed across the liability group i.e. for a residential scenario this could be based on the area of land being determined (for example three gardens where two are $100m^2$ and one is $200m^2$ the costs would be apportioned as 25% of costs for the two $100m^2$ gardens and 50% of costs for the $200m^2$ garden)

KP2 - Individual Home/Land Owner/Occupiers(s) – Class B Appropriate Person(s)

The council will consider waiving or reducing the recovery of costs incurred where the appropriate person(s) meets one of the TESTS 1 – 4 (Reasonable & Fairness Tests) and/or TEST 5 & 6 (Financial Hardship Tests) and/or TEST 7 (Burden on Taxpayers Test):

TEST 1 LAND / PROPERTY BOUGHT PRIOR TO JUNE 2001

An acquisition of land made prior to publication of the Contaminated Land Strategy (June 2001) will not be required to be accompanied by evidence of reasonable precautions being taken to identify contaminated land prior to purchase of the land or property. This is because prior to its publication it could be reasonably argued that enquiries made to the council about contaminated land issues would not have been dealt with in the same manner as such enquiries made after this publication date.

TEST 2 – REASONABLE PRECAUTIONS TAKEN

That steps were taken prior to acquiring the land as would have been reasonable at that time to establish the presence of any pollutants. This would normally involve the commission of a conveyancing company or independent solicitors to obtain the necessary searches which should have included the previous uses of the land that may be potentially contaminative. To rely on the criteria the land owner/occupiers(s) must not have been aware of any previous industrial uses that may have caused contamination at the time they purchased the property or land. Conveyancing companies/solicitors should have been aware of the issues relating to contaminated land liabilities after the issue of a Law Society Warning Card on the matter on Friday the 1st June 2001. Owner/occupier(s) are not considered responsible for the conveyancing company being negligent in so far as not commissioning such an environmental search after this date.

TEST 3 – CONTAMINATIVE PAST USE INDENTIFIED

An environmental search undertaken as part of TEST 2 should have identified whether or not the land/property in question was likely to be affected by contamination due to historic industrial land use(s). These searches normally issue a pass/fail certificate to the purchaser depending on the outcome of the search. The purchaser may also have undertaken a search direct with the council, which would also have to be assessed in a similar manner and would normally include an indication of previous uses, potential for contamination and a level of risk.

This information would normally be included in the property deeds which would need to be provided.

TEST 4 – INFORMATION ACTED UPON BY THE PURCHASER

Where initial enquiries raise a potential concern, further appropriate research should be shown to have been undertaken i.e. discussions with the council responsible officer or team dealing with contaminated land; obtaining suitable insurance to indemnify themselves against the financial risks of any future action under Part 2A of the EPA 1990. The information from the research/initial enquiry should not have been disregarded.

TEST 5 – FINANCIAL HARDSHIP

If is proved that the appropriate person(s) would suffer financial hardship by:

(a) Making an assessment of the financial resources of the appropriate person(s) by employing an appropriate 'Means Test' methodology. Currently, the most appropriate methodology appears to be referring to the Private Sector Housing Grant.

(b) The result of the assessment will determine whether the appropriate person has sufficient financial resources in order to fund the identified pro rata cost of the proposed remediation works. No upper limit has been set for this exercise because of the potential relatively high costs associated with remediation work. The remainder of the costs should be funded through the CLCPP.

(c) The council will be responsible for communicating the result of this assessment to the appropriate person(s). There shall be no appeal mechanism against the findings of the Means Test unless it can be demonstrated that:

(i) the information submitted for assessment was erroneous; or

(ii) the circumstances of the appropriate person have substantially changed between the time of the selection of the remediation methodology and completion of the works in a way that would require a re-test.

TEST 6 – LAND VALUE

Where it is conceivable that the cost of remediation may exceed the property, land or business value (value based on post remedial value with no perceived/actual blight from contamination issues) the council will request the appropriate person to obtain an independent valuation of the land, property or business from an appropriately accredited professional at their own cost.

If there is any doubt over the validity of the submitted valuation the council retains the right at its own expense to obtain a separate independent valuation of the land/property.

In general, the extent of the waiver or reduction in costs recovery will be sufficient to ensure that the costs of remediation borne by the Class B person do not exceed the value of the land. However, the council will seek to recover more of its costs to the extent that the remediation would result in an increase in the value of any other land from which the Class B person would benefit.

TEST 7 – BURDEN ON NATIONAL TAXPAYERS

A decision will have to be made to establish whether undue financial burden would be placed on national taxpayers where cost recovery is waived or reduced. The CLCPP Team will be responsible for establishing this as they allocate funding under the CLCPP.

ADDITIONAL CONSIDERATIONS

(a) Where the contaminated land in question extends beyond the dwelling and its curtilage, and is not owned and occupied by the same appropriate person(s) the above principles will be applied to the dwelling and its curtilage only.

(b) Where the appropriate person(s) has inherited the dwelling or received it as a gift the above principles will be applied to the time at which the person(s) received the property or land.

KP3 – Non Home/Land Owner/Occupier(s) Class A and Class B Person(s)

Commercial Enterprises[1]

The council will normally seek to recover in full any reasonable costs incurred where:

(a) It is clear that an enterprise has deliberately arranged matters so as to avoid responsibility for the cost of remediation.

[1] Commercial enterprises are considered to be public corporations, limited companies (whether public or private), partnerships (whether limited or not) or an individual operating as a sole trader.

; or

(b) It appears that the enterprise could be kept in, or returned to business even if it does become insolvent under its current ownership.

The council may choose to take account of such adopted policies relating to the economic prosperity / development of the district when determining cost recovery decisions.

In case of small or medium sized enterprises[2] the council will consider:

(a) Whether recovery of the full cost attributable to the appropriate person(s) would mean that the enterprise is likely to become insolvent and thus cease to exist; and

(b) If so, the cost to the community of such a closure.

Where the cost of remediation would force an enterprise to become bankrupt or insolvent, the council will consider waiving or reducing its costs recovery to the extent needed to avoid making the enterprise insolvent.

The above will be determined in consultation with legal and accountancy departments as business accounts would have to be submitted for assessment by the council. This would normally include a financial assessment.

Any shortfall in funding from any such waiver or reduction in cost recovery action should be made up by an application for CLCPP funding. If such an application is not successful the council should undertake an appraisal of options available at that particular time. This is likely to include determination of the land as contaminated land and not being able to remediate the land until such time as the financial circumstances improve or voluntary clean up can be negotiated i.e. through its redevelopment.

[2] For these purposes, a "small or medium-sized enterprise" is defined as an independent enterprise with fewer than 250 employees, and either an annual turnover not exceeding €50 million, or an annual balance sheet total not exceeding €43 million. Source: Section 8.17 of Defra Part 2A Contaminated Land Statutory Guidance April 2012.

Trusts

Where the appropriate persons include persons acting as trustees, the council will assume that such trustees will exercise all powers which they have, or may reasonably obtain, to make funds available from the trust, or from borrowing that can be made on behalf of the trust, for the purpose of paying for the remediation. The council will, nevertheless, consider waiving or reducing its costs recovery to the extent that the costs of remediation to be recovered from the trustees would not exceed the amount that can be made available from the trust to cover these costs.

However, the council will not waive or reduce its costs recovery:

(a) Where it is clear that the trust was formed for the purpose of avoiding paying the costs of remediation; or
(b) To the extent that trustees have personally benefited, or will personally benefit from the trust.

Any shortfall in funding from any such waiver or reduction in cost recovery action should be made up by an application for CLCPP funding. If such an application is not successful the council should undertake an appraisal of options available at that particular time. This is likely to include determination of the land as contaminated land and not being able to remediate the land until such time as the financial circumstances improve or voluntary clean up can be negotiated i.e. through its redevelopment.

Charities

The council will consider the extent to which any recovery of costs from a charity would jeopardise that charity's ability to continue to provide a benefit or amenity. Where this is the case, the council will consider waiving or reducing its costs recovery to the extent needed to avoid such a consequence. This approach applies equally to charitable trusts and to charitable companies.

Any shortfall in funding from any such waiver or reduction in cost recovery action should be made up by an application for CLCPP funding. If such an application is not

successful the council should undertake an appraisal of options available at that particular time. This is likely to include determination of the land as contaminated land and not being able to remediate the land until such time as the financial circumstances improve or voluntary clean up can be negotiated i.e. through its redevelopment.

Registered Providers of Social Housing

The council will consider waiving or reducing its costs recovery if:

(a) The appropriate person is a body eligible for registration as a social housing landlord under section 112 of the Housing and Regeneration Act 2008 (for example, a housing association);
(b) Its liability relates to land used for social housing, and
(c) Full recovery would lead to financial difficulties for the appropriate person(s), such that the provision or upkeep of the social housing would be jeopardised.

The extent of the waiver or reduction will normally be sufficient to avoid any financial difficulties.

Any shortfall in funding from any such waiver or reduction in cost recovery action should be made up by an application for CLCPP funding. If such an application is not successful the council should undertake an appraisal of options available at that particular time. This is likely to include determination of the land as contaminated land and not being able to remediate the land until such time as the financial circumstances improve or voluntary clean up can be negotiated i.e. through its redevelopment.

Where Other Potentially Appropriate Person(s) have Not Been Found

In some cases where a Class A person has been found, it may be possible to identify another person who caused or knowingly permitted the presence of the significant pollutant in question, but who cannot now be found for the purposes of treating the person(s) as an appropriate person. For example, this may apply where a company has been dissolved.

The council will consider waiving or reducing its costs recovery from a Class A person if that person demonstrates to the satisfaction of the council that:

(a) Another identified person, who cannot now be found, also caused or knowingly permitted the significant pollutant to be in, on or under the land: and
(b) If that other person could be found, the Class A person seeking the waiver or reduction of the council's costs recovery would either:
    (i) Be excluded from liability by virtue of one or more of the exclusion tests set out in Defra Circular 01/2006, or
    (ii) The proportion of the cost of remediation which the appropriate person has to bear would have been significantly less, by virtue of the guidance on apportionment set out in Defra Circular 01/2006.

Where an appropriate person(s) is making a case for the council's costs recovery to be waived or reduced by virtue of sections (a) and (b) above, the council will expect that person to provide evidence that a particular person, who cannot now be found, caused or knowingly permitted the significant pollutant to be in, on or under the land. The council will not regard it as sufficient for the appropriate person concerned merely to state that such a person must have existed.

Any shortfall in funding from any such waiver or reduction in cost recovery action should be made up by an application for CLCPP funding. If such an application is not successful the council should undertake an appraisal of options available at that particular time. This is likely to include the determination of the land as contaminated land and not being able to remediate the land until such time as the financial circumstances improve or voluntary clean up can be negotiated i.e. through its redevelopment.

KP4 – Cost Recovery

When the council either does not serve a Remediation Notice or where a Remediation Notice has been served and not complied with the council will bear the costs of remediation (where external funding cannot be found). The council is entitled to recover 'reasonable' costs where it has carried out remediation works.

Note 1: The council is unable to recover costs associated with the investigation of a site.

Note 2: The administrators of the CLCPP will not support costs that the council intends to recover at a later date (if recovery is uncertain) or may take a number of years to retrieve.

The council will seek to recover costs either in full or in part in line with the outcome of the hardship and fairness tests detailed in KP1 to KP3.

Glossary

The 'Act'	The Environmental Protection Act, 1990
The 'Regulations'	The Contaminated Land (England) Regulations, 2006
The 'Guidance'	Defra; Environmental Protection Act 1990: Part 2A Contaminated Land Statutory Guidance April 2012
Apportionment	As defined by the Act, means:- Any determination by the enforcing authority under section 78F(7) (that is, a division of the costs of carrying out any remediation action between two or more appropriate persons).
Appropriate Person	As defined by section 78A(9) of the Act, means:- Any person who is an appropriate person, determined in accordance with section 78F of the Act, to bear responsibility for anything which is to be done by way of remediation in any particular case.
CLCPP	Contaminated Land Capital Projects Programme
Class A Person	As defined by Section 7.3(a) of the Guidance, is a person who is an appropriate person by virtue of section 78F (2) of the Act (that is, because he has caused or knowingly permitted a pollutant to be in, on or under the land).
Class B Person	As defined by Section 7.3(a) of the Guidance, is a person who is an appropriate person by virtue of section 78F(4) or (5) of the Act (that is, because he is the owner or occupier of the land in circumstances where no Class A person can be found with respect to a particular remediation action).
Contaminant Linkage	As defined by Section 3.9 The term "contaminant linkage" means the relationship between a contaminant, a pathway and a receptor. All three elements of a contaminant linkage must exist in relation to particular land before the land can be considered potentially to be contaminated land under Part2A, including evidence of the actual presence of contaminants.
Significant Contaminant Linkage	As defined by Section 3.9 The term "significant contaminant linkage", as used in this Guidance, means a contaminant linkage which gives rise to a level of risk sufficient to justify a piece of land being determined as contaminated land.
Contaminant/ Pollutant	As defined by Section 3.8(a) of the Guidance, is a substance that is in, on or under the land and which has the potential to cause significant harm to a relevant receptor or to cause significant pollution to controlled waters.

Controlled Waters	As defined by section 78A(9) of the Act by reference to Part III (section 104) of the Water Resources Act 1991, which includes territorial and coastal waters, inland fresh waters, and ground waters.
Cost Recovery Decision	Any decision by the enforcing authority whether: (i) to recover from the appropriate person all reasonable costs incurred by the authority in carrying out remediation; or (ii) not to recover those costs or to partially recover costs
Council	London Borough of Tower Hamlets
Enforcing Authority	For land not designated as being a 'special site', the enforcing authority within is London Borough of Tower Hamlets. For land designated as being a 'special site', the enforcing authority is the Environment Agency.
Exclusion	Any determination by the enforcing authority under section 78F(6) of the Act as defined by Section 7.3(e) of the Guidance (that is, that a person is to be treated as not being an appropriate person).
Hardship	A factor underlying any cost recovery decision made by an enforcing authority under section 78P(2) of the Act
Orphan Linkage	A significant contaminant linkage for which no appropriate person can be found, or where those who would otherwise be liable are exempted by one of the relevant statutory provisions.
Owner	As defined by section 78A (9) of the Act as being: "a person (other than the mortgagee not in possession) who, whether in his own right or as trustee for any other person, is entitled to receive the rack rent of the land, or where the land is not let at a rack rent, would be so entitled if it were so let."
Part 2A	Means Part 2A of the Environmental Protection Act, 1990
Pathway	As defined by Section 3.8 (c) of the Guidance, is a route by which a receptor is or might be affected by a contaminant.
Precautionary Principle	Article 130 of the "Treaty on European Union" places the basis for environmental protection upon the 'Precautionary Principle'. Where, in the absence of firm scientific evidence regarding the effects of a particular substance or activity, the protection of the environment should be the first concern. Furthermore, there is no need for scientific proof before preventative action is taken. In summary, the reduction of risks to the environment by taking avoiding action before any serious problem arises.
The Polluter Pays Principle	Article 130 of the "Treaty on European Union" looks to ensure that the costs of environmental damage caused by polluting activities are borne in full by the person responsible for such pollution (the polluter). The principle accepts that (i) the polluter should pay for the administration of the pollution control system, UNLESS they are no longer in business; and (ii) the polluter should pay for the consequences of the pollution (e.g. compensation and remediation).
Receptor	As defined by Section 3.8 (b) of the Guidance is something that could be adversely affected by a contaminant, for example a person, an organism, an ecosystem, property, or controlled waters.
Register	The public register maintained by the Authority under section 78R of the Environmental Protection Act, 1990.
Remediation	As defined by section 78A(7) of the Act, means:- (a) The doing of anything for the purpose of assessing the condition of (i) the contaminated land in question; (ii) any controlled waters affected by that land; or (iii) any land adjoining or adjacent to that land; (b) The doing of any works, the carrying out of any operations or the taking of any steps

	in relation to any such land or waters for the purpose: - (i) of preventing or minimising, or remedying or mitigating the effects of, any significant harm, or any pollution of controlled waters, by reason of which the contaminated land is such land; or (ii) of restoring the land or waters to their former state; or (c) The making of subsequent inspections from time to time for the purpose of keeping under review the condition of the land or waters; Cognate expressions shall be construed accordingly.
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Remediation Action	As defined by Section 7.3(c) of the Guidance, a "remediation action" is any individual thing which is being, or is to be, done by way of remediation.
Remediation Package	As defined by Section 7.3(c) of the Guidance a "remediation package" is all the remediation actions which relate to a particular contaminant linkage
Remediation Scheme	As defined by Section 7.3(c) of the Guidance a "remediation scheme" is the complete set of remediation actions (relating to one or more contaminant linkages) to be carried out with respect to the relevant land or waters.
Risk	As defined by Section 3.1 of the Guidance, risk means the combination of (a) the likelihood that harm or pollution of water, will occur as a result of the contaminants in on or under the land; and (b) the scale and seriousness of such harm or pollution if it did occur.
Special Site	Land that has been designated as such by virtue of sections 78C(7) and 78D(6) of the Act, and that further defined within regulations (2), (3), and schedule (1) of the Regulations.
Substance	As defined by section 78A(9) of the Act, means any natural or artificial substance, whether in solid or liquid form or in the form of a gas or vapour.