



# Stafford

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## BOROUGH COUNCIL

**CONTAMINATED LAND  
INSPECTION STRATEGY**

## *SBC Contaminated Land Inspection Strategy, Executive Summary*

Under new legislation the local authority is required to inspect land in its area to discover whether it is contaminated. An inspection strategy must be submitted to the Department of the Environment, Transport and the Regions by July 2001. This strategy will detail how the authority will take a rational, ordered and efficient approach to this inspection.

The Council's priorities in dealing with contaminated land will be;

1. To protect human health
2. To protect controlled waters
3. To protect designated ecosystems
4. To prevent damage to property
5. To prevent any further contamination of land
6. To encourage voluntary remediation
7. To encourage re-use of brownfield land

A five-year programme of inspection will be undertaken, running from July 2001 to June 2006. An inspection programme based on population-density is proposed, with the largest towns being inspected first, followed by the smaller towns and villages. Priority will be given to inspecting land owned by the Council and land scheduled for development in the Council's Local Plan. Controlled waters and protected areas of the environment will also be examined and a final prioritisation exercise undertaken to establish the order in which problem sites should be cleaned up.

It is understood that some sites may be identified outside this general approach to inspection that will require urgent attention. These sites will be dealt with as they arise. The Borough Council will support parties wishing to undertake voluntary remediation and will encourage re-use of brownfield land for development in preference to greenfield development.

The Borough Council is the lead regulator on contaminated land but, wherever necessary, the Council will work in partnership with other organisations particularly the Environment Agency. This strategy will be issued to Parish Councils and all statutory consultees between March 2001 and June 2001 for consultation.

The legislation sets clear criteria that must be met before land can be formally designated as contaminated land. The Borough will also have to maintain a public register of its activities under this legislation. The information will be limited to that required by law.

## *CONTENTS*

Chapter 1 Introduction	<b>Page 4</b>
Chapter 2 Characteristics of Stafford Borough	<b>Page 7</b>
Chapter 3 The SBC Strategy : Overall Aims	<b>Page 13</b>
Chapter 4 Procedures	<b>Page 16</b>
Chapter 5 Liaison and Communication	<b>Page 21</b>
Chapter 6 Review Mechanisms	<b>Page 24</b>
Appendix A Glossary	<b>Page 25</b>
Appendix B Details of Statutory Consultation Contacts	<b>Page 27</b>
Appendix C	<b>Page 29</b>
References	

# Chapter 1 Introduction

The Stafford Borough Council is required to inspect land in its District for contamination under new legislation that came into force on the 1st April 2000. This strategy details how this inspection will be undertaken.

Land contamination has significant impacts on both the environment and the economy so these policy areas are therefore key considerations in developing this Inspection Strategy.

In the interests of openness this strategy will be published for public consultation and will be made available to all interested sections of the community businesses and developers. The feedback from this exercise will be considered before the final document is sent to the Department of the Environment Transport and the Regions.

## Regulatory context

Legislation concerning contaminated land has been under development since the early 1990's. Following consultation on a 1993 White Paper entitled "Paying for our Past", The Environment Act 1995 inserted a new section (Part IIA) into The Environmental Protection Act 1990. Another period of detailed consultation followed this enabling legislation, and the regulations and statutory guidance came into force in April 2000. It is the introduction of this new regulatory regime, generally referred to as the Part IIA regime, that has prompted the production of this strategy document.

## The Roles of the Borough Council and the Environment Agency

Local authorities have been given the primary regulatory role under the PartIIA regime as local authorities have historically had responsibility for dealing with any statutory nuisance caused by land contamination and are also the lead authorities on land use planning.

The local authority has a duty'

- To cause their areas to be inspected for contaminated land
- To determine whether any particular site meets the statutory definition of contaminated land
- To act as the enforcing authority for all contaminated land, unless the site meets the definition of a "special site" (in which case the Environment Agency will act **as** the enforcing authority).

The Environment Agency has a secondary regulatory role in assisting local authorities, 'providing site-specific local guidance, dealing with, 'special sites' and publishing periodic reports on the state of land contamination nationally.

## Defining contaminated land

A legal definition of contaminated land is given in Section 78A(2) of Part IIA 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 a significant possibility.of such harm being caused; or (b) pollution of controlled waters is being, or is likely to be caused

Section 78A(5) requires the regulatory authority to act in accordance with guidance issued by the Secretary of State in determining significance and likelihood.

### **Dealing with contaminated land**

If an area of contaminated land has been identified, the approach for dealing with it will be the same regardless of whether the local authority or the Environment Agency is the regulator. There are four main stages to this approach..

1. To establish who is the "appropriate person" to bear responsibility for the remediation of the land.
2. To decide what remediation is required and to ensure that this occurs, through.

Reaching a voluntary agreement

Serving a remediation notice, if agreement cannot be reached

Carrying out work themselves, in certain circumstances .

3. To determine who should bear what proportion of the liability for meeting the costs of the work
4. To record certain information about regulatory action on a public register.

### **Pollutant Linkages and Risk Assessment**

For a site to meet the definition of contaminated land, a pollutant linkage must be established. A pollutant linkage consists of three parts..

- i. A source of contamination in, on or under the ground
- ii. A pathway by which the contaminant is causing significant harm (or which presents a significant possibility of such harm being caused)
- iii. A receptor of a type specified in the regulations

### **SOURCE -----PATHWAY-----RECEPTOR**

The receptors recognised as being potentially sensitive are:

Human beings

Ecological systems or living organisms forming part of a system within certain protected locations, including:

- Sites of Special Scientific Interest ( SSSIs )
- National Nature Reserves
- Marine Nature Reserves
- Controlled Water Areas
- Special Areas of Conservation ( SACs )
- Special Protection Areas ( SPAs )
- Candidate SACs

If the three components of the pollutant linkage exist, a risk assessment will be undertaken to determine the likelihood of harm being caused and the likely nature and extent of the harm caused if the predicted event actually occurred. An area of land can only be designated contaminated land if a significant risk has been proven.

## **Development of the strategy**

All local authorities are required to take a strategic approach to inspecting land in its area for contamination .

The statutory guidance requires that the approach adopted should.

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

This strategy has been developed to meet these requirements. Particular reference has been made to 'Contaminated Land Inspection Strategies Technical Advice for Local Authorities" issued by the Department of the Environment, Transport and the Regions. It **has** been prepared in a number of stages:

A draft strategy for consultation has been produced by the Pollution Control Service

The consultation draft will be submitted to the Cabinet.

The consultation draft will be sent to formal and informal consultees these will include businesses and Parish Councils.

The consultation draft will be available for comment on the SBC web site.

A final version of the strategy will be submitted to the Environment Agency by July 2001.

## **Chapter 2 Characteristics of Stafford Borough**

This section gives the background to the Stafford Borough and an explanation of how this influences

the Council's approach to inspection for contaminated land. It will also enable fair comparison with other authorities.

**GEOGRAPHICAL LOCATION**

Stafford Borough lies in the heart of the County of Staffordshire. Staffordshire is a large County between the giant conurbations of Manchester 50 miles to the north and Birmingham 30 miles to the south. To the north the Borough shares a boundary with the City of Stoke on Trent and to the west with Shropshire.

**BRIEF DESCRIPTION of the BOROUGH / HISTORY**

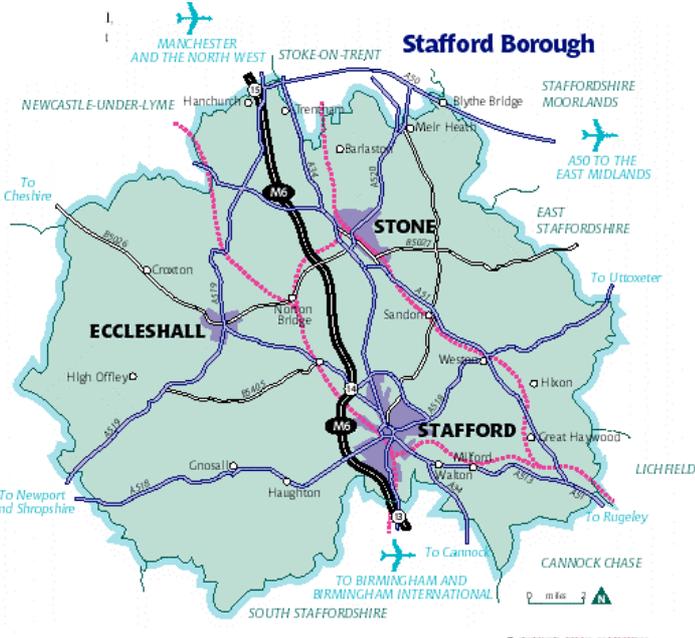
The Borough has 2 main towns and is mixed urban and rural in character Stafford and Stone the largest and second largest towns in the Borough have been the main industrial centres. Unlike our neighbour to the north no single industry has dominated in the Borough. In the past the area has been a centre for shoe making and the manufacture of railway engines. Currently there is a mix of industries although the majority are connected with engineering. There is some industrial over spill from the Potteries. The Borough is the largest in area in Staffordshire covering some 59,705ha.

**POPULATION DISTRIBUTION**

The Borough's population is 123,000 the distribution is set out below:-

Stafford Town	57,000
Stone Town	15,000

The remainder of the population is distributed in the smaller towns and villages such as Eccleshall in the north west and Gnosall in the west these rural towns both have populations of 6000.



**Figure 1: Stafford Borough**

**CURRENT LAND USE CHARACTERISTICS**

The largest proportion of land is used for agriculture, second is residential followed by industrial uses. Industrial uses vary from large international manufacturing sites such as the Alstrom and Evode sites in Stafford to the small - medium size uses to be found on the Borough's industrial estates. Mineral extraction is only on a small scale with one sand and gravel quarry. The Borough is home to the largest RAF maintenance unit in the country.

**PROTECTED LOCATIONS**

Stafford Borough has one of Britain's best rural landscapes and boasts :-

- 3 National Nature Reserves (NNR)
- 17 Sites of Special Scientific Interest (SSSI)

### **KEY PROPERTY TYPES**

As well as its rich natural environment, the District has a rich historic environment with 650 Listed Buildings, 47 Ancient Monuments and 30 designated Conservation Areas. The County Sites and Monuments Record contains information on over 1166 entries of archaeological interest .

### **KEY WATER RESOURCE PROTECTION ISSUES**

Water resources such as drinking water supplies, rivers, lakes and canals may all be affected to a greater or lesser extent by contaminated land. The Water may itself form the pathway by which contaminants are carried from the source to a receptor, or the water course and ecology may be damaged by the contamination.

Potable groundwater needs special protection since any contamination which enters these waters can be both very damaging and hard to deal with. The Groundwater is held in places in Stafford Borough within the Sherwood sandstone group, the combination of groundwater held in this strata are specifically regulated in paragraph 2 of schedule 1 of the regulations, whereby being controlled waters, they may be determined to be 'Special Sites' where contamination is present. Source protection zones (SPZ's) are designed to highlight the potential risk and to minimise harm to these key resources, the Stafford Borough SPZ's are shown later in this section.

The District Council regularly inspects the quality of 200 private drinking water supplies in its area. These are scattered about the rural areas. One supply serves a large food factory another a major Scout Camp.

### **KNOWN INFORMATION ON CONTAMINATION**

The Council holds some information on contamination in the District, primarily submitted as part of the development control process. If development is proposed on an area of land where past use may have resulted in contamination, the Council will often request a site investigation as part of a planning condition. If development proceeds on these sites, remedial works will often have been carried out to improve the site conditions. Planning records will therefore form a valuable resource during the investigation process..

### **CURRENT AND PAST INDUSTRIAL HISTORY**

The Borough has been home to a variety of industries for example heavy engineering making locomotives the manufacture of large transformers, the manufacture of consumer goods such as shoes, white goods and adhesives for home and industrial use. Although locomotive manufacture has now disappeared industry connected with engineering still remains such as the production of abrasives and abrasive wheels and the manufacture of diesel engines for marine applications and generator sets. There is particularly in the north of the Borough some specialised ceramic industries still in operation. In the past the presence of streams providing a source of power led to the building of water powered mills to supply materials to the pottery industry in neighbouring Stoke on Trent the remains of these can still be seen today, one water wheel having been restored to working order.

### **BRINE PUMPING**

This activity to extract salt from deposits under the town of Stafford had a serious impact on the town causing subsidence in some areas of the town. Brine pumping finished over 40 years ago and the land has now largely stabilised .

### **COAL MINING**

The northern part of the borough near to the boundary with Stoke on Trent and Newcastle under Lyme has been extensively undermined. The site of the colliery was in Stoke on Trent and mining ended in the 1990's. The main impact on the borough of this activity was subsidence. Further south the coal deposits contain too much chlorine to be of use.

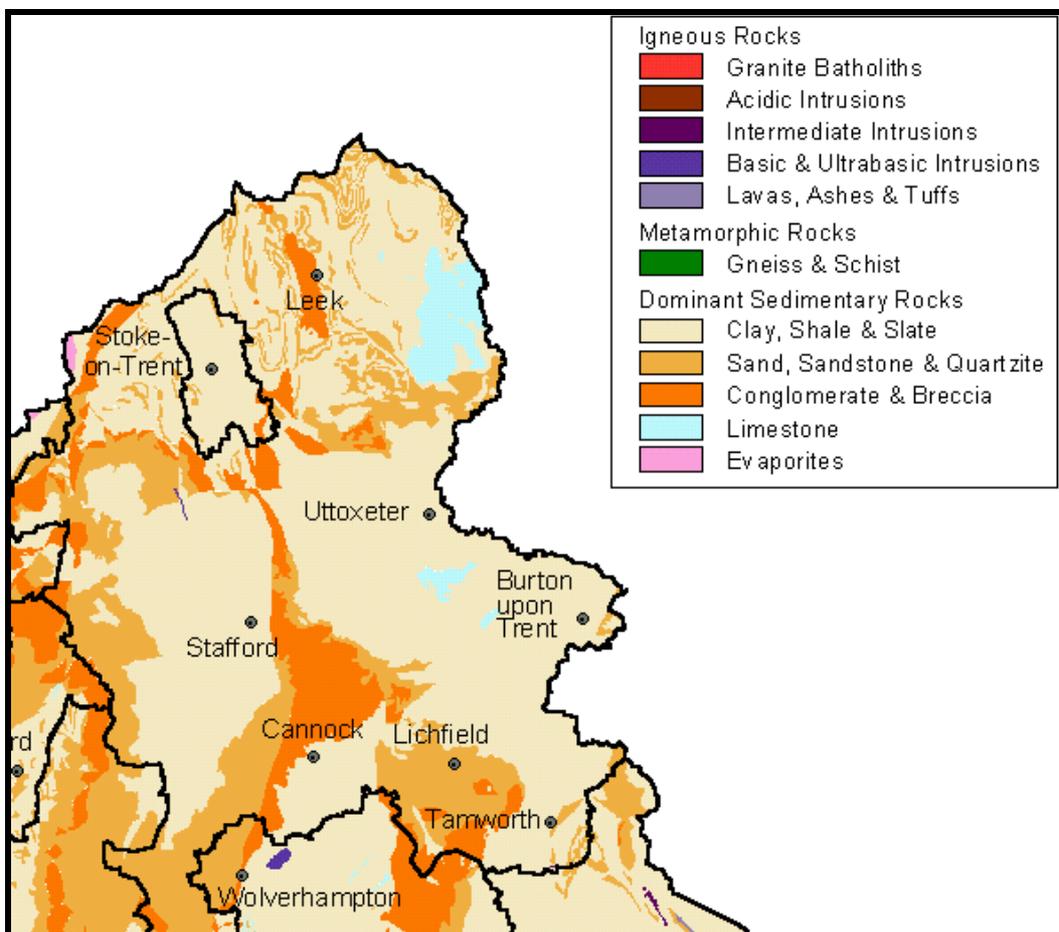
## OTHER INDUSTRIES

Engineering was and still is the biggest single sector in the Borough. With supporting industries such as foundries and abrasive manufacture. Ferrous metal foundries are no longer operating and only two non-ferrous metal foundries still exist. Although engineering was and is the main industrial sector the economic base in the Borough has always been broad no one industry dominating.

## MINISTRY OF DEFENCE LAND

Stafford Borough has a long history of military land use, presently there are at least three substantial military establishments in the borough. The risk of serious land contamination from weapons and military occupation is obvious, such land is designated a 'special site' for the purposes of the Act, consideration of such sites will fall to the Environment Agency.

## THE GENERAL GEOLOGICAL CHARACTERISTICS OF STAFFORD BOROUGH.



Stafford Borough is underlain by successions of generally horizontal sedimentary deposits which have undergone some faulting and folding.

The deepest mapped strata is that of the Carboniferous rocks, which include the Lower, Middle and Upper coal measures. These sediments now form a basin onto which Triassic age sediments were deposited unconformably.

The Triassic age sediments include the Sherwood sandstone group and the Mercia Mudstone group. These sediments also include evaporite deposits, which are salts which were crystallised from tropical seas in the Triassic period, these important minerals have been extracted as brine solutions in the Stafford area.

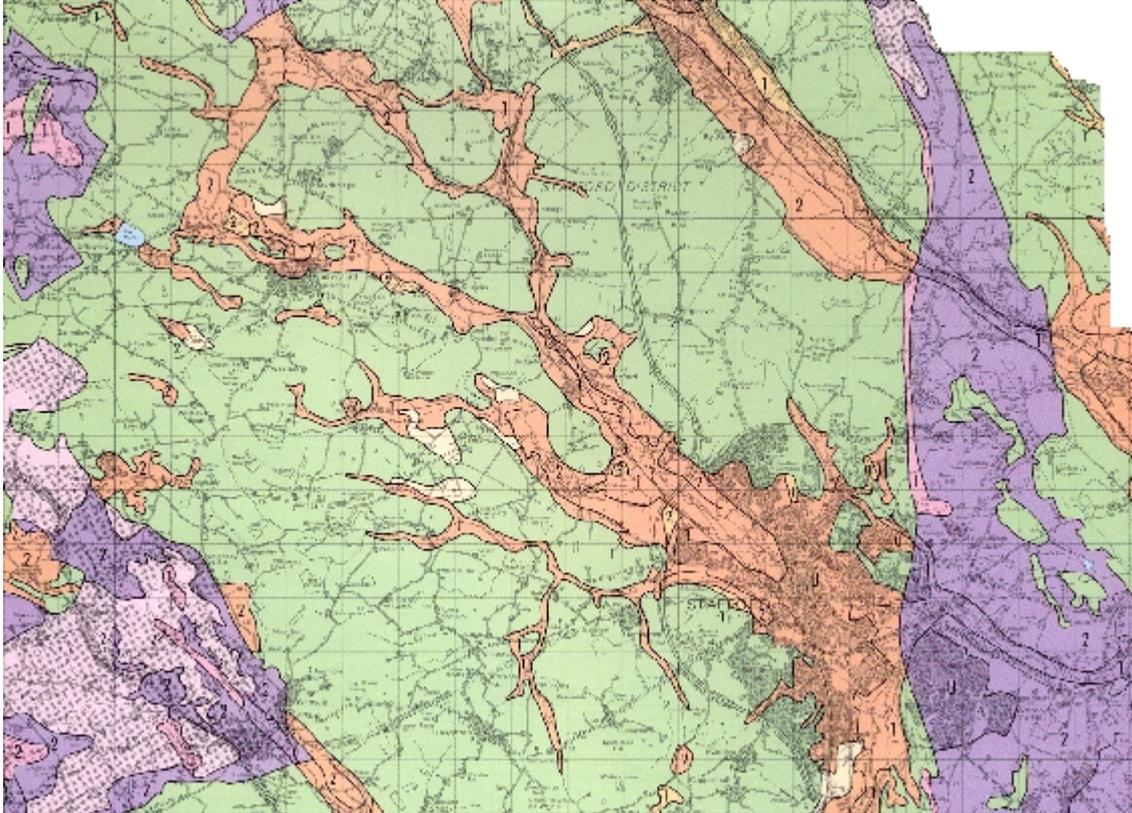
The Hopwood fault runs from north to south just to east of Stafford and brings the Sherwood sandstone strata to the surface, this fault may require particular attention because of the important pathway that this provides to the vulnerable groundwater.

On the map above, the younger clays, are surrounded in the Stafford region by sandstones and conglomerates. The clays of the Mercia mudstone group are largely impermeable to water, whereas the sandstones and conglomerates of the Sherwood group are porous and do form the major aquifers of the region. The entire borough was heavily glaciated in the more recent past, this has left some widespread but thin deposits of low permeability tills and boulder clays. Most recently, river channels have deposited gravel and sand at the near surface, these fluvial channels remain buried and are of high permeability, making them a potential high risk pathway for mobile contaminants.

## **THE BROAD HYDROLOGICAL & HYDROGEOLOGICAL FEATURES OF STAFFORD BOROUGH.**

Stafford Borough contains important water resources. In particular the river Trent watershed travels from north to south through the Borough and combines with the rivers Sow and Penk near to Stafford. The Trent valley and Trent catchment area sit upon the Coal Measures and Triassic strata, the latter comprises in part the important aquifer of the Sherwood Sandstone Group.

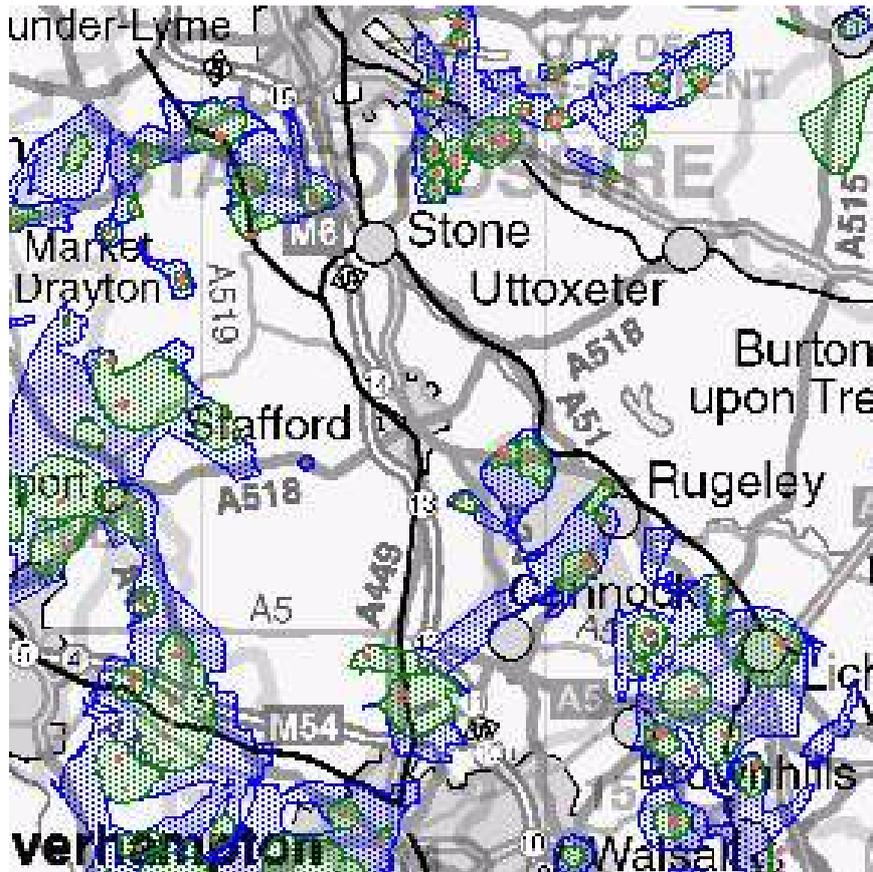
The aquifers of Stafford Borough and their relative vulnerability to damage from contamination are shown in the plan below (taken from the Environment Agency Sheet 22 Groundwater Vulnerability Maps ). Major aquifers are those which can sustain a high water productivity supply and are highly permeable, minor aquifers are locally important sources of water but are of lower permeability and production, generally they comprise fluvial and glacial drift deposits, and lower permeability strata such as the Mercia Mudstone. Non aquifers are generally impermeable such as clays, but may overly more porous strata.



**PURPLES= MAJOR AQUIFERS    BROWN= MINOR AQUIFERS    GREEN= NON AQUIFER**

The areas affecting these groundwater source protection zones (SPZ's) will need special consideration to ensure that any potential contamination does not enter the zones.

**Stafford Borough Area Source Protection Zones.**



Total Catchment. Outer Zone. Inner Zone

**Zone I (Inner Protection Zone)** - This zone is defined by a travel time of 50-days or less from any point within the zone at, or below, the water table. Additionally, the zone has as a minimum a 50-metre radius. It is based principally on biological decay criteria and is designed to protect against the transmission of toxic chemicals and water-borne disease. **Zone II (Outer Protection Zone)** - This zone is defined by the 400-day travel time, or 25% of the source catchment area, whichever is larger. The travel time is derived from consideration of the minimum time required to provide delay, dilution and attenuation of slowly degrading pollutants. **Zone III (Total catchment)** - This zone is defined as the total area needed to support the abstraction or discharge from the protected groundwater source.

### Chapter 3 THE SBC STRATEGY: OVERALL AIMS

The reasons for writing this strategy were described in chapter 1. A detailed breakdown of how the Council will meet its objectives is given in this section, prioritising actions and laying down milestones.

### **The Council's priorities**

Dealing with contaminated land constantly throws up complex issues, often where limited amounts of information are available. For each site, the importance of these issues must be balanced in order to move forward in dealing with the problem. A prioritised list of the Council's aims has therefore been devised to aid decision-making.

The Council's priorities in dealing with contaminated land will be-

- 1 To protect human health
2. To protect controlled waters
3. To protect designated ecosystems
4. To prevent damage to property
5. To prevent any further contamination of land
6. To encourage voluntary remediation
7. To encourage re-use of brownfield land

This list is presented in priority order and in all cases will have regard to significance and likelihood, as required by the regulations.

### **Work programme**

The inspection process has been broken down into a series of milestones, which are described in the work programme

#### ***Stage 1 Purchase Historical Maps (January 2000)***

To begin the process of investigation, the Council has purchased a set of historic ordnance survey maps in a digital format, which can be used with the Council's Geographical Information System (The historic ordnance survey maps are from three separate time periods (or ,epochs)

- 1878-95
- 1901-1905
- 1920-29

Mapping technology was not as accurate during these times as it is currently and therefore each set of maps has been "geo-rectified" to allow them to be overlain onto current maps.

It should be emphasised that only a small proportion of sites subject potentially contaminated land use will meet the strict definition of contaminated land. Due to the past uses of the land, many of these sites will contain substances in, on, or under the ground, which have the potential to cause harm. However, in order to be designated as contaminated land these sites must have both a pathway by which significant harm may be caused and a receptor on which significant harm can be inflicted. If either the pathway or the receptor is missing from the pollutant linkage, the site may be land in a contaminated state but cannot be designated as contaminated land, under Part IIa..

#### ***Stage 2 Draft Strategy for Consultation (November 2000 - April 2001)***

A first version of the strategy has been drawn up in accordance with DETR technical guidance, which at the time of writing remains as draft guidance. Rather than await publication of the final

guidance, this Council's approach will be to present a consultation draft of the strategy which can begin to involve other organisations in the process of investigation. Consultation comments can then be taken into account as the final strategy, along with any amendments forthcoming on the technical guidance.

***Stage 3 - Consultation (May 2001 - June 2001)***

The data sources cited, later in chapter 4, may not identify all potentially contaminated sites. It is feasible that an area of land might be used for a high risk contaminative activity (e.g. waste disposal) without ever being recorded on a map. Local consultation will therefore play a major role in identifying the gaps in this database.

The draft strategy will be sent to all the Parish Councils for their comments and any additional information they can provide.

The Borough Archaeologist is another potential source of information. Consultation on the Strategy will also be publicised in the local press and it is anticipated that a number of interested residents will come forward with information on past land uses.

The Strategy will be available on the Council's web site and it will be possible to pass on comments electronically.

***Stage 4 - Publish final Inspection strategy (July 2001)***

Provided the consultation stage runs smoothly, the strategy must be published by 1st July 2001 and submitted to the Environment Agency.

***Stage 5 - Dealing with urgent sites (July 2001 - onwards)***

If there is any verifiable report of sites causing significant harm that are identified through consultation, the general approach to inspection will be secondary to dealing with such sites, indeed, if there is a critical need, investigative work may have to begin before completion of final draft of the inspection strategy. The regulations recognise this scenario is realistic and the proposed approach is in line with the guidance.

This stage may include declaring some "special sites" and passing the lead regulatory role for these sites to the Environment Agency.

***Stage 6 - General approach to inspection (July 2001 - July 2005)*** The Council's first priority in dealing with contaminated land is to protect human health as clearly stated in chapter 3. Land within the District will therefore be inspected in order of population density.

The largest towns that have the largest number of receptors (humans) will be given the highest priority by the Council. These towns are therefore at the highest risk of having all three elements of a pollutant linkage (source, pathway, receptor) of an area of contaminated land, which could cause significant harm to human health.

The two largest towns in the District (Stafford and Stone) will therefore be inspected first, followed by the District's many villages and smaller settlements, prioritised on the basis of population.

***Stage 7 - Council owned land (April 2001 - 2005)***

The Council has land holdings within the District. There are other areas of land within the District that the Council (or its predecessors) has owned at some stage in the past where potentially

contaminative activities (e.g. waste disposal) may have occurred. The Council may also have deliberately pursued the acquisition of derelict or "brownfield" land in order to develop this and improve the overall quality of an area.

Within the general population-based approach to investigation, it is appropriate that these types of sites are subjected to investigation (and if necessary, remediation) as a priority. This follows the Council's general approach to "putting its own house in order before expecting others to follow suit.

***Stage 8 - Threats to controlled waters ,protected areas of the environment and buildings (July 2005- July 2007)***

It is anticipated that the investigation of towns and villages will bring to light information that would reveal any imminent threats to controlled waters or protected areas of the environment posed by contaminated land. If the evidence demonstrates a need for urgent action, this will be taken as soon as practicable alongside the rolling programme of town-by-town inspections. The Environment Agency will be consulted on matters relating to controlled waters.

If, however, the evidence is not conclusive then these areas will be included in a specific investigation of such threats, to be undertaken once the investigation of the towns and villages is complete. This will include areas of the District with low population density .

***Stage 9-Final prioritisation (January 2006 - June 2006)***

The regulations require the remediation of contaminated land sites to be prioritised. This prioritisation can only take place once all sites have been identified and this will therefore occur at the end of the investigation stage, currently time tabled for January 2006

It is likely that a proprietary risk assessment packages will be required for this stage but it is not possible to identify a specific package at the time of writing.

## Chapter 4 PROCEDURES

Procedures have been drawn up to describe how contaminated land issues will be handled within the Council. This section also details the level of service the business community and members of public can expect from the Council in dealing with these issues.

### **Internal management arrangements for inspection and identification**

Within the Borough Council, the Housing and Environmental Services Department has responsibility for the implementation of Part IIA EPA 1990. As part of the Technical Team the Pollution Control Officer is lead officer on contaminated land reporting to the Principal Environmental Health Officer.

The Pollution Control Officer will deal with the day-to-day implementation of the strategy once approved by elected members. The Pollution Control Officer will also be responsible for serving remediation notices, subject to consultation with the Principal Environmental Health Officer .

Elected members will be informed at the earliest opportunity of any plans to designate an area of Council-owned land, or land where the Council is the appropriate person and may be liable for remediation costs.

### **Considering local authority interests in land**

As indicated in Section 3, investigation of Council-owned land will be carried out alongside the town-by-town inspection schedule, and this land will be amongst the first investigated in each area.

### **Information collection**

Many sources of information will be required to identify potential sources of contamination and potential receptors.. Some of the resources are detailed below.

<b>Resource</b>	<b>District specific</b>	<b>Use</b>
Historic maps	Digital maps purchased from Ordnance Survey	To identify sources
Geological maps	1:50 000 solid sheets 123 & 139 Drift sheets 123 & 139 from the British Geological Society	To characterise sources and pathways
Source Protection Zones	Areas of groundwater that receive special protection by the Environment Agency are identified on the EA website, and can be used with GIS	To identify a site sensitivity with regard to large groundwater abstractions
Environmental Health	The Borough Council maintains records of complaints and investigations	To identify known information on contamination
Planning records	The Borough Council holds detailed planning records of development in the in the area including information on ground conditions presented in surveys	To identify known information on contamination

Integrated Pollution Control register	The Council has maintained a public register containing details of authorised processes in the Borough since 1990	To identify sources of contamination
Waste Management Licences	The Environment Agency maintain a public register of sites licensed for waste management activities and have provided relevant information on sites in the Borough	To identify sources of contamination
Register of closed landfill sites	The Environmental Health section have a list of closed landfill sites which is updated in conjunction with the EA.	To identify sources of contamination
The William Salt Library	The library contains historical information on Stafford and it's surrounding area	To identify sources of contamination
The Borough Archaeologist	Records of past uses of land in the Borough	To identify sources contamination
Sites and Monuments Records	The SMR should identify any Scheduled Ancient Monuments That are associated with land that may be in a contaminated state.	To identify sources contamination, as well as potential receptors

### **Information Management**

The Council's Geographical Information System (or GIS) will be the primary tool used to manage contaminated land information.

### **Complaints and voluntary information provision**

From time to time, the Council may receive a complaint regarding contaminated land from a member of the public, business or community group. Interested residents may also voluntarily supply information relating to land contamination that is not directly affecting themselves, their families or their property. These complaints or acts of information provision may impact on the approach to inspection and so the procedures to be adopted are detailed here.

### **Complaints**

A complaint from the public regarding contaminated land will be dealt with following the same procedure as currently used by the Housing and Environmental Services Department to deal with statutory nuisance complaints.

All complainants may expect:

- their complaint to be logged and recorded
- to be contacted by an officer regarding their complaint within three working days of receipt
- to be kept informed of progress towards resolution of the problem.

Every effort will be made to resolve complaints quickly and efficiently. The legislative framework does, however, present a number of obstacles to speedy resolution of problems:

- i. proof of a viable pollutant linkage before any formal designation as contaminated land is permissible, which might only be possible with detailed investigation
- ii. prior consultation with interested parties before designation as contaminated land
- iii. a minimum of a three month period between designation and serving of a remediation notice
- iv. the requirement for the enforcing authority to make every effort to identify the original polluter of the land (or "Class A" person)

The regulations allow conditions (ii) and (iii) to be waived in extreme cases, but not conditions (i) and (iv).

### **Confidentiality**

All complainants will be asked to supply their names and addresses and, if appropriate, the address giving rise to the complaint. The identity of the complainant will remain confidential. The only circumstance in which this information might be made public would be in the case of a remediation notice being appealed in a court of law and an adverse effect on the complainant's health was an important reason for the original contaminated land designation.

### **Voluntary provision of information**

If a person or organisation provides information relating to contaminated land that is not directly affecting their own health, the health of their families or their property, this will not be treated as a complaint. The information will be recorded and may be acted upon. There will, however, be no obligation for the Council to keep the person or organisation informed of progress towards resolution, although it may choose to do so as general good practice.

### **Anonymously supplied information**

The Council does not normally undertake any investigation based on anonymously supplied information, and this general policy will be adopted for contaminated land issues. This policy does not, however, preclude investigation of an anonymous complaint in exceptional circumstances.

### **Anecdotal evidence**

Any anecdotal evidence provided to the Council relating to contaminated land will be noted, but no designation of contaminated land will occur without robust scientific evidence. In all cases, the Pollution Control Officer will use knowledge and experience to decide what, if any, further investigation is required following a complaint or a provision of information.

### **Risk Assessment**

All information on substances in, on or under the ground that may cause significant harm or pollution will be evaluated against current governmental guidelines.

### **'CLEA and ICRCCL guidelines**

A new set of guidelines (applicable for human health issues only) - the Contaminated Land Exposure Assessment or CLEA guidelines - are expected from the DETR shortly. Until these guidelines are available, however, the Council will evaluate all information against the guidelines issued by the Interdepartmental Committee on Redevelopment of Contaminated Land (ICRCCL).

ICRCL 59183 (2nd Edition, July 1987) - "Guidance on the assessment and redevelopment of contaminated land" - gives the most widely used set of trigger and action levels for a range of contaminants and is likely to remain a key reference document, even with the introduction of CLEA.

#### **Risk assessment for other substances**

Risk assessments may also be required for substances not covered by ICRCL or CLEA guidelines. In these cases, reference may be made to occupational exposure levels issued by the Health and Safety Executive or other authoritative sources of information, such as guidelines adopted in other countries. If guidelines from other countries are referred to, it will be important to bear in mind the significant difference in remediation standards between the UK and these other countries.

#### **Risk assessment for controlled waters**

Advice will be sought from the Environment Agency on risk assessment if controlled waters are the receptor in a particular pollutant linkage. It is anticipated that risk assessments and remediation will be carried out in accordance with Environment Agency guidance as laid down in "Methodology for the Derivation of Remedial Targets for Soil and Groundwater to Protect Water Resources" (EA R&D Publication 20, 1999), or other suitable package.

#### **Interaction with other regulatory regimes**

There are other regulatory actions that can be taken to deal with contamination on land. Overlaps with planning, water pollution and IPPC legislation are considered the most important and are addressed here. Any issues of land contamination that may previously have been dealt with under the statutory nuisance regime will now be dealt with through Part IIA processes.

#### **Planning**

The vast majority of contaminated land issues are currently addressed through the planning regime, where contamination is a material consideration. While the introduction of Part IIA will undoubtedly lead to the problems of additional sites being addressed, it is anticipated that redevelopment of brownfield sites, and the associated planning controls, will remain the primary mechanism for dealing with contaminated land. Any remediation agreed as a planning condition will be dealt with under planning controls and not under Part IIA.

The SBC Pollution Regulation Service currently works closely with Development Control and Building Control on all issues relating to pollution and the current arrangements for inter-departmental consultation are believed to be sufficiently robust to encompass contaminated land issues.

#### **Water pollution**

Sections 161 to 161D of the Water Resources Act 1991 gives the Environment Agency powers to Take action to prevent or remedy the pollution of controlled waters.

While Part IIA legislation does not revoke these powers, the DETR have indicated that such problems should now be dealt with under the new contaminated land regime. The following steps will be taken:

The Council will consult with the Environment Agency before designating any contaminated land as a result of risk to controlled waters and will take into account any comments made with respect to remediation.

If the Agency identifies a risk to controlled waters from contaminated land, the Council will be notified to enable designation of the land and remedial action will be taken under Part IIA

### **Integrated Pollution Prevention and Control (IPPC)**

Under new legislation to regulate the pollution from industrial processes, site operators are required to undertake a site condition survey prior to receiving a license to operate. If the site condition is such that areas of land meet the definition of contaminated land, then submission of a site survey may trigger action under Part IIA. Existing processes will be brought under this legislation in stages over the next seven years, although it will apply to any new processes or any substantial change to an existing process.

## **Chapter 5 LIAISON AND COMMUNICATION**

Much of the work proposed in this strategy will be collaborative and require effective liaison with other bodies.

### **Statutory consultees**

Contacts have already been established with officers of all statutory consultees.

Statutory consultees for the Contaminated Land Inspection Strategy are,

- Environment Agency
- English Nature
- English Heritage
- Ministry of Agriculture, Fisheries and Food
- Food Standards Agency
- Staffordshire County Council

Each organisation will be invited to comment on the consultation draft of the strategy.

Environment Agency operational boundaries are defined **by** river catchments. Liaison and day to day discussions will be carried out through the Upper Trent office in Stafford.

### **Non-statutory consultees**

There is great scope for members of the public, businesses and voluntary organisations to play an important role in dealing with contaminated land in the Borough. The consultation exercise to be undertaken with Parish Councils has already been described in chapter 2. Efforts will be made to encourage participation in the process of identifying and investigating contaminated land, recognising the valuable contribution of these sectors.

### **Communicating with owners, occupiers and other interested parties**

The Borough Council's approach to its regulatory duties is to seek voluntary action before taking enforcement action. This approach will be adopted for issues of land contamination, recognising that in many cases as much or more effective remediation can be achieved by agreement than **by** enforcement. The regulations provide an incentive to undertake voluntary action, in that any materials that require disposal as a result of voluntary remediation will be exempt from landfill taxes. This exemption does not apply to materials generated as a result of a remediation notice having been served

This approach requires effective communication with owners, occupiers and other interested parties. The Pollution Control Officer will be the central contact point within the authority on contaminated land issues and as such will work to keep owners, occupiers and other interested parties informed at each stage of an investigation, regardless of whether there is a formal designation of contaminated land.

Where a formal designation of contaminated land is required, the following actions will be undertaken:-

### ***Designating an area of contaminated land***

- Write to the owner and / or the occupier of the land at least 5 working days prior to designation, explaining in summary the reason for designation
- Write to the owner and / or the occupier explaining the land has been designated as contaminated land and seeking appropriate remediation without service of a notice
- If requested, dispatch a copy of the written risk assessment to the owner and / or occupier of the land within 5 working days of receipt of a request
- Write to the owner / occupier of neighbouring properties and / or the complainant within 5 working days of designation
- Notify the Environment Agency.

### ***Serving a remediation notice***

Provide a written remediation notice to the owner / occupier specifying action required, copied to the Environment Agency

Write to the owner / occupier of neighbouring properties and /or the complainant within 5 working days of notice being served.

Should an urgent designation of contaminated land be required, these steps will be observed as far as practicable although some deviation from the time scales specified is to be expected.

### **Powers of Entry**

Under Section 108(6) of the Environment Act, the Council has been granted powers of entry to carry out investigation. At least seven days notice will be given of proposed entry onto any premises, unless there is an immediate risk to human health or the environment.

### **Enforcement action**

The Council has adopted a cross-departmental enforcement concordat to ensure consistent, fair, and transparent practices are used when taking enforcement action. Contaminated land investigations will be carried out in accordance with this Council-wide policy.

### **Risk communication**

The complex nature of contaminated land issues does not lend themselves to easy explanation to the lay person. Development of effective methods of risk communication is therefore essential.

The Council will treat any concerns raised by a member of the public seriously and with respect, recognising the importance of the issue to the individual. In all instances, the Council will recognise and try to overcome the critical barriers to effective risk communication:

- **familiarity** - increased concern about unfamiliar issues
- **control** - increased concern if the individual is unable to exert any control over events
- **proximity in space** - increased concern about nearby events
- **proximity in time** - increased concern about immediate consequences rather than long term effects
- **scale** - particularly in terms of media coverage, where one large incident appears much worse than several small incidents
- **"dread factor"** - lack of understanding can lead to stress and make further explanation more difficult

These regulations grant only limited powers to local authorities to deal with materials present in, on or under the ground. Many members of the public believe that any material that is not naturally present in the ground should be removed, especially if it is in the vicinity of their own home. It will be

critical to explain this can only be done where there is a risk of significant harm, and it is to be expected that some members of the public will have difficulty accepting this.

It is important to appreciate that the expectations of some members of the public will not be met by the powers local authorities may exercise under contaminated land legislation.

### **The public register**

Under the regulations, the Council is required to maintain a public contaminated land register. The register will be held by the Environmental Health Section at the Council's principal office at Stafford. It will be paper-based (rather than electronic) and be accessible on request by members of the public during office hours, Monday to Friday.

The regulations clearly specify the information that can be recorded on this register. This register will therefore include:

- remediation notices
- details of site reports obtained by the authority relating to remediation notices
- remediation declarations, remediation statements and notifications of claimed remediation
- designation of sites as "special sites"
- any appeals lodged against remediation and charging notices
- convictions

The public register will **not** include details of historic land use and other records used in the investigation of potentially contaminated land. These are research documents and as such will not be made available to the public.

### **Provision of information to the Environment Agency**

The Environment Agency is required to prepare a Report for the Secretary of State on the state of contaminated land in England and Wales.

This report will include:

- A summary of local authority inspection strategies, including progress against the strategy and its effectiveness
- The amount of contaminated land and the nature of the contamination
- Measures taken to remediate land

As local authorities are the lead regulators on contaminated land, with the EA regulating only some categories of sites, the national survey will clearly be reliant on information provided **by** local authorities. A memorandum of understanding has been drawn up between the Environment Agency and the Local Government Association that describes how information will be exchanged between the local authority and the Environment Agency. The Council will therefore provide information to the Environment Agency following the guidelines agreed through this national forum.

The local authority must also provide information to the Environment Agency whenever a site is designated as contaminated land, and whenever a remediation notice, statement or declaration is issued or agreed. The Environment Agency has provided standard forms allowing this information to be provided in a consistent format and the Council will adopt these to fulfil its reporting requirements.

## **Chapter 6 REVIEW MECHANISMS**

This strategy outlines the general approach to be taken in inspecting land in the Borough for contamination. This section will describe instances when inspections will occur outside this general

inspection framework, circumstances under which previous inspection decisions should be reviewed and measures to be taken to ensure the strategy remains effective and up-to-date.

### **Triggers for undertaking inspection**

The strategy has already recognised there may be occasions where inspections may have to be carried out outside of the general inspection framework.

Triggers for undertaking non-routine inspection will include:

- **Unplanned events** - e.g. if an incident such as a spill has occurred
- **Introduction of new receptors** - e.g. if housing is to be built on a potentially contaminated site, designation of a new protected ecosystem, persistent trespass onto a site .
- **Supporting voluntary remediation** - e.g. a potentially liable party wishing to undertake clean-up before their land has been inspected by the local authority
- **Identification of localised health effects** which appear to relate to a particular area of land
- **Responding to information** from other statutory bodies, owners, occupiers, or other interested parties

While these occurrences may trigger non-routine inspections, if this strategy is to prove effective, they must not be allowed to significantly interfere with the milestones laid down in the general inspection framework. It will be important to consider this issue in all strategy reviews.

### **Triggers for reviewing inspection decisions**

In addition there may be occasions where the findings of previous inspection decisions should be reviewed. This might occur, for example, if there were

- Significant changes in legislation
- Establishment of significant case law or other precedent
- Revision of guideline values for exposure assessment

It is important therefore that all decisions are made and recorded in a consistent manner that will allow efficient review.

### **Reviewing the strategy**

As part of the overall quality management of this work, it is important to consider the need to review the strategy from time to time.

The strategy will be finalised following consultation during April 2001 and work will then begin in earnest on site inspection. It will be appropriate to review the milestones in light of progress after the first full year of operation. This review will therefore take place in *April 2002* and the findings will be reported to the Deputy Leader for the Environment . If there are significant changes to the strategy, it may be appropriate to carry out further annual reviews in following years.

If the strategy is found to be operating satisfactorily throughout the period of the five year work plan, the next review date will be April 2006 when the first inspection of the District has been completed and the remediation of contaminated sites has been prioritised.

## **APPENDIX A**

### **GLOSSARY**

DETR Circular 02/2000 contains a detailed glossary of terms that provides legal definitions of terms that may be used in this Strategy. This Glossary provides an interpretation of terms used in the Strategy to aid reading by the layperson.

<b>AONB</b>	Area of Outstanding Natural Beauty
<b>Brownfield site</b>	A site that has been generally abandoned or underused where redevelopment is complicated by actual or perceived environmental contamination. Only a small proportion of brownfield sites will meet the definition of contaminated land.
<b>CLEA</b>	Contaminated Land Exposure Assessment, a methodology for carrying out a risk assessment
<b>Contaminated land</b>	Any land which appears to the local authority in whose area it is situated to be in such a condition, by reason of substances, in, on or under the land that: a) significant harm is being caused or there is a significant possibility of such harm being caused; or b) pollution of controlled waters is being, or is likely to be caused
<b>Controlled waters</b>	These include a) inland waters (river, streams, underground streams, canals, lakes and reservoirs) b) groundwaters (any water contained in underground strata, wells or boreholes) c) territorial waters (the sea within three miles of a baseline) d) coastal waters (the sea within the baseline up to the line of highest tide, and tidal waters up to the fresh water limit
<b>DETR</b>	Department of the Environment, Transport and the Regions
<b>Drinking water abstraction</b>	The taking of water from a source (in this case, primarily an underground source) for drinking water
<b>EA</b>	The Environment Agency
<b>Eco-system</b>	A biological system of interacting organisms and their physical environment
<b>SBC</b>	Stafford Borough Council
<b>GIS</b>	Geographical Information System
<b>Groundwater</b>	Any water contained in underground strata, wells or boreholes
<b>ICRCL</b>	Interdepartmental Committee on Remediation of Contaminated Land
<b>NNR</b>	National Nature Reserve

<b>Pathway</b>	One or more routes by which a receptor can be exposed to a contaminant
<b>Pollutant linkage</b>	The relationship between a contaminant, a pathway and a receptor
<b>Ramsar site</b>	A site protected under an international convention on protection of wetlands of international importance, especially as habitats for waterfowl, named after the city in Iran where the convention was signed
<b>Receptor</b>	Sometimes referred to as 'a target' - the health of a person, waters, ecosystem or property type that could be affected by contamination
<b>Remediation</b>	Generally accepted as being the carrying out of works to prevent or minimise effects of contamination. In the case of this legislation the term also encompasses assessment of the condition of land, and subsequent monitoring of the land
<b>Risk assessment</b>	The study of <ul style="list-style-type: none"> <li>a) the probability, or frequency, of a hazard occurring; and</li> <li>b) the magnitude of the consequences</li> </ul>
<b>SAC</b>	Special area of conservation
<b>Source</b>	A substance in, on or under the ground with the ability to cause harm
<b>Source protection zone</b>	Protection zones around certain sources of groundwater used for public water supply. Within these zones, certain activities and processes are prohibited or restricted.
<b>SPA</b>	Special Protection Area for birds
<b>Special site</b>	Any contaminated land designated due to the presence of: <ul style="list-style-type: none"> <li>· Waste acid tar lagoons</li> <li>· Oil refining</li> <li>· Explosives or chemical weapons.</li> <li>· Integrated pollution control sites</li> <li>· Nuclear sites or biological weapons sites.</li> <li>· Defence Land.</li> </ul> .or where controlled waters are affected .
<b>SSSI</b>	Site of Special Scientific Interest

**APPENDIX B**  
***DETAILS OF STATUTORY CONSULTATION CONTACTS***

Peter Knights

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Shropshire  
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Stafford

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**Appendix C**  
***REFERENCES***

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### **Conclusion**

This strategy sets out how SBC intend to discharge their duty to inspect their area for contaminated land.

The programme will take five years and will be systematic in approach inspecting the areas of highest risk first.

The Council will require information from a variety of sources and so will be forming partnerships with other authorities and bodies. Good working relationships already exist with the Environment Agency.

If you have any information or concerns about contaminated land or questions about this strategy then please do not hesitate to contact Mark Street Principal Environmental Health Officer or Shaun Baker Pollution Control Officer Telephone 01785 619390 or 01785619557 respectively.

E-mail [mstreet@staffordbc.gov.uk](mailto:mstreet@staffordbc.gov.uk)

We hope that this work will go some way to improving the environment of the Borough.

