ISLINGTON
getting greener

Contaminated Land Inspection Strategy

Part IIA of the Environmental Protection Act 1990

May 2010

Executive Summary

Under the contaminated land provisions contained in Part IIA of the Environmental Protection Act 1990, the Council is required to inspect land in its Borough for contamination. In September 2001 a strategy was submitted to the Department for the Environment, Food and Rural Affairs, detailing how the authority will take a rational, ordered and efficient approach to this inspection. This document is the first revision of the September 2001 contaminated Land inspection Strategy. It sets out the strategy for the next three years.

The strategic aims of the strategy have not changed. They are to :

- protect human health and the environment from unacceptable risks associated with contaminated land,
- comply with the provisions of Part IIA, and
- encourage voluntary remediation.

A geographical information system (GIS) identifying potential sources of contamination by reviewing historical maps was set up in 2003. Approximately 800 potential sites have been identified. These sites have been prioritised and will now be subject to a programmed investigation and inspection. At all times during the inspection of the Borough, council owned land will be considered in the same manner as all other land holdings. Controlled waters and protected areas of the environment will be also be examined in accordance with assigned priority.

It is recognised that some sites may be identified outside this general approach to inspection that will require urgent attention. These sites will be dealt with as they arise.

The Council will support parties wishing to undertake voluntary remediation.

Islington Council is the lead regulator on contaminated land but, wherever necessary, the Council will work in partnership with other organisations particularly the Environment Agency. Consultation has been undertaken with all relevant bodies and organisations. All actions will be based on current authoritative guidance.

The regulations set clear criteria that must be met before land can be formally designated as contaminated land. As such it is possible some areas may be identified as being in a contaminated state but not be designated as contaminated land. The expectations of some members of the public will not be met by the powers local authorities may exercise under contaminated land legislation. The Council must also maintain a public register detailing the regulatory action taken by the Council.

Contents

1 INTRODUCTION

Terminology

A glossary of terms can be found in Appendix 1.

Background

The London Borough of Islington is required under Part IIA of the Environmental Protection Act 1990 to produce a strategy for the identification and inspection of contaminated land in the Borough. The strategy must have regard to statutory guidance issued by the Secretary of State on the implementation of Part IIA.

1.1 General Policy of the Local Authority

The Council's vision

This contaminated land inspection strategy has been set out within the context of Islington Council's vision and key priorities. These have been reproduced below.

1.1 The Council's 'One Islington' vision

1.2 Our vision is that we want Islington to be

- A greener place to bez
- A place where people of all backgrounds are able to realise their full potential
- A borough of safe and empowered communities

1.3 We want Islington Council to be

- Fully accessible, electronically enabled and responsive to people's needs
- Regarded as providing high quality modern services
- Working together with other public services to deliver an improved service

1.4 Our key priorities (for next three years)

- Regenerating the Borough working in partnership with Islington's diverse communities and local providers
- Working towards a sustainable 'greener' future making the borough a more environmentally friendly place to live and work
- Improving the performance of our services delivering value for money and high quality services that strive to continually improve
- Focusing on the needs of our customers organising ourselves to meet the needs of our customers, involving and empowering communities and individuals.

A number of the Council's key themes are reflected in the contaminated land inspection strategy. The formulation of the strategy is an example of partnership working. Environmental responsibility is made explicit and the quality of the environment improved.
The strategy also promotes regeneration, a Council key priority.

1.2 Links with other Council policies

Unitary Development Plan & Islington's Planning Standards Guidance

Islington's Unitary Development Plan (UDP) contains limited provisions for the development of contaminated land.
The UDP requires treatment to any contaminated land before any development can commence. Developers of contaminated land will be required to undertake remedial work to the satisfaction of the Council. Full details of the proposed decontamination will be required as part of any planning application before it is considered, and may be subject to planning conditions.

Local Agenda 21

Islington Council's Local Agenda 21 strategy sets out how it works in partnership with its communities towards sustainable development, defined internationally as "a better quality of life for everyone, now and for generations to come". Although the Local Agenda 21 strategy makes no specific reference to contaminated land, the contaminated land inspection strategy helps achieve environmental sustainability.

Community Strategy

Part 1 of the Local Government Act 2000 places a duty on local authorities to produce community strategies, working in partnership with local communities. The purpose of community strategies is to promote and improve the environmental well being of their area and so contribute to their sustainable development.
Islington's community strategy has a number of themes. 'Theme 4, a healthier community' states 'we will promote a modern comprehensive programme to reduce health inequalities, address social, economic and environmental factors which are the root cause of ill health.' Theme 5, a better and cleaner environment' states we want Islington to be a clean and healthy place to live and work.
Whilst contaminated land is not specifically mentioned in the community strategy the contaminated land inspection strategy is entirely consistent with the aim and themes 4 and 5 of the community strategy.

Enforcement Policy

Islington Council is an enforcing authority under Part IIA of the Environmental Protection Act 1990. The Council adheres to the principles of good enforcement as detailed in the enforcement concordat. The Council will be open and helpful towards businesses and other relevant interested parties and will ensure that any action taken will be consistent and proportionate to the risks involved.

Public access to information

Islington Council does not have a written policy on public access to information, but adheres to the Environmental Information Regulations 1992 and the Freedom of

Information Act 2000 that gives the public the right to access certain environmental information. The Council makes environmental information available through its web site, Council newsletters and publications.

1.3 Regulatory Context

The current laws on contaminated land are contained in Part IIA of the Environmental Protection Act 1990 (inserted by s57 of Environment Act 1995). They seek to deal with the contamination of land arising from the legacy of England's industrial heritage that pose a serious threat to health or the environment including the pollution of controlled waters.
The main objective of Part IIA is to provide an improved system of identification and remediation of contaminated land when the contamination is causing unnecessary risks to human health or the wider environment. The extent of any risk will be assessed in the context of the current use and circumstances of the land.

Regulatory Role of Local Authorities

The role of local authorities under Part IIA is to

- Inspect their areas to identify contaminated land,
- Establish responsibilities for remediation of the land,
- Ensure that appropriate remediation takes place through agreement with those responsible, or if that is not possible,
- by serving a remediation notice, or
- in certain cases, carrying out the work themselves, or
- in certain cases, through other powers, and to
- Keep a public register detailing the regulatory action that they have taken under the new regime.

Regulatory role of the Environment Agency

The Environment Agency is

- the enforcing authority for contaminated land which meets the definition of a ''special site''
- required to publish periodic reports on the state and condition of land
- required to assist local authorities by providing site specific local guidance.

Islington Council works closely in partnership with the Environment Agency's Contaminated Land team based in Hatfield, Hertfordshire.

Definition of Contaminated Land

Under Part IIA the statutory definition of contaminated land is

> ''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) pollution of controlled waters is being, or is likely to be, caused."

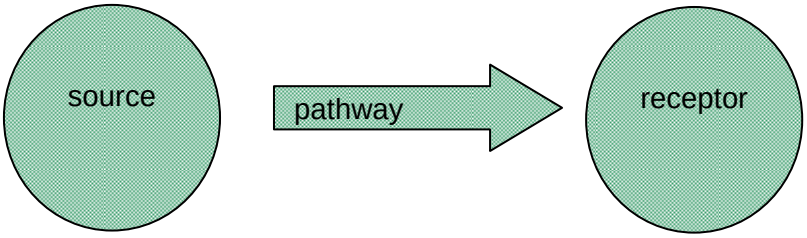
It is proposed that the definition of contaminated land be amended by the forthcoming Water Bill, to become: 'Significant pollution of controlled waters is being, or is likely to be, caused.'

Principles of pollutant linkages & risk assessment.

Part IIA recognised that harm to health and the environment arises not from the mere presence of contaminating substances in land, but from their movement along a ‘‘pathway’’ to where they can cause damage to a ‘‘receptor.’’
For a site to meet the definition of contaminated land, a pollutant linkage must be established. A pollutant linkage consists of 3 parts;

- A source of contamination in, on or under the ground
- A pathway by which the contamination is causing significant harm (or which represents a significant possibility of such harm being caused)
- A receptor of a type specified in the regulations

A pollutant linkage can be represented by the diagram below.



The four classes of receptors that are defined as being potentially sensitive are:
a) Humans
b) Any ecological system, or living organism forming part of such a system, within a location which is:

- An area notified as an area of special scientific interest under section 28 of the Wildlife and Countryside Act 1981;
- Any land declared a National Nature Reserve under section 35 of that Act;
- Any area designated as a Marine Reserve under section 35 of that Act;
- An area of special protection for birds established under section 3 of that Act;
- Any European Site within the meaning of regulation 10 of the Conservation (Natural Habitats etc.) Regulations; 1994 (i.e., Special Areas of Conservation and Special Protection Areas);
- Any candidate Special Area of Conservation or potential Special Protection Areas given equivalent protection;
- Any habitat or site afforded policy protection under paragraph 13 of Planning Policy Guidance Note 9 (PPG9) on nature conservation (i.e., candidate Special Areas of Conservation, potential Special Protection areas and listed Ramsar sites); or
- Any nature reserve established under section 21 of the National Parks and Access to the Countryside Act 1949

c) Property in the form of:

- Crops including timber
- Produce grown domestically, or on allotment for consumption
- Livestock
- Other owned or domesticated animals
- Wild animals , which are the subject of shooting, or fishing rights, and
- Property in the form of buildings.

- For this purpose 'building' means any structure or erection, and any part of a building including any part below ground level, but does not include plant or machinery comprised in a building.
-

d) Controlled water
- Major Aquifer (including source protection zones)
- Minor Aquifer – potable and non-potable supplies
- Surface waters (rivers, streams, ponds etc.)

If the three components of the pollutant linkage exist, a risk assessment will be undertaken to determine the likelihood of harm being caused and the likely nature and extent of the harm caused if the predicted event actually occurred. An area of land can only be designated if a significant risk has been proven.
If an area of land has been identified the approach for dealing with it will be the same, regardless of whether the local authority or the Environment Agency is the regulator. There are four main stages to this approach:

- to establish whom is the appropriate person to bear responsibility for the remediation of the land.
- to decide what remediation is required and to ensure that this occurs, through;
- reaching a voluntary agreement,
- serving a remediation notice, if agreement cannot be reached,
- the Local Authority or the Environment Agency carrying out the works themselves, in certain circumstances,
- to determine whom should bear what proportion of the liability for meeting the costs of the work, and
- to record certain information about regulatory action on a public register.

Requirements of a Strategic Approach

Paragraph B9 of statutory guidance (DETR circular 01/2006) requires local authorities, in carrying out its inspection duty under 78B(1) of the Environmental Protection Act 1990 to take a strategic approach to the identification of land which merits individual inspection. The circular states this approach should

- be rational, ordered and efficient
- be proportionate to the seriousness of any actual or potential risk
- seek to ensure that the most pressing problems are located first
- ensure that the local authority efficiently identifies requirements for the detailed inspection of particular areas of land.

1.4 The Strategy

The Pollution Projects Team within the Council's Environment and Conservation department lead on the production and implementation of the Council's Contaminated Land Inspection Strategy in 20001. Relevant Council services such as Planning, Building Control, Borough Valuers, Legal and Public Services, and Public Realm, were given the opportunity to contribute to the strategy. Wide external consultation of the strategy took place and included all statutory consultees and identified stakeholders.

The Pollution Projects Team in accordance with the timetable for review produced a revision of the strategy in 2004. The relevant Council departments were invited to comment on the revised strategy and comments received had been taken into account.

1.5 Objectives of Strategy Document

The objectives of Islington's contaminated land inspection strategy document are:

- To meet the requirement of producing and maintaining an up to date strategy.
- To demonstrate how Islington Council meets the criteria in paragraph B.9 of the statutory guidance.
- To inform all stakeholders of Islington's intentions.
- To provide information to the Environment Agency for its report on contaminated land.

2 Characteristics Of The London Borough Of Islington

Geographical Location

Islington is one of 32 London boroughs, situated immediately north west of the City of London. It has boundaries with Hackney to the east, Camden to the west and Haringey to the North. Figure 1 shows the location of Islington within London.

Figure 1. Location of Islington within London.

Size

Islington is one of the smallest London Boroughs with an area of 1,487 hectares. It is approximately three miles north to south and two miles east to west.

Population

The table below gives details of Islington's area, population and age structure.

Islington's population	
Area	1487 hectares (5.74 sq. miles)
Population 1997 (LRC Demographic Projections 1999 round)	176,682
Estimated Population in 2011 (LRC Demographic Projections 1999 round)	185,309
Age Structure 1997 (LRC Demographic Projections 1999 round)	
0-14	34,187 (19.3%)
15-34	62,895 (35.6%)
35-39	52,455 (29.7%)
60 and over	27,195 (15.4%)

Islington's population is evenly distributed across the borough. Areas with a predominantly residential environment are shown in figure 2 below.

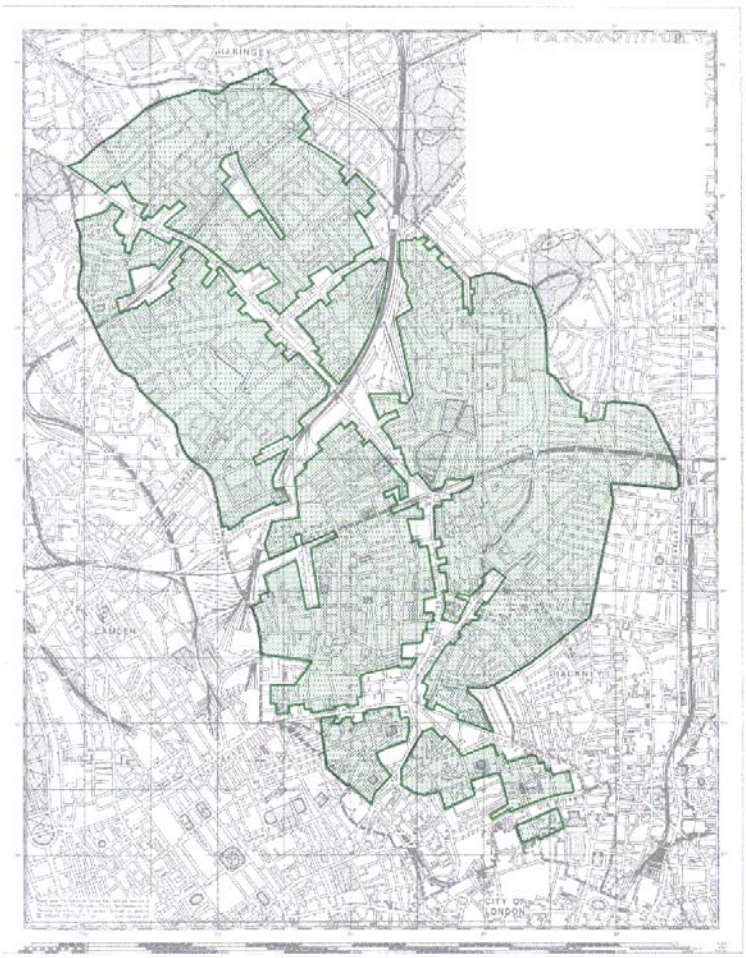


Figure 2. Green shaded areas are predominantly residential.

Current and past industrial history

Islington's present environment arises from several phases of development going back to the Middle Ages. Although very few buildings survive from then, the main street pattern can, in many cases, be traced back to this time, when development was spreading beyond the northern edge of the City and consolidating around the villages of Islington and Newington Green. Even so, Islington remained a village surrounded by open countryside until around 1800. The main role of the fields around Islington was for dairy farming, supplying milk to the City of London. After the 1820's however, the pace of London's expansion accelerated. The residential areas of Barnsbury and Canonbury were laid out during the first half of the 19th Century in the Georgian pattern of terraces and squares and many parts of these areas still provide a pleasant residential environment. During the latter half of the 19th Century the northern part of

the borough was almost entirely built over in the form of closely packed terraces, but occasionally, as in parts of Tufnell Park, streets were laid out to more spacious standards. The railway lines, with their disregard for street pattern and housing, were built across the borough at this time, and most main roads were developed for shops

Figure 3.

and commercial uses.
Widespread redevelopment occurred in the 19th Century when residential areas, particularly in Finsbury, were removed and the land used for industrial and commercial uses. More recently - particularly since l950 - extensive areas have been redeveloped for housing across the borough, with noticeable changes to the street pattern and scale of development. On the edges of the City there has been a concentration of high-density commercial development, substantially occurring within the existing street pattern. Figure 3 gives a schematic representation of the development of Islington.
The historical development of the borough has left a legacy of many fine buildings. About 4,200 are on the national list of Buildings of Special Architectural or Historic Interest (Listed Buildings). The Council has also compiled a 'local list' of several

thousand other buildings which are of less architectural or historic importance but are still worthy of retention. The general pattern of the borough is of sound, consistent buildings representative of their time. Over 30% of the area of Islington is now included within Conservation Areas, which total 35 in number.
Islington's attractive residential environment, combined with its accessibility to Central London has led to escalating property prices and an influx of high-income residents. The restoration and improvement of many of Islington's old buildings has been one result of this. There has also been considerable pressure for commercial development in the areas bordering the City, at the Angel, and more recently at King's Cross. The last mentioned includes the King's Cross Railway Lands site, which is potentially the largest redevelopment site in Europe. Although this is in Camden, it immediately borders Islington, and large-scale developments, if they take place, will have a big impact on the borough. The Channel Tunnel Terminal is also proposed at St. Pancras - which will further increase the attraction of Islington for new investment. Other rail lines currently being considered, such as the East-West CrossRail, and the Chelsea-Hackney line will have a similar effect.

Current land Use Characteristics

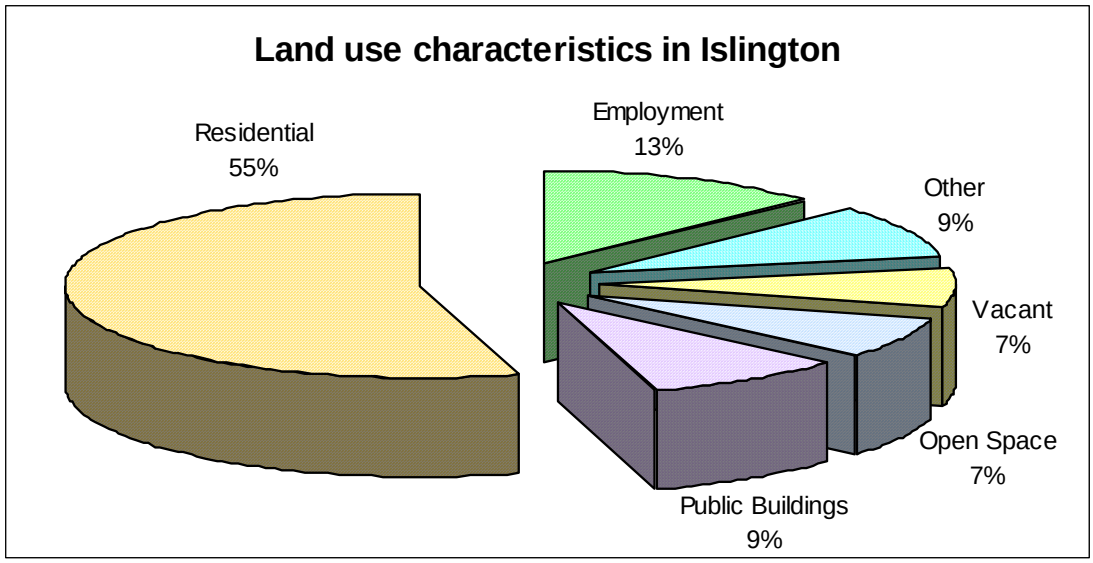


Figure 4. (Source: LBI Land Use Survey. Land use information is no longer collected systematically so updating from 1989 has not been possible. Figures do not add up to 100 due to rounding up)

Although land use is predominantly residential (see Figure 4), there are significant areas of commercial development, especially in the South. Immediately adjacent to the City there is a zone of large offices followed by a zone characterised by a rich mix of small service type businesses, hospitals, educational institutions etc related to the central business district.

The commercial areas are generally mixed in with residential and other uses and there are a few small purpose-built industrial estates or consolidated factory/warehousing zones. The last few years have seen a significant amount of re-development of former commercial sites to provide more housing and the population is now rising again.
There are two main ‘‘Town Centres’’ namely the Angel and the Nags Head, which provide a good range of shops, and four or five other local shopping centres.
There is little by way of open space in the Borough. In terms of larger parks the borough has only 35 hectares of what can be termed ‘district’ and ‘borough’ sized spaces. Figure 5 shows the location of open space within Islington.

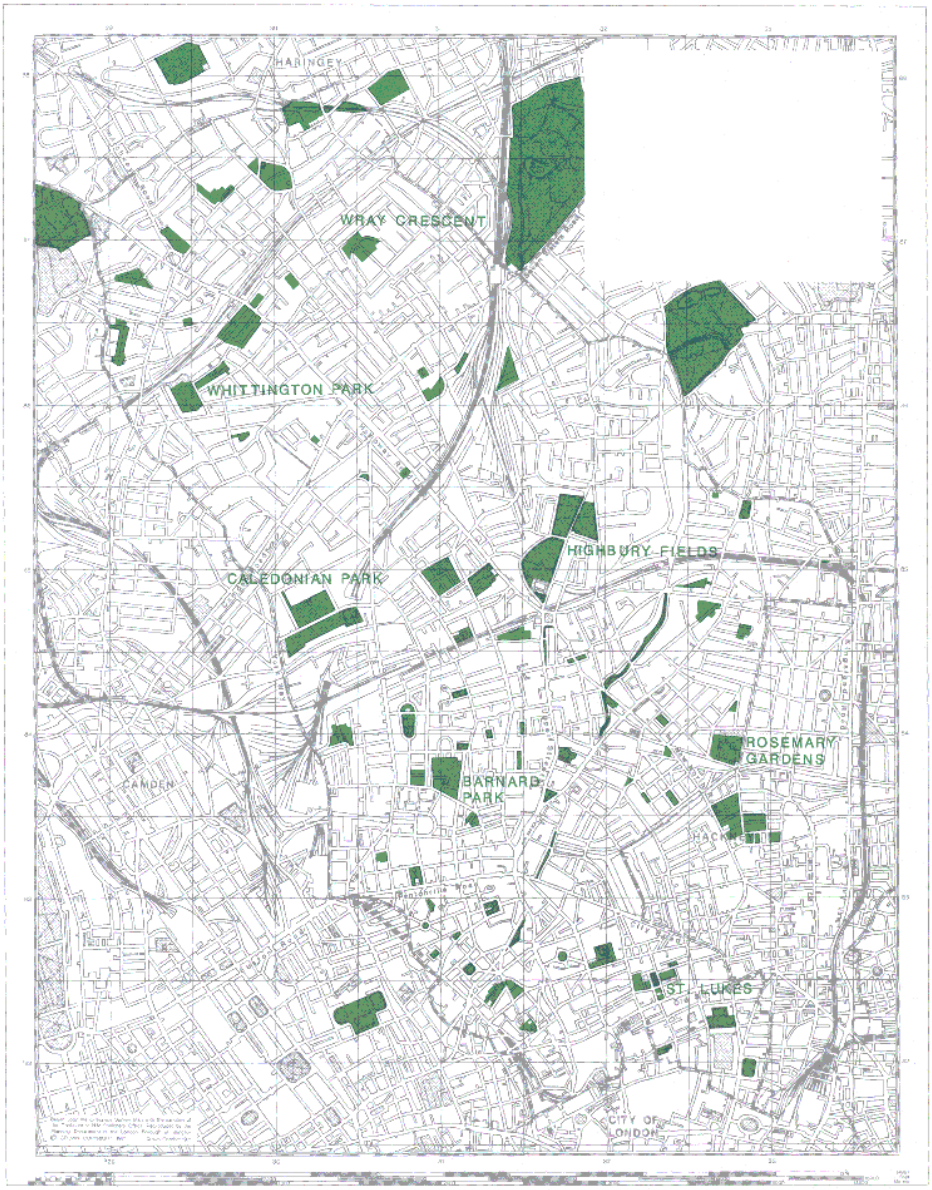


Figure 5. The green areas represent open space.

The Regents Canal (including two large canal basins) runs east west across the Borough.

The Victoria and Piccadilly lines of the London underground serve Islington. Railway links to the North from Kings Cross and St Pancras travel through the Borough. Islington is the home of Arsenal Football Club, Moorfields eye hospital and City University.
Regeneration is taking place across Islington. At King's Cross and Finsbury Park, Single Regeneration Budget (SRB) money received from the Government is being spent on comprehensive regeneration projects to improve employment opportunities, training and the environment as a whole. In the 'City Fringe' area, SRB money has been used to help bring about economic development through links with the City. In addition, capital investment in housing has been used to redevelop the Marquess Estate (now called New River Green). Future regeneration is also targeted at Bunhill where a bid has been made, from the Government, for 'New Deal for Communities' funding. Future bids for regeneration monies may also be sought for the Mildmay area.

Details of the Authorities ownership of Land

The Council is the landowner for many sites in the borough, and a few outside the borough. These include council offices, public buildings, housing estates and individual properties, council depots, and commercial buildings let to private businesses. The Council is currently compiling a database of Council owned land and buildings.

Protected locations

There are no special sites of scientific interest in Islington. There are three statutory nature conservation sites within Islington, namely Barnsbury wood local nature reserve, Gillespie park local nature reserve and part of the Parkland walk local nature reserve.
There are a number of non-statutory nature conservation sites in the borough. Perhaps the most sensitive ecological receptor in the borough is the length of the Regent's canal. Like the rest of the canal network this stretch has been identified as a site of metropolitan importance for nature conservation. Figure 6 shows the protected locations within Islington.

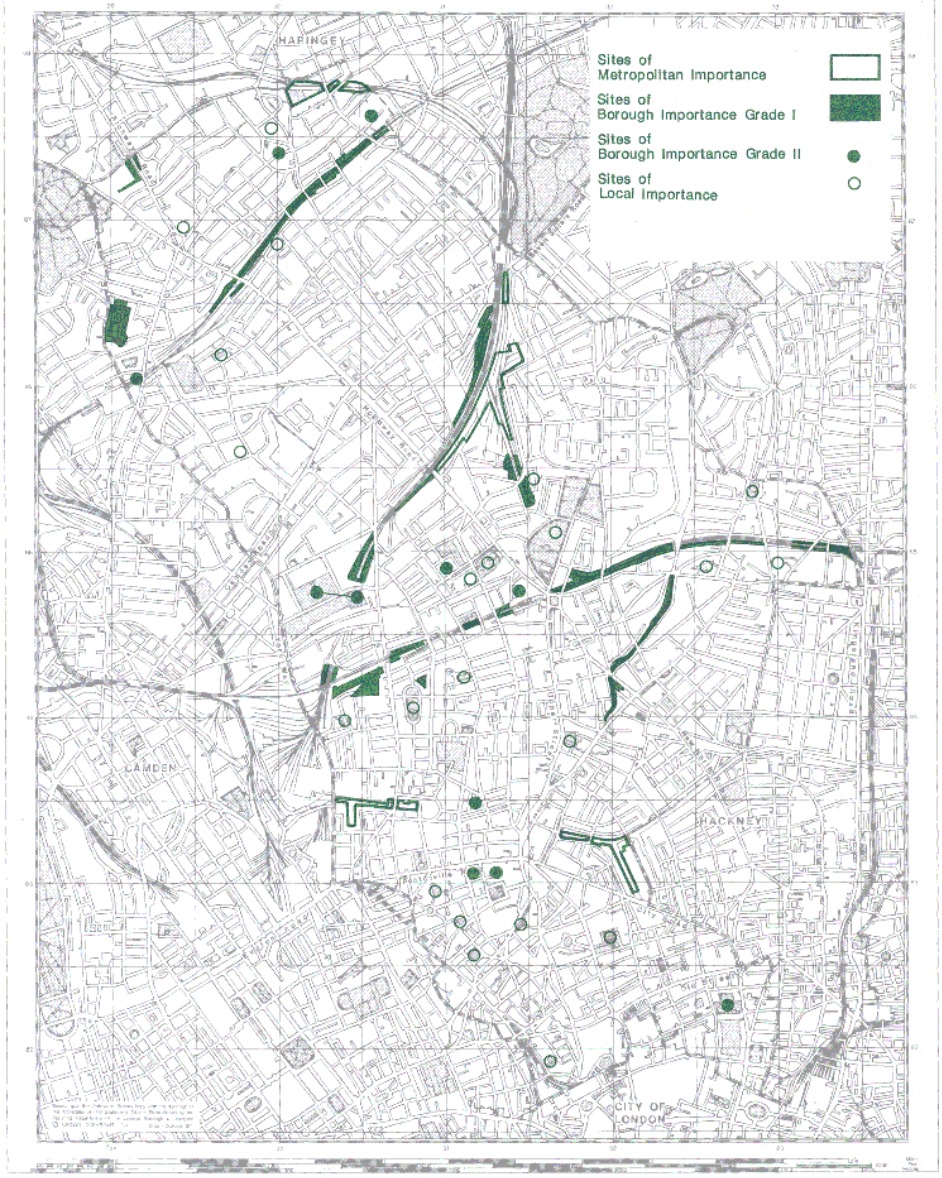


Figure 6. Protected areas within Islington.

Protected buildings

Protected buildings in the borough include listed buildings, archaeological remains, landmarks and conservation areas.
Islington has 4200 buildings and other features on the statutory list of buildings of architectural or historic interest.
The archaeological evidence for prehistoric activity in Islington is concentrated in the southern part of the borough, although there is currently not enough information to be able to describe the activity in any great detail. During the Roman, medieval, and later

periods the borough's archaeology was dominated by the historic urban core of London to the immediate south.
The southern part of the borough contains much archaeological evidence for activities which would have been unwelcome within the more-densely occupied urban area, such as burial of the dead, quarrying, and the disposal of the city's waste. The Clerkenwell area also became an important location for religious houses during the medieval period, with three major communities of monks and nuns established by the thirteenth century.
To the north of this area the archaeological evidence suggests that the borough was mainly open land, with Islington village the only significant settlement throughout the medieval and post-medieval periods. Although aspects of earlier settlement can still be seen in the survival of medieval buildings and the street pattern, the borough's current built environment largely derives from the growth of London from the nineteenth century onwards.

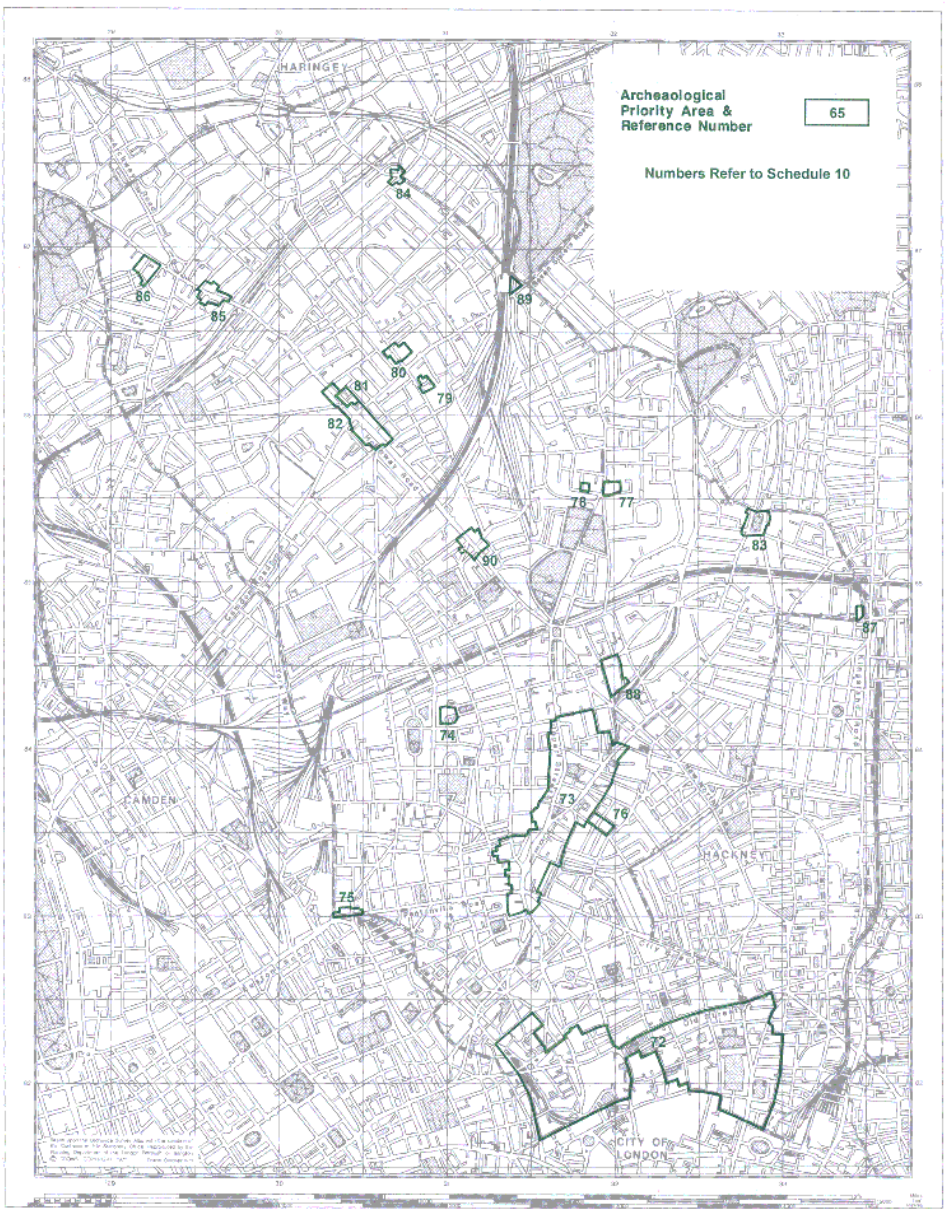


Figure 7. Archaeological Priority Areas. Reference numbers refer to schedule 10 of Islington's Unitary Development Plan.

Islington contains two 'Scheduled Ancient Monuments', which are afforded special protection under law. Both monuments are parts of the important medieval religious houses in Clerkenwell: the gatehouse of St. John's Priory still stands over St. John's Lane; rather less is visible of the nunnery of Mary de Fonte between Clerkenwell Close and St. James Walk.

The following local landmarks are recognised, and protected under Islington's UDP:

- St. Joseph's Roman Catholic Church, Highgate Hill;
- St. Mary's Church Tower and Spire, Ashley Road;
- Boston Arms Dome, junction of Junction Road/Dartmouth Park Hill;
- Camden Road New Church, Tower and Spire;

- Caledonian Market Tower, Market Road;
- Union Chapel Tower and Spire, Compton Terrace;
- St. Mary's Church Tower and Spire, Upper Street;
- St. John's RC Church, Duncan Terrace;
- Diespeker Chimney, 38 Graham Street;
- The Dome of the Angel Corner House, No. 1 Islington High Street;
- The 'Cinema' tower at 7 Islington High Street;
- Engine and Pump House, New River Head;
- St. James's Church Tower and Spire, Clerkenwell Close;
- St. Luke's Obelisk Spire, Old Street;
- Leysian Mission Dome, City Road;
- Lowndes House, 1 City Road;
- Triton Court on the north side of Finsbury Square;

Islington has 34 conservation areas.
There are currently 6 buildings in Islington listed in the Buildings at Risk register 2000 produced by English Heritage.

Broad geological/hydrological features

The oldest geological stratum exposed in Islington is London clay, deposited in the Eocene period 65 to 38 million years ago. Over the borough the clay varies in thickness from approximately 15 to 65 metres. This was overlain by sandier material, first the sand and loam of the claygate beds and later the sand of the bagshot beds, but these have been eroded over most of the borough. Claygate beds remain only along the high ground of the northern edge of the borough, with a tiny capping of bagshot beds in the north west corner. The remainder of the northern half of the borough has the London clay exposed in a broad belt. Further south it is largely overlain by much younger riverine deposits of several types. The most widespread of these are river gravels, laid down by the shifting course of the river Thames. Two terraces are represented in Islington, the Taplow Terrace down the eastern edge of the borough between Newington Green and Clerkenwell and the Boyn Hill Terrace further west in a belt from Lower Holloway to Finsbury. These are overlain in places (most extensively in Canonbury) by brick earth; this is a fine dust originated in desert conditions, which has been reworked by the river. Alluvial deposits of recent age can be found in a narrow strip ion the extreme south west of the borough, where they were deposited by the river Fleet and in the extreme south east, where the Walbrook was responsible. Beneath the clay layer across the whole of Islington and beyond is a thick layer of chalk.
The chalk layer is the major aquifer for the Thames region and is therefore at risk from water pollution. The London Clay overlying the chalk provides the chalk with protection from water pollution, however the aquifer could be contaminated through deep boreholes penetrating through the London Clay into the chalk. The river terrace gravels are classified as minor aquifers and as such can be expected to support small scale abstractions for public supply, and are thus more vulnerable to pollutants than areas with no drift geology and London Clay solid geology.
Islington has a number of existing boreholes - in most cases records of these are kept by the British Geological Survey (Hydrogeology group). Islington Council wishes to

either preserve or reuse existing boreholes or to sink new wells, in order to use ground water for:

- watering parks and gardens,
- domestic and commercial use where portable water is not required (such as toilets),
- for drinking water (subject to treatment and national legislation), as necessary.

Specific local features e.g. areas of naturally enriched soils

Local soils are not known to contain any special features such as radon or high levels of heavy metals.

Redevelopment history and Controls

For a number of years Islington's Planning Officers have required major developers to ensure the safe redevelopment of land through the imposition of planning conditions. Requirements may include the investigation of land for contamination and appropriate remediation.

Action already taken to deal with contaminated land

The Council has dealt with contamination primarily through the Development Control process referred to above. It has also responded to particular incidents and enquiries regarding potential contamination in order to ascertain the extent of the problems and ensure appropriate measures were taken.

Key water resource and protection issues

These are no rivers in Islington and little surface water, as the Borough's natural watercourses have long been culverted below ground, leaving only a few artificial water bodies.
The Regent's canal is Islington's principal watercourse running east west through the south of the Borough. The canal has an acceptable level of water quality. The EA classifies the canal for water quality as RE3 on a scale of 1 to 5, with 5 being the most polluted.
The New River is an artificially created channel, cut in 1613 to bring water from springs in Hertfordshire to supply the City of London. Today the Islington part is reduced to a series of linear ponds set in attractive ornamental gardens, known as the New River Walk. There is a reservoir of water at Claremont Square and another at Dartmouth Park Hill.
There are ground water sources within the London Boroughs of Hackney and Haringey whose source protection zones fall partly within Islington. The source protection zones are shown in Figure 8.

Known information on contamination

A number of sites have been surveyed in the past in connection to development. The Public Protection Division holds this information. In cases where development has taken place, the land has been remediated to a safe level. Some information is also held regarding potential development sites where site surveys have been carried out.

The Building Control section also holds information relevant to contamination, mostly soil analysis. The information is not readily retrievable and will be accessed for identifying contaminated land on a site basis. The information on its own does not identify contaminated land.

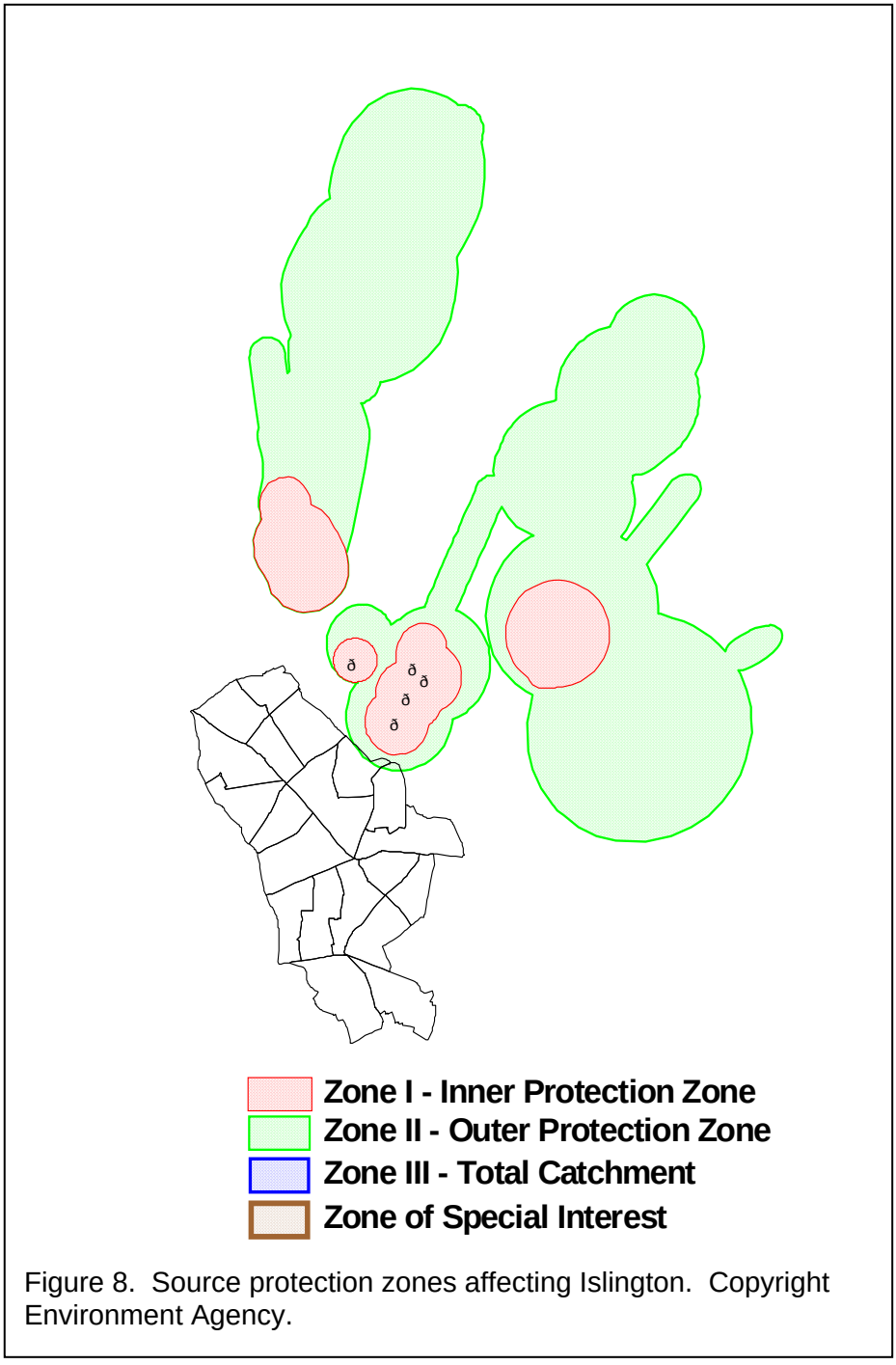


Figure 8. Source protection zones affecting Islington. Copyright Environment Agency.

3 Contaminated Land Inspection Strategy: Overall aims and progress.

3.1 Aims of the strategy

The Council seeks to protect human health and the environment from unacceptable risks associated with contaminated land, comply with the provisions of Part IIA,

- encourage voluntary remediation, and advise the planning regime on new developments where contamination is an issue.

Council priorities

Islington will investigate contaminated land sites where human health could be affected by contamination, and identify contamination that could affect controlled waters.

3.2 Work Progress to date.

A functioning GIS system capable of storing comprehensive information about contaminated land has been established within the Pollution Projects Team and is used to implement this strategy, answer contaminated land enquiries from consultants and provide information to other Council departments. The initial screen completed in 2004 identified 1200 potentially contaminated sites.
To reduce the number of sites, a walk over survey was undertaken in 2007 of all 1200 sites to remove sites that were not seen by officers to be a potential concern, the majority of these sites were office buildings or commercial premises that were completely hard standing. This exercise reduced the list of sites of potential concern to around 800 sites. The sites not seen to be a concern have stayed on the database as they may become an issue should the land use change in the future.

The sites of potential concern have been assigned a priority based on a scoring system that assigns scores based on risk to both sources and receptors. The risk scores assigned to sources and receptors are added together and multiplied by a factor to widen the range. This gives each site an overall risk score. The higher the risk score, the higher the priority of the site.

The priority ratings have been grouped into three bands that have been termed high, medium and low.

PRIORITY RATING	RISK SCORES	NUMBER OF SITES	PERCENTAGE OF SITES
HIGH	52 - 22	30	2.4
MEDIUM	21 - 12	183	14.6
LOW	11 - 2	1051	83

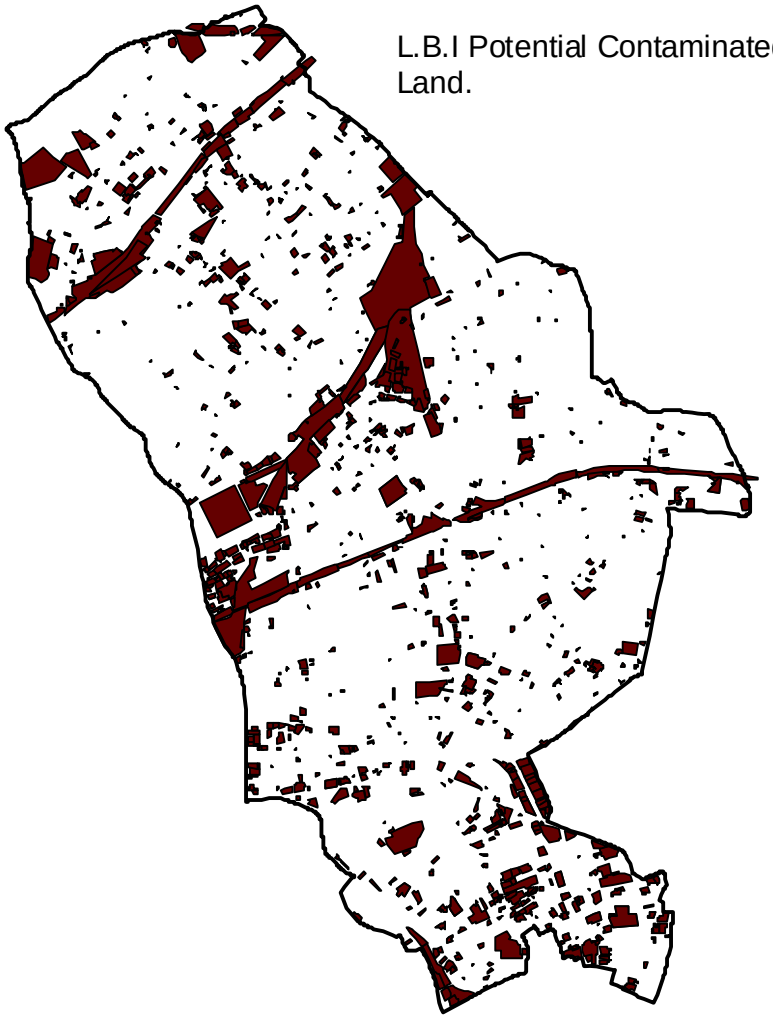


Figure 9. Potentially contaminates sites in Islington.

3.3 Milestones

Work programme Milestones

- Informed relevant council departments of land under their ownership which has a high priority rating which may have been historically contaminated June in 2005.
- Undertook site walk over all sites with a high priority rating June 2006
- Carried out a Tier 1 risk assessment (defined in section 5.5 below) for majority of sites with a high priority rating in 2007.
- Remediated all high priority council sites that were contaminated by 2009.
- Undertaking remediation of councils highest priority site throughout 2010.
- To date almost 120 sites in Islington that had contamination in some form have been remediated through site redevelopment and Part IIA actions.
- Remediated depot spill on council land outside the borough boundary using Bio-remediation and funded by polluter.
- Continually updating the Pollution Projects Team's GIS system inputting 'new' data within one month of it becoming known. Data to include information from planning applications, complaints and any relevant new data sets.
- Worked with other council departments to raise awareness and advice on contaminated land issues for council land or developments.
- Responded on average to 50 environmental queries a year since 2004.
- Involved with Edible Islington for possible growing sites.

4 Priority actions for dealing with contaminated land

4.1 Priority actions

The Council considers the completion of the following actions as being key to the aims and objectives set out in chapter 3.

- Continue to update and add data to the GIS system so that the latest up to date information for sites is available.
- Investigate and deal with any areas of known contamination within the borough when this information is made available.
- Continue to work with council partners on sites that are known or suspected to be contaminated.
- Work with planning officers in the redevelopment of brown field sites to make new developments 'fit for use'.
- Continue to provide answers to environmental queries received by the council.
- To undertake in-house 3 phased investigation of sites from the database using Part IIA guidance.

Long Term Targets;

- At the current time, December 2010, statutory guidance relating to the contaminated land regime is being revised.
- The contaminated land strategy will be reviewed in light of the new guidance once this is known.

5 PROCEDURES

5.1 Internal management arrangements for identification and inspection of contaminated land

Islington's Council's Pollution Projects Team, headed by the Principal Environmental Health Officer (Pollution Projects) and reporting to the Service Manager (Noise and Pollution) is responsible for implementing Part IIA Environmental Protection Act 1990. The Environmental Heath Officer in Pollution Team (EHO (Pollution Projects)) is responsible for the day to day implementation of the strategy, supported by the PEHO (Pollution Projects).
The Service Manager (Noise and Pollution Projects), PEHO (Pollution Projects) and the EHO (Pollution Projects) are authorised to serve remediation notices under Part IIA.
The appropriate Council Head of Service will be informed in writing of any land for which they are responsible, which is found to be contaminated land as defined by s78. The Pollution Projects Team will request information from the appropriate Head of Service as to what further investigation and/or remedial actions are proposed should remediation be required.

5.2 Considering Local Authority interests in land

The investigation of Council owned land and former local authority holdings will be carried out as part of the Council's programme of inspections. As stated in chapter 7 the programme of inspections will be completed in priority order, dealing with the highest priority first.

5.3 Information collection

Many sources of information will be required to identify potential sources of contamination and potential receptors. Some of the resources are detailed below.

Dataset	Description	Source/Pathway/Receptor
Historic maps	Digital format Ordinance Survey maps.	S
Geological maps 1:50 000	Digital solid and drift geology maps.	S, P
Hydro geological maps	The Groundwater Vulnerability Maps produced by the National Rivers Authority.	R (controlled waters)
Source Protection Zones	Areas of groundwater that receive special protection by the Environment Agency are identified on the EA website, and could be used with a GIS.	R (controlled waters)
Public Protection records	Islington Council maintains records of complaints and investigations.	S, P, R
Planning records	Islington Council holds detailed planning records of development in the area,	S, P, R

	including information on ground condition presented in surveys.	
UDP	The current plan is a valuable source of up-to-date information on land use	R
Integrated Pollution Control register	The Council maintains a public register containing details of authorised industrial processes in the Borough.	S
Waste Management Licences	The Environment Agency maintain a public register of sites licensed for waste management activities and have provided relevant information relating to sites in the Borough.	S

5.4 Complaints and Voluntary provision of Information

The Council may receive information and complaints about contaminated land from the Public, business, and voluntary organisations. The reporter may be directly affected, or be concerned for others. The reporter may give their name or wish to remain anonymous.

Complaints

All complaints will be logged, recorded and evaluated by EHO (Pollution Projects). If the Pollution Projects Team forms the view that the complaint is of an urgent nature they will respond appropriately as soon as practicable and no later than 24 hours after receipt of the complaint. Every effort will be made to resolve urgent complaints speedily but the legislative framework does present a number of barriers to the speedy resolution of complaints, as follows

1. proof of a viable pollutant linkage before any contaminated land complaint can be considered for action under Part IIA, which might only be possible with detailed investigation,
2. prior consultation with interested parties before designation as contaminated land,
3. a minimum of three month period between designation and serving a remediation notice, and
4. the requirement for the enforcing authority to make every effort to identify the original polluter of the land (or ‘‘class A’’ person).

The regulations allow conditions 2 and 3 to be waived in extreme cases, but not 1 and 4.

Information arising from urgent complaints will be used to update the GIS system. Non-urgent complaints will not be investigated. Information arising from such complaints will be used to update the Pollution Projects Team’s GIS system, and to produce a revised programme of inspection list, should the risk assessment of the site be affected relative to other sites. The reporter will be advised of this.

Confidentiality

All complainants will be asked to supply their names and addresses and, if appropriate, the address giving rise to the complaint. The identity of the complainant will remain confidential. The only circumstance in which this information might be made public is where the Council is legally required to, e.g. during court proceedings.

Voluntary provision of information

The Council will not deem any information that does not directly affect the reporter's health, the health of their families or their property, as a complaint. There will be no obligation on the Council to keep the reporter informed. The Council may choose to keep the reporter informed as a means of exercising good practise.
Voluntary information supplied will be used to update the Pollution Team's GIS system, and to produce a revised programme of inspection.

Anonymously supplied information

The Council does not normally undertake any investigation based on anonymously supplied information, and this general policy will also apply to contaminated land issues. This policy does not, however, preclude investigation of an anonymous complaint in exceptional circumstances. Information from anonymous complaints will be used to update the Pollution Team's GIS system.

5.5 Information Evaluation

All information on substances in, on or under the ground that may cause significant harm or pollution will be evaluated against current governmental guidelines.

Risk Assessment

All contaminated land sites will be risk assessed by following the DETR publication Guidelines for Environmental Risk Assessment and Management 2000 ('Greensleeves'). This UK Risk Assessment Framework is based on a staged, or tiered, approach, as summarised below
Tier 1:Risk screening – consists of identifying potentially significant pollution linkages
Tier 2:Generic quantitative risk assessment (GQRA) – assesses the potentially significant pollutants linkages against Generic Assessment Criteria (GAC) such as SGVs).
Tier 3:Detailed quantitative risk assessment (DQRA) consists of conducting a detailed, site-specific risk assessment.
The Council may use environmental consultants to risk assess individual sites, drawing on their technical expertise and experience.

CLEA and Tox guidelines

CLEA (Contaminated Land Exposure Assessment), consisting of contaminated land reports, the updated CLEA software, SGVs and latest Tox papers was published in 2002 and updated in 2009. CLEA evaluates the risk to human health from contaminants via different pathways for a range of land uses. To date Soil Guideline Values have been set for seven contaminants – arsenic, cadmium, chromium, lead nickel, mercury and selenium. Fifty-five other contaminants are scheduled to be assessed. The Council will evaluate the risk to human health from contaminated land using CLEA. Further information on CLEA is available from www.defra.gov.uk

Where there is no SGV at present the Council will, depending on the circumstances, wait until a SGV comes out or else develop site specific assessment criteria using revised SNIFFER, the CLR10 equations or other risk assessment tools.
CLEA has effectively superseded the interdepartmental Committee on Redevelopment of Contaminated Land (ICRCL) Guideline Note 59/83 (2nd edition) which was withdrawn by Defra in December 2002.

Risk assessment for controlled waters

Advice will be sought from the Environment Agency on risk assessment if controlled waters are the receptor in a particular pollutant linkage. It is anticipated that risk assessments and remediation will be carried out in accordance with Environment Agency guidance as laid down in "Methodology for the Derivation of Remedial Targets for Soil and Groundwater to Protect Water Resources" (EA R&D Publication 20, 1999). River Quality Objective values (RQO's) and Environmental Quality Standard values (EQS) will be used where available. If these do not exist for a particular watercourse or specific contaminant, a specific risk assessment with regard to the impact on the surface waters sediments and ecosystem will be considered.

Interaction with other regulatory regimes

There are other regulatory actions that apply to contamination on land. Overlaps with planning, water pollution and IPPC legislation are considered the most important and are addressed here. Any issues of land contamination that may previously have been dealt with under the statutory nuisance regime will now be dealt under Part IIA.

Planning

The vast majority of contaminated land issues are currently addressed through the planning regime, where contamination is a material consideration. While the introduction of Part IIA will undoubtedly lead to the problems of additional sites being addressed, it is anticipated that redevelopment of land, and the associated planning controls, will remain the primary mechanism for dealing with contaminated land. Any remediation agreed as a planning condition will be dealt with under planning controls and not under Part IIA. Islington Council's Pollution Team currently works closely with Development Control and Building Control on all issues relating to pollution, and the current arrangements for inter-departmental consultation are believed to be sufficiently robust to encompass contaminated land issues.
A Developer's guide has been written by the Central London Boroughs Contaminated Cluster Group which is intended to provide planning applicants with comprehensive information on the Council's requirements with regard to contaminated Land. The document entitled 'A guide to help Developers meet planning requirements with regard to contaminated land' and is available on the Council's website or from the Council's planning officers or Pollution Projects Team.

Water pollution

The Water Resources Act 1991 gives the Environment Agency powers to deal with harm to controlled waters being caused by contaminated land. While Part IIA legislation does not revoke these powers, Defra have indicated that such problems should now be dealt with under the new contaminated land regime.
The Council will consult with the Environment Agency before designating any contaminated land as a result of risk to controlled waters and will take into account

any comments made with respect to remediation. If the Agency identifies a risk to controlled waters from contaminated land, the Council will be notified to enable designation of the land and remedial action will be taken under Part IIA.

Integrated Pollution Prevention and Control (IPPC)

Under new legislation to regulate pollution from industrial processes, site operators are required to undertake a site condition survey prior to receiving a license to operate. If the site condition is such that areas of land meet the definition of contaminated land, then submission of a site survey may trigger action under Part IIA. Existing processes will be brought under this legislation in stages over the next seven years, although it will apply to any new processes or any substantial change to an existing process.

6 LIAISON AND COMMUNICATION

The implementation of the contaminated land inspection strategy requires effective liaison and communication with statutory consultees and other stakeholders on a continuing and progressive basis.

Statutory consultees

Contact has been established with statutory consultees for information transfer and consultation. The PEHO (Pollution) is the key contact.
Statutory consultees for the Contaminated Land Inspection Strategy are:

- Environment Agency
- English Nature
- English Heritage
- Ministry of Agriculture, Fisheries and Food
- Food Standards Agency
- Health and Safety Executive

Non-statutory consultees

The Council recognises the importance of involving non-stakeholders in dealing with contaminated land in the Borough. Major developers building in the borough have been identified as key non-statutory consultees. Efforts will be made to identify and contact groups and to respond to any comments made, on an ongoing basis.

Communicating with owners, occupiers and other interested parties

The Council's approach to its regulatory duties is to work in partnership with owners or their agents and others responsible for contaminated land, enforcement action being a final resort. This approach will be adopted for issues of land contamination, recognising that in many cases more effective remediation can be achieved by agreement than by enforcement. The regulations provide an incentive to undertake voluntary action, in that any materials that require disposal as a result of voluntary remediation will be exempt from landfill taxes. This exemption does not apply to materials generated as a result of a remediation notice having been served. This approach requires effective communication with owners, occupiers and other interested parties. The case officer will be responsible for keeping owners, and other interested parties informed at each stage of an investigation regardless of whether there is a formal designation of the land.

The wider community

Copies of the strategy are available from the Pollution Team, using the officer contact details given in Appendix 2 to this document. The contaminated land inspection strategy is also available to download from Islington Council's website.

7 Programme for inspection

The programme for inspection follows the identification of contaminated land using our GIS system. As stated in section 3, the inspection programme is based on priority order and deals with the most serious site first. As the population of Islington is spread evenly across the borough, there is no need to prioritise inspections on the basis of location.
There will be one officer who will be responsible for site investigations of these identified sites.
The following matters and circumstances may affect the programme of inspection.

- Unplanned events – e.g. if an incident such as a spill has occurred
- Introduction of new receptors – e.g. if housing is to be built on a potentially contaminated site, designation of a new protected ecosystem,
- Persistent trespass onto a site by young people
- Supporting voluntary remediation – e.g. a potentially liable party wishing to undertake clean-up before their land has been inspected by the local authority
- Identification of localised health effects which appear to relate to a particular area of land
- Responding to information from other statutory bodies, owners, occupiers, or other interested parties
-

The programme of inspection must be flexible so that it can accommodate revisions. A risk assessment will be carried out in response to events such as those listed above to update the programme.

7.1 Arrangements for carrying out detailed investigation

The case officer will seek to ensure that site investigations are carried out in accordance with the principals and practises in key Government guidance in connection with site investigation.

Site specific liaison

As a matter of course the case officer will adhere to the Council's customer care standards for dealing with external parties.
The case officer will collect all available information before visiting the site, and consider and decide whether the Environment Agency, English Nature, English Heritage, other statutory consultee, or other appropriate person should be contacted. Should the case officer consider intrusive sampling to be required he will consult the PEHO (Pollution Projects) for advice.
Where a formal designation of contaminated land is required, the following actions will be undertaken:

- Write to the owner and / or the occupier of the land at least 5 working days prior to designation, explaining in summary the reason for designation
- Write to the owner and / or the occupier explaining the land has been designated as contaminated land and seeking appropriate remediation without service of a notice
- If requested, dispatch a copy of the written risk assessment to the owner and / or occupier of the land within 5 working days of receipt of a request
- Write to the owner / occupier of neighbouring properties and / or the complainant within 5 working days of designation

When serving a remediation notice.

- A minimum 3 month period will elapse between designation and the service of the notice
- Provide a written remediation notice to the owner / occupier specifying action required
- Write to the owner / occupier of neighbouring properties and / or the complainant within 5 working days of notice being served

Should an urgent designation of contaminated land be required, these steps will be observed as far as practicable although some deviation from the timescales specified is to be expected.
Where the Council finds it necessary to use its power of entry under Section 108(6) of the Environment Act to carry out an investigation it will give at least seven days notice of proposed entry onto any premises, unless there is an immediate risk to human health or the environment.
Any enforcement action that is taken under Part IIA will be in accordance with the division's enforcement policy. The enforcement policy seeks to make clear the grounds on which enforcement action is taken, for reasons of consistency and fairness.
Where it is considered that a site has the potential to be designated as a special site the Environment Agency will be informed at the earliest opportunity. Any further action will be taken in consultation with the Environment Agency.

Appointment of Consultants

Consultants will be appointed on a site by site basis should outside technical expertise be required. The decision rests with the Service Manager in consultation with the PEHO (Pollution).
To be appointed, consultants will need to demonstrate their experience and capability for the work they are tendering for.

Risk communication

The complex nature of contaminated land issues does not lend itself to easy explanation to the layperson. Development of effective methods of risk communication is therefore essential.
The Council will treat any concerns raised by a member of the public seriously and with respect, recognising the importance of the issue to the individual. In all instances, the Council will recognise and try to overcome the critical barriers to effective risk communication:

- familiarity – increased concern about unfamiliar issues
- control – increased concern if the individual is unable to exert any control over events
- proximity in space – increased concern about nearby events
- proximity in time – increased concern about immediate consequences rather than long term effects
- scale – particularly in terms of media coverage, where one large incident appears much worse than several small incidents
- "dread factor" – lack of understanding can lead to stress and make further explanation more difficult

The booklet Communicating Understanding of Contaminated Land Risks, SNIFFER (2000) will be given to relevant parties to help understanding.
The contaminated land regime grants only limited powers to local authorities to deal with materials present in, on or under the ground. Many members of the public believe that any material that is not naturally present in the ground should be removed, especially if it is in the vicinity of their own home. It will be critical to explain this can only be done where this is a risk of significant harm, and it is to be expected that some members of the public will have difficulty accepting this. It is important to appreciate that the expectations of some members of the public will not be met by the powers local authorities may exercise under contaminated land legislation.

8 REVIEW MECHANISMS

Review of assumptions and information (triggers for inspection)

The assumptions and information on which the programme for inspection is based will be reviewed following

- relevant changes in legislation,
- changes in relevant Council policy,
- significant case law, and
- publication of new statutory guidance.

Reviewing the strategy document

As part of the overall quality management of this work, it is important to consider the need to review the strategy from time to time.
The 2010 review has been undertaken to highlight some of the progress made since 2004 and to update the new short and long term aims of the strategy.
There is now a review of the statutory guidance scheduled for the middle of 2010. The Strategy may be reviewed soon after this if the new guidance requires it.
The Environment Agency will be consulted on any formal reviews of the Contaminated Land Inspection Strategy.

9 INFORMATION MANAGEMENT

Information relating to contaminated land will be held on the GIS system, with the exception of the public register, which will be a paper system. Full access to the GIS system is restricted to the Service Manager, Principal EHO and EHO in the Pollution Projects Team through password protection. Read only access will be given to any assigned contaminated land administration officers.

The public register

Under the regulations, the Council is required to maintain a public contaminated land register. The regulations clearly specify the information that can be recorded on this register. This register will therefore include the following.

- Remediation notices.
- Details of site reports obtained by the authority relating to remediation notices.
- Remediation declarations, remediation statements and notifications of claimed remediation.
- Designation of sites as “special sites”.
- Any appeals lodged against remediation and charging notices.
- Convictions.

The public register will not include details of historic land use and other records used in the investigation of potentially contaminated land. These are research documents and as such will not be made available to the public.

Confidentiality of information

All complainants will be asked to supply their names and addresses and, if appropriate, the address giving rise to the complaint. The identity of the complainant will remain confidential, except where the Council is legally required to disclose this information.

Dealing with requests for information

Requests for information are envisaged to come from environmental consultants, solicitors, developers, house buyers, members of the public, Council officers and Government departments. Any request for information outside the scope of the public register is to be made in writing. Provision of information will be decided in accordance with the Environmental Information Regulations 1992. A written response will be supplied in accordance with the Council’s customer care policy. A reasonable charge may be made for information supplied.

Arrangements for giving access to information

The register will be held at 222 Upper Street, London N1 1XR. It will be available by appointment to members of the public during office hours, Monday to Friday.
Access to other information will be provided in accordance with the Environmental Information Regulations 1992.

Provision of information to the Environment Agency

The Environment Agency is required to prepare an annual report for the Secretary of State on the state of contaminated land in England and Wales.
This report will include:

- a summary of local authority inspection strategies, including progress against the strategy and its effectiveness,
- the amount of contaminated land and the nature of the contamination, and
- measures taken to remediate land.
-

As local authorities are the lead regulators on contaminated land, with the Environment Agency regulating only some categories of sites, the national survey will clearly be reliant on information provided by local authorities. A memorandum of understanding has been drawn up between the Environment Agency and the Local Government Association that describes how information will be exchanged between the local authority and the Environment Agency. The Council will therefore provide information to the Environment Agency following the guidelines agreed through this national forum.

The local authority must also provide information to the Environment Agency whenever a site is designated as contaminated land, and whenever a remediation notice, statement or declaration is issued or agreed. The Environment Agency has provided standard forms allowing this information to be provided in a consistent format and the Council will adopt these to fulfil its reporting requirements.

10 Appendix 1

10.1 Glossary of terms

BGS	British Geological Survey
CIEH	Chartered Institute of Environmental Health
CLR	Contaminated Land Research
DETR	Department of the Environment, Transport and the Regions
DEFRA	Department of the Environment, Food and Rural Affairs
DOE	Department of the Environment
EA	Environment Agency
EHO	Environmental Health Officer
GIS	Graphical Information System
GLA	Greater London Authority
GLC	Greater London Council
HSE	Health and Safety Executive
ICRCL	Interdepartmental Committee for the Redevelopment of Contaminated Land
IPC	Integrated Pollution Control
IPPC	Integrated Pollution Prevention and Control
LA	Local Authority
LBI	London Borough of Islington
MAFF	Ministry for Agriculture, Fisheries and Food
PPG	Planning Policy Guidance
RE	River Ecosystem
SAC	Special Area of Conservation
SNCI	Sites of Nature Conservation Importance
SSSI	Sites of Special Scientific Interest
POLLUTION	Pollution Team
UDP	Unitary Development Plan
SNIFFER	Scotland and Northern Ireland Forum For Environmental Research

11 Appendix 2

11.1 Consultees

Environment Agency
2 Bishop's Square Business Park
St Alban's Road West
Hatfield
AL10 9EX
Contact: Alistair Norton or Dawn Halliday

English Nature
Ormond House
26-27 Boswell Street,
London
WC1N 3JZ
Contact: Peter Massini

Food Standards Agency
Room 6/21
Hanibal House
PO Box 30080
London
SE1 6YA

MAFF
Rural and Marine Environment Division
Room 303
16 Palace Street
London
SW1E 5FF
Contact: Miss Fiona Reynolds, Mr Gary Beckwith

English Heritage
23 Saville Row
London
W1X 1AB

Health and Safety Executive
Local Authority Unit
Floor 7 South Wing
Rose Court
2 Southwark Bridge Road
London SE1 9HS

11.2 Contacts at Islington Council

Pollution Team
Environment and Conservation
159 Upper Street
London
N1 1RE.

Contacts:

Savva Mina	Principal EHO	020 7527 3840	savva.mina@islington.gov.uk
Aled Griffiths	Senior EHO	020 7527 3228	aled.griffiths@islington.gov.uk

12 Appendix 3

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