



Contaminated Land Inspection Strategy

June 2017

Executive Summary

The Borough of Spelthorne is located in north-west Surrey bordering Greater London and Heathrow; and is predominantly inside the M25. The main conurbations of the Borough are the towns of Ashford, Shepperton, Staines-upon-Thames, Stanwell and Sunbury on Thames. Approximately 65% of the Borough is designated as Green Belt, and so the remaining 35% is quite densely populated.

Sand and gravel represents an important mineral resource in the Borough. Almost a quarter of the Borough's area has been subject to sand, gravel and, in the past, brick earth extraction activities, and subsequent landfilling with wastes. Urban development was, and remains, predominantly residential but there were also significant areas developed for commercial purposes, ranging from substantial factory sites to small workshops and yards. Many of these have been extensively redeveloped over the years, both to meet commercial development needs and in some cases for residential use.

Part 2A of the Environmental Protection Act 1990 places a duty on the Council to review land in the Borough that has been historically contaminated. Its main purpose is to provide an improved system for the identification of land that is posing unacceptable risks to health or the environment given the *current use and circumstances of the land*, and for securing remediation where such risks cannot be controlled by other means. Land contamination will also be addressed when land is redeveloped under the planning system, during the building control process, or where action is taken independently by landowners.

Spelthorne Borough Council published its Contaminated Land Inspection Strategy in 2001. The Council has now undertaken a review of the strategy with the aim of bringing the original strategy document up to date by:

- Reporting on amendments to legislation and statutory guidance;
- Reviewing progress being made with the implementation of the 2001 Strategy;
- Reporting on change made to the approach, procedures and methodologies for implementing the Strategy; and
- Revising the review mechanisms.

Only land where unacceptable risks are clearly identified will be meet the Part 2A definition of contaminated land. The statutory definition of Contaminated Land requires that there must be a **significant possibility of significant harm to human health or non-human receptors** or **significant possibility of significant pollution of controlled waters**.

Chapter 2 reports on the regulatory context of the Part 2A regime setting out the legal framework, highlighting modifications in the secondary legislation and Statutory Guidance since the original strategy in 2001. It further explains the legal terms and definitions of the regime, together with the roles and responsibilities of the enforcing authorities, and introducing the key concepts.

The Council and the Environment Agency are enforcing authorities for the Part 2A regime. For most sites, Spelthorne Borough Council will be the lead regulator, and the Council has sole responsibility for determining whether any land meets the definition of Contaminated Land under Part 2A of the Environmental Protection Act 1990.

Chapter 3 outlines implementation of the 2001 Contaminated Land Inspection Strategy. The original database was not considered to meet the Council's needs for spatial display, management and confidentiality of data. New Part 2A software was purchased in 2006. Progress against the 2001 targets is discussed in depth in Appendix A3.

Between 2005 and 2012, the Council was involved in several complex detailed inspections under Part 2A, which diverted resources at peak periods away from strategic implementation of the Strategy. Information about the history of the inspection sites, contamination encountered, and actions taken and the outcomes of detailed inspections are outlined in Appendix A3. Extensive site investigations were funded, principally by grants awarded by Defra, and two sites were ultimately determined as Contaminated Land in 2001 and 2011.

Chapter 4 looks forward at the next five year period to 2022, setting out the Council's new strategic approach and priorities for action under Part 2A. The Council's approach to identifying and remedying potential land contamination will principally be via the development control process, but there is still a need to ensure the continued compliance and enforcement of the duties under Part 2A of the Environmental Protection Act 1990 through both desk-based strategic inspection and detailed inspection including intrusive investigation where necessary.

A new work programme and timescales have been developed for the 2017 – 2022 period. The Council is required to take a rational and ordered approach to assessing sites and therefore an initial prioritisation of sites has been developed based on historical and current use. Over 1,100 parcels of land have been identified with the potential to have been impacted by their past or current use. Only a very small number are likely to meet the definitions of Part 2A Contaminated Land. Obviously it is not possible to investigate all these sites at once.

During the 2017-2022 period Stage 1 prioritisation scores will be converted to bandings of High, Medium and Low. Sites in the highest banding will be those most likely to meet the legal definition of Contaminated Land under Part 2A and will start to have a more in-depth review of desk-top information. Sites in the lowest banding will be screened out of the Part 2A regime – landowners may wish to undertake assessments to refine risks and assessment will still be required under the development control system for such sites. The Council aims to produce Preliminary Risk Assessments (desktop studies) between 2019 and 2022 for one site per annum in the High banding. Achieving this target will depend on the complexity of the sites being assessed and the extent of available information. Progression to detailed inspection (site investigation and risk assessment) will only be made if there is sufficient evidence (and secure funding) to justify the further work. This could include where there is strong evidence indicating the possibility of imminent significant harm to health (or significant pollution of controlled waters). Dealing with any urgent unforeseen sites would take priority over the scheduled programme of work for 2017 – 2022.

Chapter 5 summarises how the information arising from implementation of the Strategy will be handled in order to comply with the Data Protection Act 1998, whilst also giving public access to information in accordance with the Environmental Information Regulations 2004. The Council also recognises the potential for information gathered during the process of inspection to be misinterpreted and to cause blight through its misinterpretation. This chapter also sets out the circumstances and what written outputs the Council is required to prepare following detailed inspection of any land via Part 2A.

To provide a permanent record, and to make information readily available to the public and to those with an interest in land, the Council maintains a register of all regulatory action in respect of the remediation of land determined as Contaminated Land under Part 2A of the Environmental Protection Act. The register is not a list of sites that are or might be contaminated. The register includes specified details about the condition of the land, and the remediation actions carried out. Chapter 5 details what information shall be held on the register and a summary of the register entries at the time of Strategy publication, together with links to the up-to-date online public register summary.

The Council will completely review its inspection strategy every five years, or on receipt of new guidance or advice from the Environment Agency or the Department for Environment, Food and Rural Affairs (Defra). The next review is currently anticipated for 2021/ 22. Review mechanisms for reconsidering the priority assigned to a site and triggers for non-routine inspections are set out in Chapter 5 as well.

The Council is directed by the Statutory Guidance to use its judgement to strike a balance between the risks raised by contamination and the potential burdens of regulation intervention on people affected including cost, health and property blight.

The Council's principal mechanism for dealing with land affected by contamination is to ensure that land is fit for purpose when being redeveloped under the planning system. This is the most cost-effective and sustainable way forward.

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1. Introduction

Spelthorne Borough Council published its Contaminated Land Inspection Strategy in 2001, as required under Part 2A of the Environmental Protection Act 1990. The Council has now undertaken a review of the strategy with the aim of bringing the original strategy document up to date by:

- Reporting amendments to legislation and statutory guidance (Chapter 2);
- Reviewing progress being made with the implementation of the 2001 Strategy (Chapter 3 and Appendix A3);
- Reporting on change made to the approach, procedures and methodologies for implementing the Strategy (Chapter 4); and
- Revising the review mechanisms (Chapter 5).

The Council is required to act in accordance with the Statutory Guidance, and that contains much of the detail on how our duties under Part 2A are to be implemented. It is not our intention in this document to reproduce large sections of the published guidance, but instead to signpost to the relevant paragraphs or chapters of that guidance where applicable. There are a number of terms and concepts defined in the legislation and statutory guidance upon which the regime is based, and some of these are explained in more detail in Chapter 2.

The purpose of the Part 2A regime is to help deal with a the legacy of land contamination that has arisen from a wide range of industrial and waste disposal activities and where the land is posing unacceptable risks and is not suitable for its current use. The Council's role in the regime is to **identify land** meeting the definition of Contaminated Land under the Part 2A regime, and then **secure clean up** by the appropriate persons under the 'polluter pays' principle, but only where risks cannot be controlled by other means. The regime does not apply to all land that has been impacted by contamination – only in a minority of cases will there be sufficient risk to health or the environment for such land to meet the Part 2A definition. Under Part 2A, the starting point is that land is not Contaminated Land unless there is sufficient reason to consider otherwise. At each stage of the process the Council is required to consider how likely it is that a piece of land meets the definition and the land must meet thresholds set out in the Statutory Guidance for the process to carry on.

Land contamination will also be addressed when land is redeveloped under the planning system, during the building control process, or where action is taken independently by landowners. The Council's principal mechanism for dealing with land affected by contamination is to ensure that land is fit for purpose when being redeveloped under the planning system.

The statutory definition of Contaminated Land requires that there must be a **significant possibility of significant harm to human health or non-human receptors** or **significant possibility of significant pollution of controlled waters**. The Council recognises that the expectations of some members of the public will not be met by the powers the local authority may exercise under the Part 2A regime. Wherever possible, Council Officers will seek to explain matters in terms that can readily be understood by non-specialists.

Under current central government guidance, decisions about Contaminated Land are not made on a purely technical basis. There will be a variety of regulatory, commercial, financial, legal and societal factors, which also affect how particular land contamination issues should be addressed. The Council is directed by the Statutory Guidance to use its judgement to strike a balance between the risks raised by contamination and the potential burdens of regulation intervention on people affected including cost, health and property blight. However, decisions about Contaminated Land also need to be scientifically robust, proportionate and transparent.

1.1 Aims of the Strategy

The Council's priorities when dealing with land contamination will be to:

Protect	Prevent	Encourage
<ul style="list-style-type: none">• Human Health• Controlled Waters• Designated Ecosystems	<ul style="list-style-type: none">• Damage to Property• Damage to designated Historic Sites• Further land contamination	<ul style="list-style-type: none">• Voluntary Remediation• Reuse of 'brownfield' land

1.2 Objectives of the Strategy

The Council's objectives of the strategy are:

- To follow the overarching objectives of the Contaminated Land Statutory Guidance (April 2012) Section 1;
- To follow the approach, with regard to inspection, contained within Section 2 of the Contaminated Land Statutory Guidance (April 2012);
- To ensure that where development of land takes place within the Borough that the planning process deals effectively with any land contamination such that the land is suitable for its intended use (and could not be subsequently considered as Contaminated Land under the Part 2A regime);
- To ensure that the Strategy is compatible with the Council's Corporate Plan, and the Community Plan
- To share information internally and externally to enable consideration to be given about land contamination during the policy making and planning process
- To avoid any unnecessary blight of land within the Borough

2. Regulatory Context

2.1 Introduction

Part 2A of the Environmental Protection Act 1990 places certain duties on Local Authorities in a regime to deal with a substantial legacy of land throughout the United Kingdom that has been historically contaminated. The Act came into force in April 2000. Table 2.1 outlines the overarching objectives of the UK Government's policy on land contamination and the Part 2A regime and sets out how the duties on the Council contribute to meeting those objectives.

Table 2.1 UK Government Part 2A Objectives

UK Government Policy Objectives	Spelthorne Borough Council Involvement
(a) To identify and remove unacceptable risks to human health and the environment	<ul style="list-style-type: none">• To identify land posing unacceptable risks to human health and the environment
(b) To seek to ensure that Contaminated Land is made suitable for its current use	<ul style="list-style-type: none">• To identify appropriate persons, specify the work to be done and the periods within which the work has to be carried out
(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	<ul style="list-style-type: none">• To avoid any unnecessary blight of land within the Borough.• To ensure that its decisions about land contamination are scientifically robust and proportionate, taking into account relevant financial, legal and societal factors, to strike a balance between the risks raised by contamination and potential burdens of intervention

Contaminated Land (under Part 2A) is that land that poses an unacceptable risk to human health or the environment through its current use, including,

- likely future use which would not require a new or amended grant of planning permission;
- temporary use from time to time within the bounds of current planning permission; and
- likely informal use and agricultural land where crops or animals are habitually reared.

Spelthorne Borough Council assumes all the land within the Borough is not Contaminated Land under Part 2A of the Environmental Protection Act unless there is reason to consider otherwise in accordance with the outcome of detailed risk assessments. Only land where unacceptable risks are clearly identified will be considered as meeting the Part 2A definition of Contaminated Land.

Enforcing authorities are directed to only use Part 2A where no appropriate alternative solution exists. Land contamination will also be addressed when land is redeveloped under the planning system, during the building control process, or where action is taken independently by landowners. Other legislative regimes may also provide a means of dealing with land contamination issues such as the regimes for waste, water and environmental permitting; and the Environmental Damage (Prevention and Remediation) Regulations 2009. Further details are provided in Appendix A1.

The Council's principal mechanism for dealing with land affected by contamination is to ensure that land is fit for purpose when being redeveloped under the planning system. This is the most cost-effective and sustainable way forward.

2.2 Legal Framework

The Contaminated Land legal framework consists of three main legislative/ statutory elements, as set out in Table 2.2.

Table 2.2 Legal Framework

Primary Legislation
Environmental Protection Act 1990 (by section 57 of the Environment Act 1995)
Secondary Legislation
The Contaminated Land (England) Regulations (SI 2006/1380)
Statutory Guidance
DEFRA (April 2012) Environmental Protection Act 1990: Part 2A. Contaminated Land Statutory Guidance

The 1990 Act sets the main structure of the regime. It designates the Council and the Environment Agency as regulators and defines their responsibilities (see section 2.4). Part 2A creates a risk-based definition of “contaminated land”, which hinges on whether the Council considers it poses a “significant” risk to human health or the environment (see section 2.3). The regime also sets out rules for who should pay for remediation, with the person who caused the pollution being first in line, followed in some cases by the landowner if the polluter cannot be made to bear the costs, followed by the Council (or the Environment Agency, for “special sites”) if no other party can be made to bear the costs. Polluter and owner liability are subject to “hardship” rules. The regime also provides for retrospective liability – i.e. polluters and landowners can be held liable for the costs of remediating land that was contaminated in the past, even if causing the contamination was not unlawful at the time it was caused (see Sections 2.9 and 2.10).

The Contaminated Land (England) Regulations (SI 2006/1380) consolidate the provisions of the previous regulations of 2000 and 2001, containing mainly administrative aspects such as procedures on serving remediation notices, definition of special sites and rules on appeals.

Since the introduction of the regime in 2000 there have been some modifications to the definitions of Contaminated Land in respect of controlled waters and radioactivity – see section 2.3.1.

Part 2A makes specific provision for “Statutory Guidance” to be issued by the Secretary of State to deal with the extended regime for the identification and remediation of Contaminated Land. The Statutory Guidance was first introduced in 2000, updated in 2006 to include radioactively contaminated land, and revised in April 2012 (see Table 2.3).

The main role of the Statutory Guidance is to:

- Explain the legal tests on how the regulator decides what is, and is not Contaminated Land;
- Elaborate on how the Council should implement the regime;
- Elaborate on how regulators ensure appropriate remediation happens; and

- Elaborate on liability arrangements

The scope of the guidance has not changed but DEFRA sought to simplify the guidance whilst removing uncertainty on some aspects that had in their opinion caused poor performance of the regime. Key changes within the Statutory Guidance are highlighted in Table 2.3.

Table 2.3 Key Features and Changes of Revised Statutory Guidance

<i>Key Features and Changes of Revised Statutory Guidance (April 2012)</i>
<ul style="list-style-type: none"> • Inclusion of objectives of the Part 2A regime to give greater legal weight. Plus a previous objective of ensuring 'regulatory consistency' has been dropped. • Terminology changes – e.g. contaminant, receptor, pathway and contaminant linkage • More definition of 'current use' of land • Exclusion of 'normal' or background contamination from scope of regime • Introduction of 'cost benefit' test into determination • New Section 3 on Risk Assessment, with direction to stop if no evidence that land might pose unacceptable risks; need for timely completion of inspections; and the Council is required to produce a non-technical 'risk summary' before final determination • In consideration of Significant Possibility of Significant Harm (SPOSH) Council is required to use a categorisation (Category 1 to Category 4) system • In considering the possibility of Significant Harm (SH) for human health, Council is required to take into account the number of people likely to be exposed • In pollution of controlled waters, the Council and Environment Agency are required to focus on 'significant pollution' • New obligation to explicitly exclude land (where appropriate) from further consideration under the regime and issue a written statement to that effect • Council/ EA can give appropriate persons (APs) a chance to suggest an approach that might avoid the need for formal determination • Council/ EA can postpone determination if a party undertakes to deal with the problem in an appropriate timescale to an appropriate standard. • Removal of provisions on radioactive contamination – to be in separate guidance • Strategies to be reviewed at least every 5 years

2.3 The Definition of Contaminated Land

Section 78A (2) of Part 2A of the Environmental Protection Act 1990 defines Contaminated Land as:

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

- (a) Significant harm is being caused or there is a significant possibility of such harm being caused, or
- (b) Significant pollution of controlled waters is being caused, or there is a significant possibility of such pollution being caused.”

Section 78A (4) of Part 2A of the Environmental Protection Act 1990 defines 'Harm' to include 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. Tables 1 and 2 in the Statutory Guidance (April 2012) detail how the Council should go about deciding harm for ecological system and property effects.

2.3.1 Radioactivity

Where *harm* is attributable to radioactivity, the definition of *Contaminated Land* has been modified by regulation 4(a) of the modification regulations as:

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

(a) harm is being caused, or

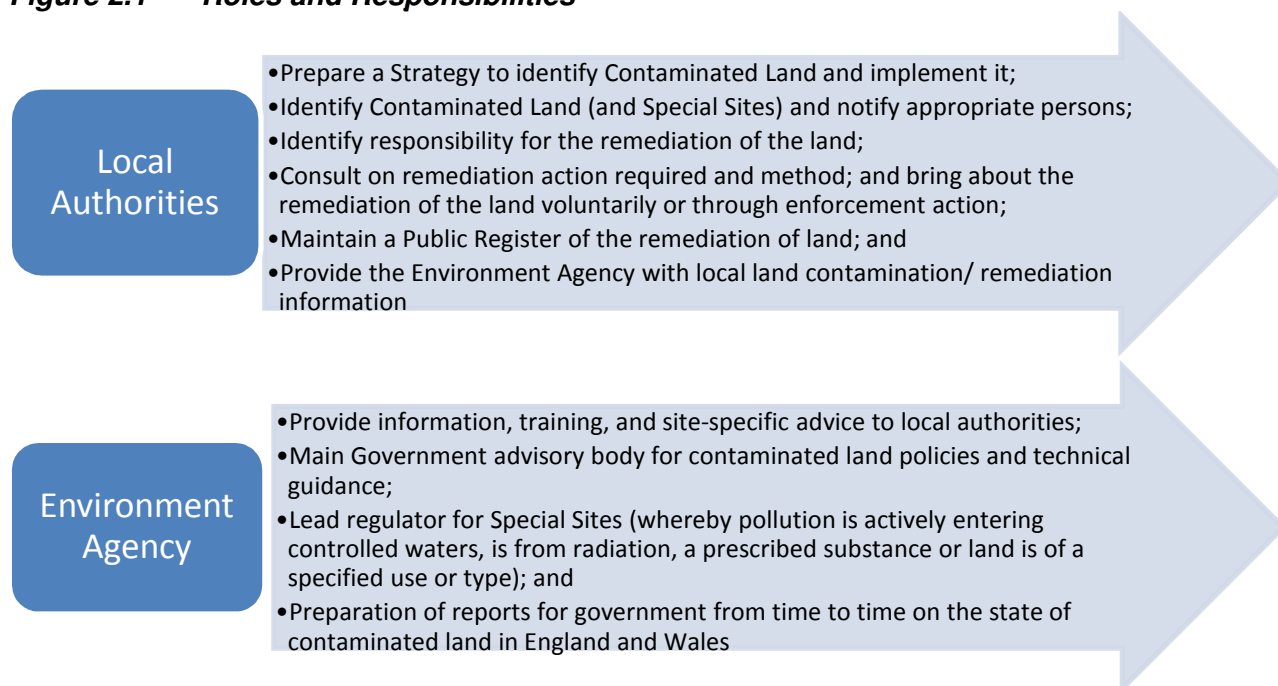
(b) there is a significant possibility of such harm being caused."

2.4 The Role of Enforcing Authorities

The enforcing authorities are the local authority, i.e. Spelthorne Borough Council; and the Environment Agency. The respective roles and responsibilities of the enforcing authorities are summarised in Figure 2.1. Local authorities have been given the primary regulatory role under the Part 2A regime and therefore for most sites Spelthorne Borough Council will be the lead regulator:

- Spelthorne Borough Council has the sole responsibility for determining whether any land meets the definition of Contaminated Land under Part 2A of the Environmental Protection Act 1990.
- If Spelthorne Borough Council determined a site as Contaminated Land and which would be likely to meet one or more of the descriptions of a special site, it should consult the Environment Agency and, subject to the Agency's advice and agreement, arrange for the Agency to carry out any intrusive inspection of the land on behalf of the Authority.
- Where the Agency carries out an inspection on behalf of the Council, the inspection duty and the decision as to whether land is Contaminated Land, remain the sole responsibility of the Council.
- Spelthorne Borough Council is required to have regard to the Agency's advice wherever contamination of controlled waters or aquifers is likely.

Figure 2.1 Roles and Responsibilities



In some cases the decision as to whether the land meets the legal definition of Contaminated Land may not be straightforward. In complex cases it may be necessary to bring in external expertise from specialist consultants to ensure the robustness of the risk assessment in line with paragraphs 3.18 – 3.20 of the Statutory Guidance. External experts may provide advice to the Council, but the regulatory decisions to be taken remain the sole responsibility of the Council. It is possible that different suitably qualified people could come to different conclusions when presented with the same information. It is for the local authority to use its judgement to form a reasonable view of what it considers the risks to be on the basis of a robust assessment of available evidence in line with the Statutory Guidance.

There may also be some unavoidable uncertainty underlying the facts of the case. Spelthorne Borough Council is directed to use its judgement to strike a reasonable balance between:

- a) Dealing with risks raised by contaminants in land and the benefits of remediating land to remove or reduce those risks; and
- b) The potential impacts of regulatory intervention including financial costs to whoever will pay for remediation, health and environmental impacts of taking action, property blight, and burdens on affected people.

Whilst taking a precautionary approach to the risks raised by contamination, it is the objective of the Council to ensure that the regime produces net benefits, taking account of local circumstances.

2.5 Principles of Contaminant Linkages

The definition of Contaminated Land for the purposes of Part 2A is based upon the principles of risk assessment providing a systematic, objective and consistent basis for considering uncertainties, discussing options and making decisions.

Risk is defined as the combination of:

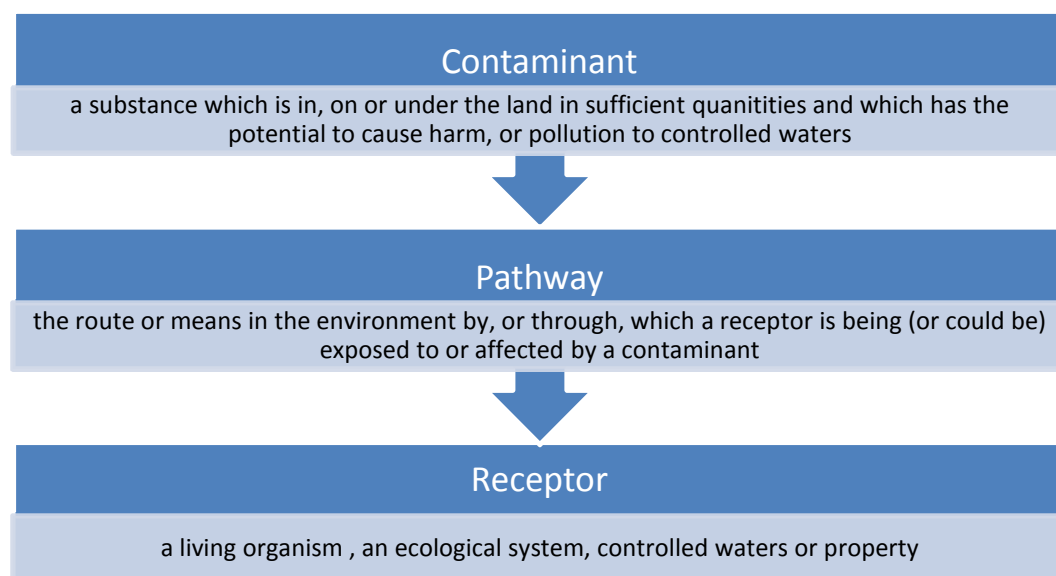
- the probability, or frequency, of a defined hazard (for example, likelihood of exposure to a property of a substance with the potential to cause harm); and
- the magnitude (including the seriousness) of the consequences

This risk must be assessed in terms of a contaminant – pathway – receptor relationship (see Figure 2.2). The identification of each of these three elements is linked to the identification of the others. A pathway can only be identified if it is capable of exposing an identified receptor to an identified contaminant. That particular contaminant should likewise be capable of harming or, in the case of controlled waters, be capable of polluting that particular receptor.

Where a contaminant, pathway and receptor are present a “contaminant linkage” is said to exist. A contaminant linkage relates to a single contaminant and therefore there may be more than one linkage on a piece of land. Any contaminant linkage which forms the basis that the land is determined as contaminated is a “significant contaminant linkage”. Land is presumed to not be contaminated unless there is a reasonable possibility that a significant contaminant linkage may exist on the land.

Assessments must be based on risks that are reasonably likely to exist. In the course of risk assessment the Council may consider possible exposure scenarios or situations which are very unlikely to occur. However, regulatory decisions should be based on what is reasonably likely, not what is hypothetically possible.

Figure 2.2 Contaminant Linkage Terms



2.6 Key Concepts of the Revised Statutory Guidance

2.6.1 Categories 1 to 4

The Statutory Guidance has introduced the categorisation of sites investigated and risk assessed under Part 2A for use by Councils. Table 2.4 provides a summary of the 4 categories. In brief, Categories 1 and 2 encompass land which is capable of being determined as Contaminated Land under Part 2A and Categories 3 and 4 would encompass land which is not on the basis of currently available information considered to meet the legal definition of Contaminated Land (see Figure 2.3).

Table 2.4 Categories 1 to 4

Categories	Human Health	Controlled Waters
1	There is an unacceptably high probability supported by robust evidence of the significant possibility of significant harm occurring if no action is taken to stop it. Significant harm may have already been caused.	Strong and compelling case that a significant possibility of significant pollution of controlled waters exists. This would include cases where there is strong science-based evidence for considering that it is likely that high impact pollution would occur if nothing were done to stop it.
2	There is a strong case for considering that the risks from the land are of sufficient concern, that the land poses a significant possibility of significant harm. Includes land where there is little or no direct evidence that similar land, situations or levels of exposure have caused harm before, but available evidence suggests that there is a strong case for taking action under Part 2A on a precautionary basis.	The strength of evidence would not place the land into Category 1; however, there is sufficient concern that the land should be considered to pose a significant possibility of significant pollution of controlled waters on a precautionary basis. This may include land where there is a relatively low likelihood that the most serious types of significant pollution might occur.
3	The risks are not low, but regulatory intervention under Part 2A is not warranted. Owners or occupiers of the land could take action to reduce risks	Risks are such that the local authority might prefer that they did not exist but regulatory intervention under Part 2A is not warranted. This includes land

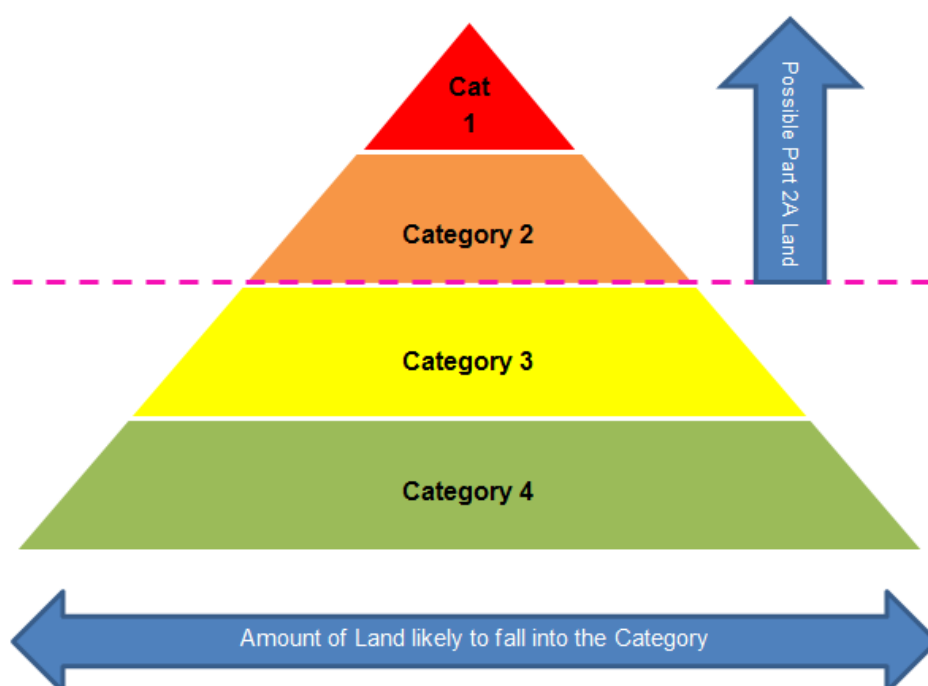
	outside of the Part 2A regime if they choose.	where it is very unlikely that serious pollution would occur; or where there is a low likelihood that less serious types of significant pollution might occur.
4	There is no risk, or that the level of risk posed is low. For example there are no relevant contaminant linkages; contaminant levels do not exceed the proposed Category 4 Screening Levels.	There is no risk, or that the level of risk posed is low. For example there are no relevant contaminant linkages or the water pollution is similar to that which might be caused by background contamination.

The most difficult decision will be between category 2 and 3 sites where the Council would have to decide whether or not there is a “significant possibility of significant harm”. The Statutory Guidance states that where all factors are taken into account, if the Council cannot decide whether or not a significant possibility of significant harm exists, it should conclude that the legal test has not been met and the land should be placed in Category 3.

The boundary between Categories 2 and 3 is also the line where regulatory intervention will be drawn – for sites in Category 3 risks are not low but regulatory intervention under Part 2A is not warranted. The Council may be able to offer advice to a landowner on how they might pursue their own investigation of their land in Category 3, but the Council would not ordinarily itself undertake, or fund, any investigation of a Category 3 site.

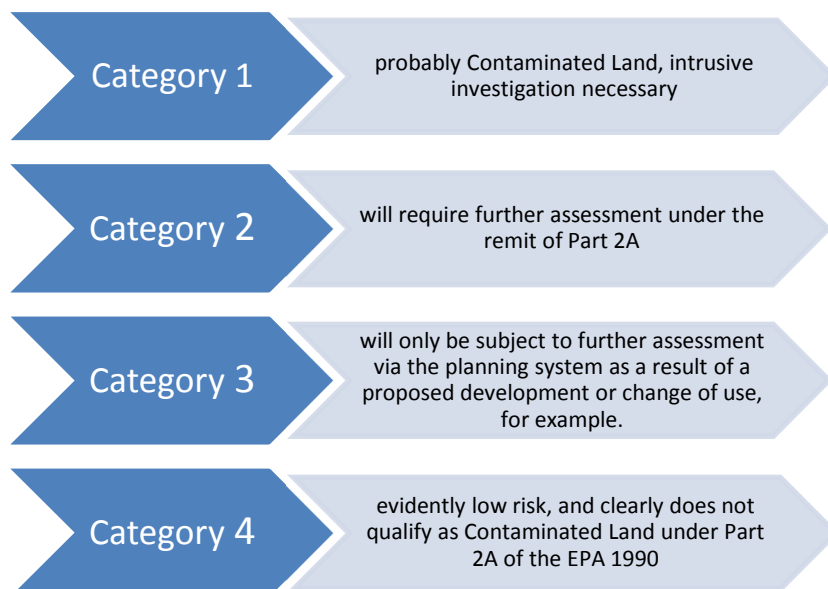
In March 2014, CL:AIRE published the output for the research project commissioned by Defra on Development of Category 4 Screening Levels (C4SLs) for assessment of land affected by contamination. This includes a methodology for deriving C4SLs for four generic land-uses comprising residential, commercial, allotments and public open space. The project also derived C4SLs for six substances – arsenic, benzene, benzo(a)pyrene, cadmium, chromium (VI) and lead. The C4SLs are “relevant technical tools” to help the Council when deciding to stop further assessment of a site, on the grounds that it falls within Category 4 (Human Health).

Figure 2.2 Categories 1 to 4



The Council may also be able to place some sites within Category 4 where no relevant contaminant linkage exists. Further risk assessment may be necessary for other sites to place them into Categories 1-3. The Council has considered the guidance and will be adopting a practical approach to the categories as shown in Figure 2.3:

Figure 2.3 Local Approach to Categories 1 to 4



2.6.2 Background Contamination

The Statutory Guidance states that normal levels of contaminants should not be considered to cause land to qualify as Contaminated Land, unless there is a particular reason to consider otherwise. "Normal" levels of contaminants in soil may be the result of the natural presence of contaminants or the presence of contaminants caused by low level diffuse pollution, and common human activities other than past industrial uses.

In October 2012, Defra published a report and technical guidance sheets, produced by The British Geological Survey (BGS), on normal background concentrations for a number of contaminants in English soils. Unfortunately the dataset is not particularly strong for this local area, but where available, data on normal background concentrations will be used to support the decision of whether land within Spelthorne is Contaminated Land under Part 2A.

2.6.3 Risk Summaries

Prior to formal determination of Contaminated Land, the Council will produce an easily understandable risk summary for any land where, on the basis of its risk assessment, it considers it likely that the land in question may be determined as Contaminated Land.

Risk summaries should be targeted towards the land owners and members of the public who may be affected by the decision. Risk summaries are not required: -

- (a) For land which will not be determined as Contaminated Land (land in Categories 3 and 4).
- (b) For land which has been prioritised for detailed inspection but which has not yet been subject to risk assessment.
- (c) For land determined as Contaminated Land before the revised Statutory Guidance came into force.

Full details of what should be included in a risk summary are in the Statutory Guidance (paragraphs 3.33 – 3.36). In short, a risk summary will include:

- Summary of the Council's understanding of the risks
- Description of the Council's understanding of the uncertainties behind its assessment
- Description of the risks in context
- Description of the Council's initial views on possible remediation

2.6.4 Written Statements

The revised Statutory Guidance has introduced Written Statements for land which is inspected by the Council but considered not to be contaminated under Part 2A. In such cases, the Council will issue a Written Statement to that effect (rather than coming to no formal conclusion) to minimise unwarranted blight. The Written Statement will make clear that on the basis of the risk assessment, the Council has concluded that the land does not meet the definition of Contaminated Land under Part 2A.

Spelthorne Borough Council will therefore inform the owners of the land of its conclusion and give them a copy of the Written Statement and keep a record of all Written Statements itself. The Council will look to publish Written Statements on its website wherever possible (subject to any data protection and commercial confidentiality restrictions, for example).

2.7 Determining Contaminated Land under Part 2A

Where one or more significant contaminant linkages exist between any sources of contamination and relevant receptors under Part 2A, the Council will follow the procedure for determining that land as Contaminated Land, as set out in Section 78A(2) of the Environmental Protection Act 1990 and Section 5 of the revised Statutory Guidance and the land will be placed in either Category 1 or Category 2. The Council is required to act in accordance with the directions provided in the Statutory Guidance.

The Council may postpone the determination of Contaminated Land following informing the interested parties, should the landowner or other interested person(s) choose to undertake the remediation to an appropriate standard and timescale agreed with the Council.

The determination may also be postponed should one or more significant contaminant linkages only exist if the circumstances of the land were to change in the future within the bounds of the current use of the land (e.g. if a more sensitive receptor were to move onto the land or a temporarily interrupted pathway were to be reactivated). Alternatively, in this situation the Council could determine the land as Contaminated Land but postpone the remediation.

The Council may reconsider a determination if new information comes to light, which is significant enough to alter the original decision. In such cases it will decide whether to retain, vary or revoke the determination.

2.7.1 Record of determination

The Council will prepare a publicly available and easily understandable written record of determination that land is Contaminated Land, which will clearly and accurately identify the location, boundaries and area of the land. The record will explain why the determination has been made and will summarise the relevant assessment of evidence.

2.8 Remediation of Contaminated Land

Once any land has been determined as Contaminated Land, the Council [or the Environment Agency for Special Sites] must consider how it should be remediated. Section 6 of the Statutory Guidance sets out the relevant provisions of Part 2A.

The Council will have regard to the Statutory Guidance when it is:

- (a) Deciding what remediation it should specify in a remediation notice as being required to be carried out;
- (b) Satisfying itself that appropriate remediation is being, or will be, carried out without the service of a notice; or
- (c) Deciding what remediation action it should carry out itself.

In selecting the appropriate detailed technical procedures or working methods the Council may consult relevant technical documents. It may also act on the advice of a suitably qualified experienced practitioner.

2.9 Liability

The main provisions for the establishment of liability are set out in Part 2A (of the Environmental Protection Act 1990). The Council (and anyone else interested in liability) will need to refer directly to Part 2A. Section 7 of the Statutory Guidance should be read in conjunction with the Act.

In simplified terms, liability is settled on the basis of the “polluter pays” principle, identifying in succession those who have caused or knowingly permitted the contamination, then those who may have contributed to the problems which may have made the land Contaminated Land under Part 2A and finally onto the owners or occupiers of the land.

2.10 Recovery of Costs of Remediation

Section 8 of the Statutory Guidance sets out the principles and approaches to be considered by the Council on the extent to which the Council should seek to recover the costs of remediation which it has carried out.

The Council has previously considered a hardship policy, but has chosen not to adopt an overarching cost recovery policy at this time. Instead the Council will have regard to the circumstances of each individual case. The Council will also have regard to balancing any hardship which the recovery may cause to the person from whom the cost is recoverable with achieving an overall result which is as fair and equitable as possible to all who may have to meet the costs of remediation, including national and local taxpayers.

A review of this decision has been included within the next five year work programme. The Council may at that time choose to adopt and make available a policy statement about the overall approach it intends to take in making cost recovery decisions. In general the Council should seek to recover all its reasonable costs as directed by the Statutory Guidance. Costs may be waived or reduced where appropriate or reasonable to reduce undue hardship or in certain circumstances outlined in sub-sections 8(b), 8(c) and 8(d) of the Statutory Guidance. Recovery of costs is not necessarily on “all or nothing” matter – appropriate persons can be made to pay part of the authority’s costs even if they cannot reasonably be made to pay all of the costs, and costs may be deferred and or secured by a charge on the land.

3.0 Implementation of the Contaminated Land Strategy

The original draft Contaminated Land Inspection Strategy was approved by Spelthorne Borough Council Executive and adopted on behalf of the Council on 8 May 2001. Initial consultation was completed in early July 2001 (see Table 3.1). Work on identification of areas of potentially contaminated land within the Borough had already started, with the review of pre-War Ordnance Survey maps having been completed by April 2001 and one site having been determined as Contaminated Land in October 2000.

Table 3.1 *Consultees for 2001 Strategy*

Statutory Consultees	Other Stakeholders
<ul style="list-style-type: none">• Environment Agency;• English Nature;• English Heritage;• DEFRA; and• Surrey County Council	<p>Neighbouring Local Authorities:</p> <ul style="list-style-type: none">• London Boroughs of Hillingdon, Hounslow and Richmond,• Boroughs of Elmbridge and Runnymede,• Unitary authorities of Windsor and Maidenhead, and Slough <p>Utility and transport network companies:</p> <ul style="list-style-type: none">• British Gas,• Railtrack,• Southern Electric, and• Thames Water

This review of the Strategy is a complete overhaul and rewrite to reflect the changes to regime's legislation and guidance, and a revised strategic approach which has developed from greater understanding of the regime and of land quality within the Borough. This Strategy also includes progress to date in the identification and management of land contamination.

3.1 Sites Inspected

As outlined in section 2.1 and Appendix A1, the primary mechanism for dealing with historic contamination will be by making sure land is suitable for use during redevelopment via the planning system. This will gradually reduce the residual number of sites requiring inspection under the Part 2A regime. Appendix A3.1.5 provides information on the numbers of applications under Building Control and Planning being assessed per annum for potential impacts of land contamination.

3.1.1 Strategic Inspection

Under the 2001 Strategy, the Council made a broad assessment, known as Strategic Inspection, of all land within its Borough through review of historical maps and selected other information sources. This identified over 1,100 potentially contaminated sites within the Borough. These are sites where a historic or current land use is known to be/ have been present which may have impacted on land quality. Only in a minority of cases, if at all, might there be contamination of sufficient risk to health or the environment for such land to be considered Contaminated Land under Part 2A. In other words there is potential for contamination to be present though not necessarily evidence of actual contamination.

However, additional sites are still being encountered as new information resources, such as additional dates of maps or aerial photographs, are acquired by the Council. Similarly new

information about existing identified sites can arise from review of more in-depth records such as historic planning files or site investigations. The number of potentially contaminated land sites and their priority may therefore be subject to change as new information becomes available and or records are updated.

Sites are initially considered and prioritised using the GeoEnviron Risk Assessment Software Tool. An initial prioritisation has produced a Stage 1 Risk Assessment Score and Site Prioritisation Inspection List, based on cross referencing the current use of the site with the past historical use.

The 2001 Strategy implemented a timescale of the end of June 2003 to complete a programme of risk prioritisation of potentially contaminated land and this was achieved using the CAPS Uniform Contaminated Land Module. However, this database was not considered to meet the Council's needs for spatial display, management, and confidentiality of data. In 2006 the Council purchased the GeoEnviron Contaminated Land Management System from STM Environmental Ltd. This made the original 2001 targets obsolete. A revised Stage 1 Site Prioritisation Inspection List was created using GeoEnviron to reflect changes in the statutory guidance. Further information about progress against the 2001 Strategy Targets and development of the Strategy is provided in Appendix A3.

3.1.2 Detailed Inspection

Since the publication of the 2001 Strategy, several sites have undergone detailed inspection (see Section A3.1.4). Extensive site investigation works were funded by capital grants from Defra and work was undertaken between 2001 and 2011. Two sites were determined as Contaminated Land in October 2000 and May 2011. Further details about these sites and their subsequent remediation is also provided in Appendix A3.

4.0 Priority Actions and Timescales for 2017 – 2022

Having regard to the latest Statutory Guidance, experience of dealing with land contamination issues over the past decade and the resources available to the Council, a different strategic approach is now considered appropriate.

Spelthorne's priority actions will be:

1. To ensure that the redevelopment of contaminated sites under the development control system (outside of Part 2A) is adequately controlled and results in land which is suitable for the proposed use, and could not be considered as Part 2A Contaminated Land in the future;
2. To maintain the database, adjust risk scoring as new information is gathered, and keep an accurate record of areas affected by potential contamination issues; and
3. To carry out detailed inspection where information is received that suggests a problem of land contamination is of current urgent concern to one or more sensitive receptors.

The Council's approach to identifying and remedying potentially land contamination will principally be via the development control process, but there is still a need to ensure the continued compliance and enforcement of the duties under Part 2A of the Environmental Protection Act 1990 through both desk-based strategic inspection and detailed inspection including intrusive investigation where necessary.

The Council's approach to dealing with land contamination outside of the Part 2A of the Environmental Protection Act 1990, including via the planning regime, is set out in Appendix A1.

4.1 Strategic Inspection

Spelthorne Borough Council will investigate its potentially contaminated land sites under Part 2A in accordance with the procedure outlined in Figure 4.1 below. The work programme and timescales are summarised in Table 4.2 (Section 4.5). In adopting this strategic approach to dealing with Contaminated Land under Part 2A, the Council has taken into account the characteristics of the Spelthorne area as described in Appendix A2.

4.1.1 Stage 1 Site Prioritisation Inspection list

The Stage 1 Site Prioritisation Inspection List produced in GeoEnviron provides a list of sites ranked by score based on historical use and current use. To develop this further the initial focus in 2017 and 2018 will be on two areas of work:

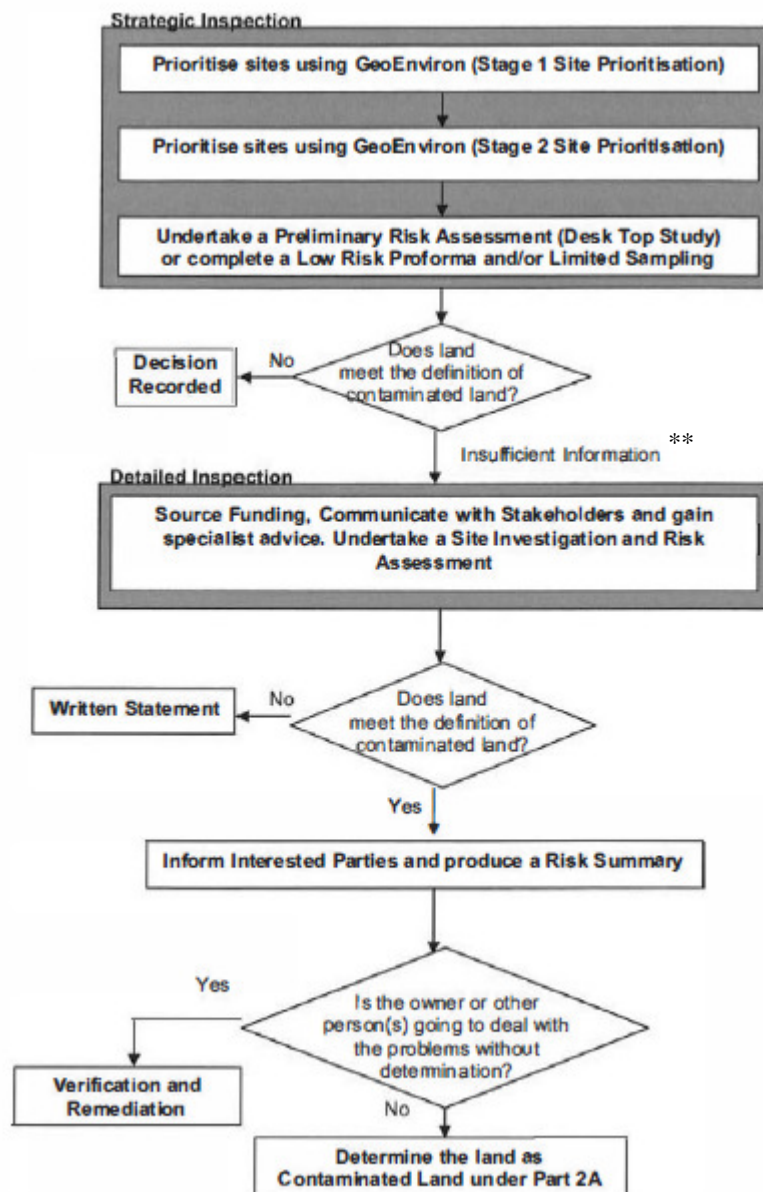
- (1) To capture and import site investigation and remediation report data (and update the Stage 1 Site Prioritisation scores); and
- (2) Convert Stage 1 Prioritisation scores into High, Medium and Low bandings (see Table 4.1)

Throughout this five year period there will also be a number of ongoing tasks, as follows:

- (1) To review newly acquired data including 1953, 1961 and 2015 aerial photography and current Ordnance Survey mapping; and
- (2) To add any new sites, discovered from the above sources or planning records for example, to the database and generate a Stage 1 Site Prioritisation score and banding

This work will be carried out in parallel with other strategic and detailed inspection tasks throughout 2017 to 2022.

Figure 4.1 Contaminated Land Inspection Procedure



** "insufficient information" – for inspection to proceed there must be evidence that an unacceptable risk is reasonably likely to exist

Sites within the High banding will be subject to Stage 2 Prioritisation and selected sites may have a Preliminary Risk Assessment (desktop study) undertaken during this five year period. Sites in the High Banding are probable Category 1 or Category 2 sites where detailed inspection is likely to be required to resolve potential risks. This could include intrusive investigation where sufficient justification exists following completion of desk top studies and preliminary risk assessments. Equally though after review of available desk top information or intrusive investigation sites in the High banding may be considered to be in Category 3 where risks are not low, but there is not a strong case for considering that the risks from the land are of sufficient concern to justify intervention under Part 2A. While about 10% of identified sites are anticipated to be taken forward in the High banding, it is likely that only a much smaller percentage would meet Category 1 or Category 2 criteria.

Table 4.1 Stage 1 Banding

Banding (% of sites)	Stage 1 Score	Description	Probable Category	
High (~10%)	To be confirmed	Detailed Inspection required to resolve potential risks Initially to comprise Stage 2 Prioritisation and Preliminary Risk Assessments (as per 4.1.2 and 4.2.1, respectively).	1	Very High Risk
			2	High to Moderate Risk
Medium (~20%)	To be confirmed	Stage 2 Prioritisation to be undertaken. Detailed Inspection may be required to resolve potential risks. This is likely to be limited to desk top research and site walkover. Some intrusive investigation may be warranted to resolve potential risks, especially if a site is borderline with Category 2. Owners/ occupiers may wish to undertake their own investigations and risk assessments to refine risks.	3	Moderate Risk
			4	Low to Very Low Risk
Low (~70%)	To be confirmed	Stage 1 Site Prioritisation Completed No further action under Part 2A can reasonably be justified. Further assessment will remain appropriate via the development control system. Owners/ occupiers may wish to undertake their own investigations and risk assessments to refine risks.		

Sites within the Medium banding are scheduled for Stage 2 Prioritisation in a future Strategy period, i.e. beyond 2022. These sites are considered on the basis of professional judgement, from experience of dealing with sites of similar historical land uses, to be likely to be Category 3 or even Category 4 sites. In the intervening period owners/ occupiers may wish to undertake their own investigations and risk assessments to refine risks. Where this is the case the Council may be able to offer advice on how this may be pursued and review those assessments to see if a formal conclusion can be reached on whether the land does or does not meet the definition of Contaminated Land. Sites will also be dealt with under the development control process where any change of use or new development is proposed. Examples of typical sites within the Medium banding may include petrol filling stations/ garages, engineering works and factories still in commercial/ industrial or other non-sensitive use; and inert landfill sites and other filled land not in current residential or other sensitive land use. Site specific circumstances may exist where sites of similar historical use are in the High or Low banding.

Sites within the Low banding are those where the historical activities and current land uses mean that the likelihood of contamination is considered to be low and any harm would normally be mild. As such, no further action under Part 2A can reasonably be justified. Further assessment will remain appropriate under the development control system, and again land owners may wish to undertake their own investigations as liabilities may remain for landowners outside of the Part 2A regime for any damage.

Previous Statutory Guidance placed all its emphasis on enforcing authorities concentrating resources on the areas where Contaminated Land was most likely to be found, locking low risk sites into the Part 2A process with no formal action likely in the short or medium term. The current Statutory Guidance makes it clear that, at any stage, for land to progress to the next phase of the process there should be evidence that an unacceptable risk could reasonably exist, and where the authority considers that there is little reason to consider that the land might pose an unacceptable risk, inspection activities should stop at that point. This enables a high proportion, estimated at 60-70%, of sites identified in Strategic Inspection to be screened out of any further consideration under Part 2A. This approach is compatible with the objective to ensure that burdens are proportionate and property blight is minimised. Examples of typical sites that may be within the Low banding include electricity substations, small former pits and ponds, modern industrial estates, warehouses and similar uses still in commercial/ industrial use, cemeteries/ burial grounds, commercial garden nurseries, and sites of any historical use that have been subject to site investigation and or remediation and found to be suitable for use.

4.1.2 Stage 2 Site Prioritisation Inspection List

The Stage 2 site prioritisation process allows an assessment of individual sites in more detail and could involve desk-top research and a site walkover where appropriate and possible. Examples of information that may be reviewed for each site include:

- (1) Planning and building control files to obtain more detailed land use details and history
- (2) Aerial photographs to supplement available map editions
- (3) Other historical archives such as the trade directory database, Council Minute Books, and local history books
- (4) Other attributes to refine ranking such as number of residential properties on-site, area of site, and duration of use.

The Council aims to carry out Stage 2 prioritisation on 10 sites in the High banding per year from 2019 to the end of 2022. This work will be carried out in parallel with other strategic and detailed inspection tasks throughout 2017 – 2022.

4.2 Detailed Inspection

4.2.1 Preliminary Risk Assessment (Desk-top Studies)

Following on from the Stage 2 Prioritisation, the Council aims to produce one Preliminary Risk Assessment (desktop study) per annum between 2019 and the end of 2022. Achieving this target will depend on the complexity of the sites being assessed and the extent of available information.

Preliminary Risk Assessments will be produced in accordance with the risk assessment principles of the Statutory Guidance (paragraphs 3.12 – 3.32) based on the contaminant-pathway-receptor approach. The studies will normally be carried out by a Pollution Control Officer under supervision of the Principal Pollution Control Officer. For more complex sites, external expertise may be sought depending on the circumstances of the land and the internal expertise available at the time of the assessment, and subject to funding.

4.2.2 Site Investigation and Risk Assessment)

Detailed inspection may be progressed through additional review of desk top information, site walkover(s), one or more phases of intrusive site investigation and or risk assessment. Depending on the amount of available information about site condition and the Council's level of uncertainty,

intrusive investigation by the Council may not be warranted for a decision to be made on determination of land as contaminated. This will depend on individual site circumstances.

The decision to progress to further with detailed inspection will only be made if there is sufficient evidence to justify the further work, based on risks that are reasonably likely to exist. This decision will be taken by a Deputy Chief Executive on the advice and evidence presented by the Senior Environmental Health Manager and Principal Pollution Control Officer.

The decision to progress will also need to consider how any works will be funded, and whether the funding source is secure to enable the project to be completed in a timely fashion. The Council has to ensure a sufficiently robust assessment while seeking to avoid or minimise the impacts of long inspections on affected persons, particularly in the case of inspections involving residential land.

Historically the Defra Capital Grants Programme was introduced for sites requiring intrusive investigation and risk assessment by local authorities. This funding stream is no longer available for new sites. Where appropriate, the Council will seek to negotiate with current land owners, occupiers and knowing permittees of contamination to fund investigation works. For Category 1 and 2 land the Council may choose to carry out site investigation and risk assessment works (or manage specialist subcontractors) itself, depending on the level of expertise in the Pollution Team at the time.

Regardless of who carries out any intrusive works or risk assessment, the final decision as to whether the land constitutes Contaminated Land lies with Spelthorne Borough Council.

4.3 Dealing with Unforeseen Urgent Sites

Where information is received indicating the possibility of imminent significant harm to health (or significant pollution of controlled waters) being caused (see also Sections 5.5.1 and 5.5.2), a strategic preliminary site assessment (desk top study) will be carried out to determine the likelihood of such an event occurring and the estimated impact of the significant harm did occur.

Where significant harm is being caused, the harm should be directly attributable to the effects of contaminants in, on or under the land on the receptor concerned. The Council will consider the strength of evidence and must be satisfied on the balance of probabilities that significant harm is being caused (i.e. that it is more likely than not that such harm is being caused) by a significant contaminant(s).

Where it is identified that a significant contaminant linkage is likely to exist, urgent action to carry out further investigation will be necessary and an action plan will be drawn up and implemented.

This work would take priority over the scheduled programme of work for 2017 – 2022.

4.4 Work Programme and Timescales for 2017 to 2022

The work programme and anticipated timescales for implementation of this Contaminated Land Inspection Strategy is outlined in Table 4.2.

Completion of the tasks and achievement of the target dates will depend on the complexity of the sites being considered, the amount of information available and the level of resources taken in dealing with any unforeseen sites.

Table 4.2 Work Programme and Timescales for 2017-2022

Task	Work	Target Date
To act as consultee to the Local Planning Authority on land contamination matters		Ongoing until end of 2022
Stage 1 Site Prioritisation List (i) Stage 1 bandings (ii) Maintaining Stage 1 List	As specified in Section 4.1.1	(i) End of 2018 (ii) Ongoing to end of 2022
Stage 2 Prioritisation of 10 highest priority sites per annum	As specified in Section 4.1.2	Ongoing until end of 2022
Produce five Strategic Preliminary Assessment (desktop study) reports	As specified in Section 4.2	2019 until end of 2022
Carry out intrusive investigation & risk assessment (Detailed Inspection)	As specified in Section 4.3	If sufficient justification & funding exists
Deal with unforeseen urgent sites	As specified in Section 4.4	As they arise
Cost Recovery Policy Review	As specific in Section 2.10	2019

4.5 Land Contamination Outside of Part 2A

Spelthorne Borough Council is mindful that the Part 2A regime should only be used where no appropriate alternative solution exists and that other legislative regimes may provide a means of dealing with land contamination issues.

The Council's principal mechanism for dealing with land affected by contamination is to ensure that land is fit for purpose when being redeveloped under the planning system. This is the most cost-effective and sustainable way forward.

Appendix A1 summarises situations where the regime does not apply and how the Council will action land contamination in those circumstances.

5.0 Information Management

5.1 Information and Complaints

Where possible, the Council operates on a presumption of sharing relevant information with the public.

The Council is committed to giving services that are excellent value for money and to providing the best possible service in a friendly, efficient and courteous manner. As part of this commitment a complaints procedure exists to address instances where things go wrong or expectations cannot be met. Details of the complaints procedure are available from reception at the Council Offices, the Council's website (<http://www.spelthorne.gov.uk> , search for Comments, Complaints, and Compliments) or on request from the Pollution team.

5.2 Maintaining Appropriate Confidentiality

The Council takes care to ensure that it complies with all the requirements of the Data Protection Act 1998.

The Council also recognises the potential for information gathered during the process of inspection to be misinterpreted and to cause blight through its misinterpretation. To prevent the possibility of blighting of land the Council will maintain information gathered in a confidential manner where possible. Environmental information about land will be provided in accordance with the Environmental Information Regulations 2004. However, requests for access to the Council's GeoEnviron Contaminated Land Management System database and other related information will not be permitted whilst work is still in progress. See section 5.3 for further information.

The Council is required to maintain a public register of all regulatory action taken in respect of the remediation of Contaminated Land. In accordance with the Statutory Guidance, the Council will consider confidentiality of information kept on the register. The Council must not, without the permission of the relevant person, include any information on its register which:

- a) relates to the affairs of any individual or business; and
- b) is commercially confidential to that individual or the person carrying on that business.

Information cannot, however, be excluded from the register solely on the basis that its inclusion might, by providing information to a prospective buyer, affect the sale or the sale price.

The Council will give any person concerned 21 days to make a representation requesting exclusion of information which the Council believes may be commercially confidential. Where information is excluded on the grounds of commercial confidentiality the Council will include on the register a statement indicating that material has been excluded on those grounds.

A right of appeal to the Secretary of State exists where information is included on a public register which the person believes is confidential.

5.3 Public Access to Information

The Environmental Information Regulations (EIR) give the general public a right to environmental information held by a public authority. There is a presumption under the regulations that environmental information must be released, unless there are reasons to withhold it.

Regulation 12 lists the exceptions under which a public authority can refuse to disclose information. All the exceptions are subject to a public interest test. Those weighing the public interest of whether

to release or withhold information will interpret the exceptions very carefully, seeking legal advice where appropriate.

A request for information can be refused (or part of the information withheld) if:

- Information is not held (then there is a duty to refer the request on);
- The request is manifestly unreasonable;
- The request is too general (after fulfilling the duty to advise and assist);
- The request is for unfinished documents or data (in which case estimated time for completion must be given); or
- The request is for internal communications.

A public authority may also refuse to disclose information or withhold part of it in order to protect the following:

- Confidentiality of proceedings;
- International relations/ public security/ defence;
- The course of justice and the right to a fair trial;
- Commercial confidentiality;
- Intellectual property rights;
- Personal/ voluntary data; or
- Environmental protection.

If information relates to emissions, a public authority cannot refuse to disclose it on grounds of confidentiality of proceedings, commercial confidentiality, personal/ voluntary data or environmental protection.

5.3.1 Written outputs to Detailed Inspection

For land that has been subject to detailed inspection by the Council, **and** a risk assessment completed, there will be either a:

- Written Statement (see section 2.6.4) – for land which the Council has decided is not Contaminated Land; or a
- Risk Summary (see section 2.6.3) – to summarise understanding of risks for land prior to determination as Contaminated Land.

These documents will be provided automatically to the landowners and members of the public affected by the decision. The Council will also as a rule publish these documents subject to considerations such as confidentiality and public interest (as per sections 5.2 and 5.3).

5.4 Part 2A Remediation Public Register

To provide a permanent record, and to make information readily available to the public and to those with an interest in land, the Council maintains a register of all regulatory action in respect of the remediation of land determined as Contaminated Land under Part 2A of the Environmental Protection Act. The register includes specified details about the condition of the land, and the remediation actions carried out. The following information shall be held on the register: -

- Site information
- Remediation notices
- Appeals against remediation notices

- Remediation declarations
- Remediation statements
- Appeals against charging notices
- Designation of special sites
- Notification of claimed remediation
- Convictions for offences under section 78m of the act
- Guidance issued under section 78v(1) of the act
- Other matters prescribed by regulations

At publication of this document, two pieces of land have been determined by Spelthorne Borough Council as Contaminated Land under the definition contained in Part 2A of the Environmental Protection Act 1990:

Table 5.1 Public Register Summary

Reference	Address	Determination
SBC/D/1	56 Station Crescent, Ashford, Middlesex, TW15 3HJ	27 October 2000
SBC/D/2	Public Open Space, Denman Drive, Ashford, Middlesex	27 May 2011

An up-to-date copy of the Public Register Summary can be found on the Council's website (www.spelthorne.gov.uk). Copies of the register entries together with further information about the investigation and clean up of these sites is also available on the Pollution web pages.

The absence of an entry on the register does not guarantee that

- the land is free from contamination, as it may not have been fully assessed
- any contamination present does not pose significant risk
- contamination present is not polluting controlled waters.

The public register may also be viewed Monday to Friday during normal office hours at the Council Offices, Knowle Green, Staines-upon-Thames, TW18 1XB. There is no charge for accessing the public register. However, a small charge may be made for the photocopying of information.

5.5 Review Mechanisms

5.5.1 Prioritisation Review

In certain circumstances the Council will need to reconsider the priority it has assigned to a site or the findings of its inspection of a site. The following events may be such as to trigger a review of a sites prioritisation or review of the findings of an inspection:

- Proposed changes in the use of the land;
- Unplanned changes in the use of the land (e.g. persistent, unauthorised use of the land by children or travellers);
- Unplanned events, e.g. localised flooding/landslides; accidents/fires/ spillages where consequences cannot be addressed through other relevant environmental protection legislation;
- Reports of localised health effects which appear to relate to a particular area of land;
- Verifiable reports of unusual or abnormal site conditions received from businesses, members of the public or voluntary organisations;

- Responding to information from other statutory bodies; or
- Responding to information from owners or occupiers of land and other relevant parties.

5.5.2 Triggers for undertaking non-routine inspections

The Strategy recognises that there may be occasions where inspections have to be undertaken outside of the general strategic framework. Triggers for undertaking non-routine inspection will include:

- Unplanned events – for example, where an incident, such as a spill, has occurred;
- Introduction of new receptors – for example, where a new protected ecosystem is designated, or there is persistent trespass on a site which otherwise does not have a sensitive receptor;
- Identification of localised health effects – which appear to relate to a particular area of land; and/ or
- Responding to information – from other statutory bodies, stakeholders, or other interested parties, which reveal that the site may require urgent action.

Where these occurrences trigger non-routine inspections, due to constraint on resources, there may be a subsequent knock on impact on the milestones of the general strategic framework.

5.6 Review of Strategy

The Council will completely review its inspection strategy every five years, or on receipt of new guidance or advice from the Environment Agency or the Department for Environment, Food and Rural Affairs (Defra). The next review will be due in 2022/ 23.

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APPENDIX A1 Land Contamination dealt with outside Part 2A of the EPA 1990

Spelthorne Borough Council is mindful that the Part 2A regime should only be used where no appropriate alternative solution exists and that other legislative regimes may provide a means of dealing with land contamination issues.

A1. Situations in which the regime does not apply

The first priority for the Government's policy on land contamination is to prevent the creation of new contamination and as a result a range of regimes have been developed to prevent new contamination of land.

A1.1 Environmental Damage Regulations
<p>The Environmental Damage (Prevention and Remediation) Regulations 2009 are a result of the implementation of the European Directive on Environmental Liability (2004/35).</p> <p>They are based on the principle of 'the polluter pays', where those responsible for a pollution incident are required to prevent, and where necessary, remedy any environmental damage caused. The emphasis is on the 'operator' identifying where or when there is imminent threat or actual damage to the environment, and taking immediate action.</p> <p>Environmental damage is considered to be:</p> <ul style="list-style-type: none">• Serious damage to surface or ground water;• Serious damage to EU-protected natural habitats or species; or• Contamination of land with a significant risk of harm to human health. <p>The regulations are not retrospective and will only be applied to damage caused after their implementation (i.e. after 2009). As such the regulations are usually applied to allow a rapid reactive resolution to land contamination caused by a pollution incident. The Environment Agency, Public Health England, Local Authorities and the Secretary of State are the enforcing authorities responsible for administering and enforcing the regulations in England and Wales, depending on the type of damage involved.</p>
A1.2 Integrated Pollution Control (IPC)
<p>Part I of the Environmental Protection Act 1990 placed a requirement on operators of prescribed industrial processes to operate within the terms of permits to control harmful environmental discharges.</p>
A1.3 Pollution Prevention and Control (PPC) Act
<p>This regime has been introduced to replace IPC, and includes the specific requirement that permits (Environmental Permit Regulations) for industrial plants and installations must include conditions to prevent the pollution of soil; and there are also requirements in relation to the landfilling of waste.</p> <p>On surrender of the permit, the operator must be able to demonstrate no deterioration of the baseline condition or will be required to restore the land and groundwater to its original state.</p>
A1.4 Waste Management Licensing
<p>Part 2 of the 1990 Act places controls over the handling, treatment and disposal of wastes; in the past, much land contamination has been the result of unregulated, or badly-managed, waste disposal activities. Now falls under the Environmental Permit regulations (see above).</p>

A1.5 Development Control
<p>Contamination is a material consideration in planning decisions. The development control (planning) regime remains the Council's principal mechanism for dealing with land affected by contamination to ensure that land is fit for purpose when redeveloped. It is the developer's responsibility to ensure that the contamination is addressed. This is the most cost-effective and sustainable way of dealing with land contamination.</p> <p>The National Planning Policy Framework (2012) states that Planning policies and decisions should ensure that:</p> <ul style="list-style-type: none"> • The site is suitable for its new use taking account of ground conditions and land instability, including from natural hazards or former activities such as mining, pollution arising from previous uses and any proposals for mitigation including land remediation or impacts on the natural environment arising from that remediation; • After remediation, as a minimum, land should not be capable of being determined as Contaminated Land under Part 2A of the Environmental Protection Act 1990; and • Adequate site investigation information, prepared by a competent person, is presented. <p>Evidence demonstrating that contamination has been satisfactorily assessed, and if appropriate, cleaned-up is required to be submitted to the Local Planning Authority for approval as a safeguard to public health and the environment.</p>
A1.6 Building Control
<p>The Building Regulations 2010 Part C (made under the Building Act 1984) contains specific requirements regarding contamination and landfill gas issues. These require measures to be taken to protect new buildings, and their future occupants, from the effects of contamination, including hazardous ground gases.</p>
A1.7 Pollution of Controlled Waters
<p>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.</p>

APPENDIX A2

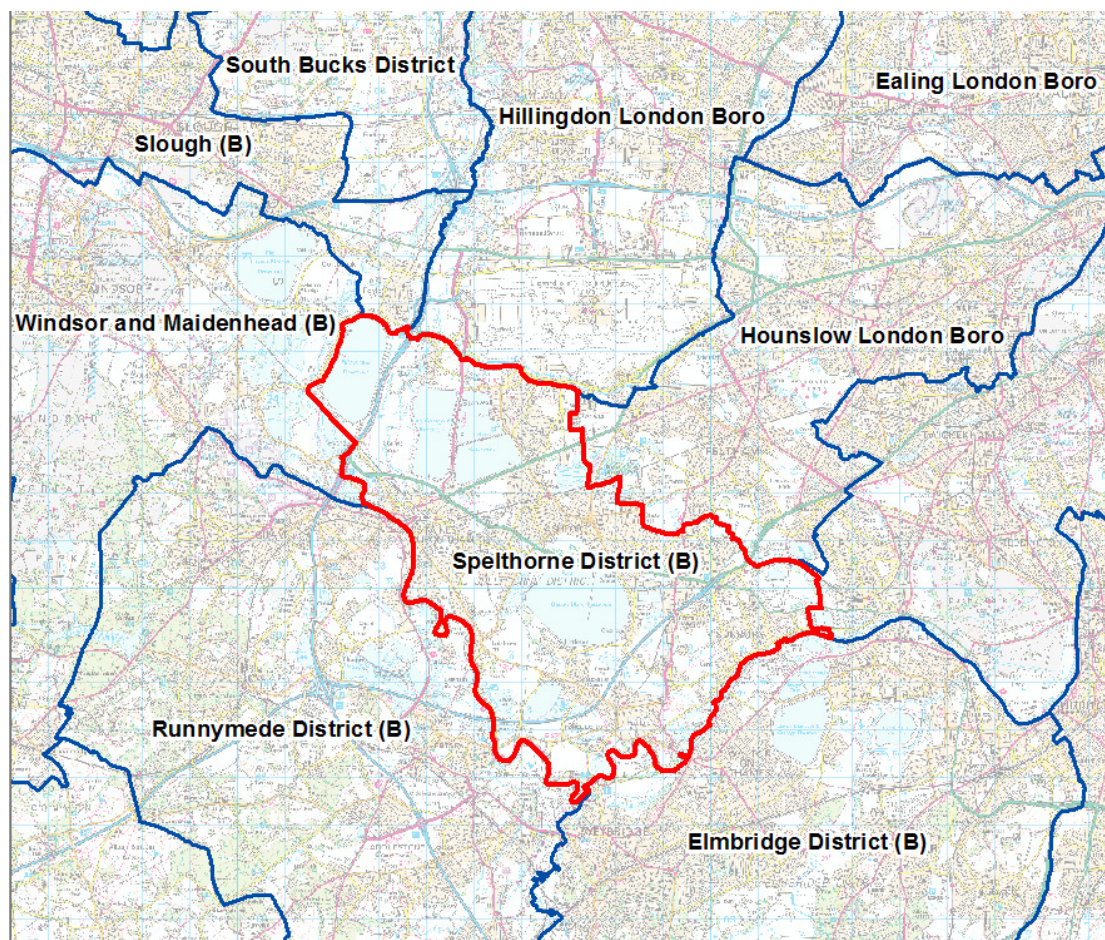
Description of the Borough

The characteristics of a local authority's area will influence the likely presence of sources of contamination, pathways and receptors. Any inspection strategy must therefore take account of these factors.

A2.1 Geographical Location

The Borough of Spelthorne lies approximately 15 miles southwest of central London covering an approximate area of 5,116 hectares and is bordered to the north east and east by the London Boroughs of Hillingdon, Hounslow and Richmond, the Surrey Boroughs of Elmbridge and Runnymede to the south and west respectively and the unitary authorities of Windsor and Maidenhead and Slough to the northwest (see figures A2.1 and A2.2). Heathrow Airport lies immediately north of the Borough and has a major influence on the Borough in terms of employment, housing and traffic. The River Thames forms much of the Borough's southern and western boundaries.

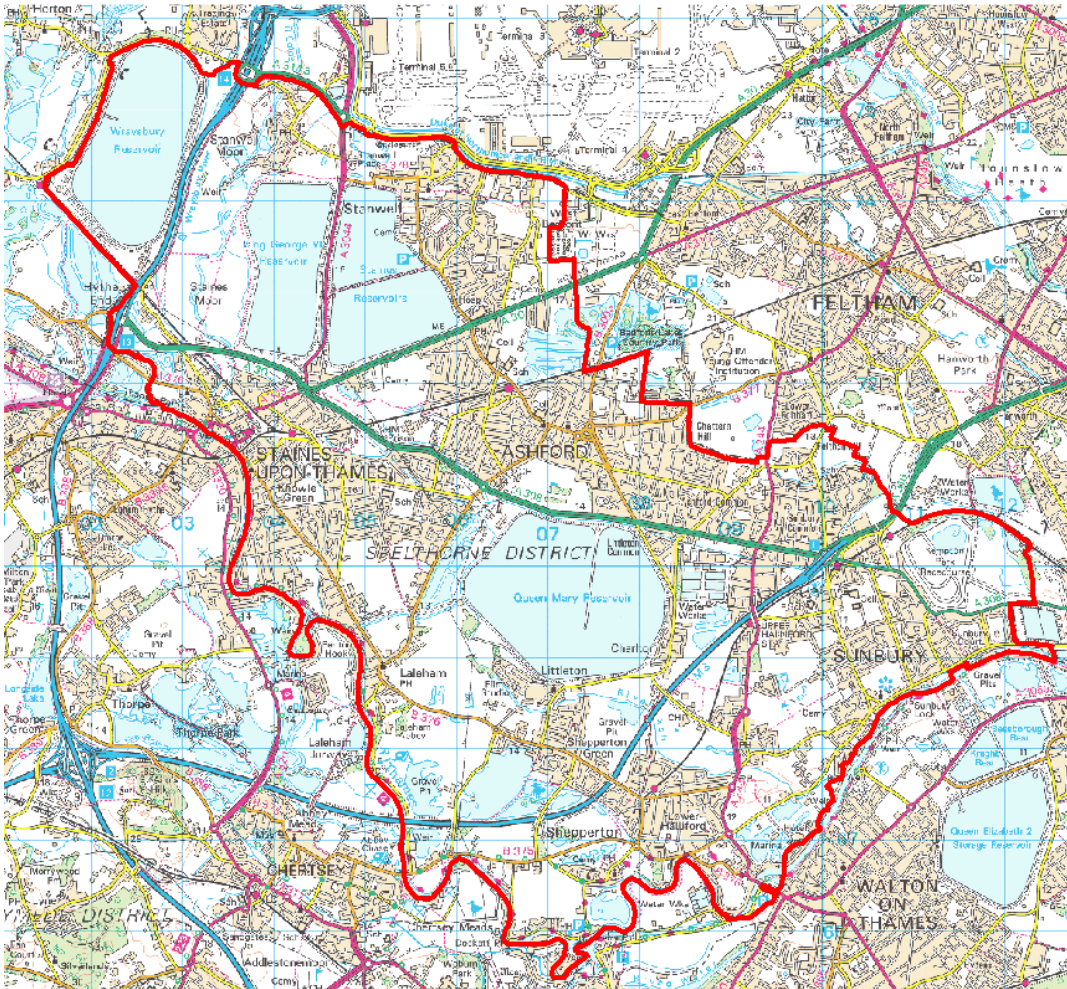
Figure A2.1 *Location of Spelthorne*



A2.2 Description of the Borough and its History

The main conurbations of the Borough of Spelthorne are the towns of Ashford, Shepperton, Staines-upon-Thames, Stanwell and Sunbury-on-Thames. Staines (as the biggest town) is the main commercial and retail centre of the Borough.

Figure A2.2 Plan of Borough of Spelthorne



A2.2.1 Population Distribution

The Borough is relatively densely populated with a population of 95,600 (2011 census) an increase of 5.8% on the population measured in the 2001 census. The population within the Borough is ageing with a small ethnic minority. Approximately 79,100 within the Borough are aged between 15 and 74 with an estimated population within Spelthorne of 16,600 over the age of 65, approximately 17.36% of the total population of the Borough. According to the 2001 census approximately 71% of the inhabitants of the Borough lived in the towns of Ashford, Staines-upon-Thames and Sunbury-on-Thames.

A2.2.2 Current Land Use Characteristics

The Borough is quite densely populated with approximately 65% of the area occupied by Green Belt. The remaining 35% of land use within the Borough is dominated by residential properties with industrial land uses predominantly on designated commercial / industrial trading estates. About 23% has been subjected to exploitation of the underlying natural sands and gravels and subsequent landfilling.

A2.2.3 Industrial Activity

The pattern of urban development in Spelthorne was largely established before the introduction of planning controls. Urban development was, and remains, predominantly residential but there were also significant areas developed for commercial purposes, ranging from substantial factory sites such as the former Staines Linoleum factory, to small workshops and yards. Many of these have

been extensively redeveloped over the years, both to meet commercial development needs and in some cases for residential use.

A2.2.4 Mineral Extraction and Landfilling

Sand and gravel represents an important mineral resource in the Borough. A large proportion of the Borough's area has been subject to sand, gravel and, in the past, brick earth extraction activities. Prior to the implementation of the Waste Management Licensing provisions of the Environmental Protection Act 1990, disposal of waste was controlled under the Control of Pollution Act (COPA) 1974. Before COPA was introduced in 1977, consents for tipping were issued by the district councils of Staines Urban District and Sunbury-on-Thames Urban District and the County Councils of Middlesex (pre 1965) and Surrey under Section 222 of the Middlesex County Council Acts of 1944 and 1950, and section 94 of the Surrey County Council Act of 1931 respectively.

In many cases the sites of these pits are now occupied by, or are in close proximity to housing and commercial developments. To date more than 200 features which may represent former mineral extraction sites have been identified from the first four editions of ordnance survey maps dating from 1876 – 1940. The extent of these pits and their proximity to subsequent development means that the potential for the presence of landfill gas including methane and carbon dioxide is a major concern for the Council.

In addition many of these filling operations would not have considered the need for protection of groundwater or surface water resources. Waste materials which may have been polluting in nature may well have as a result been placed in voids in gravels which themselves form major aquifers.

A2.3 Protected Status Designations

A2.3.1 Protected Locations (natural habitats etc)

With 65% of the Borough designated as Greenbelt, emphasis is placed on the redevelopment of land with previous uses. The restrictions on redevelopment within the greenbelt are further strengthened by the various land designations within the Borough providing protected status. The Council will protect and conserve designated areas of Greenbelt. Many of the habitats associated with these areas have been designated as ecologically important at local, national and international level, such as:

Sites of Special Scientific Interest (SSSI)

There are four SSSI's within the Borough. The SSSIs are as follows:

- Staines Moor – including Shortwood Common, Poyle Meadows, Staines and King George VI Reservoirs SSSI - 512.4Ha;
- Wraysbury Reservoir SSSI – 205.2Ha;
- Dumsey Meadow SSSI – 9.6Ha;
- Kempton Park Reservoir – SSSI 5.1Ha;

The Staines Moor SSSI is important for both its plant species associated with the moor itself and for the nationally important population of wintering wildfowl which use the reservoirs.

Sites of International Significance – Special Protection Areas (SPA) and Ramsar Sites

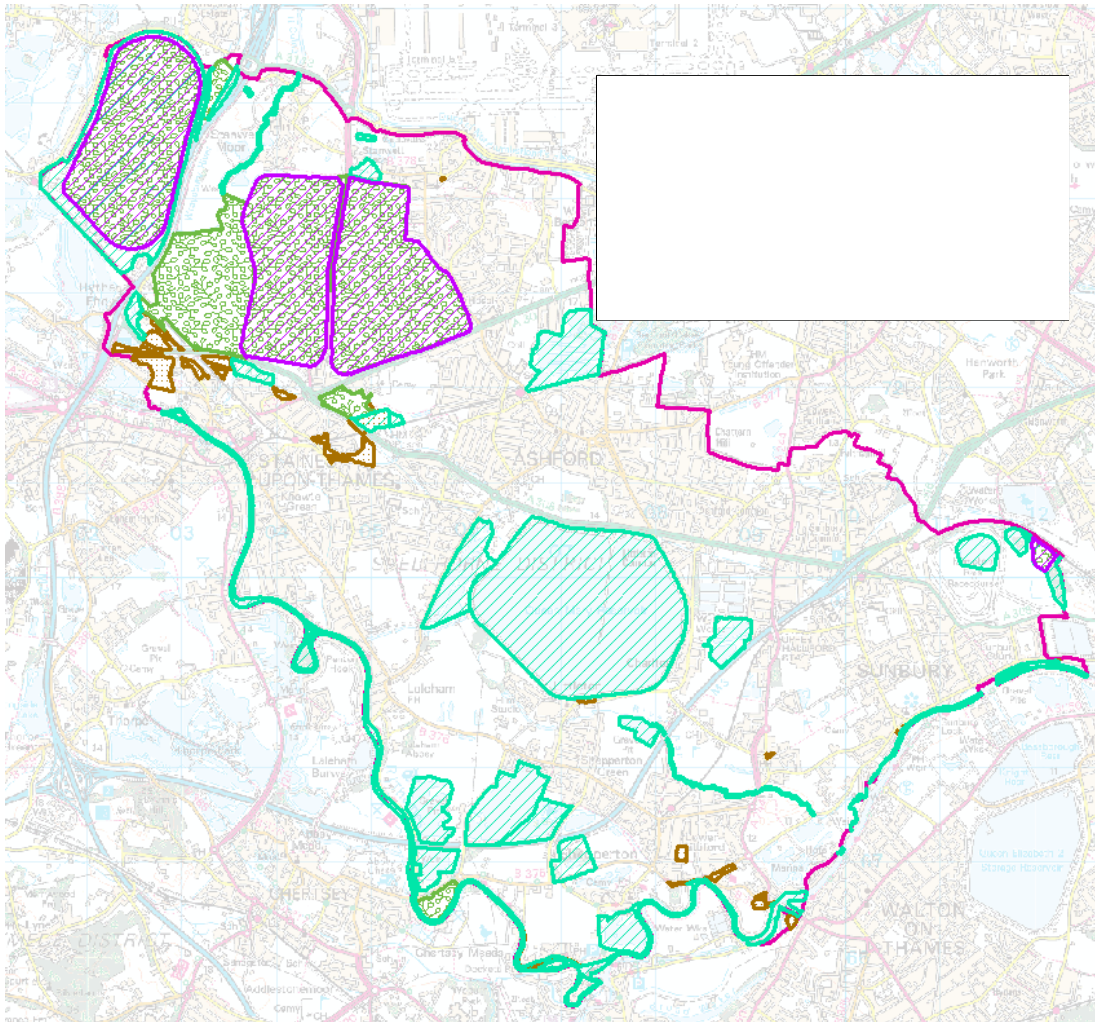
The major reservoirs particularly within central and northern areas of the Borough were designated as habitats of international significance for birds in 2000 and designated as Special Protection Areas (SPAs) and Ramsar Sites;

- *Southwest London Waterbodies including* – Parts of Staines Moor SSSI (Staines and King George VI reservoirs); Wraysbury Reservoir SSSI; Kempton Park Reservoir SSSI (part in London Borough of Hounslow);

A further 26 sites within the Borough that have been designated as Sites of Nature Conservation Importance (SNCI) covering an approximate area of 951Ha. These are a wide range of sites providing different types of habitat throughout the Borough.

Significant parts of the Borough are designated as Common Land. The most extensive areas are the Staines Commons, which cover an area of 148ha and include Staines Moor.

Figure A2.3 Plan of Protected Locations



A2.3.2 Key Property Types

The various alluvial and gravel deposits associated with the Thames which underlie the Borough, were attractive to ancient settlements. This has resulted in an area rich in archaeological finds with great potential for further discoveries. Spelthorne has numerous buildings and features of architectural importance and historic interest within the Borough. There are 8 conservation areas designated for their special architectural or historic interest within the borough which are: Laleham, Lower Halliford, Lower Sunbury, Shepperton, Staines Village, Stanwell, Upper Halliford and Manygate Lane Estate. Spelthorne also contains 195 listed buildings of which 3 are Grade I listed and 12 are Grade II* listed. The List Buildings are complemented by 159 Locally Listed Buildings that the Council considers are buildings and structures which are valued for their contribution to local character and local historical associations.

A2.4 Broad Geological/Hydrogeological Characteristics

A2.4.1 Geology

In general Eocene (Tertiary Age) clays and sands dominate the surface exposures down to a depth of about 120 metres overlain by the more recent Quaternary deposits of river gravels and sand.

Superficial Deposits

Much of the Borough has a covering of variable thickness unconsolidated sand and gravel 'drift' deposits. Eastern and northeastern aspects of the Borough (Sunbury, Ashford and southern aspects of Stanwell) are largely underlain predominantly by the Quaternary drift deposits of the Kempton Park Gravels, with significant outcrops of brickearth (homogenous structureless loam or silt). A particular brickearth band runs east to west from Sunbury to Laleham. Southern aspects of the Borough are characterised by the Shepperton Gravel Formation (Shepperton) and alluvium within the valleys of the River Thames (southern boundary) and River Ash. Northern aspects of the Borough including Stanwell are characterised by the Taplow Gravels.

The Shepperton, Kempton Park and Taplow gravels are reported as the first, second and third river terrace deposits respectively and characterised by sand and gravel, locally with lenses of silt, clay or peat.

Solid Deposits

The generalised sequence suggests that these drift deposits overlie the London Clay (described as dark grey clay, weathering brown with subordinate silt and fine grained sand) and solid geology of the Woolwich Formation, part of the Lambeth Group. These deposits overlie the Upper Chalk at depth.

A2.4.2 Groundwaters

The underlying superficial deposits of the River Terraces and alluvial deposits are highly permeable in nature and classified by the Environment Agency as a Principal Aquifer and described as *layers of rock or drift deposits that have a high intergranular and / or fracture permeability – meaning they usually provide a high level of water storage. They may support water supply and / or river base flow on a strategic scale.* The soils across the majority of the Borough are classified as having Intermediate to High leaching potential which can readily transmit liquid discharges and therefore potentially transmit a wide range of pollutants.

The London Clay at depth is described by the Environment Agency as Unproductive Strata *rock layers or drift deposits with low permeability that have negligible significance for water supply or river base flow.* The Upper Chalk formation is a Principal Aquifer, which at depth is afforded protection from contamination within the superficial deposits due to the significant deposits of the overlying London Clay.

A2.4.3 Source Protection Zones

Groundwater is a significant source of drinking water within England and Wales whilst also maintaining base flows in rivers. The Environment Agency seeks to protect groundwater resources from which water is abstracted i.e. wells, boreholes and springs used for public drinking water supplies through the designation of groundwater source protection zones. The zones are used to illustrate the risks of contamination from activities that might cause pollution in the area. There are three source protection zones based on the calculated travel time from the source to the point of abstraction:

- Zone I (Inner Source Protection - 50 day travel time)
- Zone II (Outer Source Protection – 400 day travel time)
- Zone III (Source Catchment - complete catchment)

A fourth '*Zone of Special Interest*' exists which previously represented a surface water catchment area feeding directly into the groundwater supply / aquifer.

There are no public water supply abstraction points within the Borough. There is one private water supply abstracting water from the underlying Principal Aquifer which is registered with the Council. The majority of the Borough falls outside of any designated source protection zones. Much of the western and southwestern aspects of the Borough (Staines and Laleham) are designated as Zone III (Source Catchment), Laleham, between Penton Hook and Chertsey Bridge lie within a designated Zone II (Outer Source Protection Zone) with the area around Thames Side, Laleham lying within a Zone 1 (Inner Source Protection).

A2.4.4 Surface Waters

The Borough of Spelthorne lies within the general surface water catchments of both the River Thames and River Colne. Controlled surface waters within the Borough include the River Thames, River Colne, River Wraysbury, and River Ash. Watercourses and streams such as Sweeps Ditch, Moor Lane Ditch, Stanwell Moor Ditch, Black Ditch and Feltham Hill Brook also cross the Borough.

A2.4.5 Flood Risk Potential

Due to the low lying nature of Spelthorne and proximity of the Thames one fifth of the Borough lies within a 1 in 100 flood risk area with over 2,800 residential properties as well as commercial and retail premises, particularly in Staines Town Centre, at risk from flooding.

A3.1 *Targets of the 2001 Strategy*

In the 2001 Strategy, the Council set targets for key stages of its work, as follows:

- to complete an assessment of historical maps by the end of June 2002. All sites which may be identified as being potentially contaminated from historical maps held by the local authority will have been entered onto the Land Quality GIS;
- to identify all the receptors listed within table A of the Statutory guidance by the end of June 2002;
- to examine and capture data from historical trade directories by December 2002;
- to complete an initial prioritisation of sites by June 2003 identifying and categorising primary, secondary and tertiary priority sites for later detailed inspection;
- to complete a detailed inspection of primary sites by the end of December 2005;
- to complete a detailed inspection of secondary sites by end of December 2007;
- to complete a detailed inspection of tertiary sites by the end of December 2010;
- to inspect and prioritise all Council owned or leased land by the end of 2005.

A3.1.2 Progress against 2001 Targets

Table A3.1 shows the progress made against the key stages of work set out in the 2001 strategy. This indicates that some of the basic targets of the 2001 strategy have not been met. There are several contributory factors to this:

- The original timetable underestimated the complexity of the process and the number of sites involved;
- The Council was involved in a large site investigation between 2005 and 2011, together with a number of other smaller investigations (see section A3.1.4), which drew resources from strategic development;
- Errors and missing data were discovered in the original map review;
- The original database was found to be not fit for purpose and a change was made to a new database.

While the 2001 targets became obsolete in 2005/06, work pursuant to the Contaminated Land Inspection Strategy has continued along three avenues:

1. Database development
2. Detailed Inspections
3. Development control system

Table A3.1 Progress Against 2001 Strategy Targets

Key targets from 2001 strategy	Progress	Completion date
<i>To complete an assessment of historical maps by the end of June 2002. All sites which may be identified as being potentially contaminated from historical maps held by the local authority will have been entered onto the Land Quality GIS;</i>	A single map layer was created and linked to a Uniform database. It was later found that some map data was missing. Mapping data was imported to the new GeoEnviron software.	2003 2006-2009
<i>To identify all the receptors listed within table A of the Statutory guidance by the end of June 2002;</i>	The list was completed.	2003
<i>To examine and capture data from historical trade directories by December 2002;</i>	The database was completed.	2003
<i>To complete an initial prioritisation of sites by June 2003 identifying and categorising primary, secondary and tertiary priority sites for later detailed inspection;</i>	A basic risk prioritisation was formulated using the Uniform database. Repeated using the GeoEnviron database.	2003 Completed 2014
<i>To complete a detailed inspection of primary sites by the end of December 2005;</i>	Desk studies were begun on the primary sites, but not completed due to database change. Detailed inspections were completed in 2001, 2007, and 2011 of three sites – see Appendix A3.1.4	2004 2011
<i>To complete a detailed inspection of secondary sites by end of December 2007;</i>	Not applicable as the primary sites have not been inspected, due to database and methodology change.	N/a
<i>To complete a detailed inspection of tertiary sites by the end of December 2010;</i>	Not applicable as the primary sites have not been inspected, due to database and methodology change.	N/a
<i>To inspect and prioritise all Council owned or leased land by the end of 2005.</i>	A scoping exercise was undertaken and information shared with Asset Management	2007

A3.1.3 Database Development

Between 2001 and 2003, strategic inspection was progressed using the contaminated land module of CAPS Uniform database for data management and initial prioritisation. This is a generic local authority database with modules for different departments such as environmental health, planning, building control, asset management, licensing and trading standards. The Council was a pilot authority for development of the contaminated land module.

A basic risk prioritisation was formulated using the database. As per the objectives of the 2001 strategy, the Council prioritised the protection of human health above environmental factors such as the protection of groundwater and the ecological environment.

During this period the Council also reviewed local Trade Directories. This generated nearly 3,500 records of trades in the borough between 1839 and 1979, as shown in Table A3.2.

Typical trades recorded included:

- Agricultural engineers
- Blacksmiths, whitesmiths, coopers, farriers
- Brewers
- Builders, yards & merchants
- Chemical works
- Coal and coke merchants
- Electrical engineers
- Garages, motor engineers
- Gas works
- Iron and tin works
- Laundries
- Linoleum manufacturer
- Mineral water and drinks manufacturers
- Paper mills and manufacturers
- Printers
- Scrap metal merchants

Other notable trades included a gunpowder manufacturer, battery manufacturer, research laboratory and rifle ranges.

However by 2005 it became clear that the CAPS Uniform database was not meeting the Council's needs for management of potentially contaminated land data and risk assessment, as:

- The suitability of the prioritisation tool was questioned - The prioritised list of sites included low risk sites (when considering past use, current use and size) amongst those scored as 'high priority'
- The database did not enable data to be stored and retrieved easily, and did not connect seamlessly with the GIS system
- As the database is used by the department for other environmental health functions and other Council departments, the confidentiality of the data could not be guaranteed

In 2006 the Council purchased the GeoEnviron Contaminated Land Management System from STM Environmental Ltd. This database is now one of the leading databases used by local authorities for Part 2A information management. The database enables flexible information management with user defined fields, spatial display and analysis of information through a link to GIS, and the capability of performing two stages of risk assessment scoring to prioritise sites. The document management system permits documents to be linked to cases, allows information gathered through the planning and building control regimes to be stored separately from (but with an ability to link to) the Part 2A data, and there is also a case management system for day to day activity.

The prioritisation system can be used to reflect the changes to a site as more information is gathered about the status of the land. The first stage of the prioritisation is based on the type of historic use and the sensitivity of the receptor. Hazard scores are based on the contaminants likely to be present from the historic use of the land. Each stage 1 risk score is derived from the historic use risk score multiplied by the receptor sensitivity risk score. Pathways are then considered in the second prioritisation stage.

Table A3.2 Trade Directory Entries Identified for Spelthorne Area by Publication

Source	Date	No. of Trades
Pigots Directory	1839	77
Post Office Directory of Middlesex	1847	84
Post Office Directory of Middlesex	1851	58
Post Office Directory of Middlesex	1866	90
Kellys Directory Middlesex	1867	88
Post Office Directory of Middlesex	1870	17
Post Office Directory of Middlesex	1871	83
Kellys Directory - Middlesex	1874	93
Post Office Directory of Middlesex	1878	115
Kellys Directory - Middlesex	1882	126
Kellys Directory - Middlesex	1886	119
PO Directory H/C - Middlesex	1886	1
Kellys Directory Middlesex	1890	117
Kellys Directory Middlesex	1895	131
History of Staines (1959 ed)	1902	1
Kellys Directory Middlesex	1902	130
Taylor's West Surrey Directory	1903	63
Kelly's Directory Middlesex	1906	148
Kellys Directory - Middlesex	1910	170
Kellys Directory - Middlesex	1914	79
Kellys Directory Middlesex	1914	87
Kellys Directory - Middlesex	1922	1
Kellys Directory - Middlesex	1922	178
Kellys Directory - Middlesex	1926	189
Kellys Directory - Middlesex	1933	211
Kellys Directory - Middlesex	1937	287
Key Directory of Staines and District	1962	130
Staines & District CoC YB	1966-67	43
Regency Directory Staines	1967-68	189
Yellow Pages London South West	1975	274
Staines & District CoC YB	1976	21
Surrey Area Trade Directory	1978-79	81
	TOTAL	3481

Since the publication of the 2001 Strategy, the Council obtained revised and/ or new datasets (not anticipated in the 2001 strategy) to improve the information held, including:

- Purchase of digital aerial photography for 1946, 1970, 1981 and 1992 (and in March 2017 photography for 1953 and 1961)
- Purchase of additional post-war mapping from Landmark Information Group

- Data obtained from Surrey County Council Trading Standards on historic petroleum licensed sites (giving the number, capacity and status of underground storage tanks at each site)
- Data obtained from National Grid on location of their existing electricity substations
- Data obtained from the Environment Agency in 2005 on sites they had been consulted on or for which they held site investigation information on within the Borough
- Environment Agency data, including datasets on authorised landfill sites, sites with environmental permits, pollution incidents, discharge consents, abstraction consents, groundwater vulnerability, and source protection data, was obtained on CDrom from the Agency in 2000, 2005 and 2010. This data is now available to the Council via the DataShare scheme.
- Digital geological data was previously purchased under licence from the British Geological Survey. This data was freely available in 2013 as part of the new aquifer designation maps produced by the Environment Agency and again available via the DataShare scheme.

Between 2005 and 2012 the Council was involved in several complex detailed inspections (see section A3.1.4) which diverted resources from strategic implementation of the Strategy. Since 2012 the focus has been on quality control checking the database and completing data inputting to progress to Stage 1 risk assessment and generation of a list of prioritised sites.

A3.1.4 Detailed Inspections

Station Crescent

The borrow pit was suspected to extend beyond the eastern boundary of 56 Station Crescent into the rear gardens of properties of 46 and 44 Station Crescent. In 2001, the Council commissioned White Young Green Environmental Ltd to undertake an intrusive investigation to determine the extent and level of contamination of the Borrow pit. The investigation found made ground of sandy gravelly ashy clay/ clayey ash, with variable amounts of brick, concrete, charcoal and occasional clinker fragments. This was followed, in 2002, by a detailed quantitative risk assessment by Land Quality Management Ltd (LQM). This concluded levels of arsenic, lead and benzo(a)pyrene in the soils could pose a significant risk of significant harm if a significant contaminant linkage existed.

The occupant of 46 Station Crescent was an elderly lady with limited liability and thus no significant contaminant linkage existed. The beneficiary to the estate intended to sell the property of 46 Station Crescent for housing development. A legal agreement was entered into to secure this course of action. The property was redeveloped to 46 to 46c Station Crescent and 1-9 Hanover Close in 2013, with the contamination being addressed by the developer pursuant to a condition of the planning permission.

The detailed inspection was funded by the Council.

Chestnut Grove

On 24 June 2005 a fire occurred at a commercial garage premises in the rear of 162-164 Kingston Road, Staines-upon-Thames. Asbestos cement roof sheeting of the garage premises shattered with the heat and caused asbestos cement fragments to be spread around the adjacent residential properties. As a result of the fire-fighting, water which may have contained contaminants from the garage premises ran off the garage onto neighbouring residential properties.

A specialist asbestos contractor was engaged by the Council to clean up the asbestos cement fragments at the residential properties. The Council also commissioned WS Atkins Ltd to undertake soil sampling, and a subcontractor undertook air monitoring in a number of residential properties and gardens. The inspections and analysis confirmed that whilst there were slightly elevated concentrations of certain polyaromatic hydrocarbons (PAHs) and metals (compared to minimal risk generic guideline values) in the shallow garden soils of houses around the site, these could not be attributed to migration of potential contaminants resulting from the fire. No asbestos fibres were

detected in soil samples and air monitoring found levels below the actionable concentration of 0.010 fibres per millimetre of air. This work was funded by the insurance company of the commercial garage premises associated with the fire.

The Council successfully applied for grant funding of a second phase of investigation of the nearby residential properties' gardens in 2006 to determine if the previously encountered contamination represented a significant possibility of significant harm (SPOSH) to human health under Part 2A. In 2007 the Council concluded that in its judgement, based on available information and technical guidance of the time, that the land did not meet the definition of Contaminated Land under Part 2A.

Denman Drive, Ashford

The housing estate, covering an area of 5.7 hectares, was formerly a gravel pit excavated in the early 1930s and which was landfilled between 1949 and 1962.

A preliminary investigation was undertaken in 2005 of public open space and front gardens around the centre of the estate. A second phase of intrusive investigation in 2006, undertaken by Hyder Consulting UK, on behalf of the Council broadened the investigation to rear gardens across the estate. In a third phase of investigation, done by Atkins Ltd in 2009, the scope included further intrusive investigation and human health risk assessment at six subzones of the former landfill. The objective of a final phase of investigation in 2010 by Leap Environmental Ltd was to reduce uncertainties. Subsequently in May 2011, an area of public open space was determined as Contaminated Land under Part 2A of the Environmental Protection Act 1990 due to a significant possibility of significant harm on the basis of acute exposure to complex cyanides by ingestion of soil.

In July/ August 2011 the site was remediated through removal of surface soils, placement of a geotextile membrane and replacement with clean topsoil and turf. This work was undertaken by Soilfix Ltd, with Leap Environmental Ltd engaged in a supervisory role.

The detailed inspection and remediation was entirely funded by a series of grant awards totalling over £330,000 from the Department of Environment, Food and Rural Affairs' Contaminated Land Capital Grant Fund.

A3.1.5 Development and Building Control Systems

Defra consider the Part 2A regime nationally to have been a success overall, in supporting development control and as a driver to voluntary clean-up (Defra, 2010). As the Government's policy regime is based on two parts: Part 2A and planning, Defra have stated that the full effects of the Part 2A regime cannot be measured solely on the formal steps taken by local authorities as the regime was not intended to work by itself (ENDS, 2004).

The Environment Agency's second State of Contaminated Land Report in 2009 estimated that nearly 90% of contaminated sites are managed through the planning system and less than 10% through Part 2A.

A 2010 DEFRA science project attempted to collect data on the number and area of sites where land contamination was addressed through the planning system from 1994 to 2009. The survey, though based on very limited responses, found that land contamination was considered for between 160 to 214 planning sites per year per authority, with 44 to 54 sites per year being subject to planning condition(s) on the issue (EPUK, 2011).

In Spelthorne records have been kept on planning consultations since May 2003, and building control consultations since April 2008. Table A3.3 shows that since figures on Building Control consultations have been kept an average of 340 applications per year for Building Regulations have been considered for contamination issues. Over the same time frame, on average 120 planning

applications per year were recommended for a condition(s) relating to investigation and assessment of potential for land contamination, with about a further 215 planning informatives also being recommended per year on this issue.

Table A3.3 Planning and Building Control Actions for Contaminated Land since May 2003

	Building Control consultations	Planning Conditions Recommended	Planning Informatives Recommended
2003/04		64	55
2004/05		96	352
2005/06		131	225
2006/07		152	289
2007/08		166	247
2008/09	396	110	150
2009/10	321	88	174
2010/11	328	167	252
2011/12	316	156	225
2012/13	325	118	209
2013/14	348	75	234
2014/15	366	143	276
2015/16	375	137	276

Environmental Health holds a total of 721 site investigation reports relating to land contamination submitted to the Council up to August 2014. Only 68 reports (<10%) were received prior to the implementation of the Part 2A regime in 2000. Less than 2% of the reports relate to Part 2A investigations. Therefore about 90% of the reports held by Environmental Health represent investigations undertaken under regimes outside of Part 2A (such as planning, building control and voluntary action) since the introduction of Part 2A.