



# **South Derbyshire District Council**

## **Contaminated Land Inspection Strategy**

### **Appendices**

**2012 - 2017**

**Version 5**

# Contents

APPENDIX A- SPECIAL SITE REQUIREMENTS .....	3
APPENDIX B- DEFINITION AND ACCEPTED PRINCIPLES OF CONTAMINATED LAND.....	4
APPENDIX C- STATUTORY GUIDANCE DEFINED RECEPTOR TYPES AND CATEGORIES.....	6
APPENDIX D- SAMPLE QUARTERLY CONTAMINATED LAND INSPECTION REPORT .....	16
APPENDIX E- CONTAMINATED LAND SEARCH SERVICE.....	17
APPENDIX F- ACUMEN PROJECT .....	18
APPENDIX F- REFERENCES.....	19

## Appendix A- Special Site Requirements

Contaminated land of the following descriptions is prescribed as land required to be designated as a special site-

*Land which is causing the pollution of controlled waters;*

*Land which is contaminated by waste acid tars;*

*Land on which certain activities such as oil refining and explosive manufacture have been carried on;*

*Land on which either an IPC or IPPC process is or has been carried on;*

*Land within a nuclear site;*

*Land owned or occupied by or on behalf of a defence organisation;*

*Land on which the manufacture, production or disposal of chemical, biological or toxic weapons has ever been carried on;*

*Land under Section 1(1) of the Atomic Weapons Establishment Act.*

If the Council believes that the land is potentially a special site, it will seek to make arrangements for the Environment Agency to carry out the inspection.

## **Appendix B- Definition and accepted principles of contaminated land**

Part 2A of the 1990 Act defines “contaminated land”, and provides for the Secretary of State to issue guidance on how local authorities should determine which land is contaminated land and which is not. Relevant sections of the Act include:

*Section 78A(2): “contaminated land” is any land which appears to the local authority in whose area it is situated to be in such a condition, by reason of substances in, on or under the land that – (a) significant harm is being caused or there is a significant possibility of such harm being caused; or (b) significant pollution of controlled waters is being caused, or there is a significant possibility of such pollution being caused;*

*Section 78A(4): “Harm” means harm to the health of living organisms or other interference with the ecological systems of which they form part and, in the case of man, includes harm to his property.*

*Section 78A(5): The questions – (a) what harm or pollution of controlled waters is to be regarded as “significant”, and (b) whether the possibility of significant harm or of significant pollution of controlled waters being caused is “significant”, shall be determined in accordance with guidance issued for the purpose by the Secretary of State in accordance with section 78YA below.*

*Section 78A(6): Without prejudice to the guidance that may be issued under sub-section (5) above, guidance under paragraph (a) of that sub-section may make provision for different degrees of importance to be assigned to, or for the disregard of (a ) different descriptions of living organisms or ecological systems or of poisonous, noxious or polluting matter or solid waste matter; (b) different descriptions of places or controlled waters, or different degrees of pollution; or (c) different descriptions of harm to health or property, or other interference; and guidance under paragraph (b) of that subsection may make provision for different degrees of possibility to be regarded as “significant” (or as not being “significant”) in relation to different descriptions of significant harm or of significant pollution.*

The following accepted principles of what constitutes contaminated land are collated from various sources and guidance documents; a full list of these can be found in the references section of this appendices document.

### **Significant Harm**

Harm is defined in Section 78(4) of Part 2A as:

*“harm to the health of living organisms or other interference with the ecological systems of which they form part and, in the case of man, includes harm to his property”.*

Section 4 (4.5, 4.6 & Tables 1 & 2) of the Statutory Guidance defines categories of significant harm to human and non-human receptors.

### **Significant Possibility of Significant Harm (SPOSH)**

SPOSH is defined in Section 4.2 and 4.3 of the Statutory Guidance, as essentially a measure of the probability or frequency of the occurrence of circumstances that would lead to significant harm being caused.

## Appropriate Persons

An appropriate person is defined in section 78F(2) of Part 2A as:

*“any person, or any of the persons, who caused or knowingly permitted the substances, or any of the substances, by reason of which the contaminated land in question is such land to be in, on or under that land is an appropriate person”.*

The definition above relates to a “Class A person”. Where it is not possible to identify the Class A person responsible, the following definition from section 78F(4) of Part 2A applies:

*“if no person has, after reasonable inquiry, been found who is by virtue of subsection (2) above, an appropriate person to bear responsibility for the things which are to be done by way of remediation, the owner or occupier for the time being of the land in question is an appropriate person”.*

This second definition refers to a “Class B person”. Further information can be found in Appendix B.

## Pollutant Linkages

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

### Pollutant Linkage



A **contaminant** (sometimes referred to as a source) is a substance which is in, on or under the land and which has the potential to cause harm.

A **receptor** is either:

- A living organism, a group of living organisms, an ecological system or a piece of property, which
- Is listed in Section 4 of the Statutory Guidance and
- Is being, or could be, harmed by a contaminant; or
- Controlled waters which are being, or could be, polluted by a contaminant; or
- Any person who is or who could be subject to lasting exposure to radiation.

A **pathway** is one or more routes or means by, or through, which a receptor is, or could, be exposed to or affected by a contaminant. Some pathways (e.g. controlled waters) may also act as receptors and vice versa.

## Risk Assessment

In order to determine whether land is contaminated, a risk-based approach will be used. Risk is a combination of:

- The probability or frequency of the occurrence of a defined hazard (such as a receptor being negatively affected); and
- The magnitude (including the seriousness) of the consequences.

## **Appendix C- Statutory guidance defined receptor types and categories**

### **Significant harm to human health**

The paragraphs below set out categories of harm that should be considered to be significant harm to human health. In all cases the harm should be directly attributable to the effects of contaminants in, on or under the land on the body(ies) of the person(s) concerned.

Conditions for determining that land is contaminated land on the basis that significant harm is being caused would exist where: (a) the local authority has carried out an appropriate, scientific and technical assessment of all the relevant and available evidence; and (b) on the basis of that assessment, the authority is satisfied on the balance of probabilities that significant harm is being caused (i.e. that it is more likely than not that such harm is being caused) by a significant contaminant(s).

The following health effects should always be considered to constitute significant harm to human health: death; life threatening diseases (e.g. cancers); other diseases likely to have serious impacts on health; serious injury; birth defects; and impairment of reproductive functions.

Other health effects may be considered by the local authority to constitute significant harm. For example, a wide range of conditions may or may not constitute significant harm (alone or in combination) including: physical injury; gastrointestinal disturbances; respiratory tract effects; cardio-vascular effects; central nervous system effects; skin ailments; effects on organs such as the liver or kidneys; or a wide range of other health impacts. In deciding whether or not a particular form of harm is significant harm, the local authority should consider the seriousness of the harm in question: including the impact on the health, and quality of life, of any person suffering the harm; and the scale of the harm. The authority should only conclude that harm is significant if it considers that treating the land as contaminated land would be in accordance with the broad objectives of the regime.

If the local authority decides that harm is occurring but it is not significant harm, it should consider whether such harm might be relevant to consideration of whether or not the land poses a significant possibility of significant harm. For example, this might be the case if there is evidence that the harm may be a precursor to, or indicative or symptomatic of, a more serious form of harm, or that repeated episodes of minor harm (e.g. repeated skin ailments) might lead to more serious harm in the longer term.

In cases where the local authority considers that: (i) significant harm may be being caused, or is likely to have been caused in the past; and (ii) there is a significant possibility that it may happen again, the authority may choose to consider whether to determine the land on grounds of significant possibility of significant harm (as an alternative to consideration that significant harm is being caused).

### **Significant possibility of significant harm to human health**

In deciding whether or not a significant possibility of significant harm to human health exists, the local authority should first understand the possibility of significant harm from the relevant contaminant linkage(s) and the levels of uncertainty attached to that understanding; before it goes on to decide whether or not the possibility of significant harm is significant.

### **Possibility of significant harm to human health**

In assessing the possibility of significant harm to human health from the land and associated issues, the local authority should act in accordance with the advice on risk assessment.

The term “possibility of significant harm” as it applies to human health, for the purposes of this guidance, means the risk posed by one or more relevant contaminant linkage(s) relating to the land. It comprises:

- (a) The estimated likelihood that significant harm might occur to an identified receptor, taking account of the current use of the land in question.
- (b) The estimated impact if the significant harm did occur i.e. the nature of the harm, the seriousness of the harm to any person who might suffer it, and (where relevant) the extent of the harm in terms of how many people might suffer it.

In estimating the likelihood that a specific form of significant harm might occur the local authority should, among other things, consider:

- (a) The estimated probability that the significant harm might occur: (i) if the land continues to be used as it is currently being used; and (ii) where relevant, if the land were to be used in a different way (or ways) in the future having regard to the guidance on “current use”.
- (b) The strength of evidence underlying the risk estimate. It should also consider the key assumptions on which the estimate of likelihood is based, and the level of uncertainty underlying the estimate.

In some cases the local authority’s assessment of possibility of significant harm may be based, solely or partially, on a possible risk that may exist if circumstances were to change in the future within the bounds of the current use of the land. For example, an assessment may be based on a possible risk if a more sensitive receptor were to move onto the land at some point in the future. In such cases the authority should ensure that the possibility of the future circumstance occurring is taken into account in estimating the overall possibility of significant harm.

The local authority should estimate the timescale over which the significant harm might become manifest, to the extent that this is possible and practicable (and recognising that often it may only be possible and practicable to give a broad indication of the estimated timescale).

Having completed its estimation of the possibility of significant harm, the local authority should produce a risk summary.

### **Deciding whether a possibility of significant harm is significant (human health)**

The decision on whether the possibility of significant harm being caused is significant is a regulatory decision to be taken by the relevant local authority. In deciding whether the possibility of significant harm being caused is significant, the authority is deciding whether the possibility of significant harm posed by contamination in, on or under the land is sufficiently high that regulatory action should be taken to reduce it, with all that would entail. In taking such decisions, the local authority should take account of the broad aims of the regime.

In deciding whether or not land is contaminated land on grounds of significant possibility of significant harm to human health, the local authority should use the categorisations described below. Categories 1 and 2 would 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 would encompass land which is not capable of being determined on such grounds.

In considering whether a significant possibility of significant harm exists, the local authority should consider the number of people who might be exposed to the risk in question and/or the number of people it estimates would be likely to suffer harm. In some cases, the authority may decide that this is not a particularly relevant consideration: it is quite possible that land could be determined as contaminated land on the basis of a significant possibility of significant harm to an individual or a small number of people. However in other cases the authority may consider that the number of people affected is an important consideration, for example if the number of people at risk substantially alters the authority's view of the likelihood of significant harm or the scale and seriousness of such harm if it did occur.

### **Category 1: Human Health**

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.

### **Category 4: Human Health**

The local authority should not assume that land poses a significant possibility of significant harm if it considers that there is no risk or that the level of risk posed is low. For the purposes of this Guidance, such land is referred to as a "Category 4: Human Health" case. The authority may decide that the land is a Category 4: Human Health case as soon as it considers it has evidence to this effect, and this may happen at any stage during risk assessment including the early stages.

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 this Guidance, or relevant technical tools or advice that may be developed in accordance with 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).



The local authority may consider that land other than the types described in the paragraph above should be placed into Category 4: Human Health if following a detailed quantitative risk assessment it is satisfied that the level of risk posed is sufficiently low.

Local authorities may decide that particular land apparently matching the descriptions of paragraph 4.21 (b) or (d) immediately above poses sufficient risk to human health to fall into Categories other than Category 4. However, such cases are likely to be very unusual and the authority should take particular care to explain why the decision has been taken, and to ensure that it is supported by robust evidence.

### **Categories 2 and 3: Human Health**

For land that cannot be placed into Categories 1 or 4, the local authority should decide whether the land should be placed into either: (a) Category 2: Human Health, in which case the land would be capable of being determined as contaminated land on grounds of significant possibility of significant harm to human health; or (b) Category 3: Human Health, in which case the land would not be capable of being determined on such grounds.

The local authority should consider this decision in the context of the broad objectives of the regime and of the Government's policy. It should also be mindful of the fact that the decision is a positive legal test, meaning that the starting assumption should be that land does not pose a significant possibility of significant harm unless there is reason to consider otherwise. The authority should then, in accordance with paragraphs below, decide which of the following two categories the land falls into:

(a) Category 2: Human Health. 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.

(b) Category 3: Human Health. Land should be placed into Category 3 if the authority concludes that the strong case described above 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.

In making its decision on whether land falls into Category 2 or Category 3, the local authority should first consider its assessment of the possibility of significant harm to human health, including the estimated likelihood of such harm, the estimated impact if it did occur, the timescale over which it might occur, and the levels of certainty attached to these estimates. If the authority considers, on the basis of this consideration alone, that the strong case described above does or does not exist, the authority should make its decision on whether the land falls into Category 2 or Category 3 on this basis regardless of the other factors discussed in the paragraph below.

If the authority considers that it cannot make a decision in line with the guidance above, it should consider other factors which it considers are relevant to achieving the objectives of the Part 2A regime. This should include consideration of:

(a) The likely direct and indirect health benefits and impacts of regulatory intervention. This would include benefits of reducing or removing the risk posed by contamination. It would

also include any risks from contaminants being mobilised during remediation (which would in any case have to be considered under other relevant legislation); and any indirect impacts such as stress-related health effects that may be experienced by affected people, particularly local residents. If it is not clear to the authority that the health benefits of remediation would outweigh the health impacts, the authority should presume the land falls into Category 3 unless there is strong reason to consider otherwise.

(b) The authority's initial estimate of what remediation would involve; how long it would take; what benefit it would be likely to bring; whether the benefits would outweigh the financial and economic costs; and any impacts on local society or the environment from taking action that the authority considers to be relevant.

In making its consideration in regard to the above, the local authority is not required to make a detailed assessment. For example, the consideration should not necessarily involve quantification of the impacts, particularly if the authority considers it is not possible or reasonable to do so, and the authority is not expected to produce a detailed cost-benefit or sustainability analysis. Rather it is expected to make a broad consideration of factors it considers relevant to achieving the aims of the regime.

If, having taken the above factors into account, the local authority still cannot decide whether or not a significant possibility of significant harm exists, it should conclude that the legal test has not been met and the land should be placed in Category 3.

#### **Significant harm and significant possibility of such harm (non-human receptors)**

In considering non-human receptors, the local authority should only regard receptors described in Tables 1 and 2 below, as being relevant for the purposes of Part 2A (e.g. harm to an ecological system outside the description in Table 1 should not be considered to be significant harm). Similarly, in considering whether significant harm is being caused or there is a significant possibility of such harm, the authority should only regard the forms of harm described in Tables 1 and 2 as being relevant.

Tables 1 and 2 below give guidance on how the local authority should go about deciding whether or not: (i) significant harm is being caused; or (ii) there is a significant possibility of such harm to non-human receptors. In making such decisions the authority should have close regard to the objectives of the Part 2A regime and should only consider determining land as contaminated land if it is satisfied it would be in accordance with the broader aims of the legislation

In Tables 1 and 2, references to "relevant information" mean information which is: (a) scientifically-based; (b) authoritative; (c) relevant to the assessment of risks arising from the presence of contaminants in soil; and (d) appropriate to inform the determination of whether any land is contaminated land.

In considering "ecological system effects" described in Table 1, the local authority should consult Natural England and have regard to its comments before deciding whether or not to make a determination.

**Table 1- Ecological System Effects**

<b>Relevant Types of Receptor</b>	<b>Significant Harm</b>	<b>Significant Possibility of Significant Harm</b>
Any ecological system, or living organism forming part of such a system, within a location which is:  • a site of special scientific interest (under section 28 of the Wildlife and Countryside Act 1981)	The following types of harm should be considered to be significant harm:  • harm which results in an irreversible adverse change, or in some other substantial	Conditions would exist for considering that a significant possibility of significant harm exists to a relevant ecological receptor where the local authority considers that:

<ul style="list-style-type: none"> <li>• a national nature reserve (under s.35 of the 1981 Act)</li> <li>• a marine nature reserve (under s.36 of the 1981 Act)</li> <li>• an area of special protection for birds (under s.3 of the 1981 Act)</li> <li>• a “European site” within the meaning of regulation 8 of the Conservation of Habitats and Species Regulations 2010</li> <li>• any habitat or site afforded policy protection under paragraph 6 of Planning Policy Statement (PPS 9) on nature conservation (i.e. candidate Special Areas of Conservation, potential Special Protection Areas and listed Ramsar sites); or</li> <li>• any nature reserve established under section 21 of the National Parks and Access to the Countryside Act 1949.</li> </ul>	<p>adverse change, in the functioning of the ecological system within any substantial part of that location; or</p> <ul style="list-style-type: none"> <li>• harm which significantly affects any species of special interest within that location and which endangers the long-term maintenance of the population of that species at that location.</li> </ul> <p>In the case of European sites, harm should also be considered to be significant harm if it endangers the favourable conservation status of natural habitats at such locations or species typically found there. In deciding what constitutes such harm, the local authority should have regard to the advice of Natural England and to the requirements of the Conservation of Habitats and Species Regulations 2010.</p>	<ul style="list-style-type: none"> <li>• significant harm of that description is more likely than not to result from the contaminant linkage in question; or</li> <li>• there is a reasonable possibility of significant harm of that description being caused, and if that harm were to occur, it would result in such a degree of damage to features of special interest at the location in question that they would be beyond any practicable possibility of restoration.</li> </ul> <p>Any assessment made for these purposes should take into account relevant information for that type of contaminant linkage, particularly in relation to the ecotoxicological effects of the contaminant.</p>
--	--	--

**Table 2- Property Effects**

Relevant Types of Receptor	Significant Harm	Significant Possibility of Significant Harm
<p>Property in the form of:</p> <ul style="list-style-type: none"> <li>• crops, including timber;</li> <li>• produce grown domestically, or on allotments, for consumption;</li> <li>• livestock;</li> <li>• other owned or domesticated animals;</li> <li>• wild animals which are the subject of shooting or fishing rights.</li> </ul>	<p>For crops, a substantial diminution in yield or other substantial loss in their value resulting from death, disease or other physical damage. For domestic pets, death, serious disease or serious physical damage. For other property in this category, a substantial loss in its value resulting from death, disease or other serious physical damage.</p> <p>The local authority should regard a substantial loss in value as occurring only when a substantial proportion of the animals or crops are dead or otherwise no longer fit for their intended purpose. Food should be regarded as being no longer fit for purpose when it fails to comply with the provision of the Food Safety Act 1990. Where a diminution in yield or loss in value is caused by a contaminant linkage, a 20%</p>	<p>Conditions would exist for considering that a significant possibility of significant harm exists to the relevant types of receptor where the local authority considers that significant harm is more likely than not to result from the contaminant linkage in question, taking into account relevant information for that type of contaminant linkage, particularly in relation to the ecotoxicological effects of the contaminant.</p>

	<p>diminution or loss should be regarded as a benchmark for what constitutes a substantial diminution or loss.</p> <p>In this Guidance, this description of significant harm is referred to as an “animal or crop effect”.</p>	
<p>Property in the form of buildings. For this purpose, “building” means any structure or erection, and any part of a building including any part below ground level, but does not include plant or machinery comprised in a building, or buried services such as sewers, water pipes or electricity cables.</p>	<p>Structural failure, substantial damage or substantial interference with any right of occupation.</p> <p>The local authority should regard substantial damage or substantial interference as occurring when any part of the building ceases to be capable of being used for the purpose for which it is or was intended.</p> <p>In the case of a scheduled Ancient Monument, substantial damage should also be regarded as occurring when the damage significantly impairs the historic, architectural, traditional, artistic or archaeological interest by reason of which the monument was scheduled.</p> <p>In this Chapter, this description of significant harm is referred to as a “building effect”.</p>	<p>Conditions would exist for considering that a significant possibility of significant harm exists to the relevant types of receptor where the local authority considers that significant harm is more likely than not to result from the contaminant linkage in question during the expected economic life of the building (or in the case of a scheduled Ancient Monument the foreseeable future), taking into account relevant information for that type of contaminant linkage.</p>

### **Significant pollution of controlled waters and significant possibility of such pollution**

This sub-section gives Guidance on how the local authority should go about deciding whether significant pollution of controlled waters is being caused, or whether there is a significant possibility of such pollution being caused. This sub-section deals with controlled waters as a receptor in contaminant linkages, and not as a pathway.

In establishing whether significant pollution of controlled waters is being caused, or whether there is a significant possibility of such pollution being caused, the local authority should have regard for any technical guidance issued by the Environment. If the authority considers it likely that land might be contaminated land on such grounds, it should consult the Agency and have strong regard to the Agency’s advice.

### **Pollution of controlled waters**

Under section 78A(9) of Part 2A the term “pollution of controlled waters” means the entry into controlled waters of any poisonous, noxious or polluting matter or any solid waste matter. The term “controlled waters” in relation to England has the same meaning as in Part 3 of the Water Resources Act 1991, except that “ground waters” does not include waters contained in underground strata but above the saturation zone.

Given that the Part 2A regime seeks to identify and deal with significant pollution (rather than lesser levels of pollution), the local authority should seek to focus on pollution which: (i) may be harmful to human health or the quality of aquatic ecosystems or terrestrial ecosystems directly depending on aquatic ecosystems; (ii) which may result in damage to material property; or (iii) which may impair or interfere with amenities and other legitimate uses of the environment.

### **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)).

In some circumstances, the local authority may consider that the following types of pollution may constitute significant pollution: (a) significant concentrations of hazardous substances or non-hazardous pollutants in groundwater; or (b) significant concentrations of priority hazardous substances, priority substances or other specific polluting substances in surface water; at an appropriate, risk-based compliance point. The local authority should only conclude that pollution is significant if it considers that treating the land as contaminated land would be in accordance with the broad objectives of the regime. This would normally mean that the authority should conclude that less serious forms of pollution are not significant. In such cases the authority should consult the Environment Agency.

The following types of circumstance should not be considered to be contaminated land on water pollution grounds:

- (a) The fact that substances are merely entering water and none of the conditions for considering that significant pollution is being caused set out in the paragraphs above are being met.
- (b) The fact that land is causing a discharge that is not discernible at a location immediately downstream or down-gradient of the land (when compared to upstream or up-gradient concentrations).
- (c) Substances entering water in compliance with a discharge authorised under the Environmental Permitting Regulations.

### **Significant pollution of controlled waters is being caused**

In deciding whether significant pollution of controlled waters is being caused, the local authority should consider that this test is only met where it is satisfied that the substances in question are continuing to enter controlled waters; or that they have already entered the waters and are likely to do so again in such a manner that past and likely future entry in effect constitutes on-going pollution. For these purposes, the local authority should:

- (a) Regard substances as having entered controlled waters where they are dissolved or suspended in those waters, or (if they are immiscible with water) they have direct contact with those waters on or beneath the surface of the water.
- (b) Take the term “continuing to enter” to mean any measurable entry of the substance(s) into controlled waters additional to any which has already occurred.
- (c) Take the term “likely to do so again” to mean more likely than not to occur again.

Land should not be determined as contaminated land on grounds that significant pollution of controlled waters is being caused where: (a) the relevant substance(s) are already present in controlled waters; (b) entry into controlled waters of the substance(s) from land has ceased; and (c) it is not likely that further entry will take place.

### **Significant possibility of significant pollution of controlled waters**

In deciding whether or not a significant possibility of significant pollution of controlled waters exists, the local authority should first understand the possibility of significant pollution of controlled waters posed by the land, and the levels of certainty/uncertainty attached to that understanding, before it goes on to decide whether or not that possibility is significant. The term “possibility of significant pollution of controlled waters” means the estimated likelihood that significant pollution of controlled waters might occur. In assessing the possibility of significant pollution of controlled waters from land, the local authority should act in accordance with the advice on risk assessment in this guidance

In deciding whether the possibility of significant pollution of controlled waters is significant the local authority should bear in mind that Part 2A makes the decision a positive legal test. In other words, for particular land to meet the test the authority needs reasonably to believe that there is a significant possibility of such pollution, rather than to demonstrate that there is not.

Before making its decision on whether a given possibility of significant pollution of controlled waters is significant, the local authority should consider:

- (a) The estimated likelihood that the potential significant pollution of controlled waters would become manifest; the strength of evidence underlying the estimate; and the level of uncertainty underlying the estimate.
- (b) The estimated impact of the potential significant pollution if it did occur. This should include consideration of whether the pollution would be likely to cause a breach of European water legislation, or make a major contribution to such a breach.
- (c) The estimated timescale over which the significant pollution might become manifest.
- (d) The authority’s initial estimate of whether remediation is feasible, and if so what it would involve and the extent to which it might provide a solution to the problem; how long it would take; what benefit it would be likely to bring; and whether the benefits would outweigh the costs and any impacts on local society or the environment from taking action.

The local authority should consider these factors in the context of the broad objectives of the regime. It should also consider how the factors interrelate (e.g. likelihood relative to impact). The authority should then decide which of the following categories the land falls into. Categories 1 and 2 would comprise cases where the authority considers that a significant possibility of significant pollution of controlled waters exists. Categories 3 and 4 would comprise cases where the authority considers that a significant possibility of such pollution does not exist.

**Category 1 (Water):** 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 would occur if nothing were done to stop it.

**Category 2 (Water):** 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

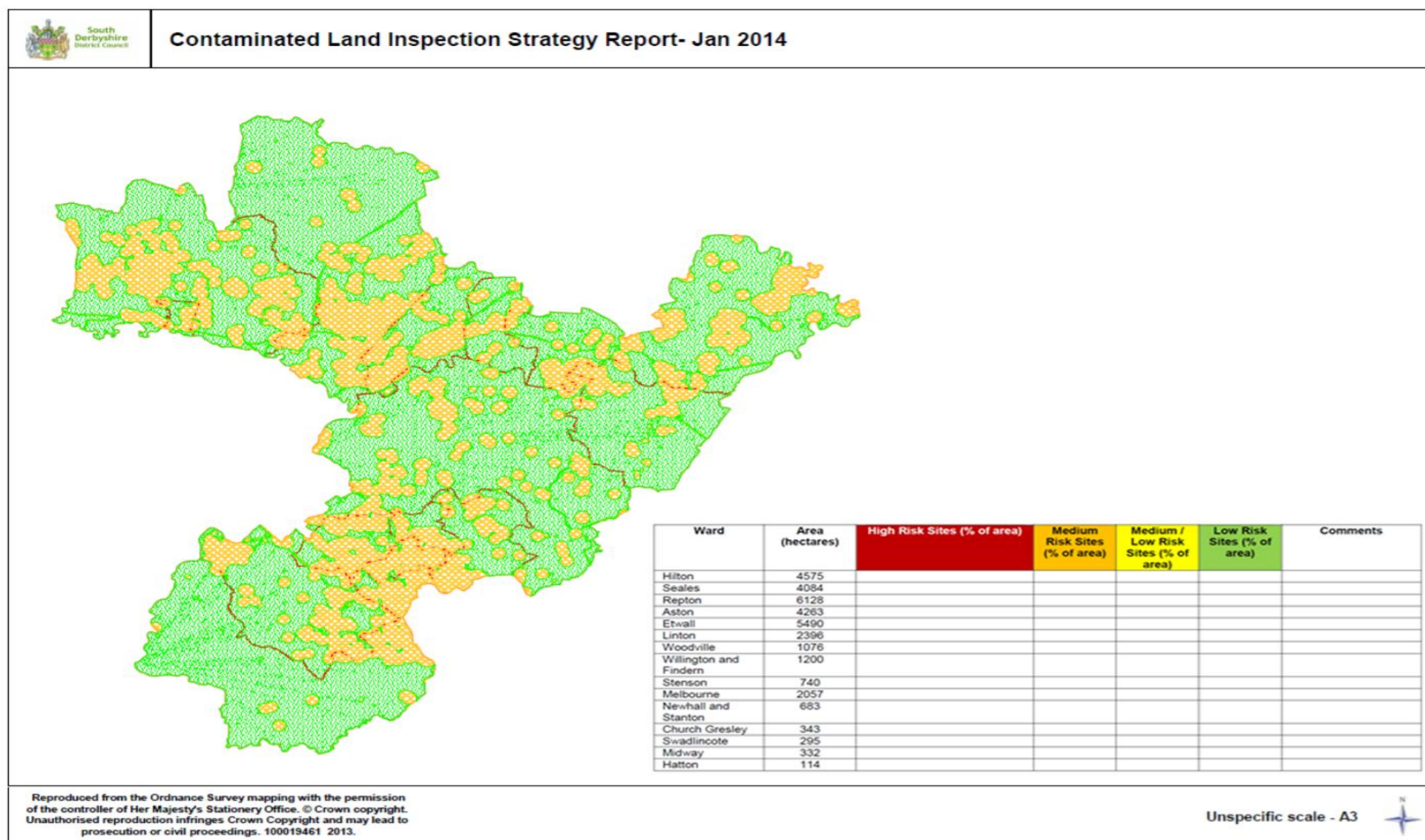
include land where there is a relatively low likelihood that the most serious types of significant pollution might occur.

**Category 3 (Water):** 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.

**Category 4 (Water):** 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 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.



## Appendix D- Sample quarterly contaminated land inspection report





## Appendix E- Contaminated land search service

There is provision within the Environmental Information Regulations 2004 for the Council to charge for the supply of environmental information that is not stored on the public register. A service charge for gathering this information is required and the Council aim to provide this within 5 working days for a Standard Search and 15 working days for an Enhanced Search, upon confirmation of the level of search required. We currently offer two levels of search listed below:

### **Standard Search (solicitors and householders)**

This search will outline South Derbyshire District Council's position in terms of Part 2A EPA (our inspection strategy) and our intentions for the land. We will also make clear the past historical uses of the land and surrounding area.

The information provided in a standard search is aimed at solicitors and individuals for land and property conveyancing. The service charge for this search is £30.00

### **Enhanced search (developers and consultants)**

This search will provide the information included within the Standard Search above, and the following:

- Detailed historical land use information and potential sources of contamination.
- Pollution incidents, records and potential hazards in relation to the site and area within influencing distance.
- A planning history of the site and surrounding area, including information regarding relevant site investigatory work and confirmation of the Local Planning Authority's sign off of any contaminated land planning conditions where available.
- Geological and hydrogeological information.
- Any other relevant concerns or information South Derbyshire District Council hold on the site.

The information provided in an Enhanced Search is aimed at providing developers and consultants with relevant background information to begin appropriate risk assessment activities prior to development or conveyancing. This may not be sufficient in satisfying Local Planning Authorities concerns in relation to contaminated land planning conditions or building control regulations. The service charge for this search is £150.00

## Appendix F- ACUMEN Project

ACUMEN- Assessing, Capturing and Utilising Methane from Expired and Non-operational landfills; an EU LIFE+ project for 2012-2015.

The ACUMEN project is a partnership between the Environment Agency, Norfolk County Council, Ground Gas Solutions, BioGas, the UK Department of Energy and Climate Change, the UK Department for Environment Food and Rural Affairs and Warsaw University of Technology. All the partners are contributing resources towards the project which is supported by the European Union (EU) LIFE+ Programme. The project started in September 2012 and will complete in August 2015.

The goal of the ACUMEN project is to demonstrate approaches to reducing methane emissions from closed landfills. The project will:

- Demonstrate an effective approach for assessing methane production from a range of closed landfill sites.
- Establish the technical and economic viability of capturing, utilising and mitigating methane from closed landfills by monitoring and assessing the results from the project.
- Communicate the lessons learnt from ACUMEN and disseminate the outputs to encourage other public bodies to capture methane from closed landfill sites.

There are currently economic and technical uncertainties hampering wide take up of new technologies to manage methane emissions from closed and historic landfill sites. The ACUMEN project will involve field scale demonstrations of effective methodologies, technologies and techniques for assessing, mitigating and utilising the methane emitted from closed and historic landfill sites. This will involve close working with the landfill site owners.

The main outputs from the project will be technical reports that highlight what we have learnt from the field scale demonstrations and how this could apply to other landfills within the UK and across Europe.

### Further information

We will provide updates on our work as the project progresses – If you would like to receive these by email please email us at [acumen@environment-agency.gov.uk](mailto:acumen@environment-agency.gov.uk) and we will include you on our mailing list.

For further information about the project, please visit [www.environment-agency.gov.uk/acumen](http://www.environment-agency.gov.uk/acumen). Or follow us on Twitter @ACUMEN\_Project

## Appendix F- References

**British Standards Institution, 1981** BS5930: Code of Practice for Site Investigation

**British Standards Institution, 2001** BS10175: Investigation of potentially contaminated sites – Code of practice

**DCLG: Department for Communities and Local Government, 2012** Nation Planning Policy Framework. HMSO

**Defra: Department for Environment, Food and Rural Affairs, 2006** Defra Circular 01/2006. Environmental Protection Act 1990: Part 2A. Contaminated Land

**Defra: Department for Environment, Food and Rural Affairs, 2012** Defra Circular 04/2012. Environmental Protection Act 1990: Part 2A Contaminated Land Statutory Guidance

**DoE: Department of the Environment, 1995** CLR Report No 06 - Prioritisation and Categorisation Procedure for Sites which may be Contaminated. HMSO

**DoE: Department of the Environment, 1997** CLR Report No 12 - A Quality Approach for Contaminated Land Consultancy. HMSO

**DETR: Department of the Environment, Transport and the Regions, 1994** CLR Report No 3 – Documentary Research of Industrial Sites. HMSO

**DETR: Department of the Environment, Transport and the Regions, 1994** CLR Report No 5 – Information Systems for Land Contamination. HMSO

**DETR: Department of the Environment, Transport and the Regions, Environment Agency and the Institute for Environment and Health, 2000** Guidelines for Environmental Risk Assessment and Management – Revised Departmental Guidance. HMSO

**DETR: Department of the Environment, Transport and the Regions, 2001** Contaminated Land Inspection Strategies, Technical Advice for Local Authorities. HMSO

**Environment Agency, 1998** Local Environment Agency Plan, Derbyshire Derwent Consultation Report. London: The Stationery Office

**Environment Agency, 2000** Guidance for the Safe Development of Housing on Land Affected by Contamination. HMSO

**Environment Agency, 2000** Part 2A, EPA (1990) (England) Process Handbook. EAS/2703/2/1

**Environment Agency, 2001** Local Authority Guide to the Application of Part 2A of the Environmental Protection Act 1990

**Environment Agency, 2002** *Assessing Risks to Ecosystems from Land Contamination*. R&D Technical Report 299. Environment Agency and SNIFFER

**Environment Agency, 2004** Contaminated Land Report 11 (CLR 11) – Model Procedures for the Management of Land Contamination.

**Environment Agency, 2006** Remedial Targets Methodology. Hydrogeological Risk Assessment for Land Contamination

**Environmental Protection Act 1990** Part 2A, Contaminated Land. Introduced by s57 of the Environment Act 1995. HMSO

**Hooker P.J. and others, 2000** Some Guidance on the use of Digital Environmental Data. BGS Technical Report No. WE/99/14.

**ICRCL, 1987** Guidance on the Assessment and Redevelopment of Contaminated Land. ICRCL 59/83 2nd Edition. HMSO

**Office of the Deputy Prime Minister, 2004** Planning Policy Statement 23: Planning and Pollution Control. HMSO

**Scotland and Northern Ireland Forum for Environmental Research (SNIFFER), 1999** Communicating Understanding of Contaminated Land Risks

**South Derbyshire District Council, 1998** Local Plan: Adopted Version

**South Derbyshire District Council, 2000** Best Value Performance Plan

**South Derbyshire District Council, 2006** Planning Policy Position Statement

**Statutory Instrument 2000** No. 227 Environmental Protection (England), The Environmental Protection Act (England) Regulations 2000 HMSO

**Statutory Instrument 2004 No. 3391** Freedom of Information, Environmental Protection. Environmental Information Regulations 2004. HMSO.

**The Environmental Protection Group, 2011.** CIRIA/Environmental Protection UK Ground gas seminar – A pragmatic approach to ground gas risk assessment for the 21<sup>st</sup> century

**Thelwell, E, 2013** Contaminated Land Briefing Note, Environmental Protection Act 1990: Part 2A – Statutory Guidance (revised April 2012). Derbyshire Pollution Group.