



# Joint Contaminated Land Strategy (Adopted December 2024)

## Purpose of this document

The Contaminated Land regime (Part 2A of the Environmental Protection Act 1990) seeks to address the legacy of historic pollution using a risk-based approach to the identification and remediation of land where contamination poses an unacceptable risk to human health or the environment. Each local authority is required to inspect its area under this regime to identify contaminated land and to prepare and publish a strategy setting out how this will be done. The strategy must detail a clear approach for addressing historic land contamination in a local authority's area in line with the national policy framework.

This strategy sets out how the councils will fulfil their statutory duties where land has been demonstrated to be significantly contaminated by historical activities.

This strategy is an update of the previous approved strategy adopted in 2001 for Vale of White Horse District Council and in 2002 for South Oxfordshire District Council.

# **Aim of Strategy**

- To set out criteria for when South Oxfordshire District Council and Vale
  of White Horse District Council ("the council") would consider being
  involved in investigating any potentially contaminated land.
- To ensure land contamination does not present an unacceptable risk to residents or the environment. It reflects the current government focus to primarily address contaminated land through development management, and only through Part 2A of the Environmental Protection Act 1990 legislation in extreme cases.

# **Background**

Contaminated Land is defined under Part 2A of the Environmental Protection Act 1990 (EPA) legislation as:

- a. 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 significant harm is being caused or there is a significant possibility of such harm being caused; or
- b. significant pollution of controlled waters is being caused, or there is a significant possibility of such pollution being caused.

The contaminated land regime is set out in Part 2A of the EPA with Contaminated Land Statutory Guidance published by Department for Environment, Food and Rural Affairs (DEFRA) in 2012 detailing local authority responsibilities for managing land contamination.

### Objectives of Part 2A Regime

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

A description of the district areas that this strategy applies to, with details relevant to the inspection strategy, are contained at **Appendix One**.

Local Authorities are required to manage and improve land quality by:

- Preventing future pollution of land through the Pollution Prevention and Control Act 1999.
- Restoring past land quality damage from historic industrial processes through development management and the National Planning Policy Framework December 2023.
- Prioritise, identify, and ensure remediation of contaminated land as defined under Part 2A of the Environmental Protection Act 1990 (EPA).
- Comply with DEFRA Environmental Protection Act 1990: Part 2A
   Contaminated Land Statutory Guidance April 2012 and Environment
   Agency Land Contamination: Risk Management 2021 where any sites are to be considered under Part 2A.

## **Addressing Historic Land Contamination**

The baseline assumption is that land should be considered not contaminated unless there is reason to consider otherwise. Part 2A of the EPA is intended to deal with the highest risk sites where significant harm is proven to be occurring or likely to occur should the local authority not intervene. Use of Part 2A in a regulatory context should be used as a last resort and only where land contamination risks would otherwise not be addressed through other regulatory or voluntary means.

The approach is to ensure land contamination does not present an unacceptable risk to human health or the environment and there are two statutory levers that the councils use to support this approach:

- Development Management Mitigating any unacceptable risk to development and the environment through development management in accordance with the National Planning Policy Framework (NPPF).
- Part 2A of the Environmental Protection Act 1990 Prioritise sites for further action such as investigation and remediation, only where evidence is presented to prove that significant harm is occurring or likely to occur should the local authority not intervene.

# **Development Management**

Land contamination is primarily addressed through development management wherever possible, thereby minimising any unnecessary financial burdens on the taxpayer, businesses, and individuals from Part 2A intervention.

Land contamination is a material planning consideration and must be considered when determining planning applications. The NPPF makes the planning system central to bringing land affected by contamination back into use, putting the responsibility for ensuring safe developments onto the developer and/or landowner by:

- 1. Encouraging applicants for planning permission to engage in preapplication discussions with the Local Planning Authority and Environmental Health departments.
- 2. Giving substantial weight to the value of using suitable brownfield land within settlements for homes and other identified needs, and support appropriate opportunities to remediate despoiled, degraded, derelict, contaminated or unstable land.
- 3. Requiring that planning policies and decisions should:

A: contribute to and enhance the natural and local environment by remediating and mitigating despoiled, degraded, derelict, contaminated and unstable land, where appropriate

B: ensure that a site is suitable for its proposed use taking account of ground conditions and any risks arising from land instability and contamination. This includes risks arising from natural hazards or former activities such as mining, and any proposals for mitigation including land remediation (as well as potential impacts on the natural environment arising from that remediation)

C: ensure that after remediation, as a minimum, land should not be capable of being determined as contaminated land under Part 2A of the Environmental Protection Act 1990; and

D: ensure that adequate site investigation information, prepared by a competent person, is available to inform these assessments.

4. Stating that where a site is affected by contamination or land stability issues, responsibility for securing a safe development rest with the developer and/or landowner.

Further information on how land contamination is assessed through development management are detailed within <a href="The Oxfordshire Contaminated">The Oxfordshire Contaminated</a> Land Group Consortium; Oxfordshire Planning Advice Note, Dealing with Land Contamination During Development: A Guide for Developers version 4 dated December 2020 and <a href="Environment Agency Land Contamination: Risk Management 2021">Environment Agency Land Contamination: Risk Management 2021</a>.

# Part 2A Strategic Inspection Requirements

The <u>statutory guidance</u> sets out that local authorities should undertake strategic inspections of their area and detailed inspections on sites where an unacceptable risk may exist. The 2 broad types of inspection that can be carried out are:

- Strategic inspections by collating information to make broad assessments and identify land warranting detailed consideration.
- ii) **Detailed inspections** of ground conditions and carry out risk assessments to establish if land is contaminated by statutory definition.

Significant resources are required to undertake detailed inspections. At present we are not aware of any unacceptable risks presenting themselves and all sites are considered as low risk and low priority (i.e. contaminants may be present but very unlikely to have an unacceptable impact on human health or the environment) for detailed inspection unless:

- there is evidence to suggest that actual harm is occurring (see
   Appendix 2) or
- ii) strong evidence exists that significant harm is likely to occur if the council does not intervene (see **Appendix 2**)

Following detailed inspection(s), should the councils be satisfied that land is or likely to present significant harm to residents' health or controlled waters, the council will formerly determine the land as contaminated land in accordance with the statutory guidance. Remedial action would then be required from the most appropriate person as defined in the statutory guidance.

The council maintains and updates a public register of remedial actions taken on sites formerly determined as contaminated land to keep track of works undertaken.

The current registers can be found on our websites:

#### South Oxfordshire District Council Contaminated Land Public Register

Vale of White Horse District Council Contaminated Land Public Register

The council will follow the most up to date statutory guidance when fulfilling its statutory functions in relation to land contamination. At the time of writing this strategy, it is the 'Department for Food and Rural Affairs Environmental Protection Act 1990: Part 2A Contaminated Land Statutory Guidance dated April 2012'.

# **Appendix One**

## <u>Description/ Characteristics of Vale of White Horse District Area</u> <u>Relevant to the Inspection Strategy</u>

Vale of White Horse is situated in the upper Thames Valley bounded to the north and east by the river Thames and to the south by the Berkshire Downs. The district covers some 224 square miles (580 square kilometres) of country which is predominately rural in nature.

Geographically, the district lies between major centres of population with Swindon located just to the west and Oxford to the northeast. The A34 trunk road runs north to south through the Vale, linking the Solent ports with the Midlands. The motorways M4 and M40 run just to the south and northeast respectively.

It is estimated that around 138,900 people lived in the district in 2021. About half of the population lives in the three historic market towns of Abingdon, Wantage and Faringdon, plus North Hinksey (Botley) and the expanded village of Grove. The remainder is distributed in more than sixty villages and small settlements. The population of the Vale is projected to reach 139,000 by 2026. The main areas of industry and employment in the district are located within the extensive site of Milton Park, on the edge of Didcot, the Didcot Power Station site, and the former atomic energy complex at Harwell (now one of the largest general research centres in Europe). There is also a significant military presence within the district with RMCS Shrivenham and Dalton Barracks.

The Vales three towns and some of its villages are of considerable conservation importance, with Abingdon now thought to be England's oldest continuously inhabited town, from at least 500 BC, and its town centre recognised as an outstanding Conservation Area. The great Benedictine Abbey of St Mary was founded in 675AD of which the 13<sup>th</sup> Century Chequer, the 15<sup>th</sup> Century Gateway and the Long Gallery of around 1500 form a group of buildings of outstanding historic significance. St Helen's Church, with its 13<sup>th</sup> Century steeple, formed a second focus becoming surrounded by a remarkable courtyard of alms-houses unique in England. The town also has many merchant houses and facades of the 17<sup>th</sup> and 18<sup>th</sup> Centuries lining the main streets and the County Hall of 1678, dominating the Marketplace. Wantage is also an area of considerable archaeological significance.

The Vale as a whole has 53 Conservation Areas with 2173 listed buildings of architectural or historic importance of which 44 are Grade I Listed Buildings, 2002 are Grade II and 127 are Grade II. The Vale also has 68 Scheduled Ancient Monuments.

#### **Characteristics of Vale of White Horse District**

As the River Thames meanders through the clay valley of the Vale it is fed by its many significant tributaries, the landscape combining extensive alluvial flats and gravel terraces where the Ock meets the Thames and water meadows, which flood regularly. From Wytham to Kennington the Thames has cut through the limestone and sandstone Corallian ridge, and through the lower greensand at Nuneham. The Corallian aquifer is one of the more important minor aquifers in the Vale.

The northern scarp of the Berkshire Downs and the ledge at its foot is made up of upper, middle, and lower chalk and upper greensand. The upper greensand forms a ledge, narrow in the west of the district and more extensive in the east. The old trackway, the Icknield Way, runs at the foot of the lower chalk but above the spring line issuing from the chalk onto the greensand. Brooks drain from the springs into the river Ock. In the area west of Wantage the upper greensand aquifer is in hydraulic continuity with the overlaying chalk and is therefore classed as a major aquifer, intergranular and fissure flow is taking place with both strata often penetrated by the same boreholes.

The middle and upper chalk at the top of the steep scarp of the Berkshire Downs dip gently southward to form the main plateau of the North Wessex Downs National Landscape. This middle and upper chalk is a major aquifer with high permeability which has a highly productive strata of regional importance.

Due to the landforms of the Vale large areas are of high conservational value including part of the Oxford Green Belt and an important section of the designated North Wessex Downs National Landscape. The water meadows of the river Thames, and the ridge of high ground between Wytham and Buscot have been named as an Area of High Landscape Value in the Oxfordshire Structure Plan and the district's Local Plan. Within the Vale there are also 23 notified Sites of Special Scientific Interest (SSSI), a designated National Nature Reserve (NNR) at Cothill Fen and 5 designated Local Nature Reserves.

#### **Geological Characteristics**

The Clay Valley of The River Thames

The soft Oxford clays have been eroded by the river and are covered in parts by gravels and alluvium. As the river meanders in its valley, the landscape combines water meadows, which flood regularly. In the Oxford area, from Wytham to Kennington, the Thames has cut through the Corallian ridge and at Nuneham, through the lower greensand.

#### The Corallian Ridge

The ridge is made up of limestone and sandstone and runs from Wiltshire to Waterperry with a steep north-facing scar slope between Coleshill and Kennington. In the west the ridge has been dissected by streams, which have eroded deep slopes to hills such as Badbury Hill and Faringdon Folly. Here the ridge is characterised by a significant proportion of ancient woodland. The soils tend to be light and sandy with large arable farms to the west. The sands, which form the heaths around Frilford, are part of the Corallian landscape. The Corallian aquifer is one of the more important minor aquifers supporting several industrial abstractions around Abingdon.

#### The Clay Vale

A broad lowland of Kimmeridge and gault clays forms the centre of Vale of White Horse. The clay vale begins near Uffington where a hilly promontory of lower greensand stretches north as far as the Corallian ridge near Faringdon but leaves on the south side a narrow depression of gault clay which flows a headstream of the River Ock. East of the greensand hillock, the gault meets the Kimmeridge clay and the two form a wide unbroken vale as far as the Thames at Abingdon. There are extensive alluvial flats and gravel terraces where the Ock meets the Thames.

The heavy wet soils of the vale were unattractive to early settlers making farming laborious. They were used for permanent dairy pasture, some of very poor quality, producing little until crop improvements in the early 1900's. Throughout the clay vale, Willows are found on the alluvium, along the river valleys and tributaries where the land tends to be of lower agricultural value.

The western clay vale soils are predominantly pastures and hedgerows and since the loss of Elm trees, has been left with green damp channels, villages usually on outcrops of gravel off the damp land. The western area having heavy soils with low-lying terrain meant management was required on a large scale to ensure maximum benefits.

In the central clay vale, there are hedge less arable fields on the thin gravel terraces, which overlay the clay sub soil, concentrated in the east, between West Hanney and Drayton. The field patterns are larger than on the clay topsoils, though there are still frequent drainage ditches. This part of the vale is much wetter being the last part to be drained.

East of the A34 the eastern clay vale has a thicker layer of gravel overlaying the clay with gravel workings south of Abingdon and near Sutton Courtenay, this area houses the Didcot Power Station. The riverine landscape of the Thames also passes through this area.

The Lower Chalk and Upper Greensand

The northern scarp of the Berkshire Downs and the ledge at its foot is made up of upper, middle, and lower chalk and upper greensand. A distinction can be drawn between: -

- The upper and middle chalk, which comprises the highest part of the escarpment, and the surface of the southern dip-slope; and
- The lower chalk and upper greensand which make up the rest of the scarp in a series of plateaux, and small gentle scarps.

The lower chalk and upper greensand are a transitional landscape area, between the more open tops of the chalk and the pastoral landscape of the flat clay vale. In some areas the lower chalk forms a broad plateau, for example above East Hendred. From this plateau the upper and middle chalk appear as a higher range of hills. In other parts the lower chalk forms smooth fingers of land with valleys between, forming an undulating landscape, again beneath the distinct hill tops formed from the upper and middle chalk (e.g., near West Hendred). Near Uffington the lower chalk narrows to form a narrower ledge before dropping again to the upper greensand.

The upper greensand forms a ledge, narrow in the west of the district and more extensive in the east. The old trackway, the Icknield Way, runs at the foot of the lower chalk but above the springline issuing from the chalk onto the greensand. Brooks drain from the springs into the river Ock. Probably the best soils in the district are found on the upper greensand, and this, combined with the water supply, has led to the narrow band of villages. At its widest, around Harwell, the greensand supports fruit growing, as well as arable farming.

The area around the upper greensand and lower slopes of the lower chalk are characterised by considerable tree cover. The higher parts of the lower chalk are more open with cattle farming and the landscape gentler than the higher Downland, with more cultivation, and better growing conditions for trees and hedgerows. In the area west of Wantage the upper greensand aquifer is in hydraulic continuity with the overlaying chalk and is therefore classed as a major aquifer, intergranular and fissure flow is taking place with both strata often penetrated by the same boreholes.

The Middle and Upper Chalk

The top steep scarp of the Berkshire Downs is formed by the middle and upper chalk. These chalk layers dip gently southward to form the main plateau of the North Wessex Downs Area of Outstanding Natural Beauty. The chalk

has produced a thin grey soil; clay with flints and sarsen stones are sometimes found in the chalk.

The Ridgeway track, said to be one of the oldest roads in Europe, runs broadly along the top of the scarp line with trees and shrubs planted along its route following the Enclosure Acts (1750-1800) to prevent livestock straying into newly cultivated arable fields. Sheep farming, the traditional use of the Downs, is still found because of improved agricultural methods arable farming is also now widespread. This middle and upper chalk is a major aquifer with high permeability which has a highly productive strata of regional importance.

Due to the landforms of the Vale large areas are of high conservational value including part of the Oxford Green Belt and an important section of the designated North Wessex Downs Area of Outstanding Natural Beauty. The water meadows of the river Thames, and the ridge of high ground between Wytham and Buscot have been named as an Area of High Landscape Value in the Oxfordshire Structure Plan and the district's Local Plan. Within the Vale there are also 23 notified Sites of Special Scientific Interest, a designated National Nature Reserve at Cothill Fen and 5 designated Local Nature Reserves.

#### **Current and Past Industrial History**

Land use is predominantly agricultural within the Vale with industry mainly located on industrial estates near the three main towns. It is estimated that prior to 1914 up to 25% of the population were employed within the agricultural sector. These were employed either directly as farmers and farm labourers or within associated industries and traditional crafts such as millers, maltsters, coopers, blacksmiths, saddlers, wheelwrights, and other cottage industries such as basket weaving. Following the shortage of men during the First World War mechanisation took place and this employment sector never recovered. By the late 1920's to mid-1930's the Morris car plant had expanded since its opening in 1912 and now incorporated Pressed Steel and Osberton Radiators as part of its organisation. These were supported by a number of small engineering works in and around the Vale with the MG sports car in production in Abingdon. The traditional industries of Abingdon being brewing, leatherworks, printing, carpet, and furniture manufacturing. During the Second World War Harwell, Kingston Bagpuize, Stanford in the Vale, Grove, and Abingdon wartime airfields became established and later many of these became areas for industrial development with the Ordnance depot at Didcot becoming the Didcot Power Station site.

Harwell became the site for United Kingdom Atomic Energy Authority now also home to the Rutherford High Energy Laboratory, the National Radiological Protection Board and the Medical Research Council. The site gaining its planning status as a research site in 1972. Other research laboratories within the Vale include the Agricultural Research Council Radiobiological Laboratory at Letcombe and the Research Establishment of Esso Ltd, between Harwell and Abingdon.

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This gradual move into research reflects the current main areas of industry and employment in the district today. Large industrial areas have become located within the extensive site of Milton Park, on the edge of Didcot, and as land has become surplus to operational requirements, the Didcot Power Station site, and the former atomic energy complex at Harwell, now one of the largest general research centres in Europe. There is a significant military presence within the district with RMCS Shrivenham and Dalton Barracks.

Some lighter engineering and manufacturing processes are scattered throughout the Vale with the more rural locations tending to house smaller industrial units and businesses. Due to the geology of the Vale with sands, gravel and clays quarrying has taken place over the centuries continuing to the present day with associated industries such as concrete block and heavy clay goods manufacturing and cement batching. Some of the former gravel pits have been used for the tipping of waste.

## <u>Description/ Characteristics of the South Oxfordshire District Area</u> <u>Relevant to the Inspection Strategy</u>

South Oxfordshire is predominately a rural district with a population of approximately 149,100. The small market towns of Henley, Thame and Wallingford together with the larger town of Didcot act as local service centres for people living in the surrounding villages and countryside. Although much of the district is used primarily for agriculture, a high proportion of the population is employed in the service sector, particularly business services, retailing and education. There are also a number of industrial estates within the district, primarily on the periphery of the major towns. These are occupied mainly by warehousing and light industry.

The district is bordered by the green belt of Oxford in the northwest, the counties of Buckinghamshire to the east and Berkshire to the south and west.

The landscape is defined by the Chilterns Hills, the river Thames and its valley and part of the circle of hills that surrounds Oxford City. The Chiltern Hills and North Wessex Downs are part of a chalk upland arc that runs from Dorset to Yorkshire. They dominate the southern stretch of the district and are designated as National Landscapes. Other areas, the north sector and a small area to the extreme south are considered by the Council as worthy of special local protection and have been designated as Areas of Great Landscape Value (AGLV).

The river Thames flows through the district from the northwest southwards to the Goring gap where it cuts through the chalk escarpment and forms the southern boundary of the district before turning northwards and leaving the area at Henley-on-Thames.

The area has a variety of wildlife habitats including river valleys, worked out wet gravel pits, ancient hedgerows, and woodlands. There are numerous designated Sites of Special Scientific Interest (SSSI). These SSSI's include a National Nature Reserve and two Forestry Nature Reserves.

#### **Geological Characteristics**

The geological structure of the district is varied, with limestone to the northwest, clay centrally and chalk downs to the south. The trend of the geological beds runs across the district from southwest to northeast.

The southern and eastern areas are predominated by chalk beds that give way to a succession of older clay beds that underlie the northwest edge of the chalk and outcrop across the middle of the district. Overlying the clay to the west are deposits of river gravel. The gravel beds have been quarried in several places in the district in the past.

The clay beds extend to the Thame area where the town of Thame mainly stands on River Terrace Deposits that overlie Kimmeridge age Sands and Gault Clay, Portland sandstone only appears to the northwest of the town and

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Portland limestone is absent. At depths of 100-200m coal measures overlie older clay beds and oolitic limestone, except in the immediate vicinity of Thame where the coal measures appear absent.

## **Key Water Resources**

The chalk hills of the Chilterns that border the south and east of the district are an important major aquifer, for example the public supply abstraction at Gatehampton in Goring is the largest groundwater abstraction in the UK. The chalk is a permeable rock, through which water percolates and is stored. This aquifer is an important source of public drinking water.

Water abstraction catchment areas for aquifers are important sites, identified by the Environment Agency as Source Protection Zones (SPZ). Within South Oxfordshire there are eleven SPZs, each indicating an area where contamination could pose a significant risk to the ground water.

Thames Water Utilities supplies most of the drinking water to the district. There are approximately 200 private water supplies, predominantly located in the town of Thame, Watlington and Crowmarsh Gifford. The majority of which are boreholes and wells, with a few sources supplied from springs.

# <u>Appendix Two - Categorisation of Contaminated</u> <u>Land</u>

The updated Statutory Guidance in 2012 established four risk categories for contaminated land when assessing the possibility of significant harm to human health from the land. In deciding whether land is contaminated land on grounds of significant possibility of significant harm to human health, the local authority should use the categorisations described in paragraphs 4.19 – 4.30 of the <u>statutory guidance</u>. Categories 1 and 2 encompass land which is capable of being determined as contaminated land on grounds of significant possibility of significant harm to human health. Categories 3 and 4 encompass land which is not capable of being determined as contaminated land. These are outlined in the table below.

Category 1	Site likely not to be suitable for present use and environmental setting. Contaminants probably or certainly present and very likely to have an unacceptable impact on key targets. Urgent assessment action needed in the short term.
Category 2	Site may not be suitable for present use and environmental setting. Contaminants probably or certainly present and likely to have an unacceptable impact on key targets. Action needed in the medium term.
Category 3	Site considered suitable for present use and environmental setting. Contaminants may be present but unlikely to have an unacceptable impact on key targets. Assessment action unlikely to be needed whilst the site remains in present use or otherwise remains undisturbed.
Category 4	Site considered suitable for present use and environmental setting. Contaminants may be present but very unlikely to have an unacceptable impact on key targets. No assessment action needed while site remains in present use or undisturbed.

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