ENVIRONMENTAL PROTECTION ACT 1990

SEFTON COUNCIL

CONTAMINATED LAND INSPECTION STRATEGY (Third Review)

REVISED August 2010

Contents

Executive Summary

In common with other areas, Sefton has a legacy of land contamination arising from industrial development and other related operational practices.

Under new contaminated land provisions contained within Part 2A of the Environmental Protection Act 1990 introduced on 1st April 2000, each Council has a duty to inspect its area to identify land which meets the statutory definition of contaminated land and ensure that it is managed in an appropriate manner.

This legislation adopts the "suitable for use" approach in order to ensure that remedial action is taken only where contamination presents an unacceptable risk to human health or the wider environment assessed in the context of the current use and circumstances of the land.

Prior to the introduction of this legislation, there has been no strategic approach to the identification of contaminated land within the Borough. Land contamination has been addressed during development or in response to identified problems.

Councils are now required to take a strategic approach to inspecting their areas and to describe and publish this in a written strategy which was required to be submitted to the Department of Environment, Transport and the Regions by July 2001.

This strategy document, now in its third review, fulfils the above requirement by setting out how Sefton Council proposes to implement its inspection duties under Part 2A. It describes the framework within which land which merits detailed individual inspection will be identified in a rational, ordered and efficient manner, identifying the most serious and pressing problems first and concentrating resources on the areas where contaminated land is most likely to be found.

The Borough Council has the primary regulatory role in the implementation of Part 2A but wherever necessary the Council will work in partnership with others, particularly the Environment Agency which has a key supporting role and a number of specific regulatory functions under the new contaminated land regime.

Through implementation of the Strategy the Council's aims are:

- to adopt a strategic risk based approach to the periodic inspection of the Borough to identify land which presents unacceptable risks to human health or the wider environment;

- to ensure that available resources are effectively targeted;

- to ensure that all those affected by, and involved in, the inspection process have the same clear understanding of the rationale for inspection, how this will be carried out and over what timescale;

- by effective communication of the authority's intentions, to encourage voluntary action by polluters or other appropriate persons;

- to promote regeneration, improvement of the environment and protection of the Green Belt through effective links with wider Council and Regional policies;

Key objectives and timescales for meeting the above aims have been set out within the strategy document.

It is recognised that sites where urgent action is required may be identified at any time; these will be dealt with as a priority as they arise. The Council has also identified the following further priorities within the overall strategic approach to inspection:

- Dealing with land where there is any verifiable report of significant harm or pollution of controlled waters;
- Identification of unacceptable risks to human health;
- Assessment of sites identified by other regulatory bodies, such as Environment Agency and English Nature;
- Assessment of land currently or formerly owned or occupied by the Borough Council;
- Assessment of land allocated for sensitive uses within the Unitary Development Plan (UDP) to be replaced by the Local Development Framework (LDF) in due course.

This Strategy sets out how, taking into consideration local characteristics, the Council proposes to;

- consider land for which it may have particular responsibilities;
- collect appropriate information on sources of contaminants, the presence of sensitive receptors (as defined within statutory guidance) and pathways along which contaminants may reach such receptors;
- evaluate such information to identify areas of land which merit detailed inspection and to prioritise them such that they are dealt with in an appropriate order;
- select individual sites for inspection and describes the way in which inspections will be undertaken;
- liaise and communicate with key partners including statutory bodies, landowners and occupiers and the wider community at various stages during strategy implementation;
- manage the significant amount of information expected to be obtained from a variety of sources and information generated during the inspection process;
- review both inspection decisions and the strategy document itself.

Effective liaison and communication with statutory bodies, landowners, occupiers, other interested parties and the wider community is recognised as a key factor in the successful implementation of the strategy.

The identification and remediation of contamination within the Borough is a long and continuous process; the preparation of this strategy document was the first stage. The speed of progress during the implementation of this strategy continues to be dependent on the resources available.

Progress to date is summarised below:

(i) Development of all modules in the Contaminated Land Information Management system (CLIMS) has been completed and all modules are integrated and fully functional;

(ii) Collection of all core data sets for input into CLIMS has been completed. This process is also on-going as new information comes to light;

(iii) Efficient liaison and information exchange mechanisms have been established with key partners;

(iv) The initial site prioritisation algorithm run by the CLIMS Analysis module produced over 20356 sites requiring further inspection by the Council. The outputs of the module were reviewed (amalgamation and merging) and this process of further re-prioritisation resulted in a refined list of 8608 sites for further consideration;

(v) A rolling programme of Detailed Inspections commenced in 2006;

(vi) Fifty-two sites have been remediated and removed from the inspection list;

(vii) Further sites have been identified through the planning process and as of 25th August 2010, 8591 sites of potential concern have been identified. These comprise 1116 high priority sites, 724 medium priority sites and 6751 low priority sites;

(viii) Three sites have been formally determined as Contaminated Land and designated as Special Sites these are Litherland Gasworks, Sefton Meadows Extension 1 and Sefton Meadows Extension 2;

(ix) The Council is currently progressing six sites through the Part 2A process; the sites are at various stages of progression ranging from inspection to consideration of remediation options;

(x) Seven closed landfill sites have been inspected by the Environment Agency on behalf of the Council:

- Two sites were determined as Contaminated Land and designated as Special Sites in August 2009;

- Two sites require further inspection prior to determination;
- Three sites do not require further work at this time. Further work may be required following remediation of the two designated Special Sites;
- A remediation forum comprising interested parties including the Council and the Environment Agency has been formed to appraise the remediation options for the two designated Special Sites.

(xi) In addition to Part 2A, there are other regimes through which remediation of contaminated land is achieved. The planning process continues to be the primary mechanism, indeed a significant number of the sites identified as high priority within the inspection process have been dealt with in this way. The Council has also successfully used the Environmental Damage (Prevention and Remediation) Regulations 2009 to secure remediation of land affected by contamination.

CONTAMINATED LAND INSPECTION STRATEGY

1.0 INTRODUCTION

1.1 General Policy

1.1.1 Local Authority Policies

This Contaminated Land Inspection Strategy (CLIS) has been prepared within the context of wider Council strategies, programmes and policies. These include:

A Vision for Sefton - The Community Strategy 2006 - 2011

The Community Strategy is the overarching plan of the public, business community and voluntary sectors. It sets out Sefton Borough Partnership's vision and strategic objectives for the future of Sefton and focuses on achieving realistic improvements in the economic, social and environmental well-being of Sefton over the next 5-10 years.

The vision set out in the Community Strategy is: **'to make Sefton a great place in which to live, work, learn, visit and do business'.**

The Sefton Borough Partnership is working towards the government's vision of Sustainable Communities that deliver sustainable communities at the local level. Priorities and targets to improve the life of those living in and visiting Sefton are presented as four main themes:

- Children and Young People
- Economic Development and Sustainability
- Safer and Stronger Communities
- Healthier Communities and Older People

The Community Strategy also builds on the foundations of other plans and programmes such as the Local Development Framework, the Local Neighbourhood Renewal Strategy and the Regeneration Strategy.

The Council will make an important contribution to meeting the aims and objectives of the Community Strategy through the services it provides and by implementing its own policies. Within the Council itself, the delivery of services is determined by the Corporate Plan.

Sefton Council Corporate Plan

This Strategy is presented in the context of the Council's Corporate Plan, which sets out the Council's vision, values, strategic aims and priorities.

The Council's Vision is:

'Sefton Council seeks to develop a thriving, prosperous borough where a high quality of life is enjoyed by all members of the community. We want Sefton to be a safe and healthy place where people are proud to live and work, and are attracted to visit and invest in. Above all we aim to make changes which will safeguard the well being of future generations'.

The Plan sets out eight strategic aims:

- Creating a Learning Community
- Health and Well-Being
- Children and Young People
- Creating Inclusive Communities
- Jobs & Prosperity
- Creating Safe Communities
- Environmental Sustainability
- Improving the Quality of Council Services and Strengthening Local Democracy

The Summary Corporate Plan 2009-2010 groups the aims under five headings:

- Sustainable Economic Development and Enterprise
- Health and Well-being
- Children and Young People
- Safer and Stronger Communities
- Improving the Quality of Council Services and Strengthening Local Democracy

Remediation of former industrial sites in south Sefton to residential standards as part of Housing Market Renewal activity is identified as an action to help deliver the strategic objective of Environmental Sustainability.

Land contamination has significant impacts on both the environment and the economy. These policy areas are therefore key considerations in developing and implementing the Strategy.

Background to Land Reclamation in Sefton

Sefton has been very active in the field of economic regeneration and land reclamation, particularly over the last fifteen to twenty years and has achieved much in its aim of removing the blight of derelict land. Inevitably such land reclamation activities have also had a significant impact on the remediation of contaminated land.

The Council has developed a land regeneration database. The purpose of the database is to record the progress that the Authority has made on its land

regeneration work. It allows for monitoring of land previously reclaimed and its progression through the development process from its initial identification through to its eventual after use or redevelopment.

Regeneration Initiatives

A number of regeneration initiatives are underway within Sefton; these include:

- Neighbourhood Renewal Fund (NRF) programme
- Merseyside Housing Market Renewal Pathfinder – New Heartlands Prospectus
- South Sefton Regeneration Strategy
- Action Plan for the City Region 2008-2011

The Council has developed a Land Regeneration Strategy. Whilst the Land Regeneration Strategy and Contaminated Land Inspection Strategy have different objectives, there are a number of important areas of overlap as both strategies will result in the reclamation and remediation of significant areas of contaminated land within the Borough.

The principal aim of Sefton's Land Regeneration Strategy is to support development that achieves the Council's regeneration objectives.

The Council's Land Regeneration Strategy is set in a local and sub-regional framework and will reflect objectives set by:

- Future Northwest: Our Shared Priorities
- Draft North Liverpool/South Sefton Strategic Regeneration Framework
- Sefton Unitary Development Plan
- Emerging Sefton Core Strategy
- Liverpool City Region Development Plan
- Action Plan for the Liverpool City Region
- Housing Market Renewal Initiative Programme

Owing to the history associated with development in Sefton it is known that there is an extensive contamination problem. Despite having reclaimed in excess of 140 hectares of land over the past decade it is acknowledged that there is now much land that may eventually require further treatment as a result of the redefining of contamination. Addressing ground contamination is thus considered to be an important priority for any land regeneration programme and progress will be measured for Best Value and Comprehensive Area Assessment purposes.

Unitary Development Plan (adopted 2006)

The Unitary Development Plan (UDP) is the statement of the Council's planning objectives and policies that will shape the future land use within the Borough. A number of policies relate directly or indirectly to land contamination issues.

Under the new planning system, Sefton Council will produce a Local Development Framework (LDF). This will consist of a set of documents which will be used in making decisions on planning applications. Work has already started on the LDF which will replace the replacement UDP in due course.

Enforcement Policy

Sefton has an enforcement policy that is consistent with Central Government's Enforcement Concordat. The Cabinet Office published the Concordat and this sets out what businesses and others being regulated can expect from enforcement officers employed by Local Authorities and other agencies. Sefton has adopted the Concordat into existing policy thereby committing themselves to good enforcement policies and procedures, which contribute to Best Value.

The Concordat's main principles are:

- Openness;
- Helpfulness;
- Consistency;
- Proportionality;
- Agreed Standards of Service;
- Access to complaint process.

Public Access to Information

The authority will respond to enquiries about contaminated land in accordance with the Environmental Information Regulations 2004.

The Environmental Information Regulations 2004, which implement the EC Directive on Public Access to Information (2003/4/EC), together with The Data Protection Act 1998 and the Freedom of Information Act 2000, form part of the UK's access to information regime.

Consultation Strategy

To ensure that all sectors of the community were aware of this new legislation and manner in which the Council intends to implement its inspection duties, a consultation draft of the first version of this Strategy (published in April 2001) was made available to interested sections of the community, businesses, developers and other regulatory

bodies. Comments received were considered and where appropriate the strategy was revised to address the issues raised.

Elected members and statutory consultees have been consulted on subsequent revisions of the strategy with final versions published on the Council website.

1.1.2 Merseyside Context

Owing to the extent and severity of contamination in areas of Merseyside, the Merseyside Districts (Sefton, Knowsley, St. Helens, Wirral and the City of Liverpool) and Halton have a history of working together to address the issue of contaminated land strategically. A Contaminated Land Officers Group (CLOG) was established in 1991 which acts to progress strategic initiatives, exchange information and seek uniform approaches to dealing with contaminated land issues across its area of Merseyside and Halton. The Contaminated Land Information Management System (CLIMS) developed and implemented by the Districts with support from Merseyside Information Service / Mott Macdonald is one such initiative.

Sefton is part of the Liverpool City Region with the neighbouring Boroughs of Knowsley, St. Helens, Wirral, Halton and the City of Liverpool. Tackling the historic legacy of contaminated land through the regeneration process is a sub-regional priority. Its importance is being flagged up through joint working arrangements at the sub-regional level including:

- The Mersey Partnership and any Local Economic Partnership that may subsequently emerge
- Liverpool City Region Cabinet and appropriate thematic Boards
- Liverpool City Region Multi Area Agreement
- Action Plan for the City Region 2008 - 2011
- The Liverpool City Region Development Plan
- Future stages of the Housing Market Renewal Pathfinder

Sefton, Knowsley, St Helens, the City of Liverpool and Halton are partners in the Mersey Forest initiative, which has established low cost community woodland uses utilising a range of funding sources on a range of sites subject to potentially contaminative uses through its Landfill Woodlands project and, more recently, the NewLands Project. Sites such as Sefton Meadows are being remediated for a community forest end use. Further bioremediation and community forest projects on contaminated land are planned.

1.1.3 Regional Context

There are three main factors driving contaminated land work in the regional context.

The North West Development Agency (NWDA) is one of the major funders of remediation and redevelopment of derelict and contaminated land, though this is

likely to change as coalition government policy regarding the Regional Development Agencies becomes clearer and reforms are implemented. The current position is that the NWDA's "England's North West – a strategy towards 2020" (2000), identifies one of its priorities for early action as being "to review the land reclamation programme to secure greater efficiency and clear objectives." The Final Report of the Land Reclamation Review Steering Group, Reclaim the Northwest was produced in May 2001. The NWDA's Strategy states that particular attention is to be given by the NWDA to the problems and issues raised by redundant and derelict sites related to the chemical industry, but the development work assisted by NWDA is widespread across the region. An increase in assistance where there are social and environmental benefits as well as economic benefits is likely as one outcome of the review.

A key point is that NWDA will not make investments where the outcome does not contribute sufficiently towards key objectives of the Regional Economic Strategy or where others are legally obligated to act. The success of the NewLands project is an example of where a major initiative has benefited from significant NWDA investment. Assistance in remediation of contaminated sites which fall clearly within Part 2A is considered unlikely and is more likely as part of economic regeneration projects.

The North West of England Plan Regional Spatial Strategy (RSS) which was adopted in 2008 provided for development and investment in the region for a 15 to 20 year period. It impacted upon contaminated land in two ways. It led development plans to contain particular policies to address contaminated land in particular ways and indirectly affected it by how it promotes spatial development in the regional context. The RSS stated:

"The North West was at the forefront of the industrial revolution and to this day remains one of the UK's major manufacturing centres. This past industrial activity has left a legacy of land contamination, which needs to be managed. Successful remediation of contaminated land is fundamental to improving the image of the region. The contaminated land regime (95) was introduced 11 years ago to identify this legacy, where it posed an unacceptable risk, and ensure its remediation to appropriate standards. The regime favours voluntary remediation and in many cases is being brought about as a consequence of proposed development. In the North West, the Environment Agency and others are developing best practice guidelines based on a hierarchy of remediation methods."

"Policy EM2 Remediating Contaminated Land in the RSS stated "Plans, strategies, proposals and schemes should encourage the adoption of sustainable remediation technologies. Where soft end uses (including green infrastructure, natural habitat or landscape creation) are to be provided on previously developed sites, appropriate remediation technologies should be considered which reduce or render harmless any contamination that may be present."

RSS, by directing development to derelict or brownfield land, thus had considerable implications on remediation of contaminated land in order to deliver such development. Local Planning Authorities were required to pay due regard to the RSS policies in preparing their Local Development Frameworks and other strategies including the CLIS. However, RSS was formally rescinded by the coalition Government in July 2010 and has not been formally replaced by any other mechanism at the Regional level. Progress on development of the Single Regional Strategy, RS2010, has also been discontinued and, while a high-level document entitled Future North West has been published, it carries no statutory weight and includes no content of formal relevance to local authority Local Development Frameworks. However, while the regional tier of policy has been removed, Government advice is that the evidence base that underpinned the content of RSS is available to be drawn upon by local authorities where this is considered appropriate. While no longer carrying statutory weight, the sections of RSS quoted above are considered to articulate important principles that Sefton will continue to pursue locally. Current Government proposals do not envisage any new statutory arrangements for strategic planning at the regional level.

By rescinding RSS, removing funding for the 4NW Leaders Forum, and by reforming and winding-down NWDA, government has significantly altered the structures that have been actively working to undertake research, develop strategic policy and actively intervene in support of bringing brownfield and contaminated land back into beneficial use. It is currently unclear what, if anything, will replace these arrangements under the Government's 'localism' agenda, though it is possible that some functions may devolve to City Region level, to a new Local Economic Partnership, or even to local authorities themselves. Some of these issues may be clarified by the introduction to Parliament of a Localism Bill, expected in the Autumn of 2010.

1.1.4 Government Policy and Intentions

The stated aims of the Government are to ensure that resources are concentrated on cases which really matter; and that land which does not pose a real problem is not blighted by fears that regulatory controls might be imposed on it.

The new regime reflects previous regulatory requirements with respect to contaminated land, including potential liabilities under the statutory nuisance regime, but clarifies the issues of what land is to be regarded as contaminated land for the purpose of control and regulation, and who should pay for any necessary remediation.

1.1.5 Wider Government Policy Context

Since Part 2A was enacted, Government's policy for urban regeneration and re-use of brownfield land[12] has set a substantial new context for the application of the new regime. Much of the land which will have to be developed in order to meet Governments aspirations on, notably the target for accommodating 60% of new housing development on previously developed land[3], will have to be examined in the course of the implementation of the Regulations. Contaminated Land Inspection Strategies will form an important part of the information and regulatory background against which planning and economic development policies must be carried out.

[1] Urban Task Force (1999) Towards an Urban Renaissance: Report of the Urban Task Force chaired by Lord Rogers of Riverside

[2] Office of the Deputy Prime Minister (2000) Urban White Paper "Our Towns and Cities: the Future – Delivering an Urban Renaissance

[3] Department of Communities and Local Government (2006) Revision of Planning Policy Statement 3: Housing, London: HMSO

1.2 Regulatory Context

1.2.1 Background and Definition

Part 2A of the Environmental Protection Act 1990, inserted by Section 57 of the Environment Act 1995, introduced a new regime for the identification and remediation of contaminated land. The responsibility for administering and enforcing these provisions lies with the local authorities and Environment Agency, but also involves input from several other organisations.

The contaminated land regime is set out in primary legislation, Statutory Guidance provided by the Secretary of State[4] and Regulations[5]. This section provides a summary of the main features of the regime and describes the roles of the local authority and the Environment Agency. A number of other organisations have vital roles within the implementation of the strategy; the organisations involved and the procedures to be adopted to ensure effective communication are detailed in later sections of this document.

Part 2A adopts the "suitable for use" approach in order to ensure that remedial action is only taken where contamination presents an unacceptable risk to human health or the wider environment assessed in the context of the current use and circumstances of the land. Liability for the remediation of contaminated land is to be established, where feasible, in accordance with the polluter pays principle. The regime incorporates a risk-based approach to assessing the significance of contamination and provides the first statutory definition of contaminated land.

Under Part 2A contaminated land is defined as:

"Any land which appears to the Local Authority in whose area it is situated to be in such a condition, by means of substances in, on or under the land that;

(a) Significant harm is being caused or there is a significant possibility of such harm being caused; or

(b) Pollution of controlled waters is being, or is likely to be, caused."

The Council must follow the guidance provided by the Secretary of State in applying the above definition for the identification and determination of contaminated land.

The regime initially excluded contaminated land by virtue of harm or water pollution attributable to radioactivity. In August 2006, the regime was extended by new regulations to include land that is contaminated by virtue of radioactivity. Statutory guidance issued in 2000 has been amended to reflect this change[5].

[4] Defra Circular 01/2006 Environmental Protection Act 1990: Part 2A Contaminated Land
[5] Statutory Instrument 2006/1380 The Contaminated Land (England) Regulations 2006

It should be noted that all future references to contaminated land within the strategy document, unless otherwise stated, refer to the statutory definition shown above.

It is important to note that the statutory definition of contaminated land does not necessarily include all land where contamination is present. Land which does not fall within the statutory definition of contaminated land, may be subject to contamination relevant in the context of other regimes. For example, land may contain substances with the potential to cause harm if the use of the land is changed. Indeed, the planning regime will continue to be the most widely used method of regulating land contamination. Part 2A will deal with the legacy of contamination that is not progressed through the Planning Regime.

The Water Act 2003 includes a change to the definition of contaminated land, in respect of pollution of controlled waters, in particular to introduce a "significance" test. This is not in force at the time of writing of this third revision of the Inspection Strategy. Statutory guidance is awaited under Part 2A to define "significant", on similar lines to the existing guidance on harm (see Section 1.2.4 below). When implemented the Council will follow the guidance provided by the Secretary of State in applying the amended definition of contaminated land.

1.2.2 Role of Sefton Council

The primary regulatory role under Part 2A rests with the local authorities, reflecting existing functions under the statutory nuisance regime and complementing their role as the planning authority. In outline the statutory duties of the local authority under the Part 2A regime are:

- to prepare a strategy for inspection of their area;
- to inspect the Borough from time to time to identify contaminated land;
- to determine whether any particular site meets the statutory definition of contaminated land;
- to establish whether sites should be designated as "Special Sites" and thus become the responsibility of the Environment Agency;
- to act as enforcing authority for all contaminated land which is not designated as a "Special Site", for which the Environment Agency will be the enforcing authority;
- to transfer Special Sites to the Environment Agency;
- to consult the Environment Agency on sites here there is pollution of controlled waters;
- to maintain a public register of sites for which a remediation notice has been served, or where a remediation statement or declaration has been published;
- to provide information to the Environment Agency to assist in the preparation of the state of contaminated land report.

Special Sites are a particular category of contaminated land for which the Environment Agency rather than the local authority is the enforcing authority for the

purposes of the Part 2A regime. The descriptions of the types of land which are required to be designated as Special Sites are set out in The Contaminated Land (England) Regulations 2006.

Enforcing authorities have four main tasks:

(a) to establish who should bear responsibility for the remediation of land;
(b) to decide, after consultation, what remediation is required and ensure that such remediation takes place either through agreement or by serving a remediation notice. In certain circumstances the local authority may need to undertake the remediation;
(c) where a remediation notice is served or the authority carries out the work, to determine who should bear what proportion of the costs for the work; and
(d) to record certain prescribed information regarding regulatory actions on a public register.

1.2.3 Role of the Environment Agency

The Environment Agency has a key supporting role to local authorities, involving provision of information and advice, and a number of specific regulatory functions. In summary, the Environment Agency has seven principal roles with respect to contaminated land under Part 2A:

- to provide information to local authorities;
- to assist local authorities in identifying contaminated land, particularly in cases of water pollution;
- to provide site specific guidance to local authorities on contaminated land;
- to undertake inspections of Special Sites;
- to act as enforcing authority for any land designated as a Special Site;
- to maintain a register of Special Sites remediation;
- to publish periodic reports on the State of Contaminated Land.

1.2.4 Principles of Risk Assessment

The approach adopted in the UK to the assessment and management of contaminated land is based on the principles of risk assessment. These principles also underlie the legislative requirements of Part 2A. The approach is based on the source-pathway- receptor relationship or pollutant linkage. For there to be a risk there must be a source of contamination, one or more receptors that could be harmed and pathways along which the contaminants can reach the receptors. Without a source-pathway-receptor pollutant linkage, there is no risk and the land in question cannot be determined to be contaminated land. The purpose of remediation of contaminated land is therefore to break the pollutant linkages by removing or treating the contaminant, removing or blocking the pathway or removing or protecting the receptor.

Receptors are defined within the Statutory Guidance as either:

(a) a living organism, a group of living organisms, an ecological system or a piece of property which:

(i) is in a category listed in Table A[6] of the Statutory Guidance as a type of receptor, and

(ii) is being, or could be, harmed, by a contaminant; or

(b) controlled waters which are being, or could be, polluted by a contaminant;

or

(c) a person subjected to lasting exposure resulting from the after-effects of a radiological emergency, past practice or past work activity.

Table A of the Statutory Guidance also specifies the descriptions of harm for each type of receptor that is to be regarded as significant harm. Table B[7] sets out the conditions for there being a significant possibility of significant harm.

Tables A and B, reproduced from the Statutory Guidance, are presented as Appendix I.

The Part 2A regime is aimed at dealing with cases where the risk is sufficient, given the existence of a pollutant linkage or linkages, to justify remedial action without waiting for any future development of the land. The regime is therefore complementary to considerations under the planning system where contaminated land or the possibility of it (both in terms of the statutory definition and in its wider context) is considered as a material planning issue.

1.2.5 Strategic Approach to Inspection

Statutory Guidance issued by the Secretary of State requires that local authorities adopt a strategic approach to the inspection of their areas for the identification of contaminated land and to describe and publish this in a written strategy.

In setting out the approach adopted by the Council, the underlying principles set out in the Statutory Guidance provided by the Secretary of State have been applied. These require that the approach should:

[6] Table A, Annex 3, Chapter A – Categories of Significant Harm – Defra Circular 01/2006, Environmental Protection Act 1990: Part 2A Contaminated Land, HMSO (2006) Statutory Guidance on the Definition of Contaminated Land.

[7] Table B, Annex 3, Chapter A – Significant Possibility of Significant Harm – Defra Circular 01/2006, Environmental Protection Act 1990: Part 2A Contaminated Land, HMSO (2006) Statutory Guidance on the Definition of Contaminated Land.

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

This document, adopted by Sefton Council, sets out how the Council intends to implement the inspection duties required by Part 2A, taking into consideration local circumstances. The document provides the framework by which land which merits detailed individual inspection may be identified in a rational, ordered and efficient manner, identifying the most serious and pressing problems first and concentrating resources on the areas where contaminated land is most likely to be found.

The practical implementation of the inspection provisions will necessitate the involvement of a number of organisations and individuals; the strategy document sets out the arrangements and procedures to be adopted to ensure efficient consultation, information exchange and where necessary transfer of regulatory control.

1.3 Development of the Strategy

In the development of this strategy Sefton Council has adopted a joint working approach with two adjacent Merseyside Districts, Knowsley and St Helens. Production of the strategy was undertaken by the Merseyside Environmental Advisory Service (Merseyside EAS), with support from internal teams.

Merseyside EAS, in close co-operation with Sefton Council officers, is also responsible for initiating the implementation of this Strategy, including site identification and risk assessment of priority sites.

Throughout the development of the strategy, close liaison has been maintained between Merseyside EAS and the constituent authorities through regular meetings of the Contaminated Land Project Working Party (now renamed the Contaminated Land Working Group). The Working Group, comprising key members of staff from the Environment Section, the Planning & Economic Development Department and Merseyside EAS staff, was set up to monitor progress; assist with direction and to resolve issues arising during Strategy development. The Working Group continues to meet during the strategy implementation stages.

Awareness raising briefings were held with all land owning departments of the Council; specifically included in the process were the Technical Services Department, the Housing Department, the Leisure Department, the Economic Development & Tourism Unit, Social Services Department and the Education Department.

In addition, through participation within and co-ordination of the Merseyside Contaminated Land Officers Group, there has been an aim to maintain consistency not only within the three districts of Sefton, St Helens and Knowsley but on a Merseyside basis.

The approach adopted is considered to be the most efficient and cost effective means of meeting the Council's statutory obligation to produce and publish the Contaminated Land Inspection Strategy.

The strategy has been developed in accordance with relevant legislation and guidance and with reference to wider Council policies. The guidance contained within Contaminated Land Inspection Strategies Technical Advice Note for Local Authorities, Draft for Comment[8], which provides advice to local authorities on fulfilling their statutory obligations and complying with the underlying principles of the Part 2A regime, was followed.

Following Cabinet approval, consultation on the Draft Contaminated Land Inspection Strategy was undertaken with both statutory and non-statutory consultees. A copy of the Draft Strategy was sent to all Statutory consultees including: the Environment Agency; English Nature (now Natural England); English Heritage, the Ministry of Agriculture, Fisheries and Food (MAFF) now the Department for Environment Food and Rural Affairs (Defra), and the Food Standards Agency (FSA). Other bodies and the wider community were also consulted. Such bodies are listed in Appendix II and include other statutory agencies, neighbouring local authorities and Parish and Town Councils.

The Draft Strategy was also made available at the offices of the Environmental Protection Department (now the Environmental & Technical Services Department) and the Planning Department (now the Planning & Economic Development Department) and at local libraries for viewing during normal opening hours. Copies of the Draft Strategy were also available from the Contaminated Land Team at the Environmental Protection Department.

Comments received as a result of the consultation process were reviewed and where appropriate incorporated into the Contaminated Land Inspection Strategy, adopted by the Council. The adopted Strategy was sent to the Environment Agency as required by the Statutory Guidance.

The strategy is periodically reviewed as a working document as detailed in Section 8.0. Amendments may be made and these will be communicated to the statutory consultees as and when they are implemented. Revised versions of the Strategy will be available for viewing on the Council's website. Hard copies will also be available from the Environmental & Technical Services Department on request.

[8] DETR (2000) Contaminated Land Inspection Strategies Technical Advice Note for Local Authorities, Draft for Comment

This third review of the strategy has been undertaken to report on progress and update sections of the document as appropriate. Previous reviews of the Strategy were undertaken in November/December 2002 and September 2006.

The priorities and procedures set out within the Inspection Strategy have not been substantively revised.

This revised version of the Contaminated Land Inspection Strategy implements the changes following the third review.

1.4 Objectives of the Strategy Document

As noted in Section 1.2, Statutory Guidance issued by the Secretary of State requires that local authorities adopt a strategic approach to the inspection of their areas for the identification of contaminated land and to describe and publish this in a written strategy.

The primary objectives of this document are:

- To meet the requirement to produce and publish a Contaminated Land Inspection Strategy;

- To set out the framework within which Sefton Council intends to implement the inspection duties of the Council under Part 2A and demonstrate compliance with the statutory guidance;

- To set out clearly and concisely the manner in which inspection for contaminated land will be undertaken such that all those affected by, and involved in, inspection have the same clear understanding of the rationale for inspection, how this will be carried out and over what timescale;

- To identify how this regime will interact with other regulatory regimes relevant to the management of land contamination and how the Council proposes to conduct liaison both internally and with external agencies and individuals;

- To provide information to the Environment Agency for its report on Contaminated Land.

This document identifies how the Council will address the following key areas: -

- a description of the particular characteristics of the area and how that influences the approach adopted;
- the aims, objectives and priorities of the authority;
- timescales for inspection; and
- arrangements and procedures for:

- considering land for which the authority may have responsibilities by virtue of current or former ownership or occupation;
- obtaining and evaluating information on actual harm, or pollution of controlled waters;
- identifying receptors and assessing the possibility or likelihood that they are, or could be, exposed to or affected by a contaminant;
- obtaining and evaluating existing information on the possible presence of contaminants and their effects;
- liaison with, and responding to information from, other statutory bodies, including the Environment Agency, Natural England, Food Standards Agency and Defra;
- liaison with, and responding to information from, the owners or occupiers of land, and other relevant interested parties;
- responding to information or complaints from members of the public, business or voluntary organisations;
- planning and reviewing a programme for inspecting particular areas of land;
- carrying out detailed inspection of particular areas of land;
- reviewing and updating assumptions and information previously used to assess the need for detailed inspection of different areas, and managing new information; and managing information obtained and held in the course of carrying out its inspection duties.

2.0 CHARACTERISTICS OF SEFTON METROPOLITAN BOROUGH

2.1 Background

Issues of local importance have been identified in order that they may be taken into account and used to direct the inspection strategy towards priority areas based on local circumstances. This section provides a description of the main characteristics of the Borough and where appropriate, an explanation of how these influence the Council's approach to inspection for contaminated land. It will also allow fair comparison to be drawn with other authorities.

2.2 Geographical Location

Sefton Metropolitan Borough is situated on the west coast between the estuaries of the Mersey and Ribble. It is adjoined by the District of West Lancashire within the County of Lancashire and the Metropolitan Districts of Knowsley and Liverpool.

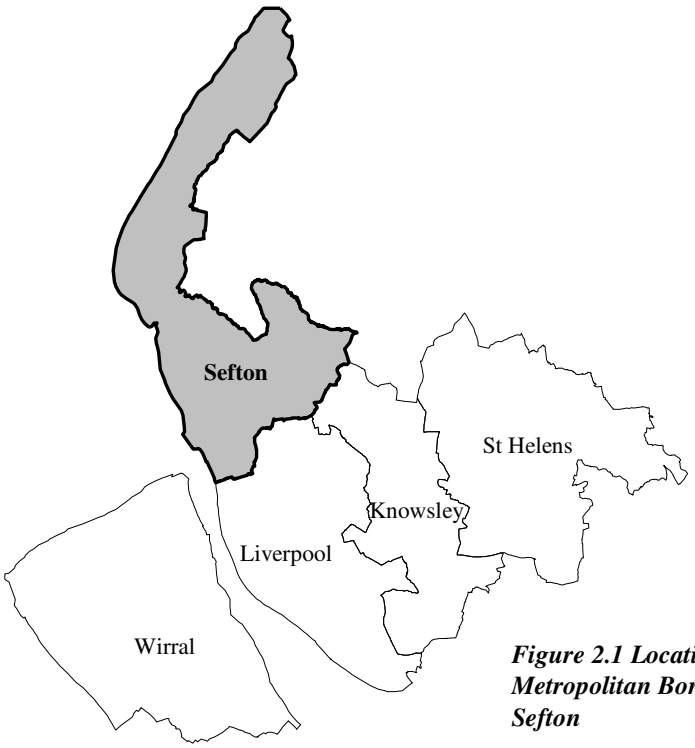


Figure 2.1 Location of the Metropolitan Borough of Sefton

2.3 Brief Description

Sefton is a very diverse metropolitan borough made up of a number of individual communities each with its own identity. These include Bootle and Litherland in the south where the Port of Liverpool and most of the Borough's industry is located, the resort of Southport in the north and the predominantly residential areas of Formby, Crosby, Maghull and surrounding parishes.

The coastal area is of considerable ecological significance locally, nationally and internationally.

2.4 Size

The total area of the Borough is approximately 15,054 hectares.

2.5 Population Distribution

At the time of the 2001 Census, Sefton had a resident population of 283,000 people.

The main centres of population are Bootle, Litherland, Aintree, Maghull, Crosby, Formby, Ainsdale and Southport.

2.6 Land Owned by Sefton Council

The Council has a varied portfolio of property held under its Corporate portfolio. This includes land and property vested to the operational functions such as Education, Leisure Services and Social Services.

Land in Council stewardship includes schools, public and administrative buildings, potential development sites, public parks, playing fields/public open space, allotments, depots and other plots of land.

Information relating to such land and property is held by the Council in various electronic formats including Geographical Information Systems.

Within its overall strategic approach to the inspection of the Borough, the Council will consider the likelihood of current and former land holdings being contaminated; details of the Council's approach in this respect are set out in Section 5.2.

2.7 Current Land Use Characteristics

In land use terms, just over half of the Borough area is in urban use (housing, industry, roads, open spaces and other urban uses). 44% of the total land area is farmland over half of which is land of the highest quality, whilst the remainder includes dunes, rough grassland and woodland. Much of this land is in the coastal

area and has considerable ecological significance both on a local level, for Sefton and Merseyside, and at national and international levels. This is reflected in extensive protective designations.

2.8 Protected Locations

Major habitats in Sefton include duneland, woodland, wetlands, salt marshes, intertidal foreshores, farmland and heathland. Most of the coastal zone is of high nature conservation value and receives protection under European and national legislation. Away from the coastal areas are many sites and features of importance for nature which form parts of ecological networks. There are the following protected locations in Sefton:

- 1 International site (and one proposed International site)
- 2 European sites (and 1 proposed European site) wholly or partly within Sefton. Special Protection Areas (SPA), Special Areas of Conservation (SAC) are also designated as SSSIs.
- 4 Sites of Special Scientific Interest (SSSI) wholly or partly within Sefton.
- 3 National Nature Reserves (NNR).
- 3 Local Nature Reserves (LNR) and 9 proposed LNRs.
- 56 Sites of Local Wildlife Sites and 11 Local Geological Sites (LGS).

2.9 Key Property Types

The Borough has a rich heritage of archaeological sites, there are:

- 13 Scheduled Ancient Monuments
- over 800 Listed Buildings
- 25 Designated Conservation Areas
- 4 Parks and Gardens of special historic interest on the English Heritage Register

Archaeological information for the borough is held on the Merseyside Sites and Monuments Record which is updated as new information comes to light.

2.10 Known Information on Contamination

The Council already holds some information on contamination in the District. The following sources of information have been investigated and existing information catalogued. Specific details have been recorded on the Contaminated Land Information Management System. This allows efficient access to appropriate information during the various stages of the implementation of this Inspection Strategy.

- Site investigation reports, primarily submitted as part of the development control process. Planning records form a valuable resource. In addition, investigations

have taken place as a result of programmes undertaken by or on behalf of the Council.

- Waste Management Sites
- IPC and IPPC Processes
- Information Provided by the Environment Agency and other regulatory bodies
- Locations of Petrol Station Sites
- Metals Survey
- Land Regeneration Database

2.11 Current and Past Industrial History

2.11.1 General Overview

The following provides a brief overview of the industrial history of the Borough and in particular describes the nature and scale of activities which may have caused land contamination. Given the great diversity of industries which have operated at various locations in the Borough it is not possible to discuss in detail all industries known to have been established; this section aims to identify the main influences in terms of the potential legacy of land contamination.

During the preparation of this strategy, a number of valuable sources of information have been identified. This information will be further utilised in the more detailed consideration of individual areas.

Sefton is a modern administrative unit dating from 1974. It comprises the former County Boroughs of Bootle and Southport, the former Borough of Crosby, the former Urban Districts of Formby and Litherland and part of the District of West Lancashire. It also includes the parishes of Aintree, Thornton, Altcar-in-Merseyside, Ince Blundell, Lydiate, Maghull, Melling and Sefton.

Sefton is diverse in character, made up of a number of individual communities each with its own identity. These include Bootle, Seaforth and Litherland in the south where the Port of Liverpool and most of the Borough's industry is located, the resort of Southport in the north and the residential areas of Formby, Crosby, Maghull and surrounding parishes.

The most intensive industrial developments have taken place in the southern part of the Borough in the old industrial heartland of Bootle, Seaforth and Litherland. The growth of Liverpool brought new development to the area beginning in the late 18th

century. The Liverpool docks gradually extended north towards Bootle and Seaforth which today have the main docks of Merseyside, including the Royal Seaforth Dock and Container Base.

The growth of southern Sefton was based on the docks, dock associated industries and the diversity of other industries which developed, particularly along the Leeds and Liverpool Canal corridor and the expanding railway network.

The area was characterised by the wide diversity of industrial activities that have taken place. At its peak Bootle was home to at least 75 different types of industries including: brick making, foundries, cable manufacturers, tanning, timber yards, food manufacturers, gas production, ship repairers and tin smelting.

Wastes from Liverpool, including street sweepings, vegetable refuse, ashes and other household wastes and due to the lack of sufficient sewers, night soil, were transported by canal to the agricultural areas including Lydiate, Maghull and Melling where they were used as a fertiliser.

The Bootle area still contains the major concentrations of economic activity in the Borough; there are many dock associated industries and new industrial estates have developed. Bootle has also become important for office development and houses government departments and banking computer centres.

A wide range of industrial activities including tanning, engineering and the manufacture of domestic and food products also characterised the centres of Aintree, Litherland and Fazakerley.

In common with Bootle, Litherland developed rapidly during the nineteenth century. Industries which developed particularly along the canal corridor included tanneries, asphalt works, tar distillery, tin smelters and sandstone quarries. During the 1914 – 1918 war, a TNT Factory was also established at Litherland.

During the 1930s, industrial estates were beginning to be developed, designed to introduce new manufacturing industries to the region. The industrial estates were intended to promote more diversification and only really began to have an important impact after World War II.

In 1936 Liverpool City Council were given powers to buy land at the then outskirts of the city for industrial estates and work started on 300 acres at Fazakerley (renamed Aintree in 1952). By 1939 factories were operational at Aintree; a particular aim was to develop light industries and food processing.

The outbreak of war in 1939 interrupted these developments but wartime production was deliberately directed in such a way as to promote post-war development.

The Aintree Estate was stimulated by war production especially by the building of a Royal Ordnance Factory. After the war the estate was extended from Fazakerley and Aintree to include Netherton where in the early 1950s a factory producing a range of electrical goods was developed.

Other industries established on the estate included artificial silk manufacture, the making of tin canisters and drums and a factory making minerals and cordials.

The building of the Liverpool-Southport railway in 1850 affected the whole coastal region leading to the early establishment of Crosby, Formby and Southport as residential centres.

The rapid expansion of such areas as parts of Formby, Crosby, Hightown, Aintree, Maghull and Lydiate between 1951 and 1981 was associated with their increasing role as commuter settlements. Improvements to road and rail links in the late 1970s also contributed to these patterns of growth.

Southport has a long history as a major west coast seaside resort. It has a significant commuter population and is a preferred location for retirement.

Whilst primarily a resort and retail centre, industrial activities have and continue to be undertaken which have the potential to have caused contamination.

Reference to historical maps dating back to the 1845 First Edition Ordnance Survey maps indicates the presence of a range of industries including: gas works; electricity generation works; extensive areas of railway land (track and ancillary land); coal yards, timber yard, saw mill, fireworks factory, sewage works and laundry.

Engineering has played an important role in the Southport area. Activities undertaken include the manufacture of motor cars and parts, motor bikes, coaches and lorries and manufacture for military purposes. Light engineering activities were often undertaken on backland sites.

The original gasworks in Southport was situated on Eastbank Street. Gas manufacture at these works was discontinued in 1878 and subsequently concentrated at the Crowlands Works towards the eastern boundary of the Borough. The Electricity Generating Station also at Crowlands commenced in 1894. Both electricity and gas generation continue to be undertaken in this location.

The Eclipse Fireworks Factory appears on the Ordnance Survey map of 1908, situated at the northern extent of the Borough to the north east of the gasworks and electricity works at Crowland Street.

In addition, the deposition of a variety of waste materials has taken place in a number of locations, for example infilling of excavations, land reclamation works, pre-licensing landfill sites, road construction and sea defences.

More recently industrial estates have been developed at a number of locations within Southport.

2.11.2 Summary of Potential Issues

As noted previously, Sefton is diverse in character, the potential for contamination and its nature and extent varying significantly across the Borough. The most significant influences in terms of the legacy of potential contamination are considered to be:

- Industries associated with the docks chiefly made up of industries which use a great bulk of raw materials including flour milling, timber, sugar refining, warehouses, ship building and repairing. Intermingled with these, were a huge diversity of factories producing a vast range of products;

- Industries developed along the Leeds and Liverpool canal corridor from the late eighteenth, nineteenth and early twentieth centuries, particularly in Bootle and Litherland. These include tanneries, tar distilleries, gas works, alkali works and smelting works;

- Industries developed on pre- and post- war industrial estates, particularly at Aintree and Netherton including artificial silk manufacture, light engineering, food and drink processing industries, electrical goods manufacture;

- Smaller scale industrial development, mainly post war including parts of Bootle, Southport, Birkdale, Maghull and Formby;

- The deposition of various waste materials which occurred throughout the Borough, these include,

    - Waste Disposal Sites including major sites at Town Lane and Foul Lane, Southport; Sefton Meadows; Rimrose Valley and smaller sites elsewhere within the Borough;
    - large areas of marsh land have been reclaimed using a variety of materials including waste, for example parts of Bootle;
    - post-war tipping of denatured tobacco waste on several abandoned asparagus fields at Formby Point;
    - infilling of sandstone quarries for example Maghull, Melling and parts of Bootle;
    - infilling of sand winning excavations in Southport and Formby;
    - infilling of areas of clay extraction for construction, canal building, tile and brick manufacture;
    - infilling of river channels, for example River Alt, during straightening works;
    - prior to the formal regulation of waste disposal industrial waste tended to be disposed of within and around the curtilage of factory premises;

- Tin slag from tin smelting in Bootle and Litherland has historically been used widely across the Borough for infill, including infilling of bomb craters after the war and extensively within Crosby sea defences. It was also used as hardcore for development sites. Tin smelting was for many years an industry concentrated in Cornwall. When the major part of the raw materials started to be imported, operations were transferred to Bootle and from 1910 full advantage was taken of the port. From the 1930s onwards tin smelting was concentrated in Bootle and Litherland and in the late 1950s the tin smelter at Bootle was the largest in the world;

- Former railway land, particularly but not exclusively, in the south of the Borough and parts of Southport. Redundant cuttings provided opportunity for landfill and as with the canals a range of industries were attracted to trackside locations;

Sefton currently has little heavy industry and there is a predominance of activities in the public sector and in small and medium sized companies, with concentrations in food, tourism, port related activity, retail, information and communication technology and finance. Over half of the area of Sefton is agricultural land, a large proportion of which has a very high productive capacity, yielding high value horticultural crops. The health sector is also a major employer in the Borough.

2.12 Broad Geological and Hydrogeological Characteristics

The geology of the Borough is shown on the following geological maps:

- Geological Survey of Great Britain (England and Wales) Southport Sheet 74, 1:50 000 Solid and Drift Edition, 1989;
- Geological Survey of Great Britain (England and Wales) Formby Sheet 83, 1:50 000 Solid Edition, 1976;
- Geological Survey of Great Britain (England and Wales) Formby Sheet 83, 1:50 000 Drift Edition, 1974;

2.12.1 Solid Geology

Permian and Triassic Strata

The solid rocks exposed or which lie immediately beneath the superficial deposits are all of Triassic age.

Exploratory work in connection with the occurrence of oil in the Formby area encountered older rocks after passing through a substantial thickness of Triassic mudstones and sandstones.

Permian Rocks

The Permian strata underlying the Triassic Sandstone consist of the Manchester Marl, which is a mudstone unit, overlying the Collyhurst Sandstone. Beneath the Permian Strata are the Carboniferous Strata.

Triassic Rocks

Permian strata are succeeded by sandstones of the Sherwood Sandstone Group which are in turn overlain by rocks of the Mercia Mudstone Group.

With the exception of a limited number of small isolated exposures Triassic rocks are seldom seen at the surface due to the significant thickness of glacial and later deposits.

The Sherwood Sandstone Group

Rocks of the Sherwood Sandstone Group comprise the entire Borough area.

The Chester Pebble Beds overlain by the Wilmslow Sandstones together form the lowest of the Triassic strata (formerly known as Bunter Sandstone). They consist of sandstones which, in the case of the Pebble Beds, are medium to coarse grained with rounded pebble inclusions. These strata underlie the south and south east of the Borough.

The highest member of the Sherwood Sandstone (overlying the Wilmslow Sandstone) is the Helsby Sandstone (formerly known as the Keuper Sandstone). The Helsby Sandstone is more resistant than the underlying Sherwood Sandstone and as such has tended to be less eroded. The Helsby Sandstones underlie much of the south east of the Borough extending northwards from Litherland and Netherton to Blundellsands, Crosby and Ince Blundell. Isolated outcrops occur at Great Crosby, Little Crosby, Thornton and Ince Blundell where they give rise to low rounded features.

The Mercia Mudstone Group

Rocks of the Mercia Mudstone Group underlie the low lying plain extending northwards from Crosby to beyond the Ribble Estuary at the north of the Borough.

The group comprises a succession of predominantly fine-grained red mudstones, they are however, shown undifferentiated in the area to the south of the Ribble Estuary due to insufficient data.

Geological Structure

The regional dip of the Triassic rocks ranges between north and north west, the inclination varying between 10° and the horizontal. The Triassic rocks are intersected by a series of dip-faults of which the largest and most important is the Croxteth Fault.

2.12.2 Superficial Geology

With the exception of a few areas of outcrop, the Triassic bedrock is overlain by a thick, complex sequence of glacial and later deposits.

Glacial Till

The oldest known and most widespread deposits are, red and grey sandy clays with variable proportions of gravel (boulder clay) laid down as lodgement till beneath the late Devensian ice sheet. It appears that the Glacial drift filled up all the low lying areas in the pre-glacial topography.

Overlying the lodgement till is a complex of deglaciation deposits including outwash sand and gravel, laminated clay and silt, flow till and melt out till. These deposits are vertically and laterally variable. The glacial sequence to the south of the Ribble Estuary is however shown as undifferentiated on the geological map.

Considerable depths of glacial drift have been noted in the area. In a well boring at Aintree the solid rock floor was encountered at approximately 44 metres below sea level. Well borings at Gladstone Branch Dock and Linacre Road encountered 27 metres and 24 metres of drift respectively.

Late Glacial Deposits

Deposits of older blown sand including Shirdley Hill Sand began to form towards the end of the Devensian. Boreholes indicate that at the present time, the deposits occur as lenses beneath younger deposits.

Post-Glacial and Recent Deposits

Post-Glacial Deposits comprise marine and aeolian sands, estuarine and marine silty clays, peat and freshwater alluvium. The total thickness of post-glacial deposits often exceeds 15 metres.

Natural exposures of post-Glacial deposits are infrequent. The Glacial deposits are normally succeeded by Shirdley Hill Sand above which lies the Downholland Silt; almost everywhere the latter is covered by a considerable thickness of peat which is exposed occasionally along the coast as a Submerged Forest bed. Freshwater and estuarine alluvium and recent blown sand may rest upon any of the other deposits.

Shirdley Hill Sand

The oldest post-Glacial deposit in the area is the Shirdley Hill Sand. This deposit occupies considerable areas to the south of the Ribble and rests abruptly on boulder clay or upon the Triassic rocks.

Shirdley Hill Sand varies considerably in thickness. It is known in places to be at least 3 metres thick, but frequently less than 1 metre of sand is present between the soil and the boulder clay.

Downholland Silt

Downholland Silt is the most widespread of the early alluvial deposits. Typically it consists of silty clays, pale blue in colour when fresh, but grey, cream or brown when weathered.

Peat

An extensive spread of peat marks the upper limit of the marine and estuarine alluvium. It gives rise to an almost flat belt of ground on the inland side of the blown sand, beneath which it usually passes on its western side to reappear on parts of the foreshore.

Generally the peat rests abruptly on the slightly irregular surface of the Downholland Silt. In the area south of the Ribble, however, the silt dies out in an easterly direction, so that the peat then overlies Shirdley Hill Sand.

Limited areas have younger thin, marine and estuarine deposits overlying the peat bed; these were presumably laid down in the lower parts of the depositional basin, and mark a limited inundation across the peat surface. Elsewhere, extensive peat deposits are present at the surface or overlain by recent spreads of Blown Sand.

The peat averages a thickness of about 2 metres, but in a few places exceeds 6 metres. The greatest thickness of peat in the borough occurs in the lower part of the Rimrose Brook valley.

A particular issue relating to peat is its propensity to give rise to gas which can be an additional consideration in contaminated land site investigations and assessments.

Alluvium

Three types of alluvium are present; freshwater alluvium, estuarine alluvium and marine alluvium.

Freshwater alluvium, consisting of brown silts and sands with grey sandy clays, is mainly developed in the valley of the River Alt and covers a large area east and south of Formby; it passes gradually into estuarine alluvium in the tidal part of the river.

A narrow flat of freshwater alluvium borders the upper reaches of the Rimrose Brook to the west of Ford and Litherland.

The Downholland silt is mainly estuarine alluvium, but is older than the peat and has a distinctive character, it is thus treated separately.

Considerable areas of estuarine alluvium exist in the neighbourhood of Banks and Crossens on the south side of the Ribble. The eastern part of Southport is largely built on estuarine alluvium which overlies peat. A considerable area of alluvium also lies to the north east of the town where it merges with the saltings of the Ribble Estuary.

The marine alluvium on the tidal flats is sandy except in the vicinity of the estuaries of the Ribble and Mersey, where silt and mud predominate.

Blown Sand

A belt of sand dunes fringes much of the coastline and, except where landscaped or built up or stabilised by vegetation, these remain active to the present day.

Other Recent Deposits

Other recent deposits of less widespread occurrence are gravel ridges marking the position of Storm Beaches, the cumulative products of relatively rare and violent marine activity. These merge seaward with Modern Beach Deposits and Tidal Flats which extend out into the Ribble Estuary.

2.12.3 Local Hydrogeology and Use of Groundwater Resources

A number of water bearing units occur within the area giving rise to a range of aquifers within both the bedrock and the superficial deposits. Generally, across north Merseyside, groundwater levels are rising with implications for potential pollution.

Aquifer designations have recently been changed to be more consistent with the terminology used within the Water Framework Directive. The new aquifer designations are: Principal Aquifer, Secondary Aquifer and Unproductive Strata.

Principal Aquifers are geological strata that exhibit high intergranular and/or fracture permeability. They usually provide a high level of water storage. They may support water supply and/or river base flow on a strategic scale. Principal Aquifers equate in most cases to aquifers previously designated as Major Aquifer.

Secondary Aquifers include a wide range of geological strata with a correspondingly wide range of permeability and storage. Secondary aquifers are subdivided into two:

- Secondary A – permeable strata capable of supporting water supplies at a local rather than strategic scale and in some cases forming an important source of base flow to rivers. These generally equate to aquifers formerly classed as Minor Aquifers.

- Secondary B – predominantly lower permeability strata which may in part have the ability to store and yield limited amounts of groundwater by virtue of localized features. These are generally the water bearing parts of the former Non-Aquifers.

Unproductive Strata are geological strata with low permeability that have negligible significance for water supply or river base flow.

At the time of writing of this third review of the Strategy, new aquifer designation datasets were unavailable. Details of the previous aquifer designations are summarised below for general information. In conducting any site specific investigation, the Council will use the most current information available.

Major Aquifers

The major aquifer within the Borough is the Permo-Triassic Sandstone (including the Sherwood Sandstone Group). The aquifer unit outcrops in the South of the Borough to the south of the area around Ince Blundell and Great Crosby. The sandstone forms part of a much larger outcrop comprising the Liverpool and Ormskirk aquifer unit.

Groundwater within the Liverpool and Ormskirk aquifer unit is heavily exploited for both public and industrial use with major abstractions located within and to the east of Sefton boundary, at Melling and near Lydiate. These major abstractions have designated Source Protection Zones[9] around them, which cover a substantial area of the sandstone outcrop in the Borough. Historically, over abstraction resulted in falling groundwater levels and, although there has been significant reduction in abstraction, with associated recovery, over the last two decades, new applications for abstractions are understood to be considered on a case by case basis. The groundwater also supports numerous small-scale licensed and unlicensed abstractions, provides baseflow to the River Alt and discharges to the Mersey estuary.

[9] Source Protection Zones provide additional protection for water sources. They are designated zones around public water supply abstractions and other sensitive receptors that signal there are particular risks to the groundwater source they protect. The zones are periodically reviewed to ensure they are kept up to date as licence conditions change or knowledge of local hydrogeology improves.

The sandstone is generally covered with a complex series of drift deposits, which are dominated by glacial boulder clay. Such low permeability drift will inhibit aquifer recharge and thereby reduce the vulnerability of the groundwater to pollution from surface activities. However, where the drift cover is thin and/or sandy, it should be regarded as capable of transmitting water to the aquifer beneath. In the lower lying area of the Alt Valley, the aquifer is sealed by low permeability drift deposits above and the groundwater levels are artesian. In such circumstances, the upward pressure of groundwater in the major aquifer will prevent the downward movement of superficial groundwaters.

Groundwater quality in the aquifer is generally high although past heavy industrial abstraction close to the Mersey has resulted in localised areas of saline intrusion to the south of the Borough.

Minor Aquifers

Minor aquifers within the Borough boundaries are confined to the more permeable unconsolidated drift (superficial) deposits; there are no solid rock minor aquifers in the Borough.

Although low permeability glacial boulder clay dominates, a variety of permeable drift deposits are present in the area. These can be classified as minor aquifers in their own right and have some potential for localised exploitation. The most extensive is wind blown sand, which occurs along almost the entire coast and further inland to the south and east of Ince Blundell. This deposit covers a large proportion of the non-aquifer outcrop in Sefton Borough and groundwater within it is exploited for spray irrigation. Other permeable drift deposits include alluvium along the coast around north Southport and along the River Alt. Groundwater in the drift deposits also supports peatland in the south, along the eastern boundary and to the west of Ince Blundell. Groundwater levels in the drift deposits will generally be close to ground level with flow ultimately towards surface waters. Groundwater in the drift deposits is variable and may be highly susceptible to surface pollution.

Non-aquifers

Non-aquifers in the Borough comprise the Triassic Mercia Mudstone Group. The Mercia Mudstone Group underlies a large proportion of the Borough, north of the major aquifer outcrop, to the north of Great Crosby and Ince Blundell.

The Mercia Mudstone Group contain siltstone layers, solution breccias (formed by dissolution of slat deposits), shallow fractured/weathered zones, which allow for some limited groundwater movement and provide some limited groundwater storage.

Where low permeability strata such as glacial boulder clays are thickly developed and laterally extensive they may be considered as non-aquifers.

2.13 Surface Waters

The main river in the south and central area of the Borough is the River Alt. This rises in Huyton in the Metropolitan Borough of Knowsley and flows in a north westerly direction twenty-eight kilometres to its tidal limit at Hightown, in Sefton. The catchment area of the River Alt, in addition to Sefton, includes Knowsley and North Liverpool. The estuaries of the Alt and the Crossens form part of an area designated for its conservation importance nationally and internationally.

In Sefton, the tributaries of the River Alt include Downholland Brook, Maghull Brook, Dover's Brook, Hunt's Brook and Fine Jane's Brook.

In the upper reaches of its catchment the River Alt drains highly urbanised and industrialised areas and is canalised in places along its length. In the lower reaches, between Maghull and Altmouth, the river is contained by artificial embankments and flows through low lying rural areas, where agriculture is the dominant activity. This area is drained by a large network of ditches which are linked to the main watercourses via land drainage and pumping stations. In the past the catchment was entirely pumped, however in recent years, the pumping regime has been reduced.

At the north of the Borough the main water courses comprise: The Sluice which rises in the District of West Lancashire; Back Drain which drains the central area of mosslands to the north and east of Southport and Three Pools Waterway which rises in the south east corner of Ormskirk and flows north eastwards skirting Southport.

The Alt/Crossens catchment has historically had problems with water quality, owing to nutrient enrichment and agro-chemical input from agricultural activities, and sediment input contaminated with heavy metals from the area's industrial legacy. However, it is showing signs of improvement[10].

The River Basin Management Plan (RBMP) identifies a number of specific actions to improve water bodies within the Alt/Crossens catchment, these include researching and remediating historically contaminated sediments (from the industrial legacy of the catchment) to prevent leachate contaminating rivers..

There are three designated bathing water beaches in the River Alt and Crossens area. These are at Formby, Ainsdale and Southport. The Environment Agency is responsible for sampling and monitoring bathing waters to enable compliance with the EC Bathing Waters Directive. The Environment Agency sample the quality of the bathing waters approximately once per week during the bathing season (May to September). Sample data to date for 2010 showed the quality of the bathing water to be excellent[11].

[10] Environment Agency (December 2009) River Basin Management Plan North West River Basin District

[11] http://evidence.environment-agency.gov.uk/Bathingwaters

At the south of the Borough the main watercourse is Rimrose Brook which runs approximately north to south between Great Crosby and Litherland, north of Bootle.

The Leeds and Liverpool Canal crosses the southern area of the Borough; water quality in the stretches of canal within the Borough is poor.

2.14 Natural Contamination

The potential for presence of natural contamination within the Borough has not previously been studied in detail and such information will be obtained from appropriate sources including the British Geological Survey, Soil Survey and Land Research Group and Imperial College, London.

The main potential area of concern with respect to natural sources of contamination is natural methane released from peat deposits which occur extensively within the Borough.

Reference to The British Geological Society, Natural Environmental Radioactivity Survey, Radon Potential Based on Solid and Drift Geology, Liverpool Bay, Scale 1: 250, 000 (1998) indicates that there is a low radon potential over the entire Borough area.

2.15 Redevelopment History and Controls

2.15.1 Redevelopment History

The decline in the traditional manufacturing base of parts of the Borough and the change in the types of activities undertaken as outlined in Section 2.11, has resulted in the redevelopment of areas of land which have previously been subject to potentially contaminative industrial or commercial usage. A proportion of the redevelopment took place prior to the formal consideration of contaminated land within the planning process.

Since the early 1990s the majority of redevelopment schemes have been subject to an assessment for the potential impact of contamination within the development process.

Prior to this time, developments are unlikely to have been formally assessed for risks associated with potential contamination; this will be taken into consideration in the evaluation of relative priorities for inspection.

2.15.2 Controls

When determining planning applications where contaminated land is suspected, the Council will have regard to the advice set out in Planning Policy Statement 23:

Planning and Pollution Control (PPS23)[12] and its accompanying Annex 2: Development on Land Affected by Contamination, together with other relevant policies, acknowledged standards and regulations. Further details on PPS 23 and the interface between planning guidance and the Part 2A regime is set out in Section 5.6.1.

The Council has a statutory duty to determine applications in accordance with the UDP. Policies EP1 (Managing Environmental Risk), EP3 (Development of Contaminated Land) and EP4 (Development on or near to Landfill Sites) are particularly relevant.

Policy EP1 Managing Environmental Risk

Development proposals should demonstrate that environmental risks have been evaluated and appropriate measures have been taken to minimize the risks of harm or damage to people, property and the natural environment from:

(a) pollution of land, surface water, ground water and the air;
(b) previously contaminated land;
(c) hazardous substances;
(d) noise, vibration and light nuisance;
(e) flooding.

[12] Planning Policy Statement 23 : Planning and Pollution Control (PPS 23) (November 2004)

Policy EP3 Development of Contaminated Land

1. *Where there is evidence that a site may be affected by contamination, proposals shall be accompanied by a site investigation report and a schedule of remedial measures.*

2. *Development will not be permitted where the remedial measures will not deal effectively with the level of contamination and will place the occupiers of the proposed development and neighboring land uses at risk.*

3. *Where proposals are acceptable in principle, planning permission will be granted subject to conditions requiring:*
   (a)where appropriate, a full site investigation and assessment to be carried out before the development begins; and

   (b)the development to incorporate all the remedial measures found to be necessary.

4. *Where remedial measures are required to deal effectively with contamination, a validation report must be submitted to verify that remedial works have been carried out.*

5. *Where appropriate, ecological surveys must accompany applications that involve the development of contaminated land.*

Policy EP4 Development on or Near to Landfill Sites

1. *Development proposals on land liable to be affected by the migration of gas or other harmful substances from a nearby landfill site will only be permitted:*

(a) *if proposals are accompanied by a site investigation report containing information on the nature and extent of landfill gas and any other harmful mobile substances;*
(b) *if proposals are accompanied by a schedule of remedial measures;*
(c) *if suitable precautions are taken to prevent migrating gas or other harmful substances causing a hazard either during the course of development or during the subsequent use of the site; and*
(d) *where appropriate, adequate provision has been made for the continued monitoring of gas on site.*

Procedures

Planning conditions or legal agreements will be used to ensure that appropriate measures are incorporated into proposals to control the migration of gas and other mobile substances.

In dealing with planning applications on sites where it is known or suspected that land is affected by contamination and/or the proposed development is sensitive to contamination (for example, residential development, schools and allotments) a minimum of a desk study and site reconnaissance (Phase 1 Report) will be required with the planning application. The Phase 1 Report will assist in determining the need for and scope of further investigations, issues that may require remediation and whether remediation can be secured by means of planning conditions requiring the submission and implementation of a contaminated land investigation, remediation scheme and validation as appropriate.

Where the desk study and site reconnaissance does not provide sufficient information to assess the risks and appraise remediation options, further investigations will be required before the application is determined. A site investigation will also be required prior to determination if a proposed development will introduce a particularly sensitive land use on a potentially high risk site.

2.16 Action already taken to deal with Land Contamination

Much of the action taken to deal with land contamination has been development led, through the planning and development control process.

In addition to land remediated though the above process, Sefton has been very active in the field of land reclamation, particularly over the last fifteen to twenty years and has achieved much in its aim of removing the blight of derelict land. Inevitably such land reclamation activities have also had a significant impact on the remediation of contaminated land.

Because of the history associated with development in Sefton it is known that there is an extensive contamination problem. Despite having reclaimed in excess of 140 hectares of land over the past decade it is acknowledged that there is now much land that may eventually require further treatment as a result of redefining of contamination.

Section 215 of the Town and Country Planning Act (1990) provides local authorities with discretionary powers to require landowners to clean up 'land adversely affecting the amenity of the neighbourhood'. Local authorities also have powers to clean up the land themselves under s215 and recover the costs. Sefton has an active programme of land clean up utilising such powers; whilst works have not been targeted directly at dealing with land contamination, some sites have been remediated through use of this power.

2.16.1 Housing Market Renewal (HMR) Initiative

The HMR initiative has identified a number of strategic sites, predominantly in the south of the Borough, as redevelopment sites for housing. Generally speaking, the identified sites are also considered as priority sites within the inspection process.

The HMR process is by necessity, fast moving in order to maximize the potential to utilise various funding mechanisms. Therefore, the sites are being comprehensively assessed in much faster timescales than either the Inspection process or the planning process would normally facilitate. This is achieved through close partnership with internal departments, independent consultants and the Environment Agency. The advantages are that some of the very worst sites are being dealt with in acceptable timescales within the context of the strategy.

3.0 OVERALL AIMS OF THE STRATEGY

3.1 Aims of the Strategy

In developing the overall aims of the Contaminated Land Inspection Strategy, the Council has been guided by the requirements of the statutory guidance and the local characteristics of the Borough.

Through implementation of the Strategy the Council's aims are:

- to adopt a strategic risk based approach to the periodic inspection of the Borough for the purposes of identifying land which presents unacceptable risks to human health or the wider environment. Further, that such inspections are undertaken in an appropriate order, in compliance with the statutory guidance and in accordance with good practice;

- to ensure that available resources are effectively targeted;

- to ensure that all those affected by, and involved in, the inspection process have the same clear understanding of the rationale for inspection, how this will be carried out and over what timescale;

- by effective communication of the authority's intentions, to encourage voluntary action by polluters or other appropriate persons;

- to promote regeneration, improvement of the environment and protection of the Green Belt through effective links with wider Council and Regional policies;

- Throughout the implementation of the inspection strategy, priority will be given to the identification of unacceptable risks to human health. Risks to other receptors will be assessed in consultation with internal departments and external organisations as appropriate.

3.2 Objectives and Milestones

Within the broad aims of the Strategy, the Council has identified a number of specific objectives which it aims to undertake within certain timescales. The identification of definitive timescales for the entire inspection process is not possible at this stage as it will be highly dependent on the number and type of cases identified. When the Inspection Strategy was first produced provisional targets, actions and outputs together with possible external and internal partners were identified for the following objectives (see Table 3.1).

- Development of the Information Management System
- Collection of information on sources, pathways and receptors

- Establishment of areas of current and former Council owned/leased land
- Establishment of efficient liaison and information exchange mechanisms

These objectives have been met subject to any necessary updating as new information is identified.

Table 3.1 identifies ongoing work areas, and where possible, anticipated timescales.

Sites where urgent action is required may be identified at any stage during the implementation of the inspection strategy and therefore detailed inspections may be carried out on some areas of land before the preliminary inspection of the Borough is complete. The need to take action on such sites may influence the rate of progress in the overall programme.

Within the implementation of this strategy to achieve the Council's overall aims, there is a need for a flexible approach, addressing the sites which present the most serious risks as quickly as possible whilst balancing the requirement to assess the entire Borough area with available resources.

Table 3.1 Objectives and Timescales

Objective	Provisional Timescale/Target	Action	Output/Record	Possible Consultation (as required)
Development of Information Management System (IMS) • **Input Module** • **Output Module** • **Evaluation Module and Integration** • **Database Module**	• Complete • Complete • Complete • Complete • Complete	• Completion of necessary functionality of IMS • Subject to further development as necessary	• IMS with required functionality	• MIS • CLOG
Collection of appropriate Information on Sources, Pathways and Receptors	• Ongoing • Core/essential dataset list agreed pan-Merseyside • Data capture (potentially contaminative land uses) from pre-war maps complete • Data capture from post war maps complete • Data capture and collection of remaining core datasets is complete to date.	• Collect appropriate information on sources, pathways and receptors etc • see Information Collection Procedure Section 5.3. • Subject to on-going review.	• Information collated and stored on the IMS • Cross reference to information which cannot be stored on the IMS	• Council Departments • Statutory Bodies • Others

Objective	Provisional Timescale/Target	Action	Output/Record	Consultation
Establishment of areas of land currently/previously owned or occupied by the Council	• Complete	• Collate information on land currently or previously owned or occupied by the Council • Information is held by The Property Management Group (Capita Symonds) accessed on a site specific basis. • See Procedures regarding Local Authority Land, Section 4.2.4 and 5.2	• Information collated and stored on the IMS • Cross reference to information which cannot be stored on the IMS	• Council Departments • Current owners, occupiers and other interested parties
Establishment of efficient liaison and information exchange mechanisms (i) Internal (ii) External	• Established and on-going	• Develop and implement procedures for liaison and information exchange – see General Liaison and Communication Strategies Section 6.0	• Procedures for liaison and information exchange are in place.	• Statutory Bodies • Council Departments • Owners • Occupiers • Other Interested Parties • Wider community
Evaluation of information – initial screen	• Complete	• See Information Evaluation Procedures Section 5.5 • Includes land currently or previously owned/occupied by the Borough Council	• Initial site prioritisation (High, Medium and Low Priority) • Record on IMS and related files • Identification of possible Special Sites	• MIS • Environment Agency • Other statutory bodies

Objective	Provisional Timescale/Target	Action	Output/Record	Consultation
Further Evaluation to sub-prioritise groupings from initial screen – High, Medium and Low Priority Sites	• Complete	• See Information Evaluation Procedures Section 5.5 • Includes land currently or previously owned/occupied by the Borough Council	• Relative priorities of sites in initial High, Medium (and Low) groupings are kept under review • May result in revision of priority ranking for some sites • Record on IMS and related files • Identification of possible Special Sites	• Statutory Bodies • Council Departments • Owners • Occupiers • Other Interested Parties • External contractors
Programme Detailed Inspections	• A rolling programme commenced in 2006. to include an Annual Review	See Programme for Inspection Section 7.0	• Prioritised programme of sites which require further detailed inspection	• Statutory Bodies • Council Departments • Owners • Occupiers • Other Interested Parties

Objective	Provisional Timescale/Target	Action	Output/Record	Consultation
Programme Detailed Inspections continued	• For sites where urgent action is needed- immediate and on-going.	• See Programme for Inspection Section 7.0	• Justifications • Inspection of Special Sites conducted by Environment Agency	• Statutory Bodies • Council Departments • Owners • Occupiers • Other Interested Parties
Commence Detailed Inspections	• A rolling programme commenced in 2006 with Annual Review • For sites where urgent action is needed- immediate and on-going. • Inspection of urgent sites may be required at any time in the process	• See Programme for Inspection Section 7.0	• Determination whether site is contaminated land or not • Appropriate details on file/IMS • Appropriate details on Register	• Statutory Bodies • Council Departments • Owners • Occupiers • Other Interested Parties • External contractors

4.0 PRIORITY ACTIONS AND TIMESCALES

4.1 Priorities

Within the overall strategic approach to the inspection of the Borough, the Council has identified the following priorities.

- Dealing with land where there is any verifiable report of significant harm or pollution of controlled waters;
- Identification of unacceptable risks to human health;
- Assessment of sites identified by other regulatory bodies;
- Assessment of land currently or formerly owned or occupied by the Borough Council;
- Assessment of land allocated for sensitive uses within the Unitary Development Plan (UDP)/ LDF.

4.2 Timescales

As stated previously, it is difficult to formulate a definitive timetable for the overall inspection process; the timescales, where stated, should be considered broad estimates. Progress with strategy implementation at the time of the third review of the strategy is summarised within the Executive Summary. Further details on the review process are presented in Section 8.0.

4.2.1 Sites causing significant harm or pollution of controlled waters

Sites which are causing or pose an imminent risk of harm or water pollution may be identified at any point in the inspection process. Such sites will be dealt with as a priority.

4.2.2 Identification of Risks to Human Health

Specific timescales are yet to be defined. Sites causing or which pose an imminent risk of harm will be dealt with as identified in 4.2.1 above.

4.2.3 Assessment of sites identified by other regulatory bodies

Specific timescales are yet to be defined. As directed by the statutory guidance, the activities of and information gathered by other regulatory bodies will be taken into account when considering relative priorities.

4.2.4 Assessment of land in the currently or formerly owned or occupied by the Borough Council

One of the key underlying principles of the strategic approach is that sites should be dealt with in an order appropriate to the apparent seriousness of the potential harm or pollution.

The Council recognises that there may be sites within the Borough for which it may have particular responsibilities, through current or former ownership. The Council will seek to identify such land as soon as practicable. Such land will be dealt with in order of priority relative to all potential sites in the Borough.

4.2.5 Assessment of land identified for specific uses within the UDP/LDF

As the planning authority for the Borough, the Council must produce a Unitary Development Plan. The UDP is the statement of the Council's planning objectives and policies that will shape future land use within the Borough; the document includes specification of permitted land use for particular areas of land. It is considered logical that the Council consider such areas of land as a priority within the general inspection framework.

Timescales are yet to be determined but will be integrated with the UDP review process.

4.3 Measuring Progress

Best Value Performance Indicators BV216a and BV216b have been discontinued due to differing interpretation of guidance by local authorities which meant that it was not possible to compare performance between authorities.

Performance targets for delivery of Part 2A work are set within the Environmental & Technical Services Department Business Plan; performance against the target is monitored on a quarterly basis.

5.0 PROCEDURES

5.1 Internal Management arrangements for inspection and identification

The purpose of this section is to outline responsibilities within the Council for inspection and identification.

A corporate approach is fundamental to the successful implementation of this strategy. It is anticipated that most of the Departments within the Council will be involved to some degree during the process of identification and determination of contaminated land.

Detailed procedures have been developed setting out how the Council's inspection duties will be fulfilled; these are presented in the latter part of this Section and in subsequent Sections of the Strategy document.

Existing links between key Departments, including the Environmental and Technical Services Department, Planning and Economic Development Department and other relevant Departments in respect of contaminated land will be reviewed and enhanced.

At the time of writing, the Departmental structures are in flux owing to the Transforming Sefton agenda; the functions of key sections in the implementation of the strategy are summarised below.

Specifically on a day to day basis, the following sections will have key roles.

<u>Environment Section</u>

The Environment Section has the lead role in the implementation of the Contaminated Land Inspection Strategy with Merseyside EAS.

In co-operation with other Council Departments and external agencies as appropriate, the Environment Section is responsible for all aspects of the implementation of the Contaminated Land Inspection Strategy; these include:

- Information collection and evaluation
- Liaison and communication
- Carrying out detailed inspections
- Making determinations
- Reviewing decisions and the Strategy document itself
- Carrying out any necessary enforcement actions
- Production and maintenance of the Public Register

The Planning and Economic Development Department has a number of related functions which are relevant to the management of land contamination, including the development of plans for future environmental, physical and economic regeneration of the Borough.

The Development Control Section

The Development Control Section deals with planning applications for development where issues of land contamination must be considered. The majority of contaminated land issues are currently addressed through the planning regime, where contamination is a material planning consideration. Whilst the introduction of Part 2A will undoubtedly lead to additional sites being addressed, it is anticipated that redevelopment of brownfield sites, and the associated planning controls, will remain the primary mechanism for dealing with land contamination. Any remediation agreed as a planning condition will be dealt with under planning controls and not under Part 2A.

The Building Control Section

The Building Control Section has a duty to enforce protection measures in new build projects to mitigate the impact of contamination on property. Activities relevant to the implementation of the Inspection Strategy include:

- Enforcement of protection measures to new buildings;
- Collation and recording of site investigation information;
- Information management in line with agreed procedures;
- Provision of technical advice.

Legal Services

The Legal Services will provide legal advice on the complex and wide ranging issues arising from the implementation of the Part 2A regime, including:

- Interpretation of legislation
- Identification and determination of contaminated land and Special Sites
- Remediation of contaminated land
- Exclusion from, and apportionment of, liability for remediation
- The recovery of costs of remediation and the relief from hardship
- Contents of, and arrangements for, serving remediation notices
- Compensation to third parties for granting rights of entry
- Grounds of appeal against remediation notices, and procedures relating to such appeals
- Particulars to be contained in registers
- Information management and provision
- Advice with regard to Council owned land and other land where the Council may be an appropriate person.

Merseyside Environmental Advisory Service

The Merseyside Environmental Advisory Service, in close co-operation with the Planning & Economic Development Department and the Environmental & Technical Services Department, will be responsible for providing technical advice and support in the implementation of the Strategy. This will include site identification and risk assessment of priority sites.

Other Departments of the Council, including those identified below and all land owning Departments of the Council, will be involved at various stages as providers of information and/or advice and through current or former land ownership.

Leisure and Tourism

In the context of action needed in respect of land that may be contaminated under their control or ownership.

Housing Market Renewal Team

The Housing Market Renewal (HMR) Team delivers and monitors Sefton's Housing Market Renewal Programme. Activities relevant to land affected by contamination include commissioning and managing the purchase and development of derelict or underused land to provide viable space which can be used for housebuilding.

Through the HMR Programme, some of the highest priority sites for inspection are being dealt with.

Capita Symonds

Through partnership arrangements with the Council, relevant activities/services include:

- Liabilities associated with and action needed with respect to the Council's own land holdings;
- Management of the Council's property portfolio including acquisition, disposal, lease agreements and valuations; and
- Feasibility, design and project management of multidisciplinary major engineering and building projects;
- Architectural feasibility and design, project management, QS services and contract supervision for a range of large and small building projects.

Other Council Departments

In the context of the implications of investigation and identification of contaminated land in relation to existing and proposed housing development.

5.2 Local Authority Interest in Land

The Council has a portfolio of publicly owned land in its stewardship.

As the Council has responsibility for enforcing the provisions of Part 2A, it is important that its conduct in respect of its own land is beyond reproach. To this end, in considering its own land, the Council will scrupulously follow the statutory provisions and guidance.

It is imperative that the duties of the local authority as a regulator are kept clearly separate from responsibilities as a landowner or polluter. Where possible, the Council will separate the role of dealing with enforcement from dealing with the authority's own liabilities, and allocate these responsibilities to different Departments. The Environmental & Technical Services Department and Legal Services have a joint lead role in enforcement of the statutory provisions but responsibility for remediation will lie with the land owning Department.

Council Departments with responsibility for land will, at an early stage, consider the likelihood of current and former land holdings being contaminated and include potential liabilities in the budget planning process. There are three general areas to consider (i) land currently owned or leased by the authority (ii) land formerly owned or leased by the authority (iii) other areas where the enforcement of Part 2A leads to the authority taking responsibility for land not in its ownership.

As stated in Section 4.2.4, the Council will seek to identify land for which it may have particular responsibilities through current and former ownership as soon as practicable. In keeping with the strategic approach, such sites will be dealt with in an order of priority appropriate to the apparent seriousness of the potential harm or pollution.

Officers responsible for the implementation of the Contaminated Land Inspection Strategy will ensure that all sites, whether publicly owned or in private ownership, are inspected in accordance with the strategy.

Care will be taken to maintain appropriate records and to give clear reasons for decisions. So far as possible, a consistent approach will be taken between significant pollutant linkages[13] for which the Council is liable and linkages for which others are liable.

It is anticipated that potential disputes may particularly arise where the authority is called upon to apportion the costs of remediation between itself and other appropriate persons. The authority cannot delegate this responsibility. However, where appropriate the Council may seek advice from an independent party and publish that advice.

[13] A pollutant linkage which forms the basis for a determination that a piece of land is contaminated land.

Internal procedures setting out actions to be taken by departments responsible for the management of local authority land, the assistance available from the enforcing department and enforcement procedures in respect of local authority owned land are described in Appendix III.

5.3 Information Collection

5.3.1 Background

The purpose of the information collection procedure is to ensure that sources of relevant information are identified and that such information may be accessed and, where necessary, updated at appropriate times.

Local authorities are required under paragraph B.15 of the Statutory Guidance to have in place arrangements and procedures for obtaining information on the following:

i) Information on actual harm or pollution of controlled waters;
ii) Information on receptors;
iii) Information on the possible presence of contaminants and their effects

Information requirements and sources have been identified with reference to the Statutory Guidance[14], the Draft Technical Advice Note for Comment on Inspection Strategies for Contaminated Land and other good practice publications regarding information collection for this purpose[15].

Table 5.3.1 identifies information requirements and appropriate sources. The identification of further sources of information is an on-going process; further datasets and information sources may, therefore, be identified in the future.

Information will be obtained by the Contaminated Land Team and Merseyside EAS from the identified sources, which include internal Departments, other regulatory bodies and organisations.

5.3.2 Internal Information Sources (Council Departments)

With respect to internal information sources, the following will be established:

- Key contact points within relevant Council Departments and Sections;
- Nature of information held;
- Format of information (wherever possible, data will be obtained in digital format suitable for incorporation into the Information Management System described in Section 9.0);
- The need to develop a system for marking and storing information such that it may be readily accessed in the future. Information recorded should include:

    - Grid Reference;

[14] In particular, paragraphs B.10 and B.16
[15] Such publications include (a) Documentary Research on Industrial Sites, DETR, 1994 (CLR3); (b) Some Guidance on the use of Digital Environmental Data, BGS/EA, 2000 and (c) Industry Profiles, DOE, 1995.

- Digitised site boundary and appropriate information fields for inclusion within Contaminated Land Information Management System (CLIMS).

- For each data set, whether the information is to be updated and at what frequency and the post with responsibility for updating. Where information will/or is likely to be updated, arrangements will be put in place to ensure that up-dated information is received at appropriate times;
- Resources available to collate and catalogue information held;
- Agreement to retain identified relevant information and consult with the Contaminated Land Team prior to disposal;
- Consultation with the Contaminated Land Team with respect to any new information to ascertain relevance with respect to the inspection process;

A number of Council Departments hold a significant amount of relevant information in a variety of formats. In many cases the information has not been collated or catalogued; this will be a very time-consuming process and the rate of progress highly dependent on the resources available.

5.3.3 External Information Sources

Statutory Guidance requires that specific arrangements be made for obtaining information from other regulatory bodies. There are also a number of other bodies and organisations which may hold valuable information relevant to the identification of contaminated land within the Borough.

The following external bodies and organisations have been approached regarding the provision of information:

- Statutory and non-statutory bodies identified in Appendix II
- The British Geological Survey
- Others as identified

Mechanisms to be adopted for general liaison and communication are set out in Section 6.0.

More detailed information collection procedures will be developed once the nature and format of available information has been established and following discussions with the individual organisations involved.

The Council (Contaminated Land Team/Merseyside EAS) will, however, aim to obtain/agree the following as a minimum:

- Key contact point
- Nature and format of information held (wherever possible, data will be obtained in digital format suitable for incorporation into the CLIMS);
- For each data set, whether the information is to be updated and at what frequency;

- Agreement to provide relevant information and updates;
- Consultation with the Contaminated Land Team with respect to new information obtained to ascertain relevance with respect to the inspection process;
- Issues of confidentiality.

5.3.4 Information Management

Information will be managed in accordance with identified protocols. Details of the CLIMS are included as Section 9.0.

Table 5.3.1 Sources of Information

Information on Receptors

Receptor	Land Use Type	Sources of Information include:
Human Beings	- Allotments - Residential with gardens - Residential without gardens - Schools or nurseries - Recreational/Parks,Playing Fields, Open Space - Commercial or Industrial	- UDP - OS maps - MIS data - Internal Departments
Ecological Systems and other protected locations	- SSSIs - National Nature Reserves - Marine Nature Reserves - Areas of special protection - for birds - European sites - SAC, SPAs - Candidate SACs and SPAs - Ramsar Sites - Local Nature Reserves -	- UDP - MIS - Merseyside EAS - English Nature
Property (buildings)	- Ancient Monuments - Buildings	- English Heritage - Merseyside Sites and Monuments Record (SMR) - EAS - UDP
Property (Other eg (crops and livestock)	Agricultural land Allotments Forestry areas Other open spaces, rivers lakes etc	- MAFF - Food Standards Agency - Agricultural Land Classification maps are held by EAS - Forestry Commission
Controlled Waters	- Surface waters - Drinking Water Abstractions - Source Protection Zones - Abstractions (including licensed, - unlicensed, potable and non-potable) - Groundwaters – Major Aquifers - Bathing Water Designations - Fisheries Designations - Shellfishery Designations	- OS map data (except culverts) - Environment Agency - Environment Agency - EnvironmentAgency/Environmental Health - Environment Agency - Environment Agency - Environment Agency - Environment Agency

Table 5.3.1 Continued

Information on Sources

Information Type	Sources of Information include:
Historical Mapping	Ordnance Survey/Landmark
Potentially Contaminative Land Uses (digitised polygons)	EAS/Internal Departments
Site Investigation Reports	Environmental Health/Planning/other Council Departments/NHBC/SMR
Previous Planning History	Planning
Part A and Part B processes	Internal Departments/ Environment Agency
Petrol Stations	Fire Brigade/Internal departments
Pre-licensing Landfill Sites	Environment Agency/Planning/ Environmental Health
Waste Management Licences	Environment Agency
Landfill Database	Environment Agency
Potentially Contaminated Sites Known to the Environment Agency	Environment Agency
Location of Sites Registered Exempt under Schedule 3 paragraphs 9 & 19 of the Waste Management Licensing Regulations 1994	Environment Agency
Location of Sites Registered Exempt under Schedule 3 paragraph 45 of the Waste Management Licensing Regulations 1994 (Exempt Scrap Yards)	Environment Agency
Location of Waste Management Sites that have been surrendered	Environment Agency
Information on Sites affecting/potentially affecting surface waters	Environment Agency
Information on Sites affecting/potentially affecting groundwaters	Environment Agency
Sites Registered under Alkali, & Works Regulations Act 1906	Environment Agency
Quarrying Records	Planning/EAS
Natural Contamination	British Geological Survey/Soil Survey and Land Research Group/Imperial College, London
Aerial Photographs	EAS
Trade Directories	Public Record Office and Local Libraries/SMR
Historical Land Use – specific sites	Merseyside Chief Officers
Agricultural Land Classification Survey	MAFF

Information on Pathways

Information Type	Sources of Information include:
Geology	British Geological Survey
Mining Data	British Geological Survey/Coal Authority/Mineral, Valuer/County Record Offices/
Hydrology	Environment Agency/ Ordnance Survey
Controlled Waters	Environment Agency/Environmental Health/OS map data (except culverts)

Note: A number of the data sources fit more than one category, for example geological information may provide information on both “pathways” and “sources”.

5.4 Information and Complaints

5.4.1 Background

The Council may receive complaints regarding land contamination from members of the public, businesses and voluntary organisations. Members of the community may also provide information relating to land contamination.

Complaints and information may be received by the Council in a number of forms including telephone calls, letters, personal visits, electronically or via a third party.

5.4.2 Complaints

Complaints regarding contaminated land will be dealt with through the Council's existing procedures.

In this context, a complaint means the receipt by the Council of a request to address any matter that is alleged to be a hazard to health or the environment which relates to land contamination.

Such complaints will be:

- Logged and recorded;
- Allocated to a competent investigating officer;

Complainants will be:

- advised of the manner in which their complaint will be progressed and provided with a point of contact for further enquiries;
- kept informed of progress;

Investigating officers will undertake appropriate actions and enquiries considered necessary to resolve any complaint having regard to departmental procedures, statutory requirements and professional judgement.

The appropriate level and nature of further investigation will be determined on a case by case basis and will be dependent on a number of factors including; the nature of the complaint, the initial findings and the amount of information already available.

Where detailed inspection of sites is considered necessary, such inspections will be undertaken in an order consistent with the level of risk, assessed in the context of the overall inspection programme (see Section 7.0). It may be that complaints can be dealt with within the strategic timescale and no immediate action is required to be taken or it may trigger a review of the priority given to a particular site.

Sefton Council has an Emergency Plan in place. The Emergency Plan designates responsibilities for each department within the Council if a major incident occurs.

Should an imminent risk to persons or property or the environment from contaminated land be perceived, the Emergency Plan will trigger the appropriate emergency responses by the Council. The Emergency Plan will apply to incidents which relate to contaminated land as well as those explicitly described within it.

The Council will make every effort to resolve complaints quickly and efficiently. The Part 2A legislative framework does, however, impose specific requirements and periods of consultation which may influence the speed of resolution of complaints.

In the context of this Inspection Strategy resolution means:

- no further local authority action is possible or necessary and appropriate advice has been provided; or
- prescribed formal action has been taken; or
- that the policy and procedure adopted by the local authority for dealing with contaminated land complaints has been followed through to completion or reference has been made to another regulatory body.

5.4.3 Confidentiality

All complainants will be asked to provide details of their name and address which will remain confidential. There are circumstances where certain information may be required to be made public, for example, during the course of formal legal action. This issue would be discussed in detail prior to taking any such formal action.

5.4.4 Voluntary Provision of Information

If a person or organisation voluntarily provides information relating to contaminated land that is not directly affecting themselves, their families or their property, this will not be treated as a complaint. The information provided will be recorded and if appropriate allocated to an investigating officer. Investigating officers will take whatever actions and enquiries they consider necessary to follow up such information having regard to departmental procedures, statutory requirements and professional judgement.

The appropriate level and nature of further investigation will be determined on a case by case basis and will be dependent on a number of factors including; the nature of the complaint, the initial findings and the amount of information already available.

In such circumstances, there will be no obligation on the Council to keep the person or organisation informed of progress towards resolution, although it may choose to do so as a matter of good practice.

5.4.5 Anonymous Information and Complaints

Anonymous complaints or information provided anonymously will be evaluated by an investigating officer. Appropriate action will be taken on the basis of the merits of the information received.

5.5 Information Evaluation

5.5.1 Background

The primary aim of the information evaluation procedure is to enable the Council to identify areas of land which merit detailed inspection and to prioritise them such that they may be dealt with in an appropriate order. In carrying out this task, the Council will ensure its approach is consistent with the principles set out in the Statutory Guidance.

In order to determine which areas of land merit detailed inspection, a wide range of information must be evaluated. Details of the information required and mechanisms for obtaining it are set out in Information Collection Procedures (Section 5.3).

In keeping with the aim of maintaining consistency on a Merseyside basis the Council, in partnership with other members of the Merseyside Contaminated Land Officers Group and the Merseyside Information Service, developed information evaluation and risk prioritisation procedures utilising a GIS based Information Management System. Further detail on the CLIMS is presented in Section 9.0.

5.5.2 Methodology

A summary of the approach and general principles to be adopted is set out below. Figures 5.5.1 to 5.5.3 (Appendix IV) comprise the Development, Surface Water and Groundwater algorithms respectively used within the prioritisation methodology.

The aim of the methodology is to identify areas of land which could pose a threat to human health or the environment and subsequently to prioritise these areas such that further more detailed investigations and assessments may be planned in a systematic and efficient way. The approach is based on recognised good practice and guidance set out in Contaminated Land Report 6 - Prioritisation and Categorisation Procedure for Sites which may be Contaminated, published by the Department of Environment in 1995 (CLR 6).

The methodology is based on the source-pathway-receptor (pollutant linkage) approach to contaminated land risk assessment. Potential pollutant linkages are identified through assessment of the spatial correlation between potential contamination sources and receptors. The correlation may be one of coincidence (occupying the same space) or influence (within an assumed or known zone of influence).

Information on pathways will be obtained as part of the information collection process. However, since pathways will often be difficult to accurately define in the absence of detailed site investigation information, the initial prioritisation procedure will rely on the confirmation of two parts of the pollutant linkage, the source and receptor(s). Further work in the form of a detailed inspection (walkover, limited sampling or intrusive investigation) will generally be needed to determine whether or not the land actually appears to be contaminated land. The prioritisation methodology

may be further refined to take account of pathways in the future should suitable datasets become available.

The initial prioritisation procedure within CLR6 (Part I Assessment) has been extended to include consideration of a wider range of receptors, as required by the Statutory Guidance and adapted to allow for classification and prioritisation of both the source and receptor datasets. With regard to classification of source datasets, three priority classes (High, Medium and Low) have been identified based on the likelihood of contaminative substances being present at concentrations which may result in 'significant harm' being caused or may result in pollution of controlled waters.

The classes have been established using formalised professional judgement based on the potentially contaminative land uses considered. Particular reference has been made to work undertaken by Paul Syms of Sheffield University[16] the Department of the Environment Industry Profiles[17] and the classification of contaminating industries as outlined in the 1991 DOE Consultation Paper on Public Registers of contaminative uses[18].

With regard to classification of receptors, the highest priority is given to the assessment of risks to human health. Risks to all receptors required by the Statutory Guidance will, however, be addressed in an order appropriate to the apparent seriousness of the potential harm or pollution. The methodology adopted thus allows resources to initially be concentrated on the sites that pose the greatest risk to human receptors.

Application of the prioritisation model places sites in one of three groups. Sites are placed into Group A, B or C in accordance with the highest grouping from each of the algorithms, Development, Surface Water and Groundwater. Sites placed in Group A (the highest priority sites) are subject to further more detailed assessment first, followed by sites in Group B, and then those in Group C (the lowest priority sites).

Within each group, site prioritisation is further refined in accordance with a Hazard Ranking allocated to each potentially contaminative land use.

Further more detailed assessment is undertaken to sub-prioritise sites utilising additional relevant information. The more detailed assessments follow established guidance, including CLR 6, and include a more detailed desk study, further site investigation and site specific risk assessment. The first stage of any further assessment is the collation and assessment of additional relevant information. This review can lead to the refinement of the initial prioritisation.

Determination of the need for and the degree of site inspection is based on available information. Any further information obtained, either through liaison with the site

[16] Paul Syms, Desk Reference Guide to Potentially Contaminative Uses, IVSA (1999)
[17] Department of the Environment, Industry Profiles, 47 Volumes, DOE (1996)
[18] Department of the Environment, Public Registers Of Land Which May Be Contaminated A Consultation Paper, DOE (1991)

owner or through site inspection, is assessed through the information evaluation procedures. The prioritisation factor may then be revised accordingly.

The outcome of the information evaluation procedures is a prioritised list of sites where it is possible that a pollutant linkage exists. Consideration will need to be given to the need for detailed inspection to determine whether or not the land actually appears to be contaminated land. Arrangements for carrying out detailed inspections and criteria for selecting individual sites are detailed in Section 7.0.

The precise nature of the detailed assessments varies from site to site depending on the specific circumstances.

When evaluating the coincidence of sensitive receptors with known potential areas of contamination, to establish the likelihood of land meriting detailed inspection, consideration is given to any actions which have already been taken to deal with contamination. Any additional information that specific remediation or further remedial action has taken place by landowners, the local authority or others is taken into account.

When considering relative priorities, the Council takes account of the activities and information gathered by other regulatory bodies for example the Environment Agency in respect of issues relating to controlled waters and Natural England with respect to protected habitats. To this end, site specific advice is sought from other regulatory bodies as appropriate.

If during the course of information evaluation it becomes apparent that actual harm or pollution of controlled waters is being caused the Council will initiate procedures for determining that land is contaminated land.

This methodology may be updated in the light of the future publication of relevant best practice guidance.

5.5.3 Site Specific Risk Assessment and Guideline Values

The Council take a risk-based approach to the assessment and identification of contaminated land.

There are a number of methodologies available for assessment of the potential health and environmental impacts of land contamination including those described below. Decisions on the most suitable technique or range of techniques are determined on a site specific basis.

The Council will ensure that risk assessment models and guideline values are suitable for the purpose for which they are being used and are appropriately applied.

5.5.3.1 Human Health

Methodologies and guidance values available for estimation of potential risks to human health include the following.

Contaminated Land Exposure Assessment (CLEA) Framework

The CLEA 2002 guidance was published in the form of The Contaminated Land Exposure Assessment (CLEA) protocol. These guidelines consisted of a series of guidance documents: Contaminated Land Reports (CLR) 7 – 10[19] [20] [21] [22] [23] [24], Soil Guideline Values (SGVs) and Toxicological Reports (TOX) issued by the Environment Agency on behalf of Defra. In August 2008, the Environment Agency withdrew all of the current CLR 7 to 10 documents and all existing SGVs since they were no longer considered to reflect the current UK human health risk assessment approach.

A revised version of the CLEA framework was published by the Environment Agency in January 2009 with the aim of helping in the assessment of potential risks to human health from long-term exposure to soil contamination. The revised CLEA guidance includes:

- A Review of Body Weight and Height Data used within the Contaminated Land Exposure Assessment Model (CLEA) (Science Report SC050021/SR1).
- Human Health Toxicological Assessment of Contaminants in Soil (Science Report SC050021/SR2) which replaces CLR 9.
- Updated Technical Background to the CLEA Model (Science Report SC050021/SR3) which replaces CLR10.
- CLEA Software Version 1.06 and CLEA Software (Version 1.05) Handbook, Science Report: SC050021/SR4.

The Environment Agency has also published new Soil Guideline Value (SGV) reports and associated TOX reports for eleven substances; further reports are anticipated in the future. As new TOX reports are issued using the new approach, the relevant existing report will be withdrawn.

The updated guidance documents are intended to provide regulators, developers, land owners and other interested parties with relevant, appropriate, authoritative and

[19] CLR 7: Assessment of risks to human health from contamination. An overview of the development of guideline values and related research, Defra and Environment Agency , 2002.
[20] CLR 8:Potential Contaminants for the assessment of land, Defra and Environment Agency , 2002.
[21] CLR 9: Contaminants in Soil. Collation of toxicological data and intake values for humans, Defra and Environment Agency , 2002.
[22] Toxicological Reports
[23] CLR10: The Contaminated Land Assessment Exposure (CLEA) Model. Technical Basis and algorithms, Defra and Environment Agency , 2002.
[24] Soil Guideline Value Reports

scientifically based information and advice on the assessment of risks arising from the presence of contamination in soil.

It is important to note the Health Criteria Values (which describe the level at which long term human health exposure to chemicals in soil is tolerable or poses minimal risk) and SGVs do not represent the trigger for an unacceptable intake; they are based on minimal risks to health. SGVs represent trigger values above which there might be a significant possibility of significant harm (SPOSH), with the significance linked to the margin of exceedence, the duration and frequency of exposure and other site and contaminant specific factors that the enforcing authority may wish to take into account. In most cases further investigation and evaluation of risk will be required.

Other Generally Accepted Guidelines

In addition to CLEA guidelines reference may also be made to other accepted sources including:-

- Occupational exposure levels issues by the Health and Safety Executive;
- Environment Agency site specific pollution prevention guidelines from authoritative sources;
- Guidance issued by the Construction Industry Research and Information Association (CIRIA);
- Other risk assessment tools such as, RBCA, RISC and SNIFFER.

Interdepartmental Committee on the Redevelopment of Contaminated Land (1987) Guidance on the Assessment and Redevelopment of Contaminated Land ICRCL 59/83 (2nd Edition)

This document, **now withdrawn**, set out a systematic approach for the assessment of contaminated sites. The guidance included threshold and action trigger concentrations for a range of contaminants which depend on the intended use of the site. The document and the threshold and action trigger levels presented within it have been widely used in the assessment of contaminated land. **The Council does not accept the use of these assessment criteria.**

5.5.3.2 Controlled Waters

R & D Publication "Methodology for Derivation of Remedial Targets for Soil and Groundwater to Protect Water Resources"

The Council will seek the advice of the Environment Agency when assessing risks to controlled waters. It is understood that the Agency would wish to see the R&D Publication "Methodology for the Derivation of Remedial Targets for Soil and Groundwater to Protect Water Resources[25]" used as the framework for assessing the

[25] Environment Agency (1999) Methodology for the Derivation of Remedial Targets for Soil and Groundwater to Protect Water Resources. R&D Publication 20.

need for remediation. The Consim Model has been developed by the Environment Agency as a tool to assist in such assessments.

In the case of surface waters, the Environment Agency will seek to protect existing water quality and have particular regard to Environmental Quality Standards. In cases where pollution of surface waters is occurring, the Environment Agency will seek to improve water quality.

5.5.3.3 Other Receptors

The Council will work with the relevant specialist organisations (including Natural England, Building Control Departments, English Heritage, the Food Standards Agency and Defra) when assessing the risks to ecological, animal, crop and building receptors to achieve consistent application of the regime.

5.6 Interaction with other Regimes

There are a number of other regulatory regimes, in addition to Part 2A, which are relevant in the context of the management of land contamination. The Council will liaise with the appropriate regulatory authority where there is potential overlap with the Part 2A regime.

5.6.1 The Planning Regime and Development Control

Under the Town and Country Planning legislation, the Council's Planning Department already considers the potential implications of contamination when developing planning policy and when it is considering individual applications for planning permission. Although Part 2A will address contamination issues, it is anticipated that the planning process will continue to be the primary mechanism to assess risks and set appropriate remediation requirements, on the basis of both the current and proposed land use. In Sefton the relevant UDP policies are EP1, EP3 and EP4.

Government guidance for dealing with land affected by contamination under the planning system is set out in Planning Policy Statement: Planning and Pollution Control (PPS23)[26], and DOE Circular 11/95 The Use of Conditions in Planning Permissions.

PPS 23 provides guidance on how land potentially affected by contamination should be dealt with under the planning system. Annex 2: Development on Land Affected by Contamination to PPS 23 expands on the policy considerations the Government expects Regional Planning Bodies and local planning authorities (LPAs) to have regard to in preparing policies in development plans and taking decisions on individual applications on land affected by contamination.

[26] Planning Policy Statement 23 : Planning and Pollution Control (PPS 23) (November 2004)

Relationship between Planning Control and Part 2A

Annex 2 of PPS23 explains the relationship of the contaminated land regime under Part 2A to the planning system and advises that the broad approach of the Part 2A regime, with respect to identifying risks from land contamination and dealing with them, should be applied to plan making and determining individual applications. The stated aim is that planners, developers and their advisors address land contamination issues at the appropriate stage and consistently with arrangements under Part 2A.

With regard to the relationship between planning control and Part 2A, PPS 23 Annex 2 provides the following advice.

- The contaminated land regime in Part 2A was introduced specifically to address the historical legacy of land contamination. It applies where there is unacceptable risk, assessed on the basis of the current use and the relevant circumstances of the land. It is not directed to assessing risks in relation to a future use of the land that would require the specific grant of planning permission; this is primarily a task for the planning system.
- For planning purposes, the assessment of risks arising from contamination and remediation requirements should be considered on the basis of both the current use and circumstances and its proposed new use. In most other respects, the underlying approach to identifying and dealing with risk, and the overall policy objective of safeguarding human health and the environment, are similar. A wider range of contamination and receptors is relevant to planning because of its wider spatial perspective but the degree of harm or pollution relevant to planning and the approach to remediation are essentially the same. PPS23 advises that, as a minimum after carrying out the development and commencement of use, the land should not be capable of being determined as contaminated land under Part 2A.
- The Part 2A regime was designed and intended to encourage voluntary remediation rather than regulatory action and to work with the established role of planning and building control in those cases where the land is suitable for or scheduled for redevelopment. Government policy recognises that voluntary remediation will often be funded by redevelopment and that the planning system should secure appropriate investigation and remediation of land. Where new development is taking place, it is the developer's responsibility to carry out remediation and that, in most cases, the enforcement of remediation requirements will be through planning conditions and building control rather than a remediation notice under Part 2A.
- PPS23 recognises that there may be cases where information about the condition of land and associated risks may emerge in connection with a planning application or its implementation. PPS 23 advises that the local authority will need to consider this information in accordance with its strategic approach under Part 2A to the identification of land that merits detailed inspection. The Council will have regard to the advice contained in PPS 23 in deciding when and whether Part 2A should be applied in such circumstances.
- PPS 23 advises that where contaminated land is identified and determined as such under Part 2A but the enforcing authority (the local authority or the

Environment Agency, in the case of a special site) is satisfied that appropriate actions are being undertaken by way of remediation without the service of a remediation notice, it cannot serve such a notice. Instead a remediation statement can be agreed and placed on the public register and kept under review.

Under the Building Regulations 2000, the Council's Building Control Section (or private sector Approved Inspectors) will also specify measures to be taken during construction, to protect buildings and future occupants from the effects of contamination. Guidance on such requirements is given in Approved Document C (Site Preparation and the Resistance to Contaminants and Moisture), 2004 Edition.

5.6.2 Pollution Prevention and Control (PPC) –The Pollution Prevention and Control Act 1999 and The Pollution Prevention and Control Regulations 2000 (now incorporated into the framework of the Environmental Permitting Regulations 2007)

Under the Integrated Pollution Prevention and Control (IPPC) legislation a site condition survey prior to receiving a permit to operate.

Sites regulated under the IPPC regime, which become contaminated will generally be regulated under this power[27]. The Council is precluded from serving a remediation notice if it appears that the powers of the relevant enforcing authority under The Pollution Prevention and Control Regulations can be used. There may, however, be situations where Part 2A powers are needed.

Land determined to be contaminated land which is subject to regulation under the IPPC regime, where the installation is designated for central control (that is by the Environment Agency), is required to be designated as a Special Site.

An exception to the above is that historical contamination present prior to the permit being issued under IPPC is dealt with under Part 2A powers.

5.6.3 The Environmental Damage (Prevention and Remediation) Regulations 2009 (SI 2009 No. 153)

The Environmental Damage Regulations 2009 came into force on 1st March 2009, they implement the European Environmental Liability Directive 2004/35/EC. They are based on the polluter pays principle requiring those responsible to prevent and remedy damage.

The regulations only apply where the environmental damage and the activity that caused it has occurred or requires preventing after the regulations came into force and they only apply to operators of economic activities.

[27] Regulation 12 - The Pollution Prevention and Control (England and Wales) Regulations 2000.

Environmental Damage has a specific meaning within the regulations and it only refers to;

• Damage to Land
• Damage to Water
• Damage to Ecosystems

Local authorities are the enforcing authority in relation to damage to land; the damage must result in a significant risk of adverse effects on human health. DEFRA have released non statutory guidance entitled *The Environmental Damage (Prevention and Remediation) Regulations 2009*, *2nd Update* dated November 2009.

Operators should inform the relevant enforcing authorities if possible environmental damage occurs, enforcing authorities can require information from operators, serve prevention and/ or remediation notices on operators to require certain action to be taken.

There are offences for:

• Failing immediately to take all practicable steps to prevent damage or notify the authority where there is an imminent threat of environmental damage (or of damage that there are reasonable grounds to believe will become environmental damage).

• Failing immediately to prevent further damage or notify the authority where the operator of an activity has caused environmental damage or has caused damage where there are reasonable grounds to believe that the damage is or will become environmental damage‘.

• Failing to comply with a notice to prevent damage or further damage;

• Failing to comply with a remediation notice;

• Failing to provide information pursuant to these Regulations required by an authority;

• Failing to comply with instructions given under Regulation 31 (powers of entry etc.);
• Providing false or misleading information to an authorised officer.

Enforcing authorities can recover costs from operators in accordance with the regulations. Operators of economic activities should be aware that pollution of land may incur a liability under both the Environmental Damage Regulations 2009 and Part 2A of the EPA 1990.

If pollution of the land is observed or there is an imminent risk of pollution occurring this should be reported to the Environmental & Technical Services Department.

5.6.4 Waste Management Licensing System

The Environment Agency currently license and manage waste management activities under Part II of the Environmental Protection Act 1990. There are three potential areas of interaction between the Part 2A regime and the waste management licensing regime:

- where significant harm or pollution of controlled waters occurs owing to a breach of a site licence under Part II. In this case, Part 2A does not apply unless the harm or pollution is attributable to a cause other than a breach of a license;
- where the contamination results from an illegal deposit of controlled waste; and
- where certain remediation processes on contaminated land may fall within the licensing requirements of the Part II regime.

In the above circumstances, the Council is precluded from serving a remediation notice under Part 2A to remedy the harm or pollution of controlled waters; the Environment Agency has power to act under the waste management licensing regime in these cases.

5.6.5 Statutory Nuisance

Prior to the implementation of the Part 2A contaminated land regime, the statutory nuisance system under Part III of the EPA 90 was the main regulatory mechanism for enforcing for the remediation of contaminated land.

The Part 2A regime now replaces the statutory nuisance regime for dealing with nuisance that consists of, or is caused by land “being in a contaminated state”. The definition of “land in a contaminated state” covers all land where there are substances in, on or under the land which are causing harm or where there is a significant possibility of such harm being caused.

The statutory nuisance regime will continue to apply to the effects of deposits of substances on land which gives rise to offence to human senses, for example odours.

5.6.6 Water Resources Act 1991

This Act gives the Environment Agency powers to prevent or remedy pollution of controlled waters by using Works Notices. There is significant potential for overlap between these powers and the Part 2A regime. The appropriate application of either regulatory regime will need to be determined after consultation between the Local Authority and the Environment Agency.

5.6.7 Radioactivity

The Part 2A Contaminated Land regulatory regime was extended to include radioactively contaminated land in August 2006[28].

The extended regime provides a system for the identification of contaminated land, where such land is causing exposure of radiation to any person or where there is a significant possibility of such exposure.

Local Authorities have a new duty to inspect land where there are reasonable grounds for believing that it is contaminated by virtue of radioactivity.

Any sites determined as contaminated land by virtue of radioactivity would be special sites with the Environment Agency acting as enforcing authority. Where there is a mixture of radioactive and non-radioactive contamination, the Environment Agency would act as enforcing authority for all of the pollutant linkages.

5.6.8 Other Regimes

There are a number of other regimes which may have implications for land contamination or which may overlap with Part 2A, these include:

- Food Safety (Part I of the Food and Environment Protection Act 1985)
- Health and Safety (Health and Safety at Work Act 1974 and the Construction (Design and Management) Regulations 2007 (SI 2007 No.320)
- Landfill Tax (The Finance Act 1996) and The Landfill Tax (Amendment) Regulations 2009
- The Control of Major Accident Hazards Regulations 1999

In all cases, the Council will liaise with the appropriate regulatory authority where there is potential overlap of interests with the Part 2A regime.

[28] Consultation on contaminated land: extension of Part 2A of the Environmental Protection Act 1990 to include radioactivity, Defra, 18th July 2005.

6.0 GENERAL LIAISON AND COMMUNICATION STRATEGIES

A key factor in the successful implementation of the inspection strategy will be the adoption of effective mechanisms for liaison and communication:

- internally within the Council;
- with other statutory bodies;
- with landowners, occupiers, and other interested parties; and
- with the wider community.

6.1 Internal Liaison

Details of departmental responsibilities for inspection and identification are set out in Section 5.1.

6.2 Consultation

In addition to the consultation on the strategic approach to the Borough described in Sections 1.1.1 and 1.3, the strategy provides a framework for on-going regular, consistent and sustained communication with other statutory bodies, landowners, occupiers and interested parties and the wider community.

6.3 Statutory Consultees

Statutory guidance requires that specific arrangements be established for liaison with, and responding to, information from other regulatory bodies. The Council will establish effective communication arrangements with appropriate Statutory bodies whilst implementing its strategy.

As noted in Section 1.3, Sefton Council consulted all statutory consultees during the preparation of the Contaminated Land Inspection Strategy.

Statutory Consultees:

- **Environment Agency**
- **Natural England**
- **English Heritage**
- **Food Standards Agency**
- **Defra**
- **Homes and Communities Agency)**
- **North West Development Agency**

Key contacts are set out in Appendix II; further brief details are also provided below.

6.3.1 The Environment Agency

The Environment Agency has a key supporting role involving the provision of information and advice and a number of specific regulatory functions (see Section 1.2.3).

Given its role as Governmental advisor on contaminated land, the Environment Agency is the organisation that the Council will consult most often. The Environment Agency has identified an Area Contact for regulatory requirements relating to Part 2A; the Area Contact will therefore be the Council's first point of contact. The Merseyside Contaminated Land Officer's Group (CLOG) also provides a useful mechanism for communication between the Agency and Council particularly in respect of non-site specific issues.

A framework[29] for co-operation between the Agency and the local authorities has already been agreed; local arrangements have been developed within this framework.

The Environment Agency's Process Handbook[30] sets out potential areas of interaction between local authorities and the procedures to be adopted by them. This document, together with policy statements published by the Environment Agency with regard to Part 2A, will be a key reference within the implementation of the Part 2A regime.

6.3.2 Natural England

Natural England is the statutory consultee for both central and local Government, and other organisations and individuals, on the principles and practice of wildlife and geological conservation.

Within the development and implementation of this strategy, Natural England will be the main contact for issues relating to ecological systems. It is responsible for maintaining information records on protected species and habitats. English Nature will be contacted in relation to these resources and for site specific advice as and when they are identified as being potential receptors of contamination.

6.3.3 English Heritage

English Heritage provides expert advice to the Government about all matters relating to the historic environment and its conservation.

English Heritage will be contacted in relation to potential impacts to these receptors (property in the form of buildings, ancient monuments, and archaeological resources).

[29]Memorandum of Understanding between the Environment Agency and the Local Government Association

[30] The Environment Agency, Part 2A EPA (1990) (England) Process Handbook, May 2000

6.3.4 Food Standards Agency (FSA)

The Food Standards Agency has responsibility for food safety including the safety of consumers of any food that may be affected by contaminated land. This includes food produced in domestic gardens and allotments and food collected from the wild as well as commercially produced food. The FSA will provide advice on the food safety aspects of any specific cases of contaminated land

The FSA is a statutory consultee for the Contaminated Land Inspection Strategy.

6.3.5 Defra

Current responsibility for contaminated land and related issues within MAFF[31] lies with the Rural and Marine Environment Division (RMED). This group is concerned with soil protection and sustainability of agriculture and takes advice from, amongst others, the executive agencies of MAFF, the Rural Development Service (RDS) and the Veterinary Laboratories Agency (VLA). The latter being responsible for livestock issues. MAFF hold information on agricultural resources. They will be contacted when property in the form of crops and livestock may be affected by contaminated land.

MAFF are statutory consultees for the Contaminated Land Inspection Strategy.

6.3.6 North West Development Agency (NWDA) and the Homes and Communities Agency.

The NWDA is a major funder of remediation and redevelopment of derelict and contaminated land (see 1.1.3).

The Homes and Communities Agency (HCA) is the national housing and regeneration agency which has objectives to promote job creation, inward investment and environmental improvement through the reclamation and development of vacant, derelict and underused or contaminated land and buildings.

The Role of the HCA includes delivery of Housing Market Renewal and overseeing the implementation of the National Brownfield Strategy which outlines principles for the sustainable reuse of brownfield land.

It is anticipated that both the HCA and NWDA hold significant amounts of valuable information relevant to the implementation of this strategy.

[31] MAFF became part of Defra in 2001; organisational details stated above may have changed.

6.4 Health Protection Agency

The Health Protection Agency (HPA) is the Government's principal scientific and technical advisor on the health effects of toxic substances. It works closely with the Environment Agency on producing technical guidance on contaminated land (as it relates to human health). The HPA also provides advice to local authorities in relation to specific cases of land contamination.

6.5 Other Bodies

In addition to the above Statutory Consultees, the Council will also establish contact with other relevant non-statutory bodies that may hold valuable information relevant to the identification of contaminated land within the Borough. Contact will be made with such bodies to ensure that information is exchanged effectively and in a format that will assist the Council in its duties.

The key points of contact within these organisations are presented in Appendix II. The list is not exhaustive as additional organisations to those currently identified may be contacted during the implementation of the strategy.

6.6 Owners, occupiers and other interested parties

There are a number of stages within the implementation of this strategy where it will be necessary, either to meet statutory requirements or as a matter of good practice, for the Council to liaise with site owners, occupiers and other interested parties. These include:

- during the inspection process (see 7.2.3);
- notification of the determination of contaminated land[32];
- prior to the serving of a remediation notice[33];
- when designating Special Sites.

Throughout the implementation of the Part 2A regime, it is the Council's intention to encourage voluntary action to secure the remediation of contaminated land. This approach requires effective communication with owners, occupiers and other parties. Where possible, Council officers will seek the co-operation of landowners and occupiers in carrying out their duties.

When required, all reasonable efforts will be made to contact the landowner or occupier including the following potential sources of information:

- Land Registry records;
- Borough Council records;
- Trade Directories;
- Telephone directories;

[32] Section 78B(3) and Section 78B(4) of Part 2A Environmental Protection Act 1990
[33] Section 78H(1) of Part 2A Environmental Protection Act 1990

- Visiting premises; and
- Public and Site notices.

6.7 The Wider Community

Within this context, the term wider community includes all possible groups and organisations, local residents, businesses and industry, voluntary organisations and community bodies.

Land affected by contamination may be of relevance to members of the community other than owners and occupiers. The use and condition of land may impact on the wider community especially if the contamination poses a risk to human health. For those affected by contamination, the Council will endeavor to:

- inform the affected parties of potential risks arising from contamination;
- consult on proposed actions in relation to contaminated land;
- keep affected parties informed of decisions taken.

The Council recognises the importance of making decisions about contaminated land matters that are accepted by the community and are both defensible and transparent.

If practicable, and indeed necessary the findings of any inspection will be communicated to the affected community and consultations undertaken on the best way to achieve the successful remediation of the contaminated land problem.

6.8 Risk Communication

Under Part 2A, the Council will be determining the presence of contaminated land using a risk based approach. Decisions on contaminated land may often be very complex and in many cases impact on a variety of stakeholders.

As noted above, public acceptance of any decisions made is very important if contaminated sites are to be managed effectively. Effective risk communication is thus an essential element in the implementation of this strategy.

Sefton Council will aim to ensure that all relevant stakeholders are provided with appropriate levels of information during the inspection stage of the strategy and ensuing remediation of particular sites.

The Council also recognises the importance of the need to prevent needless anxiety and planning blight. A balance will, therefore, need to be achieved concerning when and to whom information is given.

Reference will be made to the SNIFFER publication, "Communicating Understanding of Contaminated Land Risks"[34] when developing any specific risk communication strategy for individual sites. This document addresses the four key steps in the process of communicating risk:

- Step 1 - **when** to communicate;
- Step 2 - **whom** to communicate with;
- Step 3 - **what** to communicate;
- Step 4 - **how** to communicate.

6.9 Trans-boundary Pollutant Linkages

Pollutant linkages may exist across Sefton's administrative boundaries. Sefton has mutual boundaries with the Metropolitan Borough of Knowsley, the City of Liverpool and the Lancashire District of West Lancashire.

Where this situation arises, the Council will work with the neighbouring authority to agree a mutually acceptable method of assessing and, if necessary, remediating the site, with reference to appropriate legislation[35] and statutory guidance.

[34] Scotland & Northern Ireland Forum For Environmental Research (SNIFFER) Communicating Understanding of Contaminated Land Risks (May 2010)
[35] Section 78X(2) Part 2A Environmental Protection Act 1990

7.0 PROGRAMME FOR INSPECTIONS

7.1 Background

7.1.1 Local Issues

Whilst the Council has certain information relating to contamination, no formal Borough wide assessment has previously been undertaken to determine the overall extent of potentially contaminated land. At this stage, therefore, it is not possible to predict the number of sites which will need to be subject to detailed inspection.

The Council's approach to identifying such areas of land is set out within this strategy.

7.1.2 Criteria for Selecting Individual Sites For Inspection and Activities

Site inspection will be considered for areas of land where it is identified that a possible pollutant linkage exists. Such areas of land may be identified as a result of:

i) information gathering and evaluation through implementation of this strategy;
ii) information received from other regulatory bodies regarding the condition of land;
iii) information received from members of the public, business or voluntary organisations regarding the condition of land.

In the case of (ii) and (iii) above such information will be assessed along with information held by the Council to avoid any duplication of investigation.

The primary objective of the inspection of land is to collect sufficient information to determine whether or not the land appears to be contaminated land, in accordance with the statutory guidance on determination. A secondary objective of inspection is to identify any contaminated land which is required to be designated a special site.

Determination of the need for and the degree of site inspection will be based on available information. Any further information obtained, either through liaison with the site owner or through site inspection, will be assessed with reference to the procedures set out within this strategy and appropriate technical guidance.

Inspections will be undertaken by suitably qualified and authorised personnel in accordance with the statutory guidance and in compliance with good practice in site investigation appropriate to this purpose.

The precise protocol for the detailed inspection of each area in question may only be determined on a site specific basis taking into consideration relevant factors including the circumstances of the site and the potential pollutant linkage(s) to be assessed.

The detailed inspection works undertaken will be sufficient only to provide evidence of the identified pollutant linkages. Further investigation may be appropriate after

determination of land as contaminated land as an Assessment Action under a Remediation Notice.

Prior to undertaking any physical investigations, the following will be determined:

- nature and extent of investigation works including detailed specification;
- timing of the works;
- contractual arrangements;
- the need for Section 108 powers to be exercised (see Section 7.2.2);
- the format and content of any reports to be produced.

7.1.3 Timetable

The prioritised inspection programme will be developed based on the outcome of the information evaluation procedures set out in Section 5.5.

In practice, inspection will be undertaken as part of a rolling programme subject to annual review. The annual review will be timetabled such that any necessary bids for funding may be prepared.

Sites where urgent action is required may be identified at any stage during the implementation of the inspection strategy. The need to take action on such sites may influence the rate of progress in the overall programme.

There is a need for a flexible approach to inspection; sites which present the most serious risks will be addressed as quickly as possible whilst balancing the requirement to assess the entire Borough area with available resources.

7.2 Arrangements for Carrying Out Detailed Inspection

7.2.1 Compliance with Statutory Guidance

Where detailed inspection of land is necessary, such inspections will be undertaken in accordance with the Statutory Guidance in particular paragraphs B.19 to B.25 and B.26 to B.30.

Detailed inspection may include any or all of the following:

- The collation and assessment of documentary information, or other information from other bodies;
- A site visit for the purposes of visual inspection and, in some cases, limited sampling;
- Intrusive site investigation of the land involving the sampling and analysis of soils and/or groundwater.

As required by the statutory guidance, the information gathered during detailed inspection will include, in particular, evidence of the actual presence of a pollutant.

Investigations will be undertaken in accordance with appropriate technical procedures. The nature and degree of investigation will be determined on a site specific basis. However, in all cases the principles and practices contained within Defra and Environment Agency sponsored technical guidance and other good practice publications will be adopted. The guidance utilised will be kept under review to ensure that the most appropriate and up-to date advice is followed.

In conducting site investigations, all reasonable precautions will be taken to avoid harm, water pollution or damage to natural resources or features of historical or archaeological interest; the advice of appropriate regulatory authorities will be sought.

In accordance with recognised good practice, appropriately phased site investigations will be undertaken. If at any stage the results of such investigations demonstrate that there is no longer a reasonable possibility that a pollutant linkage exists, no further detailed inspection will be undertaken with respect to that pollutant linkage.

The process of detailed inspection only terminates when the Council considers it has sufficient information before it to determine the site as statutory contaminated land or not.

7.2.2 Inspection using statutory powers of entry

Under Section 108 of the Environment Act 1995, the Council has been granted powers of entry to carry out detailed inspections. Such inspections are termed "inspections using statutory powers of entry". There are a number of conditions for use of these powers as set out below.

Before carrying out any inspection using statutory powers of entry the Council will be satisfied, on the basis of available information that;

- in the case of site reconnaissance (visual inspection and/or limited sampling) there is a reasonable possibility that a pollutant linkage exists. Any sampling will be limited to that necessary to verify the pollutant linkages already identified;
- in the case of intrusive investigation, that it is likely that both contaminants and receptors are present.

The Council will not carry out any inspection using statutory powers of entry which takes the form of an intrusive investigation if:

- it has already been provided with detailed information which provides an appropriate basis upon which the Council can determine, in accordance with statutory guidance, whether or not the land is contaminated land; or
- a person offers to provide appropriate information within a reasonable and specified time and then provides it within the agreed timescale.

Further details on site specific liaison are set out below.

7.2.3 Site Specific Liaison

The Council will endeavour, where possible, to consult the owners, occupiers and other interested parties to find out whether appropriate information already exists on the condition of the land or whether such information could be made available. Where information is provided by third parties, it will be assessed to determine its adequacy.

Consultation on a site-specific basis will also be undertaken with other regulatory bodies, including the Environment Agency, Natural England and English Heritage, as appropriate, in advance of detailed inspections. Such consultation will be undertaken both to avoid unnecessary duplication of investigation work and to ensure that the approaches adopted by the Council to site inspection are consistent. Advice will also be sought from the Environment Agency on the applicability of other regulatory powers.

Prior to any inspection being carried out, the Council will inform owner(s)/occupier(s) of the land and any other relevant persons that an inspection is required to take place. At this stage, further details will be provided on what inspection entails, that physical examination of the land is likely to be necessary and the indicative timescale for the investigation.

The permission of the owner(s)/occupiers of the land will be requested, in writing, to enter the land for purposes of detailed inspection under Part 2A. The letter will advise the owner(s)/occupier(s) of the powers conferred on the local authority under Section 108 of the Environment Act 1995 in the event that permission is not granted.

Section 108 (6) provides that, except in an emergency, if the premises to be inspected are residential, or if the inspection necessitates the use of heavy equipment, at least seven days notice will be given, unless there is an immediate risk to human health or the environment. In an emergency, these powers of entry can be exercised forthwith.

In all other cases, where possible, the occupier of the land or site to be inspected will be consulted, particularly in order that any necessary health and safety precautions can be identified and incorporated into the inspection.

Compensation may be payable by the authority for any disturbance caused by an inspection using statutory powers of entry.

General liaison and communication strategies are set out in Section 6.0.

7.2.4 Health and Safety Procedures

Prior to conducting any detailed inspections including site reconnaissance and intrusive site investigations, consideration will be given to the potential health, safety and environmental hazards which may arise. Risk assessments will be undertaken to identify any potential hazards and precautions will be taken to control the associated risks to an acceptable level.

Appropriate health and safety procedures will be adopted to protect both site investigation personnel and the general public.

Good practice guidance will be followed and relevant legislative requirements will be met in full.

Existing health and safety procedures will be reviewed and if necessary specific procedures relating to the activities covered by this strategy will be developed.

7.2.5 Inspection of Potential Special Sites

Before authorising or carrying out any inspection consideration will be given to whether, if the land were found to be contaminated land, it would meet any of the descriptions of land given in the Contaminated Land (England) Regulations 2006 as requiring to be designated a Special Site.

Where there is evidence to suggest that a particular site would be designated a Special Site, if identified as contaminated land, the Environment Agency will be asked to undertake the detailed inspection.

The Environment Agency has set out the procedures to be adopted in the Environment Agency's Part 2A EPA (1990) (England) Process Handbook.

Before undertaking any detailed inspection, the Environment Agency will satisfy itself that it agrees that the site is a potential Special Site and that the requirements of the statutory guidance have been met. Where necessary, the Council will authorise a person nominated by the Agency to use the powers of entry conferred by Section 108 of the Environment Act 1995. The same conditions for using statutory powers of entry apply as for detailed inspection undertaken by the Council as detailed above.

If the Environment Agency agrees that a particular site is a potential Special Site it will provide notification in writing. The Environment Agency will, subject to the statutory conditions for detailed inspection having been met, undertake the inspection on behalf of the Council.

Following inspection, information on the condition of the land and an opinion on whether significant pollutant linkages are present will be provided to the Council. Determining whether land appears to be contaminated land is the sole responsibility of the Council; this also applies were the detailed inspection is undertaken by the Environment Agency.

If the Environment Agency disagrees that a particular site is a potential Special Site it will provide notification in writing giving reasons.

7.2.6 Arrangements for the Appointment of Consultants/Contractors

At various stages in the implementation of this Strategy it may be necessary to appoint specialist consultants and contractors.

The Council has existing procedures for procuring such works and these will be utilised, where necessary.

It is considered vital that any such works are well specified and managed.

7.2.7 Risk Communication

Sefton Council will ensure that all stakeholders receive appropriate levels of information during the inspection stage of the strategy. Details of the Risk Communication Strategy to be adopted are set out in Section 6.

7.2.8 Frequency of Inspection

As noted above, inspection will be an on-going process. There will, however, be situations where changes in the condition or circumstances of the land or the surrounding environment may necessitate a review of the previous inspection findings for a particular area. A number of such triggers to re-inspection have been identified; these are set out in Section 8.0 together with details of the Council's approach.

7.2.9 Format of Information Resulting from Inspection

Information resulting from inspections will form the basis of the Council's decision making on whether or not land appears to be contaminated land or whether further inspections are necessary.

Such information will be produced and held in a variety of formats and will be managed utilising the Council's Information Management System described in Section 9.0.

8.0 REVIEW MECHANISMS

8.1 Background

This section sets out the approach to be adopted by the Council for:

- routine review of inspection findings;
- periodic review of inspection decisions;
- managing new information; and
- measures to be taken to ensure the strategy remains effective and up to date.

Under Part 2A the Council is required to inspect the Borough area from "time to time" to identify contaminated land. In practice, however, it is considered that inspection will be an on-going process requiring the Council to balance the systematic approach described within this strategy with the available resources.

8.2 Triggers for Reviewing Decisions

There will inevitably be situations where changes in the condition or circumstances of the land or the surrounding environment may necessitate a review of the previous inspection findings for a particular area. A number of such triggers have been identified and are set out below; it is also possible that further triggers will be identified during the course of implementation of this strategy.

Triggers for the Review of Inspection Decisions include:

- Significant changes in legislation;
- Proposed changes in the use of the surrounding land;
- Unplanned changes in the use of the land;
- Unplanned events (eg localised flooding, fires, spillages) where the consequences cannot be dealt with through other relevant environmental protection legislation;
- Reports of localised health effects which appear to relate to a particular area of land;
- Response to information or complaints from members of the public, businesses or voluntary organisations;
- Information from other statutory bodies, landowners or occupiers and other relevant interested parties;
- Changes in national guidance relating to specific types of site or contaminant.

Mechanisms to ensure the receipt of appropriate and timely information from other departments of the Council, statutory bodies, owners, occupiers and other interested parties are detailed within this strategy document. Procedures are also identified for responding to information and complaints from members of the public, businesses or voluntary organisations. Such mechanisms are essential to facilitate effective review.

Information obtained and records of decisions made during the course of such reviews will be managed utilising the Contaminated Land Information Management System.

Whilst the above factors may trigger inspection of particular areas of land, it is important that such inspections do not significantly interfere with the general inspection framework. The relative priority of such inspections will be considered along with those of planned inspections such that they may be undertaken in an appropriate order. In considering this issue, the Council will ensure its approach is consistent with the underlying principles set out in the Statutory Guidance.

8.3 Review of Inspection Strategy

The practical implementation of this strategy will provide vital information on its effectiveness (a) in ensuring that resources are being used efficiently and (b) in meeting the requirements of the legislation.

In addition, information obtained during the course of implementation may indicate that the approach adopted with respect to certain issues should be modified.

As part of the overall quality management of this work, the Council will review the inspection procedures set out within this Strategy on a regular basis and ensure that any necessary modifications are undertaken.

This, the third review of the strategy, has been undertaken to report progress and update sections of the document as appropriate. The Strategy was first reviewed in November/December 2002 with a second review taking place in September 2006.

The priorities and procedures set out within the Inspection Strategy have not been substantively revised.

This revised version of the Contaminated Land Inspection Strategy implements the changes following the third review.

Subsequent reviews will take place on a three yearly cycle.

9.0 INFORMATION MANAGEMENT

9.1 General Principles

Throughout the implementation of this Strategy, a significant amount of information will be obtained, from a variety of sources. Further information will also be generated as a result of the inspection process. This information will be in a range of formats including bound documents, reports, letters, maps, aerial photographs and electronic records and may include:

- Information on Sources
- Information on Receptors
- Information on Pathways
- Site Investigation Reports
- Details of liaison with other Departments and organisations
- Results of Information Evaluation
- Information provided by members of the public, businesses or voluntary organisations
- Decisions made following review of information or records

Statutory Guidance requires that local authorities publish details of how information obtained during the inspection process is to be held and managed.

It is considered that the information management system must meet the following criteria:

- Be transparent;
- Be capable of logging all information provided with respect to individual areas of land;
- Have security of access and editing;
- Be able to tag information type (eg commercially confidential information);
- Record details of information providers and reviewers;
- Have mechanisms for ensuring that there is no duplication of information;
- Have check systems which ensure that all relevant information is reviewed for all areas;
- Be capable of being audited to ensure that any information held is both accurately recorded and up to date;
- Be capable of interrogation to facilitate risk assessment and site prioritisation.

9.2 Merseyside Contaminated Land Information Management System

The Council has developed a Contaminated Land Information Management System (CLIMS) in partnership with other members of the Merseyside Contaminated Land Officers Group (CLOG) with technical input and support from the Merseyside Information Service (MIS) / Mott Macdonald. The use of a common system across

Merseyside provides significant advantages for data sharing and has resulted in economies of scale in system development and support.

The primary purpose of this system is to manage the information obtained and held in the course of carrying out the Council's inspection duties. It is considered that a Geographical Information System working with a database(s) provides the most efficient means of achieving this. The CLIMS also provides an invaluable source of information for a number of the other functions of the Council.

The CLIMS comprises a computer application developed in MapInfo which has the capability to capture, hold, analyse and display all the information required to implement the inspection duties of the Council. In general terms, the CLIMS comprises an Input Module for data capture, an Output Module for standard output production, an Analysis Module to assist with site prioritisation and a Database Module for information recording.

The structure of the GIS is based on the source-pathway-receptor model, with appropriate information held in layers. For example potential contaminative land uses digitised from historical maps form several layers, protected sites, such as Sites of Special Scientific Interest, form another layer, allotments another and so on. Further details on the types of information gathered are set out in Section 5.3 Information Collection Procedures.

In addition to information management, the CLIMS is also used to assist in the prioritisation of sites. Further details on the functionality of the system in this respect are outlined in Section 5.5 Information Evaluation.

Certain information, for example site investigation reports are also held within the CLIMS so that they can be readily cross-referenced. A decision may be taken in the future whereby other key documents relevant to the decision making process will be scanned and held within the GIS system although this is not an immediate priority.

9.3 Administration and IMS Management

The Environmental & Technical Services Department Contaminated Land Team is responsible for the day to day management of the system including data management.

The CLIMS Modules Guide Book has been developed to aid users of CLIMS within the Merseyside Districts.

The Guide includes procedures for using the modules and data management, updating, validation and data and system maintenance.

9.4 Arrangements for Access to Information

Public access to information will be afforded through two principal routes, (a) information held on the public register and (b) through specific information requests.

Transparency is one of the underlying principles of the Part 2A regulatory regime. The Council will aim to ensure that, subject to appropriate legislative requirements, the public can gain access to clear accurate factual information pertaining to the state of the land. Further details are set out below.

9.4.1 Public Register

The regime provides for a public register, but only of land in respect of which a remediation notice has been issued, or where a remediation statement or declaration has been published. This information will be available for public inspection subject to any exclusions, for example, on the grounds of national security or commercial confidentiality. The details of information to be included on the Public Register are set out in The Contaminated Land (England) Regulations 2006. These are:

- Remediation notices
- Appeals against remediation notices
- Remediation Declarations
- Remediation Statements
- Appeals against charging notices
- Designation of Special Sites
- Notification of claimed remediation
- Convictions
- Guidance issued by the Environment Agency
- Other environmental controls

The Public Register is available for inspection at Magdalen House, 30 Trinity Road, Bootle L20 3NJ on Monday to Friday between the hours of 9am and 4pm. The Public Register is currently held in paper form. Consideration is also being given to making the public register available on the Council website.

9.4.2 Information Requests

It is envisaged that requests will be made for access to information relating to the inspection process, for example, information on whether land has been inspected and details of any site investigation reports prepared. Requests may also be regarding other information held by the Council in respect of the condition of land. It is the Council's intention that the release of such information will be in accordance with existing procedures for environmental information requests under the Environmental Information Regulations 2004.

9.4.3 Other Council Departments

The information gathered during the process of implementation of this strategy will be valuable to other Departments of the Council in the discharge of their specific functions. The full value of the IMS will be realised as it is integrated with other

systems maintained by other Departments. As noted in Section 9.3, procedures will be developed to ensure appropriate data management.

9.4.4 Provision of Information to the Environment Agency

The Environment Agency has a specific duty to prepare and publish from time to time or at the request of the Secretary of State, a national report on the state of contaminated land in England. The aim of the report is to compile information on the nature, extent and distribution of contaminated land, the level of remediation undertaken and regulatory activity under Part 2A; to allow an assessment of the scale and significance of the problem and the effectiveness of the measures put in place to address it.

An agreed framework for co-operation and working arrangements has been set out in a Memorandum of Understanding between the Environment Agency and the Local Government Association. Within this framework, appropriate local arrangements have been set up to facilitate provision of the necessary information for the Agency to produce the State of the Land Report.

Local authorities are required to provide the Environment Agency with the information necessary to produce the report: limited to information that local authorities may have, or be reasonably expected to acquire under Part 2A. Information to requirements include:

- the nature, extent and distribution of contaminated land;
- remediation undertaken;
- regulatory activity

The Council utilise standard forms provided by the Environment Agency for this purpose, as follows:

- the submission to the Agency of a summary form each time a site is determined;
- the submission to the Agency of a summary form each time a remediation notice, statement or declaration is issued or agreed; and
- the submission to the Agency of a summary form of regulatory activity at the end of each financial year.

9.5 Risk Communication

The mechanisms by which the Council will communicate information on risks associated with land contamination are set out in the Communication Strategy, Section 6.4

GIS is an extremely valuable tool for assisting in the process of risk communication. It offers a good visualisation facility for presentations to stakeholders and interested parties, for example to demonstrate specific potential pollution linkages.

Appendix I

Categories of Significant Harm (Statutory Guidance, Annex 3, Chapter A, Table A)

Type of Receptor	Description of harm to that type of receptor that is to be regarded as significant harm
Human beings	Death, disease, serious injury, genetic mutation, birth defects or the impairment of reproductive functions. For these purposes, disease is to be taken to mean an unhealthy condition of the body or a part of it and can include, for example, cancer, liver dysfunction or extensive skin ailments. Mental dysfunction is included only insofar as it is attributable to the affects of a pollutant on the body of the person concerned. This description of significant harm is referred to as a human health effect.
Any ecological system, or living organism forming part of such a system, within a location which is: • an area notified as an area of special scientific interest under section 28 of the Wildlife and Countryside Act 1981; • any land declared a national nature reserve under section 35 of that Act; • any area designated as a marine nature reserve under section 36 of that Act; • an area of special protection for birds, established under section 3 of that Act; • any European Site within the meaning of regulation 10 of the Conservation (Natural Habitats etc) Regulations 1994 (ie Special Areas of Conservation and Special Protection Areas); • any candidate Special Areas of Conservation or potential Special Protection Areas given equivalent protection; • any habitat or site afforded policy protection under paragraph 6 of Planning Policy Statement 9 (PPS9) on nature conservation (ie candidate Special Areas of Conservation, potential Special Protection Areas and listed Ramsar Sites); or • any nature reserve established under section 21 of the National Parks and Access to the Countryside Act 1949.	For any protected location: • harm which results in an irreversible adverse change, or in some other substantial adverse change, in the functioning of the ecological system within any substantial part of that location; or • harm which affects any species of special interest within that location and which endangers the long-term maintenance of the population of that species at that location. In addition, in the case of a protected location which is a European Sites (or a candidate Special Area of Conservation or a potential Special Protection Area), harm which is incompatible with the favourable conservation status of the natural habitat at that location or species typically found there. In determining what constitutes such harm, the local authority should have regard to the advice of English Nature and the requirements of the Conservation (Natural Habitats etc) Regulations 1994 This description of significant harm is referred to as an ecological system effect.
Property in the form of : • crops, including timber; • produce grown domestically, or on allotments, for consumption; • livestock; • other owned or domesticated animals: • wild animals which are the subject of shooting or fishing rights.	For crops, a substantial diminution in yield or other substantial loss in their value resulting from death, disease or other physical damage. For domestic pets, death, serious disease or serious physical damage. For other property in this category, a substantial loss in its value resulting from death, disease or other serious physical damage. The local authority should regard a substantial loss

	in value to as occurring only when a substantial proportion of the animals or crops are dead or otherwise no longer fit for their intended purpose. Food should be regarded as no longer fit for purpose when it fails to comply with the provisions of the Food Safety Act 1990. Where a diminution in yield or loss in value is caused by a pollutant linkage, a 20% diminution or loss should be regarded as a benchmark for what constitutes a substantial diminution or loss. This description of significant harm is referred to as an animal or crop effect.
Property in the form of buildings. For this purpose, "building" means any structure or erection, and any part of a building including any part below ground level, but does not include plant or machinery comprised in a building.	Structural failure, substantial damage or substantial interference with any right of occupation. For this purpose, the local authority should regard substantial damage or substantial interference as occurring when any part of the building ceases to be capable of being used for the purposes for which it is or was intended. Additionally, in the cases on a scheduled Ancient Monument, substantial damage should be regarded as occurring when the damage significantly impairs the historic, architectural, traditional, artistic or archaeological interest by reason of which the monument was scheduled.

Significant Possibility of Significant Harm (Statutory Guidance, Annex 3, Chapter A, Table B)

Descriptions of Significant Harm (as defined in Table A)	**Conditions for There Being A Significant Possibility of Significant Harm**
Human health effects arising from • the intake of a contaminant, or • other direct bodily contact with a contaminant	If the amount of the pollutant in the pollutant linkage in question: • which a human receptor in that linkage might take in; or • to which such a human might otherwise be exposed, as a result of the pathway in that linkage, would represent an unacceptable intake or direct bodily contact, assessed on the basis of relevant information on the toxicological properties of that pollutant. Such an assessment should take into account: • the likely total intake of, or exposure to, the substance or substances which form the pollutant, form all sources including that from the pollutant linkage in question; • the relative contribution of the pollutant linkage in question to the likely aggregate intake of, or exposure to, the relevant substance or substances; and • the duration of intake or exposure resulting form the pollutant linkage in question. The question of whether an intake or exposure in unacceptable is independent of the number of people who might be affected by that intake or exposure. Toxicological properties should be taken to include carcinogenic, mutagenic, teratogenic, pathogenic, endocrine disrupting and other similar properties.
All other human health effects (particularly by way of explosion or fire).	If the probability, or frequency, of occurrence of significant harm of that description is unacceptable, assessed on the basis of relevant information concerning: • that type of pollutant linkage, or • that type of significant harm arising form other causes. In making such an assessment, the local authority should take into account the levels of risk which have been judged unacceptable in other similar contexts and should give particular weight to cases where the pollutant linkage might cause significant harm which: • would be irreversible or incapable of being treated; • would affect a substantial number of people; • would result from a single incident such as a fire or explosion; or would be likely to result from a short-term(that is, less than 24-hour) exposure to the pollutant.
All ecological system effects	If either: • significant harm of that description is more likely than not to result from the pollutant linkage in question; or • there is a reasonable possibility of significant harm of that description being caused, and if that harm were to occur, it would result in such a degree of damage to features of special interest at the location in question that they would be beyond any practicable possibility of restoration. Any assessment made for these purposes should take into account relevant information for that type of pollutant linkage, particularly in relation to the ecotoxicological effects of the pollutant.
All animal and crop effects.	If significant harm of that description is more likely than not to result from the pollutant linkage in question, taking into account relevant information for that type of pollutant linkage, particularly in relation to the ecotoxicological effects of the pollutant.
All building effects.	If significant harm of that description is more likely than not to result from the pollutant linkage in question during the expected economic life of the building (or, in the case of a scheduled Ancient Monument, the foreseeable future), taking into account relevant information for that type of pollutant linkage

Appendix II

Appendix II Statutory and Non-Statutory Bodies

Organisation	Contact
Sefton Elected Members	
*Environment Agency (South Area)	South Area Contact
*Environment Agency (Central Area)	Central Area Contact
*English Nature	Ecologist (Merseyside)
*English Heritage	Land Use Planner
*Ministry of Agriculture Fisheries and Food	Policy Advisor (Contaminated Land)
*Food Standards Agency	Contaminants Division
*North West Development Agency	Senior Development Manager
English Partnerships	Senior Project Manager
North West Regional Assembly	Waste and Contaminated Land Co-ordinator
Health & Safety Executive	Health and Safety Officer (Merseyside)
Railtrack	Environmental Manager
United Utilities	Project Manager (Contaminated Land)
British Gas	Director
Lattice Properties Holding Limited	Construction Manager
MANWEB Mersey Region	Safety and Environment Manager
British Telecom	Notice Handling Centre
South Sefton Primary Care Trust	Director of Public Health
Bootle and Litherland Primary Care Trust	Chief Executive
Crosby and Maghull Primary Care Group	Chief Executive
Southport and Formby Primary Care Trust	Chief Executive
Parish Councils: Aintree Village Ince Blundell Little Altcar and Hightown Lydiate Maghull (Town Council) Melling Sefton Thornton	The Clerk to the Council
Knowsley MBC Liverpool City Council St Helens MBC Wirral MBC Halton Borough Council West Lancashire District Council	Neighbouring Authorities Contaminated Land Lead Officers
Lancashire County Council	County Planning Officer
Merseyside Emergency Planning Unit	Manager
Merseyside Waste Disposal Authority	Acting Director and Treasurer
Mersey Waste Limited	Manager
The Coal Authority	Operations Manager

Defence Estates Organisation	Land Disposal Manager
Merseyside Chamber of Commerce	Building and Environment Committee
National House Building Council	Head of Engineering
British Waterways	Supervisor (Merseyside)
Groundwork Trust	Acting Strategic Manager (East)
Forestry Commission	Director
Mersey Forest	Director
NFU Mutual	Agency Office
South Sefton Partnership	Manager
Central Sefton Partnership	Manager
Objective One Secretariat	Government Office for Merseyside
The Countryside Agency	Manager
The House Builders Federation	To be Determined

*denotes Statutory Consultee

Note: The consultees listed above were consulted on the first version of the Inspection Strategy. Elected members and statutory consultees have been consulted on subsequent revisions of the strategy with final versions made available on the Council website.

Appendix III

Procedure for Dealing with Local Authority Land

This procedure is intended to indicate the type of actions required from departments responsible currently for the management of local authority owned land; the assistance that is available from the enforcing department and the enforcement procedure that will be followed in respect of local authority land.

Departments Managing Land

Departments managing land will be contacted by Enforcement officers at an early stage and offered general advice on their responsibilities. Further advice can be obtained at any stage.

Dealing with contaminated land can be a long difficult and expensive process and it is recommended that departments begin the identification and planning process as soon as possible. The points below indicate the steps which may be taken to start this process.

- Obtain information on land it currently has responsibility for and land it formerly owned or leased, and the activities currently or formerly undertaken there.

- Establish whether any such land has had potentially contaminative uses.

- Consider the extent to which work may have already taken place to deal with potential contamination.

- Consult with other departments and other persons who may have useful information relating to contamination.

- At this point if there is not an ongoing dialogue with Environmental & Technical Services Department advice should be sought on the detailed implications of Part 2A.

The land owning department of course may progress this to remediation in advance of the regulatory department's inspection process.

Environmental & Technical Services Department

The enforcing department must be seen to treat local authority and privately owned land in a similar manner. To this end this procedure outlines the first informal steps towards information gathering relating to local authority owned land and goes on to detail an enforcement procedure to be applied if required.

- Ensure departments are aware of their responsibilities under the strategy and that the time scales within the strategy are a minimum standard.

- Gather information from departments to provide a record of council owned land for inclusion on the Contaminated Land Information Management System.

- Ensure that as information becomes available council owned land is programmed into the strategy in order of prioritisation.

- Inspect potentially contaminated land as per the strategy programme or on request from land owning departments.

- Agree appropriate Remediation Actions with land owning departments. This will include a timetable and must be in writing.

If agreement cannot be reached, or is not complied with or the timetable is not met the matter should be brought to the attention, in writing, of the Head of Service of the Department managing the land. It should be made clear what further steps will be taken if the matter is not resolved.

If the matter is still not resolved it should be brought to the attention of the Environment Section Manager who will arrange for it to be raised with the Director of Environmental & Technical Services and the Director of the appropriate Department. The Director of Environmental & Technical Services will also inform the relevant Strategic Director if no progress is made.

If necessary a full report will be sent to the Chief Executive for referral to Cabinet.

Appendix IV

Figure 5.5.1 Part I Assessment- Development

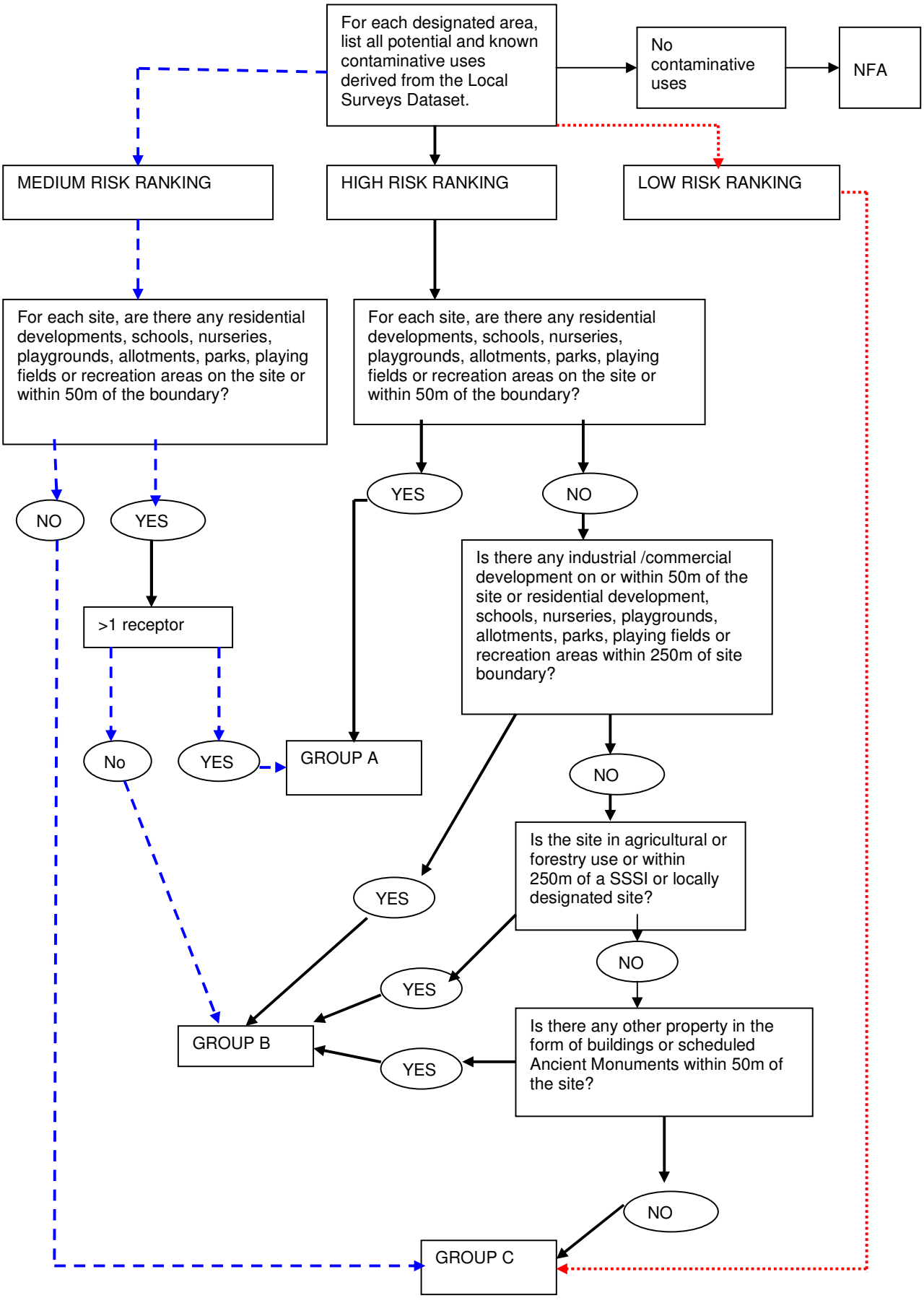


Figure 5.5.2 Part I Assessment- Controlled Surface Waters

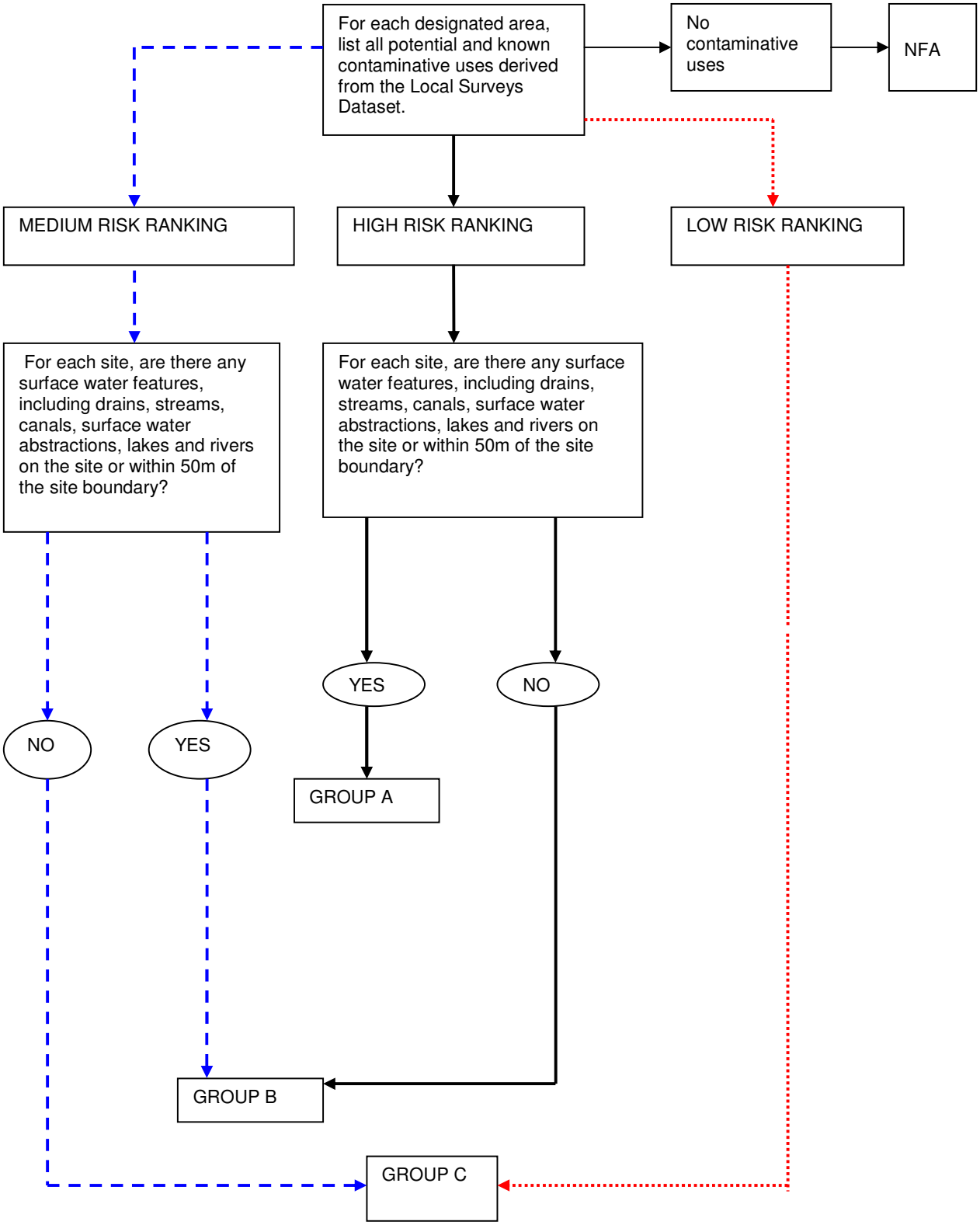
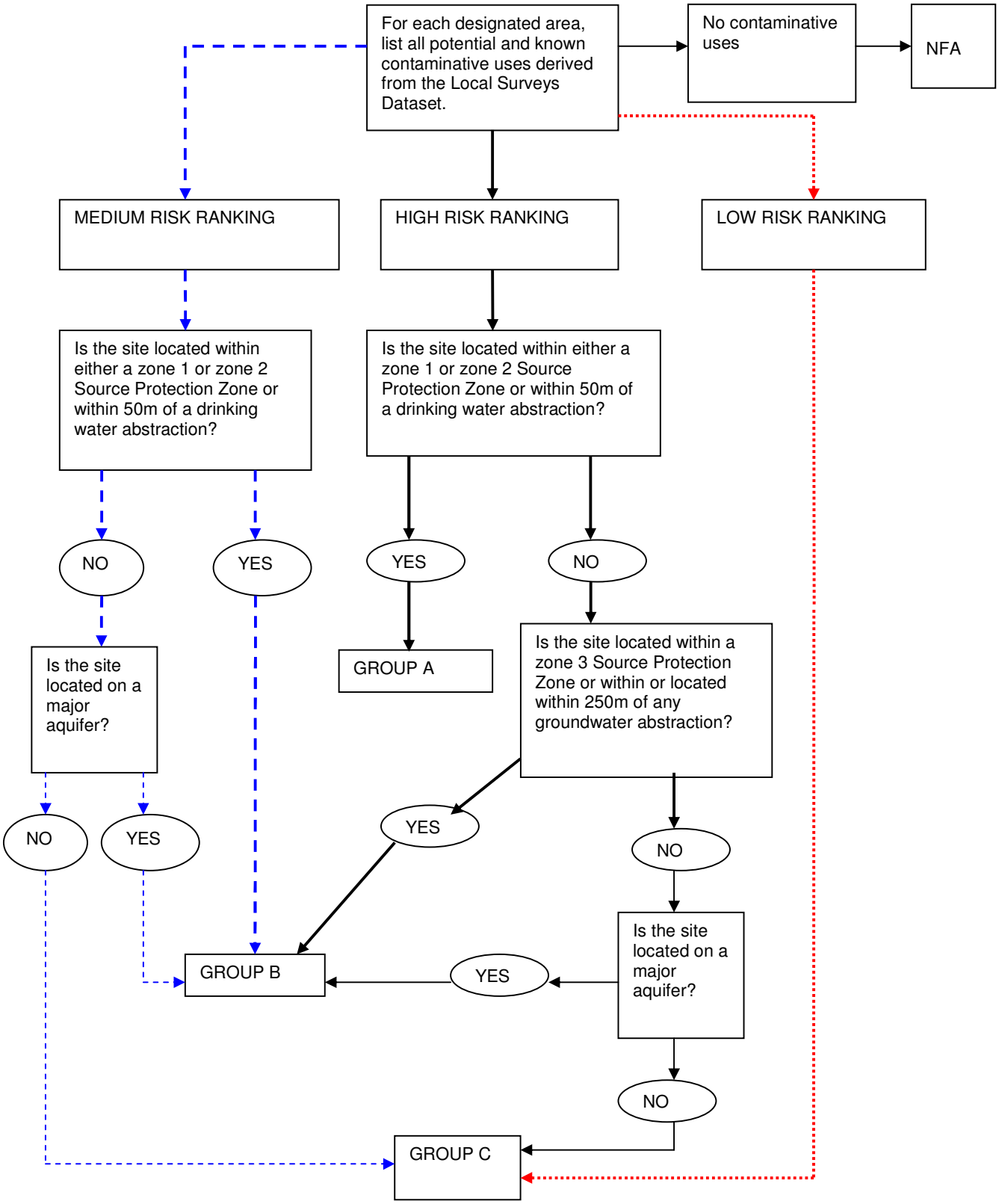


Figure 5.5.3 Part I Assessment- Controlled Ground Waters



Appendix V

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