Borough Council of King's Lynn & West Norfolk



Environment and Planning

Contaminated Land Inspection Report

Former Brickyard and Landfill, Broadend Road, Walsoken, King's Lynn

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Executive Summary

The Borough Council of King's Lynn and West Norfolk (BCKLWN) has a statutory duty to inspect its district for potentially contaminated land under Part 2A of the Environmental Protection Act 1990. The contaminated land inspection strategy has identified the former brickyard and landfill at Broadend Road, Walsoken as a site which requires detailed inspection.

This site is a former brickyard part of which was then used then as a refuse tip which now forms part of a builder's yard within the district of King's Lynn. An initial assessment of the site was undertaken to assess the potential for harm to human health, controlled waters, the environment and property under Part 2A.

To gather information of the site's history a desk study and preliminary risk assessment were carried out by the Environmental Quality Team. From the evidence gathered during the desk study of the site history and a site walkover, the following can be stated:

- The site was a Brickyard and tile works.
- Part of the site was a refuse tip.
- The site is not indicated on the Environment Agency's web site as a historic landfill.
- Norfolk County Council has no information regarding the use of the site as a refuse tip.
- The site is not located on a Major Aquifer or within a Source Protection Zone.
- The landfill is part of a former industrial site which is not occupied at this time.
- Visual examination of the surface of the landfill did not indicate the presence of any hazardous material.
- The landfill does not appear to have been capped so any ground gases would be able to permeate direct to atmosphere.

Following the initial assessment it was concluded that no additional information was required to characterise and categorise the site. No evidence has been found that the site has been used for the disposal of hazardous waste and the site is unoccupied. This indicated that the site in its current use is unlikely to pose a significant risk to human health or property. There is not a strong case for taking action under Part 2A EPA 1990 and the therefore the site has been classified into category 4 regarding the risk to human health. No evidence was found of significant pollution or significant possibility of such pollution of controlled waters.

Therefore the site is not considered to be contaminated land under Part 2A of the Environmental Protection Act 1990.

1. Introduction

This report details a review of information and written statement about a former brick yard and landfill at Broadend Road, Walsoken, King's Lynn and provides a conclusion on the risk to human health, property, groundwater and the wider environment.

The Contaminated Land Statutory Guidance (DEFRA, 2012) suggests that where the authority has ceased its inspection and assessment of land as there is little or no evidence to suggest that it is contaminated land the authority should issue a written statement to that effect. This document provides that written statement.

2. Desk Study Information

Location

The site's location is shown in Appendix B. The grid reference for the centre of the site is 548223, 309082 and the nearest postcode is PE14 7BQ.

Initial Prioritisation Score

The site was initially assessed as having a 'Very High' Potential Hazard Rating due to the assumed risk to human health and property receptors present on site.

Previous Site Usage

The site (drawing CL17/101) was a Brickyard and Tile Works, part of which was denoted as a refuse tip on historic maps.

Present Site Usage

Its present use comprises a vacant builder's yard and industrial site which is accessed from Broadend Road to the north. Two residential properties are to the north and one is present in the north eastern corner. An orchard is to the east, an industrial estate and transformer station are to the north and open fields and a farm are to the west and south.

Ownership

Enquiries have been made to establish land ownership. This report will be made available to the site owners.

Environmental Setting

Geology

The Solid and Drift Geology Sheet 160, 1:50,000, 1999 and Regional Hydrological Characteristics Sheet 1 1:125 000 shows the site surface is approximately 3 meters above ordnance datum (maOD).

The bedrock geology is the Ampthill Clay Formation - Mudstone (undifferentiated).

Superficial geology was noted as Tidal Flat Deposits - Clay and Silt.¹

¹ BGS website: http://mapapps.bgs.ac.uk/geologyofbritain/home.html

Hydrogeology

The site is on land classified on the Environment Agency website as a non-aquifer and is not within a Source Protection Zone (SPZ).

Hydrology

No water features were noted on site. There are a number of drainage ditches in the fields surrounding the site. No major water features are noted within 500m.

There are no surface water abstraction points within 1000m. No private water or Environment Agency licenced abstractions exists on site or within 500m.

Local Authority Pollution Prevention and Control Regulations

No LAPPC processes are on site or within 500m of the site.

The Environment Agency Web site records

The Environment Agency Web site records the following:

- The site is in an area where Flood Warnings and Flood Alerts are given.
- The site was part of a Nitrate Vulnerable Zone (Surface Water) in 2013 but not in 2017.
- The site is not recorded as being a landfill.
- No significant pollution incidents are recorded within 500m of the site.

MAGIC website records

MAGIC website records the following

- The site is designated as part of a Higher Level Stewardship Themes (England).
- The site forms habitat for:
 - Tree sparrow.
 - Turtle Dove.

Historic Maps

E-map Explorer

Enclosure Map 1800 - 1850 - Not available.

Tithe map circa 1840 – The site is indicated as being part of three fields, numbered 1043, 1044 and 1045. The site is surrounded by fields.

Ordnance Survey 1st Ed. 1879-1886 – The site is labelled as 'Walsoken Brick and Tile Works'. Kilns are indicated as being on site and three structures can be seen.

Historic Maps on file at the Borough Council of King's Lynn and West Norfolk

1843 – 1893: The site and surrounding area have not changed from previous map editions, with the exception that the chalk pits have expanded slightly.

1891 – 1912: The site is depicted as being the 'Walsoken Brick and Tile Works'. Two 'Old Clay Pits' are noted to the north and south of the main production area in the middle of the site. Twelve structures are noted on site, although seven are considered to potentially represent stacks of bricks. A building is depicted to the northeast of the site, which is considered to be a residential property, which is still in existence today.

1904 – 1939: The site is as depicted above with the exception that the 'Old Clay Pits' are no longer named.

1919 – 1943: Not available.

1945 – 1970: The site is depicted as being a builders Yard with a Refuse Tip occupying part of the west of the site. The residential building to the northwest is named as Brickville. An electrical subs station and a fruit packing station are depicted on the opposite side of Broadend Road. The residential house to the northeast is now depicted.

1970 – 1996: Not available.

Aerial Photographs

1945 – 1946 MOD Aerial Photograph - The industrial buildings in the centre of the site are in place and what appear to be excavations are noted to the north and south. Trees are noted to the east and northwest. Brickville is noted to the northwest as is the other residential property to the northeast.

1988 Aerial Photograph - The number of buildings in the centre of the site has reduced and only two are visible. The remainder of the site is covered with vegetation. A curved mark in the ground surface and a reduction in vegetation were noted in the area where the refuse dump was located.

1999 Aerial Photograph – The site is generally as depicted above with the exception that no sign of the Refuse Tip remains, but an area of disturbed ground was noted to the south of Brickville.

2006-09 Aerial Photograph – The industrial area of the site has expanded, with more building and hardstanding being present and appears to be used for storage and other various industrial uses. What appears to be a mound is shown where the Refuse Tip was depicted on the 1945-70 map.

Planning History

Nine planning application exist in the Borough Council records on the site. These are related to industrial uses, construction of residential dwellings and change of use. Details of these applications are presented in Appendix D.

Environment Agency Records

The Environment Agency were contacted and do not have any information regarding the use of the site as a refuse tip.

Norfolk County Council Records

No planning applications are recorded on the County Councils planning system. The Minerals and Waste department of Norfolk County Council was contacted and a search of their records did not provide any additional information.

3. Site Walkover

A site visit was carried out by an Environmental Quality Officer of the Borough Council of King's Lynn and West Norfolk on 17/10/2017 and the following was noted. Photographs are presented in the Appendix A.

The site is located to the south of Broadend Road via a temporary road. The site was generally flat; the central part had been laid to a temporary surface with gravel, and hardcore. The area surrounding the centre of the site was generally covered with scrub vegetation.

The central portion of the site contained several brick and wooden buildings including what appeared to have been former brick kilns. These appeared to have either been used as offices, storage buildings and a mechanical workshop which contained an inspection pit. On the southern boundary several fiberglass boat hulls were noted. Multiple shipping containers were noted on site but were not accessed at this time. Sixteen derelict cars and trucks were noted on the eastern part of the site.

The area where the refuse tip was denoted was generally flat and was surfaced with made ground comprising brick, concrete, gravel and glass in a clay matrix. No hazardous material was noted on the surface of the landfill. A mound of soil intermixed with brick and concrete was noted to the north of the tip, but this appears to have been deposited recently.

A number of empty Intermediate Bulk Containers, labelled as being used to store Adblue, and oil drums were noted adjacent to the mechanical workshop. Adjacent to the drums were other items of scrap metal including a washing machine.

4. Assessment of Site Use

From the assessment of the site using historic maps, aerial photography and a site walk over it has been possible to conclude that the site has been used for mineral extraction and as a brick yard. Part of the site was then depicted to have been used as a refuse tip. Evidence gathered during the site walkover shows that the former excavations have been filled.

Assessment of probability of a contamination event

The site was a brick and tile yard which excavated the site for raw materials. Part of the site appears to have been potentially filled with waste material. It is unknown what material was placed in the refuse tip or if it was capped when filling had been

completed. But from the site walkover it would appear that the site was used to dispose of inert building waste and has not been capped or restored.

The site has undergone landfilling but is located on a former industrial site which is no longer operational. This would limit the potential for direct contact. As the landfill does not appear to have been capped this would allow the permeation of any ground gases generated to directly into the atmosphere. This would significantly reduce the potential for lateral migration of any ground gases into the adjacent residential properties (64m to the north). No humans are present on site and as the site is enclosed the occurrence of casual users (dog walkers) is considered to be rare. Therefore it is considered that the probability of a contamination event effecting human health (via direct contact or inhalation) is considered UNLIKELY.

Given the age of the landfill it is highly unlikely that the landfill was lined against leachate from the landfill but as the site is not located in a source protection zone or above an aquifer the probability of a contamination event affecting groundwater is considered UNLIKELY

Assessment of Hazard

The risks posed by the site have been assessed separately under the separate statutory guidance, the Contaminated Land Statutory Guidance. This is discussed further below:

Human Health

From the materials noted on the surface of the former landfill the landfilled material is considered to probably be inert in nature. No signs of any pollution incidents were noted on site and no pollution incidents are known to have occurred on site. As such the hazard to human health is considered to be LOW.

Property

The site only contains buildings as receptors as stipulated in Table 2 of the Statutory Guidance as presented in Appendix D. No buildings are on the area which was used as a refuse tip. Therefore the hazard to property is considered to be LOW.

Environment

The site and area do not contain any of the receptors stipulated in Table 1 of the Statutory Guidance as presented in Appendix D.

Controlled Water

Groundwater

The landfilled material is considered to probably be inert and no groundwater resources are noted with 1km the area. As such the hazard to groundwater is considered to be LOW.

Surface waters

The landfilled material is considered to probably be inert and no surface water receptors are noted on or within 500m of the site. As such the hazard to surface water is considered to be LOW.

Conceptual site model

The conceptual site model (Table 1) shows the sources, pathways and receptors identified and the subsequent risk classification.

Source	Pathway	Receptor	Probability	Hazard	Risk
Metals and	Direct	Humans	Unlikely	Low	Very Low
metalloids within	contact				
waste material					
	Inhalation				
Metals and	Direct	Property	Unlikely	Low	Very Low
metalloids within	Contact				
waste material					
	Inhalation				
Metals and	Direct	Environment	Unlikely	Low	Very Low
metalloids within	contact				
waste material					
Metals and	Direct	Controlled	Unlikely	Low	Very Low
metalloids within	contact	water			
waste material					

 Table 1: Preliminary conceptual site model

5 Outcome of Preliminary Risk Assessment

No plausible source pathway receptor linkage was identified as no source of contamination has been identified. Therefore further investigation is not considered necessary.

Conclusion

From the information gathered and the site walkover it is apparent that the site was excavated for clay and then backfilled with waste material. The waste material appears to be inert in nature.

No evidence was noted of significant harm and there is not a strong case to consider that the risks from the land are of sufficient concern that the land poses a significant possibility of significant harm to Humans (via direct contact, ingestion and inhalation), Property, Environmental Receptors or Controlled Water as defined in the statutory guidance. CIRIA C552 states that on a site with a very low risk classification 'There is a low possibility that harm could arise to a receptor. In the event of such harm being realised it is not likely to be severe.'²

Human Health

Following the above assessment the site is assessed as Category 4: Human Health³ as set out in the Statutory Guidance, as such no further assessment is considered necessary with regards to the risk to human health.

² Contaminated land risk assessment. A guide to good practice. CIRIA C552, ISBN 0860175529.

³ Appendix E sets out the categories of land in the Contaminated Land Statutory Guidance.

Controlled Waters

No further inspection is considered to be required with regards to controlled waters as it is considered that there is no reasonable possibility that a significant contaminant linkage exists as set out in the Statutory Guidance⁴. This assessment applies to the site's current use.

No further assessment of the site is considered necessary unless additional information is discovered or if the site is considered for redevelopment.

Part 2A status of the site

The site is not considered to be contaminated land under Part 2A of the Environmental Protection Act 1990.

Further Action

This assessment is based on the site's current use and is valid providing no changes are made to the soil, vegetation cover, to surface water conditions or to the site's use.

No further assessment of the site is considered necessary under Part 2A unless additional information is discovered or if changes are made to the site.

⁴ (Contaminated Land Statutory Guidance April 2016)

^{2.13.} If at any stage the local authority considers, on the basis of information obtained from inspection activities, that there is no longer a reasonable possibility that a significant contaminant linkage exists on the land, the authority should not carry out any further inspection in relation to that linkage.

Appendices

Appendix A Site Photographs











Appendix B Drawings



















Project / Details

Drawn by EH&H

Drawing / Reference Number

\$560100055153/008

Broadend Road, Walsoken

Tel. 01553 616200 - Fax. 01553 691663

Appendix C. Borough Council of King's Lynn and West Norfolk Planning Documents

- 16/00163/PREAPP Pre-application enquiry (Outline with consultations): Site for redevelopment for either B1(c)/B8 employment or for starter homes. Application Permitted
- 11/00335/O Outline Application: Construction of a two storey dwelling to be associated and attached to serve an existing storage and logistic business. Application Refused
- 08/02281/O Outline Application: construction of dwelling. Application Refused
- 06/02009/FM Construction of two buildings for storage/warehousing/vehicle parking with associated parking and turning area, bunding and screening. Application Permitted
- O5/02413/FM Construction of two buildings for storage /warehousing/vehicle parking with associated parking and turning area. Application Withdrawn.
- 04/01429/F Erection of 25 metre lattice telecommunications mast- 3 no. antennae- 1 no. 300 mm and 2 no. 600 mm transmission dishes- equipment cabin and associated development
- 2/03/1902/CU Change of use to mixed use comprising vehicle operating centre with associated offices and workshop and facilities, and storage, sorting and distribution of building/construction materials and vehicles and trailers, plant and equipment. Application Permitted.
- 2/02/1299/CU Continued use of land as haulage yard. Application Refused.
- 2/98/0513/LD Operational base for road surfacing business. Application Permitted

Appendix D. Risk Assessment Methodology

The Model Procedures for the Management of Land Contamination (CLR11⁵) provide the technical framework for applying a risk management process when dealing with contaminated land.

The Borough Council's Contaminated Land Strategy has identified priority sites based on mapping and documentary information. The Contaminated Land Inspection Report collates all the existing information on the site and develops a conceptual site model to identify and assess potential pollutant linkages and to estimate risk.

The risk assessment process focuses on whether there is an unacceptable risk, which will depend on the circumstances of the site and the context of the decision. The Council has used a process adapted from CIRIA C552, Contaminated Land Risk Assessment, a guide to good practice⁶ to produce the conceptual site model and estimate the risk of harm to defined receptors. This involves the consideration of the probability, nature and extent of exposure and the severity and extent of the effects of the contamination hazard should exposure occur.

The probability of an event can be classified as follows:

- Highly likely: The event appears very likely in the short term and almost inevitable over the long term, or there is evidence at the receptor of harm or pollution;
- Likely: It is probable that an event will occur, or circumstances are such that the event is not inevitable, but possible in the short term and likely over the long term;
- Low likelihood: Circumstances are possible under which an event could occur, but it is not certain even in the long term that an event would occur and it is less likely in the short term;
- Unlikely: Circumstances are such that it is improbable the event would occur even in the long term.

The severity of the hazard can be classified as follows:

- High: Short term (acute) risk to human health likely to result in 'significant harm' as defined by the Environment Protection Act 1990, Part IIA. Short term risk of pollution of sensitive water resources. Catastrophic damage to buildings or property. Short term risk to an ecosystem or organism forming part of that ecosystem (note definition of ecosystem in 'Contaminated Land Statutory Guidance, April 2012');
- Medium: Chronic damage to human health ('significant harm' as defined in 'Contaminated Land Statutory Guidance, April 2012'), pollution of sensitive water resources, significant change in an ecosystem or organism forming part of that ecosystem (note definition of ecosystem in 'Contaminated Land Statutory Guidance, April 2012');

⁵ https://www.gov.uk/guidance/land-contamination-risk-management

⁶ https://www.brebookshop.com/samples/142102.pdf

• Low: Pollution of non-sensitive water resources. Significant damage to crops, buildings, structures and services ('significant harm' as defined in 'Contaminated Land Statutory Guidance, April 2012'). Damage to sensitive buildings, structures or the environment.

Once the probability of an event occurring and hazard severity has been classified, a risk category can be assigned from the table below:

		Hazard		
		High	Medium	Low
	High Probability	Very High Risk	High Risk	Moderate Risk
bility	Likely	High Risk	Moderate Risk	Moderate/Low Risk
roba	Low Probability	Moderate risk	Moderate/Low Risk	Low Risk
-	Unlikely	Moderate/Low Risk	Low Risk	Very Low Risk
Very High Risk High Risk	There is designate evidence happenir This risk, Urgent in remediat Harm is I identified Realisate Urgent in clarify the remedial	 There is a high probability that severe harm could arise to a designated receptor from an identified hazard, OR, there is evidence that severe harm to a designated receptor is currently happening This risk, if realised, is likely to result in a substantial liability. Urgent investigation (if not undertaken already) and remediation are likely to be required. Harm is likely to arise to a designated receptor from an identified hazard. Realisation of the risk is likely to present a substantial liability. Urgent investigation (if not undertaken already) and remediation are likely to be required. 		
Moderate risk	It's possi from an i any such is more li	It's possible that harm could arise to a designated receptor from an identified hazard. However, it is relatively unlikely that any such harm would be severe, or if any harm were to occur it is more likely that harm would be relatively mild.		
Moderate/Low ri	sk It is poss from an i it is more	It is possible that harm could arise to a designated receptor from an identified hazard. However, if any harm were to occur it is more likely that harm would be relatively mild.		
Low Risk	It is poss from an i realised,	It is possible that harm could arise to a designated receptor from an identified hazard, but it is likely that this harm, if realised, would at worst normally be mild		
Very Low Risk	K There is a low possibility that harm could arise to a receptor. I the event of such harm being realised it is unlikely to be severe.			e to a receptor. In likely to be

Appendix E. Determination of contaminated land – Contaminated Land Statutory Guidance, April 2012

Human Health

Category	
1	The local authority should assume that a significant possibility of significant harm exists in any case where it considers there is an unacceptably high probability, supported by robust science-based evidence that significant harm would occur if no action is taken to stop it. For the purposes of this Guidance, these are referred to as "Category 1: Human Health" cases. Land should be deemed to be a Category 1: Human Health case where:
	(a) The authority is aware that similar land or situations are known, or are strongly suspected on the basis of robust evidence, to have caused such harm before in the United Kingdom or elsewhere; or
	(b) The authority is aware that similar degrees of exposure (via any medium) to the contaminant(s) in question are known, or strongly suspected on the basis of robust evidence, to have caused such harm before in the United Kingdom or elsewhere;
	(c) The authority considers that significant harm may already have been caused by contaminants in, on or under the land, and that there is an unacceptable risk that it might continue or occur again if no action is taken. Among other things, the authority may decide to determine the land on these grounds if it considers that it is likely that significant harm is being caused, but it considers either: (i) that there is insufficient evidence to be sure of meeting the "balance of probability" test for demonstrating that significant harm is being caused; or (ii) that the time needed to demonstrate such a level of probability would cause unreasonable delay, cost, or disruption and stress to affected people particularly in cases involving residential properties.
2	Land should be placed into Category 2 if the authority concludes, on the basis that there is a strong case for considering that the risks from the land are of sufficient concern, that the land poses a significant possibility of significant harm, with all that this might involve and having regard to Section 1. Category 2 may include land where there is little or no direct evidence that similar land, situations or levels of exposure have caused harm before, but nonetheless the authority considers on the basis of the available evidence, including expert opinion, that there is a strong case for taking action under Part 2A on a precautionary basis.
3	Land should be placed into Category 3 if the authority concludes that the strong case described in 4.25(a) does not exist, and therefore the legal test for significant possibility of significant harm is not met. Category 3 may include land where the risks are not low, but nonetheless the authority considers that regulatory intervention under Part 2A is not warranted. This recognises that placing land in Category 3 would not stop others, such as the owner or occupier of the land, from taking action to reduce risks outside of the Part 2A regime if they choose. The authority should consider making available the results of its inspection and risk assessment to the owners/occupiers of Category 3 land.

Category	
4	The local authority should consider that the following types of land should be placed into Category 4: Human Health:
	(a) Land where no relevant contaminant linkage has been established.
	(b) Land where there are only normal levels of contaminants in soil, as explained in Section 3 of this Guidance.
	(c) Land that has been excluded from the need for further inspection and assessment because contaminant levels do not exceed relevant generic assessment criteria in accordance with Section 3 of this Guidance, or relevant technical tools or advice that may be developed in accordance with paragraph 3.30 of this Guidance.
	(d) Land where estimated levels of exposure to contaminants in soil are likely to form only a small proportion of what a receptor might be exposed to anyway through other sources of environmental exposure (e.g. in relation to average estimated national levels of exposure to substances commonly found in the environment, to which receptors are likely to be exposed in the normal course of their lives).

Ecological system effects

Relevant types of receptor	Significant harm	Significant possibility of significant harm
Any ecological system, or living organism forming part of such a system, within a location which is:	The following types of harm should be considered to be significant harm:	Conditions would exist for considering that a significant possibility of significant harm exists to a relevant ecological
A site of special scientific interest (under section 28 of	 Harm which results in an irreversible adverse change, or in some other 	receptor where the local authority considers that:
the Wildlife and Countryside Act 1981)	substantial adverse change, in the functioning of the ecological system	• Significant harm of that description is more likely than not to result from the
• A national nature reserve (under s.35 of the 1981 Act)	within any substantial part of that location; or	contaminant linkage in question; or
• A marine nature reserve (under s.36 of the 1981 Act)	 Harm which significantly affects any species of special interest within that 	 There is a reasonable possibility of significant harm of that description being
 An area of special protection for birds (under 	location and which endangers the long-term	caused, and if that harm
s.3 of the 1981 Act)	maintenance of the	in such a degree of damage to features of special interest
• A "European site" within the meaning of regulation 8	at that location.	at the location in question that they would be beyond
of the Conservation of Habitats and Species	In the case of European sites, harm should also be	any practicable possibility of restoration
Regulations 2010	considered to be significant	Any assessment made for
Any habitat or site afforded policy protection	favourable conservation status of natural habitats at	these purposes should take
under paragraph 6 of	such locations or species	information for that type of
(PPS 9) on nature	deciding what constitutes	particularly in relation to the
Special Areas of	should have regard to the	contaminant.
Special Protection Areas	and to the requirements of	
and listed Ramsar sites); or	and Species Regulations	
 Any nature reserve established under section 	2010.	
21 of the National Parks and Access to the		
Countryside Act 1949.		

Property effects

Relevant types of	Significant harm	Significant
receptor		possibility of
		significant harm
Property in the form of:	For crops, a substantial diminution in	Conditions would exist
	yield or other substantial loss in their	for considering that a
 Crops, including 	value resulting from death, disease	significant possibility of
timber;	or other physical damage. For	significant harm exists to
	domestic pets, death, serious	the relevant types of
Produce grown	disease or serious physical damage.	receptor where the local
domestically, or on	For other property in this category, a	authority considers that
consumption:	from death disease or other serious	likely than not to result
oonoumption,	physical damage.	from the contaminant
 Livestock; 	prijerea. damager	linkage in guestion,
	The local authority should regard a	taking into account
 Other owned or 	substantial loss in value as occurring	relevant information for
domesticated animals;	only when a substantial proportion of	that type of contaminant
	the animals or crops are dead or	linkage, particularly in
• Wild animals which	otherwise no longer fit for their	relation to the
shooting or fishing	intended purpose. Food should be	of the contaminant
rights	purpose when it fails to comply with	or the containinant.
ingine.	the provisions of the Food Safety Act	
	1990. Where a diminution in yield or	
	loss in value is caused by a	
	contaminant linkage, a 20%	
	diminution or loss should be	
	regarded as a benchmark for what	
	or loss	
	011033.	
	In this section, this description of	
	significant harm is referred to as an	
	"animal or crop effect".	
Property in the form of	Structural failure, substantial damage	Conditions would exist
buildings. For this	or substantial interference with any	for considering that a
purpose, building	right of occupation. The local	significant possibility of
erection and any part of	damage or substantial interference	the relevant types of
a building including any	as occurring when any part of the	receptor where the local
part below ground level,	building ceases to be capable of	authority considers that
but does not include plant	being used for the purpose for which	significant harm is more
or machinery comprised	it is or was intended.	likely than not to result
in a building, or buried	In the econ of a cohedular Arcient	from the contaminant
services such as sewers,	In the case of a scheduled Ancient Monument, substantial damage	during the expected
cables	should also be regarded as occurring	economic life of the
	when the damage significantly	building (or in the case of
	impairs the historic, architectural,	a scheduled Ancient
	traditional, artistic or archaeological	Monument the
	interest by reason of which the	foreseeable future),
	monument was scheduled.	taking into account
	In this Operation, this loss shafts and	relevant information for
	in this Section, this description of significant harm is referred to as a	that type of contaminant
	"building effect".	minugo.

Controlled waters

Significant pollution of controlled waters

The following types of pollution should be considered to constitute significant pollution of controlled waters:

(a) Pollution equivalent to "environmental damage" to surface water or groundwater as defined by The Environmental Damage (Prevention and Remediation) Regulations 2009, but which cannot be dealt with under those Regulations.

(b) Inputs resulting in deterioration of the quality of water abstracted, or intended to be used in the future, for human consumption such that additional treatment would be required to enable that use.

(c) A breach of a statutory surface water Environment Quality Standard, either directly or via a groundwater pathway.

(d) Input of a substance into groundwater resulting in a significant and sustained upward trend in concentration of contaminants (as defined in Article 2(3) of the Groundwater Daughter Directive (2006/118/EC)5).

Significant	possibility of significant pollution of controlled waters
Category	
1	This covers land where the authority considers that there is a strong and compelling case for considering that a significant possibility of significant pollution of controlled waters exists. In particular this would include cases where there is robust science-based evidence for considering that it is likely that high impact pollution (such as the pollution described in paragraph 4.38) would occur if nothing were done to stop it.
2	This covers land where: (i) the authority considers that the strength of evidence to put the land into Category 1 does not exist; but (ii) nonetheless, on the basis of the available scientific evidence and expert opinion, the authority considers that the risks posed by the land are of sufficient concern that the land should be considered to pose a significant possibility of significant pollution of controlled waters on a precautionary basis, with all that this might involve (e.g. likely remediation requirements, and the benefits, costs and other impacts of regulatory intervention). Among other things, this category might include land where there is a relatively low likelihood that the most serious types of significant pollution might occur
3	This covers land where the authority concludes that the risks are such that (whilst the authority and others might prefer they did not exist) the tests set out in Categories 1 and 2 above are not met, and therefore regulatory intervention under Part 2A is not warranted. This category should include land where the authority considers that it is very unlikely that serious pollution would occur; or where there is a low likelihood that less serious types of significant pollution might occur.
4	 This covers land where the authority concludes that there is no risk, or that the level of risk posed is low. In particular, the authority should consider that this is the case where: (a) No contaminant linkage has been established in which controlled waters are the receptor in the linkage; or (b) The possibility only relates to types of pollution described in paragraph 4.40 above (i.e. types of pollution that should not be considered to be significant pollution); or (c) The possibility of water pollution similar to that which might be caused by "background" contamination as explained in Section 3.