



# **Contaminated Land: Inspection Strategy for Warrington**



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**Undertaken by Regulatory Services**

**As required by Part 2A of the Environmental  
Protection Act 1990**

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## 1. INTRODUCTION

Part 2A of the Environmental Protection Act (EPA) 1990 came into force in England in April 2000 (inserted by section 57 of the Environment Act 1995). Under Part 2A, each local authority in England has a duty to identify land within its area where contamination is causing unacceptable risks to human health or the wider environment using a strategic approach.

Warrington Borough Council (the 'Council') published its first Inspection Strategy (the 'Strategy') in July 2001. On 6 April 2012, new Statutory Guidance was published by the Department for Environment Food and Rural Affairs (Defra), which required all local authorities to update or replace their existing Inspection Strategies in accordance with this Guidance.

This document is the first review and sets out the way in which the Council proposes to implement its inspection duties under Part 2A in accordance with the revised Statutory Guidance. It provides a review of the progress that has been made to implement the Strategy and also sets out the Council's revised proposals for the identification and assessment of contaminated land within the Borough.

### **Consultation Process**

As no significant changes have been made to this version of the Strategy, the consultation process was limited to those consultees listed in Appendix A.

The draft Inspection Strategy was sent to the consultees for consultation on 16 January 2017. The final date for receipt of comments was 30 January 2017.

As a result of comments received from external parties as well as internal consultees within the council, a number of minor amendments were made.

The Inspection Strategy was formally adopted on 13 March 2017.

## 2. LEGISLATIVE OVERVIEW/REGULATORY CONTEXT

The scope of the strategy is limited primarily to the inspection and determination of contaminated land. Issues such as apportioning liability, remediation and enforcement will be specifically addressed on a case by case basis.

### 2.1 The Contaminated Land Regime

Part 2A of the Environmental Protection Act (EPA) 1990 ('Part 2A') came into force in England in April 2000 (inserted by section 57 of the Environment Act 1995). This established a new regulatory system for the identification and remediation of land contamination which was introduced in DETR Circular 02/2000. This Statutory Guidance contained advice to regulators on how Part 2A should be implemented, in line with the Contaminated Land Regulations 2000.

Since this initial guidance was published, various changes have been made to the Statutory Guidance and Regulations. In April 2012, the Secretary of State for Defra published revised Statutory Guidance in accordance with section 78YA of the Environmental Protection Act 1990. Section 2 of this Statutory Guidance requires local authorities to take a "strategic approach" to inspecting their areas and to describe and publish this within a written Strategy.

The Statutory Guidance requires each local authority to take a strategic approach when compiling and implementing its Strategy in order that it reflects the principles of risk assessment (section 78B(1)). It must, therefore, be:

- (a) be rational, ordered and efficient;
- (b) proportionate to the seriousness of any actual or potential risk;
- (c) seek to ensure that the most pressing and serious problems are located first;
- (d) ensure that resources are concentrated on investigating areas where the Authority is most likely to identify contaminated land; and
- (e) ensure that the local authority efficiently identifies requirements for the detailed inspection of particular areas of land.

The Statutory Guidance and the Contaminated Land (England) Regulations 2006 provide a framework for delivering the objectives of the contaminated land regime. The Statutory Guidance sets out the approach to be taken in determining the degree of risk, the identification of any interested parties and level of remediation required. It clearly highlights the need to promote voluntary action before taking enforcement action and to maintain a transparent system through the maintenance of a public register.

### 2.2 Government Objectives/The National Perspective

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

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

The government considers that the most effective way of delivering these objectives is via the 'suitable for use' approach. It also places a strong emphasis on voluntary action.

The main element of the 'suitable for use' approach is to ensure that where unacceptable risks to human health, or the environment are identified; that the remedial requirements are targeted to the risk, as it relates to the current circumstances and use of the land. The Part 2A regime cannot be used to deliver site betterment beyond addressing actual harm.

The government requires that a balance is achieved between the precautionary approaches to dealing with contaminated land and empowering local authorities to make proportionate, clear and accountable decisions; ensuring that any intervention achieves a net benefit.

### 2.3 What is 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.

The terms 'significant harm', 'harm', 'significant possibility' and 'significant pollution of controlled waters' are all defined within the Statutory Guidance. The definition reflects the 'suitable for use' approach and is underpinned by the principles of risk assessment. The need to protect the environment and to prioritise decisions necessitates the adoption of a risk based approach.

Risk is the probability, or frequency of occurrence of a defined hazard (for example exposure of a property to a substance with the potential to cause harm); and the magnitude (including the seriousness) of the consequences. The Statutory Guidance introduces the concept of **contaminant-pathway-receptor** to reflect this definition. It also defines other terminology within the Strategy some of which are listed within the glossary.

The Statutory Guidance refers to a "**contaminant linkage**", meaning the relationship between a contaminant, a receptor and a pathway. Unless all three elements of a contaminant linkage exist a piece of land cannot be considered potentially to be contaminated land under Part 2A including evidence of the actual presence of contaminants.

### 2.4 Regulation of Part 2A

Local authorities are the primary regulators under Part 2A. This reflects their existing functions under the statutory nuisance regime and also complements their roles as planning authorities. The key local authorities responsibilities are:-

To cause its area to be inspected to identify contaminated land.  
To determine whether any particular site is contaminated land.  
To act as enforcing authority for all contaminated land which is not designated as a "special site" (the Environment Agency will be the enforcing authority for special sites).

The Environment Agency has a mainly supporting role providing assistance and site-specific guidance to local authorities, particularly with respect to cases of pollution to controlled waters. The Environment Agency acts as the enforcing authority for 'Special Sites'. The Environment Agency also has a duty to prepare from time to time a report on the state of contaminated land in England. The Environment Agency

will be consulted when the Council considers there to be an issue with respect to controlled waters, or when a site is likely to be designated as a special site; this is discussed further in Chapter 8.

The council will liaise with neighbouring local authorities at the earliest opportunity about priority sites which cross the borough boundary. Each site will be dealt with individually and consultation will be carried out to determine whether it is appropriate for one or both authorities to carry out Detailed Inspection.

### **3. INTERACTION WITH OTHER REGIMES**

In addition to the Part 2A regime, there are certain other regulatory regimes which will continue to deal with land contamination issues. The Council will liaise closely with the appropriate regulatory authority to determine the appropriate enforcement action and to ensure effective communication.

#### **3.1 Planning and Development Control**

Land contamination is a material consideration under the Town and Country Planning Act 1990 and remains the primary mechanism for dealing with the remediation of contaminated land. The National Planning Policy Framework (NPPF) dated March 2012 requires the local planning authority to take account of land contamination when developing local plans and considering applications for proposed developments.

The planning regime addresses the risks in relation to future use of land and where a site is affected by contamination or land stability issues; responsibility for ensuring that a development is suitable for use resides with the developer and / or landowner. Planning policies and decisions should ensure that a site is suitable for its new use and that after remediation, as a minimum, land should not be capable of being determined as contaminated land under Part 2A.

Since the introduction of Part 2A, the Council has been applying the principles within Planning Policy Statement 23 (PPS 23); PPS 23 was withdrawn in 2012 prior to the introduction of the NPPF. The Council has recently prepared a Supplementary Planning Document (SPD), which includes a section on contaminated land, and upholds the core principles of PPS23; this is discussed further in Chapter 7. Where necessary, the Council will use conditional approval on planning consents that requires the developer/applicant to follow a staged process of risk assessment. This may be required in order to demonstrate that contamination has been effectively considered and dealt with in accordance with legislation, current guidance and good practice. This will ultimately serve to demonstrate that the development is suitable for its intended use.

The Part 2A inspection process will also form a mechanism for checking that remediation previously carried out during redevelopment i.e. prior to the introduction of Part 2A and the application of PPS23 and the NPPF, has been to a sufficient standard.

#### **3.2 Building Regulations**

The Building Regulations 2010 Part C, C1. (2) and Approved Document C, Site Preparation and Resistance to Contaminants and Moisture (Amended 2013), contain specific requirements regarding land contamination. These require measures to be taken to protect new buildings, and their future occupants, from the effects of contamination, including hazardous ground gases.

The Councils contaminated land officer(s) will comment and offer advice on Building Control Applications if they are located in area of potential contamination to ensure new building and future occupants are protected from the effects of potential contamination.

#### **3.3 Water Resources Act (WRA)**

Under the Water Resources Act 1991 (Amendment) (England and Wales) Regulations 2009, the Environment Agency retains powers to deal with harm to controlled waters being caused by contaminated land. Consequently, there is great potential for overlap between the two regimes. Therefore, the DETR in conjunction with the Environment Agency has provided guidance on how the two regimes will operate in

tandem. The Council will normally use Part 2A enforcement procedure for land identified as contaminated land, rather than the works notice system used by the Environment Agency under the Water Resources Act 1991.

### **3.4 Environmental Permitting**

The Environmental Permitting Regulations 2016 (EPR) requires the operators of industrial sites involving particular processes to obtain a 'permit' from the Environment Agency or the Local Authority (depending on the nature and scale of the process). In general, processes regulated under the EPR are likely to be 'more polluting' than those that are not. However, this covers all forms of pollution and does not necessarily mean that EPR sites are more likely to cause land contamination. The EPR replaced the Pollution Prevention and Control (PPC) and Waste Management Licensing regimes.

#### **3.4.1 Industrial Installations**

The EPR (as amended) are designed to minimise the impact from potentially polluting activities. Many industrial installations fall under the environmental permitting regime. This regime is enforced by the Environment Agency for A1 activities and by the Council for A2 (LA-IPPC) and Part B (LAPPC) activities. Any facility regulated under the EPR, where there may be a significant risk to land or groundwater [including where one is necessary to satisfy requirements of the Industrial Emissions Directive (IED)], is required to carry out a site condition report to ascertain the baseline condition of the land prior to being granted a permit. If an operator causes contamination of the site or land by breaching conditions of the permit, they are required to remediate the land so that it is returned to its original baseline condition.

#### **3.4.2 Waste Management Facilities**

All waste disposal and processing sites are subject to licencing under Part 2 of the Environmental Protection Act (as amended by the EPR). Contamination causing significant harm or pollution of controlled waters should be dealt with as a breach of a condition of the licence or permit rather than through Part 2A. Where a site has remained unlicensed, or where a waste licence has been surrendered, it could potentially meet the definition of 'contaminated land' and would therefore, be dealt with under the Part 2A regime.

### **3.5 Statutory Nuisance**

The Part 2A regime replaces the statutory nuisance provisions of the Environmental Protection Act 1990 for dealing with nuisance that consists of, or is caused by, "land in a contaminated state". That is all land where there are substances in, on or under the land which are causing harm, or where there is a possibility of harm being caused. However, where land is causing offence to human senses, for example odours, the statutory nuisance regime will still apply.

### **3.6 Environmental Damage Regulations 2009**

The Environmental Damage (Prevention and Remediation) Regulations 2009 provide additional enforcement powers for the prevention and regulation of land contamination. The regulations only apply to damage which has taken place after 1 March 2009 and are usually applied to allow a rapid reactive resolution to land contamination caused by a pollution incident.

These regulations define environmental damage as damage to:

- (a) Protected species or natural habitats, or a site of special scientific interest, or
- (b) Surface water or groundwater with a deterioration in the water's status, or
- (c) Contamination of land that results in a significant risk of adverse effects on human health.

The Environment Agency, Natural 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. The enforcing authority must establish whether damage is 'environmental damage' and identify a responsible operator in order to serve a remediation notice taking account of any measures proposed by the operator.

## 4. CORPORATE OBJECTIVES AND STATUTORY FUNCTIONS

The implementation of Part 2A does not stand in isolation from other Council functions, policies and strategies. Moreover, it plays an important role in allowing the Council to move closer to meeting its aims and objectives for environmental improvement, regeneration and in particular achieving sustainable development. This chapter outlines the principal Council policies, statutory and everyday functions alongside and within which Part 2A is implemented.

### 4.1 Vision for Warrington

It is important that the policies and objectives of the Council are consistent with other organisations/statutory bodies, whilst ensuring the delivery of Government policy at a local level. The Council has, therefore, declared a vision for Warrington:

***“We will work together with our residents, businesses and partners to make Warrington a place where everyone can thrive”***

The Council will look to, where possible, discharge its duties in relation to contaminated land in support of its ambitions for the town.

### 4.2 Core Strategy

The adopted Local Plan Core Strategy sets a target within Policy CS 2 that ‘the re-use of previously developed land within defined settlements will be prioritised and at least 80% of all new homes within the borough will be delivered on previously developed land’. Policies relating to land contamination include Policy QE6 within the Local Plan Core Strategy, which states that ‘Development proposals on land that is (or is suspected to be) affected by contamination or ground instability must include an assessment of the extent of the issues and any possible risks. Development will only be permitted where the land is, or is made, suitable for the proposed use’.

### 4.3 Business Plan

The Business Plan for Regulatory Services establishes a set of priorities for action and links closely with the Core Strategy. The Service aims to provide high quality services directed towards protecting the public and the environment and making Warrington a fairer, healthier and safer place to live and work. Its vision is to deliver high quality, value for money, services, with a focus on providing a high level of protection to the most vulnerable in our society. The availability of resources, and hence capacity, requires the service to prioritise overall service delivery according to risk and where intervention is likely to have the greatest effect.

### 4.4 Health Policy

The reforms, introduced as a result of the Health and Social Care Act 2012 give local authorities a duty to promote the health of their population. The Council will look to instigate a Health Advisory Team with colleagues from Public Health in order that the socio-economic impact of contaminated land, as well as the resultant impact on wellbeing of land being identified as statutory contaminated land, can be taken into account.

#### **4.5 Health and Wellbeing Strategy**

The Health and Wellbeing strategy encompasses three distinctive themes including: - (1) Starting well; (2) Living well and; (3) Ageing well, which are supported by an additional theme of developing a 'Strong and Resilient Warrington'. The strategy acknowledges that the environment, as well as the local economy, community and housing have a significant impact/influence on health and wellbeing. Health and wellbeing is dependent on a number of factors, including the availability of suitable land for housing, recreation and employment.

## 5. CHARACTERISTICS OF WARRINGTON BOROUGH

This chapter provides an overview of the principal characteristics of Warrington including its geography, history, geology, hydrology and land-use. These characteristics will be used to direct the Strategy towards priority areas based on local circumstances.

### 5.1 Location and Size

In 1998 Warrington became a unitary authority. The total area of the borough is 18,184 hectares and the population was estimated at 202,200, in the 2011 Census. The Borough shares its boundaries with industrial and residential conurbations such as Wigan and Halton.

The urban area is intersected by two waterways; the River Mersey, which passes close to the Town Centre, and the Manchester Ship Canal to the south. The town is well served by an extensive road network including three motorways, namely the M6, M56 and M62. The existence of such an extensive transport infrastructure has assisted in the rapid redevelopment of the town. Warrington has historically been, and continues to be, a major industrial and commercial centre.

### 5.2 Historical Development

Until the 20<sup>th</sup> Century, Warrington was the only convenient crossing point on the River Mersey for many miles. This explains much of the town's historical development. The development of unrivalled transport facilities in the 18<sup>th</sup> and 19<sup>th</sup> centuries, based on the waterways and railways, changed the old market settlement into a thriving commercial and industrial centre.

The expansion and urbanization of Warrington largely coincided with the Industrial Revolution, particularly after the Mersey was made navigable in the 18th century. Warrington has since been characterised by a wide diversity of industrial activities including metal/wire works, cotton mills, chemical works, breweries, tanneries, mineral works, coal processing, sand/clay extraction, power generation and military establishments. The main influences in terms of the legacy of potentially contaminated land are considered to be as follows:

- i) Chemical works, metal production and processing and tanneries generally concentrated in areas near to water supplies and transportation networks.
- ii) Landfilling, such as the infilling of areas of clay and/or sand extraction which occurred both in areas near to the town centre and towards the periphery in more rural areas, deposition on low-lying areas adjoining rivers and the infilling of former canals and river meanders. Many of the infilling activities were undertaken prior to the introduction of Waste Management Legislation in the 1970's and as such were not subject to the level of regulation and control that would be expected today.
- iii) Military land and associated activities comprising three former RAF sites and one former naval depot. These activities were generally located in formerly sparsely populated areas and not limited to the town centre, contributing to the diverse and widespread industrial base within the town.

It is notable that as well as being diverse in terms of the range of activities undertaken, the spatial distribution of sites is also widespread across the Borough but predominantly within the area to the north of the Manchester Ship Canal.

A decline in the traditional manufacturing base of the town and the change in the types of activities undertaken have resulted in the redevelopment of extensive areas of land which have previously been subject to potentially contaminative industrial or commercial usage. A significant amount of this land has since been redeveloped.

The key consideration, with regard to directing the Strategy, will, therefore, be the degree of confidence that can be attached to the redevelopment with regard to its historic land usage. For this reason any development undertaken prior to 1990 will be treated as a higher priority within the risk assessment process given that they are less likely to have benefitted from a formalised risk assessment. The date will, therefore, be used to provide a mechanism for prioritising the assessment process.

### **5.3 Land Ownership**

There are several significant land owners within the borough, including the Council, the Homes and Communities Agency (HCA) Railtrack, Manchester Ship Canal Company (Peel Holdings) and private landowners. In April 1968, an area of thirty square miles around and including the town was designated as New Town. The proposed role for the New Town was to act an overspill area for Manchester and Liverpool. This heralded the commencement of a period of rapid “induced growth” which has culminated in a vast expansion in terms of both residential and commercial areas under the direction of the Commission for the New Towns (CNT). This rapid growth has led to the development of large areas of the town, including areas that were previously the subject of the potentially contaminative activities outlined above. It is notable that much of this development occurred prior to 1990 when the issue of contamination was not formally considered in the development process.

### **5.4 Geology**

The solid geology of Warrington consists of a series of strata that slope towards the south and outcrop in a series of broadly parallel bands. The types of strata are as follows:

#### **(1) Sherwood Sandstone**

Rocks of the Sherwood Sandstone group underlie the majority of the north and central area of the borough. Chester Pebble Beds overlain by Wilmslow Sandstone, form the lowest of the Triassic strata (formerly known as Bunter Sandstone). This is overlain by Helsby Sandstone (formerly known as the Keuper Sandstone). The Helsby Sandstone is more resistant than the underlying Wilmslow Sandstone and as such has been subject to less erosion. They form a well-defined escarpment at Hill Cliffe. Due to their extensive outcrops and their permeable nature, the Sherwood Sandstones form an important source of underground water supply.

#### **(2) Mercia Mudstone**

Rocks of the Mercia Mudstone group outcrop at the extreme south of the borough. The Tarporley Siltstones form the lowest of the Mercia Mudstone strata and are transitional between the sandstones of the Sherwood Sandstone and the mud-rocks of the overlying Mercia Mudstone.

#### **(3) Older Strata**

At depth, the Sherwood Sandstones overlie 100 to 150 metres of Permian Strata consisting of the Manchester Marl, which is a mudstone unit, overlying the Collyhurst Sandstone, another locally important and productive aquifer. Beneath the Permian strata are the Coal Measures. These rocks outcrop to the north of Warrington.

The solid bedrock is largely overlain by a variable thickness of glacial drift deposits (typically up to 10 metres in thickness) throughout the borough. The layer of glacial drift is thicker (up to approximately 70

metres) within deep glacial channels which occur along the Mersey Valley and beneath the Sankey Brook. Glacial tills (boulder clay) predominate, and these can be sandy or contain frequent lenses and layers of glacial sand. A widespread belt of windblown sand covers parts of the central area of the Borough and to the south of the Manchester Ship Canal. Alluvial deposits and fluvio-glacial sands and gravels flank the River Mersey and Sankey Brook.

## 5.5 Hydrogeology

Warrington is underlain by a Principal aquifer, the Sherwood Sandstone, and a Secondary A and B aquifer, the alluvial deposits and fluvio-glacial sands and gravels, both of which contain groundwater in exploitable quantities. The presence of glacial drift material has essentially served to protect the groundwater from contamination; however, where drift is absent there is significant potential for contamination to impact on groundwater quality. The greatest potential for groundwater contamination, due to the lack of drift cover and concentration of industrial development, exists within the Mersey Valley. Groundwater quality is, however, poor in this area and not used for public supply except for some limited industrial abstraction.

The general Groundwater Vulnerability of the Borough has been assessed with reference to the Environment Agency Groundwater Vulnerability, 1:100,000 scale, Sheet 16 (West Cheshire) and through preliminary discussions with the Environment Agency.

The central area of the Borough and the flanks of the River Mersey and Sankey Brook are classified as a Secondary A aquifer with high leaching potential. It comprises the following drift deposits: blown sand (including Shirdley Hill Sand), alluvium, river terrace deposits and glacio-fluvial sand and gravel deposits. Generally, whilst there is groundwater present in these deposits their principal significance is as a pathway to surface waters although locally they may be suitable for supply. These waters are more vulnerable to surface activities and their quality is variable.

The surrounding area is underlain by a Principal aquifer (the Sherwood Sandstone Group) with soils predominantly classified as having a low permeability (Boulder Clay) with areas of high permeability soils essentially comprising areas where drift is absent or where development has occurred and the worst case has been assumed due to uncertainty over the precise nature of the drift.

Very good quality waters exist to the north of the Borough, the main exploitation occurring within this area for example at Winwick and Houghton Green. Groundwater from this area is utilised for potable supply. In general, there is less potential for groundwater contamination in this area of the Borough due to the limited extent of industrial development either historically or currently. The main impacts on groundwater quality in this area are from agricultural land usage.

Areas which have been classified as non-aquifers comprise the southern extent of the Borough and two areas to the north of the Borough, one in the vicinity of Risley Moss, the second comprising a small area to the north of Hermitage Green. It is noted that the area of non-aquifer in the vicinity of Risley Moss coincides with areas of clay extraction and subsequent landfilling. The relatively poor resource potential of the groundwater is reflected by the low abstraction volume; the abstracted water is used mainly for industrial use, but also irrigation. There are various Source Protection Zones located across the borough which are in place to help protect abstractions with potable use.

In general terms, the distribution of sites of potential land contamination is favourable with respect to geology and groundwater quality and utilisation. The industrial areas have tended to be located in areas either where drift deposits protect the groundwater and/or where groundwater is of poor quality and not used for abstraction except for on a limited basis by industries.

Whilst no specific concerns were raised within our preliminary discussions with the Agency with respect to groundwater vulnerability, it was noted that certain types of industrial activity are likely to have had an effect. Activities of particular concern to the Agency are those involving the large-scale storage of chlorinated solvents and fuels. In addition, any activity near to a potable abstraction point is viewed with concern. Within the implementation of the Strategy, whilst our primary focus will relate to the assessment of risks to human health, we will in consultation with the Agency, prioritise risks to groundwater in accordance with the concerns identified.

## **5.6 Hydrology**

The main watercourses comprise the areas of Glaze Brook, Sankey Brook and their tributaries and the River Mersey. It also includes the catchments of Padgate, Spittle and Whittle Brooks. It is understood that the Environment Agency also include St. Helens Canal, the Manchester Ship Canal and Bridgewater Canal within their routine monitoring programme.

Within Warrington, most of the main water courses and their tributaries identified above flow through areas which have historically been subject to a variety of activities including chemical works, glass manufacture, copper smelting, tanning, brewing and military establishments. There are also a number of closed landfill sites, which pre-date, and are excluded from the waste site licensing regime practises.

Previous discussions with the Environment Agency has, however, indicated that they are not aware of any high priority sites with respect to impacts on water quality within the Borough. They do however caution that it is possible that leachate outbreaks may be occurring which have not been detected, in part due to the tidal nature of Sankey Brook, where the deposition of silt may mask any existing outbreaks. Sites will be reviewed in accordance with the Strategy on a site-specific basis and potential impacts identified on a priority basis in discussion with the Environment Agency.

A large proportion of the water courses in Warrington continue to be of poor quality. Contamination of surface water may be due to surface water run-off, trade discharges, industrial discharges, land contamination and historic landfilling. Information provided by the Environment Agency with regards to the Water Framework Directive indicates that the River Mersey is currently failing to achieve a 'good' chemical status.

## **5.7 Receptors**

### **5.7.1 Agriculture**

A preliminary review of the Ministry of Agriculture, Fisheries and Food (MAFF) Provisional Agricultural Land Classification map, 1:50,000 scale (originally mapped at 1:63,360) indicates that the vast majority of sites on which we have information of potentially contaminated land coincide with land classified as being in urban use.

Consultation will be undertaken with organisations such as the Environmental Protection Division of MAFF and the Farming and Rural Conservation Association (FRCA). This will be done in order to discuss any site specific issues and to address any specific concerns. Within the implementation of the Strategy our primary focus will relate to the assessment of risks to human health, we will however, in consultation with relevant organisations identify and prioritise risks to all receptor groups.

### **5.7.2 Ancient Monuments**

There are 14 'Scheduled Ancient Monuments' within the Borough and over 300 listed buildings; these will be considered within the risk assessment process.

### **5.7.3 Ecological Systems**

Within the Borough three classifications of protected habitats are represented; Sites of Special Scientific Interest (SSSI), Special Areas of Conservation (SAC) and Sites of Importance for Nature Conservation (SINC). There are 4 SSSIs, located at Risley Moss, Holcroft Moss, Thelwall Eyes and Rixton Clay Pits, 45 SINCs and 1 SAC.

A preliminary review of the locations of the above-protected habitats has indicated that there is a reasonably high degree of coincidence between these areas and sites of potentially contaminated land.

Consultation will be undertaken with organisations such as Natural England and other local/national conservation bodies in order to identify any specific concerns. The primary focus will relate to the assessment of risks to human health, the Strategy will however, in consultation with relevant organisations identify and prioritise risks to all receptor groups. Any evidence of actual harm to these receptors will be a review trigger for promoting the importance of sites within the assessment process.

It is also recognised that any necessary investigation and/or remedial works should, where possible, take account of the nature conservation value of the site. Appropriate advice will therefore be sought from Natural England prior to any intrusive site assessment. The Council is aware that sites of past land use may support legally protected species such as great crested newts and water voles. The Council will therefore liaise closely with all interested parties when dealing with such sites

It should be noted that a number of sites are likely to have been assessed previously. The information obtained during these assessments will be reviewed at an early stage during the course of the implementation of the Strategy.

### **5.8 Typical or 'Background' Contamination**

It is considered that certain sites/areas within the Borough, with no known industrial/historical usage may constitute potentially contaminated land. A number of sites across the Borough have been found to contain made ground comprising ash and clinker type material. Given that Warrington is at risk from tidal and river flooding and has records of flooding dating back to 1767, it is likely that ash and clinker has been used as fill material in areas prone to flooding i.e. low lying marshland, and therefore the contamination associated with ash and clinker is likely to be widespread.

Warrington is also well served by an extensive road network including three motorways, namely the M6, M56 and M62. These major road systems may have resulted in lead deposition alongside their route. The potential impact of lead deposition from major roads has not been assessed to date although results of earlier surveys demonstrated that the deposition of lead from the air reduced considerably in the 1990's due to changes to the lead content of fuel

The presence of natural contamination is not currently a consideration when recording potentially contaminated sites/areas; such information will need to be sourced from organisations such as British Geological Survey (BGS) and the Environment Agency.

The Statutory Guidance states that the presence of 'normal' levels of contamination in soils shall not be treated in the risk assessment process as representing significant contamination even when they may exceed generic screening levels produced in a scientifically authoritative manner. These normal levels may be the result of naturally elevated concentrations due to the underlying bedrock, or may be the result of diffuse pollution resulting from a common human activity and affecting a wide area (typically urban areas).

Examples in the urban environment are elevated lead and benzo (a) pyrene identified within garden areas of properties with no former land-use, as a result of continued fall-out from vehicle exhausts as well as the disposal of ash from coal fires. Reports and maps showing normal, background levels for a number of common substances have been published by the British Geological Survey and will be used by the Council.

## 6. INFORMATION MANAGEMENT

Information management comprises collection, evaluation, maintenance and review. The implementation of the Strategy will result in the collation of a large quantity of information which may be useful to other parties. This chapter outlines how third parties can access this information and in what format it will be available. It also presents details of which third parties the Council will provide information to.

### 6.1 Data Collection (Geographical Information System)

A preliminary survey was undertaken to identify all potential sources of contamination within the Borough based on any features identified on historical maps including mid-1800s, pre-war and post-war epochs. The information captured by this survey was digitised onto a Geographical Information System (GIS) dataset named the 'Potentially Contaminated Land (PCL)' layer. Since its creation this layer has been continually updated and amended. In order to assist in the information management process, each site on the PCL layer has been allocated an individual site reference number (i.e. CL0001).

The information held by the Council on individual sites typically varies from a single polygon on the PCL layer around an historical feature to detailed site investigation reports and risk assessments that provide in-depth information on the characteristics of the site. Wherever information is available on a site it is used during the prioritisation process to assist in assigning the site an appropriate level of risk. All relevant information is logged within the GeoEnviron database which is updated on a regular basis. GeoEnviron is a collection of data management software applications and was purchased by the Council in 2007 for the purpose of prioritising PCL for further inspection under Part 2A. It replaced the previous software CLOG Output (Contaminated Land Officer Group), and is maintained by STM Environmental. The database is also supported by an electronic filing system which holds all reporting as well as pertinent correspondence relating to planning consultations and Part 2A inspection.

### 6.2 Public Access to Information

The Council acts in accordance with the requirements of the following statutes and regulations in making environmental information accessible to the public:-

- Local Government (Access to Information) Act 1985
- Data Protection Act 1998
- Human Rights Act 1998
- Freedom of Information Act 2000
- Environmental Information Regulations 2004

For the majority of the above legislation, there are common exceptions to the right to access information. These generally refer to issues relating to national security, legal proceedings, breaches of statutory provision, confidentiality, work in the course of completion, personal information or issues which could following disclosure increase the likelihood of damage to the environment. In compliance with the above and also the requirements of the Contaminated Land Regulations (England) 2006, information held on the public register will be accessible by the public. These requirements will also be adhered to when carrying out Part 2A duties which require disclosure of site specific information.

The data collected and logged within the GeoEnviron database is mainly incomplete or unverified and therefore certain site-specific information obtained during detailed inspection, will be treated as confidential. Part 3 12(4) (d) of the Environmental Information Regulations 2004 provides an exemption for incomplete data.

### **6.3 Public Register**

In accordance with Part 2A and the Contaminated Land (England) Regulations 2006, the Council is required to maintain a public register. The register serves as a permanent record of all regulatory action carried out to ensure the remediation of any site which has been determined as statutory contaminated land. Sites which have been determined as contaminated land but where no subsequent action has been taken will not appear on the register.

The public register is available on the Council's website or can be viewed free of charge by visitors to the reception of New Town House, Buttermarket Street, Warrington, WA1 2NH

### **6.4 Environmental Searches**

The Council routinely responds to requests from members of the public, those carrying out conveyancing work and other interested parties, for information pertaining to property sales or development. A reasonable charge for this information is levied and will be reviewed on an annual basis. The Council endeavours to respond to all requests within six working days. All requests are recorded within a database, and are processed using software called MapEagle.

### **6.5 Local Land Charges**

The Council responds to corporate contaminated land enquiries under Condition 29 (CON 29) of the Environmental Information (Amendment) Regulations. Information pertaining to the actual determination of a site will not be released, until the Council is satisfied as to its status under Part 2A. It is hoped that this approach will avoid any unnecessary concerns about a site that may ultimately not be considered as being statutory contaminated land. Following the implementation of Part 2A and the requirement for each local authority to keep a public register of its regulatory activity, a question (3.12) referring to contaminated land has been added to the Form CON29 Enquiries of Local Authorities. The questions on this form are answered by the Local Land Charges team as part of the search carried out every time a property transaction takes place. Local Land Charges base their response to 3.12 on information provided by the Public Protection Service.

### **6.6 Provision of Information to Third Parties**

All site-specific information will be made available to site owners/occupiers, or other relevant interested parties, and statutory organisations including the Environment Agency, Defra and other local authorities. Under Section 78U of Part 2A the Environment Agency is required to publish a report on the state of contaminated land in England first published in 2002. Local authorities, as the lead regulators, are to provide the Environment Agency with much of the information necessary to write the report. The Local Government Association has drawn up a Memorandum of Understanding with the Environment Agency that sets out the exchange of information process. The Council will therefore provide information to the Environment Agency following the guidelines agreed at the national level. Information will be provided free of charge and in paper and/or electronic format.

### **6.7 Information Received**

During the course of implementing its inspection and assessment of land for potential contamination the Council may receive complaints or information from third parties. Any information provided by third parties, including the Environment Agency and other statutory/regulatory organisations, the public, businesses or site owners/occupiers will be recorded within the GeoEnviron database. Information

provided by any third party will also be classified as confidential and will only be disclosed for public inspection with the prior agreement by the information provider.

The information received will be reviewed against the following criteria:

- Evidence of actual harm or significant risk.
- The accuracy/ quality of information to determine its seriousness /significance
- The nature of the receptors at risk (following our priority hierarchy).
- The existing risk priority/status.
- Whether it triggers the review procedure.

The information provider will be informed as to how the Council intends to act upon the information. It should be noted the information received from an appropriate person seeking to discharge any liability will not normally change the overall timescales of the review unless there is evidence of actual harm or unless it forms part of a remediation proposal.

It should be noted that information received anonymously might preclude the Council from taking action if the information is incomplete, inappropriate or its origin needs to be proved for legal reasons.

## 7. REVIEW OF ACHIEVEMENTS

The following achievements have been realised by the Council since the publication of the initial Strategy in July 2001: -

- the identification and prioritisation of 1700 potentially contaminated sites based on former use; these sites have been classified as high, medium or low risk;
- the assessment and re-prioritisation of 170 sites, namely landfills, including the preparation of a desk study/PRA and site walkover; approximately 90 of these sites have been reprioritised as low risk.
- the review of approximately 100-150 site investigation and remediation reports per annum
- the remediation of over 100 sites, via planning and Development Control; many of these sites are large residential schemes accounting for approximately 240 hectares of land.
- the investigation and detailed inspection of a number of sites under Part 2A including 600 properties and 4 former landfill sites.
- the remediation of 34 residential properties following the successful application for funding from the Contaminated Land Capital Projects Programme (CLCPP);

### 7.1. Part 2A Action/Detailed Inspection

#### Sankey Bridges

In October 1989 alkali/soap waste was discovered at an allotment in Sankey Bridges following works carried out on the banks of Sankey Brook by the National Rivers Authority. The Council carried out a series of intrusive site investigations in the area and at the adjoining residential properties, following closure of the allotment. A layer of ash and clinker was identified above the soap waste, which contained elevated levels of lead, copper, zinc, nickel cadmium, arsenic and mercury. In 2004, 26 no. residential properties (Phase I) were determined as contaminated land following a detailed risk assessment; the front and rear gardens of these properties were remediated in 2008. It was believed that ash and clinker material identified within the garden areas of these properties may have extended across the surrounding/adjoining area (Phase II), therefore the Council commissioned a desk study and preliminary investigation of an additional 222 residential properties. The majority of these properties were eliminated from the investigation following detailed risk assessment. However, in 2010, 8 no. properties on Rostherne Close were determined as contaminated land and were subsequently remediated in 2012. All details are included within the public register.

#### RAF Burtonwood

In 2002, 300 no. residential properties located on the former maintenance and repair depot at RAF Burtonwood were inspected by the Council; no information was available as to whether these properties were ever 'remediated' prior to being constructed in the 1980s. A number of preliminary investigations were carried out between 2002 and 2005 where elevated levels of certain contaminants were identified within the garden areas. As these investigations were inconclusive a more detailed site investigation and assessment was carried out in 2006. The assessment concluded that soils within the front and rear gardens of the majority of properties contained levels of contaminants that did not pose a risk to human health. However, soils within the garden areas at 3 no. properties were found to contain contaminant concentrations above acceptable levels; two of the properties are under management by a housing association and one subject to voluntary remediation.

## **Gatewarth Landfill**

Gatewarth landfill operated for 18 years from 1970 to 1988 and comprised three phases with a total area of approximately 55 hectares. Phases 1 and 2 were infilled between 1971 and 1977 with approximately 457,000 m<sup>3</sup> of domestic and industrial waste. Phase 3 was infilled between 1977 and 1988, with 108,600m<sup>3</sup> of unknown waste. The site has been subject to a number of investigations/risk assessments. In 2009, the Council requested the Environment Agency to inspect the site on their behalf due to the risks identified to controlled waters. The Environment Agency has since undertaken an intrusive investigation at the site which identified widespread contamination. It was concluded that the site does meet the definition of a special site under Regulation 3(c). The risk status of the site has been reclassified accordingly, in accordance with the process set out in Chapter 8.

## **Manchester Road/Larkfield Avenue**

A series of site investigations have been undertaken at the site which is a former landfill. The site was operated in the 1970s prior to any licensing requirements and information on the nature of the waste deposited is very limited, however it is anticipated that the site may have accepted both domestic and commercial waste. It was concluded that there is no risk to human health however the investigations identified potential risks to controlled waters; again the site has been reclassified accordingly.

## **Westy Park**

A number of investigations and risk assessments were undertaken at Westy Park between 1990 and 2008. The site operated as a landfill during the 1930s, and accepted mainly domestic refuse. In 1990, following spike bar monitoring at the site, the Council commissioned a site investigation which identified elevated levels of landfill gas. Subsequently, passive venting trenches were installed around Westy Hall Residential Care Home and Westy Community Centre to prevent the migration of gases and any ingress into the buildings/properties. In 2001, a further investigation was carried out following the introduction of Part 2A of the Environmental Protection Act 1990. This identified a potential risk to controlled waters, therefore the Environment Agency commissioned an additional investigation. It was concluded that site did not meet the definition of contaminated land or a 'Special Site'. In 2007, a supplementary ground gas risk assessment was undertaken to determine, and re-assess the risk posed to surrounding properties. The levels of ground gas were relatively low and remained consistent over time; therefore the generation of ground gas at the site was not thought to pose a significant risk to either site users, or the adjacent properties.

## **Johnsons Lane**

This site was operated by ICI under licence as a chemical landfill from *circa* 1920 to 1993. The site was infilled with 8.00-10.00m of waste boiler ash and spent lime, but also received volatile and semi-volatile organic chemical wastes, together with herbicides, pesticides, acids, alkalis, cyanide and radioactive materials such as radium, thorium and uranium. The landfill is bisected by the Halton/Warrington Borough boundary and has been the subject of multiple investigations and monitoring programmes between 1990 and 2015, examining soil, water, vapour and radiological contamination and risk. In 2008-2010, the Environment Agency investigated the whole landfill on behalf of Halton and Warrington Borough Council under Part 2A of the Environmental Protection Act 1990. Investigations determined that while the site remained secure, there was no human health risk. A risk to controlled waters was found to exist, but this risk was unlikely to be significant. The landfill formed the subject of several planning applications in 2007, 2013 and 2014. The current planning proposals are to redevelop the Halton landfill as a Solar Farm and the Warrington landfill with a harvestable fuel crop. Both schemes will involve measures to deliver some site betterment, including the establishment of a long-term monitoring programme.

## **7.2 Development of Contaminated Land Policy**

The Public Protection Service has produced its own policy and procedural documentation for two key areas in line with the Statutory Guidance:

### *1. Hardship Policy*

This policy was written to set out how the Council intends to recover the cost of 'cleaning up' or remediating contaminated land. The policy needed to be in place to allow the Council to apply for CLCPP funding to pay for any clean up works where the recovery of costs would cause financial hardship to the public, landowners and commercial businesses.

### *2. Human Health Land Categorisation Procedure*

This procedure document was written to set out how the Council intends to categorise 'land' in line with the Statutory Guidance. The procedure is in place to allow the Council to decide whether or not land is 'contaminated land' on grounds of 'significant possibility of significant harm to human health' or 'SPOSH'.

Both of these policies received full council approval.

## **7.3 Development of a Supplementary Planning Document (SPD)**

The Public Protection Service has published a Supplementary Planning Document (SPD) for Environmental Protection. The document acts as a guide to applicants/developers for dealing with Environmental Protection constraints as part of the development control process including contaminated land, noise, air quality and lighting. The SPD forms part of the Local Planning Framework which comprises a series of plans and documents. The SPD provides further detail to policies contained within the Development Plan and is a material consideration in decision making. It specifically supplements Environmental Protection policies outlined within the Core Strategy. The NPPF states that "as a minimum, land should not be capable of being determined as contaminated land under Part 2A" following development. The SPD will ensure that land is suitable for use, will not require action under Part 2A and as stated previously upholds the principals of PPS23.

## **7.4 Contribution to Strategic Priorities**

### *Housing Stock Transfer*

The Public Protection Service were involved in appointing a suitably qualified environmental consultant (SKM-Enviros) to identify all pertinent environmental constraints and liabilities as well as financial implications with the strategic transfer of all Council-owned housing to the Golden Gates Housing Trust, which included approximately 8500 dwellings. The Public Protection Service assisted with the provision of information and was involved with contact negotiations relating to environmental warranties.

### *Corporate Regeneration Projects*

The Public Protection Service has been involved with a number of corporate projects where contaminated land issues have been highlighted and have advised accordingly. These include: Omega, Bridge Street Quarter, The Atlantic Gateway, Warrington Waterfront development, Woolston Urban Ecology Park, Orford Park, Port Warrington and the Stadium Quarter to name but a few.

## 8. INSPECTION OF LAND IN WARRINGTON

A major aim of the Strategy is to identify unacceptable risks to human health and the environment and to take action on a priority basis. This requires the Council to adopt a set of prioritisation procedures, in order to assign priorities for further detailed investigation/ inspection of particular areas of land.

Prioritisation procedures are based upon an assessment of risk from any land that may be contaminated.

There are two principal aspects to the implementation of the Strategy:

1. **Strategic Inspection (Risk Prioritisation);** preliminary screening of key relevant datasets to assign an initial priority ranking to all sites and determine those sites which require further inspection; this will involve collation and assessment of desk-based information to identify any potential contaminant linkages.
2. **Detailed Inspection;** an in depth appraisal of sites that have been assigned a high priority ranking involving intrusive investigation to obtain information on ground conditions and carrying out risk assessments to support decision-making.

The Council has developed a process for the strategic and detailed inspection of land within the Borough. This process is shown in Figure 1. Further detailed information on each stage of the process is detailed within this chapter.

### 8.1. Strategic Inspection

#### 8.1.1 Stage 1: - Preliminary Screening and Prioritisation

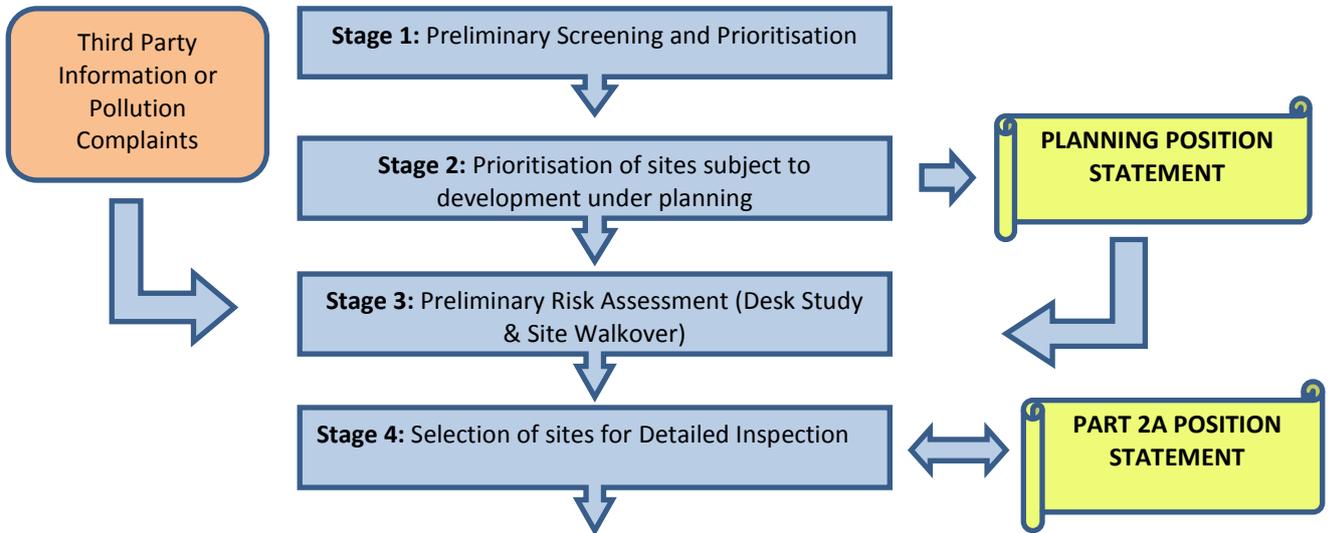
This initial stage of the risk prioritisation procedure is based solely on the types of land/industrial uses the site has been subjected to (i.e. the source of contamination) and the sensitivity of potential receptor(s). Using key datasets on potential sources and receptors, and also historical mapping, it has been possible to identify those sites where a potential contaminant linkage may exist.

A number of datasets have been obtained and appraised, to identify the location of potential contaminant sources and also to provide information on the location of receptors for example residential areas, schools, playing fields, protected areas (SSSI, local nature reserves), listed buildings and ancient monuments. As outlined in Section 6.1 a review of historical mapping has been carried out focussing primarily on identifying industrial sites; this generally involved large scale 1:1250 and 1:2500 maps.

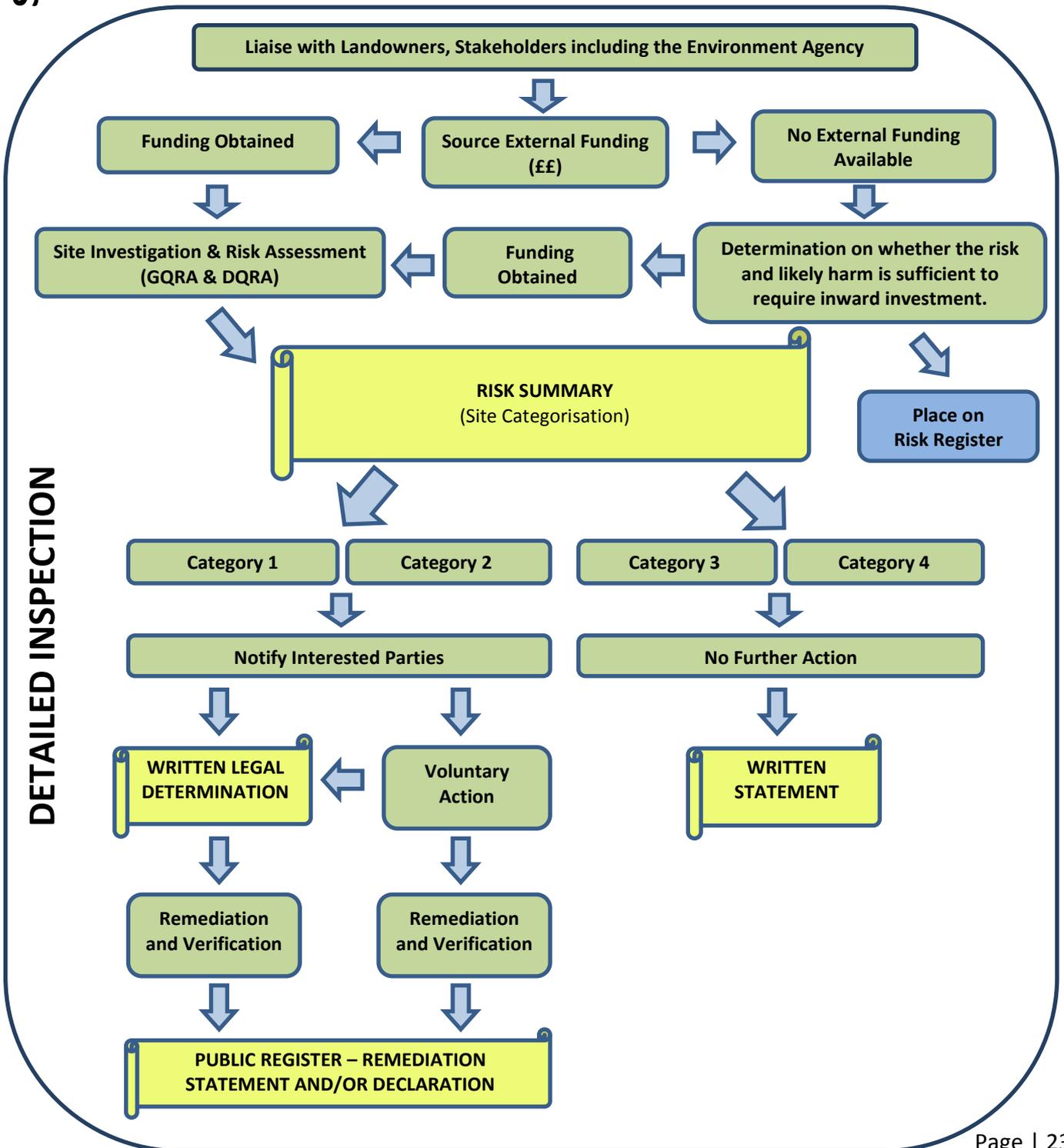
Spatial analysis will be undertaken to identify areas where potential contaminants and receptors are both present, or in close proximity. The Council has developed a risk prioritisation model within the GeoEnviron database for the purposes of the Strategy which utilises GIS to enable a preliminary prioritisation to be carried out systematically and efficiently. The methodology is outlined in Appendix B. A priority list is obtained using the site 'risk scores' and sites with the highest scores (>100) will be considered first; sites posing a risk to human health receptors will be prioritised above all others.

#### Figure 1: Process for the Strategic and Detailed Inspection

**STRATEGIC INSPECTION  
(Risk Prioritisation)**



**DETAILED INSPECTION**

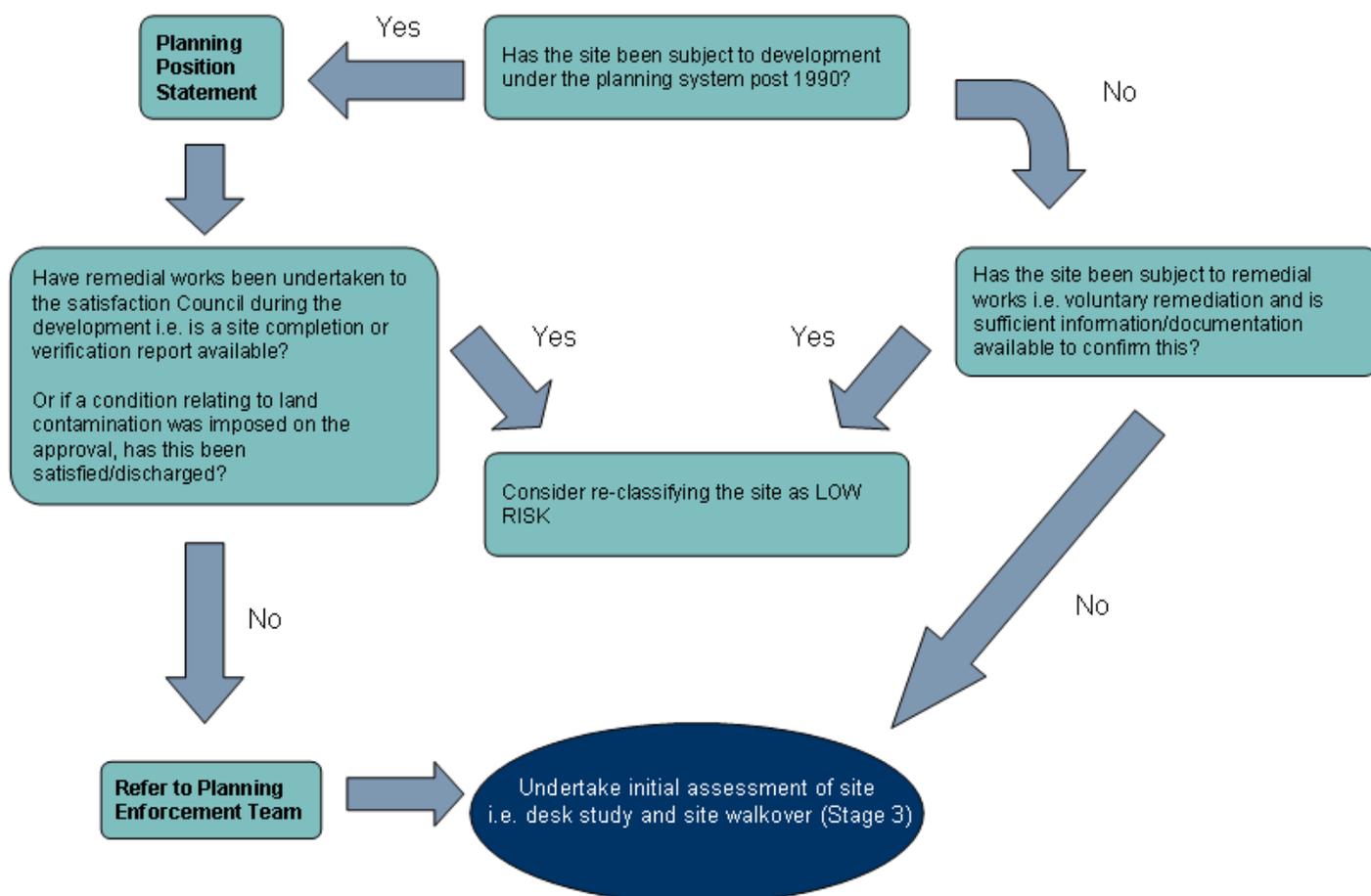


### 8.1.2 Stage 2: Re-prioritisation of Planning Sites

This stage will involve the re-prioritisation of sites subject to development under the planning regime. Figure 2 shows the process that will be adopted. Any information relating to planning will be reviewed to determine whether the site has been remediated prior to or during development. Historically sites may have been redeveloped but not subject to full planning control for identifying and managing contamination. These sites may require further investigation to determine whether they are suitable for use, or whether they require additional remedial measures. As stated previously any sites that were developed prior to 1990 will be given a higher priority; as they are less likely to have benefited from a formalised risk assessment.

For sites that have been subject to a planning application/approval post 1990, following the introduction of the Part 2A regime and the Town and Country Planning Act 1990 a 'Planning Position Statement' will be produced. This statement will be shared with the planning enforcement team for possible consideration however further action may be required under Part 2A which will involve progressing to Stage 3.

**Figure 2: Process for the Re-prioritisation of Planning Sites**



### 8.1.3 Stage 3: Preliminary Risk Assessment (PRA)

Sites carried forward from Stage 2 will be subject to an initial assessment of risk. This will take the form of a PRA or 'desk study' including a site walkover. The purpose of a desk study is to gain more information about the potential contaminant linkages identified during Stage 1. This involves finding out specific information about contamination pathways and receptors to enable a greater understanding of site conditions, including details of site boundaries and a site visit.

The desk study will involve a review of all the information/data already held by the Council; this may be in electronic format, on GIS or in hard copy/paper form. If the Council identifies any gaps in existing information which prevent decision-making, further documentary data will be sought and obtained from appropriate sources such as the Environment Agency, other statutory bodies or stakeholders. A site visit will often be limited to a visual inspection of the site carried out as a walkover exercise, or viewing the site from its boundary. A standard checklist has been developed for this purpose.

Carrying out desk-based research will allow the Council to develop a conceptual site model which will be used to inform whether further inspection is required or not.

#### **8.1.4 Stage 4: Selection of Sites for Detailed Inspection**

At this stage, a 'review panel' made up of officers from the Public Protection Service will determine the status of the site and any future actions. This decision will be made on the basis of the information gathered during the desk study, site walkover/visit and any sampling. Each member of the panel will have undertaken a review of the desk study so that they are familiar with the site. The decision as to what course of action to take for each site should be based upon a consensus of opinion from all officers. Following the review panel meeting a Part 2A Position Statement will be produced, which will include a summary of the information within the desk study and the decision making process.

If during Stage 3 more than one site is identified as requiring detailed inspection a decision will be taken, based on a case by case risk assessment, as to which is completed first. If during this stage a site is identified that appears to pose a significant or imminent risk to human health or the environment, then a decision should/will be taken as to whether the site should immediately undergo detailed inspection or remediation action.

The decision will be taken in accordance with the Council's constitution and scheme of delegation to ensure suitable governance arrangements are in place.

#### **8.1.5 Revising and Reviewing the Priority List**

At any point during the inspection process, information may come to light which leads to a site being reprioritised, or the inspection process being placed on hold for a specific period of time. This may occur for a number of reasons, for example a site visit may show the absence of a specific receptor or contaminant, or the introduction of a pathway. Alternatively, a site may already be undergoing investigation and subsequent remediation via a different regulatory regime.

The rationale behind any reprioritisation or postponement of inspection will be recorded and the site re-addressed in accordance with the adopted process. For example, inspection of a site which is currently undergoing development may be placed on hold until the development is complete. The site will then be re-examined to ensure that the appropriate level of remediation has taken place and the site is now 'suitable for use'. Therefore the status of specific sites will need to be constantly reviewed in order that any new information source can be taken into consideration and the risk amended accordingly.

## **8.2 Detailed Inspection**

Following the strategic inspection, and initial prioritisation procedures, the Council will look to carry out in-depth appraisal of each site that has been classed as high risk, depending capacity and resources. A scientific and technical assessment will be undertaken to determine whether, on the balance of probabilities, the land is statutory contaminated in accordance with the Statutory Guidance.

The assessment will have regard to any information and advice received from external organisations. The determination will also be made on the basis of any relevant guidance or standards and/or the ability of any existing management regime to prevent harm.

The primary objectives of any detailed inspection will, therefore, be:

- To enable an accurate and reasoned determination to be made
- To identify any special sites
- To engage any interested parties prior to determination whenever possible

The procedure for achieving these objectives will involve a staged approach in order to minimise any disturbance and to ensure that resources are allocated according to need.

An intrusive investigation will only be considered where a contaminant linkage is likely and there shall be a presumption that the interested parties will be notified whenever possible. A specification will be developed prior to any intrusive investigation and the advice of the Environment Agency will be routinely sought.

The Council will also consider whether the proposed works present any risk to the environment or sites of interest. If there is any doubt the appropriate organisation will be consulted prior to any intrusive site investigation. The Council will also consider whether any compensation is payable under Paragraph 6 of Schedule 18 of the Environment Act 1995. Any party with a right to compensation will be notified accordingly.

If the Council considers that a detailed inspection of a site is necessary, then it will have regard to the following issues:

- (a) Requirement for any consents/licences  
Statutory undertakers and the Environment Agency will be consulted, following the liaison procedures, on the need for any consents and/or licenses.
- (b) Authorisation of inspections  
The Authority will ensure that appropriate persons are authorised to carry out inspections in accordance with Section 108 on the Environment Act 1995. The Authority will liaise fully with any neighbouring authority prior to any investigation of land within their area (section 78X (2)).
- (c) Health and safety requirements  
The land- owner will be consulted regarding any specific health and safety requirements in relation to their site. The Authority will follow its own health and safety protocol, which shall include a health and safety risk assessment for any site investigation work. Contractors will be expected to comply with the Construction Design Management Regulations 1994.
- (d) Rights of Access  
The Authority will endeavour to agree any access arrangements with the appropriate person wherever possible. It will ensure that it gives the occupiers/owners of residential properties at least seven days' notice. If access arrangements cannot be agreed then The Authority will seek to obtain a warrant under Section 108(6) Schedule 18 of the Environment Act 1995.

### **8.2.1 Intrusive Site Investigation and Risk Assessment**

The procedures that the Council will follow for carrying out an intrusive investigation and risk assessment (or 'Generic Quantitative Risk Assessment' (GQRA) and 'Detailed Quantitative Risk Assessment' (DQRA)) are based on well-established and industry adopted good practice techniques. Since such techniques are documented in various authoritative publications it is not considered necessary to reproduce such material within the Strategy. Site investigation and risk assessments will be carried out in accordance with the guidance, good practice, technical procedures and relevant standards/criteria available at the time of the planned works.

The purpose of an intrusive investigation is to collect sufficient information to better characterise actual or potential contaminant linkages at the site. The intrusive site investigation may involve the excavation of trial pits, the drilling of boreholes and the installation of monitoring wells in order to allow sampling and subsequent chemical analysis of soils, water and gas/vapours. The level of investigation required will be decided on a site specific basis and will be dictated by issues such as the number and nature of potential contaminant linkages at the site, local environmental sensitivities, the level of confidence required, the practicalities of investigation and cost implications.

The Council may employ the services of an environmental consultant to carry out the work on their behalf. Any consultant would be selected following a procurement process in line with the Council financial regulations.

### **8.2.2 Risk Summaries & Site Categorisation**

Following the outcome of the site investigation and risk assessment process the Council will assign all sites one of four categories if there are human health or controlled water receptors. This is in line with the Statutory Guidance. For assigning a risk category the following will be used:

1. Human Health: the Public Protection Service will follow the Councils 'Categorisation Procedure' for Human Health, and produce a Risk Summary for all sites. The procedure document is available for viewing or downloading on the Council website.
2. Controlled Waters: the Public Protection Service will refer to paragraphs 4.46 of the Statutory Guidance to categorise the land.

The Public Protection Service have produced a 'Categorisation Procedure' that sets out how the Council will determine whether or not land is considered 'contaminated' on grounds of 'significant possibility of significant harm to human health' or 'SPOSH'. Figure 3 summarises the process. This procedure/process ensures that the decision-making process is consistent, transparent and robust. Although it is not a requirement to produce a Risk Summary where a site is not to be determined as contaminated land, the Council has decided to produce a Risk Summary for all sites following detailed inspection and assessment; this is to improve transparency and governance. The Council will follow any subsequent guidance published on the categorisation of sites by Environment Agency when carrying out detailed inspection of sites; where it is considered that there may be a risk to controlled waters. Following categorisation a decision will then be made as to whether or not a site meets the definition of contaminated land under Part 2A. If a site does not meet the definition of contaminated land then it will be allocated a 'review trigger' which the Council will record within the GeoEnviron database; the need for a monitoring programme will be decided with the relevant organisations and individuals.

## Part 2A – Categorisation Process

**Q1 Do any of the following apply:**

- Similar land or situations are known or strongly suspected on the basis of robust evidence to have caused such harm.
- Similar degrees of exposure to contaminants in question are known or strongly suspected on the basis of robust evidence.
- Significant harm may already have been caused.

**Q2 Do any of the following apply:**

- No relevant contaminant linkage has been established
- Only normal levels of contaminants in soil exist
- Contaminant levels do not exceed relevant GACs or SSACs derived following DQRA
- Estimated levels of exposure are likely to form only a small proportion of what receptor might be exposed to anyway.

N

N

Y

**Q3 Are any of the following considered to be significant with an appropriate level of certainty:**

Estimated likelihood that harm might occur in an identified receptor	Estimated impact of harm if it did occur	Estimated timescale over which significant harm may occur
--	--	---

N

Y

Inconclusive

RISK SUMMARY

RISK SUMMARY

Category 1 High Risk

Category 2 Medium Risk

Category 3 Low Risk

Category 4 No Risk

→

→

N

Y

**Q4 Cost-Benefit/Stress Analysis:**  
Would determination and remediation produce net benefits?

Determine land as statutory contaminated land

### **8.2.3 Further inspection**

The collation of information is an iterative process. Each stage of detailed inspection may result in the need to acquire further information. This may mean going back to carry out further desk-based research or a second stage of intrusive site investigation. If the Council is unable to obtain sufficient information within a reasonable time period then it will consider whether further investigation is necessary. In making this decision it will have regard to whether there is reasonable possibility of a contaminant linkage and whether the site is likely to be a special site.

### **8.3 Determination**

The Council will make its determination as to the status of the land in accordance with the Statutory Guidance. The determination will be recorded and it shall include the information prescribed in Section 5, 5.17-5.19 of the Statutory Guidance. Prior to determination of land the Council will inform the interested parties including owner/occupiers of the land and any other person who appears to be liable to pay for remediation. Any legal determination of land will be postponed if the problem is dealt with on a voluntary basis within appropriate standards and timescales.

Enforcing authorities have four main tasks in the event that contaminated land is determined:

1. Establish who should bear responsibility for the remediation of the land (the "appropriate person" or persons);
2. Decide, after consultation, what remediation is required in any individual case and to ensure that such remediation takes place, either through agreement with the appropriate person, or by serving a remediation notice on the appropriate person if agreement is not possible or, in certain circumstances, through carrying out the work themselves;
3. Where a remediation notice is served, or the Authority itself carries out the work, to determine who should bear what proportion of the liability for meeting the costs of the work; and
4. Record certain prescribed information about their regulatory actions on a public register.

If the Council determines land as contaminated land a 'notification' of determination will be issued to the Environment Agency and the owner/occupier and any appropriate persons.

### **8.4 Communication and Liaison**

#### **8.4.1 The Environment Agency**

Whilst the local authority has sole responsibility for the determination of statutory contaminated land the advice of the Environment Agency will be sought throughout the process. Part 2A requires the Environment Agency to provide information and advice including site-specific guidance to local authorities. As indicated in previous sections, the Environment Agency will be consulted accordingly, specifically about sites where significant pollution of controlled waters is a concern, or where the site may be defined as a special site. For the former, the Environment Agency will also be asked to assist in the assessment of any laboratory data and the determination of the existence and significance of contaminant linkages.

A strong working relationship will be maintained in order to ensure that any action taken by the Council is consistent with Environment Agency protocols. All liaison, communication and action will be undertaken in accordance with the Environment Agency/local authorities' memorandum of understanding and the

Environment Agency Handbook and procedural notes. Liaison between the Council and the Environment Agency will also follow the principles set out in the document “Working better together” document (Ref25).

The Environment Agency will be notified of the Council’s intentions to carry out detailed inspection and discuss options for land which is considered likely to meet one or more of the descriptions of a special site (Contaminated Land (England) Regulations 2006). Following advice and agreement the site will be investigated either by the Environment Agency or the Council. If the Environment Agency investigates then the Council will authorise them to exercise powers of entry conferred by section 108 of the Environment Act 1995. Regulatory functions will still remain the sole responsibility of the Council including inspection duty and decision on whether the land is contaminated.

If at any stage of carrying out detailed inspection, the Council suspect that the site could be defined as a special site; the Environment Agency will be informed. If they agree on the likely designation then the site will be passed over to them to carry out the inspection where procedures for carrying out inspection are detailed in its own internal standard.

#### **8.4.2 Appropriate Persons**

The Council is committed to involving possible appropriate persons within the process in order to achieve consensus and to meet the aim of voluntary remediation. The appropriate persons are likely to be identified via a number of sources including legal searches, records held by the Council and other organisations, trade directories and registers, legal documents and third party information. All decisions regarding the interest held by any persons will be made in consultation with legal services and the rights of the individual will be upheld at all times.

If the Council is satisfied that there is reasonable possibility of a contaminant linkage and that a person or organisation holds an interest; then every effort will be made to advise them accordingly prior to any formal determination.

The appropriate persons will be given a reasonable opportunity to provide any information requested by the Council but will be expected to provide suitable evidence of any previous remediation schemes. It should be noted that such evidence is only likely to be accepted if it is supported by suitable post remediation validation.

The Council will only consider undertaking an inspection of the land if the appropriate person(s) fails to provide sufficient information, in a reasonable time, to make a determination.

The Council will ensure that it has fully evaluated the role of other regulatory regimes as part of this process, including their ability to address the contaminant linkage. If the Council is satisfied that the other regime will not totally address the linkage, then the appropriate person will be advised as to their status under Part 2A.

The Council will endeavour to provide the following information, where possible:

- A copy of the written determination
- Information on the availability of site investigation reports
- Why they have been identified as an appropriate person
- The names of other appropriate persons (subject to legal advice)

The consultation period following notification will last for a minimum of three months (excludes urgent remediation) however the Council may extend this period if it is deemed beneficial to the achievement of an appropriate level of remediation.

The Council will ensure that it gives the appropriate person every reasonable opportunity to discuss any issues and will also ensure that they are informed of any subsequent decision made as to their liability status.

It should be noted that the Council does not have a policy of “signing off” land following the determination and subsequent remediation of a site. It will, however, make a suitable entry within the public register and the appropriate person will also be notified of the “review triggers” for the site.

#### **8.4.3 Risk Communication**

The Council is aware of the need to avoid alarm and potential blight due to the creation of unnecessarily high perceptions of risks when communicating with the public about land contamination issues. The Council’s statutory duties and the reasons for requiring further information will be clearly explained and all communication will be made in line with the guidance presented in the SNIFFER publication ‘Communication Understanding of Contaminated Land Risks (2010).

The Council recognises, however, that land use plays an important role in the community and that peoples’ perceptions about the quality of the land may affect their ability to enjoy their local environment. Effective communication is, therefore, essential in order to address any misconceptions and to ensure that people are fully informed.

The expertise of the Council’s communication team will be used to ensure that an effective and transparent communication process is adopted; Public Health England will also be contacted where appropriate along with the Environment Agency. Resources will be allocated according to the level of communication required.

#### **8.4.4 Access Arrangements and Powers of Entry**

The Council will take measures to ensure that its procedures for gaining site access are reasonable in all ways and fully compliant with the requirements of the Environment Act 1995 and the Human Rights Act 1998. In accordance with Section 108 of the Environment Act 1995, the Council has statutory powers to authorise suitable persons to carry out detailed inspection.

The Council will give at least seven days’ notice of proposed entry on residential premises or on sites where an intrusive investigation using heavy equipment is to take place. If the occupier fails to grant consent for inspection, the Council will seek to obtain a Magistrates warrant in order to gain access. Prior to entering a site to carry out a site visit, or intrusive site investigation, the Council will attempt to gain prior consent from the current site occupier and/or owner, who will be provided with information that includes the period of inspection, what the inspection will involve, who will carry out the inspection; and if appropriate who is required to be present for interview during the inspection. This will also enable health and safety precautions, consents or any regulatory permission for access to, or work on, the site to be identified and obtained. However, in line with Section 108 provisions the Council may enter a site at any reasonable time without prior notice and in emergency situations; powers of entry can be exercised forthwith.

## **9. COUNCIL OWNED LAND**

### **9.1 Current Land-Holdings**

The Council, like most local authorities, owns a large amount of property and maintains a record of all property assets. These include, for example, the Town Hall, schools, industrial units, shops, allotments, residential stock, parkland and highways grass verges.

### **9.2 Management Policy**

The Council's Asset Management Plan (AMP) 2009 is currently under review and is becoming established as a property strategy document as opposed to an AMP. It is considered however that the principles of property management within the Council will remain the same.

It is envisaged that the risk assessment of Council assets with regard to the contaminated land regime will be undertaken using the methodology detailed in Chapter 8. Land that the Council holds an interest in will then be prioritised according to its status within the overall risk assessment process; as this will ensure that resources are allocated according to risk not according to whether the Council is the landowner. The Council will however promote the environmental regeneration of its assets wherever possible within the resources available.

The Council will also ensure that contaminated land issues are addressed during any land transactions involving the Council. This will include the assessment of the site against our internal records to examine any contaminated land issues, it will not, however, be possible to formally determine the status of the site as this will be done within the overall framework of the Strategy.

## 10. ACTIONS, OBJECTIVES & PRIORITIES

The Council's aim is to fulfil the requirements of the revised Statutory Guidance. It has therefore taken account of the principles of the guidance in developing its approach and, compliance will be achieved through the following aims and objectives: -

<p><b>Aim 1</b> To achieve environmental improvement and fulfil the Council's responsibilities with respect to implementing environmental legislation</p>	<p>Objectives</p>	<p>Continue with the identification of contaminated land in a rational, ordered and efficient manner and identify those sites where land contamination is presenting unacceptable environmental risks.</p> <p>Ensure the Inspection Strategy and its implementation meet the requirements of Part 2A</p>
	<p>Priorities</p>	<p>Prioritise areas of land considered likely to pose the greatest risk to human health and the environment for inspection, and be proportionate to the seriousness of actual or potential risks</p> <p>Ensure that resources are focussed on inspecting areas where the Council is most likely to identify risks. Ensure efficiency by directing effort away from those areas where risks associated with land contamination area is already being addressed</p>
<p><b>Aim 2</b> To reduce the Council's impact on the environment</p>	<p>Objectives</p>	<p>Identify Council-owned/occupied land which should be prioritised for remediation as part of asset management and manage and/or reduce the Council's liabilities as a landowner or occupier</p>
	<p>Priorities</p>	<p>Adopt an exemplary approach as a responsible landowner towards inspecting Council-owned land and dealing with contamination</p> <p>Ensure public confidence on the Council's objective assessment of its own landholdings</p>
<p><b>Aim 3</b> To encourage regeneration/redevelopment, and support the local economy</p>	<p>Objectives</p>	<p>Encourage the re-use and remediation of contaminated land through the planning regime in accordance with the NPPF to ensure any new development is suitable for use.</p> <p>Enable informed decisions (by Council and third parties) regarding future land use</p>
	<p>Priorities</p>	<p>Provide information on land contamination to enable the Council to act in accordance with government planning policy guidance</p> <p>Assist with any enquiries from landowners, developers and the Council by providing information to help establish and resolve the status of the land</p>
<p><b>Aim 5</b> To raise awareness and promote understanding of land contamination issues</p>	<p>Objectives</p>	<p>Encourage a proactive approach amongst landowners, developers and the Council towards the investigation and remediation of land contamination</p> <p>Encourage voluntary remediation to deal with land contamination as far as reasonable and practicable</p>
	<p>Priorities</p>	<p>Carry out consultation on future reviews of the Inspection Strategy with stakeholders as considered necessary and adopt a transparent approach to implementing the Inspection Strategy to minimise or reduce potential property blight as far as possible</p> <p>Develop effective procedures for communication, liaison and information exchange within the Council and with third parties</p>

These are overall aims which interlink with, and are supported by, those of existing Council policies and strategies; they also reflect the Council's statutory duties. The aims and content of the strategy are subject to review and they may be revised as the Strategy is implemented and targets are achieved, but also in light of changes in Council policy, as well as government guidance and legislation. The Council will assume that all the land within the Borough is not contaminated land under Part 2A unless there is reason to consider otherwise in accordance with the outcome of detailed risk assessments and site categorisation.

### **10.1 Actions and Work Programme**

The actions identified for the implementation of the Strategy are:

- To carry-out strategic and detailed inspection of potentially contaminated land.
- To assess planning applications and associated contaminated land reports to ensure that land is investigated and remediated appropriately by developers, so it does not pose a risk to human health and/or the environment.
- To undertake any necessary investigation for urgent cases, as and when they are identified, or become apparent.

**Listed below are some specific examples of how these commitments will be met.**

#### **Strategic & Detailed Inspection**

The procedures outlined in Chapter 8 will be followed; Table 1 sets out a work programme for strategic and detailed inspection over the next 5 years (2017-2022). Detailed inspection, involving intrusive site investigation is expensive and time-consuming, and is therefore reliant upon resource, as well as service priorities. All inspections carried out to date have been funded by the Supplementary Credit Approval (SCA), or the Contaminated Land Capital Projects Programme (CLCPP), administered by DEFRA and/or the Environment Agency. Unfortunately this funding was withdrawn in April 2014. The Council will continue to focus on strategic inspection and where possible identify the appropriate persons to fund any detailed inspection. In the event that a site warrants urgent action, or where no appropriate person can be identified, the Council will seek to identify the funding necessary to address any unacceptable risk.

#### **Assessment of Planning Applications**

Land contamination is a material planning consideration and for the majority of sites within the borough, intrusive investigation will be achieved through conditions placed on planning approvals and not Part 2A action. The Council's Development Management team consults within the Public Protection Service on all planning applications either located on potentially contaminated land or involving a sensitive end-use. The Public Protection Service is responsible for reviewing all investigation and remediation work undertaken by developers to ensure that it is completed to a satisfactory standard and the site is suitable for the proposed end-use. This will continue to be a priority to ensure that land does not pose a risk to health and/or the environment.

#### **Reactive Investigation and Urgent Cases**

There may be a requirement to assess potential areas of contamination that have been reported to the Public Protection Service from members of the public, businesses or other organisations. In these circumstances officers will advance to Stage 3 and 4 of the strategic inspection, following a review of the information against criteria presented in Section 6.7.

### **Development of Key Datasets, the GIS and GeoEnviron Database**

As stated previously, a dedicated GIS and database have been set up to manage the information required to support the inspection process. The data stored on the GIS is continually in the process of being reviewed and updated. The maintenance of the GIS is fundamental to ensuring that the data collected is managed effectively and to ensure that the land has been systematically reviewed for historic activities. Further datasets will be added to the GIS, including a 'Remediation' layer, during the implementation of the Strategy, as they are required or developed.

### **Review of Residential Development and the Planning System**

The Public Protection Service is responsible for conditioning planning applications to ensure that any sensitive end-use developments are suitable for use. The Public Protection Service has identified approximately 150 sites where contaminated land conditions placed on an approval/consent remain in force, or undischarged, because the developers/applicants have not submitted adequate information in respect of contaminated land. The Public Protection Service is in the process of preparing 'Planning Position Statements' for such sites with a view to taking action in liaison with development control / planning enforcement. This task will assist in the strategic inspection and prioritisation of land across the Borough.

### **Enquiries and Environmental Information Searches**

The Council will continue to deal with these enquiries as and when they are received. All the information requested will be disclosed unless it is covered by the exclusion test of commercial confidentiality or an intellectual property right. The public register will continue to be maintained and updated. The Public Protection Service will utilise its specialist software (MapEagle) to run environmental search reports where necessary. See Section 6.

### **Brownfield Register**

The Council will be required to develop a Brownfield Register which will list all available brownfield land suitable for housing and what proportion of suitable sites have planning permission. This will be publicly available and will enhance transparency for developers and communities. It will also enable progress to be measured against the Government's target for obtaining planning permission on 90% brownfield land identified as being suitable for housing by 2020.

**Table 1: Strategic & Detailed Inspection: Work Programme 2017-2022**

Inspection Phase	Actions	Timescales
<p><b>Stage 1: Preliminary Screening and Prioritisation</b></p>	<p>A priority list has been obtained which includes approximately 1700 potentially contaminated land sites based on historical and current land use, and also potential receptors.</p> <p>The Public Protection Service will continue to update and add any information/ or sites that are identified from a review of its own records or external information to the GeoEnviron database, this will include the transfer of data/scoring obtained using the CLOG system into the GeoEnviron database (~170 sites)</p>	<p>Completed</p> <p>On-going (2017-2022)</p>
<p><b>Stage 2: Re-Prioritisation of Low Risk Sites</b></p>	<p>The Public Protection Service will undertake a review of all planning records/files, technical reports and any other historical information which may be available, focussing on the sites with the highest risk scores. The 'Other Factors' scores within the GeoEnviron database will be updated accordingly.</p> <p>A 'Planning Position Statement' will be prepared where necessary. The Public Protection Service will liaise with the planning enforcement team to determine whether proceedings may be taken under the planning regime or whether action is required under Part 2A.</p>	<p>Ongoing (2017 – 2022)</p>
<p><b>Stage 3: Preliminary Risk Assessment</b></p>	<p>This will involve the following areas of work:</p> <ol style="list-style-type: none"> <li>(1) A site walkover/site visit</li> <li>(2) Logging all information on GeoEnviron</li> <li>(3) Checking all Council records (i.e. building control)</li> <li>(4) Preparing an environmental search /report using MapEagle</li> <li>(5) Preparing a PRA or desk study report and conceptual site model</li> </ol> <p>The Public Protection Service aim to produce approximately 10-20 PRAs per year between 2017 and 2022 depending on resource availability.</p>	<p>Ongoing (2017-2022)</p>
<p><b>Review of Priority Sites/ Review Panel</b></p>	<p>The review panel will aim to undertake a review of all PRAs that are carried out in Stage 3. A decision on whether to take any of these sites forward for detailed inspection will be made, documented accordingly and a Part 2A position statement prepared.</p>	<p>Ongoing (2017-2022)</p>
<p><b>Detailed Inspection (Site Investigation &amp; Risk Assessment)</b></p>	<p>The Public Protection Service will prepare a risk summary for all sites (~10 sites) that have been previously subjected to detailed inspection following the introduction of Part 2A; each site will be categorised accordingly.</p> <p>The Council will act on the findings of any preliminary risk assessment and any urgent action taken where necessary.</p>	<p>2017-2022</p>

## 11. REVIEW PROCEDURES

The Council has a duty under Part 2A to keep the Strategy under periodic review to determine whether the objectives/priorities are being achieved, to revise and improve procedures, to take into account any changes in legislations and guidance, to consider the establishment of significant case law or precedent and to reflect changes in Council policies and strategies. The review schedule for this document is 5 years unless circumstances dictate otherwise. This is considered to be the most efficient and effective way of not only making sure the Strategy is up to date and reflects current practices but also that it is realistic and achievable.

The review will be carried out by the Public Protection Service in consultation with other services across the Council as well as external organisations and neighbouring authorities where necessary.

The Environment Agency, as part of their statutory duty under Part 2A, has to assess the Inspection Strategy and its effectiveness in their 'State of Contaminated Land in England report. Any suggested changes to the Strategy will then be reported, for approval to the Council.

Details of all significant proposed changes will be sent to the various statutory consultees listed in Appendix A for consultation. Following the consultation period, the Strategy document will be revised. The changes to the Strategy will then be adopted and implemented.

## 12. REFERENCES

BGS (2012). Normal Background Concentrations of contaminants in English soils.

Department for Communities and Local Government (2012). **National Planning Policy Framework**. DCLG, London.

Department for Environment, Food and Rural Affairs (2012). **Environmental Protection Act 1990: Part 2A Contaminated Land – Contaminated Land Statutory Guidance**. The Stationery Office, London.

Department of Energy and Climate Change (2012). **Environmental Protection Act 1990: Part 2A Contaminated Land – Radioactive Contaminated Land Statutory Guidance**. The Stationery Office, London.

Environment Agency (2004). **CLR11: Model Procedures for the Management of Land Contamination**. Environment Agency, Bristol.

**Environmental Permitting (England and Wales) Regulations 2016**. Statutory Instrument (SI 2016/1154).

**Environmental Protection Act 1990, Part 2A**: inserted by the Environment Act 1995, Section 57. See Environment Act 1995 for text for Part 2A.

**The Contaminated Land (England) (Amendment) Regulations 2012**. Statutory Instrument (SI 2012/263).

**The Contaminated Land (England) Regulations 2006**. Statutory Instrument (SI 2006/1380).

**The Environmental Damage (Prevention and Remediation) Regulations 2009**. Statutory Instrument (SI 2009/153).

**Water Resources Act 1991 (Amendment) (England and Wales) Regulations 2009**. Statutory Instrument (SI 2009/3104).

## 13. GLOSSARY

<b>Contaminant</b>	A substance which is in, on or under the land and which has the potential to cause harm or to cause pollution of controlled waters.
<b>Contaminant Linkage</b>	The relationship between a contaminant, a pathway and a receptor.
<b>Contaminated Land</b>	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) pollution controlled waters is being, or is likely to be, caused.
<b>Controlled Waters</b>	Defined by reference to Part II (Section 104) of the Water Resources Act 1998; this embraces territorial and coastal waters, inland fresh waters, and ground waters.
<b>Current Use</b>	Any use which is currently being made, or is likely to be made, of the land and which is consistent with any existing planning permission (or is otherwise lawful under town and country planning legislation). This definition is subject to the following qualifications: (a) the current use should be taken to include any temporary use, permitted under town and country planning legislation, to which the land is, or is likely to be, put from time to time. (b) the current use includes future uses or developments which do not require a new, or amended, grant of planning permission. (c) the current use should, nevertheless, be taken to include any likely informal recreational use of the land, whether authorised by the owners or occupiers or not, (for example, children playing on the land); however, in assessing the likelihood of any such informal use, the local authority should give due attention to measures taken to prevent or restrict access to the land; and (d) in the case of agricultural land, however, the current agricultural use should not be taken to extend beyond the growing or rearing of the crops or animals which are habitually grown or reared on the land.
<b>Harm</b>	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.
<b>Pathway</b>	One or more routes or means by, or through, which a receptor: (a) is being exposed to, or affected by, a contaminant, or (b) could be exposed or affected.
<b>Pollution of controlled waters</b>	The entry into controlled waters of any poisonous, noxious or polluting matter or any solid waste matter.
<b>Possibility of significant harm</b>	A measure of the probability, or frequency, of the occurrence of circumstances which would lead to significant harm being caused.
<b>Receptor</b>	A living organism, a group of living organisms, an ecological system, property or controlled waters which could be adversely affected by a contaminant. The various types of receptors are detailed within the Statutory Guidance.
<b>Risk</b>	The combination of: (a) the probability, or frequency, of occurrence of a defined hazard (for example, exposure to a property or a substance with the potential to cause harm); and

	(b) the magnitude (including the seriousness) of the consequences
<b>Significant harm</b>	Means any harm which is determined to be significant in accordance with the Statutory Guidance
<b>Significant contaminant linkage</b>	A contaminant linkage which forms the basis for a determination that a piece of land is contaminated land.
<b>Significant possibility of significant harm</b>	A possibility of significant harm being caused which is determined to be significant in accordance with the Statutory Guidance
<b>Special Site</b>	<p>A site defined as such in the Contaminated Land Regulations (England) 2006. These are sites which meet the definition of contaminated land and fall within one of the descriptions given in the Regulations, which include:</p> <p>(a) Certain water pollution cases:-</p> <p>(b) Industrial cases</p> <ul style="list-style-type: none"> <li>▪ Waste acid tar lagoons</li> <li>▪ Oil refining</li> <li>▪ Explosives</li> <li>▪ Certain IPC sites</li> <li>▪ Nuclear sites</li> </ul> <p>(c) Land owned by the Ministry of Defence</p> <p>(d) All radioactive contaminated land</p>
<b>Substance</b>	Any natural or artificial substance, whether solid or liquid in form or in the form of a gas or vapour.
<b>Unacceptable Risk</b>	A risk of such nature that it would give grounds for land to be considered as contaminated land

## APPENDIX A: LIST OF CONSULTEES

### Statutory & Regulatory Authorities

<p><b>Environment Agency</b> Richard Fairclough House Knutsford Road Warrington WA4 1HG <b>Contact:</b> Lee Beveridge Technical Officer (Groundwater, Hydrology &amp; Contaminated Land Team)</p>	<p><b>Historic England</b> Canada House 3 Chepstow Street Manchester M1 5FW <b>Contact:</b> Catherine Dewar</p>
<p><b>Natural England</b> Natural England Consultation Service Hornbeam House Electra Way Crewe Business Park Crewe CW1 6GJ <b>Contact:</b> consultations@naturalengland.org.uk</p>	<p><b>Public Health England</b> 5th floor 3 Piccadilly Place London Road Manchester M1 3BN <b>Contact:</b> Dr Sam Ghebrehewet Interim Head of Health Protection (PHE North West- Cheshire &amp; Merseyside)</p>
<p><b>National House Building Council</b> NHBC House Davy Avenue Knowlhill Milton Keynes MK5 8FP <b>Contact:</b> Orna O'Toole (Principal Environmental Engineer); Sally Boorer (Engineering Policy Manager)</p>	

### Neighbouring Local Authorities

<p><b>Cheshire East</b> Westfields Middlewich Road Sandbach CW11 1HZ <b>Contact:</b> Rebekah Norbury / Sally Shaw</p>	<p><b>Cheshire West &amp; Chester</b> 1st Floor East Wing, Wyvern House The Drummer Winsford Cheshire CW7 1AH <b>Contact:</b> Martin Wright</p>
<p><b>Halton Council</b> 2<sup>nd</sup> Floor, Municipal Building Kingsway Widnes WA8 7QF <b>Contact:</b> Will Watson (Contaminated Land Officer)</p>	<p><b>Knowsley Council</b> 2<sup>nd</sup> Floor, Yorkon Building Archway Road Huyton L36 9FB <b>Contact:</b> Keith Dooley (Environmental Protection Officer, Environmental Health &amp; Consumer Protection)</p>
<p><b>Salford Council</b> Environmental Protection Salford City Council, Unity House Civic Centre Chorley Road Salford</p>	<p><b>St Helens Council</b> Environmental Health &amp; Trading Standards Division 3<sup>rd</sup> Floor Wesley House Corporation Street St Helens WA10 1HE</p>

<p>M27 5AW  <b>Contact:</b> Martin Plant, Senior Environmental Health Officer</p>	<p><b>Contact:</b> Christopher Culley, Scientific Officer (Contaminated Land) Environmental Protection Department</p>
<p><b>Trafford Council</b>  Environmental Health Team  Trafford Town Hall  Talbot Road  Stretford  M32 0TH  <b>Contact:</b> Richard Pollitt</p>	<p><b>Wigan Council</b>  Regulatory Services Business Team  Places Directorate  Wigan Council  PO Box 100, Wigan  WN1 3DS  <b>Contact:</b> C Ball / Michaela Guest</p>

## Warrington Borough Council Internal Consultees

<p><b>ECONOMIC REGENERATION, GROWTH AND ENVIRONMENT DIRECTORATE</b></p> <p><b>Development Control</b>  Pete Astley (Assistant Director)</p> <p><b>Building Control</b>  Tony Gartside (Service Manager - Building Control)</p> <p><b>Spatial Planning &amp; Development Control</b>  Michael Bell (Planning Policy &amp; Programme Manager)</p> <p><b>Estates &amp; Property</b>  Stuart Brown (Property &amp; Estates Service Manager)</p> <p><b>Planning Enforcement</b>  Jason Lewis (Planning Enforcement Manager)</p>	<p><b>CHIEF EXECUTIVE DIRECTORATE</b></p> <p><b>Legal Services</b>  Paul Clisby (Legal Services Manager)</p>
<p><b>FAMILITES AND WELLBEING DIRECTORATE</b></p> <p><b>Public Health</b>  Muna Abdel Aziz (Public Health Director)</p>	

## APPENDIX B: GEOENVIRON RISK PRIORITISATION METHODOLOGY

The methodology for risk scoring is built into the GeoEnviron software which includes an assessment of the hazard posed by each type of contaminant, the vulnerability of the receptor, and any knowledge of the site's physical condition or use. The initial stage of the risk prioritisation procedure is based solely on the types of land/industrial uses the site has been subjected to (i.e. the source of contamination) and the sensitivity of the potential receptors.

**(1) Source:** - An objective methodology has been used to derive hazard scores or an 'Profile Hazard Score' (PHS) for each of the DoE Industry Profiles in relation to each land/industrial use; this has been done by considering the contaminants likely to be present on the site. The scoring is based on an appraisal of likely contaminants, their environmental behaviour, as well as a subjective assessment based on knowledge, experience and professional judgement. Table 1 lists the risk categories used to classify each land/industrial use.

Table 1: Prioritisation Risk Categories

Risk Category	Code	Score (PHS)
Very High	VH	6
High	H	5
Medium High	MH	4
Medium	M	3
Medium Low	ML	2
Low	L	1

**(2) Receptor:** - Each receptor is rated in terms of their sensitivity. For human receptors the sensitivity scores or 'Receptor Sensitivity Score' (RSS) have been derived is carried out by assessing the current land use, in consultation with the Health Protection Agency (HPA). For the groundwater receptor, the scoring is carried out by considering the source protection zone in conjunction with the Groundwater Protection Policy. For surface water receptors, the scoring is carried out by considering the distance to the nearest surface water i.e. river, stream, drain, pond, lake, reservoir or canal.

Table 2: Land Use Sensitivity Rating

ID	Current Use	Score (RSS)
NURS	Nurseries	10
RES	Residential (assuming with gardens)	9
ALLOT	Allotments	10
PA	Play Area/Playing Fields	6
SCH	Schools	7
POS	POS	5
CC	Community Centres	4
AGR	Agricultural (food chain)	4
AGR	Agricultural (direct contact)	2
PARK	Parks and Gardens	5
YC	Youth Centres	4
RCH	Residential Care Homes	1
WOOD	Woodlands	4
HP	Hospitals	1
I/C	Industrial/Commercial	2
GV	Graveyards	1
PH	Public Highway	1

**(3) Calculation:** - An overall site risk score is then automatically calculated using the following algorithm:

$$SRS = PHS \times RSS \times OFS$$

Where: -

SRS = Site Risk Score

PHS = Profile Hazard Score

RSS = Receptor Sensitivity Score

OFS = Other Factors Scores

OFS have been obtained and adapted from an STM working group consisting of contaminated land officers from 14 local authorities.

Using these site risk scores a site by use priority listing is obtained.

All site-specific information will be logged, referenced and stored within the GeoEnviron database; 'Other Factors' scores will be updated which will either increase or decrease the risk score for the site in question, and alter its position/ranking on the priority list.