



**Contaminated Land Inspection
Strategy**

February 2007 (Revision 2)

Revision Record

Version	Author	Date
Original	Dee Mawn – Contaminated Land Officer	November 2001
Revision 1	Dee Mawn – Contaminated Land Officer	February 2003
Revision 2	Richard Allard – Contaminated Land Officer	February 2007

Executive Summary

North Somerset Council is required to inspect land within its area under a new regulatory regime for the identification and remediation of contaminated land which came into effect in April 2000.

Although the prevention of new contamination is of critical importance, the focus of the new regime is to specifically address land that has been contaminated in the past.

The existence of contamination presents a number of threats to sustainable development and therefore once identified these areas of contaminated land must be remediated in order to fulfil the Government objectives which underlie the 'suitable for use' approach to the remediation of contaminated land, which the Government considers to be the most appropriate approach to achieving sustainable development.:

The primary objectives of the Contaminated Land Inspection strategy are as follows:

- to demonstrate how the Council intends to identify all the contaminated land within the district.
- To demonstrate how the Council intends to remove unacceptable risks to human health and the environment by instigation a programme of land remediation.
- To seek to bring back damaged land into beneficial use.
- To inform all stakeholders of the Councils intentions
- To ensure that the cost of remediation is proportionate, manageable and economically sustainable.
- To maintain a Contaminated Land Register which is accessible to the public.

Contaminated land is defined for the purposes of Part IIA under Section 78A(2) of the Environmental Protection Act as:

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

- a) significant harm is being caused, or there is significant possibility of such harm being caused, or
- b) pollution of controlled waters is being, or is likely to be caused.

Before the Council can determine that any land is 'contaminated land' they have to establish the presence of a 'pollution linkage'. This means that each of the following have to be identified:

- a contaminant
- a receptor which is sensitive to the contaminant present; and
- a pathway, by which the contaminant is, or is likely, to be causing significant harm to that receptor.

The strategy outlines the procedures that will be used to gather and evaluate the information needed to determine whether any land is contaminated. The aim of the Council is to investigate and deal with contaminated land according to the potential risk posed by the site. Any sites identified as being potentially contaminated will be prioritised according to previous land uses and the proximity of sensitive receptors.

A risk assessment will then investigate any potential pollution linkages on a site to establish whether any contamination is posing, or is likely to pose an unacceptable risk to health and the environment.

Where there is a high probability of adverse affects from a pollution linkage a more detailed investigation will be required to characterise any contamination on the site. The Council will liaise with the land owner and other people with an interest, to seek their co-operation in the investigation. If the land is found to be contaminated land, the Council will seek to achieve voluntary remediation.

In terms of contaminated land, North Somerset Council has the following direct responsibilities:

- sites owned or previously owned by the Council including leased sites;
- 'orphaned sites where there is no appropriate person; and
- Sites where the original polluter no longer exists and contamination is migrating and affecting neighbouring sites.

As the main regulatory authority for contaminated land the Council recognises that it is vital to adopt a responsible and transparent attitude towards dealing with contamination issues affecting publicly owned land.

A time table has been given outlining the proposed progress for each stage of the inspection the District.

The progress of the inspection Strategy will be regularly reviewed to determine how the work is progressing in line with the proposed timescales. This will take into account any new guidance that has been produced to ensure that the Strategy is in line with current best practice.

CONTENTS PAGE

TABLE OF CONTENTS.....	i
1. INTRODUCTION	1
1.1 National Policy	1
1.2 North Somerset's Visions and Priorities.....	2
1.3 Draft Regional Planning Guidance (RPG)	3
1.4 North Somerset Local Plan.....	4
1.5 Environment Policy	4
1.6 Enforcement Concordat.....	5
1.7 Enforcing the New Regime	6
1.8 Roles and Responsibilities of North Somerset Council.....	6
1.9 Roles and Responsibilities of the Environment Agency.....	7
1.10 Definition of contaminated Land under Part IIA	7
1.10.1 The Source-Pathway-Receptor Concept.....	8
1.10.2 Principles of risk assessment.....	9
1.10.3 'Special Sites'	9
1.11 Requirements for a Strategic Approach.....	9
1.12 Other Control Mechanisms for Contaminated Land.....	10
1.12.1 Planning and Development Control	10
1.12.2 Pollution Prevention Control (PPC).....	10
1.12.3 Waste Management Licensing.....	11
1.12.4 Statutory Nuisance.....	11
1.12.5 Water Resources Act 1991	11
1.12.6 Radioactivity.....	12
1.12.7 Other Regimes.....	12
1.13 Development of the Inspection Strategy	12
1.13.1 Internal Team Responsibility	12
1.13.2 Internal Consultation	13
1.13.3 Consultation with the Environment Agency and other appropriate public authorities	13
2 CHARACTERISTICS OF NORTH SOMERSET	14
2.1 North Somerset	14
2.2 Geographical Location.....	14
2.3 Population and Economy.....	15
2.4 Current Land Use Characteristics.....	15
2.5 The Natural Environment and Protected Locations	17
2.5.1 Wildlife and Habitat Conservation	17
2.5.2 Landscape Conservation Areas	19
2.6 Key Property Types	20
2.7 Key Water Resource / Protection Issues	21
2.8 Broad Geological Characteristics	22
2.9 Broad Hydrogeological Characteristics.....	23
2.10 Areas of Naturally Metal Enriched Soils.....	23
2.11 Current and Past Industrial Activity.....	23
2.11.1 Environmental Protection Act 1990 - Pollution Inventory	23

2.11.2	Limestone Quarrying.....	24
2.11.3	Lead Mining	24
2.11.4	Coal Mining.....	24
2.11.5	Power Generation	25
2.11.6	Petrochemicals	25
2.11.7	Other Industry	26
2.12	The National Land Use Database.....	26
3	THE COUNCIL'S INSPECTION STRATEGY: AIMS AND PRIORITIES	28
3.1	Objectives.....	28
3.2	Programme of Action.....	28
3.2.1	Appointment of Contaminated Land Officer (March 2001).....	28
3.2.2	Information Collection	29
3.2.3	General Approach to Inspection.....	30
3.2.4	Information Evaluation – Risk Assessment.....	32
3.2.5	Council Owned Land.....	33
3.3	Timescales	33
	Completed	35
3.4	Dealing with Urgent Sites	37
4	PROCEDURES	38
4.1	Internal Management Arrangements for Inspection and Identification 38	
4.2	Arrangements for Carrying out Detailed Inspection	38
4.2.1	Site Specific Liaison with Interested Parties.....	38
4.2.2	Powers of Entry.....	39
4.2.3	Detailed Inspection Procedures	39
4.2.4	Health and Safety Procedures	41
4.3	Formally Determining an Area of Contaminated Land.....	41
4.4	Notification of the Identification of Contaminated Land.....	42
4.4.1	Definition of 'Appropriate Persons'	42
4.4	Formal Designation of 'Special Sites'	42
4.5	Service of a Remediation Notice	42
4.6	Risk Communication.....	43
5	INFORMATION MANAGEMENT	45
5.1	General Principles	45
5.2	The Public Register	45
5.3	Use by Other Departments	45
5.4	Data Confidentiality	46
5.5	State of Contaminated Land Report	46
5.6	Voluntary Information and Complaints.....	46
5.6.1	Complaints / Concerns.....	47
5.6.2	Confidentiality and anonymous Information	47
5.6.3	Voluntary Provision of Information	47
5.6.4	Anecdotal Evidence	48
5.7	Interaction with other Regulatory Regimes	48
6	GENERAL LIAISON AND COMMUNICATION STRATEGIES	49
6.1	Statutory Consultees	49
6.2	Non-Statutory Consultees.....	49
6.3	Communicating with Owners, Occupiers and Other Interested Parties.....	49

7	MECHANISMS FOR REVIEW	51
7.1	Triggers for Undertaking Inspection.....	51
7.2	Triggers for Reviewing Inspection Decisions.....	51
7.3	Review of the Strategy.....	52
	Annex A – Categories of Significant Harm	53
	Annex B – Sources of Information for Part IIA	56
	Annex C – Glossary of Terms	58
	Annex D - References	61

1. INTRODUCTION

North Somerset Council is required to inspect land within its area under a new regulatory regime for the identification and remediation of contaminated land which came into effect on the 1st April 2000.

Although the prevention of new contamination is of critical importance, the focus of this new regime is to specifically address land that has been contaminated in the past. It is not known how much land is contaminated in the UK and this is why local authorities are required to publish a written strategy detailing how they intend to inspect their districts to identify areas of contaminated land.

The existence of contamination presents a number of threats to sustainable development and therefore once identified these areas of contaminated land must be remediated in order to fulfil the following government objectives: -

- to remove unacceptable risks to human health and the environment;
- to bring damaged land back into beneficial use; and
- to ensure that the cost burdens faced by individuals, companies and society as a whole are proportionate, manageable and economically sustainable.

These three objectives underlie the 'suitable for use' approach to the remediation of contaminated land, which the government considers to be the most appropriate approach to achieving sustainable development in this field.

1.1 National Policy

The statutory objectives for North Somerset's Inspection Strategy for Contaminated Land are taken from Part IIA of the Environmental Protection Act 1990 (as amended).

The objectives of the Inspection Strategy may be summarised as follows:

- It should set out protocols that allow a '*rational, ordered and efficient approach*' to be taken in the dispensation of the Council's duties of inspection and identification of contaminated land;
- It should ensure that the approach taken by the local authority is '*proportionate to the seriousness of any actual or potential risk*' from contaminants in, on or under land;
- It should ensure that the most serious contamination problems are located and addressed first;
- It should ensure that the Council's resources are concentrated on investigating areas where contaminated land is most likely to be identified, and;

- It should ensure that the Council efficiently identifies requirements and protocols for the detailed inspection of particular areas of land.

Above all, the Strategy should reflect the unique local circumstances. These local circumstances will influence the approach to developing a key element of the strategy – the Land Inspection Strategy. Guidance for the Strategy as a whole and for the preparation of this is provided by “Contaminated Land Inspection Strategies – Technical Advice for Local Authorities” – DETR (May 2001). This has been followed, and strategies prepared by other Councils have been reviewed.

1.2 North Somerset’s Visions and Priorities

The Council's vision statement is contained within its Best Value Performance Plan, for 2001/2.

It is the Council's Vision to provide services that benefit the community. It is proposed to achieve this by:

- Consulting without pre-conceived ideas
- Responding to local opinion
- Providing quality services
- Giving value for money
- Supporting existing and new employment
- Maintaining the character of villages, towns and the countryside, and;
- Protecting the vulnerable

Its long- term (10 year) statement of community aspirations is set out in a Community Pride document, which sets 5 long-term goals;

- Protecting and improving the environment
- Enhancing health and well-being
- Maximising educational achievement and opportunity for all
- Increasing prosperity
- Managing the organisation efficiently and effectively

The Contaminated Land Inspection Strategy is one link between the first and second of these goals. The Council's aim in the environment is to protect and enhance the quality, safety, character and diversity of North Somerset's environment and its enjoyment by present and future generations. Its aim in health and well-being is to work in partnership to improve the health and well-being of communities. These aims include relevant objectives:

- To promote the ‘suitable for use’ approach in dealing with derelict and contaminated land whilst encouraging the bringing back of empty properties into use.
- To protect and enhance the natural environment.

- To work in partnership with landowners, organisations, community groups and individuals to manage and enhance the environmental resource.
- To plan for and manage change by embracing the opportunities and challenges through mixed development and use of previously used land in preference to greenfield sites.
- Undertake a full impact assessment of new development so as to ensure a healthy and safe environment and to minimise its environmental impact.

The issue of land contamination has wide and potentially significant environmental and economic impacts. It is therefore important that the development of the strategy has regard to both of these factors.

The Council's aim in increasing prosperity is by developing a more sustainable local economy that meets the needs and aspirations of residents and businesses alike.

This aim includes relevant objectives, to:

- Facilitate the availability and development of a range of suitable land and premises in appropriate locations to meet the requirements of industry, commerce and tourism.
- Encourage the effective use of natural resources i.e. Re-using previously used sites.
- Continue to work in conjunction with the South West of England Regional Development Agency (SWRDA), commercial agents and neighbouring Local Authorities.
- Support the provision of high quality infrastructure.

The strategy must also be achieved within the context of the Council's development plan as well as approved objectives for modernisation within decision making. It will emphasise transparency and openness and encourage the community to be involved. A consultation draft was published and made available for comment. Comments were taken into account in the development of this document which has been approved by the Council and submitted to the Department for Environment, Food and Rural Affairs (DEFRA).

During the course of implementation of the strategy the Council has a duty to provide statutory information in the form of a public register which will be available on request at the Council offices (see Section 5.2).

1.3 Draft Regional Planning Guidance (RPG)

RPG 10 for the South West seeks to ensure that the region's needs are met in a sustainable manner while protecting the critical environmental assets of the area. In particular RPG 10 promotes the following vision;

“Developing the region in a sustainable way, as a National and European region of quality and diversity, where the quality of life for residents, the business community and visitors will be maintained and enhanced”.

Regional Planning Guidance also advises that priority should be given to regenerating derelict, contaminated and under-used land and to improve the environment of such areas, (Objective 4(j) – Making best use of past investment in buildings and infrastructure).

1.4 North Somerset Local Plan

The North Somerset Local Plan has been prepared in accordance with the Town and Country Planning Act 1990, as amended by the Planning and Compensation Act 1991. The Local Plan aims to balance the need for development with the protection and enhancement of North Somerset’s high quality environment. It seeks to meet the needs and aspirations of those who live, work in or visit North Somerset by: -

- Setting out planning policies and proposals for the development and use of land in North Somerset.
- Bringing local and detailed planning issues before the public.
- Providing a detailed basis for co-ordinating development and other use of land.

Policy ENV5 of the Local Plan states that planning permission will not be granted for the development or use of land, which is unsuitable by reason of contamination unless remedial works are included or can be secured, or development can be restricted, sufficient to reduce the risk to an acceptable level.

It is paramount therefore that there is provision for information exchange between the Local Plan developments and the contaminated land inspection outputs.

1.5 Environment Policy

North Somerset Council is committed to protecting and improving the local environment to ensure that there is no net loss of biodiversity. The policy includes the following action points:

- Consider a planning and transportation strategy for the next ten years.
- Produce and implement in partnership, a Local Agenda 21 and Environment Strategy.
- Ensure all Council strategies, policies and plans fully address all environmental issues, and have a positive environmental impact, taking

- account both local and national aspirations, for example
- Concentration of development on previously developed sites.
 - Appropriate design of buildings, streets and other open spaces.
 - Minimising waste and increasing re-cycling rates.
 - Reducing dependency on land-filling of waste.
 - Continuously improve, monitor and minimise environmental effects of air, waste, noise, light and land pollution.
 - Accepting the “polluter pays” principle.
 - Encourage diversity of habitat and environment.
 - Raise awareness and encourage participation in environmental issues throughout the whole community.
 - Work ourselves and with others to audit and establish best environmental practices in all resources.
 - Identify and monitor the environmental resource in terms of its source, quality and quantity and make environmental information on this available as appropriate.
 - Establish and finance strong regulatory services to protect the environmental resource.

1.6 Enforcement Concordat

North Somerset has become a signatory to this Government initiative, primarily for the Directorate of Planning & Environment’s Environmental & Consumer Services section. Other services will follow.

The six principles of good enforcement will be gradually applied to other enforcement services such as planning control and building control as Improvement Plans are applied. They are:

1. Clear standards
2. Openness
3. Helpfulness
4. Complaint resolution
5. Proportionality (with risks involved)
6. Consistency

The new regime for dealing with contaminated land came into force on April 1st 2000. Enforced under Part IIA of the Environmental Protection Act 1990, it requires local authorities to inspect their areas for contaminated land and secure remediation for sites they may identify. This Inspection Strategy details how the Council will undertake its inspection and enforcement duties within North Somerset. It will incorporate the principles set out in the Enforcement Concordat.

In making enforcement decisions subject to securing remediation of contaminated sites, the Council must have regard to any hardship which may be caused to the person responsible for remediation. The term ‘hardship’ is not defined within Part IIA, and therefore carries its ordinary meaning –

hardness of fate or circumstances, severe suffering or privation.

1.7 Enforcing the New Regime

Until the implementation of the new regime, contaminated land was dealt with through Statutory Nuisance provisions under Part III of the Environmental Protection Act 1990. This legislation was not specifically developed to address land contamination and a lack of a formal definition of contaminated land had led to inconsistencies in approach. Therefore the need to develop a new regime which would effectively combat the legacy of historic pollution as well as prevent future contamination was achieved through enacting Section 57 of the Environment Act 1995, thus implementing Part IIA of the Environmental Protection Act 1990.

The new regime has been developed to promote a proactive approach for dealing with contaminated land. It sets out the right level of protection for human health and the environment from the effects of land contamination. It does this by providing a formal definition of contaminated land as well as a methodical framework for the inspection, investigation and remediation of any land identified as contaminated.

North Somerset Council is the regulatory authority in its area, but the appropriate management of contaminated land will require the involvement of a range of organisations (see section 1.14). The Environment Agency in particular will play a supporting role through the provision of information and advice. In addition the designation of 'special sites' (see section 1.10.3) will be done in agreement with the Environment Agency.

Local Authorities have been issued with Statutory Guidance in the form of a DETR circular 02/2000. The Guidance sets out the way in which the new regime is expected to work by providing a guide to the regulations. Despite being a key document for Local Authorities, the circular will no doubt become an invaluable source of information for those with a common interest in contaminated land issues i.e. land owners and property developers.

1.8 Roles and Responsibilities of North Somerset Council.

As the primary regulating authority for Part IIA, North Somerset Council has been vested with 12 main responsibilities.

- | |
|---|
| <ol style="list-style-type: none">1) Prepare a strategy for the inspection of the district for contaminated land.2) Determine whether any particular areas of land are contaminated in accordance with the Part IIA definition (see Section 1.10). |
|---|

- 3) Decide in consultation with the Environment Agency whether any contaminated land should also be designated as a 'special site', in accordance with the Contaminated Land Regulations 2000.
- 4) Undertake immediate remediation action where there is imminent danger of serious harm.
- 5) Decide whether other statutory regimes can provide a more applicable means of control than Part IIA.
- 6) Identify and notify those who may need to take action in respect of a particular contaminated or special site.
- 7) Determine who may be liable to bear responsibility for remediation.
- 8) Consult with all relevant parties on what remediation action is required.
- 9) Serve a remediation notice unless restrictions apply or voluntary action can be agreed.
- 10) Monitor the effectiveness of any remediation works.
- 11) Maintain a public register containing details of regulatory actions taken under Part IIA, or other means; and
- 12) Report progress under Part IIA to the Environment Agency to allow preparation of a national report on contaminated land.

1.9 Roles and Responsibilities of the Environment Agency

The Environment Agency will have four principal roles with respect to contaminated land under Part IIA. It will:

- (a) Assist local authorities in identifying contaminated land, particularly in cases where water pollution is involved;
- (b) Provide site-specific guidance to local authorities on contaminated land;
- (c) Act as the 'enforcing authority' for any land designated as a 'special site'; and
- (d) Publish periodic reports on contaminated land.

1.10 Definition of contaminated Land under Part IIA

Contaminated Land is defined for the purposes of Part IIA under Section 78A(2) of the Environmental Protection Act 1990.

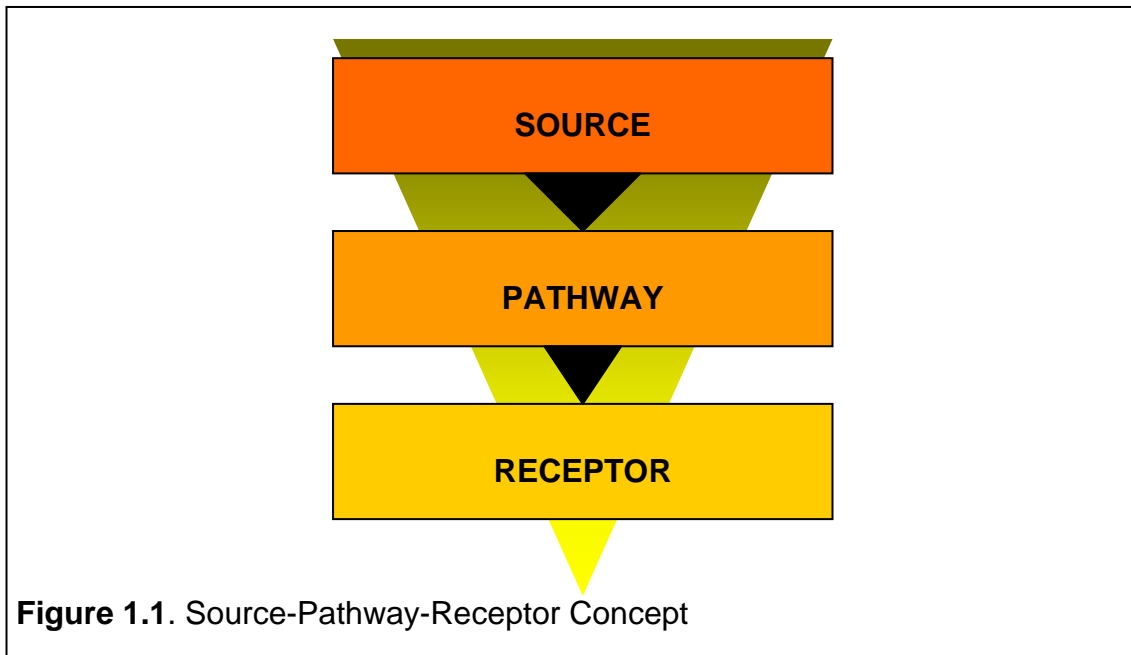
'Contaminated Land is any land which appears to the Local Authority in whose area it is situated to be in such a condition, by reason of substances in, on or under the land, that

- a) significant harm is being caused, or there is significant possibility of such harm being caused, or
- b) pollution of controlled waters is being, or is likely to be caused.

The local authority is required to act in accordance with the Statutory Guidance in determining what is significant.

1.10.1 The Source-Pathway-Receptor Concept

For any site to meet the definition of contaminated land, the Council must first demonstrate that a **pollutant linkage (PL)** exists. A PL is defined as ‘the relationship between a source of contamination, a pathway and a receptor’.



Source

A source of contamination in the form of pollutants in, on or under the land.

Pathway

The migratory pathway(s) by which the pollutants are carried to the receptor.

Receptor

The statutory guidance has specified who or what can be regarded as a receptor for the purposes of Part IIA (see Annex A): -

- **Human beings**
- **Ecological systems or living organism forming part of such as a system, within any of the following:**
- **Property in the form of buildings, crops, home-grown produce, livestock, domestic animals and wild animals subject to shooting or fishing rights.**
- **Controlled Waters**

Once the Council is certain that a PL exists, it must then demonstrate that it is causing or has the potential to cause significant harm. The process in which the authority does this is most commonly referred to as a risk assessment.

1.10.2 Principles of risk assessment

In order to determine whether the PL identified is likely to cause **significant harm**, the Council would need to carry out a risk assessment. These assessments are designed to ascertain the probability, or frequency of the receptor being exposed to a contaminant and also the magnitude or seriousness of this exposure. In order for the council to draw conclusions about the risks it must carry out an appropriate scientific and technical assessment of all the relevant and available evidence and be certain that all appropriate methods have been used. Until a **Significant Pollutant Linkage (SPL)** can be proven in this way, a piece of contaminated land can not be determined as such.

1.10.3 'Special Sites'

Having identified any contaminated land, the Council must consider whether the land also meets any of the descriptions which would require it to be designated as a 'special site'. These descriptions are prescribed in the Contaminated Land (England) Regulations 2000. If the Local Authority concludes that it should designate any land as a 'special site', it will need to notify the Environment Agency.

1.11 Requirements for a Strategic Approach

The statutory guidance sets out the principles to be applied by local authorities to ensure a strategic approach to the inspection procedure. It states that 'this approach should:

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

1.12 Other Control Mechanisms for Contaminated Land

Part IIA is not the only legislation relevant to contaminated land, and may not be applicable for dealing with all circumstances. Other controls to be considered are: -

1.12.1 Planning and Development Control

On receipt of individual applications for planning permission planning authorities must consider the potential for contamination. The 'suitable for use' concept requires planning control to consider whether the land is suitable for its current or intended use. Where necessary the authority should only approve planning permission where appropriate site investigation and remediation conditions are agreed.

Planning Policy Guidance is available in; PPG14 – “Development on Unstable Land” and PPS 23 “Planning and Pollution Control”. Minerals Planning Guidance may also be relevant; particularly MPG3 – “Coal Mining and Colliery Spoil Disposal”, MPG7 – “Reclamation of mineral workings”, MPG9 – “IDO Conditions” and MPG12 – “Treatment of disused mine openings etc.

In most cases, the enforcement of any remediation requirements will be through planning conditions and building control, rather than through a remediation notice issued under Part IIA.

Any implications arising from the Town and Country Planning Hazardous Installations Regulations may also need to be considered.

1.12.2 Pollution Prevention Control (PPC)

Section 27 of the Environmental Protection Act 1990 gives the Environment Agency the power to take action to remedy harm caused by a breach of PPC controls under section 23(1)(a) or (c) of the Act. This could apply to cases of land contamination arising from such causes.

In any case where an enforcing authority acting under Part IIA considers that the section 27 power is exercisable, it is precluded by section 78YB(1) from serving a remediation notice to remedy the same harm.

In some cases, remediation activities may themselves constitute processes which cannot be carried out without a permit issued under the PPC regime.

The PPC regime enables the Environment Agency to require the operator of permitted plants or installations to remedy the effects of any breaches of their permits.

1.12.3 Waste Management Licensing

There are three areas of potential interaction between the Part IIA regime and the waste management licensing system under Part IIA of the Environmental Protection Act 1990.

Firstly, there may be significant harm or pollution of controlled waters arising from land for which a site licence is in force under Part II. Where this is the case, under Section 78YB(2), The Part IIA regime does not normally apply, that is, the land cannot be formally identified as ‘contaminated land’ and no remediation notice can be served. If action is needed to deal with a pollution problem in such a case, this would normally be enforced through a ‘condition’ attached to the site licence.

However, Part IIA does apply if the harm or pollution on a licensed site is attributable to a cause other than a breach of the site licence, or the carrying on of an activity authorised by the licence in accordance with its terms and conditions.

Secondly, under Section 78YB(3), an enforcing authority acting under Part IIA cannot serve a remediation notice in any case where the contamination results from an illegal deposit of controlled waste. In these circumstances, the Environment Agency and the waste disposal authority have powers under Section 59 of the 1990 Act to remove the waste, and to deal with the consequences of it having been present.

Thirdly, remediation activities on contaminated land may themselves fall within the definitions of ‘waste disposal operations’ or ‘waste recovery operations’, and be subject to the licensing requirements under the Part II system. Guidance on the meaning of the relevant definitions and the operation of the licensing system is provided in DoE Circular 11/94.

1.12.4 Statutory Nuisance

Since the introduction of the new contaminated land regime, most contaminated land issues are removed from the scope of Statutory Nuisance. However Statutory Nuisance provisions may still be applied where the land itself gives rise to a nuisance, e.g. an odour that is an offence to human senses but is not expected to cause harm.

1.12.5 Water Resources Act 1991

There is a potential for overlap between taking enforcement Action under Part IIA and the Water Resources Act 1991. Where this may be the case North Somerset will consult the Environment Agency before determining the land as contaminated in respect of pollution of controlled waters. The Environment

Agency will then decide whether to proceed with Part IIA or use powers under the Water Resources Act 1991. Powers under the Water Resources Act may be particularly useful where the enforcing authority cannot find a source for the contamination.

1.12.6 Radioactivity

On 4 August 2006, the Part IIA regime was extended to deal with the protection of human health from radioactive contamination. The extended regime provides a system for the identification of land where contamination is causing lasting exposure to radiation of human beings and where 'intervention' is liable to be justified.

The extension of the regime has been undertaken in such a way as to minimise the additional costs to local authorities and impacts on business and landowners, providing a proportionate response. Property, crops, livestock, animals and ecosystems are not included in the regulations at this time as there is no evidence to suggest that they face an unacceptable risk.

1.12.7 Other Regimes

There are a number of other, less obvious regimes which may overlap with Part IIA, but which must also be considered. These include;

- Part 1 of the Food and Environmental Protection Act 1985
- The Health and Safety at Work etc Act 1974
- The Construction (Design and Management) Regulations 1994
- The Finance Act 1996 with particular reference to Landfill Tax
- The Control of Major Accident Hazards (COMAH) Regulations 1999

As part of its duties, North Somerset Council will check in each particular case to see whether another regime may be more appropriate for the management of contaminated land. This process is particularly important where restrictions apply to the service of a remediation notice because of enforcement action being taken outside of Part IIA.

1.13 Development of the Inspection Strategy

This strategy has been prepared by North Somerset Council's Contaminated Land Officer and line managers, in collaboration with other departments in accordance with the Government's guidance.

1.13.1 Internal Team Responsibility

The Contaminated Land Strategy has been initiated within the Planning &

Environment Directorate, specifically Environmental & Consumer Services. However, major contributions were made by -

- The Environment Group
- I T
- Building Control
- Development Control
- Waste Management
- Corporate Services Unit
- Marketing & Leisure Directorate
- Housing & Social Services Directorate

1.13.2 Internal Consultation

Prior to publication of the strategy, a draft was presented to the Environmental Services Committee where committee members were invited to comment and approve the inspection strategy.

1.13.3 Consultation with the Environment Agency and other appropriate public authorities

A number of external organisations and individuals will also be involved in the practical implementation of the inspection provisions. It is therefore appropriate to establish defined links with these organisations to ensure efficient consultation, transfer of information and, where relevant, to ensure the transfer of regulatory control. These external liaisons will include: -

- The Environment Agency
- English Nature
- Department for Environment, Food & Rural Affairs (DEFRA)
- English Heritage
- Regional Development Agencies
- English Partnerships
- Food Standards Agency

Informal consultees have also been invited to comment on the Inspection Strategy, including Parish Councils, local businesses and the wider community.

2 CHARACTERISTICS OF NORTH SOMERSET

2.1 North Somerset

North Somerset became a Unitary Authority on the 1st April 1996 when as a result of the Local Government Act 1992 the former County of Avon was replaced by four new Councils. The new North Somerset Council serves an area of 37,000 hectares and is responsible for implementing the new Contaminated Land Regime for the district.

2.2 Geographical Location

North Somerset is situated in the South West of England and borders the districts of Bristol to the north, Bath and North East Somerset to the east, Mendip and Sedgemoor to the south and the Bristol Channel to the West. (Map 2.1). The authority's principal offices are located in the coastal town of Weston-super-Mare, with smaller offices scattered throughout other parts of the district.



Map 2.1. North Somerset District Map

2.3 Population and Economy

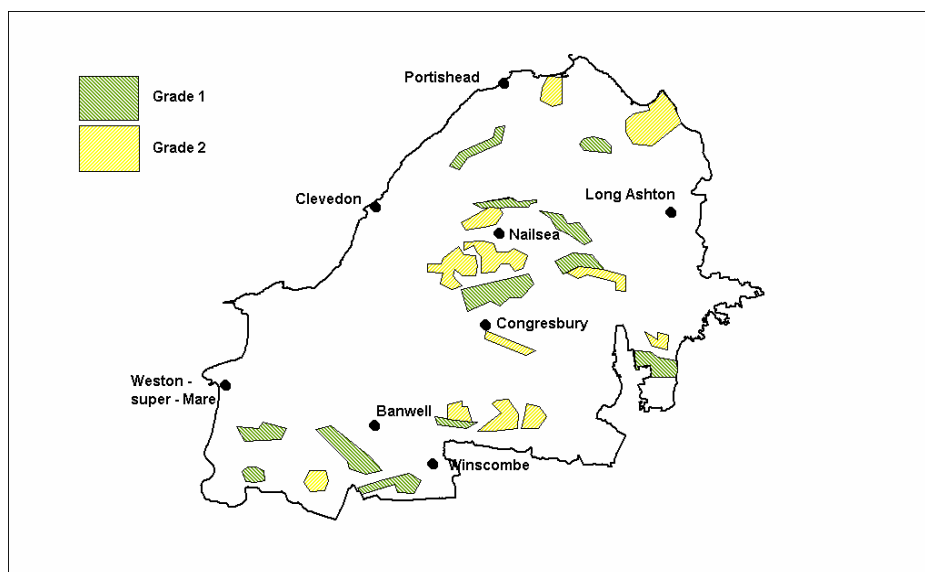
In terms of population, North Somerset is the third largest of the four Unitary Authorities which make up the former County of Avon. During the last decade the population has risen by over 9%, and now approximates to 191,066 residents. As a tourist location it receives many additional visitors.

Most of the growth has centred on the urban areas with Weston-super-Mare accommodating the most. The towns of Nailsea, Clevedon and Portishead have also expanded considerably in the last 20-30 years. Whilst the population of a number of villages have remained relatively static, others such as Yatton, Congresbury, Backwell, Easton-in-Gordano and Wrington have seen considerable development.

There is significant industrial and business development in the main towns as well as at the major Portbury Docks. The area also includes the growing Bristol International Airport. The remainder of the North Somerset is predominately rural and is very much dominated by agriculture. The majority of which is located on the levels and moors.

2.4 Current Land Use Characteristics

Agriculture, although not the main employer, is likely to remain the use that most influences the physical appearance of the countryside. Almost 71% (26,913 ha) of the land is farmed of which, a large proportion (82%) is grassland and rough grazing (see Table 2.1.). The catchment is predominately Grade 3 land which supports specialist dairy, beef and sheep farms with limited arable (DEFRA Agricultural Land Classification Maps). Higher grade land (Grades 1 & 2) is generally concentrated in the Nailsea/Tickenham area and Winscombe Vale.



Map 2.2. Agricultural Land Quality

Agricultural Land Use Types (MAFF 1995)	%
Grassland < 5 years	12
Grassland > 5 years	65
Rough Grazing	5.2
Crops and Fallow	12.6
Farm Woodland	2.3
Other	1.6
Set – Aside	1.3

Table 2.1. Agricultural Classification within North Somerset

Almost the entire industrial base within North Somerset is concentrated in the urban areas of Portishead, Weston-super-Mare and Clevedon. The Royal Portbury Dock in the north of the district has become one of the largest commercial ports in the UK and has had a recent increase of 2% in manufacturing jobs. This is contrary to a national trend of a declining industrial base and an expanding service sector.

The towns of Weston-super-Mare, Clevedon and Portishead owe much of their early growth to the Victorian fashion for seaside living and recreation. Weston-super-Mare still has a strong tourist function with a significant portion of the local economy connected to tourism.



Plate 2.1: The Pier at Weston-super-Mare

Bristol International Airport situated in the north of the district opened in 1957 and has since expanded rapidly in order to meet the increased demand for air travel. Situated within the greenbelt, policy supports its development

consistent with the proper running of the airport, and environmental policies.

The extraction of minerals across the district has also influenced the appearance of the landscape. Most quarrying has occurred within the limestone, however the clay soils in the area provided raw material for brick and tile making as well as for the Pottery industry which was influential in Weston-super-Mare during the 19th Century. A summary of the main quarrying activities that have taken place within North Somerset is as follows:

- 19 Carboniferous Limestone quarries
- 3 Clay Quarries
- 2 Sandstone Quarries
- 1 Ochre Quarry
- 1 Jurassic Limestone Quarry

Of these 26 recorded quarries within the area there are 3 still in operation: -

- **Durnford Quarry – Long Ashton** a large existing limestone quarry, partly within Ashton Court estate, on the edge of Bristol.
- **Freemans Quarry – Barrow Gurney** a large new quarry planning to extract up to 800,000 tonnes of limestone per annum.
- **Stancombe Quarry – Flax Bourton / Backwell** a large existing limestone quarry proposed to extract 28m tonnes over a 25 year period.

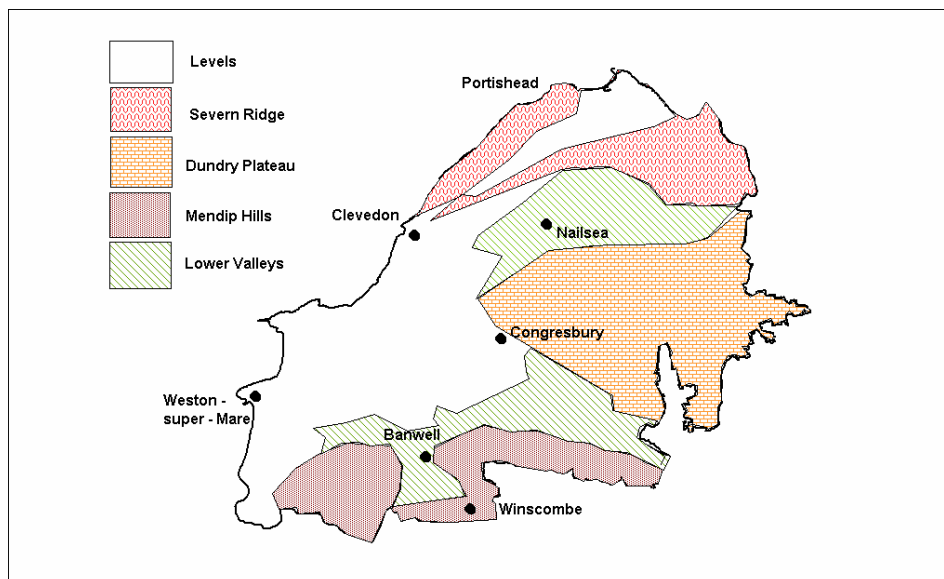
2.5 The Natural Environment and Protected Locations

North Somerset has a mixture of high and low landscapes, with many distinctive features such as the Mendip Hills and Tickenham Ridge contrasting with the lowland levels, wetlands and rhynes. Under the Countryside Stewardship Scheme the Department for Environment, Food and Rural Affairs pays farmers to manage land in an environmentally sensitive manner in order to help preserve the natural characteristics of the area.

The Mendip Hills, which are designated as an Area of Outstanding Natural Beauty (AONB), rise almost 300m above sea level. Their distinctive landscape characteristics owe their nature to the underlying geology and more than 4000 years of human influence.

2.5.1 Wildlife and Habitat Conservation

Within North Somerset there are 41 SSSIs, the largest being the Severn Estuary which runs the length of the coastline. The Severn Estuary has also been notified as a wetland of international importance ('Ramsar') Site and a Special Protection Area (SPA) under the EC Birds Directive. In addition the Avon Gorge Woodlands and Mendip Hills are candidate Special Areas of Conservation (SACs) under the EC Habitats Directive.



Map 2.3. Key Landscape Character Areas

Key Landscape Character Areas (see Map 2.3.)

The Levels and Moors (see plate 2.2).

The Levels and Moors are the flat, open reclaimed marshland which lie at less than 10m above sea level. The Gordano Valley in the north, generally consists of species rich wet meadows, whilst the Southern levels are mainly grazing land. Drainage channels known as rhydes are a common feature throughout.

The Severn Ridge

The Failand/Tickenham area is characterised by wooded scarp slopes which rise from the levels up to a broad ridge top. Woodland is generally parkland and there is a high concentration of recreational land use. Between Clevedon and Portishead an attractive ridge of grassland and woodland runs along the steep rocky road.

Dundry Plateau

The general character of the area is of a broad gently undulating plateau with large fields, relatively few trees and a significant amount of arable farming.

Mendip Hills

The Mendips, which extend from Bleadon Hill in the west to Blagdon Lake in the east, comprise steep, usually wooded slopes, scarp edges and roughly undulating exposed plateaux.

Lower Valleys

The Yeo and Lox Yeo valleys are broad, gently undulating and low lying. The valleys are more intensively farmed than the adjacent areas with large fields and few hedgerows.

The North Somerset area supports some nationally important areas of high conservation value with some of the best examples of biologically rich rhyne and ditch systems in the Southwest.



Plate 2.2: North Somerset Levels and Moors

2.5.2 Landscape Conservation Areas

Attractive landscapes in North Somerset are cherished by both residents and visitors and have been designated as Priority Landscape Conservation Areas:

- Ashton Court
- Avon Gorge
- Cleeve/Brockley
- Coast between Portishead and Clevedon
- Middle Hope
- Mendip Lakes
- Northern Slopes of the Mendip Hills
- Tickenham Ridge
- Weston Wood

Parts of the Avon Gorge and the Gordano Valley are also designated as National Nature Reserves which are managed by English Nature and North Somerset Council. Areas of local importance have been designated as Local Nature Reserves and are as follows: -

- Eastwood and Battery Point, Portishead
- Poet's Walk, Clevedon
- Backwell Lakes, Nailsea
- Cheddar Valley Railway
- Cadbury Hill, Yatton
- Uphill, Weston-super-Mare

2.6 Key Property Types

North Somerset contains a wealth of archaeological remains of both national and international importance. These include; the hill forts at Dolebury and Cadbury, the Roman sites at Banwell and Long Ashton and the remains of ancient field systems.

The archaeology of the levels and moors is difficult to interpret, but the visual landscape is based largely on medieval and later periods in history, with evidence preserved in field patterns and drainage systems.

The archaeological evidence from low lying coastal areas and the intertidal zones has many similarities with that found across the levels. Here the deposits are water-logged, therefore organic evidence such as wood, fabric, leather and foodstuffs are far better preserved in these wet conditions, thus providing a valuable archaeological resource.

Many of the towns and villages within North Somerset have historic centres, which usually have at the core of the community the village church and often older burial grounds, together with the manor house and farm. In other villages the church may be found on the edge of the settlement. In some cases this represents the centre of past deserted villages.

Under the Planning (Listed Buildings and Conservation Areas) Act 1990 over 1000 listed buildings have been designated within North Somerset. More than 100 of these are in the highest two grades, i.e. Castle Batch in Worle and Elms Colliery in Nailsea. In addition to listed buildings, there are more than 35 Conservation Areas in North Somerset. The Council is required to take into account both these designations when considering planning applications and related matters. For example, a significant number of industrial buildings are listed and some conservation areas include, or may have been designated principally because of past industrial activity.

Not all sites of national importance have been scheduled and the Council will seek to protect both scheduled and unscheduled sites of national/local importance and their settings so as to avoid damage when carrying out its duties under the new Contaminated Land Regulations 2000.

NSC has also the following Priority Historic Landscape Areas within its district:

- ❖ Ashton Park
- ❖ Banwell
- ❖ Bleadon
- ❖ Congresbury
- ❖ Dolebury/Burrington
- ❖ Gordano
- ❖ Wraxall

These areas include both significant concentrations of sites, structures and areas of archaeological significance as well as historically valuable visible features.

North Somerset is also home to a number of sites on the 'Register of Parks and Gardens of Special Historic Interest in England'. Compiled by English Heritage the list includes: -

- ❖ Ashton Court
- ❖ Barrow Court
- ❖ Clevedon Court
- ❖ Leigh Court
- ❖ Tyntesfield
- ❖ Rayne Thatch
- ❖ Leigh Woods, and
- ❖ Barley Wood

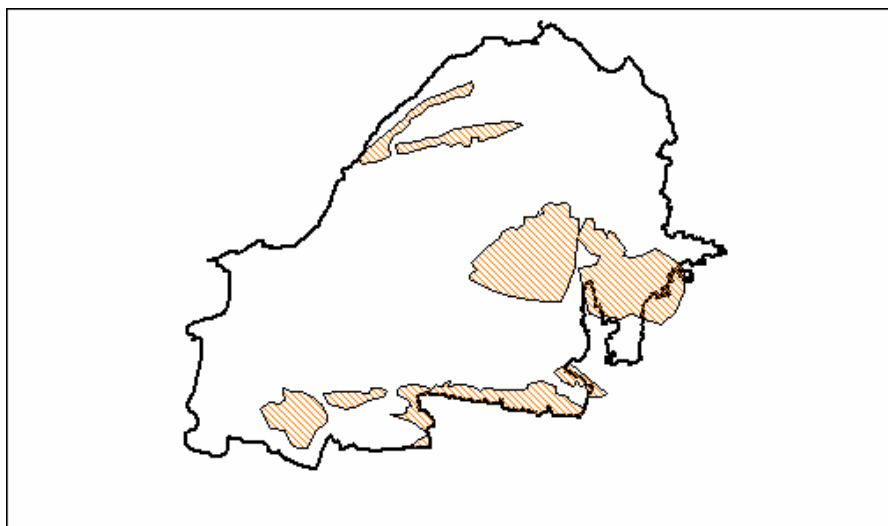
In addition to these sites are 66 designated landscapes, grounds and places of recreation listed on the 'Gazetteer of Historic Parks and Gardens in Avon', prepared by the Avon Gardens, now adopted by the Council.

2.7 Key Water Resource / Protection Issues

Bristol Water and Wessex Water supply drinking water and sewerage services to the North Somerset area. The main centres of high water demand include those adjacent to the Bristol Channel, Weston-super-Mare, Clevedon and Portishead as well as those further inland including Nailsea, Yatton and Congresbury.

In order to meet these local demands supply is drawn from a number of sources for example Banwell Spring, Chelvey Well, Cold Bath Spring and Clevedon Well and Borehole. Surface water abstraction for drinking water is limited to the River Yeo, downstream from Blagdon Reservoir, and therefore any contaminated land located upstream of the abstraction point carries a risk of contaminating the supply. This must be considered during the prioritisation process.

Officers from Environmental & Consumer Services sample 19 private drinking water supplies in the area at least once annually. The analysis includes a full chemical and bacteriological examination. Most of these private water supplies are derived from the Carboniferous Limestones. These Source Protection Zones (SPZs) are illustrated in Map 2.4.



Map 2.4. Source Protection Zones within North Somerset.

2.8 Broad Geological Characteristics

North Somerset is a region of geological contrast, with rocks ranging from the Devonian to the Jurassic periods, together with recent alluvial sands, gravels and silts, and an isolated deposit of glacial sands and gravels.

The oldest rocks that reach the surface are the Old Red Sandstones which underlay the Carboniferous Limestones and limestone shales of the Clevedon-Failand Ridge. This ridge, together with those of Broadfield Down and the most northerly section of the Central Mendips, have been extensively folded and faulted.

Two other small limestone outcrops form the northern and southern arms of Sand Bay near Weston-super-Mare. The Carboniferous period is further represented by the Pennant Measures and the Lower Coal Series which outcrop between Broadfield Down and the Clevedon-Failand Ridge.

Overlying and surrounding the Carboniferous rocks are mainly the red Permian and Triassic sandstones, conglomerates and mudstones. Small exposures of Lower Liassic clays are also found, but the majority of the

remaining area is made up of almost entirely flat, low lying estuarine alluvium.

2.9 Broad Hydrogeological Characteristics

Water courses in North Somerset include surface bodies (rivers, lakes, ponds, ditches etc.) and groundwater (subsurface aquifers). The Mendip Hills, consisting of fissured limestone is classified as a major aquifer and causes the River Yeo, the River Banwell and the Oldbridge River to respond rapidly to rainfall.

Flooding, resulting from extreme events has had major effects in North Somerset and may need to be considered as a 'pathway' factor in the Strategy. The Service Manager and the Environment Agency will advise the Council in this matter.

Of the varying rock types mentioned in Section 2.8, only the Carboniferous Limestone has been classified as a major aquifer. Minor aquifers of local importance include the glacial sands and gravels, the Triassic Dolomitic Conglomerate, the Penarth and Mercia Mudstone Groups and the Coal Measures.

2.10 Areas of Naturally Metal Enriched Soils

It is evident from numerous soil investigation reports received by the Council, that many areas of the region are naturally enriched with a particular suite of metals attributable to the mining in the area (see section 2.11.3).

2.11 Current and Past Industrial Activity

The local economy of North Somerset is particularly varied and although the area has always been important agriculturally, small pockets of the district may be classed as industrial areas which have been subject to various industrial activities either past or present.

2.11.1 Environmental Protection Act 1990 - Pollution Inventory

The Environmental Protection Act 1990 Part I introduced a regulatory system of authorisations for potentially polluting industries now under control of either the local authority or the Environment Agency. The introduction of an authorisation regime involves the placing of applications and authorisations on public registers.

Those industries with the greatest potential to discharge polluting substances to air, land and water are called Part A processes and subject to Pollution Prevention Control (PPC) by the Environment Agency. Certain other

industries are controlled by local authorities for air pollution only. These industries are those deemed to have a potential to be significantly less polluting than Part A's and are termed Part B processes.

Seventy authorisations have been issued and are enforced by North Somerset Council for the control of Part B Processes. In addition three authorisations covering Part A processes are enforced by the Environment Agency. At present Part B Authorisations are reviewed by the council every 4 years, but are inspected annually.

2.11.2 Limestone Quarrying

As mentioned in Section 2.4. the majority of mineral extractions in North Somerset has taken place within the Carboniferous Limestone shales. Many of the quarries are non-operational now and have been land filled. This authority must take into account these areas when inspecting.

2.11.3 Lead Mining

Up until the early 1900s large areas of North Somerset were mined for lead ore and probably calamine. Associated with the mines are spreads of waste derived from the crushing and sorting of ore. The largest areas where such excavations have been known to exist include:

- Leigh Woods
- Bleadon
- Winscombe
- Sandford
- Dolebury Warren
- Burrington Combe
- Worle, Weston-super-Mare
- Sand Bay, Weston-super-Mare
- Loxton, and
- Banwell

2.11.4 Coal Mining

Since Medieval times and up until the 19th Century, the lower coal seam which outcrops between Broadfield Down and the Clevedon – Failand Ridge has been mined extensively. Historically the coal was taken from wherever it outcropped. During the 1800s the mining activities became more commercial due to an increase in domestic and industrial use. During this time the mines became more widespread and up to hundreds of feet deep. In all there were twenty mines at work in Nailsea as well as some smaller operations, of which not much is known.

2.11.5 Power Generation

Following construction of the Portishead Docks in 1870, the dockside became a prime location for industry including power generation. In 1929 the Portishead Power Station was commissioned along with associated tanks, coal and ash conveyors. During the 1950s and 60s the power station expanded and in 1970 a second power station was constructed.

Following 40 years of operation the stations were gradually closed and decommissioning was completed by 1994. The only structure that remains of the old power station is the 132/33 kV transformer station operated by Western Power. Construction works are now underway to relocate this transformer station.

Gas production activity within North Somerset was primarily based in the town of Weston-Super-Mare, although Clevedon and Portishead also had smaller gas work operations.

The gasworks site in Weston-super-Mare was vast with several purifiers, tar, liquor and benzole storage tanks. Gas production ceased in 1968, and part of the site was decommissioned by British Gas during the late 1990s. Two gas holders and five high pressure 'bullet' holders still remain on site for distribution purposes.

A demonstration plant for research into the disposal of waste and the recovery of energy using gasification technology has been granted planning permission in Weston-super-Mare. Initially the plant will operate for 2 years and involves heating waste materials in an enclosed chamber using low calorific gas, which is driven off for combustion from which energy can be utilised in the form of heat and power.

2.11.6 Petrochemicals

As already mentioned in Section 2.11.5 the Portishead Docks became an ideal location for industry during the late 1800s and early 1900s. In 1908 the Anglo-Saxon Petroleum Company Limited leased 3 acres of land to store and tranship 'motor spirit'. The first tanker docked in 1909 and the company expanded their lease progressively to 6 acres by 1911. During that year 23,000 tonnes of mineral oil was imported.

At the beginning of the 1st World War a UK shortage of toluene became apparent as coal for distillation could not keep up with the demand of the explosives manufacturers. In order to make up the shortfall, a refinery was transferred from Rotterdam and re-erected at Portishead in 1915. This refinery was supplied with crude oil from Borneo from which toluene could be extracted by Shell-Mex and BP.

The Anglo-Saxon Petroleum Company then expanded their tankage at Portishead to set up a can-making works in order to fulfil a government objective to supply petrol to the war front in four-gallon cans.

During the war 18,000 tonnes of toluene was produced as well as a large quantity of xylene which was re-exported to France for the French explosives industry.

It is not known whether oil refining continued after the war, but petrol storage in 12 circular tanks continued and export was mainly made in tins and tankers by rail.

By 1935 the installation was 'taken over' by a bitumen refining company who specialised in the manufacture of bitumastic products including flooring blocks.

2.11.7 Other Industry

Albright & Wilson operated a phosphorus plant on Portishead Docks between 1953 and 1970, after which the area was used for redrumming and distribution of phosphorus imported from Canada and China.

As well as the extensive coal mining activities in Nailsea, was the manufacture of glass. The Nailsea Glassworks, which operated prior to the mid 1880s is now an area of archaeological importance.

The famous Royal Potteries which used to excavate clay from the old clay pits in Weston-super-Mare, became an affluent industry for Weston-super-Mare between 1836 and 1961.

An airport has existed in Weston-super-mare since the early 20th century. During the mid 1940s British Aerojet and GKN Westlands constructed factories for the purpose of aircraft manufacture. The site of one of the factories has now been developed as a residential estate, the other has now largely given way to other types of industry, although GKN Westlands still operates from part of the site.

Other significant types of industry include tanneries, scrap metal yards, chemical manufacture, chromium plating and Ministry of Defence sites.

2.12 The National Land Use Database

Many of the industries mentioned in the previous section have now declined and their sites have since been remediated following the 'suitable for use' approach and used for housing or commercial development.

The National Land Use Database is a government initiative which requires

local authorities to identify within their district previously developed land which has become potentially available for development. This is to support a government policy to achieve up to 60% of new dwellings on 'previously used sites'. North Somerset has identified 39 industrial sites on the NLUD database that may warrant further investigation as result of previous land use. One of the most significant redevelopments has been that of Portishead Dock, where many contaminative uses were identified. These contamination issues arising from the historic use of this site have already been dealt with under planning control conditions.

Other sites that have also been/ or are being developed through existing planning conditions include: -

- BAJ Vickers – Hutton
- Glassworks - Nailsea
- Gasworks/Timber Yard - Clevedon
- Sunnyside Road North - WSM
- Southfield Road – Nailsea
- SWEB Depot – WSM
- Ham Green Hospital – Pill
- Winford Hospital - Winford

Under the Contaminated Land Regime, North Somerset Council currently owns, occupies, or is responsible for a wide range of sites, a proportion of which are used by the public for a number of activities. It is proposed that these sites are included within the overall programme for inspection of the district for contaminated land.

3 THE COUNCIL’S INSPECTION STRATEGY: AIMS AND PRIORITIES

The statutory aims of the strategy are set out in Section 1.1. This chapter will set out the unique objectives and priorities of the Council in dealing with contaminated land issues, and a programme of action for meeting the objectives.

3.1 Objectives

The primary objectives of the Contaminated Land Inspection Strategy are as follows: -

- To demonstrate how the Council intends to identify all the contaminated land within the district.
- To demonstrate how the Council intends to remove unacceptable risks to human health and the environment by instigating a programme of land remediation.
- To seek to bring back damaged land into beneficial use.
- To inform all stakeholders of the Council’s intentions.
- To ensure that the cost of remediation is proportionate, manageable and economically sustainable.
- To maintain a Contaminated land Register which is accessible to the public.
- To provide information to the Environment Agency to enable them to

3.2 Programme of Action

North Somerset Council has identified the following areas of action or milestones necessary to achieve the objectives set out in Section 3.1 above and to fulfil its duties under Part IIA.

3.2.1 Appointment of Contaminated Land Officer (March 2001).

North Somerset Council has appointed a Contaminated Land Officer. The officer is responsible, to the Environmental & Consumer Services Manager, for the following:

- Ensuring that the contaminated land strategy is prepared and implemented in accordance with the legislation.
- Carrying out the Contaminated Land function as described in steps 1-12 of Chapter 1.
- Assessing, modelling and sampling contaminated land throughout the area and liaising with colleagues in neighbouring authorities.
- Assisting in the enforcement of all appropriate legislation

- Investigating complaints; and
- Preparing and collating supporting evidence and statements for legal proceedings and attending court as necessary.

3.2.2 Information Collection

Numerous sources of information will be utilised to identify potential sources of contamination, pathways and receptors during the general inspection of the area, and any further scrutiny of individual site. Annex B outlines some of these information sources and their uses.

It should be noted that some information providers might charge for access to information.

The Council’s Geographical Information System (GIS), MapInfo, is the primary tool for the storage and management of contaminated land information. The GIS will be used where possible to correlate information and compare receptors with sources of contamination, to consider proximity, and to look for potential pathways.

In order to begin the process of inspection the Council has purchased a set of digital historical ordnance survey maps for the (GIS) software platform MapInfo.

Work on creating a GIS Gazetteer for North Somerset is well advanced within the Planning & Environment Directorate and plotting of many data sources, such as the location of Sites of Special Scientific Interest (SSSIs), completed.

Four editions of detailed 1:2500 scale mapping for North Somerset have been obtained for the following time periods or epochs:

- 1881 – 1890
- 1902 – 1904
- 1915 – 1917
- 1930 – 1937

The maps have been geo-rectified to the current national grid allowing them to overlay existing digital ordnance survey maps.

As part of the existing Service Level Agreement (SLA) with Ordnance Survey the Council has, at an increased licence fee, obtained digital copies of the 1: 2500 / 1: 1200 scale mapping for a further four epochs: -

- 1953 – 1981
- 1955 – 1991
- 1981 – 1987
- 1984 – 1991

These maps will provide a complete digital cartographic archive which can be used to help identify areas of potentially contaminated land based on former historic uses.

The Council also recognises local consultation as an important way of obtaining information relating to potential sites of interest. Local people may know of sites that have been used for a potentially contaminative activity without ever being officially recorded. This is especially feasible within North Somerset, where for example the local geology has lent itself to localised small-scale quarrying, leaving holes in the landscape that may have been backfilled with waste materials.

It is therefore the intention of the Council to consult with Town and Parish Councils so that information can be shared relating to the inspection within their respective parishes.

Local history and civic societies will also be contacted as another potential source of relevant information. The consultation draft will be publicised in the local press and at local libraries.

There may be a role for seeking and evaluating information from specialist groups and contractors, such as local history groups, businesses and larger organisations like the British Geological Society (BGS).

The consultation process is expected to generate relevant information as well as comments on the proposed Strategy. All information will be given due consideration and will be used to review decisions as appropriate.

An IT project group is being set up to programme work required to update the GIS. This programme must include arrangements for integrating with the Gazetteer the purchased historical mapping package as well as other data sources.

3.2.3 General Approach to Inspection

The Council is obliged by statute to ensure that firstly, resources are concentrated on investigating those areas most likely to result in the identification of contaminated land, and secondly, that the most seriously contaminated sites are dealt with first.

The general approach to inspection in North Somerset will be based on a scheme of prioritisation that aims to identify those areas where the highest concentration of vulnerable receptors will be found (see Figure 3.1). The Council will have reference to guidance contained in the CLR Report No. 6: *Prioritisation and Categorisation Procedure for Sites which may be Contaminated* - Dept. of the Environment, 1995).

The prioritisation will be undertaken by subdividing the Council into parishes, since many records are held on a parish basis, and the boundaries are easily identifiable on most maps.

Parishes will be prioritised for inspection purposes initially on population size based on the assumption that larger populations exist because of localised trade and industry, which may of course provide a contaminant source in a pollutant linkage. Such a scheme of prioritisation is consistent with the need to establish pollutant linkages in order to designate land as contaminated land.

Parishes will be further prioritised based on whether or not they contain other vulnerable receptors. The order of priority assigned to other vulnerable receptors will be in accordance with the statutory objectives relating to contaminated land (see Section 1.1) and the Council’s aims set out in Figure 3.1. For example Controlled waters will receive a higher priority than sensitive ecosystems, which in turn will be ranked higher than property.

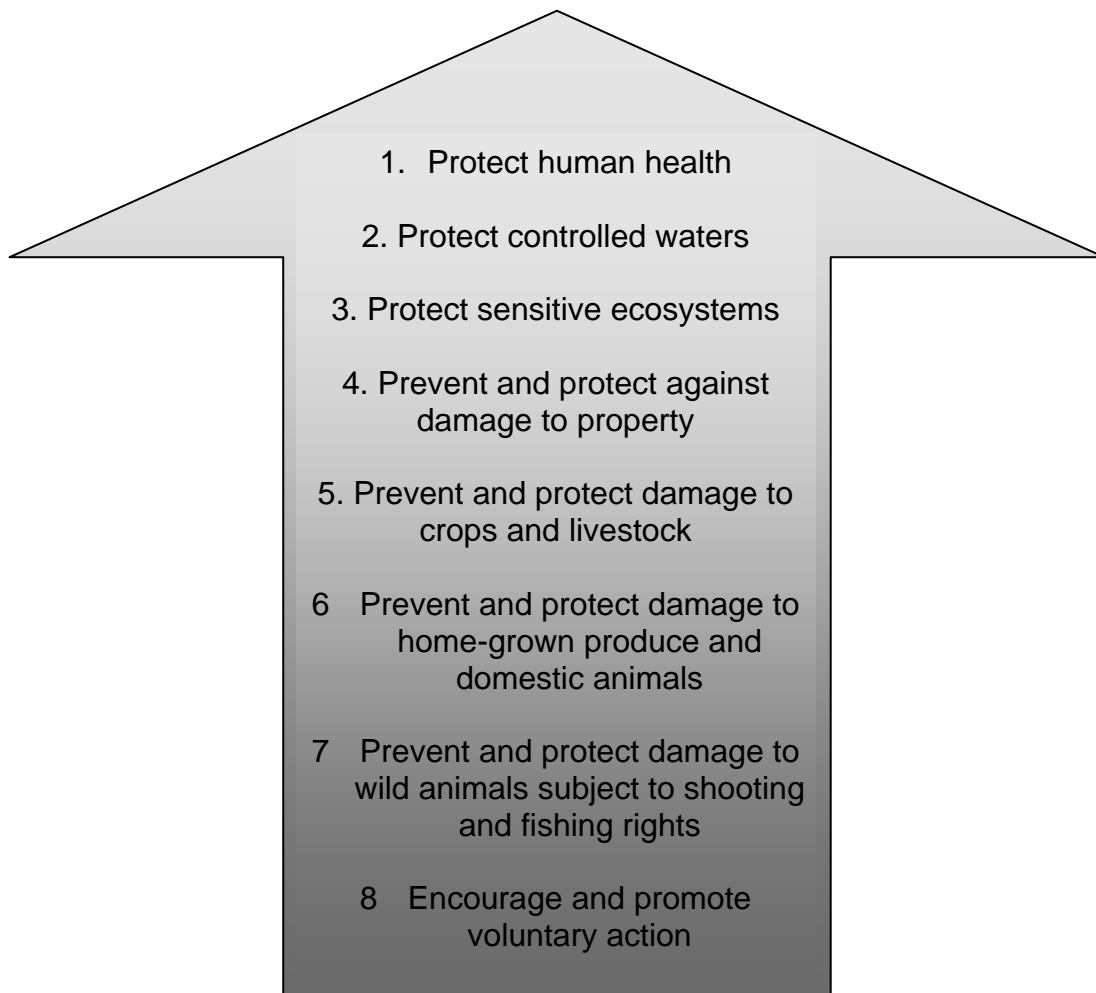


Figure 3.1 Council's Priorities Relating to Contaminated Land

3.2.4 Information Evaluation – Risk Assessment

The next step of the process is to identify individual priority sites within the priority *sub-areas* or parishes. This stage of the process is known as risk assessment and can normally be broken down into four main stages;

- Hazard Identification – identification of all potential contaminants, pathways and receptors (pollutant linkages) associated with that particular site.
- Hazard Assessment – the pollutant linkages identified during Hazard Identification are assembled and the plausibility of each reviewed.
- Risk Estimation – this involves estimating the likelihood that a negative effect might occur if the receptor comes into contact with the hazard.
- Risk Evaluation – decisions are made about the significance of the risk and the measures that must be taken in order to reduce the risks to acceptable levels.

Risk assessments carried out in this way should enable the council to quantify the risk to the receptor and therefore confirm whether or not the harm is significant. Sites can then be placed into one of the following specific categories to be dealt with in order of priority.

Priority Category 1

- Site probably or certainly not suitable for present use and environmental setting
- Contaminants probably or certainly present and very likely to have an unacceptable impact on key receptors
- Action will be needed in the short term

Priority Category 2

- Site may not be suitable for present use and environmental setting
- Contaminants probably or certainly present, and likely to have an unacceptable impact on key targets
- Action may be needed in the medium term

Priority Category 3

- Site considered suitable for present use and environmental setting
- Contaminants may be present but unlikely to have an unacceptable impact on key receptors
- Action unlikely to be needed whilst site remains in present use or otherwise remains undisturbed

3.2.5 Council Owned Land

In terms of contaminated land, North Somerset Council has the following direct responsibilities:

- Sites owned or previously owned by the Council including leased sites;
- ‘Orphaned sites where there is no appropriate person; and
- Sites where the original polluter no longer exists and contamination is migrating and affecting neighbouring sites.

As the main regulatory authority for contaminated land the Council recognises that it is vital to adopt a responsible and transparent attitude towards dealing with contamination issues affecting publicly owned land.

As well as property linked with potentially sensitive uses, such as schools and allotments, the Council has a substantial industrial and commercial property portfolio.

It is possible that the Council or its predecessors own or owned at some stage in the past land where potentially contaminative activities, like waste disposal, may have occurred, for which the present Council has liabilities.

The Council has also acquired failed land in the past in the interest of redevelopment and improvement of the overall quality of the local area. Generally, these will have been remediated if needed at the time of acquisition or disposal.

The investigation of Council owned land shall take place during the overall programme of inspection. Such land will be considered as an equal priority within the general approach to inspection.

3.3 Timescales

The DETR Circular 02/2000 does not specify timeframes by which local authorities must have carried out each of their statutory duties under Part IIA. At the time of writing (July 2001) North Somerset had not actively begun to inspect the district for the purpose of identifying contaminated land. However it has started to collate much of the information listed in Annex B of this report.

Whilst it is not possible to pre-empt the amount of work that will be generated by the forthcoming inspection exercise, or predict the resource implications of any technical or legal complications which may ensue, the following timescales are considered achievable based on existing available resources.

Task	Target
<ul style="list-style-type: none"> • Production and publication of the statutory Contaminated Land Inspection Strategy 	By November 2001
<ul style="list-style-type: none"> • GIS Enhancement • Designation of high priority parishes 	By December 2001
<ul style="list-style-type: none"> • Desktop inspection of all high priority parishes • Identification of potentially contaminated sites within priority group • And prioritisation of further investigation • Detailed investigation and assessment of such sites • Determination of contaminated land within priority group • Commence moves to secure remediation of contaminated land 	By November 2002
<ul style="list-style-type: none"> • Desktop inspection of all medium priority parishes • Identification of potentially contaminated land within priority group • And prioritisation for further investigation • Detailed inspection and assessment of such sites • Determination of contaminated land within priority group • Commence moves to secure remediation of contaminated land 	By November 2003
<ul style="list-style-type: none"> • Desktop inspection of the remainder of the district • Identification of potentially contaminated sites and prioritisation for further investigation • Detailed inspection and assessment of such sites • Determination of contaminated land within priority group • Commence moves to secure remediation of contaminated land 	By 2006

Amendment – February 2003

Due to unforeseen resource restraints, the time scales originally drawn up in the Council’s Contaminated Land Strategy published in November 2001 have proved over ambitious and require revising.

The timetable has been broken up into more manageable sized tasks and is seen to be more achievable based on current circumstances. A report will be published in December 2003 in order to summarise the Council’s progress in achieving these revised targets.

Task	Revised Target
<ul style="list-style-type: none"> • Production and publication of the statutory Contaminated Land Inspection Strategy 	Completed
<ul style="list-style-type: none"> • GIS Enhancement • Designation of high priority parishes 	Completed
<ul style="list-style-type: none"> • Desktop inspection of all high priority parishes • Identification of potentially contaminated sites within priority group • Prioritisation of further investigation 	March 2003
<ul style="list-style-type: none"> • Detailed investigation and assessment of such sites • Determination of contaminated land within priority group • Commence moves to secure remediation of contaminated land 	March 2004
<ul style="list-style-type: none"> • Desktop inspection of all medium priority parishes • Identification of potentially contaminated land within priority group • Prioritisation of further investigation 	March 2005
<ul style="list-style-type: none"> • Detailed inspection and assessment of such medium priority sites • Determination of contaminated land within priority group • Commence moves to secure remediation of contaminated land 	March 2006
<ul style="list-style-type: none"> • Desktop inspection of the remainder of the district • Identification of potentially contaminated sites and prioritisation of further investigation • Detailed inspection and assessment of such sites • Determination of contaminated land within priority group • Commence moves to secure remediation of contaminated land 	2007

Amendment February 2007

Due to unforeseen resource restraints, the time scales originally drawn up in the Council’s Contaminated Land Strategy published in November 2001 have proved over ambitious and require revising.

The timetable has been revised and more realistic timescales have been applied.

Task	Revised Target
<ul style="list-style-type: none"> • Production and publication of the statutory Contaminated Land Inspection Strategy 	Completed
<ul style="list-style-type: none"> • GIS Enhancement • Designation of high priority parishes 	Completed Dec 2007
<ul style="list-style-type: none"> • Desktop inspection of all high priority parishes • Identification of potentially contaminated sites within priority group • Prioritisation of further investigation 	Dec 2009
<ul style="list-style-type: none"> • Detailed investigation and assessment of such sites • Determination of contaminated land within priority group • Commence moves to secure remediation of contaminated land 	Dec 2010
<ul style="list-style-type: none"> • Desktop inspection of all medium priority parishes • Identification of potentially contaminated land within priority group • Prioritisation of further investigation 	Dec 2011
<ul style="list-style-type: none"> • Detailed inspection and assessment of such medium priority sites • Determination of contaminated land within priority group • Commence moves to secure remediation of contaminated land 	Dec 2012
<ul style="list-style-type: none"> • Desktop inspection of the remainder of the district • Identification of potentially contaminated sites and prioritisation of further investigation • Detailed inspection and assessment of such sites • Determination of contaminated land within priority group • Commence moves to secure remediation of contaminated land 	Dec 2013

3.4 Dealing with Urgent Sites

A piece of land may be identified at any time during the strategy development programme or during the general inspection of the area where the Council is able to verify that a significant pollutant linkage (SPL) is in imminent danger of causing serious harm.

Under these circumstances the programme of action is secondary to any urgent action needed to deal with such sites. The Authority may have to undertake investigative and remedial works before completion of the programme for inspection. The government has recognised that this is a realistic scenario and that this approach is consistent with Part IIA.

This situation may involve the designation of Special Sites, in which case regulatory authority may be passed to the Environment Agency.

4 PROCEDURES

This section will describe how the Council plans to deal with contaminated land issues arising from the programme of inspection detailed in Chapter 3. It will also detail the level of service that business' and the wider community can expect from the Council in dealing with these issues.

4.1 Internal Management Arrangements for Inspection and Identification

The Planning & Environment Directorate has primary responsibility for the implementation of Part IIA in North Somerset.

The Environmental & Consumer Services Manager will be the person responsible for the day-to-day implementation of the inspection strategy. The same officer will also be responsible for the decision to serve a remediation notice.

Elected members will be informed at the earliest opportunity of any plans to further scrutinise and/or designate an area of council owned land, or where the Council may be liable for remediation costs.

4.2 Arrangements for Carrying out Detailed Inspection

As described in Section 3, sites will be screened and put forward in priority order for further detailed inspection, based on the possible existence of a pollutant linkage (PL) and perceived risk. The aim of detailed inspection is to obtain sufficient information for the council to determine whether the land appears to be contaminated and to decide whether such land falls within the definition of a special site.

4.2.1 Site Specific Liaison with Interested Parties

The Council will keep the owners, occupiers and appropriate person(s) informed of its actions regarding the inspection of land (see section 4.4.1. for definition). They will be asked to provide any relevant information and to give permission to enter and inspect the site.

The Council will ensure that it takes all reasonable precautions to avoid harm, water pollution or damage to natural resources or features of historical or archaeological interest which might be caused as a result of investigations. The Council will consult English Nature, concerning any investigation involving areas of ecological importance, and English Heritage in respect of scheduled or unscheduled areas of archaeological importance.

English Nature will have five key tasks with respect to contaminated land under Part IIA. It will:

- 1) Assist Local Authorities and others in carrying out their responsibilities towards SSSIs under the Wildlife and Countryside Act 1981 (as amended) including the issuing of assents/consents for inspection /remediation activities;
- 2) Assist Local Authorities and others in carrying out their responsibilities towards Natura 2000 sites under the Conservation (Natural Habitats & c.) Regulations 1994, including Appropriate Assessments of inspection/remediation activities;
- 3) Assist Local Authorities, and the Environment Agency over 'special sites', in the determination of 'ecological system effects' as defined in DETR Circular 02/2000;
- 4) Advise Local Authorities over their responsibilities when implementing Part IIA towards nature and geological conservation, including 'best practice' for inspection and remediation.
- 5) Advise Local Authorities over sources of advice and expertise for best practice and ecological monitoring.

4.2.2 Powers of Entry

At least seven days notice of the proposed entry to any premises will be given to the owner/occupier. If consent is not given, the Council may exercise statutory powers of entry conferred under Section 108(6) of the Environment Act 1995 in order to carry out an inspection.

Where the Environment Agency is to carry out an inspection using statutory powers of entry on behalf of the Council, the Council shall authorise a person nominated by the agency to exercise S.108 powers of entry.

The seven-day notice period may be waived where the Council considers that there is an immediate and serious risk to human health or the environment.

4.2.3 Detailed Inspection Procedures

1. **Desk study:** to assemble and evaluate historical, archival and current information on the site. This may permit the identification of 'hotspots' on the site where particular groups of contaminants can be expected or special precautions are needed to protect ecological, historic or archaeological features.
2. **Site reconnaissance and characterisation:** a visual inspection of the site will be undertaken in accordance with Contaminated Land Research Report No.2, *Guidance on Preliminary Site Inspection of Contaminated Land*, Department of the Environment, 1994.

3. **Initial exploratory survey:** this stage involves minimal intrusive sub-surface exploration and sampling. This will allow design of the main intrusive investigation, if necessary.
4. **Main intrusive site investigation:** the need for a full intrusive site investigation will be assessed based on the information gathered in the previous three stages. All intrusive investigations will be carried out in accordance with appropriate guidance and technical procedures.

If a full intrusive site investigation is necessary, a specification will be written detailing the work to be undertaken, and any requirements in relation to health and safety, environmental protection, nature conservation, or features of historical or archaeological importance will be reviewed

Wherever possible the council will use appropriate models and guidelines to assess the risks posed by individual sites. The new Contaminated Land Exposure Assessment (CLEA) model for the derivation of guideline values for contaminants in soils is expected to be released by DEFRA (Department for Environment, Food and Rural Affairs) in 2001. The model uses human health toxicity assessments for a number of exposure pathways to generate site-specific assessment criteria, which can be used to compare against values found during site investigations.

Until the CLEA model is available, the Council will use other guideline values to carry out a risk-based evaluation of information. A number of sets of guideline values and risk assessment models are available:

- Guideline Values
 - 1987 UK Interdepartmental Committee on the Redevelopment of Contaminated Land (ICRCL) 59/83 (2nd Edition) 'Trigger Levels'
 - 1992 Denmark Soil Target Values
 - 1993-1996 USA Screening levels
 - 2000 Revised Dutch Intervention Values
- Site-specific models
 - SNIFFER (Scottish and Northern Ireland Forum for Environmental Research) Framework
 - RBCA (Risk Based Corrective Action)

When selecting soil/groundwater guideline values, care will be taken to ensure that the set is both appropriate and relevant. Guideline values are usually based on a number of assumptions, which may not be relevant to any scenario the Authority is dealing with. Therefore site-specific models such as those mentioned previously may be more appropriate for use under Part IIA.

Advice will be sought from the Environment Agency on the assessments where controlled waters are affected. It is expected that risk assessments and remediation of controlled waters will be carried out in accordance with EA guidance as laid down in the *'Methodology for the derivation of Remedial*

Targets for Soil and Groundwater to Protect Water Resources' (EA R&D Publication 20, 1999).

Where necessary, specialist consultants, contractors or analysts may be employed to undertake elements of the inspection process. The qualifications, experience and accreditation of these organisations will be checked to ensure that they are appropriate for the task, prior to their appointment. Where necessary, their appointment will be in accordance to the Council's Standing Orders with respect to contracts.

The Council will be responsible for funding initial site investigations as part of the inspection process, via Supplementary Credit Approval, or other appropriate means. If a site is designated as contaminated land under the statutory definition, the 'appropriate person or persons' (see section 4.4.1.) will be required to fund any necessary investigative and inspection work.

4.2.4. Health and Safety Procedures

An assessment will be carried out by appropriately qualified staff within the Council, of the risks to personnel in carrying out the various phases of the detailed inspection. All necessary control measures highlighted in the assessment will be implemented prior to any staff entering the site.

Any consultant or contractor employed to carry out site investigation work will be supplied with all information held on the site, to enable them to carry out their own necessary risk assessment. All consultants or contractors will be vetted by the Council for their general health and safety competence prior to site inspection work. All risk assessments including control measures will also be vetted. Relevant guidance on Health and Safety aspects of site investigations is included within HSE HS (G)66 *Protection of Workers and the General Public During the Development of Contaminated Land* (1991).

4.3 Formally Determining an Area of Contaminated Land

Having carried out an appropriate, scientific and technical assessment of the condition of the land, using all of the relevant and available evidence, Council officers will determine whether any of the land appears to meet the definition of contaminated land set out in Section 78A(2) of the Environmental Protection Act 1990.

The Council will prepare a written record of any determination made, which will include a summary of the basis on which the land has been identified as contaminated land and this will include information on the specific significant pollutant linkage, or linkages found.

4.4. Notification of the Identification of Contaminated Land

Having regard to any piece of land identified as being contaminated land, the Council must establish:

- a) who is the owner of the land (defined in Section 78A(a));
- b) who appears to be in occupation of all or part of the land; and
- c) who appears to be an appropriate person to bear responsibility for any remediation action which might be necessary.

The Council will act on the best available information it can find at any particular time to determine who fits into the above categories, particularly category C. The above persons, together with the Environment Agency, will be notified in writing of the fact that the land has been identified as contaminated land and the capacity in which they have been notified. Persons identified as appropriate persons will also be informed about the apportionment of liabilities as set out in chapter D of the statutory guidance. The question of who falls into or is excluded from a particular category will be reconsidered as new information is obtained. The Environment Agency will be notified using the standards form SOCL/LAFORM 1 and a section 78B(3) written record.

4.4.1. Definition of 'Appropriate Persons'

For the purposes of Part IIA, an 'appropriate person' is defined as:

Class A Person(s) = the original polluter(s) (persons causing or knowingly permitting the contaminants to be in, on or under the land), or

Class B Person(s) = the owner or occupier for the time being of the land in question.

4.4 Formal Designation of 'Special Sites'

If the Council decides that an area of land might need to be designated as a special site it will seek to make arrangements for the Environment Agency to carry out inspection of the land on behalf of the council (as directed in paragraphs B.28, B.29 & B.30 of the statutory guidance.

4.5 Service of a Remediation Notice

The Council will observe the statutory three-month period between notification of appropriate person(s) of the designation of an area of contaminated land,

and the service of a remediation notice. An exception applies where there is a need for urgent action due to the imminent possibility of harm being caused, in which case the Council will act by serving a remediation notice on an urgent basis or by carrying out the remediation itself.

Wherever the Council considers that there are sufficient grounds for the service of a remediation notice, the following actions will be taken: -

- A remediation notice will be served on all appropriate person(s), specifying the remediation action required.
- A copy of the remediation notice will be sent to the EA and the owner and/or occupier of the contaminated land; and
- The Council will write to the owner/occupier of neighbouring land within 5 working days of the notice being served.

4.6 Risk Communication

The Council recognises that contaminated land issues are often complex, with a need to resolve conflicting views. The risk-based approach adopted by the new regime means that harm regarded as 'significant' under Part IIA may be viewed very differently by others. There are a number of factors that influence the perception of risk to the individual;

- Level of familiarity with the issue
- Level of personal control over the issue/event
- Proximity in space
- Proximity in time
- Scale of event
- Personal values
- Life experience
- Culture
- Background

Any of these factors may create barriers to effective communication. In addition, the views of any stakeholder may change with time, and ultimately, decisions on risk acceptability are personal and subjective.

The Council recognises that effective and efficient communication is a two-way process. When dealing with any site, the Council will aim to initiate communication with all interested parties at an early stage, and be open and inclusive. By providing clear information, the Council will try to share a good understanding of the risks to allow interested parties to raise their concerns and hopefully participate in the process of managing contaminated land risks.

Any concerns raised by a stakeholder will be treated seriously and with respect, recognising the importance of the issue to the individual or group. Anyone with concerns relating to contaminated land may contact the

Contaminated Land Officer, in the first instance, to discuss their concerns.

Whilst community acceptance of decisions is considered important for the successful management of contaminated land issues, the local authority only has powers to address unacceptable and significant risks. In addition, remedial action is only required to eliminate unacceptable risks, and no more. It is anticipated that some members of the public will have difficulty accepting this.

The expectations of some members of the public will not be met by the powers of local authorities under Part IIA.

5 INFORMATION MANAGEMENT

5.1 *General Principles*

The Council will prepare an electronic database to hold information derived from the inspection of its area. Until a determination is made, all information about sites considered to be potentially contaminated will be treated as confidential. This is because the release of such information could be damaging and could raise unfounded concerns. While respecting legal rights of access to information, the process of information gathering will be classified as 'work in progress' and until such time as a determination can be made, such information will be protected from disclosure.

5.2 *The Public Register*

The Council will maintain a public register of certain information, as required under Section 78R of the Environment Protection Act 1990. The Register will be kept in paper format at the Environmental and Consumer Services Offices located on the Third Floor, Somerset House, Oxford Street, Weston-super-Mare, BS23 1TG, and will be accessible on request during office hours, Monday to Friday (09:00 – 17:00).

Schedule 3 of the Contaminated Land (England) Regulations 2000 clearly prescribes the information to be held by the register, including:

- Remediation notices, including appeals against notices
- Remediation declarations and remediation statements
- Notices of designation of 'Special Sites'; and
- Convictions in relation to remediation notices.

Information affecting national security and commercially confidential information is excluded from inclusion on the public register. It will not include any land identified as **potentially** contaminated. Neither will it include research documents used to investigate a potentially contaminated site.

Written requests for information under the Environmental Information Regulations (1992) will be dealt with within the statutory timescale for response (currently 2 months)

5.3 *Use by Other Departments*

All enquiries for information about contaminated land will be referred to the Environmental & Consumer Services Manager. Information classified as 'work in progress' will be regarded as confidential and will only be disclosed to other council departments once the completion of an assessment and determination of site status has been made.

5.4 Data Confidentiality

Once the completion of an assessment and determination of site status has been made, collected information will be categorised as either 'Public Register Information' or general 'Inspection Information'. The accessibility/confidentiality of Public Register information will be dealt with in accordance with section 17 of Annex 2 of the DEFRA Circular 01/2006.

General inspection information such as site specific reports will be dealt with under the Environmental Information Regulations 1992. These regulations underline the obligation to make environmental information available, subject to specific exceptions e.g. information relating to national defence, public security, legal or other proceedings and commercial or industrial confidential information.

5.5 State of Contaminated Land Report

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

- A summary of Local Authority Inspection Strategies, including progress made against the Strategy and its effectiveness;
- The amount of contaminated land in England and Wales and the nature of the contamination; and
- Measures taken to remediate land.

This national report will be based on information provided by local authorities. A Contaminated Land Protocol has been drawn up between the Environment Agency and the Local Government Association setting out how information is to be exchanged between the local authorities and the Agency. The council will provide information to the Environment Agency following these agreed guidelines.

The Council will provide information to the Agency whenever a site is designated as Contaminated Land, and whenever a remediation notice, statement or declaration is issued or agreed, using standard forms provided by the Agency for this purpose.

5.6 Voluntary Information and Complaints

From time to time a member of the public, business or the wider community may communicate a concern, or complain, to the Council about contaminated land. In addition, individuals or organisations may supply information

voluntarily whether or not it affects them, or their property in any way. The receipt of this information may impact the approach to inspection in North Somerset.

5.6.1 Complaints / Concerns

As a minimum every complainant may expect the following; -

- Their complaint/concern is logged and recorded, including the time and date of receipt, the details of the complainant (name, address, postcode, contact telephone number), and the name of the officer receiving the complaint, and
- To receive a response within 10 working days of receipt.

Every effort will be made to resolve complaints and concerns quickly and efficiently. The nature of the contaminated land regime means that some degree of investigative work may be required before a satisfactory resolution can be reached;

1. The Council must prove a viable significant pollutant linkage, before land can be formally designated as contaminated;
2. The Council must consult with interested parties before designation (except in cases of urgency);
3. The Council must observe the statutory three months consultation period between designation and the service of a remediation notice (except where urgent remediation is required); and
4. The Council must make every effort to identify the Class A (original polluter) or Class B person(s) – see Section 4.4.1 for definitions.

5.6.2 Confidentiality and anonymous Information

Complainants will be asked to supply their name and address, since the Council has a general 'no response' policy to information supplied anonymously, and will not normally undertake any investigation based on anonymous information. Clearly this policy will not preclude an investigation in exceptional circumstances.

The identity of all complainants will remain confidential as far as practical. It may only be made public where a remediation notice is contested in a court of law and the health effects of the complainant were an important basis for the original determination of contaminated land.

5.6.3 Voluntary Provision of Information

Any information supplied by a person or organisation that has no direct impact

on their health, or property, will not be treated as a complaint. The information will be recorded and may be acted upon, and the Council may keep the informant up-to-date as a matter of good practice, subject to resources being available to achieve this.

5.6.4. Anecdotal Evidence

Anecdotal evidence will be noted. However the Council will observe the statutory requirement that robust scientific evidence must support any determination. The manager will use knowledge, experience and advice from officers to decide whether any further action is warranted.

5.7 Interaction with other Regulatory Regimes

As indicated in Chapter 1, there are other regulatory regimes that may be used to address land contamination issues. Overlaps with Development Control, Water Pollution and PPC legislation should be considered here, see section 1.12 for more detail.

6 GENERAL LIAISON AND COMMUNICATION STRATEGIES

Much of the work proposed in this Strategy that will take place under Part IIA will require effective communication and liaison with other individuals and organisations.

6.1 *Statutory Consultees*

Contact has been established with officers from all organisations acting as statutory consultees for the Inspection Strategy:

- Environment Agency
- English Nature
- English Heritage
- Department of the Environment, Food and Rural Affairs (DEFRA)
- Food Standards Agency

Initial liaison with the Environment Agency will be carried out through the Area Contaminated Land Officer based in Bridgwater, Somerset.

6.2 *Non-Statutory Consultees*

There is considerable scope for involvement of local businesses, the public and the wider community in addressing contaminated land issues in North Somerset.

Town and Parish Councils, local history and civic societies, as well as local business and industry, the Internal Drainage Boards and the general public have been encouraged to comment on the strategy, as well as participate in the general process of identifying and investigating potentially contaminated land. This approach is consistent with the Council's objectives for emphasising transparency and openness and encouraging the community to become involved.

6.3 *Communicating with Owners, Occupiers and Other Interested Parties*

One of the Council's aims for contaminated land is to encourage and promote voluntary action, as the preferred alternative to enforcement action. In many cases, an effective solution is more likely to be achieved by agreement.

The Government believes that the clarity and consistency contained in Part IIA and the accompanying guidance lends itself towards the encouragement

of voluntary action. Polluters will be able to act in advance of regulatory enforcement under part IIA. Another Incentive is the fact that materials requiring disposal through *voluntary remediation only* will be granted exemption from expensive landfill taxes.

Effective communication between polluters, owners, occupiers and other interested parties is required to effectively encourage and promote voluntary action. The Contaminated Land Officer will be the main point of contact within the Council for contaminated land issues and will endeavour to keep polluters, owners, occupiers and interested parties fully informed about the progress of an investigation.

7 MECHANISMS FOR REVIEW

The Strategy describes the general approach that will be taken in inspecting the North Somerset area for potentially contaminated land. This section will describe triggers for undertaking inspections outside of the general approach, triggers for reviewing inspection decisions and a mechanism for reviewing the Strategy. The frequency of inspection of the area for the purpose of identifying contaminated land is also addressed in this section.

7.1 Triggers for Undertaking Inspection

As discussed in previous chapters, there may be a need to carry out inspections outside of the general approach to inspection. Triggers for such inspections will include:

- Unforeseen Events – e.g. any contaminative incident like spillages, where consequence cannot be addressed through other relevant environmental protection legislation.
- New Receptors – e.g. housing proposed for a potentially contaminated site.
- Localised health effects apparently relating to a particular area of land.
- Responding to information on particular areas of land.

Non-routine inspections must not be allowed to significantly interfere with the general approach to inspection, if the overall Strategy is to prove effective. This issue will be considered before undertaking any non-routine inspection.

7.2 Triggers for Reviewing Inspection Decisions

There may be situations where changes in the condition or circumstances of the land or its surrounding environment prompts the Council to review its inspection decision for a particular area of land, outside of the routine review cycle. Triggers for such a review may include;

- Proposed changes in the use of surrounding land.
- Unplanned changes in the use of the land.
- Unforeseen events – where consequences cannot be addressed through other relevant environmental protection legislation.
- Verifiable reports of unusual or abnormal site conditions.
- Responding to information from other statutory bodies, owners or occupiers, or other interested parties.
- Significant changes in legislation.
- Significant precedents set by case law decisions.
- Significant reviews in toxicological data upon which risk assessment

were based.

Care will be taken to ensure that all decisions are made and recorded consistently and clearly for efficient review.

7.3 *Review of the Strategy*

As part of quality management practices, there will be a periodic review of the Inspection Strategy to ensure that it represents an efficient use of resources and that it is effective in meeting the requirements of the Part IIA regime.

The Strategy will be reviewed in terms of the milestones set out in Chapter 3 after one full year of implementation (November 2002). If the Strategy is significantly changed, it will be reviewed annually in following years.

If the strategy is found to be operating satisfactorily, the next review will be in 2006, when the first inspection of the area has been completed and sites prioritised for remediation.

The Council has a duty to inspect its area from time to time under the legislation. The frequency of inspection is not prescribed, therefore the 2006 review will be used to consider the frequency of inspection, based on the results of the first inspection and local circumstances.

Annex A – Categories of Significant Harm

Type of Receptor	Description of harm to that type of receptor that is to be regarded as significant harm
1. Human beings	<p>Death, disease, serious injury, genetic mutation, birth defects or the impairment of reproductive functions.</p> <p>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 effects of a pollutant on the body of the person concerned.</p> <p>This description of significant harm is referred to as a 'human health effect'.</p>
<p>1. Any ecological system, or living organism forming part of such a system, within a location which is:</p> <ul style="list-style-type: none"> • 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 (i.e. Special Areas of Conservation and Special Protection Areas); • Any candidate Special Areas of Conservation or potential 	<p>For any protected location:</p> <ul style="list-style-type: none"> • 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. <p>In addition, in the case of a protected location which is a European Site (or a candidate Special Area of Conservation or a potential Special Protection Area), harm which is incompatible with the favourable conservation status of natural habitats at that location or species typically found there.</p> <p>In determining what constitutes such harm, the local authority should have regard to the advice of English Nature and to the requirements of the Conservation (Natural Habitats etc) Regulations 1994.</p>

<p>Special Protection Areas given equivalent protection;</p> <ul style="list-style-type: none"> Any habitat or site afforded policy protection under paragraph 13 of Planning Policy Guidance Note 9 (PPG) on nature conservation (i.e. candidate Special Areas of Conservation, potential Special Protection Areas and listed Ramsar sites); or Any nature reserve established under section 21 of the National Parks and Access to the Countryside Act 1949. 	<p>This description of significant harm is referred to as an 'ecological system effect'.</p>
<p>2. Property in the form of:</p> <ul style="list-style-type: none"> Crops, including timber; Produce grown domestically, or in allotments, for consumption; Livestock, Other owned or domesticated animals; Wild animals which are subject to shooting or fishing rights. 	<p>For crops, a substantial diminution in yield or other substantial loss in their value resulting from death, 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.</p> <p>The local authority should regard a substantial loss in value as occurring only when a substantial proportion of the animals or crops are dead or otherwise no longer fit for their intended 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.</p> <p>This description of significant harm is referred to as an 'animal or crop effect'.</p>
<p>3. 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</p>	<p>Significant failure, substantial damage or substantial interference with any right of occupation.</p> <p>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</p>

<p>comprised in a building.</p>	<p>used for the purpose for which it is or was intended.</p> <p>Additionally, in the case of 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.</p> <p>This description of significant harm is referred to as a 'building effect'.</p>
---------------------------------	--

Annex B – Sources of Information for Part IIA

Resource	Information	Use
Historical Ordnance Survey Maps	Digital mapping of North Somerset obtained through Landmark / Sitescope (1880's-present)	To identify potential sources, pathways and receptors.
Geochemical Mapping	Digital elemental and physicochemical data for North Somerset soils, supplied by BGS as interpolated maps	To identify potential sources
Hydrogeological Maps	Groundwater Vulnerability maps produced by the former National Rivers Authority (NRA)	To identify potential receptors and pathways
Groundwater Source Protection Zones (SPZ's)	Areas defined by the EA for the purpose of protecting groundwater abstraction sources against pollution. Obtained from the EA website (www.environment-agency.gov.uk)	For use on a GIS to identify potential receptors and pathways.
Aerial Photographs (Development Plans)	Digital aerial photography of present-day North Somerset for use on GIS	To identify potential sources, pathways And receptors
Statutory Planning Register (Development Control)	Registers of planning permissions maintained by local planning authority.	May contain details of use. To identify potential sources and receptors. Note: consents may not have been implemented.
North Somerset Local Plan (Development Plans)	A new plan is currently on deposit draft and is a valuable source of up-to-date information on land use.	To identify potential sources And receptors
Discharge Consents to controlled Waters, issued by EA under Water Resources Act 1990	Details and conditions of discharge. Supplied by EA in general package of information relating to Part IIA.	To identify potential sources and pathways.
Discharge Consents to Sewers, issued by water company under Water Industry Act 1991)	Details and conditions of discharge. Available from sewerage undertaker.	To identify potential sources and pathways.
Dedicated Sludge Disposal Site Register maintained by local water companies	Information relating to sludge disposal. Sewage sludge has probably been disposed in the North Somerset area as an agricultural conditioner/fertiliser	To identify potential sources
Part A IPC (IPPC) Process Authorisations (EA)	Details of authorisations required for polluting industrial processes are available from the EA website, and were also supplied in the general package of information by the Agency for Part IIA.	To identify potential sources.
Part B IPC Process Authorisations (Environmental & Consumer Protection Unit)	The Environmental Services Department of the Council maintains an up-to-date register of authorisations for polluting processes subject to Local Authority control, as well as information on revoked authorisations.	To identify potential sources

Annex B – Sources of Information for Part IIA

Resource	Information	Use
Waste Management Licences (EA)	The EA maintain a public register of sites licensed for waste management activities and have provided this information as part of the package of information for Part IIA	To identify potential sources
Sites and Monuments Records	The Authority collects, stores and makes available archaeological information	To identify potential sources and receptors.
Minerals Surveys	The Authority may still hold information relating to minerals workings in the area which may assist in identifying areas of waste disposal	To identify potential sources
Sites and Monuments Records	The County Archaeology section holds records of all known archaeological sites, including scheduled ancient monuments	To identify potential receptors
Local Authority Nuisance Complaint Records	North Somerset Council maintains records of nuisance complaints and investigations for the Area	To identify potential sources / known Information on contamination
Data on protected species such as great crested newts, badgers and bats	British Environmental Records Centre (BRERC)	To identify potential receptor
Maps and information relating to SSSIs, NNRs, Natura 2000 sites (SACs SPAs), LNRs and CWS.	English Nature will provide information on statutory sites	To identify potential receptors
National Land Use Database (NLUD) (Development Plans)	Information collated as part of an ongoing project to identify areas of land suitable for redevelopment in North Somerset.	To identify potential sources, and previous land-use.

Annex C – Glossary of Terms

Concordat – agreement

Contaminants – substances which are in, on or under the land and which have the potential to cause harm or to cause pollution of controlled waters.

Contaminated Land – defined in Section 78A(2) as
'any land which appears to the local authority in whose area it is situated to be in such a condition, by reason of substances in, on or under the land, that –

- (a) significant harm is being caused or there is significant possibility of such harm being caused, or;
- (b) pollution of controlled waters is being, or is likely to be, caused

Controlled Waters – defined in section 78A(9) by reference to Part III (Section 104) of the Water Resources Act 1991; this embraces territorial and coastal waters, inland fresh waters and ground waters

Greenfield Sites – virgin land which has never been developed

Harm – harm to the health of living organisms or other interference with the ecological systems of which they form part and, in the case of man, includes harm to his property.

Hazard – exposure or vulnerability to harm

Landfill – low-lying sites or tips filled up with alternate layers of rubbish or earth

Orphaned sites – a contaminated land site for which no appropriate person can be found, or where those who would otherwise be liable are exempted by one of the relevant statutory provisions

Pollutant Linkage – the relationship between a contaminant, a pathway and a receptor

Possibility of significant harm – a measure of the probability, or frequency, of the occurrence of circumstance which would lead to significant harm being caused

Protocol – a record of agreement

Public Register – a record maintained by the council under Section 78R of particulars relating to contaminated land that is publicly available

Receptor – 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 Annex A
 - (ii) is being, or could be, harmed by a contaminant
- (b) controlled waters which are being, or could be, polluted by a contaminant

Regeneration – bringing derelict and rundown areas back to beneficial use

Remediation – defined in Section 78A(7) as

‘(a) the doing of anything for the purpose of assessing the condition of:

- the contaminated land in question;
- any controlled waters affected by that land; or
- any land adjoining or adjacent to that land

(b) the doing of any works, the carrying out of any operations or the taking of any steps in relation to any such land or waters for the purpose of:

- preventing or minimising, or remedying or mitigating the effects of any significant harm, or any pollution of controlled waters, by reason of which the contaminated land is such land; or
- restoring the land or waters to their former state; or

(c) the making of subsequent inspections from time to time for the purpose of keeping under review the condition of the land or waters.’

Risk - the combination of:

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

Source – any natural or artificial substance, whether in solid or liquid form or in the form of a gas or vapour

Special Site – defined by section 78A(3) as:

‘any contaminated land -

(a) which has been designated as such a site by virtue of Section 78C(7) or 78D(6)...; and

(b) whose designation as such has not been terminated by the appropriate agency under Section 78Q(4)...;’

The effect of the designation of any contaminated land as a special site is that the Environment Agency, rather than the local authority, becomes the enforcing authority for the land.

Strategy – the authority’s overall plan for identifying contaminated land within

North Somerset

Suitable for Use – the current condition of the land is safe for its current or intended purpose

Annex D - References

Legislation and Guidance

DETR, Contaminated Land Inspection Strategies, Technical Advice for Local Authorities. **(May 2001)**.

DETR Circular 02/2000, Environmental Protection Act 1990: Part IIA Contaminated Land. **HMSO (2000)**.

Duxbury & Morton, Blackstones Statutes on Environmental Law, 2nd Edition, **Blackstone Press (1995)**

Part IIA, Environmental Protection Act 1990 (as amended). **HMSO (1990)**.

SI 1991/3240 Environmental Information Regulations 1992. **HMSO (1992)**.

SI 2000/227 Environmental Protection, England, The Contaminated Land (England) Regulations 2000. **HMSO (2000)**.

North Somerset Council Publications

North Somerset Local Plan. **North Somerset Council (1999)**.

Other Publications

Code of Good Agricultural Practice for the Protection of Soil, **MAFF (1993)**

Communicating Understanding of Contaminated Land Risks. **SNIFFER (1999)**.

CLR Report No. 2 Guidance on Preliminary Site Inspection of Contaminated Land, **DoE, 1994**.

CLR Report No. 3 Documentary Research on Industrial Sites. **DoE, (1994)**.

CLR Report No. 6 Prioritisation and Categorisation Procedure for Sites Which May Be Contaminated. **DoE (1995)**.

HSE HS(G)66, Protection of Workers and the General Public During the Development of contaminated land, **HSE (1991)**

ICRCL Guidance Note 59/83 Guidance on the Assessment and Redevelopment of Contaminated Land. **ICRCL, (1987)**.

Methodology for the Derivation of Remedial Targets for Soil and Groundwater to Protect Water Resources, Environment Agency R&D

Publication 20. Environment Agency, (2000).

Stuart Bell, Ball & Bell on Environmental Law, 4th Edition, **Blackstone Press Ltd. (1997).**

www.environment-agency.gov.uk **(2000).**