

Contaminated land Inspection strategy



Non-technical Summary

England has an industrial past which has led to contaminated land in some areas. Part 2A of the Environmental Protection Act 1990 established a system for dealing with this. The main objectives of the Government's policy on contaminated land and Part 2A are set out in the 2012 Statutory Guidance.

The objectives are:

- (a) to identify and remove unacceptable risks to human health and the environment;
- (b) to seek to ensure that contaminated land is made suitable for its current use;
- (c) to ensure that the burdens faced by individuals, companies and society as a whole are proportionate, manageable and compatible with the principles of sustainable development.

Part 2A requires that local authorities inspect land to identify contaminated land. This strategy sets out Brent Council's plan of action, specifically the process for inspections and data management. It replaces the council's original contaminated land inspection strategy published in 2001 and reviews and updates issued in 2005, 2007, 2008 and 2011.

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1 Overview

1.1 Introduction

The UK's industrial heritage has left a legacy of contaminated land. Historic industrial processes and activities released substances and waste products into the environment which have the potential to detrimentally impact upon human health and the environment, jeopardising development and economic growth.

The Government's policy on dealing with this legacy is through the Contaminated Land regime under Part 2A of the Environmental Protection Act 1990. Part 2A requires that local authorities cause their areas to be inspected with a view to identifying contaminated land, and to do this in accordance with Statutory Guidance. The relevant sections of the Act include:

- a) Section 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.
- b) Section 78B(2): In performing [these] functions... a local authority shall act in accordance with any guidance issued for the purpose by the Secretary of State.

On the 6th April 2012, new Statutory Guidance was published which required local authorities to update their Contaminated Land Inspection Strategies at least every five years.

This document sets out Brent Council's strategic approach to inspecting the borough for contaminated land considering this new guidance. It replaces the 2001 Contaminated Land Inspection Strategy and all subsequent reviews.

1.2 Regulatory context

The first set of Contaminated Land Statutory Guidance was the Department for Environment Transport and the Regions (DETR) Circular 02/2000.

On 01 June 2001, Brent Council published its Contaminated Land Inspection Strategy in accordance with the statutory guidance. This strategy was comprehensively reviewed in 2005 and updated in 2007, 2008 and 2011.

The DETR Circular was replaced in September 2006 by the Department for Food, Environment and Rural Affairs (Defra) Circular 01/2006 which amended the regulations and extended it to include Radioactive Contaminated Land. This circular was in turn replaced by the new "Contaminated Land Statutory Guidance" published by Defra on 6 April 2012. This guidance no longer refers to radioactive contaminated land, which is covered by the "Radioactive Contaminated Land Statutory Guidance" published by the Department for Business, Energy and Industrial Strategy in June 2018.

The Contaminated Land Regulations (England) 2006 relate to special sites, remediation notices and information to be included in public registers. These regulations were amended by the Contaminated Land (England) (Amendment) Regulations 2012.

1.3 Policy context

This strategy must be read in the context of other Council strategies which, taken together, will help to deliver the modern local government agenda. Other relevant strategies are:

1.3.1 Corporate strategy

The Corporate Strategy for 2015 - 2019 sets out Brent Council's vision, values and key commitments. This states, amongst other things, that the Council will:

- *drive economic opportunity and regeneration.* Brent's Local Development Framework identifies five key growth areas across the borough where we will be working with the private sector to create opportunities for more business, retail, housing and environmental improvements;
- *protect our environment.* This includes promoting sustainable development, increasing the amount of maintained open space within the borough and enhancing the public realm; and
- *provide greater access to affordable housing.* This involves creating more housing within our growth areas, which in turn will mean the redevelopment of brownfield land.

1.3.2 Corporate Environmental Policy Statement

Brent Council is committed to sustainable development and improving the environmental wellbeing of the borough in sustainable ways through the services that we provide and by reducing the adverse effects of our own actions. We recognise that we can enhance the quality of the environment through our services, through our use of resources, particularly natural resources, to improve Brent in ways that allows us to live today but also maintains a high quality of life for future generations.

To improve the environment we will:

- enforce and comply with all relevant legislation and other obligations;
- raise awareness of, and provide information on, issues affecting the environment;
- work with partners to promote the sustainable development agenda;
- improve resource use and waste management by encouraging waste minimisation, re-use, recycling, composting, and other recovery techniques; and
- prevent, control, and reduce the release of pollutants to the environment.

1.3.3 The London Plan

The London Plan is the overall strategic plan for London, setting out an integrated economic, environmental, transport and social framework for the development of London over the next 20–25 years. The consideration of contaminated land is covered by policy 5.21 Contaminated Land.

The Mayor supports the remediation of contaminated sites and has committed to work with strategic partners to ensure that the development of brownfield land does not result in significant harm to human health or the environment, and to bring contaminated land to beneficial use.

1.3.4 Brent Council's Development Plan

The emerging Development Management Development Plan Document (DMDPD) replaces the policies of the Unitary Development Plan (UDP). The contaminated land policy within the DMDPD states that it is the responsibility of the developer to ensure that when undertaking a development, the site is cleaned up to a level which is appropriate for the proposed end use.

1.4 Roles and responsibilities under Part 2A

Defra is responsible for the strategic management of the contaminated land regime and supporting policy. The local authority serves as primary regulator and the Environment Agency has specific responsibilities related to contamination where controlled waters may be affected.

The primary responsibilities are as follows:

Brent Council

- to cause the borough to be inspected to identify contaminated land;
- to decide, after consultation, what remediation is required in any individual case and to ensure this takes place;
- to establish who should be the appropriate person or persons to bear responsibility for the remediation of such land; and
- to record information about regulatory activity and make it available to the public.

Environment Agency

- to assist local authorities in identifying contaminated land, particularly where pollution of controlled waters is involved;
- to provide site specific guidance to local authorities;
- to act as the enforcing authority for any site designated as a 'special site';
- to publish periodic reports on contaminated land; and
- to carry out technical research and, in conjunction with DEFRA, publish scientific advice.

1.5 Definition of Contaminated Land

1.5.1 The Statutory Definition

Part 2A of the 1990 Act defines "contaminated land". It states:

Section 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 caused, or there is a significant possibility of such pollution being caused.

Harm is defined in the legislation in section 78.

Section 78A(4): "Harm" means 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.

The legislation also includes a provision for the Secretary of State to issue guidance on what constitutes harm to controlled waters.

1.5.2 Objectives of Part 2A

Part 2A provides a means of dealing with unacceptable risks posed by land contamination to human health and the environment, and enforcing authorities should seek to find and deal with such land. Under Part 2A the starting point should be that land is not contaminated land unless there is reason to consider otherwise. Only land where unacceptable risks are clearly identified, after a risk assessment has been undertaken in accordance with this Guidance, should be considered as meeting the Part 2A definition of contaminated land.

The overarching objectives of the Government's policy on contaminated land and the Part 2A regime are:

- (a) To identify and remove unacceptable risks to human health and the environment.
- (b) To seek to ensure that contaminated land is made suitable for its current use.
- (c) To ensure that the burdens faced by individuals, companies and society as a whole are proportionate, manageable and compatible with the principles of sustainable development.

Enforcing authorities should seek to use Part 2A only where no appropriate alternative solution exists. The Part 2A regime is one of several ways in which land contamination can be addressed. For example, land contamination can be addressed when land is developed (or redeveloped) under the planning system, or where action is taken independently by landowners. Other legislative regimes may also provide a means of dealing with land contamination issues, such as building regulations; the regimes for regulation of waste, water, and environmental permitting; and the Environmental Damage (Prevention and Remediation) Regulations 2009.

1.5.3 The contaminant linkage

Under Part 2A, for a relevant risk to exist there needs to be a "contaminant linkage". A contaminant linkage is a connection between a contaminant and a receptor by means of a pathway.

The guidance provides the following definitions:

- A “**contaminant**” is a substance which 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 of controlled waters.
- A “**receptor**” is something that could be adversely affected by a contaminant, for example a person, an organism, an ecosystem, property, or controlled waters.
- A “**pathway**” is a route by which a receptor is or might be affected by a contaminant.

A site cannot be considered as possible Contaminated Land unless at least one contaminant linkage is present.

Once a contaminant linkage has been established, the local authority must determine if it is significant. The statutory guidance defines a “significant contaminant linkage” as one which gives rise to a level of risk sufficient to justify determination of a site as contaminated land.

1.5.4 Significant Harm and Significant Possibility of Significant Harm to Human Health

The revised guidance categorises contaminated sites into 4 categories on the grounds of significant possibility of significant harm (SPOSH) to human health (see below). The starting assumption is that land does not pose a significant possibility of significant harm unless otherwise proven.

Category 1 sites - the Local Authority considers that there is an unacceptably high probability, supported by robust scientific based evidence that significant harm would occur if no action is taken to stop it.

Category 2 sites - the potential for the significant possibility of significant harm exists such that there is a strong case for taking precautionary action under Part 2A

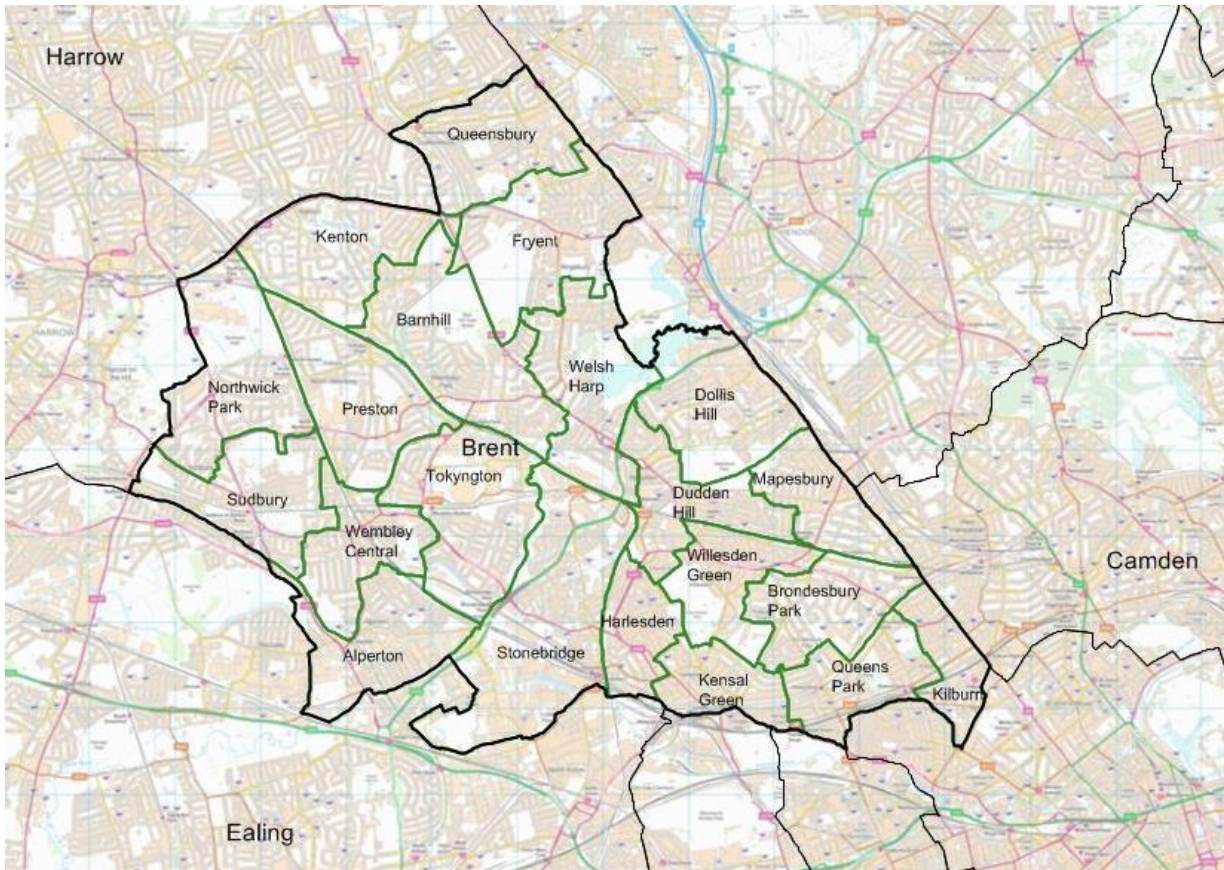
Category 3 sites - the legal test for significant possibility of significant harm is not met and may include land where the risks are not low, but regulatory intervention is not warranted. Other parties could take action to reduce risks outside of the Part 2A regime.

Category 4 sites - there is no risk or a low risk of a significant possibility of significant harm. This includes land where no relevant contaminant linkage has been established; land where there are only normal contaminant levels typical of that area; land where contaminant levels do not exceed relevant generic assessment criteria (GAC’s); and land where estimated levels of exposure to contaminants in soil is proportionally very low when compared to other environmental sources.

2 Characteristics of Brent

2.1 Overview of Brent

Brent lies in the centre of north-west London with neighbouring boroughs Camden and Barnet to the east, Harrow to the north-west and Ealing, Westminster, Hammersmith & Fulham to the south. It covers an area of 4,421 hectares.



Map 1. The London Borough of Brent

Brent contains some 360 hectares (nearly 900 acres) of industrial estates, many of which were originally developed during the expansion westwards of London's manufacturing industries during the inter-war period. It contains two of London's largest industrial estates at Wembley and Park Royal. These estates have long been seen as a strategic resource in West London to house manufacturing activities, including both new industries and traditional industries such as in the food and printing sectors, which continue to serve the London market from a base within the capital.

The borough is very diverse architecturally. Within Brent there are well-planned leafy suburbs, dense 19th Century inner city housing, 1960s high rise residential and office blocks and large industrial estates.

The River Brent, after which the Borough takes its name, runs through the centre of the Borough (much of it now open as a riverside walk) roughly dividing the more inner urban South of the Borough from the suburban North. The river flows through the Welsh Harp reservoir in the east of the Borough, important for both wildlife and water-sports. The Borough's largest open space is Fryent Country Park, which is a local nature reserve and retains its 17th Century hedgerow patterns.

2.2 Geology and Hydrology

The nature of the underlying soils and geology is a key factor in determining the groundwater yield, capacity and movement within groundwater bearing strata. These characteristics can have a significant influence on the possible movement of mobile contaminants within the ground. Mobile contaminants generally move most freely within coarse textured sediment strata, such as sand and gravel, which are both porous and highly permeable.

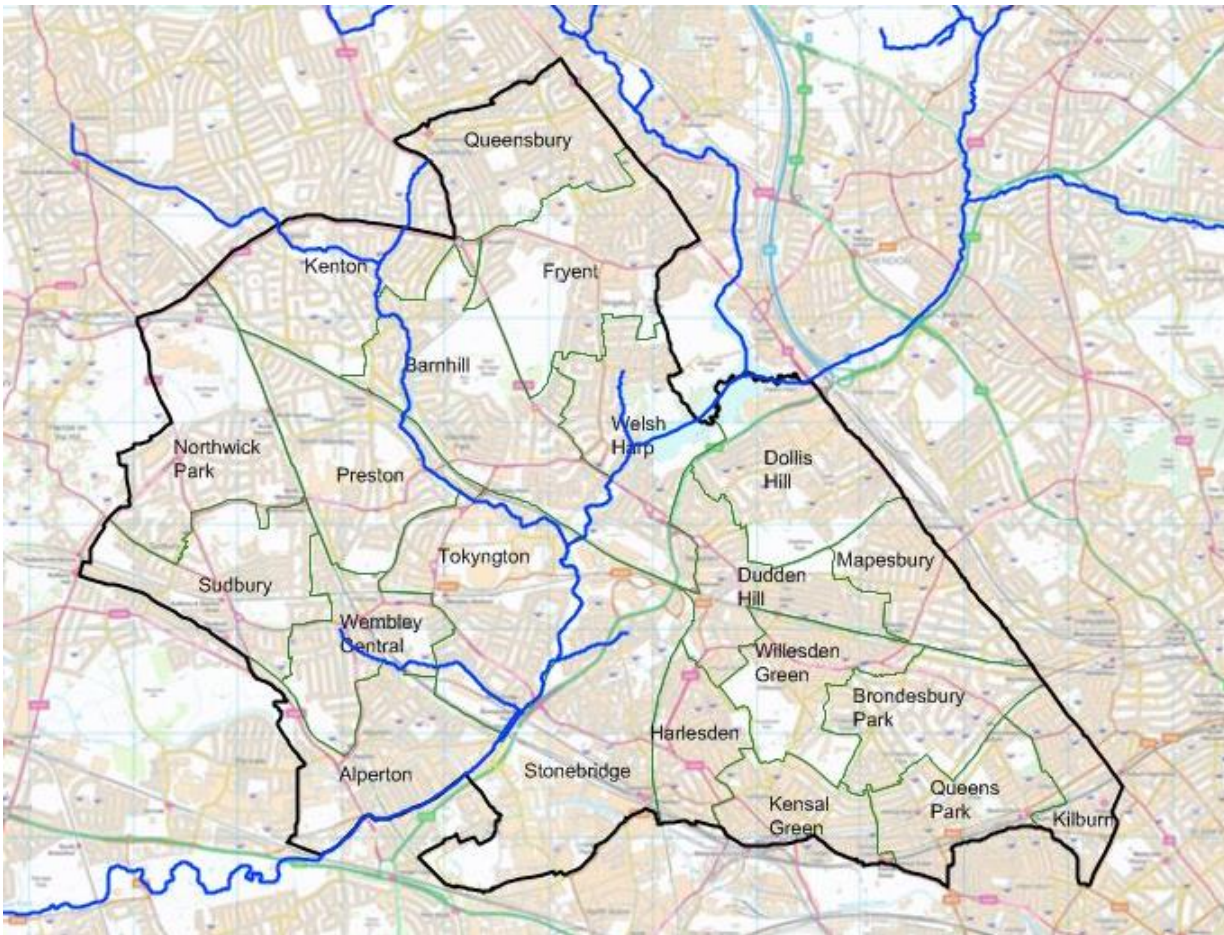
Maps provided by the British Geological Survey show that Brent is typical of the London area with the London Clay formation being the dominant rock type. The majority of the borough lies on impervious clay strata. An outcrop of the Claygate formation occurs in the south-east of the borough at Willesden Green. In terms of groundwater resources, the London Clay does not represent an important geological stratum, since it rarely yields water resources and is classified by the Environment Agency as non-aquifer. This formation tends not to be vulnerable to pollution, due to the absence of significant abstractions and has a high capacity for the attenuation of contamination.

This London Clay confines the underlying Chalk (the Principal Aquifer for the Thames Region), preventing infiltration from above. Therefore, there is a risk that the major aquifer could be contaminated through deep boreholes penetrating the London Clay into the Chalk. Where a potential contaminant linkage includes a public water supply source as a receptor, the responsible water company will be immediately notified.

Running Southwest to Northeast, following the course of the River Brent are the deposits of gravel and sands deposited when the River Brent flowed into the proto-Thames. Subsequent to deposits of sands and gravels, alluvium was deposited along the length of the main watercourses. The high porosity and unconsolidated nature of Pleistocene fluvial deposit allows relative free water flow, however the underlying clay acts as a barrier and thus the strata are classified by the Environment Agency as secondary aquifers. The porous nature of these geological strata makes them vulnerable to pollution and increases the mobility of contaminants within them.

Surface waters (rivers, canals, ponds, streams etc.) are more susceptible to pollution than groundwater because of the direct influences of surface run-off. Controlled surface water features within Brent include the Welsh Harp and three watercourses running through Brent:

- the River Brent following from the Northeast to the Southwest;
- the Paddington Feeder Canal which flows along the Southern margin;
- the Silk Stream, which bisects the north of the borough;
- and there are a number of other smaller tributaries within the borough which are controlled waters e.g. Wembley Brook, Wealdstone Brook.



Map 2. The rivers of Brent.

The Environment Agency classifies both the River Brent and the Paddington Arm of the Grand Union Canal for water quality as River Ecosystem Grade 4 (RE4) on a scale of 1-5, with 5 being the most polluted. The Silk stream is classified as RE3.

2.3 Population

According to the 2011 census, Brent is home to over 311,000 people. There are large areas of social housing spread throughout the borough. The south of the borough has a higher population density with fewer open spaces than the north which is characterised by suburbs.

2.4 Historic Industry

In common with many parts of London, Brent has been the site of small-scale industrial and commercial activities that could have given rise to contamination. These include:

- a landfill site at Abbey Road. Part of the landfill was removed during the construction of the underpass on the North Circular Road. The rest of the fill still remains in situ;
- brick pits dug out in the 18th Century in the Alperton area that have been back filled. There are a number of unknown pits scattered throughout the Borough, which are presumably back filled;
- minor mining works and coking works in Alperton;
- metal works along Glacier Road in Alperton. The site is likely to be significantly contaminated with heavy metals;

- a number of former sewage works located in and around Neasden close to the North Circular Road. One such former sewage works is located very close to a housing development; and small-scale industry typical of urban areas including metal manufacture and processing, light engineering, minor chemical processes, motor repair and maintenance, construction materials, consumer goods and services.
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3 The Strategy

3.1 Aims and Objectives

3.1.1 Objectives

The principal objectives of the inspection strategy are:

- a) To meet the statutory obligation placed on the council to produce a written strategy under Part 2A;
- b) To provide a strategic framework which the council will use to identify, inspect and determine contaminated land;
- c) To describe how the council will prioritise and categorise sites;
- d) To inform the public, and improve communication with stakeholders, of the council's intentions in relation to contaminated land;
- e) To ensure that the council's corporate priorities and ambitions will be achieved by adopting this strategy, in particular valuing our environment and revitalising our communities, by removing unacceptable risks to human health and the environment.

3.1.2 Aims

Brent Council has taken account of the statutory guidance to ensure that the aims of this strategy are consistent with those of the regime. The aims are to:

- a) Undertake the identification of contaminated land sites in a rational, ordered and efficient manner which reflects any local circumstances;
- b) Be proportionate to the seriousness of any actual or potential risks;
- c) Prioritise areas of land we consider likely to pose the greatest risk to human health or the environment;
- d) Ensure that resources are concentrated on investigating areas where the authority is most likely to identify contaminated land;
- e) Minimise or reduce potential property blight as far as considered reasonable;
- f) Be open to moves by the landowner (or other interested parties) in providing information to help resolve the status of the land;
- g) Encourage voluntary action to deal with land contamination issues as far as considered reasonable and practicable;
- h) Encourage the re-use and remediation of brownfield land through the planning regime in accordance with the National Planning Policy Framework to ensure that new developments are suitable for use;
- i) Ensure wherever possible that the original polluter pays for land remediation carried out under the Part 2A regime.

3.2 Progress to date

As of November 2014, 1778 sites were identified as having potentially contaminative historic uses. These sites were identified using historic maps and trade directories and the data is managed using an electronic database. The sites can be seen on Map 3 below. To date we have sufficient information for 360 of the identified sites to verify whether or not they are “contaminated” as per the statutory definition. The majority of these sites have been redeveloped via the planning regime, where the investigation and remediation of soil was secured through planning conditions.

Brent Council has investigated 34 sites under Part 2A. Land that met the statutory definition of contaminated land was determined at one of these sites, where 61 properties were determined as contaminated in 2010. These properties were remediated in 2011/2012. The sites investigated by the Council are listed in below.

Table 1. Sites investigated by Brent Council under Part 2A as of 01 December 2014

Site name	Date of investigation	Outcome
Tenderden Close Allotment	September 2006	Suitable for use
Bovingdon Avenue Allotment	September 2006	Suitable for use
Longstone Avenue Allotment	September 2006	Suitable for use
Nutfield Road Allotment	September 2006	Suitable for use
Tower Road Allotment	September 2006	Suitable for use
Gibbons Road Allotment	September 2006	Suitable for use
Furness Road Allotment	September 2006	Suitable for use
Bridge Road Allotment	April 2007	Suitable for use
Dog Lane Allotment	April 2007	Suitable for use
Old Kenton Lane Smithy	June 2008	Suitable for use
Crome Road Foundry	June 2008	Suitable for use
Dyne Road Corporation Yard	June 2008	Suitable for use
Dyne Road Corporation Yard 1b	June 2008	Suitable for use
Carlton Vale Metal Works	June 2008	Suitable for use
Beaconsfield Road 37 Works	October 2008	Suitable for use
Cavendish Road Garage	October 2008	Suitable for use
Harp Island Close Depot	October 2008	Suitable for use
Melville Road Rifle Range	October 2008	Suitable for use
Strathcona Road Works	October 2008	Suitable for use
Strathcona Road Depot & Laundry	October 2008	Suitable for use
Sudbury Crescent Smithy	October 2008	Suitable for use
Wembley Hill Road Scrap Metal	October 2008	Suitable for use
Willesden Lane 290 Garage	October 2008	Suitable for use
Barry Road Works	February 2009	Suitable for use
Cricklewood Broadway 317 Works	February 2009	Suitable for use
Chalkhill Sewage Works	February 2009	Suitable for use
Drury Way Depot	February 2009	Suitable for use
Park Avenue Railway Depot	November 2009	Suitable for use
St Andrew’s Hospital	November 2009	Suitable for use
Hawthorn Road Camera Works	November 2009	Suitable for use
Wyborne Way Depot	November 2009	Suitable for use
St Raphael’s Investigation Area 9	October 2009	Suitable for use
St Raphael’s and Brentfield Estates	February 2008 – April 2012	61 properties found to be contaminated
Lancelot Road Engineering Works	November 2013	Suitable for use
Lancelot Road Works	November 2013	Suitable for use

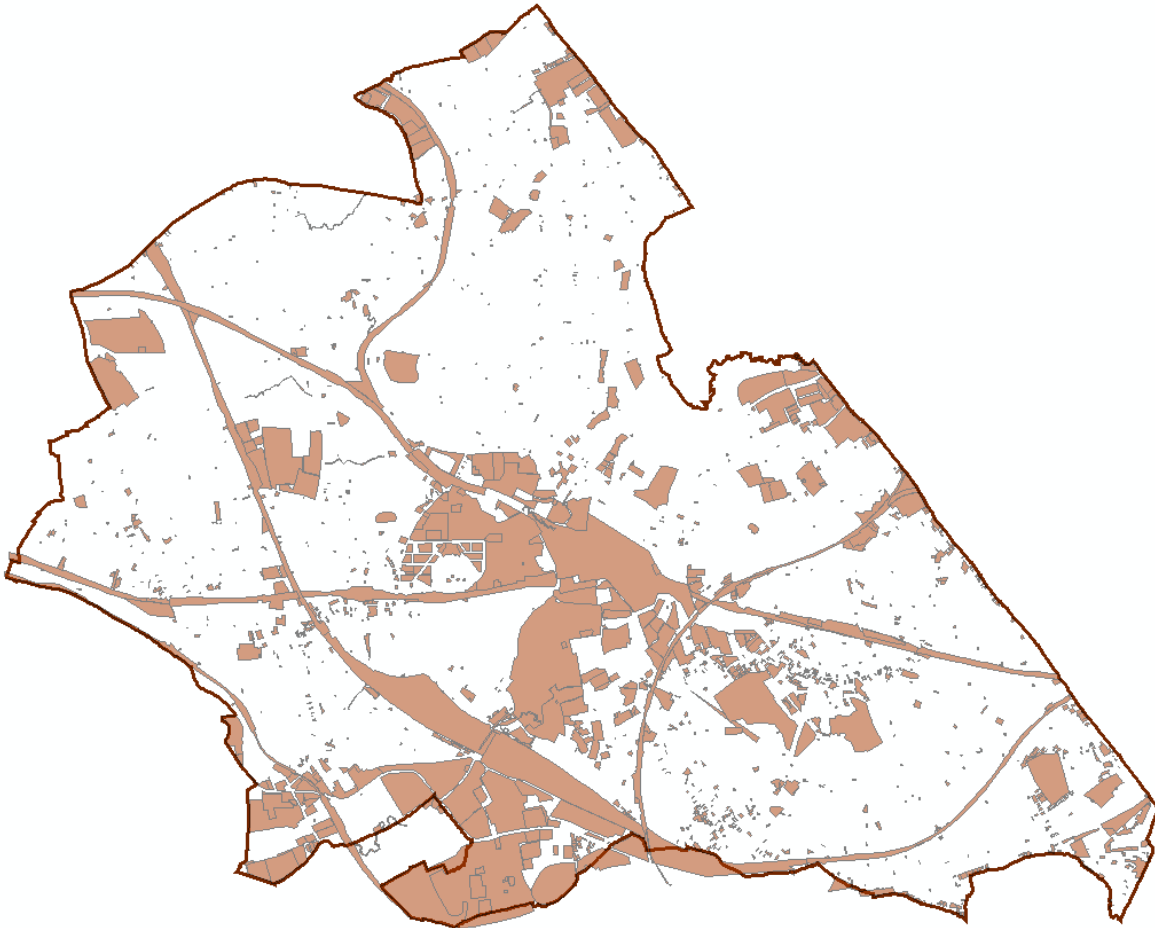
4 Procedures

4.1 Strategic Inspection

Local authorities should take a strategic approach to inspection. This involves collating data about potentially contaminated sites and prioritising these sites for inspection. The list of datasets used by Brent Council can be found in Appendix 7.1.

4.1.1 Site Identification

Brent Council completed the identification of potentially contaminated land was by 2004 and reported in the 2005 review of the Inspection Strategy. All identified sites have been digitised to form a map dataset. We have identified 1778 sites in the borough, which can be seen in Map 3 below.



Map 3. Sites identified for inspection

Sources of historical information

Data on the historic land uses was compiled from the following sources:

Maps

Historic maps covering 7 epochs from 1864-1996 have been reviewed. Sites with potentially contaminative uses such as engineering works, rifle ranges, landfills and sewage treatment works were identified and digitised. 1216 sites were identified this way.

Trade Directories

Trade directories dating back to 1905 were reviewed for businesses with potentially contaminative activities. Most of these were already identified from the historic maps, but an additional 418 premises such as milliners, dyers and printers were identified and digitised.

Planning applications

A number of sites have been investigated under the Planning regime during the redevelopment of sites in Brent. This has provided us with land quality data for an additional 144 sites.

4.1.2 Site Prioritisation

According to the statutory guidance, when conducting detailed inspections of land in accordance with Part 2A, the local authority should give priority to land most likely to pose the greatest risk to human health. The following methodology was implemented to achieve this aim:

A score is allocated to the industry type (source) and to the current use (receptor). Scores range between 1 (low priority) and 9 (very high priority). The source and receptor scores are multiplied giving rise to a total prioritisation score ranging from 1 to 81.

Prioritisation for inspection is ranked as:

- High priority (81-54)
- Medium priority (53-28)
- Low priority (27-1)

95 different industry types have been identified in the borough. These industry types and their prioritisation scores can be found in Appendix 7.2.

36 different current use categories have been identified and prioritised. These can be found in Appendix 7.3.

4.2 Detailed Inspection

Brent Council will systematically work through the list of prioritised potentially contaminated sites at a rate determined by available resources. It is envisaged that the majority of the sites identified for inspection under this strategy will be investigated through the Planning system, as and when land is redeveloped.

The purpose of a detailed inspection is to obtain information about ground conditions and carry out the risk assessments to determine the status of land with respect to the Part 2A regime. Detailed inspections initially involve a Phase I Desk Study and site visit, the outcome of which will determine if an intrusive site investigation is required.

If at any stage Brent Council considers, on the basis of information obtained from inspection activities, that there is no longer a reasonable possibility that a significant contaminant linkage exists on the land, Brent will not carry out any further inspection in relation to that linkage.

It may become apparent during the course of detailed inspection that the risks posed by the land are lower than expected. In such cases there may be good reason to continue until a decision can be taken on whether or not the land is contaminated land. However, as soon as it becomes clear to Brent Council that the land is unlikely to be contaminated land, we will bring the inspection to an end, and redirect our efforts to the inspection of other sites in line with our approach to prioritisation.

4.2.1 Desk Studies

The purpose of the desk study (also known as a Phase I Desk Study) is to gain more information about the potential contaminant linkages identified in the initial site prioritisation. This involves finding specific information about contaminants, pathways and receptors to enable a greater understanding of site conditions, including details of site boundaries and a site visit (see below). Carrying out desk-based research also facilitates identification of further potential contaminant linkages that may be present. Obtaining this information ultimately allows us to develop a 'conceptual site model' – i.e. a picture of all potential contaminant linkages at the site. Historic land use maps, environmental data such as geological and hydrological information as well as industrial contaminant profiles held by Brent Council are considered in completion of the desk study.

4.2.2 Site Visits

The purpose of the site visit is to gather further information about identified potential contaminant linkages. This may be to determine the likelihood that contaminants and receptors are present, and/or to gather further information about relevant pathways. In some cases the site visit allows us to clarify and verify desk study information and in particular, to consider the site boundaries in more detail. Also, the site visit may be used to assist in the planning of any intrusive site investigation which may be required.

In the majority of cases the site visit is limited to a visual inspection of the site. A standard checklist has been developed for this purpose. During the site inspection, notes and photographs are taken. Where relevant, inspection is also carried out on land directly adjacent to the site boundaries.

On some sites it may be appropriate or necessary to be accompanied by the site owner, occupier or another representative during the visit. They may be interviewed to find out additional information and, if necessary, to discuss access issues and practicalities for potential future intrusive site investigation work.

4.2.3 Intrusive Investigations

The purpose of the intrusive site investigation is to collect sufficient information to better characterise actual or potential contaminant linkages at the site, where there is a reasonable possibility that a significant contaminant linkage exists on the land.

On completion of the intrusive site investigation, the Council should be able to decide whether any of the contaminant linkages actually exist and whether any could be described as 'significant'.

The intrusive site investigation may involve the excavation of trial pits, drilling of boreholes, installation of monitoring wells, soil augering etc. in order to allow the sampling and subsequent chemical analysis of gases/vapours, site soils, and/ or waters. Samples will be submitted for chemical laboratory analysis to appropriately accredited laboratories.

The level of investigation required will be decided on a site-specific basis. This will be dictated by factors such as the conceptual site model, local environmental sensitivities and the practicalities of investigation (such as site access). Brent Council will undertake investigations in a phased approach, as described in section 4.2.4.

In accordance with the Statutory Guidance, Brent may seek to use the services of environmental consultants to undertake intrusive investigations and subsequent risk assessments.

4.2.4 Phasing investigations

As a general rule, inspections will be conducted as quickly and with as little disruption as reasonably possible, whilst ensuring that a sufficiently robust assessment is carried out. The Council will seek to avoid or minimise the impacts of long inspections on affected persons, in particular disruption and stress to directly affected members of the public for inspections of residential land.

In order to achieve this, Brent will undertake a phased approach to intrusive investigation. Intrusive investigations will be designed to ensure that we obtain sufficient information to inform us about whether the site is likely to meet the definition of “contaminated land” or if additional (or more intensive) sampling is required in identified areas of concern. This approach ensures that the site is not unnecessarily over-sampled, which is not only more cost effective to the tax payer but also minimises the impact and interruption caused to residents and allows the Council to focus our limited resources on areas of concern.

4.3 Outcomes of detailed inspections

Following the inspection of a site there are a number of potential outcomes, depending on the findings of the inspection. These are listed below:

4.3.1 Potential outcomes of a desk study and site visit

Once the historic uses of a site have been investigated in more detail, and considered within the context of the environmental factors (such as underlying geology) and the current site use, a conceptual model of plausible pollutants-pathways-receptors is developed.

The conceptual site model will determine if there are any contaminant linkages that require more detailed investigation (such as through intrusive soil sampling). The desk study could also show that the industrial uses may not have occurred on site, or that no plausible contaminant linkage exists. At this point we would cease our inspection of the site and issue a written statement to that effect.

4.3.2 Potential outcomes of an intrusive investigation

Following an intrusive investigation, a risk assessment is undertaken to determine if there are any identified significant contaminant linkages. If there is little or no evidence to suggest that the land is contaminated then the inspection and assessment of the land will cease. Brent Council will then issue a statement stating that the land is not contaminated land, in order to minimise the potential for blight.

However, the risk assessment may identify areas of concern that warrant further investigation. For example, a cluster of elevated contamination may be identified in a specific area of an otherwise uncontaminated site that requires delineation or additional sampling to reduce the level of uncertainty.

If following the assessment, Brent Council is satisfied that the land will fall into either Category 1 or 2 (see section 1.5.4), then it will determine the land to be contaminated land. Brent Council will produce a summary of the risks that led to the determination of the land as contaminated and work towards the remediation of the land in accordance with the processes detailed in the statutory guidance.

If following the assessment, Brent Council is satisfied that the land will fall into either Category 3 or 4 (see section 1.5.4) then a statement will be issued stating that the land is not contaminated land, and no further action will be taken against this land under Part 2A (unless new information comes to our attention that may change the outcome of the assessment).

4.4 Interactions with other regimes

The Part 2A regime should only be used where no appropriate alternative solution exists as other legislative regimes may provide a means of dealing with land contamination issues. These are described below:

4.4.1 The Planning Regime

Contamination is a material consideration under the Town and Country Planning Act 1990 and the planning regime remains the primary mechanism for dealing with contaminated land. In accordance with the National Planning Policy Framework 2018 (NPPF), local planning authorities have to consider the implications of contamination when developing local plans and when considering applications for proposed developments.

The NPPF makes it clear that developers and landowners are responsible for ensuring that land is suitable for its proposed use. Adequate site investigation by a competent person is required to show that the effects of pollution on health, the natural environment and the general amenity have been taken into account. As a minimum, land should not be capable of being determined as contaminated land under Part 2A, after it has been remediated through the planning process.

Where necessary, Brent Council will use conditional approval on planning consents to require the developer and/or landowner to demonstrate that contamination has been effectively considered and dealt with in accordance with legislation, current guidance and good practice. At the end of this process the development will be suitable for its new intended use.

As of December 2013, 288 sites with industrial histories had been investigated in Brent and 254 of these were undertaken as part of the Planning process. It is envisaged that the Planning regime will continue to be the greatest driver of detailed inspections of potentially contaminated land in the borough.

4.4.2 Regeneration of the Borough

The regeneration of parts of the Borough is a key part of Brent's Corporate Strategy. The main areas identified for regeneration under the Corporate Strategy are Wembley, Alperton, South Kilburn, Church End and Burnt Oak/Colindale. Regeneration presents a great opportunity to investigate large areas of the borough for contamination; clean up land to a standard appropriate to its end use; and bring brownfield land back into use.

4.4.3 Building Control

The Building Regulations 2010 Part C, C1(2) and approved Document C, 'Site preparation and resistance to contaminants and moisture (2004 Edition incorporating 2010 and 2013 amendments)' require measures to be taken to protect new buildings, and their future occupants, from the effects of contamination, including hazardous ground gases. These regulations act as an additional failsafe to ensure that contamination is considered during the development process.

4.4.4 Environmental Permitting

Many industrial sites that the Council has identified as potentially contaminated are currently in use and are regulated under the Environmental Permitting Regulations 2010 (as amended). They combine the previous pollution prevention and control and waste management licensing regimes, impacts from water discharges, groundwater activities, radioactive substances, and other areas such as mining waste.

Regulation of such sites is split between the Environment Agency and local authorities. Permits are issued to operators to control potentially harmful processes and therefore reduce their environmental impact. Operators must comply with conditions set within the permits which includes controlling possible emissions to land and controlled waters, as well as to the atmosphere. Failure to adhere to the conditions within the permit can lead to enforcement action.

4.4.5 Controlled Waters

The Water Resources Act 1991 provides the Environment Agency with powers to take action to prevent or remedy the pollution of controlled waters. The Act is particularly useful in cases where there is historic pollution of groundwater, but where the Part 2A regime cannot be applied, for example, where pollutants are entirely contained within the relevant body of groundwater or where the source site cannot be identified.

4.4.6 The Environmental Damage (Prevention and Remediation) Regulations 2009

The Part 2A regime was established to deal with historic contamination. Contamination resulting from recent activities may be more effectively dealt with under other legislation, such as the Environmental Damage (Prevention and Remediation) Regulations 2009. These regulations apply to damage caused after the regulations came into force, in March 2009. Environmental damage as defined by the regulations includes contamination of land that results in a significant risk of adverse effects on human health, as well as damage to species and habitats and damage to controlled waters.

Local authorities regulate damage to land and the order in which these regimes should be considered when dealing with land contamination is:

1. The Environmental Damage Regulations (where applicable)
2. Remediation under the planning system (where appropriate)
3. Remediation under Part 2A (where there is no alternative)

4.4.7 Voluntary Action

Brent Council aims to encourage owners to deal with contamination by voluntary action to minimise unnecessary burdens on the taxpayer, businesses and individuals. Where appropriate the Council will encourage owners to address issues with problem sites as part of wider regeneration plans as a more efficient and cost effective resolution.

5 Information Management

5.1 Public register

Section 78R of the Environmental Protection Act 1990 requires councils to maintain a Public Register, collating details of actions taken to deal with land identified as contaminated land under the Act. The register is available to view at the Brent Council offices:

Civic Centre
Engineers Way
Wembley
HA9 0FJ

For any queries relating to the Register, please contact ens.monitoring@brent.gov.uk.

5.2 Stakeholder consultation

The communication strategy for each inspection will be tailored to meet the needs of the specific project. Stakeholders will be kept updated on progress with inspections and informed of the implications of the outcome of the inspection.

5.3 Requests for information

A substantial amount of environmental information has been collected through the strategic inspection of the borough and this information is often required by third parties. Most of the requests for such information made to the Council are to provide environmental information pertaining to property sales or development. This is a chargeable service. Such information is useful to establish any future liability for contamination that may be transferred during a sale.

Brent Council will comply with the provisions of the Environmental Information Regulations 2004, the Freedom of Information Act 2000 and the General Data Protection Regulation, the Data Protection Act 2018 in all responses to requests for environmental information. Care will be taken to ensure that the information provided is as accurate and correct as possible so as to avoid 'blighting' land and raising unfounded concerns.

Site investigation and remediation reports are often submitted as part of Planning applications. The Brent Council Planning Department keeps records of these documents: <http://www.brent.gov.uk/planning>, however they can usually not be relied without the permission of the author.

5.4 Confidentiality

Brent Council will act in accordance with the General Data Protection Regulation, the Data Protection Act 2018 and the Environmental Information Regulations 2004 when dealing with requests for information.

Before information is given, we will determine whether or not the relevant document and/or information requested is confidential or in the public domain.

6 Review

The Statutory Guidance states that as good practice, local authorities should aim to review their strategies every five years. Brent Council will therefore aim to carry out a formal review of this inspection strategy before March 2020.

However, there may be other circumstances that trigger an earlier review of the strategy. These include:

- a) further revisions of the legislation or guidance;
- b) the establishment of case law or other precedent; and
- c) revisions of risk assessment guidelines.

There may also be instances where the prioritisation of a specific site or area is reviewed as circumstances change or new information comes to light. These include:

- a) Proposed changes in the use of land;
 - b) Unplanned changes in the use of the land (e.g. persistent, unauthorised use of land);
 - c) Unplanned events, e.g. localised flooding/landslides; accidents/fires/spillage's where consequences cannot be addressed through other relevant environmental protection legislation;
 - d) Reports of localised health effects which appear to relate to a particular area of land;
 - e) Verifiable reports of unusual or abnormal site conditions received from business, members of the public or voluntary organisations;
 - f) Responding to information from other statutory bodies; and
 - g) Responding to information from owners or occupiers of land and other relevant interested parties.
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7 Appendix

7.1 Datasets collected to date

Dataset	Source	Format
Map data		
OS Landline	Ordnance Survey	GIS map
Industrial Estates	Brent Council	GIS map
Allotments	Brent Council	GIS map
Waste Licenses	Environment Agency	GIS map
Radioactive waste disposal	Environment Agency	GIS map
Pollution incidents	Environment Agency	GIS map
Landfill sites	Environment Agency	GIS map
IPPC authorisations	Environment Agency	GIS map
Part B authorisations	Brent Council	GIS map
Electricity substations	Brent Council	GIS map
Licensed water abstractions	Environment Agency	GIS map
Discharge consents	Environment Agency	GIS map
Groundwater vulnerability	Environment Agency	GIS map
Waterways	Brent Council	GIS map
Drift Geology	British Geological Survey	GIS map
Solid Geology	British Geological Survey	GIS map
Aerial photographs	Cities Revealed	GIS map
Historic Epoch Maps 1868-1988	Landmark	GIS map
Trade directories		
Commercial Directories 1905-1940	Kilburn, Willesden and Cricklewood Professional and Trades Directory	Paper
Commercial Directories 1935 & 1962	Wembley, Alperton and Kingsbury Professional and Trades Directory	Paper
Street Directories 1956, 1968 & 1973	Map of the Borough of Wembley - Street Directory	Paper

7.2 Industry type classification and prioritisation scores

Industry Type	Prioritisation Score
Agricultural Plants	5
Allotment	9
Artificial Teeth Manufacturers	5
Blind Maker	2
Brewery	6
Brick Works	6
Builder's Yard	4
Car Spraying	7
Cemetery	4
Charcoal works	5
Chemical Works - General	9
Chemical works: Cosmetics and toiletries manufacturing works	7

Industry Type	Prioritisation Score
Chemical Works: Explosives, propellants & pyrotechnics	9
Chemical Works: Fine chemicals manufacturing works	8
Chemical Works: Organic chemicals manufacturing works	8
Chemical Works: Pharmaceuticals manufacturing works	7
Chemical Works: Rubber processing works	7
Chemical Works: Linoleum, vinyl & bitumen-based floor covering	8
Coal Merchants	6
Contractor	3
Dairy	4
Depot	8
Dry-cleaners	7
Dyers	8
Electrical & electronic equipment manufacturing works	6
Electrical Contractor	3
Electrical Engineer	5
Electrical Sub Station	7
Electronic equipment manufacture works	6
Engineering Works - General	6
Engineering works: aircraft manufacturing works	6
Engineering Works: Shipbuilding , repair and ship breaking	6
Engineering works: vehicle manufacturing works	6
Farm	4
Fibreglass and fibre glass resins manufacturing works	5
Fire Station	7
Food manufacturing	4
Foundry / Smithy	8
Fuel Provider	7
Garage - Vehicles	4
Garage Repairs	8
Gas works, coke works, coal carbonisation plants	9
Glass manufacturing works	8
Heavy Industry	9
Hospital	7
Infilled Land - Cutting/Pond	4
Infilled River/Channel	4
Instrument Repairers	4
Laboratory	6
Laundry	4
Light Industry	5
Made Ground	4
Metal manufacturing, refining and finishing works: Lead works	9
Metal manufacturing: Iron and steelworks	9
Metal Polishers	4
Metal worker	4
Metal Works : Electroplating and other metal finishing works	9
Metal Works : Non-ferrous metal works (excluding lead works)	9
Milliner	8

Industry Type	Prioritisation Score
Munitions	7
New Planning Sites	5
No industrial history but contamination on site	8
NONE	1
Oil Storage	8
Panel Beaters	5
Photographers	3
Photographic processing industry	4
Planning Site	4
Polluting activity\Contamination event	8
Power stations (excluding nuclear power stations)	8
Printing and bookbinding works	3
Pulp and paper manufacturing works	4
Pumping station	4
Railway land	7
Rifle Range	5
Road vehicles: Garages and filling stations	8
Road Vehicles: Transport and haulage centres	6
Scrap Metal Merchant	7
Sewage works and sewage farms	9
Sewing Machine Manufacturers	5
Shearing Mills	7
Sign Writers	3
Tank	8
Textile works and dye works	5
Timber Merchant	5
Timber products manufacturing works	6
Timber treatment works	8
Undertaker	2
Vehicle Manufacturing Works	7
Warehouse	4
Waste recycling, treatment & disposal: Metal recycling sites	8
Waste: Landfills and other waste treatment & disposal sites	8
Watchmaker	5
Welders	3
Works Unspecified	7

7.3 Current use classification and prioritisation scores

Current Land Use	Prioritisation Score
Allotments	9
Building Site	7
Burial Ground	3
Car Park	1
College	5
Commercial	3
Community Centre	4
Derelict	3
Electrical Sub Station	4
Emergency Services	4
Flats	5
Flats Complex	7
Flats With Gardens	9
Garages	3
Golf Course	3
Hard standing	2
Health Centre	5
Industry	3
Institutional Building	4
Not in Borough	2
Open Space	7
Park	8
Playing Fields	8
Railway Land	4
Religious Building	5
Residential with Gardens	9
Residential with Hard Standing	5
Rifle Range	5
Road	2
School	9
School with hardstanding	5
Tank	4
Tower Block	7
Transport	4
Vacant Land	8
Vegetation	7

7.4 Glossary of terms

Contaminant	a substance relevant to the Part 2A regime which is in, on or under the land and which has the potential to cause significant harm or to cause significant pollution of controlled waters for non-radioactive contamination (or harm for radioactive contamination). Has the same meaning as 'pollutant' and 'substance'. A contaminant forms part of a contaminant linkage.
Contaminant linkage	the relationship between a contaminant, a pathway and a receptor.
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 the land, that – for non-radioactive contamination - (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 caused or there is a significant possibility of such pollution being caused. for radioactive contamination – (a) harm is being caused; or (b) there is a significant possibility of such harm being caused.
Controlled waters	defined by reference to Part 3 (section 104) of the Water Resources Act 1991; this embraces territorial and coastal waters, inland fresh waters, and ground waters. For this purpose, controlled waters has the same meaning as in Part 3 of the Water Resources Act 1991, except that "ground waters" does not include water contained in underground strata but above the saturation zone.
Current use	(a) The use which is being made of the land currently. (b) Reasonably likely future uses of the land that would not require a new or amended grant of planning permission. (c) Any temporary use to which the land is put, or is likely to be put, from time to time within the bounds of current planning permission. (d) Likely informal use of the land, for example children playing on the land, whether authorised by the owners or occupiers, or not. (e) In the case of agricultural land, the current agricultural use should not be taken to 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 for non-radioactive contamination.
Pathway	a route by which a receptor is or might be affected by a contaminant.
Pollution of controlled Waters	the entry into controlled waters of any poisonous, noxious or polluting matter or any solid waste matter.
Possibility of significant harm	a measure of the probability, or frequency, of the occurrence of circumstances which would lead to significant harm being caused.

Receptor	something that could be adversely affected by a contaminant, for example a person, an organism, an ecosystem, property, or controlled waters. The various types of receptors are explained in the Contaminated Land Statutory Guidance.
Risk	the combination of: (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 harm or pollution if it did occur.
Significant harm	means any harm which is determined to be significant in accordance with the Contaminated Land Statutory Guidance.
Significant contaminant linkage	a contaminant linkage which forms the basis for a determination that a piece of land is Contaminated Land.
Significant pollution of controlled waters	the following types of pollution should be considered to constitute significant pollution of controlled waters: (a) Pollution equivalent to “environmental damage” to surface water or groundwater as defined by The Environmental Damage (Prevention and Remediation) Regulations 2009, but which cannot be dealt with under those Regulations. (b) Inputs resulting in deterioration of the quality of water abstracted, or intended to be used in the future, for human consumption such that additional treatment would be required to enable that use. (c) A breach of a statutory surface water Environmental Quality Standard, either directly or via a groundwater pathway. (d) Input of a substance into groundwater resulting in a significant and sustained upward trend in concentration of contaminants (as defined in Article 2(3) of the Groundwater Daughter Directive (2006/118/EC))
Significant possibility of harm or significant harm	a possibility of significant harm or harm being caused which is determined to be significant in accordance with the Contaminated Land Statutory Guidance
Special Site	a site defined as such in the Contaminated Land Regulations (England) 2000. These are sites which meet the definition of Contaminated Land and fall within one of the descriptions given in the Regulations, which include: <ul style="list-style-type: none"> • certain water pollution cases • industrial cases <ul style="list-style-type: none"> - waste acid tar lagoons - oil refining - explosives - certain IPC sites - nuclear sites • Land owned by the Ministry of Defence. • All radioactive Contaminated Land
Substance	has the same meaning as ‘pollutant’ and ‘contaminant’.

7.5 References

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