



ADUR DISTRICT
COUNCIL

Revised Contaminated Land Inspection Strategy

Environmental Protection Act 1990
Part 2A

January 2024

Executive Summary

Throughout the District of Adur there are a significant number of sites that may have been contaminated by their previous use. This is often associated with industrial processes or activities that have now ceased, but where waste products or remaining residues could cause land contamination.

A regime for Local Authorities to deal with contaminated land within their areas was brought in by Part 2A of the Environmental Protection Act (EPA) 1990; this regime was introduced by section 57 of the Environment Act 1995 and came into force in the UK on the 1st April 2000.

These provisions require Local Authorities to develop and publish a strategy document detailing the manner in which they will inspect their area for contaminated land.

Adur District Council's first Contaminated Land Strategy was formally adopted in 2001. That strategy document detailed the general background to the contaminated land regime and indicated, in light of the particular characteristics of Adur and the Council's priorities, how the regime would be implemented. This document was revised in 2007.

The 2007 strategy has been reviewed and revised and takes account of Statutory Guidance from DEFRA (April 2012). This revised strategy explains how the Council will implement the contaminated land regime, taking account of the latest guidance, experience gained over previous years and the resources available to the Council. The revised strategy will be made available on the Council's website.

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1.0 Introduction

Contaminated land is defined in Part 2A of the Environmental Protection Act 1990 as any land to be in such 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) Significant pollution of controlled waters is being caused, or there is significant possibility of such pollution being caused.”

What constitutes significant harm, a significant possibility of such harm or pollution to controlled waters being caused is set out in the Statutory Guidance 2012 and included in Appendix A. This is a very important definition and places the concept of the ‘pollutant linkage’ at the centre. For land to be determined as contaminated land there must be a significant ‘pollutant linkage’ present. A pollutant linkage is where a source of pollution is connected to a receptor by a pathway so as to give rise to harm. There may be multiple pollutant linkages on a site.

If significant pollutant linkages exist and are not dealt with adequately, they can pose a serious threat to the people and the environment. The contaminated land regime in Part 2A of the Environmental Protection Act 1990 came into force in April 2000 and is intended to complement existing controls under the planning and development process by causing the District to be inspected by the Council to identify contaminated land sites. Under this regime local authorities in England are required to prepare, implement and keep under periodic review, a Contaminated Land Inspection Strategy.

Paragraph 119 of the NPPF refers to making as much use as possible of previously developed or brownfield land and paragraph 120 c) gives substantial weight to the value of using suitable brownfield land and supports opportunities to remediate despoiled, degraded, derelict, contaminated or unstable land.

2.0 Aims and Objectives

2.1 Aims of the Strategy

This strategy outlines how Adur District Council (the council), will meet its statutory duties to inspect its area for contaminated land as laid out in the Contaminated Land Statutory Guidance April 2012 (DEFRA) referred to as the statutory guidance. This strategy should be read in conjunction with the statutory guidance, as it contains the legal and scientific detail behind the Adur District Council strategy. This strategy reflects the financial constraints that the council is now facing and will continue to face over the coming years.

The regulations require the council to:

- Inspect its area to identify contaminated land.
- Determine whether a specific site meets the legal definition of contaminated land on the basis of a risk assessment.
- Notify any affected person and the Environment Agency if contaminated land is identified.
- Decide whether any particular site is a ‘Special Site’ in consultation with the Environment Agency.
- Decide what remediation should take place on that land either through voluntary agreement or by formal notice.

- Establish and formally require the appropriate person to bear responsibility for the remediation, after consulting them.
- Take enforcement action against any person who fails to comply with a formal notice.
- Exercise its power to carry out remediation and recover the costs of doing so.
- Keep a public register relating to information about land which meets the legal definition of contaminated land.

In doing so, it has to act in accordance with the Act, secondary regulations (e.g. the Contaminated Land Regulations 2012), statutory guidance issued by the Secretary of State and other best practice guidance.

The Council Aims to:

- Identify potential and actual contaminated sites within the Borough by rational, ordered and efficient investigation, to remove unacceptable risks to human health and the environment.
- To seek land remediation through the development control system.
- Seek to ensure that contaminated land is made suitable for its current use.
- To carry out detailed inspection of urgent sites where there is, or there is likely to be, significant possibility of significant harm occurring.
- To ensure that the burdens faced by individuals, companies and the community as a whole are proportionate, manageable and compatible with the principles of sustainable development.

2.2 Objective of the Strategy

In order to ensure the aims of this strategy are met, the following objectives have been identified.

- Consider that land is not contaminated land unless there is reason to consider otherwise.
- Consider the development control system as the predominant way in which land affected by contamination will be remediated.
- Encourage voluntary remediation of sites where appropriate.
- Only use Part 2A where no appropriate alternative solution exists.
- Will not undertake a detailed inspection of any site where a planning permission exists or is understood to be imminent unless there is significant evidence that the land is contaminated land.
- Continue the process of strategic inspection across the borough,
- Continue to risk prioritise sites for detailed inspection using the GeoEnviron prioritisation software.
- Consult landowners before carrying out detailed inspection of their land.
- Refer any issues or allegations relating to radioactivity on land to DECC.
- Only use its powers of entry under Section 108 of the Environment Act 1995 when it is satisfied that there is a reasonable possibility that a significant pollutant linkage exists.
- When remediation is carried out by the council then, where liable parties are identified, the council will pursue the appropriate persons for the apportioned share of the liability in accordance with the statutory guidance.
- Seek to communicate in language that is appropriate for the persons with whom we are communicating and where appropriate in non-technical language.
- Seek to communicate in language sensitive to the fact that land contamination issues have potential to cause property blight and psychological stress.

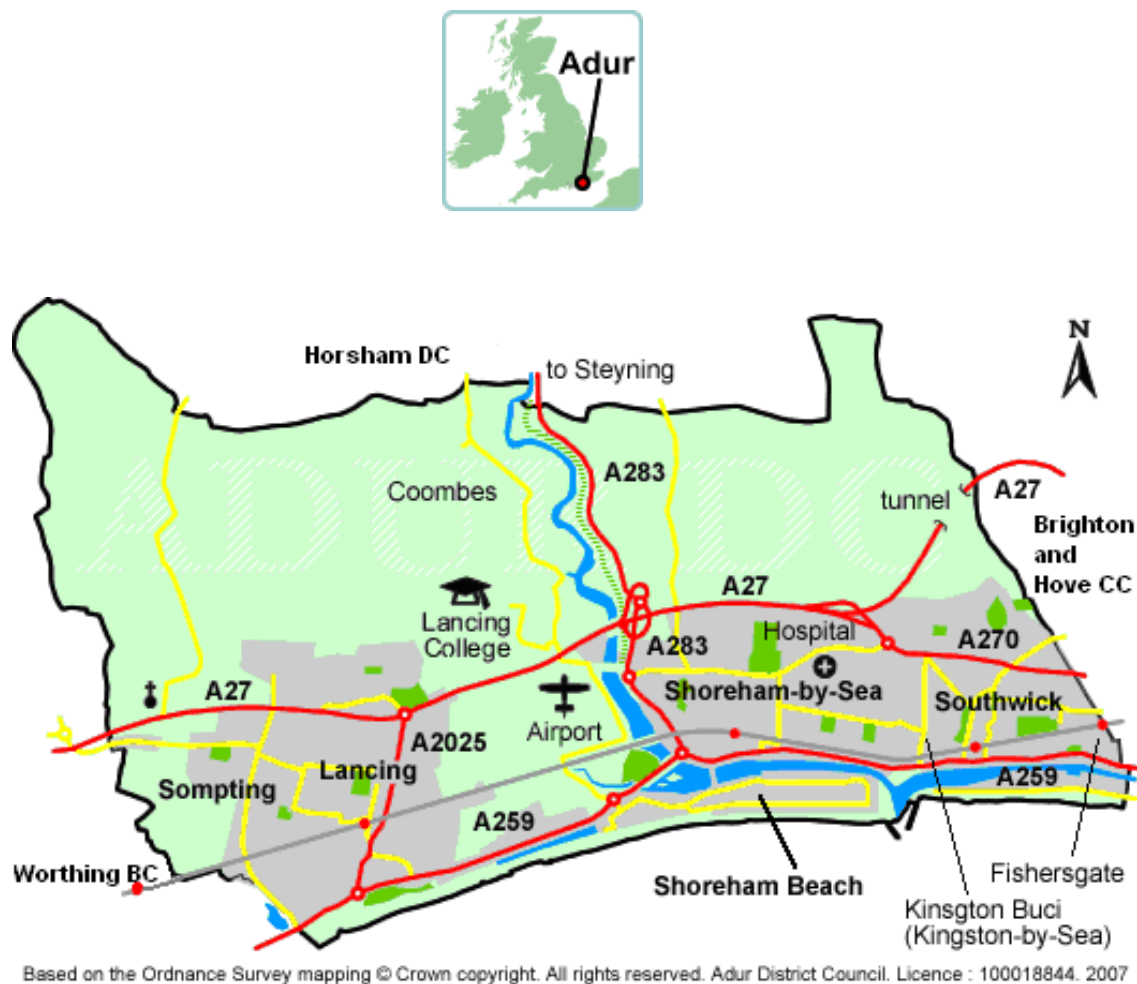
- Will request in writing that, on behalf of the council, the EA carries out the detailed inspection of any Special Site of which the council becomes aware.
- Make information on all regulatory action taken by the Council with regard to contaminated land available to the public by way of public register.

The implementation of this Strategy feeds into the commitments within a number of the council’s overarching strategies and priorities. It will work alongside existing Council policies to aid the efficient and effective delivery of these commitments by supporting the regeneration of brownfield land and encouraging development.

3.0 Area Overview

Across the United Kingdom there are marked differences in geography, industrial activity and prevalence of vulnerable ‘receptors’ such as protected wildlife and water resources. The manner in which contaminants have been deposited, have affected or threatened vulnerable receptors can vary even between localities a few kilometres apart. The Council has considered the character of the District when developing priorities and objectives for inspecting land that may be contaminated.

Map 1 – The Boundaries and Extent of the Adur District



Map One: Adur’s Location

3.1 Local Area Characteristics

Adur District Council is a small West Sussex coastal district, home to approximately 64,500 residents. The authority derives its name from The River Adur, which flows through the middle of the district. Adur covers an area which stretches inland from the Sussex Coast to the South Downs, and extends from the border with Worthing in the west to the boundary with Brighton & Hove in the east (see map 1). Over half of Adur District (53%) lies within the South Downs National Park boundary, with the picturesque charm of old flintstone buildings, farmhouses and winding streets surviving amidst the built-up residential and industrial areas, with a thriving port and a small airport.

Adur District is just over 4,200 hectares (10,000 acres) in size. The majority of the population is located in the coastal strip between Lancing and Southwick.

The 2021 Census data gives the population breakdown figures by ward for the District as follows.

Table One: Total Ward Population in 2021

WARD	POPULATION	WARD	POPULATION
Buckingham	4,024	Churchill	4,447
Cokeham	4,491	Eastbrook	4,845
Hillside	4,480	Manor	4,505
Marine	4,662	Mash Barn	4,465
Peverel	4,398	St. Mary's	5,235
St. Nicolas	4,122	Southlands	4,266
Southwick Green	4,619	Widewater	5,988

Figures based on 2021 census data (Ref: <https://www.ons.gov.uk/census>)

Map 2 – Ward Boundaries



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Map Two: Adur's Electoral Wards and their Boundaries

Adur Council was established in 1974 following the reorganisation of Local Government. The Council became responsible for geographical areas previously administered by Southwick Urban District Council, Shoreham Urban District Council and part of Worthing Rural District Council.

Along much of the coast, particularly adjacent to Shoreham Harbour, there is a substantial area of industrial land, predominately light manufacturing. Similarly, in Lancing there is a relatively large industrial estate, which is predominately light manufacturing. Shoreham Port is a major UK port for aggregates, sawn timber, steel, oil, locally grown cereals and scrap metal. There are cement batchers, a fuel terminal and a number of local fishing vessels.

Currently there are 13 Part B industrial installations permitted by Adur District Council under the Environmental Permitting (England and Wales) Regulations 2016. The 400MW gas fired power station which is situated on Shoreham Harbour and an energy from waste facility in Lancing Business Park are both permitted by the Environment Agency Under Part A of the Environmental Permitting (England and Wales) Regulations 2016 .

Adur contains some of the largest areas of brownfield land in West Sussex including part of the disused Shoreham cement works at Dacre Gardens in the north of the district. This site mostly lies within the District of Horsham and as such will be re-developed in conjunction with this authority. The South Downs National Park is the relevant planning authority for this site. There is also much disused and under used land in and around the Shoreham Harbour which is currently being regenerated.

The council owns an appreciable amount of land throughout the district, including parklands, housing and a substantial part of Shoreham Beach.

3.2 *Brief History of Adur*

The town and port of New Shoreham was established by the Norman Conquerors towards the end of the eleventh century. Shoreham's strategic location and proximity to Normandy made it a logical place to improve facilities for travel and trade. The rise of Brighton and Worthing and the coming of the railway in 1840 prepared the way for Shoreham's rise as a rapidly growing Victorian Sea Port with several shipyards and an active coastal trade.

Southwick has been continually occupied since 2000 BC. The Green was once common land used for grazing but is now a focal point for much activity in Southwick. Beyond Southwick and to the south east is Fishersgate, a mix of residential and light industrial and commercial activity. The western end and northern parts of the Parish remain predominantly rural with an abundance of flint walls, older houses and cottages. It is now a conservation area within the district and has its own parish.

Lancing has a long history dating back to the Stone Age. During the Bronze Age (1500-500 BC) a sacred place was made near Lancing Clump. In Roman times Chichester became an important city, a road was constructed along the coastal plain through Lancing and Sompting.

Coombe is a hamlet with a population of just under 50. It is in the South Downs National Park and is close to Lancing College. Shoreham is a Trust Port, first established in 1760 and the Port authority is charged with the statutory duty to improve, maintain and develop the port for the benefit of the Kingdom.

3.3 Land Use

Shoreham Airport – This is the oldest licensed working airfield in the country. The airfield was used as a major airstrip during the Second World War. The airport also has many industrial units. Northbrook College (the engineering department) can be found here. In addition, there are a number of flying schools located here as well as the police air rescue centre.

Shoreham Harbour – This area is mostly industrial and is home to the Shoreham Power Station. This has been recently re-built and recommissioned to run as a gas fired power station. The harbour has many industrial uses including scrapyards, aggregates, timber yards, steel, a sewage works (see below) and importing of goods. This is also where the Port Authority and Shoreham Customs are found. Shoreham Harbour is currently part of a large regeneration project.

Landfills – Until recently there was one major landfill site located in Sompting, at the foot of the downs. This was tipped for many years and is no longer used. A waste transfer station was also located at this site; however this has recently relocated to the Lancing Business Park. Waste is now removed and taken to other landfill sites outside the boundaries of the district. There are a number of smaller disused landfill sites located within the district.

Sewage works – Adur has one type of works located on the harbour. This is run by Southern Water for the secondary treatment of sewage taken from the district's sewers. This is then discharged into the sea from an outfall pipe on Southwick Beach. Secondary screens have been added and were commissioned in November 1999.

Industrial Estates – Adur has two major industrial estates within the district boundaries. Lancing Business Park on the western side of the district has been used for industrial purposes for many years and used to be the site of old carriage works, at present the estate houses three waste transfer stations, warehousing and industrial units. The second is of course the harbour and port area mentioned above.

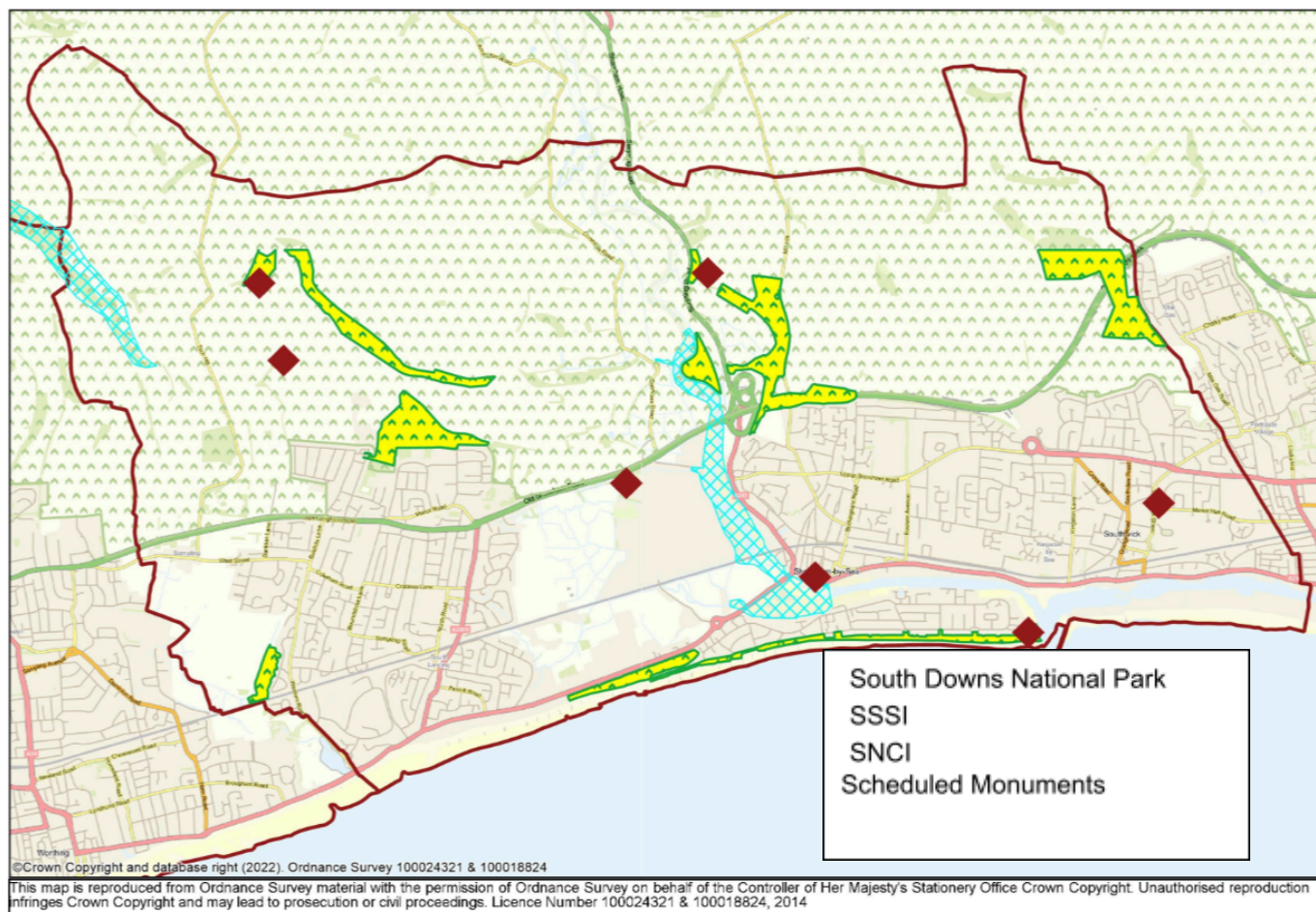
Waste Sites – Within Adur there are six registered waste sites. Four are used for household, commercial and industrial transfer stations, three in the Lancing Business Park and the fourth along the A259 in Shoreham. The other two are for the transfer of non-biodegradable wastes within the harbour area.

Part A Permits – There are two Part A installations in the District under the Environmental Permitting (England and Wales) Regulations 2016 and regulated by the Environment Agency; the new power station at Shoreham Harbour and an energy from waste facility in Lancing Business Park.

Part B Permits – Thirteen Part B installations are operated throughout the District under the Environmental Permitting (England and Wales) Regulations 2016 and regulated by Adur District Council. These include petrol stations, printing on flexible plastic, cement batchers and dry cleaners.

3.4 Areas of Environmental Importance

(See Appendix C for the full descriptions for each site)



Map Three: SSSI's, LWS, Sussex Downs National Park and Scheduled Monuments

Table Two: SSSI's, LWS's and the Sussex Downs National Park

Site Location	Designation
River Adur Estury	SSSI
Cissbury Ring	SSSI
Lancing Ring	LWS
Lower Cokeham Reed Bed	LWS
River Adur Meadows	LWS
Steep Down	LWS
Applesham Farm	LWS
Truleigh Hill to Southwick Hill	LWS
Old Erringham Farm	LWS
Mill Hill	LWS
Southwick Hill	LWS
Shoreham Beach	LWS
Widewater Lagoon	LWS
South Downs	South Downs National Park

3.5 Heritage Assets

There are approximately 119 listed buildings in Adur and 9 conservation areas which serve to greatly enhance the character of the District. Adur also has seven scheduled monuments within the boundaries of their district. These are shown on Map Three and listed below:

In certain circumstances the historic use of a site, for example, underground fuel storage, may have caused extensive ground disturbance which is likely to be incompatible with the survival of any but the most deeply buried archaeological features. In highly contaminated sites, the levels of toxicity within the ground may preclude archaeological investigation due to health and safety considerations.

Scheduled Monuments.

- Shoreham Airfield Dome
- The Marlipins, Shoreham High Street;
- Shoreham Old Fort
- Ronano-British Villa
- Shrunken Medieval Settlement;
- Cross Dyke, Titch Hill Farm;
- Cross Dyke, Beggars Bush.

3.6 Geological Characteristics

The published geology of the Adur District is shown on the British Geological Survey Sheet 318/333 (Brighton and Worthing) Solid and Drift Geology.

The map shows the majority of the Adur District is directly underlain by drift deposits of Marine and Estuarine Alluvium, Head and Brickearth. However, the harbour is directly underlain by storm gravel beach deposits. These drift deposits would have been laid in the Quaternary Geological time interval (discussed below in more detail).

The solid geology, laid down in the Tertiary geological time period, is situated beneath the drift geology and is composed of Woolwich and Reading Beds up to 30m which in turn is underlain by upper and middle chalk, undivided up to 325m which was laid in the Cretaceous period. The majority of the Adur District is chalk outcrop. The tertiary and cretaceous geological time period are discussed below in more detail. The Woolwich and reading beds (clay with flint deposits) may provide protection to the chalk in some areas.

3.7 Groundwater Vulnerability

3.7.1 Aquifers

The published Environment Agency Policy and Practice for the protection of groundwater classify the underlying strata of England and Wales into aquifers of varying sensitivity.

Aquifers are defined in the Environment Agency Guidance document Protect Groundwater and Prevent Groundwater Pollution 2017 as: 'A subsurface layer or layers of rock or other geological strata of sufficient porosity and permeability to allow either a significant flow of groundwater or the abstraction of significant quantities of groundwater.'

The underlying strata of England and Wales is divided into principal aquifers, secondary aquifers, secondary undifferentiated and unproductive strata depending upon their potential for uses as portable water supplies. Appendix D provides further details about these types of aquifers. The majority of the Adur District is classed as being a Principal aquifer by the

Environment Agency with a narrow area classed as a Secondary A aquifer running along the coast.

3.7.2 Source Protection Zones

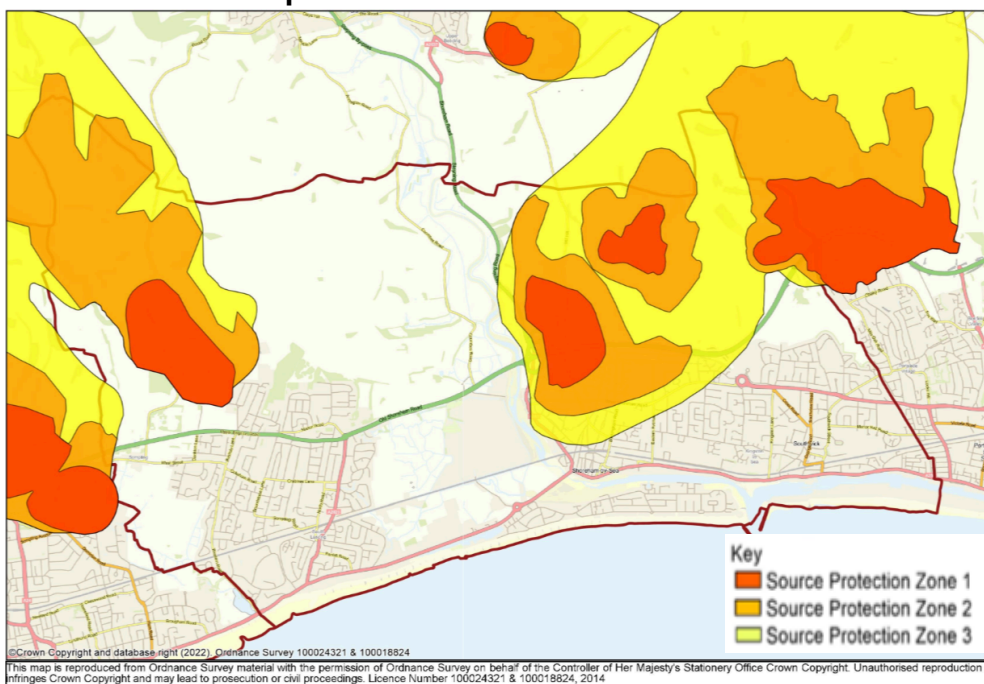
The Environment Agency has defined Source Protection Zones as: *“The parts of the aquifers which, according to current techniques and methodologies, are considered to form the catchments to public water supplies and certain other private supplies have been defined as Source Protection Zones. They relate purely to groundwater flow below the water table and do not take account of the nature and thickness of the overlying unsaturated zone and cover which may have an important influence on groundwater vulnerability”.*

Source protection zone maps show the position of the sources and all subdivisions of their protection zones (Inner, Outer and Total Catchment) as referred to in the statements and matrices in the PPG document. These are shown in a form which represents a precautionary approach to the protection of groundwaters. They incorporate practical consideration of uncertainty in the underlying data and manual adjustments to take account of local circumstances.”

The permeable chalk geology under Worthing holds large volumes of water that is abstracted by Southern Water and used to supply drinking water to the locality. Four public water supply abstraction points are located in the Borough. The Environment Agency has designated Source Protection Zones around all these points.

The information shown on the Environment Agency’s Policy and Practise for the Protection of Groundwater Source Protection Map Sheet 6 suggests that the majority of the Adur District lies in an area where there is no SPZ. However, the areas of Sompting and Shoreham are both in a Zone I Inner Protection Zone, with Zones 2 and 3, the outer protection zone and the total catchment being on the outer edges (see map below). As such the groundwater below these areas is highly vulnerable to any potentially contaminative processes undertaken within these areas.

Map Four: Source Protection Zones



Map Four: The Location of Source Protection Zones in Adur

3.8 Information on Contaminated Land

The Council holds some information concerning land contamination within its area. This has primarily originated from reports undertaken by third parties, which were submitted as part of the development control process. From these records and a number of other sources of information the Council has built a substantial GIS based database that holds information regarding the possible presence of land contamination within its Boundary and is using this information to assist with amongst other things, decision making regarding the prioritisation and inspection of potentially contaminated sites in the Borough. Details of how these actions are being undertaken are provided in following sections of this strategy.

A contaminated land register has been held since April 2000 and is available for inspection at the Council Offices at Town Hall, Chapel Road, Worthing. However, there are currently no entries in the register.

4.0 What works have been undertaken

There are currently approximately 466 potentially contaminated sites in our database within the Adur District. Approximately 68% of these are low to medium risk sites which are currently occupied by commercial/industrial areas. These sites will not be investigated further unless developed or new information is found.

The information in the database is regularly updated as new information becomes available or sites are redeveloped and remediated for example through the planning system. The statutory guidance encourages private land owners to carry out their own assessment. The council, if satisfied with the work undertaken, will accept their conclusions and enter them into the database.

Approximately 21% of these sites have been investigated and remediated where necessary to ensure they are suitable for their current use.

Three large Council owned sites which were former landfill sites are currently in the process of being investigated and remediated as part of regeneration works.

Adur District Council is currently working with its partners (Brighton & Hove City Council; West Sussex County Council; Shoreham Port Authority) on a joint project to regenerate Shoreham Harbour and surrounding areas. The Shoreham Harbour Joint area Action Plan was adopted by these partner authorities in 2019. These regeneration works involve extensive remediation of Shoreham Harbour which has seen a large range of historic contaminative uses.

5.0 Ongoing works

The Statutory Guidance requires the council to continue to identify and prioritise sites that may be potentially contaminated by their historic or current use, followed by detailed inspections/investigations of sites where a need for further investigation has been identified.

5.1. Identification of potential sites and prioritisation

Information on current and historical potentially contaminative land uses has been collated, with information taken from a range of sources including; historic Ordnance Survey mapping, Council held records, reports submitted by third parties, libraries, County records office, trade directories, local interest publications providing detailed historical information such as 'An Historical Atlas of Sussex' by Kim Leslie and Brian Short, which includes useful coverage on

industrial archaeology. This helped to construct a wide view of the Adur District and the types of environment which are important when identifying contaminated land within the area.

The Council has recently purchased the Geoenvion Site Prioritisation Sub-module software package. The information already collated has been inputted into this prioritisation software which ranks the sites according to priority for inspection based on presence of receptors (for example; land use, geology, water supplies, rivers, property) and sources (potential or confirmed contaminants present). This database is regularly updated as new information becomes available. The software enables us to produce a list of sites for detailed inspection according to the highest potential risk (priority). This list is in a constant state of change as more information is found about different sites, and the risk rating changes or new sites are added. The list of potential sites is therefore not a public document. Any land that is formally determined as contaminated will be put on the register which is a public document.

5.2 Site Inspections

Part 2A requires that local authorities to inspect their area to identify contaminated land and to do this in accordance with the statutory guidance. Two types of inspection are intended, they are:

- Strategic inspection; collecting information to make a broad assessment of land within an authority's area and then identifying priority land for more detailed consideration; and
- Detailed inspection; taking soil samples to obtain information on ground conditions and carrying out risk assessments which support decisions under the Part 2A regime relevant to that land.

Detailed inspection of a site will establish whether pathways are present between the source and the receptors. This is known as a pollutant linkage. For a site to meet the statutory definition of contaminated land there needs to be a significant possibility of significant harm to an identified receptor, this is a stringent test. Details of what constitutes significant harm or a significant possibility of such harm is set out in the statutory guidance and included in Appendix A.

The detailed inspection of a site will start with a site walkover and desktop study. The council may progress these first elements of detailed inspection. The data gathered will be used to update the council's data base of potentially contaminated sites. At this point the council will consider whether a detailed inspection the site through intrusive investigation, analysis of samples (soil, water and gas) and risk assessment is necessary. Where required, such work would be contracted out to consultants. Currently, due to funding, detailed inspection and risk assessment are only being undertaken on urgent sites.

It is expected that the majority of the investigation and remediation of the sites identified will happen during the development or redevelopment of those sites. Where a 'brownfield' site is developed particularly for a more sensitive 'end use' the planning system is designed to ensure that it is suitable for its use after the development.

5.3. Possible outcomes of a detailed inspection

The statutory guidance describes in detail the possible outcomes of detailed inspection for all receptors. Sites will be assigned categories (1-4). Generally, sites in category 1 will require immediate action (designation as contaminated land); sites in category 2 may require immediate action. Sites in category three may not meet the stringent definition of contaminated land but may require observation or monitoring and sites in category four are unlikely to meet the

definition of contaminated land. For controlled water receptors the council will consult the Environment Agency.

Currently, due to funding, detailed inspection and risk assessment are only being undertaken on urgent sites. If the detailed inspection is undertaken and show that an unacceptable risk is being caused the council will have to determine the site and place the records on a public register. Based upon all of the available information and the statutory guidance the council will then decide if remediation of the site should be carried out. If remediation is carried out this will be only be done where necessary and the council will work with residents inform them and minimise disruption as much as possible.

5.4 Risk ratings and outcomes

The table below shows the categories that sites may be allocated and the action likely to be taken by the council. Sites will be put into these categories based upon the information known about it. This will begin at the initial prioritisation and if necessary continue through to the remediation of the site. A site could move between categories as more information is found about it and risk assessments revised.

Category	Description
1	Probable Contaminated Land- Intrusive Investigation necessary. Full review of existing site data required to develop detailed investigation strategy and conceptual model. The council will seek funding to do the investigation, from an original polluter or developer if possible or from council funds if an urgent site.
2	Medium Risk - Intrusive investigation required to resolve potential risks. Clean up considered likely under part 2A and priority action recommended. The council will seek funding to do the investigation, from an original polluter or developer if possible or from council funds if an urgent site
3	Low to Medium Risk- Intrusive investigation recommended to resolve potential risks. Clean up cannot be excluded under part 2A. Initial site investigation will not be funded by the council as this will divert available funds from high risk sites. Residents will be assisted to undertake their own investigations and risk assessments. Should these assessments indicate that the site should be reassessed as category 1 or 2 the council will re-evaluate its position
4	Low risk- Likelihood of contamination is considered low and if present the impact is such that clean up could not be reasonably justified. It is highly unlikely that further work will be required on these sites. Should residents wish to do so the same approach to category 3 sites will be followed

5.5. Payment for investigations and remedial works

DEFRA Grants

Until 2012 Central Government offered financial support to local authorities in regard of their duties under Part 2A. However the grant was effectively stopped other than for ‘absolute emergency cases’ by Lord De Mauley’s letter (DEFRA December 2013) and ceased to exist in any form after 2017. Local authorities’ statutory duties remain but central government financial support has been removed.

Given the withdrawal of funding and Defra’s advice to minimise unnecessary burdens on the taxpayer, the Council is not currently undertaking further detailed site inspections beyond the

Desk Top (Phase 1) Stage. Intrusive sampling (soil, water or gas), risk assessments or remediation exercises will not be undertaken unless the need for inspection is considered to be urgent. Adur District Council is also not publishing any timescales for detailed site inspection at this time. The exception to this is if an urgent site inspection was to arise which follows as below.

5.6 Urgent site inspections

The need for urgent detailed inspection may arise in a situation where Adur District Council becomes aware that contamination is causing significant harm. Incidents such as fires or fuel or chemical releases also have potential to cause significant harm. Such circumstances are extremely rare, nevertheless Adur District Council has a duty under the legislation to inspect any such site.

As such under those circumstances Adur District Council would:

- seek to establish who the liable persons for the site are and whether they still exist,
- apply the six sequential tests from the Statutory Guidance to establish which liable parties might drop-out of the liability group,
- apportion the liability between the remaining liability groups,
- establish whether any linkage is an orphan linkage,
- seek voluntary inspection by the site owner and/or occupier,
- enter into discussions with DEFRA about the availability of any available grants or funds,
- seek to finance any essential related work through monies held in reserves expressly for this purpose or, where these monies are insufficient, from reserves mandated by Cabinet and
- seek to recover any costs from liable persons.

6 Enabling residents

Where any resident lives on or near a potentially contaminated land former land use, they may wish to engage the services of a professional consultant to investigate their property. This circumstance may occur if the site is not scheduled for further inspection in the near future, but a mortgage lender will not lend without clearing any uncertainty.

In these cases the council will provide as much assistance as it can to the resident in the form of liaising with any consultants on the scope of proposed investigations, and reviewing any results and reports. Where no contamination is found the council will provide confirmation of this in writing for the use of the resident. If unacceptable levels of contamination are found, the council will revise the priority rating for the site.

6.1 Voluntary Remediation

Adur District Council's approach to its regulatory duties is to encourage voluntary action before considering the need for enforcement. In dealing with issues of land contamination, this approach will be no different. This approach is supported by the regulations, which 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.

In adopting this approach, effective communication with the owners, occupiers and other interested parties will be required. The Officer dealing with contaminated land will be the central point for the authority on contaminated land issues and will ensure that all parties are kept

informed at each stage of investigations, regardless of whether or not there is a formal designation of contaminated land.

In designating an area of contaminated land it will be necessary to undertake the following actions:

- Inform the owner and/or occupier of the land in writing at least five working days prior to designating the land, summarising the reason for designation.
- Write to the owner and/or occupier of the land explaining the land has been designated as contaminated land and seeking voluntary remediation is undertaken.
- Provide copies of the written risk assessments for the site within five working days of receipt of a request from an interested party.
- Write to the owner and/or occupier of neighbouring land or any other interested parties to inform them of the designation within five days of the land being designated.

Where voluntary remediation action is not forthcoming it will be necessary to:

- Provide a written remediation notice to the owner/occupier specifying the actions required to remediate the site.
- Write to the owner and/or occupier of neighbouring land or any other interested parties within five days to inform them that a remediation notice has been served.

Upon completion of remediation, the Authority will enter details of the remediation into the public register.

7.0 The Public Register

Adur District Council is obliged by section 78R of the Environmental Protection Act 1990 to hold and maintain a public register of all regulatory action taken under Part 2A. This is not a register of all contaminated land in the Borough; it is a register covering sites where formal determination of land as contaminated land has occurred. The information required to be held on the register is prescribed in section 78R of the Environmental Protection Act 1990, further information is presented in Annex 4 of Defra Circular 01/2006, paragraphs 71-92. The register is held by the Public Health and Regulation Section and is available for public inspection by contacting the Environmental Protection Team at the following address:

Public Health and Regulation
Worthing Town Hall, Chapel Road,
Worthing
West Sussex, BN11 1HA

At present, no sites within the District of Adur have been determined as 'contaminated land' or as 'special sites', and as such, there are currently no entries in the register.

8.0 Special Sites

There is a category of contaminated site that is termed a special site. These are sites that meet a specific set of circumstances, generally where the main receptor is some form of controlled water such as a river or an aquifer. The detailed definition is found in Appendix B.

In general, Special Sites have had uses where the Environment Agency is likely to already have a regulatory responsibility, for example Integrated Pollution Control sites. Special Sites are not necessarily more contaminated than other kinds of site. Examples of Special Sites are nuclear sites, MOD sites, oil refineries, and sites that may be causing pollution of drinking water resources.

Where the council thinks that a site might be a special site it will request that the Environment Agency take over as the lead authority for it. The mechanism for this is detailed within the statutory guidance. The council will then work with the Environment Agency as the site is investigated and remediated if necessary.

9.0 Investigating reports of possible land contamination

If there are reports that a piece of land is or has been contaminated either historically or recently this will be investigated according to standard complaints investigation procedures. If the problem can be resolved directly as a result of the investigation either by giving advice or taking enforcement action this will be done. If not then the results of the investigation will be used to inform the council's overall prioritisation of potentially contaminated sites data base.

10.0 Wider benefits of this strategy

As a result of the data collated during the initial prioritisation the council has a searchable layer for specialist officers which is accessible to the Planning and Building Control departments. This ensures that the appropriate officers of the council are consulted on any planning application that may be at risk from land contamination. The council can provide more detailed and useful replies to environmental information requests (from solicitors when people are moving house). It has also enabled the council to focus its attention on the highest risk sites that have been identified. The work on enabling residents to access professional services to do their own site investigations and risk assessments will benefit all residents on sites which are not scheduled for further investigation by the council but which due to the historic use of the site may face difficulties when selling.

11.0 Measuring our progress of implementing this strategy

We aim to add more detailed knowledge about sites each year using existing resources. This increased knowledge will enable the council to refine the prioritisation further, reduce the number of sites that need more detailed investigation and identify those that need detailed investigation most urgently.

12.0 Interaction with the planning system

The statutory guidance and the National Planning Policy framework (NPPF) both have the concept that potentially contaminated land must be shown to be suitable for its current use. As an absolute minimum this means that, where necessary, the site should be remediated to a standard where significant harm or pollution of controlled waters can no longer occur. The site must be incapable of being designated as contaminated land as defined under Part2A of the Environmental Protection Act 1990.

As a general rule the council will expect any planning application for land which may be affected by contamination to be accompanied by the report of a desktop study and site walkover as defined in British Standard BS10175: 2011 'Investigation of potentially contaminated site – Code of Practice'.

This report should identify that the site has been assessed and is considered suitable for use or in the event that further works are needed, to detail them and discuss how the site can reasonably be made suitable for the proposed use. All reports should be completed by a suitably qualified 'competent' person as defined in the NPPF.

Further guidance on Land Contamination Investigations has been published by the Environment Agency, Land Contamination Risk Management (LCRM), and can be found online: <https://www.gov.uk/government/publications/land-contamination-risk-management-lcrm>

13.0 Summary section

- The council has identified and prioritised numerous potential sites.
- Most of them are low/low to medium risk and will not be investigated further.
- First phases of investigation will be done using existing resources
- At the current time only urgent site will be investigated further by the Council.
- Where residents need contaminated land investigations done, and the site is not considered to be an urgent site, it will provide advice and assistance to the appointed contractor.
- Investigations might show that unacceptable risk is being caused. The council will ensure that only land that poses a genuinely unacceptable risk is formally determined. It will then be remediated if that is the most appropriate thing to do.
- The council will work with residents to ensure that they are involved in and informed of any site investigation and remediation that affects them. Officers will work to avoid any unnecessary disruption or distress.
- The council will try to make previous polluters or developers pay for remediation. Where this is not possible, residents will be required to contribute and we will work with them and apply a hardship policy to make sure that this as fair as possible.
- The council will investigate reports about potentially contaminated land and either give advice or take action accordingly.

14.0 Liaison and Communication Procedures

14.1 Strategy Consultation

Adur District Council is directed by statutory guidance to consult specific organisations to obtain their views on its draft contaminated land strategy prior to the revised strategy being formally adopted.

The public authorities consulted for this strategy are:

- Environment Agency – Solent and South Downs
- Natural England
- English Heritage
- West Sussex County Council
- Food Standards Agency
- South Downs National Park
- UKHSA
- Neighbouring Local Authorities - Mid Sussex DC, Horsham DC, Brighton & Hove City Council

Further contact details can be found below.

14.2 Contact points for consultation

Adur District Council

Public Health and Regulation
Worthing Town Hall, Chapel Road,
Worthing
West Sussex
BN11 1HN
Tel: 01903 221064
E-mail: publichealth.regulation@adur-worthing.gov.uk

Environment Agency – Solent and South Downs Area

Guildbourne House
Chatsworth Road
Worthing
West Sussex
BN11 1LD
Tel: 03708 506 506

West Sussex County Council

County Hall
West Street
Chichester
West Sussex
PO19 1RG
Tel: 01243 777100

Natural England

Guildbourne House
Chatsworth Road
Worthing
West Sussex
BN11 1LD
Telephone: 0300 060 3900

English Heritage - South East Region

The Engine House
Fire Fly Avenue
Swindon
SN2 2EH
Tel: 0870 333 1181

Food Standards Agency

Contaminants division
Floors 6 and 7, Clive House
70 Petty France
London SW1H 9EX
Tel: [0330 332 7149](tel:03303327149)

South Downs National Park Authority

South Downs Centre
North Street

Midhurst
West Sussex
GU29 9DH
Tel: 01730 814810

APPENDIX A - TABLE A - CATEGORIES OF SIGNIFICANT HARM

Type of Receptor	Description of harm to that type of receptor that is to be regarded as significant harm
<p>1 Human beings</p>	<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>In this Chapter, this description of significant harm is referred to as a "human health effect".</p>
<p>2 Any ecological system, or living organism forming part of such a system, within a location which is:</p> <p>an area notified as an area of special scientific interest under section 28 of the Wildlife and Countryside Act 1981;</p> <p>any land declared a national nature reserve under section 35 of that Act;</p> <p>any area designated as a marine nature reserve under section 36 of that Act;</p> <p>an area of special protection for birds, established under section 3 of that Act;</p> <p>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);</p> <p>any candidate Special Areas of Conservation or potential Special Protection Areas given equivalent protection;</p> <p>any habitat or site afforded policy protection under paragraph 13 of Planning Policy Guidance Note 9 (PPG9) on nature conservation (i.e. candidate Special Areas of Conservation, potential Special Protection Areas and listed Ramsar sites); or</p> <p>any nature reserve established under section 21 of the National Parks and Access to the Countryside Act 1949.</p>	<p>For any protected location:</p> <p>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</p> <p>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> <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>In this Chapter, this description of significant harm is referred to as an "ecological system effect".</p>
<p>3 Property in the form of:</p> <p>crops, including timber;</p> <p>produce grown domestically, or on allotments, for consumption;</p>	<p>For crops, a substantial diminution in yield or other substantial loss in their value resulting from death, disease or other physical damage.</p> <p>For domestic pets, death, serious disease or serious physical damage. For other property in</p>

<p>livestock; other owned or domesticated animals; wild animals which are the subject of shooting or fishing rights.</p>	<p>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. Food should be regarded as being no longer fit for purpose when it fails to comply with the provisions of the Food Safety Act 1990. Where a diminution in yield or loss in value is caused by a pollutant linkage, a 20% diminution or loss should be regarded as a benchmark for what constitutes a substantial diminution or loss.</p> <p>In this Chapter, this description of significant harm is referred to as an "animal or crop effect".</p>
<p>4 Property in the form of buildings.</p> <p>For this purpose, "building" means any structure or erection, and any part of a building including any part below ground level, but does not include plant or machinery comprised in a building.</p>	<p>Structural 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 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>In this Chapter, this description of significant harm is referred to as a "building effect".</p>

Source: DETR Circular 01/2006 Annex A Part 3, Table A

TABLE B - SIGNIFICANT POSSIBILITY OF SIGNIFICANT HARM

Descriptions of Significant Harm (As Defined In Table A)	Conditions for there being a Significant Possibility Of Significant Harm
<p>1 Human health effects arising from the intake of a contaminant, or other direct bodily contact with a contaminant</p>	<p>If the amount of the pollutant in the pollutant linkage in question:</p> <p>which a human receptor in that linkage might take in, or to which such a human might otherwise be exposed, as a result of the pathway in that linkage, would represent an unacceptable intake or direct bodily contact, assessed on the basis of relevant information on the toxicological properties of that pollutant.</p> <p>Such an assessment should take into account:</p> <p>the likely total intake of, or exposure to, the substance or substances which form the pollutant, from all sources including that from the pollutant linkage in question;</p> <p>the relative contribution of the pollutant linkage in question to the likely aggregate intake of, or exposure to, the relevant substance or substances; and</p> <p>the duration of intake or exposure resulting from the pollutant linkage in question.</p> <p>The question of whether an intake or exposure is unacceptable is independent of the number of people who might experience or be affected by that intake or exposure.</p> <p>Toxicological properties should be taken to include carcinogenic, mutagenic, teratogenic, pathogenic, endocrine-disrupting and other similar properties.</p>
<p>2 All other human health effects (particularly by way of explosion or fire)</p>	<p>If the probability, or frequency, of occurrence of significant harm of that description is unacceptable, assessed on the basis of relevant information concerning:</p> <p>that type of pollutant linkage, or</p> <p>that type of significant harm arising from other causes.</p> <p>In making such an assessment, the local authority should take into account the levels of risk which have been judged unacceptable in other similar contexts and should give particular weight to cases where the pollutant linkage might cause significant harm which:</p> <p>would be irreversible or incapable of being treated;</p> <p>would affect a substantial number of people;</p> <p>would result from a single incident such as a fire or an explosion; or</p> <p>would be likely to result from a short-term (that is, less than 24-hour) exposure to the pollutant.</p>
<p>3 All ecological system effects</p>	<p>If either:</p> <p>significant harm of that description is more likely than not to result from the pollutant linkage in question;</p> <p>or</p>

	<p>there is a reasonable possibility of significant harm of that description being caused, and if that harm were to occur, it would result in such a degree of damage to features of special interest at the location in question that they would be beyond any practicable possibility of restoration.</p> <p>Any assessment made for these purposes should take into account relevant information for that type of pollutant linkage, particularly in relation to the ecotoxicological effects of the pollutant.</p>
4 All animal and crop effects	If significant harm of that description is more likely than not to result from the pollutant linkage in question, taking into account relevant information for that type of pollutant linkage, particularly in relation to the ecotoxicological effects of the pollutant.
5 All building effects	If significant harm of that description is more likely than not to result from the pollutant linkage in question during the expected economic life of the building (or, in the case of a scheduled Ancient Monument, the foreseeable future), taking into account relevant information for that type of pollutant linkage.

Source: DETR Circular 01/2006 Annex A Part 3, Table B

Appendix B - Special Sites

Land required to be designated as a special site

The rules on what land is to be regarded as special sites are set out in the Contaminated Land (England) Regulations 2006.

2.—(1) Contaminated land of the following descriptions is prescribed for the purposes of section 78C(8) as land required to be designated as a special site—

- (a) land affecting controlled waters in the circumstances specified in regulation 3;
- (b) land which is contaminated land by reason of waste acid tars in, on or under the land;
- (c) land on which any of the following activities have been carried on at any time—
 - (i) the purification (including refining) of crude petroleum or of oil extracted from petroleum, shale or any other bituminous substance except coal; or
 - (ii) the manufacture or processing of explosives;
- (d) land on which a prescribed process designated for central control has been or is being carried on under an authorisation, where the process does not solely consist of things being done which are required by way of remediation;
- (e) land on which an activity has been or is being carried on in a Part A(1) installation or by means of Part A(1) mobile plant under a permit, where the activity does not solely consist of things being done which are required by way of remediation;
- (f) land within a nuclear site;
- (g) land owned or occupied by or on behalf of—
 - (i) the Secretary of State for Defence;
 - (ii) the Defence Council,
 - (iii) an international headquarters or defence organisation, or
 - (iv) the service authority of a visiting force, being land used for naval, military or air force purposes;
- (h) land on which the manufacture, production or disposal of—
 - (i) chemical weapons,
 - (ii) any biological agent or toxin which falls within section 1(1)(a) of the Biological Weapons Act 1974⁽¹⁾ (restriction on development of biological agents and toxins), or
 - (iii) any weapon, equipment or means of delivery which falls within section 1(1)(b) of that Act (restriction on development of biological weapons), has been carried on at any time;
- (i) land comprising premises which are or were designated by the Secretary of State by an order made under section 1(1) of the Atomic Weapons Establishment Act 1991⁽²⁾ (arrangements for development etc of nuclear devices);
- (j) land to which section 30 of the Armed Forces Act 1996⁽³⁾ (land held for the benefit of Greenwich Hospital) applies;
- (k) land which is contaminated land wholly or partly by virtue of any radioactivity possessed by any substance in, on or under that land; and
- (l) land which—
 - (i) is adjoining or adjacent to land of a description specified in any of sub-paragraphs (b) to (k); and
 - (ii) is contaminated land by virtue of substances which appear to have escaped from land of such a description.

(2) For the purposes of paragraph (1)(b), “waste acid tars” are tars which—

- (a) contain sulphuric acid;
- (b) were produced as a result of the refining of benzole, used lubricants or petroleum; and
- (c) are or were stored on land used as a retention basin for the disposal of such tars.

(3) In paragraph (1)(d), “authorisation” and “prescribed process” have the same meanings as in Part 1 of the 1990 Act (integrated pollution control and air pollution control by local authorities) and the reference to designation for central control is a reference to designation under section 2(4) (which provides for processes to be designated for central or local control).

(4) In paragraph (1)(e), “Part A(1) installation”, “Part A(1) mobile plant” and “permit” have the same meanings as in the Pollution Prevention and Control (England and Wales) Regulations 2000(4).

(5) In paragraph (1)(f), “nuclear site” means—

(a) any site in respect of which, or part of which, a nuclear site licence is for the time being in force; or

(b) any site in respect of which, or part of which, after the revocation or surrender of a nuclear site licence, the period of responsibility of the licensee has not come to an end.

(6) In paragraph (5), “nuclear site licence”, “licensee” and “period of responsibility” have the meanings given by the Nuclear Installations Act 1965(5).

(7) For the purposes of paragraph (1)(g), land used for residential purposes or by the Navy, Army and Air Force Institutes must be treated as land used for naval, military or air force purposes only if the land forms part of a base occupied for naval, military or air force purposes.

(8) In paragraph (1)(g)—

- “international headquarters” and “defence organisation” mean, respectively, any international headquarters, and any defence organisation, designated for the purposes of the International Headquarters and Defence Organisations Act 1964(6);
- “service authority” and “visiting force” have the same meanings as in Part 1 of the Visiting Forces Act 1952(7).

(9) In paragraph (1)(h), “chemical weapon” has the same meaning as in subsection (1) of section 1 of the Chemical Weapons Act 1996(8), disregarding subsection (2) of that section.

3. Pollution of controlled waters

The circumstances to which regulation 2(1)(a) refers are where—

(a) controlled waters which are, or are intended to be, used for the supply of drinking water for human consumption are being affected by the land and, as a result, require a treatment process or a change in such a process to be applied to those waters before use, so as to be regarded as wholesome within the meaning of Part 3 of the Water Industry Act 1991(1) (water supply);

(b) controlled waters are being affected by the land and, as a result, those waters do not meet or are not likely to meet the criterion for classification applying to the relevant description of waters specified in regulations made under section 82 of the Water Resources Act 1991(2) (classification of quality of waters); or

(c) controlled waters are being affected by the land and—

(i) any of the substances by reason of which the pollution of the waters is being or is likely to be caused falls within any of the families or groups of substances listed in paragraph 1 of Schedule 1 to these Regulations; and

(ii) the waters, or any part of the waters, are contained within underground strata which comprise wholly or partly any of the formations of rocks listed in paragraph 2 of Schedule 1 to these Regulations.

Appendix C – Areas of Environmental Importance.

Below are areas that occur in the Adur District which have been recognised as Environmentally Important and have been designated as either Special Sites of Scientific Interest (SSSI's), Local Wildlife Sites (LWS) or National Park.

SSSI – River Adur Estuary

The part of the estuary designated covers an area of 62.2 hectares and was notified under section 28 of the Wildlife and Countryside Act 1981. The site was given the status in 1987 and is also part of the RSPB nature reserve. The site represents the only significant areas of saltmarsh between Chichester in West Sussex and Sandwich Bay in Kent. Rare species of both flora and fauna are recorded here.

Cissbury Ring

Cissbury Ring is an 84.2-hectare biological Site of Special Scientific Interest north of Worthing in West Sussex. It is owned by the National Trust and is designated a Scheduled monument for its Neolithic flint mine and Iron Age hillfort. The main biological interest of the site centres on the areas of unimproved chalk grassland, a habitat type which has become rare nationally through being under constant threat from agricultural improvement. The scrub areas provide important habitats for wintering, breeding and migrant birds and also support a varied butterfly fauna.

Local Wildlife Sites (LWS)

Widewater Lagoon

The Widewater is a shallow coastal lagoon of 8.2 hectares and is situated on marshland formed by sediments deposited by the River Adur. It is a classic example of an isolated spit lagoon, lying between South Lancing and the broad shingle beach of Lancing Beach. Areas of saltmarsh and vegetated shingle occur along its southern edge; these are rare habitats in West Sussex.

The lagoon became isolated when the southern shingle bank developed through a combination of storms and longshore drift. This bank was later reinforced artificially in an effort to prevent flooding of reclaimed land to the north. As the sea frequently breached the shingle bank a second bank was constructed of clay to the north eventually allowing housing development in the 1900's.

The lagoon itself is principally fed by seawater which permeates through cracks in its thin clay bed. The evidence for this is clearly demonstrated during high tidal cycles which can dramatically raise the water level. Despite the fact that the lagoon is subject to harsh physical conditions of heat, salt, wind and drought it contains many interesting species none less so than the unique Ivell's Sea Anemone.

The land surrounding the Widewater can boast over 140 plant species which reflects the diverse habitats that exist in this limited area. The western end of the Widewater is dominated by shingle banks covered in Sea Campion and Sea Kale. Towards the eastern end the shingle bank gives way to a range of grasses including Sea Thrift and Vipers Bugloss. In addition to wild plants there are several garden escapees, remnants of gardens and homes that fringed the southern bank of the Widewater before the Second World War.

In the main animals are less numerous than plants with the exception of birds. Throughout the year birds like the Pied Wagtails and Black-headed Gulls are common. Some species nest on site, including a family of Swans whose young survive because they are fed and watered by the residents. However, the time of variety is between October and April. A survey conducted in 1982 recorded over 90 species of birds. Thus the Widewater is a significant winter feeding

ground and haven for migratory birds and those resident species escaping harsh winter conditions further inland.

Lancing Ring

This site is 24.3 hectares in area and encompasses a range of habitats including unmanaged rank grassland, horse-grazed pasture, disused chalk pit, scrub and developing Ash woodland (see map). Although most of the grassland has become heavily scrub invaded it supports an interesting herbaceous flora. Lancing Ring is also important for insects, notably butterflies.

Much of the site consists of unmanaged grassland with scattered scrub of Hawthorn, Blackthorn, Gorse, Wild Privet, Dogwood and Bramble. Many of these shrubs are large and shading of the grassland is becoming severe. Coarse grasses, particularly False Oat-grass and Upright Brome dominate the sward. Characteristic downland herbs such as Squinancywort, Round-headed Rampion, Horseshoe Vetch and Kidney Vetch are present, although few are abundant. There are localised patches of herb-rich sward, for example on shallow soils of the chalk pits.

The horse-grazed pasture has an interesting chalk grassland flora with Dwarf Thistle, Common Restharrow, Yellow Rattle, Pyramidal Orchid, Harebell and Cowslip.

The rich butterfly fauna includes breeding colonies of Chalkhill Blue, Holly Blue, Small Copper, Small Heath and Wall Brown. The rank grassland favours certain species such as the localised Marbled White. The flowers of Greater Knapweed and Field Scabious are a great attraction to many butterflies.

Lancing supports a good range of breeding warblers, including Chiffchaff, Willow Warbler, Whitethroat and Lesser Whitethroat. Yellowhammer, Linnet and Cuckoo also breed. Adder, Slow-worm and Common Lizard are reported to occur.

Mill Hill

This site is approximately 35 hectares in area and is a fine example of chalk grassland, scrub and unimproved herb-rich downland on a steep west-facing slope. The site consists of a mosaic of open grassland with scattered scrub and patches of dense scrub. In addition to an interesting herb and moss flora, the site is of tremendous butterfly importance. Following extensive scrub removal and fencing, sheep grazing was re-introduced to part of the hill in 1991.

Much of the grassland is herb-rich with typical downland species such as Wild Thyme, Dropwort, Round-headed Rampion, Autumn Gentian, Pyramidal Orchid, Yellow Rattle, Burnet-saxifrage and Horseshoe Vetch. A small area of grassland is noted for its rich moss flora. Fine grasses such as Sheep's-fescue are present, although coarse species, particularly Upright Brome and False Oat-grass are locally dominant.

The whole site is certainly of County-wide significance on account of its butterfly fauna. Twenty-five species are known to have bred including a number of particular note such as Adonis Blue, Chalkhill Blue, Brown Argus and Marbled White. The uncommon Dark Green Fritillary has re-colonised the site in recent years.

A number of species of grasshopper have been recorded including two of note, the Stripe-winged Grasshopper and Great Green Bush-cricket.

Parts of the hill now support dense scrub. It provides nesting sites for Linnet, Yellowhammer, Whitethroat and Lesser Whitethroat. The berries of Elder and Bramble attract many warblers in late summer.

Shoreham Beach

The site includes all of the landward side of Shoreham Beach, approximately 11.2 hectares in area from Widewater Lagoon in the west to the old fort by the entrance to Shoreham Harbour. Its main interest is its highly specialised shingle flora, adapted to withstand harsh and extreme conditions. Largely due to habitat destruction, this community is very rare in West Sussex.

The plant communities vary with the amount of disturbance. On stable shingle between houses and along garden boundaries, grasses, such as Soft Brome, Red Fescue, Cock's foot and Barren Brome have established, together with tolerant 'land' herbs, such as Ribwort Plantain, or those adapted to dry, bare places, such as Ivy-leaved Toadflax, Red Valerian and Common Mallow. However, most species are 'maritime', including Sea-Kale, Yellow Horned-poppy, Sea-beet, Sea Campion, Danish Scurvey-grass, Buck's-horn Plantain and English Stonecrop.

On less stable areas, the vegetation is scattered with Yellow-horned Poppy, Seabeet, Kale and Mallow most abundant. Bittersweet and exotics, such as Tamarisk, are occasional.

Short grassland occurs within the old fort, but the surrounding shingle supports grasses and herbs similar to those listed for stable shingle, with Wall barley, Lady's Bedstraw and Viper's Bugloss. Of particular interest is the presence of Starry Clover.

Old Erringham Farm Valley and road cutting, Shoreham-by-Sea

The site includes a shallow valley, running east to west, the habitats include chalk grassland, semi-natural woodland, pond and quarry. The site is approximately 14.8 hectares in area and rich grassland on its sides, an area of storm-damaged woodland on a steep slope, and a road cutting, which supports an extremely diverse chalk grassland community. There are also three derelict ponds and a disused quarry within the boundary.

The valley bottom is herb-poor, and may have been improved. The sides are rich in herbs and grasses, including species indicative of a history of unimprovement, such as Dropwort, Round-headed Rampion, Betony and Heath grass. Tor-grass and Upright Brome are locally dominant, creating areas of taller, coarser grassland. Small clumps of Hawthorn, Bramble and Dog Rose occur.

The road cutting is fairly recent, but supports a varied flora, including Viper's Bugloss, Kidney Vetch, Salad Burnet, Common Broomrape and Bee Orchid.

The woodland is badly storm-damaged, so has few mature trees. Those remaining include Ash, Sycamore, some Beech and Horse Chestnut. Young Elms, Blackthorn, Privet, Elder, Hawthorn and Dog Rose dominate the shrub layer.

The quarry is also wooded, although some bare chalk remains. Its floor has both native and garden plants, including Buddleia and Russian Vine.

One pond is grassy depression but the others, although dry and shaded by trees, support Hairy Willowherb, Reed Canary-grass, Water Dock and Bittersweet.

A White-letter Hairstreak butterfly colony occurs on the Elms.

River Adur Meadows, Shoreham-by-Sea

The site is approximately 13.9 hectares in area and consists of neutral grassland and ditches comprising two relatively herb-rich meadows, located on the eastern bank of the River Adur. The meadows are crossed by ditches which contain an interesting variety of species.

The two meadows support rough, uncut grassland, with Yorkshire Fog, Tufted Hair-grass, Cock's Foot, Red Fescue, Yellow Oat grass and Creeping Bent all frequent. Bulbous Foxtail occurs in damp hollows; this grass is rare in West Sussex.

The herbs are typical of neutral grassland, including Meadow Vetchling, Goat's Beard, Hogweed, Meadow Buttercup, Bristly Oxtonague and Wild Carrot. Red Clover and White Clover are common in the northern field, and Oxeye Daisy and Ribwort Plantain are frequent.

The fields are crossed by ditches which contain a diversity of species including the Common Reed, Spike-rush, Common Fleabane, False Fox-sedge and Bulrush. The presence of Sea Clubrush indicates that the ditches are brackish.

Lower Cokeham reedbed and ditches, Lancing

The site is approximately 6.2 hectares in and consists of an area of reedbed and tall fen which is crossed and bordered by wet ditches (see map). It is of considerable importance for wildlife as it is an area of semi-natural habitat which is especially valuable birds, located on the edge of a heavily-built up area.

The reedbed is dominated by Common Reed and Hairy Willowherb, with patches of Meadowsweet and Reed Canary-grass. Bramble, Creeping Thistle and Bittersweet occur in drier areas. Hawthorn, Elder and Crack Willow scrub is scattered, or lines the ditches, and there is a wooded strip along the eastern boundary.

The ditches mostly contain water. Tall species such as Reed Canary-grass and Hairy Willowherb are locally dominant, but other herbs, such as Water-cress, Brooklime, Gypsywort, Water Mint, Fool's Water-cress, Water Forget-me-not and Celery-leaved Buttercup occur in more open areas. Branched Bur-reed, Floating Sweet-grass and Marsh Foxtail also occur.

Areas of tall fen vegetation and reedbeds are valuable as roosting and nesting sites for a variety of birds, such as Warblers and Starlings.

The urban setting of the site increases its importance for wildlife.

Steep Down, Lancing

This is an isolated remnant of approximately 5.5 hectares of unimproved chalk grassland and scrub situated on the west-facing slope of Steep Down. The moderately steep slope supports a mosaic of short herb-rich grassland, rank grassland and scrub. The site supports many plants and butterflies characteristic of unimproved downland.

The areas of short turf are of high nature conservation importance supporting a herb-rich flora. Sheep's-fescue, a fine-leaved grass, occurs with herbs such as Salad Burnet, Small Scabious Squinancywort, Harebell, Eyebright, Dropwort, Fairy Flax and Autumn Gentian. Ploughman's spikenard, Kidney Vetch and Carline Thistle are present in a few small patches of bare chalky soil. A rare plant, Field Fleawort was recorded in 1981.

Much of the grassland is dominated by Tor-grass. This is a coarse, invasive species which out-competes many of the more interesting plants. However, two notable species, Round-headed Rampion and Pyramidal Orchid, have been found amongst the Tor-grass on Steep Down.

The scrub, which probably encroached on previously open grassland, is fairly diverse. It includes Wayfaring-tree, Wild Privet, Blackthorn, Hawthorn, Holly, Elder and Traveller" joy.

Butterflies recorded on Steep Down include Chalkhill Blue, Small Skipper, Gatekeeper, Meadow Brown, Green-veined White and Brimstone. The presence of a Chalkhill Blue colony is particularly notable. The larval foodplant, Horseshoe Vetch, occurs in some abundance.

Southwick Hill

Southwick Hill is situated on the dip of the slope of the South Downs and is approximately 58.8 hectares in area consisting of dense scrub and unimproved chalk grassland. The rich flora and fauna includes a number of rare species.

The grassland comprises a wide range of grasses, including Sheep's-fescue, Quaking Grass, Crested Hair-grass, Heath grass and Yellow Oat-grass. Many herbs are also present. Particularly abundant are Kidney Vetch Common Knapweed and Dwarf Thistle. Other typical downland herbs include Round-headed Rampion, Dropwort, Horseshoe Vetch, Small Scabious, Carlina Thistle and Wild Thyme. Pyramidal Orchids occur on the north-east facing slopes.

An important feature of the site is the presence of a very large, though localised, population of a rare plant, Bastard Toadflax. It occurs south of the summit in a very species-rich short sward. The lower plants found in this short turf are also of note and include moss and lichens. There is a little Heather so presumably chalk heath developed here.

A large proportion of the site is occupied by dense scrub. The area around the top of the hill is generally dominated by dense Gorse scrub. An extremely rare plant, Red Star-thistle, grows along a track through the scrub.

The mollusc fauna of Southwick Hill includes several species which are typical of long established short turf. The rich butterfly fauna includes two notable species, Adonis Blue and Small Blue. Glow-worms were recorded in 1993.

Truleigh Hill to Southwick Hill Chalk Grasslands, Southwick

This site comprises of several fragments of chalk grassland on the Downs between Upper Beeding, Fulking and Southwick. These areas are the remaining pockets of chalk grassland in this area, the surrounding land being predominantly arable.

These fragments of chalk grassland are mostly floristically rich. Between them they contain species characteristic of chalk grassland such as Round-headed Rampion, Wild Basil, Cowslip, Harebell, Yellow Rattle, Rest Harrow, Common Rock-rose, Kidney Vetch, Yellow-wort, Hoary Plantain, Bastard Toadflax and Hairy Violet.

Some areas have a slight healthy influence with areas of Gorse scrub. Hawthorn scrub occurs in some areas also. Although these areas are fairly scrubby and rank they will still be of importance to many species of invertebrates and to nesting birds such as Tallowhammer, Whitethroat and Linnet.

The Chalkhill Blue butterfly occurs on all of these areas.

Applesham Farm Bank

Applesham Farm bank is a curved, northeast facing slope with partial terraces in places on the upper slopes. The bank supports areas of excellent unimproved chalk grassland with a typically species rich sward. The quality of the sward varies somewhat across the slope and the central section is the most herb rich with locally frequent Horseshoe Vetch, Kidney Vetch, Greater Knapweed and Round-headed Rampion. Cowslip is extremely abundant on parts of the slope.

The central, most herb rich section of the bank supports a wide variety of calcicoles including Horseshoe Vetch, Kidney Vetch, Round-headed Rampion, Greater Knapweed, and Pyramidal Orchid. Across the bank other chalk grassland species include Large Thyme, Wild Thyme, Common Milkwort, Quaking Grass, Cowslip, harebell, Fairy Flax, Autumn Gentian, Salad Burnet, Dwarf Thistle, Small Scabious, Squinancywort and Hairy Violet. Other plants of interest on the bank include Yellow Rattle, abundant Common Bird's-foot-trefoil, Common Spotted-orchid and Eyebright.

An area of bare ground around a large Rabbit warren has typical plants of disturbed ground including Musk Thistle, Field Pansy and White Campion as well as stands of Tor Grass.

Scattered Hawthorn scrub is present in the southern part of the bank. The upper slopes in this section have a rather more coarse sward and perhaps slightly mesotrophic soil. Creeping Thistle is locally frequent here.

The chalk grassland is an excellent habitat for invertebrates and 21 species of butterfly have been recorded from the bank including Chalkhill Blue and Marbled White.

South Downs National Park

On 31 March 2010, the South Downs became the 10th National Park to be designated in England. The South Downs National Park is over 1,600 square kilometres and stretches 100 miles from the edge of Winchester to Beachy Head, including the northern area of the Adur District.

Vegetated Shingle Beaches

Vegetated shingle characterised by specialist plants that have adapted to survive in the harsh coastal conditions. The shingle, which does not retain water or nutrients, may be more or less stabilised. Closer to the sea, it is constantly moved by the impact of waves. This makes it very hard for plants to establish. Therefore, there needs to be a sufficiently wide band of shingle to create a more stable environment away from the waves, this is usually on the top of wide ridges or more inland.

The coastline within the Adur District has some prime areas of vegetated shingle. The main site is Shoreham Beach. This has a little over 11 hectares of stable shingle and is designated a site of nature conservation importance. Shoreham has some of the counties last remaining stable assemblages of plants, mosses and lichens. The increase in plants species has a relation to the increase in invertebrate species, and these stable communities of shingle plants are particularly rich in invertebrate diversity. It is amongst the stable shingle/sand at Pagham and Shoreham that the nationally endangered Childing Pink is found. The remaining Adur coastline has areas where the primary pioneer plants, such as Sea Kale, Yellow Horned-Poppy, Sea Beet and Curled Dock, are found. These are often in danger from deliberate and inadvertent damage. There are a number of small sites that have potential to be managed and re-colonised with shingle plants. The most likely at the moment being Kingston Beach.

APPENDIX D

Significant Changes since the publication of Adur District Council's Contaminated Land Strategy 2007

Part 2A New Statutory Guidance

In April 2012 revised Statutory Guidance on the contaminated land regime under Part 2A of the Environmental Protection Act 1990 was published by the Department for Environment, Food and Rural Affairs (Defra). The new Guidance came into force on 6th April 2012 and supersedes previous statutory guidance, which was published as Annex 3 of Defra Circular 01/2006. The aim of the new guidance is to simplify the contaminated land regime and provide greater clarity to regulators in deciding whether land is or is not 'contaminated land'.

The most significant change in the statutory guidance is a new four category system to help local authorities determine whether land is or is not contaminated on the basis of a significant possibility of significant harm to human health. The new guidance sets out a legal framework for taking decisions in the form of a category based test, whereby Category 1 sites are clearly contaminated and represent a high risk and Category 4 sites are evidently low risk and clearly do not qualify as 'contaminated land' under Part 2A of the EPA 1990. Category 2 and 3 sites are less straightforward and require more detailed consideration before deciding whether a site meets the legal definition of contaminated land. Category 2 sites require further risk assessment under the remit of the Part 2A regime, whereas Category 3 will only be subject to further assessment via the planning system as a result of a proposed development or change of use, for example.

The Category 4 Screening Levels (C4SLs) research project (Phase 1) provided technical guidance to support Defra's revised Statutory Guidance. This provides a test for deciding whether land is suitable for use and definitely not contaminated land in the legal sense. It is intended that the C4SLs represents a new set of generic screening levels that are precautionary but more pragmatic than existing GACs, soil guideline values (SGVs) and other screening criteria. A similar system can be used for determining whether or not a significant possibility of significant pollution of controlled waters exists. This is described in detail in the statutory guidance.

The revised Statutory Guidance does not apply to radioactive contamination of land, which is now covered by separate statutory guidance published by the Department of Energy and Climate Change (DECC) in April 2012. Both sets of statutory guidance will apply in the event that land is affected by radioactive and non-radioactive contaminants. The enforcing authority should decide on the appropriate course of action having due regard to the relevant primary legislation and advice from the Environment Agency.

National Planning Policy Framework

On 27th March 2012, the former Planning Policy Guidance (PPG) Notes and Planning Policy Statements (PPS) were replaced by the National Planning Policy Framework (NPPF), reducing thousands of pages of technical guidance into around 59 pages. This included the withdrawal of PPS23: Planning and Pollution Control that gave legislative and technical guidance in relation to development on land affected by contamination. The National Planning Policy Framework was revised on 20 July 2021 and sets out the government's planning policies for England and how these are expected to be applied.

The underlying principle in the new NPPF is a presumption in favour of sustainable development. With regard to land contamination, the NPPF states that planning policies and decisions should ensure that new development is appropriate for its location and that developers and/or landowners are responsible for securing the safe development of land. The

NPPF encourages the re-use of previously developed (brownfield) land, provided it is not of high environmental value. As a minimum, land should not be capable of being determined as contaminated land under Part 2A after it has been remediated via the planning process.

Part 2A Amendment: Radon

The regime for radioactive sites has changed, with an amendment that redefines the term "substance" for radioactive contaminated land, removing the exclusion for radon and its decay products. This came into force on 30 September 2010. The change allows the regulator to take action where land is contaminated by radon or its decay products as a result of the after-effects of a radiological emergency or a past activity e.g. radium luminised paint remnants. Naturally occurring radon gas continues to remain outside the scope of the regime.

Best Value Performance Indicators

Two Best Value Performance Indicators relating to contaminated land (BV216a "Identifying Contaminated Land" and BV216b "Information on Contaminated Land"), which came into effect in 2005, were withdrawn at the end of March 2008.

South Downs National Park

On 31 March 2010, the South Downs became the 10th National Park to be designated in England. The South Downs National Park is over 1,600 square kilometres and stretches 100 miles from the edge of Winchester to Beachy Head, including the northern area of the Adur District.

Aquifer designations

From 1 April 2010 the EA Groundwater Protection Policy has been using aquifer designations that are consistent with the Water Framework Directive. These designations reflect the importance of aquifers in terms of groundwater as a resource (drinking water supply) but also their role in supporting surface water flows and wetland ecosystems. The aquifer designation data is based on geological mapping provided by the British Geological Survey. The new aquifer designations are as follows:

- Principal Aquifers: (highly permeable) - previously designated as major aquifers.
- Secondary Aquifers: (variably permeable) - subdivided into two types: o Secondary A - These are generally aquifers formerly classified as minor aquifers. Secondary B - These are generally the water-bearing parts of the former non-aquifers.
- Secondary Undifferentiated - In most cases, this means that the layer in question has previously been designated as both minor and non-aquifer in different locations due to the variable characteristics of the rock type. Unproductive Strata: (negligibly permeable).

APPENDIX E GLOSSARY OF TERMS

The following is a non-technical explanation of terms and acronyms used in the strategy, for a precise definition of terms; reference should be made to Statutory Guidance.

Appropriate Person	A person who is determined to have responsibility for conducting remediation works and bearing the costs of these works
Brownfield Land	Previously developed land or Site
C4SL's	Category 4 Screening Levels. These are levels of contamination below which DEFRA considers land is not capable of being determined as contaminated land.
Class A Person	A person who is the appropriate person by virtue of section 78F (2), that is because he has knowingly permitted a pollutant to be in, on or under the land.
Class B Person	A person who is an appropriate person by virtue of section 78F (2), that is because he is the owner or occupier of the land in circumstances where no Class A person can be found with respect to a particular remediation action.
CLEA	'Contaminated Land Exposure Assessment'; an assessment tool for considering risks to human health.
CLR	Contaminated Land report, a series of key reports from Defra and the EA assessing the risk to human health from land contamination.
Contaminant	A substance which is in, on or under the land and which has the potential to cause harm or to cause the pollution of controlled waters.
Contaminated Land	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.
Controlled Waters	These include (a) inland waters (rivers, streams, underground streams, canals, lakes and reservoirs) (b) groundwater (any water in underground strata, wells or boreholes) (c) territorial waters (seawater within the three-mile limit) (d) coastal waters (the sea up to the line of highest tide; tidal waters within the freshwater limit).
DEFRA	Department for Environment, Food and Rural Affairs
DETR	Department of the Environment, Transport and the Regions
EA	The Environment Agency (Solent and South Downs Office).
Eco-system	A biological system of interacting organisms and their physical environment

FSA	The Food Standards Agency
GIS	Geographical Information System - a storage and retrieval database capable of being interrogated on any level of pre-determined parameters.
Greenfield Site	An area which has not been previously developed
Groundwater	Any water contained in underground strata, wells or boreholes.
NPPF	National Planning Policy Framework.
Orphan Linkage	A significant pollutant linkage from which no appropriate person can be found, or where those who would otherwise be liable are exempted by one of the relevant statutory provisions.
Part 2A	Part 2A of The Environmental Protection Act 1990, inserted by section 57 of the Environment Act 1995.
Pathway	One or more routes by which a receptor can become exposed to a contaminant.
Pollutant linkage	The relationship between a contaminant, a pathway and a receptor.
Receptor	or 'target' – something that could be affected by contamination, such as waters, a person's health, ecosystem or property type.
Regulations	Statutory Instrument (2000/227) The Contaminated Land (England) Regulations 2000.
Remediation	The carrying out of works to prevent or minimise the effects of contamination. In Part 2A this encompasses an assessment as to the condition of the land and monitoring subsequently.
Risk assessment	The study of the probability of a hazard occurring and the magnitude of the consequences.
SDNP	South Downs National Park
Source	A substance in, on or under the ground with the ability to cause harm.
Source Protection Zone	Zones around groundwater abstraction points used for public water supply within which certain activities and processes are either restricted or prohibited.
Special Sites	Any contaminated land designated as special according to the criteria specified in Appendix B.
SSSI	Site of special scientific interest
Statutory Guidance	Environmental Protection Act 1990 Part 2A, Contaminated Land Statutory Guidance, DEFRA, April 2012.