

Breckland Council Contaminated Land Strategy

March 2021

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1.0 Introduction

This document sets out how Breckland Council (BC) will approach the inspection of its district with respect to its statutory requirements under Part 2A of the Environmental Protection Act 1990 (Part 2A) as inserted by Section 57 of the Environment Act 1995. This meets the requirements of section 2.6 of Contaminated Land Statutory Guidance dated April 2012.

This document replaces the original document and all subsequent revisions and sets out the priorities for 2021-2026.

2.0 Background to the Contaminated Land Regime

Under Part 2A of the Environmental Protection Act 1990, Local Authorities in England are given responsibilities for regulating contaminated land. There are two main parts to the local authority's duties under Part 2A – an inspection function and an enforcement function.

Statutory Guidance for regulators (2012) requires the publication of a strategy setting out how the local authority will inspect its area for contaminated land, identify contaminated land and manage the information that it collects in the process.

2.1 What is Contaminated Land?

In general terms, contaminated land usually means land where industrial or other human activities have resulted in the presence of substances in the ground with the potential to cause harm to human health, structures, or the environment. However, in English law the term "contaminated land" means something more specific than this.

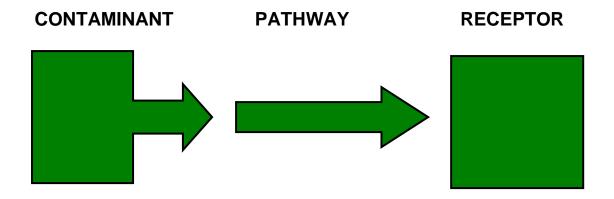
The definition of non-radioactive contaminated land from the Environmental Protection Act 1990, Part 2A is:

'any land which appears to the local authority in whose area it is situated to be in such a condition, by reason of substances in, on or under the land, that –

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

For a relevant risk to exist there needs to be one or more contaminant-receptor linkages – "contaminant linkage". The statutory guidance defines:

- A contaminant is a substance which is in, on, or under the land and which has
 the potential to cause significant harm to a relevant receptor, or to cause
 significant pollution of controlled waters.
- A **receptor** is something that could be adversely affected by a contaminant, for example a person, an organism, an ecosystem, property, or controlled waters.
- A **pathway** is a route by which a receptor is or might be affected by a contaminant.
- A **contaminant linkage** is the relationship between the contaminant (or 'source'), the pathway and the receptor.



All three parts of the contaminant linkage must be in place for a risk to exist.

For example, consider an industrial site that has become contaminated with lead (a toxic metal). The receptor of concern is the people that work on the site. To be harmed by the lead, the people must be able to come into physical contact with the soil that contains the lead – they must be able to inhale soil dust, or get soil in their mouths.

If all the contaminated soil is covered by buildings, concrete and tarmac, the people cannot contact the soil. There is no contaminant linkage, and no risk of harm. In this case, even though a potentially harmful substance was present, the site would not legally be contaminated land.

2.2 What is Radioactive Contaminated Land?

Part 2A also applies to radioactive contaminated land and this is covered by the Radioactive Contaminated Land (RCL) Statutory Guidance June 2018.

Radioactive Contaminated Land is defined as:

any land which appears to the local authority in whose area it is situated to be in such a condition, by reason of substances in, on or under the land, that –

- (a) harm is being caused; or
- (b) there is a significant possibility of such harm being caused.

The trigger for Local Authority inspections relating to radioactivity requires 'reasonable grounds' for believing that land may be radioactively contaminated and is a more limited inspection duty than for the non-radioactive contaminated land regime. If inspections identify that the land meets the statutory definition for radioactive contaminated land, it becomes a 'Special Site', and the Environment Agency becomes the enforcing authority.

At the time of writing BC has no reason to believe that there is any radioactive contaminated land in the district, however, should information come to light which suggests otherwise, the processes given in this document and in the RCL Statutory Guidance 2018, will apply. The remainder of this document refers to non-radioactive contaminated land.

3.0 Aims & Objectives.

3.1 Government Aims.

The main objectives of the Government's policy on contaminated land and the Part 2A regime are:

- 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 as a whole are proportionate, manageable, and compatible with the principles of sustainable development.

Part 2A takes a risk-based approach to defining contaminated land where risk in the statutory guidance is defined as the combination of:

- a) The likelihood that harm, or pollution of water, will occur because of contaminants in, on or under the land; and
- b) The scale and seriousness of such harm or pollution if it did occur.

In conducting assessments under the Part 2A regime the local authority should aim to focus on land which might pose an unacceptable risk.

Risks should only be considered for the current use of the land. The local authority should assume that any future use or development would be carried out in accordance with the National Planning Policy Framework at the time.

Under Part 2A the starting point should be that land is **not** contaminated land unless there is a reason to consider otherwise and that '**enforcing authorities should seek to use Part 2A only where no appropriate alternative solution exists**'.

3.2 Breckland Council Approach

3.2.1 Aims

Breckland Council's Corporate Plan 2019-23 sets out the strategic ambition:

'Breckland: A place where people and business can thrive'.

This will be achieved through four themes, and the table below sets out where this strategy will help to achieve these priorities.

Priority	Critical Activity to which this strategy contributes
Your Place	Ensure the district continues to have high levels of
	safety while continuing to work with our partners to

	further reduce crime, anti-social behaviour and protect the community and the environment. Enable the effective planning and delivery of housing solutions to meet local needs and aspirations to ensure that our residents including veterans have access to a range of housing options in the district
Your Health & Wellbeing	Ensure that our public protection service continues to enable our communities to remain healthy and safe through our regulatory activities including food safety, environmental protection, and licensing
Our Council	Continue to ensure that our regulatory and statutory services remain fully compliant with all current and emerging legislation

BC wishes to identify contaminated land present in its area in the most practical and efficient way and ensure that the most pressing and serious problems are addressed first. BC has therefore identified the following overall aims for this strategy:

- To meet our statutory obligations under Part 2A of the Environmental Protection Act 1990
- To protect human health, important ecological sites, important historic and cultural sites, and the water environment
- To ensure that Part 2A procedures are well integrated with the planning and building control process.
- To be rational, ordered, and efficient in carrying out all inspection work
- To have a body of information for contaminated land that is useful and accessible.
- To aid communication between bodies and individuals interested in contaminated land.
- To have a transparent decision-making process wherever possible

3.2.2 Objectives

In order to achieve our aims, our main objectives are to:

- Ensure that this Contaminated Land Strategy and its implementation meet the requirements of Part 2A.
- Respond proactively to enquiries regarding voluntary remediation, or that required through other regimes, in particular the planning regime.
- Provide readily available information for all interested parties, including members of the public, local businesses and landowners, environmental organisations and also the Council itself.
- Identify sites where contaminated land has already been remediated.
- If an unacceptable environmental risk is identified, ensure that remediation takes place, including on Council owned land.
- Provide and maintain a public register available for access on request.

3.2.3 Internal Management Arrangements

The approval of the Contaminated Land Strategy is an executive function.

The Environmental Protection Team of the Public Protection Service at BC is responsible for carrying out the inspection of land under Part 2A within BC's area of responsibility.

The Environmental Protection Manager is responsible for the management and production of the Contaminated Land Register and has overall responsibility for assessing information and classifying the sites.

The Environmental Protection Team Leader has responsibility for obtaining and collating information.

Contact details for the Environmental Protection Team can be found at the end of this document.

3.2.4 Broader Approach to Land Contamination

As well as through Part 2A, land affected by contamination can be addressed through the planning regime, building regulations and environmental permitting regulations, or voluntarily.

Some sites in Breckland have been remediated voluntarily.

National Planning Policy Framework (NPPF 2019) paragraphs 170 (f), 178 & 179 apply. Specifically, it states:

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

The Breckland Local Plan adopted on November 28th 2019 also considers that contaminated land will be considered for the protection of amenity for all new development. Addressing land contamination through the planning and building control process is currently the primary mechanism for ensuring remediation of contaminated sites within BC. From 1 April 2019 to 21 January 2020, for example, planners referred over 700 consultations relating to land contamination.

3.2.5 Minimising unnecessary burdens

The cost of detailed investigation including sampling, analysis and interpretation can be significant. Local Authority funding is provided through the Revenue Support Grant from the Ministry of Housing, Communities and Local Government such that the statutory obligation under Part 2A of the Environmental Protection Act can be met, however this is unlikely to cover the cost of intrusive investigations or costly remedial work where there is no appropriate person and the Local Authority is then responsible.

Funding from DEFRA through the Contaminated Land Capital Grant scheme ceased in 2017 and there are currently no plans to replace this.

BC will seek to minimise the financial burden to taxpayers, businesses, and individuals by making the planning regime the primary mechanism for ensuring remediation of contaminated sites within the BC area, and in all other cases, encouraging voluntary action as a first step.

3.2.6 Council-owned Land

All sites in the district will be prioritised for detailed inspection on the environmental risk posed, with risk to human health coming first. Therefore, the Council will not prioritise its own landholdings above others for detailed inspection.

Should any land, for which BC are the appropriate person, be found to be statutorily contaminated BC will lead by example in ensuring that the land is remediated to a standard suitable for its current use.

The duties of BC in this strategy will be kept separate from the responsibilities of BC as a landowner.

4.0 Relevant Aspects of the BC Area

The district of Breckland is situated in the centre of Norfolk (see Appendix A Figure 1). The district covers an area of 130,496 hectares (approximately 500 square miles) and is principally a rural area with five towns; Attleborough, Dereham, Swaffham, Thetford and Watton.

Further information on the general characteristics of the area (e.g., geology and hydrology) is given in Appendix A.

4.1 Potentially contaminative land uses

The Breckland area has a wide variety of industry, including engineering, mineral extraction, agriculture, commercial forestry, and military establishments.

There is no history of what could be classed as widespread major polluting industries within the area. However, there are many sites where a degree of pollution could have occurred. The small towns and large villages have a number of sites with historical potentially contaminative land uses, such as former petrol filling stations, gas works, manufacturing industries and railway land.

One of the most significant issues to be considered is that of former landfill sites which are found throughout the District. Prior to 1974 many former ponds and pits were used for the disposal of household and in some cases agricultural and general commercial waste. Limited information is held about the location and content of these waste filled sites. The presence of sand and gravel deposits has allowed for mineral extraction resulting in a large number of excavated sites in Breckland, some of which have been filled as a means of disposing of waste.

Despite being principally in a rural area, there is still a need and a legal requirement for the Council to implement the Contaminated Land Regime. The current and historical uses of parts of the district require the Council to assess whether there are contamination issues that need to be addressed.

4.2 Background concentrations

The Guidance states that the Part 2A regime was not intended to apply to land with levels of contaminants in soil that are commonplace ('background') and widespread where in most cases there is no reason to consider that there is an unacceptable risk.

Normal levels of contaminants in soil may result from:

- a) The natural presence of contaminants at levels that might be considered typical in certain areas and do not pose an unacceptable risk (for example due to the underlying geology).
- b) The presence of contaminants caused by low level diffuse pollution and common human activity other than specific industrial processes.

4.3 Potential receptors

BC will prioritise human receptors above all others. This includes people living, working, and playing on land within our area.

Appendix A gives further characteristics of other vulnerable receptors, for example one area to the south of the district close to Lopham has been designated a Ramsar site, an internationally important bird reservation area. The district also contains a large number of historic properties and scheduled monuments, which, like natural habitats, are considered in the contaminated land legislation as statutory designated receptors.

The chalk aquifer that underlies Breckland is the main source of water for domestic and industrial use in East Anglia. The definition of contaminated land in Part 2A states that pollution of controlled waters (both surface and ground waters) from substances contained in, on or under the land would define the site as contaminated. Breckland has approximately 860 known private water supplies, which supply 1,400 properties/businesses.

Breckland contains a large number of rivers, mainly tributaries of larger rivers beyond the district. The protection of this water not only affects the habitats in the Breckland area, but also those in other areas through which the rivers pass.

5.0 Breckland Council Approach to Inspection

The Statutory Guidance identifies two types of inspection – strategic and detailed.

Strategic inspection involves looking at the district as a whole, to identify those sites which may require further consideration.

Detailed inspection is undertaken on a particular piece of land to obtain specific information on the ground conditions and carrying out of risk assessments to support decisions made under Part 2A.

5.1 Strategic Inspection

5.1.1 Prioritisation of potential sites

In order to identify potential contaminated land in the district, an assessment tool, developed by STM Environmental is used by The Council. This method enables sites to be grouped into four categories according to the 'Potential Hazard Score', of high, medium, low and negligible, focussing on the potential hazards to the human health receptor. Almost 3000 sites have been risk assessed and the process is ongoing.

Potentially contaminated land will continue to be addressed under the planning regime as far as possible. Many sites in the district have already been investigated and remediated prior to development / redevelopment through the planning regime with developers having to ensure that the site is suitable for the proposed end use through a planning condition. Conditions recommended to Planning can require desk studies, site investigation reports, remediation reports and validation reports to be submitted.

As an illustration of this ongoing work, from 1 April 2019 to 21 January 2020, planners referred over 700 consultations relating to land contamination. Addressing land contamination through the planning and building control process is currently the primary mechanism for ensuring remediation of contaminated sites within BC.

5.1.2 Desk Study Review

The Statutory Guidance states that priority will be given to areas that pose the greatest risk to human health or the environment.

As necessary, sites will be subject to a preliminary desk study to establish the potential risk. This is a commonly used method of collating as much information about a site as possible without using intrusive investigation work and will be undertaken in accordance with best practice at the time. Information can be obtained from the following sources:

- Historical mapping
- Planning History of the site and surrounding area.

- Aerial photographs
- Assessment of geological and hydrogeological maps.
- Environmental databases
- Environment Agency Information
- County Council Information
- Discreet site walkover to establish current use and conduct a visual inspection.

Based on the information collated, a preliminary risk assessment can be produced which identifies the source/s of contamination, the pathway/s and the receptor/s and the possible pollutant linkages at the site.

At this point, if a potentially significant contaminant linkage is identified it will move to detailed inspection.

5.1.3 Ongoing Identification of Potentially Contaminated Sites

The work of identifying and prioritising sites that may be contaminated is ongoing as new information comes to light. Information provided by statutory bodies, the planning process and by the general public, businesses and other organisations may identify new sites or affect the prioritisation of sites that have already been identified.

The Environmental Protection Team will not investigate anonymously supplied information unless there are clear signs that there has been a significant pollution incident which may fall under regulations relevant to contaminated land and under the jurisdiction of The Council.

Anecdotal evidence can be a vital source of information when dealing with the contaminated land regime. It should be noted, however, that determinations cannot be made without robust scientific evidence as advocated in the Statutory Guidance. Officer judgement will be used to decide what, if any, investigation is required following receipt of information.

It may become apparent during the course of the detailed inspection of land that the assumptions leading to the original prioritisation of the land prove to be incorrect, and the risks posed by the land are lower than first thought. This again will alter the prioritisation.

5.2 Detailed Inspection

Sites which are still considered to pose an unacceptable risk after the strategic inspection stage will then be subject to further assessment in the form of a detailed inspection.

The purpose of a detailed inspection is to establish enough information:

 About the three elements (contaminant, pathway, receptor) to determine whether the site appears to be contaminated land, and • To decide whether the site falls into the definition of a Special Site

In order to do this we must decide whether the land is contaminated on grounds of:

- Significant Possibility of Significant Harm to Human Health (SPOSH)
- Significant harm and significant possibility of such harm (non-human receptors)
- Significant pollution of controlled waters and significant possibility of such pollution

Part 2A states the starting point should be that land is not contaminated land. The detailed inspection should provide sufficient information such that a risk summary can be produced. The assessor will consider the likely severity of the contamination, the sensitivity of the receptors and the probability of an existence of a pathway.

All assessments will be clearly documented by the Environmental Protection Team and the circumstances of each location will be considered on a site by site basis.

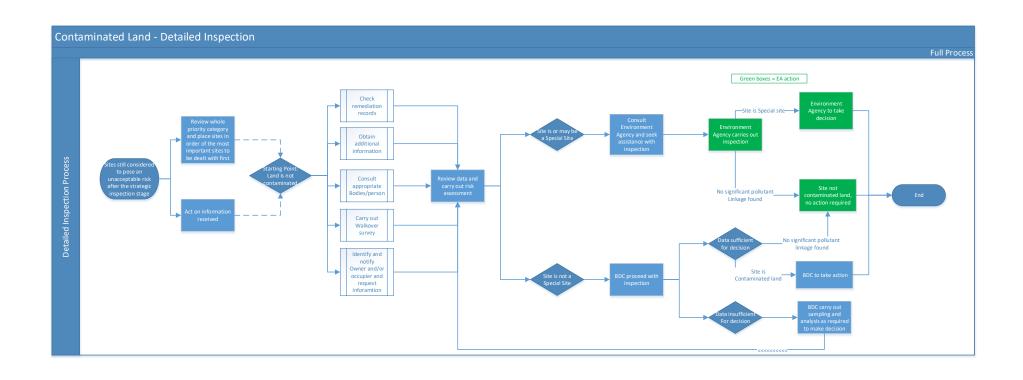
The detailed inspection may include the following actions:

- A collation and assessment of documentary information and evidence (detailed desk study)
- A site visit to carry out a visual inspection and, in some cases, limited surface sampling
- An **intrusive site investigation** involving the sampling and analysis of site soils and groundwater and/or gas and vapour monitoring.

BC will ensure that any intrusive investigations are carried out in accordance with the appropriate technical standards.

BC will ensure that it takes all reasonable precautions to avoid harm, water pollution or damage to natural resources, or features of historical or archaeological interest, whilst carrying out an intrusive investigation. BC will liaise with the Archaeology Service at Norfolk County Council to identify whether or not there is likely to be any significant archaeological remains on the site and where significant contamination is identified on or in an unscheduled archaeological site.

BC has established procedures for carrying out detailed inspections and the methodology is summarised in the following flow chart with further detail given in appendix B.



5.3 Identification of Special Sites

The Environmental Protection Act 1990 identifies a limited number of scenarios where the enforcing authority is the Environment Agency rather than the local authority.

If BC identifies a site that is likely to be a Special Site, the Environment Agency will be notified and the information on the site forwarded to the Agency. BC will retain details of the site and the Environment Agency will notify BC of significant progress on the site's remediation.

5.4 Appointing Consultants

BC may, from time to time, need to appoint external consultants to assist in a number of areas to fulfil its statutory duties, for example:

- · Advise on particular technical issues;
- Undertake some or all of the detailed site inspections.
- Prepare and undertake detailed technical presentations to the general public or to other bodies.

The appointment of consultants will be in accordance with the delegated functions of the Council.

5.5 Timetable for Detailed Inspections

There are no plans to undertake detailed inspections at the current time.

A case specific approach will be employed should it become apparent that detailed inspection is required, and a business case put forward for consideration in accordance with BC procedures.

6.0 Remediation

Remediation is defined in the Statutory Guidance as:

- (a) The doing of anything for the purpose of assessing the condition of
 - (i) the contaminated land in question; or
 - (ii) any controlled waters affected by that land; or
 - (iii) any land adjoining or adjacent to that land.
- (b)The doing of any works, the carrying out of any operations or the taking of any steps in relation to any such land for the purpose
 - (i) of preventing or minimising, or remedying or mitigating the effects of,
 - by reason of which the contaminated land is such land; or
 - (ii) of restoring the land or waters to their former state; or
- (c) The making of subsequent inspections from time to time for the purpose of keeping under review the condition of the land or waters.'

6.1 Remediation Process

BC will follow the process as set out within the Statutory Guidance when serving remediation notices, and at all times will pursue a voluntary approach where a favourable outcome is likely.

The compliance time will be site and situation specific; however, in all instances BC will work with the appropriate persons identified to ensure that the timescales are reasonable and achievable.

Details of the information to be recorded on the public register are given in Appendix C.

6.2 Cost Recovery

Where voluntary remediation is not achieved, BC will seek to recover all costs by identifying the appropriate Class A or Class B persons as set out in the Statutory Guidance.

However, when these persons cannot be found, where they are exempt from liability, or where an orphan linkage is identified, then the enforcing authority (e.g., BC or the Environment Agency) shall bear the cost of remediation.

BC will, in all cases, follow the Statutory Guidance and ensure that any actions required are reasonable.

7.0 Priorities & Conclusion

This strategy has set out the aims, objectives and background the land contamination within the Breckland Council area and has identified processes for both strategic and detailed inspection. The following priorities have been identified in order to guide the future workflow whilst minimising the cost burden to taxpayers.

Our identified priorities are therefore:

- Contaminated Land will be addressed under the planning regime as far as possible. The National Planning Policy Framework requires the Local Planning Authority to take account of land contamination when making planning decisions. If required remedial works must be undertaken to ensure that the site is 'suitable for use' and as a minimum cannot be classed as Contaminated Land under Part 2A.
- 2. Where possible BC will promote a proactive approach to the investigation of a site and encourage remediation of a site to take place voluntarily. BC will consider legal enforcement under Part 2A as a last resort.
- 3. Information on land contamination already collected both through the planning process and Part 2A work will be collated and stored so that it is easily accessible when required. This will aid information requests, consultation processes and transparency in all that we do.
- 4. Part 2A sites will be investigated so that the most pressing and serious problems are located first. Risks to human health will be considered above all other risks so therefore residential land, school and playgrounds, allotments and drinking water abstraction points will be our priority. The investigations will:
 - i. be rational, ordered and efficient
 - ii. be proportionate to the seriousness of any actual or potential risk
 - iii. seek to ensure that the most pressing and serious problems are located first
 - iv. ensure that resources are concentrated on investigating in areas where the authority is most likely to identify contaminated land and not where risks are already being addressed through planning etc. (development land).

The document has set out the approach that BC will take towards dealing with contaminated land in its area, and identified key priorities to guide our implementation of the regime.

By carrying out our investigations in this way BC will therefore minimise the necessary burden on the taxpayer, businesses and individuals whilst still maintaining our statutory requirements.

APPENDIX A CHARACTERISTICS OF THE BRECKLAND AREA

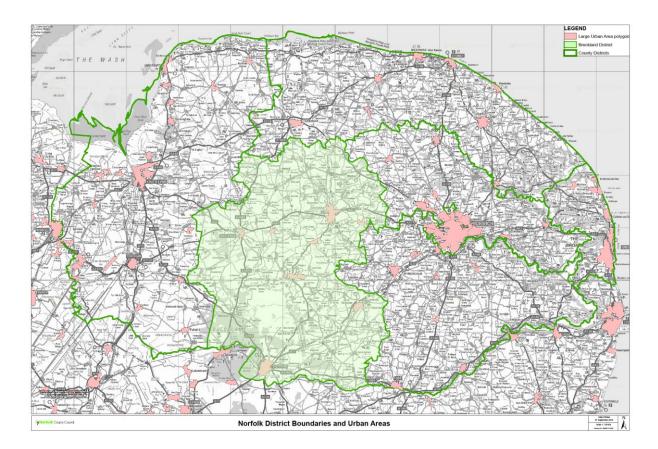
This section gives the background to the Breckland district and an explanation of how this influences the Council's approach to inspection for contaminated land. It will also enable comparison with other authorities.

A.1 Geographical Location

Breckland is located at the heart of Norfolk. It comprises of rural village communities and the five market towns of Attleborough, Dereham, Swaffham, Thetford and Watton.

The area's rural nature is characterised by its 112 parishes and numerous villages.

Figure 1. The Breckland area (Map developed in cooperation with Norfolk County Council)



A.2 Brief Description and History

Ancient heathland once covered huge areas of the Brecks, created by the axes of prehistoric farmers and grazing animals. 'Brecks' were temporary fields cultivated for a few years and then allowed to revert to heath one the soil became exhausted.

Nowadays, agriculture, advanced engineering and manufacturing, logistics and forestry are the dominant business sectors with professional, scientific and technical and food processing not far behind. Breckland's local economy continues to grow bringing new employment to the area.

Thetford and Attleborough are key areas for future housing and business growth.

A.3 Size

Breckland district spans over 500 square miles (1,300 square km)

A.4 Population Distribution

Breckland's population is estimated to grow from the current 140,500 residents to 159,400 by 2041. Half of the current residents live in one of the five market towns with the remainder living in rural village homes. This means that the district has a low population density.

There are numerous villages of varying size and character, plus a sporadic distribution of individual dwellings and small groups of dwellings in the open countryside.

A.5 Principal Land Use Characteristics

Outside the built up areas of the settlements, the majority of the land is farmland. The district also comprises of tree plantations.

A.6 Geology

The geology of the Breckland area is very diverse. The majority of drift geology is from the Quaternary period and comprises Brickearth, various clays and silts, various river terrace deposits and post glacial fluvial deposits. The solid geology of the area is primarily Cretaceous Chalk. The geology is recorded by the British Geological Society and is available on their website.

A7 Hydrology & Hydrogeology

There is a strong link between the groundwater within an area and the hydrogeology of that area. The regulatory authority for controlled waters has a duty to protect the quality of groundwater. In terms of the Part 2A legislation this would be the Local Authority's responsibility or The Environment Agency if the site is determined a Special Site.

The Environment Agency recognises 3 clear divisions for groundwater; Principal, Secondary and Unproductive Strata. The summary of these divisions is shown below:

- The Environment Agency describes Principal Aquifers as "layers of rock or drift deposits that have high inter-granular and/or fracture permeability – meaning they provide a high level of water storage. They may support water supply and/or river base flow on a strategic scale".
- Secondary Aguifers are subdivided as:

"Secondary A – permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers.

Secondary B – predominantly lower permeability layers which may store and yield limited amounts of groundwater due to localised features such as fissures, thin permeable horizons and weathering.

Secondary Undifferentiated – has been assigned in cases where it has not been possible to attribute either category A or B to a rock type. 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

"These are rock layers or drift deposits with low permeability; they have negligible significance for water supply or river base flow".

The chalk aquifer that underlies Breckland is the main source of water for domestic and industrial use in East Anglia. The definition of contaminated land in Part 2A states that pollution of controlled waters (both surface and ground waters) from substances contained in, on or under the land would define the site as contaminated. The depth of the aquifer from the surface varies significantly throughout the district making it vulnerable to contamination the closer it comes to the surface.

Breckland contains a large number of rivers, mainly tributaries of larger rivers beyond the district. The protection of this water not only affects the habitats in the Breckland area, but also those in other areas through which the rivers pass.

A.8 Key Water Resource and Protection Issues

Anglian Water Services Ltd. supplies drinking water in the district.

In addition, Breckland has approximately 860 known private water supplies, which supply 1,400 properties / businesses. The source of the supply may be a well, borehole, spring, stream, river, lake or pond.

The supply may serve just one property or several through a network of pipes.

A.9 Ecological Sites- Protected and Other Locations

Breckland is home to a large number of nature reserves and nature conservation areas. There are also a number of Sites of Special Scientific Interest (SSSI's) and Environmentally Sensitive Areas covering a significant proportion of the land area in Breckland. For instance, the River Nar, East Wretham Heath, Hockering Wood and Badley Moor are designated as SSSIs.

In addition one area to the South of the district close to Lopham has been designated as Ramsar, an internationally important bird reservation area.

- Special Areas of Conservation(including candidate SACs) classified pursuant to Article4 of European Council Directive on the Conservation of Natural Habitats and of Wild Fauna and Flora, and Special Protection Areas(including potential SPAs) classified pursuant to Article4 of European Council Directive on the Conservation of Wild Birds.
- Ramsar sites listed under the Convention on Wetlands of International Importance.
- Sites of Special Scientific Interest (SSSIs) notified under Section 28 of the Wildlife and Countryside Act 1981 (as amended)
- National Nature Reserves (NNRs) declared under Section 19 of the National Parks and Access to the Countryside Act 1949 or Section 35 of the Wildlife and Countryside Act 1981 (as amended)
- Local Nature Reserves (LNRs) declared under Section 21 of the National Parks and Access to the Countryside Act 1949

A.10 Key Property Types

Buildings, property, scheduled monuments and important archaeological sites are all considered receptors that should be protected under the contaminated land regime.

Most of them pre-date industrial development and are not likely to be actually located on contaminated land. Any instances of significant harm would be more likely to be as a result of migration of contamination – for example migrating landfill gas, or contaminants in groundwater.

In 2017, Breckland District recorded 1539 listed buildings, 127 scheduled monuments, 51 conservation areas and 9 registered parks and gardens. Breckland contains a high number of scheduled monuments relative to other local authorities which reflects the importance of the archaeological record within Breckland, where the unique combinations of differing landscapes have been exploited by local people since the Palaeolithic period and have been continuously occupied ever since. Breckland's largely rural character has contributed to the survival of archaeological remains. In addition, the area has been the focus of population in Roman, Saxon, Viking and Medieval periods which have all left their mark, contributing to the historic environment whether archaeology, surviving buildings or settlement patterns.

A.11 Current and Past Industrial History and Some Other Notable Activities

The Breckland area has a wide variety of industry, including engineering, mineral extraction, agriculture, commercial forestry and military establishments.

There are long established major industrial locations across the major towns particularly in the Thetford area.

Across the District there has over the years been infilling of the many pits and ponds in ad hoc fashion. Where the nature of the fill material and method employed remains unrecorded, there may be questions about the stability of the land and possible contamination issues which can only be confirmed through investigation.

A.12 Known Information on Contamination

Information on past industrial use of land is held in our GIS mapping system, and was obtained from a number of sources such as historical mapping, the Environment Agency and the planning department.

There is no history of what could be classed as major, widespread polluting industries within the area, however the towns and large villages were generally self-supporting with smaller scale industrial premises located across the district.

One of the most significant issues to be considered is that of former landfill sites throughout the whole of the District. Prior to 1974 many former ponds and pits were used for the disposal of household and in some cases agricultural and general commercial waste. Limited information is held about the location and content of these waste filled sites.

Information on sites which have been remediated is held within both the Environmental Protection Team records and on the planning file, as appropriate.

A.13 Action Already Taken to Deal with Contamination

Prior to 2001, the Council dealt with any issues relating to contaminated land on an ad-hoc basis either through Building Control, Planning or ultimately Environmental Health.

Since 2001, many sites the district have been investigated and remediated prior to development / redevelopment through the Planning Regime with developers having to ensure that the site is suitable for use through a planning condition. Information submitted is held on the planning file for public inspection.

Some sites in the district have also been investigated and remediated voluntarily.

APPENDIX B Explanation of Flowchart for Detailed Inspection

a) Review priority category

Before commencing detailed inspections on a priority category, the assessor will review the information for each site in the category and decide the relative urgency of each case, in terms of the likelihood that significant harm or water pollution is occurring. This will ensure that the potentially most serious sites are dealt with first. This review will take place only at the start of the inspection process on each category. Similar reviews of progress and relative urgency of cases will be undertaken at regular intervals as part of reviewing the strategy.

b) Check remediation records

The first step in the detailed inspection is to check whether the site has recently been remediated. BC keeps records of site remediation, which are kept up to date through the planning process. If the site has been remediated, the likelihood of significant harm or water pollution may well have been reduced. If this is the case, BC will amend the priority category to reflect the new situation. BC will not automatically assume that remediation has been effective in preventing a significant pollutant linkage, and will seek information to demonstrate that this is so.

c) Obtain additional information

The initial survey and prioritisation process will have provided information that is adequate to determine the likely presence and significance of contamination in most cases. All sites are different, however, and where appropriate BC will carry out further research to clarify the possible sources, pathways and receptors. Examples of further research at this stage would be to request additional large scale historical maps from the Bodleian Library in Oxford; to look at aerial photographs held by the County Library and to make site specific enquiries to relevant statutory bodies and other organisations. BC will make reference to published guidance in seeking further documentary information.

d) Consult appropriate bodies

BC will consult both within BC and externally to seek further details and advice on a site-specific basis. The list of consultees will depend on the nature of the possible significant pollutant linkage. For example, Historic England will be consulted in respect of Scheduled Monuments and where remediation is deemed appropriate consultation with the County Archaeologist will take place. The Environment Agency will be consulted in most cases. BC has already established links with the organisations that may need to be consulted.

e) Carry out walkover survey

BC will visit sites during detailed inspection to confirm the current site use and condition and to look for any evidence of contamination. A standard proforma will be used to ensure that the same information is sought on each site. Walkover surveys will be carried out in accordance with published guidance on best practice.

BC has statutory powers to enter sites to inspect them, but will normally inspect sites by agreement with the site owner and/or occupier. Prior to carrying out the walkover survey, BC will review the information currently held for the site to ensure that there still appears to be a reasonable possibility of the presence of a contaminant, a pathway and a receptor.

f) Identify and notify owner and occupier

BC will make contact with site owners and occupiers at the detailed inspection stage. The principal purposes of this first contact will be to inform them that BC are inspecting the site for contamination problems, and to request any information (e.g. site investigation data) that already exists.

g) Review data and carry out risk assessment

Information from the above activities will be reviewed and used to produce an updated contaminant-pathway-receptor risk assessment. The risk assessment will indicate whether significant harm or water pollution is likely, in a similar manner to the prioritisation procedure. Because there is now more information, the results of the risk assessment will be more reliable.

h) Data sufficient for decision

It is possible that there will be sufficient information to determine that the site appears to be contaminated land or a Special Site without the need for BC to carry out a sampling and analysis. In this case the information must always include evidence that contamination is certainly present on the site.

The risk assessment may show that there is no significant pollutant linkage; for example the landowner may have carried out a site investigation and found no contamination to be present. In these cases, no action will be necessary and BC will not pursue the inspection any further. Details of such sites will remain on BC's database, since changes such as new development on a site can create new pollutant linkages.

i) Carry out sampling and analysis

Where the risk assessment shows that there is a reasonable possibility of a significant pollutant linkage, BC will seek evidence that contamination is actually present on the site. This generally requires taking samples and analysing them for the contaminants that may be present.

The scope of the sampling and analysis required depends on the site. In all cases BC will seek only the information that is required to decide whether the site is contaminated land or a Special Site. In deciding what kind of site investigation is needed, BC will make reference to appropriate published guidance.

In some cases the landowner or occupier, or other party (e.g. an organisation that is, or expects to be the appropriate person) may offer to carry out a site investigation. In these cases, BC will specify minimum requirements for the investigation (for example number of samples, contaminants that must be analysed for, position and depth of samples) to ensure that adequate information is obtained. BC will also agree a timescale within which the information must be provided.

Once adequate site investigation data is obtained, BC will repeat the risk assessment as above, and decide whether the site appears to be contaminated land or a Special Site.

APPENDIX C What shall be contained in the Public Register?

BC is obliged to maintain a public register of specific information about contaminated land in its area of responsibility. Details of what must be included in the register are set out in the Statutory Guidance. Briefly, these details are:

Remediation Notices

Details of the remediation notice:

- 1. Who BC has served a notice on
- 2. Where the contaminated land the notice refers to is
- 3. Why the land is contaminated land, what the contamination is and where it came from (if not from the land in question)
- 4. What the contaminated land is currently used for
- 5. Details of what remediation each appropriate person has to do and when this has to be done by
- 6. The date of the notice

Appeals Against Remediation Notices

Details of any appeal against a remediation notice served by BC and any decision on such an appeal.

Remediation Declarations

Any remediation declaration prepared and published by BC and for any such declaration, details of items 2-5 as detailed in 'Remediation Notices' above.

Remediation Statements

Any remediation statement prepared and published by the responsible person or by BC and for any remediation statement, details of items 2-5 as detailed in 'Remediation Notices' above.

Appeals Against Charging Notices

Any appeal against a charging notice served by BC and any decision on such an appeal.

Designation of Special Sites

Details of any land in BC area of responsibility designated as a Special Site by BC or the Secretary of State and the reasons for this.

Any notice given by the Environment Agency (EA) of its decision to adopt a remediation notice (The EA being the enforcing authority for Special Sites).

Any notice given by or to BC/EA terminating the designation of any land as a Special Site

Notification of Claimed Remediation

Any notification given to BC of remediation claimed to have taken place

Convictions for Offences in relation to a Remediation Notice

Any conviction of a person for any offence in relation to a remediation notice served by BC, including the name of the offender, the date of conviction, the penalty imposed and the name of the Court.

Guidance issued to BC by the Appropriate Agency

Details of any guidance issued to BC for a particular site (by the Environment Agency in most cases)

Other Environmental Controls

Where BC cannot issue a remediation notice because the powers of the appropriate agency (usually the Environment Agency) may be exercised instead:

- 1. Details of items 2-5 in 'Remediation Notices' above for the contaminated land
- 2. Any steps of which BC has knowledge, taken towards remedying any significant harm or pollution of controlled waters that would cause the land to be contaminated land

Where the powers of the appropriate waste regulation authority or waste collection authority may be exercised instead (in relation to deposition of controlled waste which causes the land to be contaminated land) BC may not issue a remediation notice and may record the following details on the register:

- 1. Details of items 2-5 in 'Remediation Notices' above for the contaminated land
- 2. Any known steps taken to remove the waste, or reduce the consequences of its deposit, including steps taken by the EA or waste collection authority and the name of the authority.

Where BC cannot specify something by way of remediation in a remediation notice because this would impede or prevent a discharge to a water body for which a discharge consent is in force:

- 1. Details of the consent
- 2. Details of items 2-5 in 'Remediation Notices' above for the contaminated land

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