

CONTAMINATED LAND STRATEGY 2014-2019



CRAVEN DISTRICT COUNCIL

July 2014.

CONTENTS

		Page No.
Executive Summary		6
Chapter 1: Introduction		7
1	Introduction	7
1.1	Regulatory Context	7
1.2	Definition of Contaminated Land	8
1.3	Radioactivity	8 - 9
1.4	Special Sites	9
1.5	Contaminated Land Register	9 - 10
1.6	Pollutant Linkages	10 - 11
1.7	Significant Harm to Human Health	11
1.8	Significant Possibility of Significant Harm(SPOSH) To Human Health	11 - 12
1.9	Normal Levels of Contamination	12 - 13
1.10	Risk Assessment	13
1.11	Roles and Responsibilities	14
1.11.1	The Regulatory Role of the Local Authority	14 - 15
1.11.2	The Regulatory Role of the Environment Agency	15 - 16
1.11.3	Other Regulatory Regimes	16
1.11.4	Planning and Development Control	16
1.12	Pollution of Controlled Waters	17
1.13	Waste Management – Licencing / Permitting	17
1.14	Environmental Permitting & Integrated Pollution Prevention Control (IPPC)	17 - 18
1.15	The Environmental Damage (Prevention and Remediation) Regulations 2009	18
1.16	Situations where the Part 2A Regime does not apply	18
1.16.1	Statutory Nuisance	18
1.16.2	Waste on Land	18
1.16.3	Food Safety	18 - 19
1.16.4	Organisms	19
1.16.5	Risk of Harm to Employees	19
1.16.6	Risk of Harm following an incident at a COMAH site (Control of Major Accident Hazard Regulations 1999)	19
1.17	Craven District Council’s Vision and Priorities	19
1.17.1	Craven Vision	19
1.17.2	Craven Priorities	19 - 20
1.17.3	Objectives of the Strategy	20
Chapter 2: Characteristics of Craven		20

2.1	Geographical Location	20 - 21
2.1.1	Broad Geological Characteristics	21
2.1.2	Broad Hydro-Geological Characteristics	21 - 22
2.1.3	Groundwater Source Protection Zones	22
2.2	Brief Description / History	22
2.3	Size	22
2.4	Population Distribution	22
2.5	Land Owned by the Council	23
2.6	Current Land Use Characteristics	23
2.7	Protected Locations	23
2.8	Key Property Types	23 – 24
2.9	Key Water Resources/Protection Issues	24
2.10	Known Information on Contamination	24
2.11	Current and Historical Use	24
2.11.1	Lead Mining	24
2.11.2	Lime Manufacture	24 – 25
2.11.3	Quarrying Operations	25
2.11.4	Woollen Industry	25
2.11.5	Tanning	25
2.11.6	Coal Mining	25
2.11.7	Gasworks and Waste Disposal Activities	25
2.12	Radon	25
2.13	Redevelopment Controls	26
Chapter 3: Craven District Council's Aims and Objectives		26
3.1	Aims	26
3.2	Objectives	26 – 27
3.3	Strategic Inspection (Prioritisation)	27 - 28
3.4	Land in Council Ownership	28 - 29
3.5	Consultation	29
3.6	Dealing with Urgent Sites	29
3.7	General Approach to Inspection	29
3.8	Local Development Framework/Local Plan Land	29 – 30
3.9	Threats to Controlled Waters / Protected Areas and Buildings	30
3.10	Final Prioritisation	30
3.11	Timetable	30
Chapter 4: Procedures – Arrangements for Identification, Inspection and Collection of Information		31
4.1	Internal Management Arrangements for Inspection and Identification	31
4.2	Information Management	32

4.3	Complaints and Voluntary Information Provision	32
4.3.1	Complaints	32
4.3.2	Voluntary Provision of Information	33
4.4	Confidentiality	33
4.5	Anonymously Supplied Information	33
4.6	Anecdotal Evidence	33
4.7	Risk Assessment	33
4.7.1	Risk Assessment of Controlled Waters	34
4.8	Interaction with Other Regulatory Regimes	34
4.9	Planning	34
4.10	Duty of Site Operator Under Environmental Permitting Regulations)	34
4.11	Information Collection	35 – 36
4.12	Receptors	36
4.13	Controlled Waters	36 – 37
4.14	Special Sites	37
Chapter 5: Procedures – Arrangements for Detailed Inspections		37
5.1	Categorisation and Prioritisation	37
5.2	Desktop Study and Site Walkover	37 – 38
5.3	Reviewing Site Specific Information Provided by Others	38 – 39
5.4	Detailed Site Inspection	39
5.5	Intrusive Site Inspection	39
5.6	Statutory Powers of Entry to Undertake Site Inspections	39 – 40
5.7	Arrangements for Inspection by the Environment Agency	40
5.8	Liaison with Neighbouring Local Authorities	40 – 41
5.9	Risk Assessment	41
5.10	Soil Guideline Values (SGV's)	41
5.11	Risk Assessment for Other Substances	42
5.12	Risk Assessment Models	42
5.13	Risk Assessment for Controlled Waters	42
5.14	Risk Assessment for Radioactivity	42
Chapter 6: Procedures - Determinations, Enforcement and Remediation Notices		43
6.1	Determination on Land Being Contaminated Land	43
6.2	Where Determination on Land Being 'Contaminated Land' Cannot be Made	43 – 44
6.3	Land which may be a 'Special Site'	44
6.4	Format of Information	44
6.5	Liability	44 – 45
6.5.1	Appropriate Persons	45
6.5.2	Apportionment of Costs	45

6.6	Enforcement	45
6.6.1	Remediation Notices	45 – 46
6.6.2	Remediation by the Council	46
6.6.3	Remediation on Council Owned Land	46
6.7	Urgent Action	46 – 47
6.8	Appeals	47
Chapter 7: Communication and Liaison		47
7.1	Statutory Consultees	47 – 48
7.2	Communicating with Owners, Occupiers and Other Interested Parties	48
7.3	Designating an Area of Contaminated Land	48
7.4	Serving a Remediation Notice	48 – 49
7.5	Powers of Entry	49
7.6	Enforcement Action	49
7.7	Risk Communication	49
7.8	Public Register	49 – 50
7.9	Provision of Information to the Environment Agency	50 – 51
7.10	Provision of Information to Interested Parties	51
7.11	Environmental Enquiry - General information	51 – 52
7.12	Information from detailed site inspections	52
Chapter 8: Review Mechanisms		52
8.1	Triggers for Undertaking Non-Routine Inspections	52 – 53
8.2	Triggers for Reviewing Inspection Decisions	53
8.3	Review of the Strategy	53
8.4	Review of Register	54
Appendices		55 – 66
Appendix A - Industry Profiles		55 – 56
Appendix B - Statutory Consultees		57
Appendix C – Site Inspection Summary Sheet		58 – 65
Appendix D – Developers Guide		66
Appendix E – Glossary of Terms		67 - 71

EXECUTIVE SUMMARY

This document is the Contaminated Land Strategy for Craven District Council. The authority produced an original strategy in 2001 as required by Part 2A of the Environmental Protection Act 1990 and undertook a subsequent review of the strategy in 2011.

Since then, there have been updates to the Regulations and major changes to the Statutory Guidance issued by Defra and also the approach to risk assessment in the UK which underpins assessment of land affected by contamination and the regulatory role played by local authorities.

The Strategy has been written to reflect the changes to the new Defra Statutory Guidance issued in April 2012 and outlines how the authority will identify and deal with contaminated land within the District.

The Strategy considers the Priority Aims and Objectives of the authority and takes into consideration the diverse natural setting of the District and local circumstances when deciding how to deal with land contamination.

The Strategy outlines a list of actions, policies and procedures that the authority will adopt when faced with specific issues such as orphan sites, pollution incidents, hardship and risks to human health or controlled waters.

The Strategy also presents sections on how information is obtained and evaluated, how information is managed, how information will be communicated and with whom, and how, when and why decisions and information will be reviewed.

CHAPTER 1

1.0 Introduction

Local Authorities have a duty to deal with contaminated land. There are two ways of doing this, through the planning process, as contaminated sites are redeveloped and also by direct action using Part 2A of the Environmental Protection Act 1990 (EPA) to enforce remediation of contaminated sites.

Much progress has been achieved through the planning process in Craven as many dormant sites have been redeveloped and the contamination consequently dealt with to prevent any risks to the subsequent occupants of the land or other receptors. The Council intends to continue to use its resources to deal with contaminated land.

There is however, a statutory duty under Part 2A of the EPA for Local Authorities to inspect land within their area from 'time to time', for the purpose of identifying and dealing with contaminated land within its district. Statutory Guidance required each Local Authority to prepare, publish and adopt a strategy setting out how they will achieve this which resulted in the publication of Craven District Councils first Contaminated Land Strategy in 2001 this document was reviewed in 2011.

There has been significant research and development within the contaminated land field that has resulted in changes to the legislation and guidance on how we deal with contaminated land and this has resulted in this current revision of the Councils strategy.

This strategy sets out the approach that Craven District Council will take to identify and remediate contaminated land.

1.1 Regulatory Context

The primary legislation, the Environmental Protection Act 1990 (the Act) was amended by the introduction of a new Part 2A by Section 57 of the Environment Act 1995 and contains the structure and main provisions of the new regime in Sections 78A to 78YC. The Contaminated Land (England) Regulations 2000 enacted Part 2A of the Environmental Protection Act 1990 which was extended in 2006 by new modification regulations to include land that is contaminated by virtue of radioactivity. Further regulations came into force in December 2007 extending the regime to cover land contaminated by radioactivity originating from nuclear installations (Radioactive Contaminated Land (Modification of Enactments) (England) (Amendment) Regulations 2007) but the revised Statutory Guidance, issued by DEFRA in April 2012 does not include radioactively contaminated land.

The Local Authority (Craven District Council) is the regulatory authority for contaminated land within the boundaries of the Craven district of North Yorkshire

1.2 Definition of Contaminated Land

The definition of 'Contaminated Land' is set out in Part 2A Environmental Protection Act 1990, and the requirement for a risk assessment approach. It also takes account of the revised Statutory Guidance, issued by DEFRA in April 2012.

Section 78A(2) of Part 2A defines 'contaminated land' as "any land which appears to the local authority in whose area the land 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, or is likely to be, caused."

The definition has been amended to include radioactive contaminated land (The Radioactive Contaminated Land (Modification of Enactments) (England) (Amendments) Regulations 2010).

'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.

Under Part 2A risks should be considered only in relation to the current use of the land. Current use is defined as the purpose for which the land is currently employed, reasonably likely future uses, temporary uses or informal uses, which do not require a new planning permission.

1.3 Radioactivity

Prior to regulation in 1960, activities such as the use and disposal of radioactive substances, e.g. isotope based paint use, could lead to radioactive contamination, as a result of spills or poor disposal methods and records. The Radioactive Industry Profile published by DEFRA, identifies activities that may contribute to radioactive contamination and this will be studied to establish any sites within the district likely to require prioritisation for detailed inspection. It is considered unlikely however that any sites will be found meeting the relevant criteria for land contaminated by radioactivity originating from nuclear installations.

Radioactive contamination is dealt with separately to non-radioactive contamination and in April 2012 new statutory guidance was issued by the Secretary of State for Energy and Climate Change in accordance with section 78YA of the Environmental Protection Act 1990 as it applies to harm attributable to radioactivity. Section 78YC of Part 2A EPA 1990 gives powers to the Secretary of State to make regulations applying the Part 2A regime, with any necessary modifications, for the purpose of dealing with harm attributable to radioactivity. These powers have been exercised in the Radioactive Contaminated Land (Enabling Powers) (England) Regulations 2005 and the Radioactive Contaminated Land (Modification of Enactments) (England) Regulations 2006 to establish a legal framework for dealing with radioactive contaminated land in England.

The radioactive contaminated land regime only covers contamination which has resulted from the after-effects of a radiological emergency or a past practice or past work activity. It does not apply to current practices and natural background radiation. In addition, the regime and therefore this Guidance does not apply in relation to land within a nuclear site or an MOD nuclear site or where remediation is to be undertaken by a local authority in implementation of an emergency plan under regulation 13(2) of the Radiation (Emergency Preparedness and Public Information) Regulations 2001.

Part 2A requires that local authorities cause their areas to be inspected with a view to identifying radioactive contaminated land, and to do this in accordance with the statutory guidance. The trigger for a local authority to cause land to be inspected is where it considers that there are *reasonable grounds* for believing that land may be radioactive contaminated land. For example we would have reasonable grounds if we have knowledge of relevant information relating to:

- a. a former historical land use, past practice, past work activity or radiological emergency, capable of causing lasting exposure giving rise to the radiation doses set out in the statutory guidance; or
- b. levels of contamination present on the land arising from a past practice, past work activity or radiological emergency, capable of causing lasting exposure giving rise to the radiation doses set out in the statutory guidance.

If the council consider that there are reasonable grounds for believing land may be radioactive contaminated land we will inspect the land to obtain sufficient information on type, level and extent of the contamination. If land is radioactive contaminated land it will fall within the definition of a 'special site' prescribed in regulation 2 of the Contaminated Land (England) Regulations 2006 and the Environment Agency will be the enforcing authority in respect of that land.

1.4 Special Sites

In certain cases, the Environment Agency is the regulatory authority for the contaminated land legislation. This arises if the site under investigation has been used for certain processes, or if the site is situated on bedrock classed as a major aquifer (i.e. water-bearing strata). In the legislation, these sites are referred to as "Special Sites". Details are given in the Statutory Instrument 2000 No 227 The Contaminated Land (England) Regulations 2000, Section 2 and Schedule 1.

1.5 Contaminated Land Register

Local Authorities have a statutory obligation to keep a register of contaminated land. The information stored on a formal register is that relating to regulatory action and remediation. The contents are specified at length in the Contaminated Land (England) Regulations 2000 and include the following:

- Remediation Notices
- Remediation Declarations/Statements
- Appeals against Notices

- Designation of special sites
- Notification of Claimed Remediation
- Convictions for Offences

This formal register is maintained at the offices of Craven District Council, Environmental Protection Department, 1 Belle Vue Square, Broughton Road, Skipton, North Yorkshire, BD23 1FJ.

Members of the public are able to view the register free of charge during normal office hours 9.00am – 5.00pm by appointment. Requests for copies of documents must be made to the Environmental Protection Section and a reasonable charge will be made.

1.6 Pollutant Linkages

In order for a site to be determined as "Contaminated Land", a "**pollutant linkage**" must exist. The pollutant linkage consists of a **pollutant** (the contaminant), a **pathway** (the route for the contaminant to move along) and a **receptor** (person, property). All three **must** be linked in order for the land to be determined as contaminated.

In practice, most sites with a previous potentially contaminating history are remediated to a condition suitable for use under the planning regime rather than the Part 2A legislation.

The definition of contaminated land and the guidance is based on the assessment of risk to human health and the wider environment and involves the principle of significant pollutant linkages.

A pollutant linkage is the relationship between a contaminant (pollutant), a receptor and the pathway that links the two. All three elements of a pollutant linkage must be identified in respect of a piece of land for the land to be identified as contaminated land. The Council must show that a pollutant linkage exists and that the pollutant linkage is significant with reference to DEFRA's Statutory Guidance.

A contaminant (source) is a substance, which is in, on, or under the land and has a potential to cause harm or to cause pollution to controlled waters. The existence of a source alone does not constitute contaminated land under the Part 2A regime, which is not intended as a means to clean up all contamination.

A receptor is either:

- (a) a living organism, a group of living organisms, an ecological system, or property which:
 - Is in a category listed in Table A of DEFRA's Statutory Guidance and
 - Is being, or could be, harmed, by a contaminant; or
- (b) controlled waters, which are being, or could be, polluted by a contaminant, or
- (c) a person subjected to lasting exposure resulting from the after-effects of a radiological emergency, past practice or past work activity.

A pathway is one or more routes or means by, or through which a receptor:

- Is being exposed to, or affected by, a contaminant, or
- Could be so exposed or affected.

Controlled waters can be both a pathway as well as a receptor in a pollutant linkage.

The Council must be satisfied that:

(a) a pollutant linkage exists in respect of a piece of land; and

(b) the pollutant linkage is significant, in that it:

- is resulting in significant harm being caused to the receptor in the pollutant linkage,
- presents a significant possibility of significant harm being caused to that receptor,
- is resulting in the pollution of controlled waters which constitutes the receptor,
- is likely to result in such pollution,
- is resulting in harm so far attributable to radioactivity being caused to any person in the pollutant linkage, or
- presents a significant possibility of harm so far attributable to radioactivity being caused to any person in the pollutant linkage.

Before the Council can determine a site as contaminated land a pollution linkage must be established. There may be more than one source, more than one receptor and therefore there may be a number of pollutant linkages on any one site.

1.7 Significant Harm to Human Health

The Statutory Guidance states the following 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 also be considered to constitute significant harm to human health by the Local Authority. In deciding whether there is actual significant harm to human health occurring, it is advisable for the local authority to seek the advice from Public Health England (formally known as Health Protection Agency in England).

1.8 Significant Possibility of Significant Harm (SPOSH) to Human Health

Where the Local Authority is not yet convinced that significant harm is occurring, it may still determine land to be contaminated land on the basis that a significant possibility of such harm occurring at some point in the future exists.

The Statutory Guidance (2012) details four Categories of site, when considering whether a significant possibility of significant harm exists:

Category 1 Sites – if the Local Authority has robust scientific evidence that significant harm would occur, then it should consider that a significant possibility of significant harm exists (SPOSH). Examples would be where similar contaminant levels are known or strongly suspected to have resulted in significant harm elsewhere.

Category 4 Sites – if the Local Authority considers no relevant pollutant linkage exists, or that only ‘normal’ levels of contaminants are present, or that generic guidance criteria are not exceeded, or where land based exposures form only a small proportion of a receptor’s total exposure, then it should consider that SPOSH does not exist.

Category 2 and 3 Sites – if the Local Authority is unable to place the site being assessed into category 1 or 4, then it must consider whether to consider it within Category 2, if it is considered SPOSH exists, or Category 3, if it is considered SPOSH does not exist.

Category 2 Sites – if the Local Authority considers there is a strong case for considering the risks from the site are of sufficient concern to warrant SPOSH.

Category 3 Sites – if the Local Authority does not consider there is a strong case for considering the risks from the site are of sufficient concern to warrant SPOSH.

If the council is unable to consider on the basis of estimates whether SPOSH exists, it will take account of a number of other factors when considering its decision:

1. The likely direct and indirect health consequences of determination, such as the benefits of reducing contaminant exposures during remediation, but also the possibility of increased exposures during remediation.
2. We will also consider an initial estimate of the duration and cost of remediation, and the extent of the benefit that would occur.

In considering these two factors, the council is not required to undertake a detailed quantified assessment.

1.9 Normal Levels of Contamination

Normal levels of contamination in soils should not be considered to cause land to qualify as contaminated land, unless there is particular reason to consider otherwise. Therefore if it is established that land is at or close to normal levels of contamination, it should not be considered further within Part2A.

The Statutory Guidance describes further what may be considered ‘normal’ in this context, and supporting technical guidance is expected to be published shortly.

1.10 Risk Assessment

The contaminated land regime promotes a risk-based approach to dealing with land contamination. This approach aims to protect human health and the environment without

wasting finances on cleaning up sites that do not pose a significant risk. Each site therefore will be assessed for risk on a site specific basis and remediation will be decided accordingly.

This approach also supports the 'suitable for use' approach, which consists of three elements:

1. Ensuring that land is suitable for its current use (and all uses within that planning use class).
2. Ensuring that land is made suitable for any new use, as official permission is given for that new use, and
3. Limiting requirements for remediation to the work necessary to prevent unacceptable risks to human health or the environment in relation to the current use or officially permitted future use of the land.

Contaminated land is evaluated using a risk assessment approach, which considers the site specific likelihood of the contaminants to cause harm to the receptors, rather than simply comparing site conditions with arbitrary 'acceptable' threshold levels of contaminants.

The assessment of risk should be based around a clear understanding of the site, usually referred to as a Conceptual Site Model (CSM), detailing all plausible linkages between potential sources of contamination, vulnerable receptors, the connecting pathways between the two, and considering the uncertainties that apply.

The understanding of these risks is typically developed in a staged approach, beginning with a preliminary risk assessment (comprising a desk study and site walkover), then progressing to a generic qualitative risk assessment, finally progressing to a detailed quantitative risk assessment. This process should normally continue until the Local Authority is able to conclude that there is insufficient evidence that the site may be contaminated to progress to the next stage of assessment.

Having identified potential pollutant linkages, the risk assessor must estimate both the likelihood of that linkage existing (considering exposure modelling, or direct monitoring), and the potential harm a likely exposure could result in.

Ordinarily if the risk assessment indicates the most vulnerable receptor is likely to be exposed to a level of risk that the Local Authority considers represents a Significant Possibility of Significant Harm (SPOSH), then the definition for Contaminated Land has been met, and the local authority should consider determining the site.

1.11 Roles and Responsibilities

1.11.1 The Regulatory Role of the Local Authority

Regulation of the regime rests with both the Local Authority and the Environment Agency. The primary regulatory role under Part 2A of the Environmental Protection Act 1990 rests

with Local Authorities at a District Council level. This reflects Craven District Council's existing functions under the statutory nuisance regime and also complements its role as a planning authority.

Part 2A requires that the Council acts in accordance with any statutory guidance issued by the Secretary of State. The Statutory Guidance requires local authorities to undertake a strategic approach to their inspections and to describe and publish this in a written strategy.

The role of Craven District Council under Part 2A is:-

1. To prepare and publish an inspection strategy;
 - To cause their area to be inspected to identify contaminated land;
 - To determine whether any particular site contains contaminated land;
 - The Council is also required to consult with the Environment Agency on pollution of controlled waters.
2. Where a site has been determined as contaminated land and has been designated as 'a special site', enforcement responsibility will transfer to the Environment Agency;
3. Where land is identified and determined as being contaminated land the Council will have a number of key actions to implement as the enforcing authority.
 - To establish who should bear responsibility for the remediation of land
 - To establish what remediation is required in consultation with the Environment Agency.
 - To ensure that such remediation takes place, either through agreement with the appropriate person, by serving a remediation notice or, in certain circumstances, through carrying out the work themselves;
4. Where a remediation notice is served, or the Council itself carries out the work, there will be a need to determine who should bear what proportion of the liability for meeting the costs of the work.
5. The Council will also record certain prescribed information about its regulatory actions on a public register and will maintain the public register in accordance with the Contaminated Land (England) Regulations 2000 (as modified in 2006).

Implementation of the strategy will include gathering vast amounts of data on land contamination, which will not appear on a public register. Much of this information has been obtained from the historical mapping system contained within Cartology, the Councils geographical Information system (GIS).

1.11.2 The Regulatory Role of the Environment Agency

Although the responsibility of inspecting and determining whether land is to be considered contaminated land under the terms of Part 2A lies with the Council, the Environment Agency also has a number of roles by:

- Assisting the Council in identifying ‘contaminated land’, particularly in cases where water pollution is suspected or apparent and to provide advice to the Council on identifying and dealing with pollution of controlled waters;
- Providing site-specific guidance to the Council on the remediation of contaminated land and to provide general advice to the Council on the remediation of contaminated land;
- Providing advice about the applicability of other Environment Agency duties and powers.
- Acting as the enforcing authority for any land designated as a ‘special site’. Land to be designated as ‘special sites’ is described in the Contaminated Land (England) Regulations 2006 and includes radioactively contaminated land.
- Ensuring remediation of a special site;
- Maintaining a public register of regulatory action for ‘Special Sites’; to publish a national report on contaminated land and to continue to carry out technical research and in conjunction with DEFRA, publish scientific and technical advice.

The Contaminated Land (England) Regulations 2000 define “Special Sites”, which includes land associated with the following situations;

- pollution of controlled waters as defined in the regulations
- contamination by certain chemicals used as pesticides
- contamination by waste acid tars
- refining of petroleum
- manufacture of explosives
- nuclear sites
- land owned by the Ministry of Defence
- land on which prescribed processes designated for central control have been carried out

The Environment Agency also has the power to provide site specific guidance on contaminated land, once notification of a determination by the Local Authority of contaminated land has been received. This site specific guidance is likely to be in connection with the following circumstances;

- Remediation options
- The standard to which land or waters should be remediated
- The reasonableness of remediation in regards to costs and the seriousness of the impact to controlled waters
- Identification of appropriate persons and the application of exclusion tests
- Apportionment of liability and recovery of costs of remediation

1.11.3 Other Regulatory Regimes

The Part 2A contaminated land regime is intended to deal with historic contamination, there being several other existing regulatory regimes aimed to prevent new contamination occurring. There are several situations where other regulatory regimes are more applicable to deal with land contamination issues.

Overlaps with planning, water pollution, waste management licensing and Integrated Pollution Prevention Control (IPPC) legislation are considered the most important and are addressed here.

1.11.4 Planning and Development Control

The redevelopment of brownfield (previously developed) land is encouraged by Local Planning Authorities as it maximises the development benefit from derelict and underutilised land and reduced development pressures on Greenfield land. Redevelopment of land affected by contamination is an appropriate means of achieving remediation, as investigation and remediation can be integrated into the overall ground works, and economies of scale may be achieved within the development. The cost of safe remediation of contaminated land is addressed within development process. It is the intention that the majority of contaminated land sites within Craven District are dealt with through the planning process.

The objective of the procedure is to ensure that any development is 'suitable for use' and that no unacceptable risks result. Both Craven District Council and the Yorkshire Dales National Park planning authorities consult with the Council's Environmental Health Officers and the Environment Agency in relation to planning applications concerning sites that are likely to contain contaminated land. Consultations on planning applications reflect historical records of previous land uses and activities on sites.

The developer is ultimately responsible for ensuring the safe development of their site and must comply with all reasonable requirements of the Local Planning Authority as per the Town and Country Planning Act 1990.

The Local Planning Authority is required to take account of all material considerations affecting development, including contamination and potential contamination. They must satisfy themselves that a developer has given proper consideration to the possibility of contamination and provided adequate safeguards to address any risks. The Planners may also seek advice from the Environment Agency on the pollution of controlled waters.

Planning Policy Statement 23 has been superseded by the Government's National Planning Policy Framework (March 2012) and its online national planning practice guidance. The latter provides relevant guidance when considering minimising and managing environmental risk and pollution on land affected by contamination.

1.12 Pollution of Controlled Waters

The Environment Agency has powers to take action to remedy or prevent pollution of controlled waters under the Water Resources Act 1991(Section 161) using a Works Notice. These powers would be used where a pollution incident has occurred and the pollutant is discharged directly into the body of water, or it has left land and is entirely in the body of water. However where pollution of controlled waters arises from substances in, on, or

under land there is an overlap between these powers and the Part 2A regime. In cases of contaminated land affecting controlled waters the Council will:

- Consult with the Environment Agency before determining land to be contaminated land.
- Take into account any comments from the Environment Agency with respect to the requirements for remediation.

The Environment Agency for its own part will notify the Council should it identify a risk to controlled waters from land affected by contamination thus enabling the Council to formally identify the land as contaminated land for the purposes of the Part 2A regime.

1.13 Waste Management Licensing / Permitting

All waste disposal and processing sites (including scrap yards) should be subject to licensing under Part 2 of the Environmental Protection Act 1990 (as amended by the Environmental Permitting (England and Wales)(Amended) Regulations 2014 - the waste management licensing/permitting system). Contamination causing significant harm or pollution of controlled waters should be dealt with as a breach of a condition of the licence or permit rather than through Part 2A.

Where a waste site is unlicensed or where the waste licence has been surrendered under the Control of Pollution Act 1974 regime, potentially these sites could be contaminated land and would be dealt with under the Part 2A regime as Contaminated Land. Moreover remediation activities may themselves fall within the definition of waste disposal or waste recovery operations and be subject to the licensing requirements or permitting regime.

1.14 Environmental Permitting and Integrated Pollution Prevention Control (IPPC)

The regime introduced by the Pollution Prevention Act 1999 and the Environmental Permitting (England and Wales) (Amended) Regulations 2014, controls certain industrial activities prescribed under the regulations with the aim of preventing pollution arising from these industrial activities, including pollution to land. This regime is enforced by the Environment Agency (Part A activities) and by the Local Authority (Part A2 and Part B, LA-IPPC) and any pollution resulting from such an activity, occurring as a result of the breach of IPPC controls, including pollution to land will be dealt with by the enforcement of IPPC controls.

For new permit applications, site operators are required to undertake a site condition survey prior to being authorised to operate. If the site condition is such that areas of land meet the definition of contaminated land then submission of a site survey may trigger action under Part 2A. On completion of operation on such a site there is a requirement to submit a further land condition survey. Should the survey reveal that areas of land meet the definition of contaminated land such land contamination would be dealt with by IPPC enforcement action and not Part 2A. The General Guidance Document available from DEFRA for Local Authorities contains a section on contaminated land including site assessment and restoration in relation to LA-IPPC. The Environment Agency has similar guidance. An IPPC

permit application site report should also highlight historic contamination which may be controlled by the Part 2A regime.

Moreover remediation activities may themselves constitute activities or processes, which cannot be carried out without a permit issued under the IPPC regime.

1.15 The Environmental Damage (Prevention and Remediation) Regulations 2009.

The Environmental Damage Regulations are implemented under the Environmental Liabilities Directive and are intended to deal with serious cases of environmental damage caused by economic activities. They are based on the 'polluter pays' principle. However the regulations can only be used to deal with pollution incidents that occurred after March 2009 when the regulations came into force. Where damage occurred prior to this date action must be taken under other regimes detailed in this strategy.

1.16 Situations where the Part 2A Regime does not apply

1.16.1 Statutory Nuisance

Issues of land contamination that may have been dealt with under the statutory nuisance provisions (Part 3 of the Environmental Protection Act 1990) are now dealt with through the Part 2A regime. However the statutory nuisance regime continues to apply to the effects of the contamination on land, e.g. odours that are deemed to constitute a nuisance. The exclusion of the statutory nuisance provisions applies only to 'harm' and the 'pollution of controlled waters'.

1.16.2 Waste on Land

The Part 2A regime is not applicable where there is contaminated land arising from illegal tipping of controlled waste (fly tipping). This should be dealt with under Part 2 of the Environmental Protection Act 1990 (Section 59).

1.16.3 Food Safety

Part 1 of the Food and Environment Protection Act 1985 gave ministers emergency powers to prevent the growing of food on contaminated land. Following the establishment of the Food Standards Agency by the Food Standards Act 1999 this power is now vested in the Secretary of State. Where the Council suspects that crops may be affected from contaminated land to such an extent that they may be unfit to eat, it will consult the Food Standards Agency and DEFRA to establish whether an emergency order may be necessary.

It should be noted that remediation of the site, if necessary, would be secured through the Part 2A regime.

1.16.4 Organisms

Part 2A does not apply to contamination caused by organisms such as bacteria, viruses or protozoa as they do not fall within the definition of substances. The Council will liaise with the Environment Agency in relation to MOD land and it should be noted that even though contaminated sites used in connection with biological weapons must be designated special sites (See Chapters 4.14 and 6.3) this only applies to non-biological contamination.

1.16.5 Risk of Harm to Employees

Where there is a risk of harm to persons at work from land contamination, this should be dealt with under the Health and Safety at Work Etc. Act 1974. The enforcing authority will be either the Health and Safety Executive or Craven District Council's Workplace Safety Team, depending on the main work activity at the site. Liaison between the Council (for Part 2A enforcement) and the Health and Safety Executive will be established to avoid duplication of controls and to ensure that the most appropriate regime is used.

1.16.6 Risk of Harm following an Incident at a COMAH site (Control of Major Accident Hazard Regulations 1999)

Where there has been a release, explosion or other major incident, which has caused land contamination, the restoration should be carried out as part of the COMAH on site/off site emergency restoration plan.

1.17 Craven District Council's Vision and Priorities

Craven District Council's Council Plan promotes the Council's vision and priorities, all of which are relevant to the Council's approach to addressing its responsibilities to contaminated land.

1.17.1 Craven Vision

'The Council's vision is for Craven to be a prosperous place with strong, vibrant and diverse communities.'

1.17.2 Craven Priorities

- **ENTERPRISING CRAVEN –**
 - Address the impact of the recession
 - Determine future land allocations for housing and employment across the District outside the National Park and secure affordable homes
 - Facilitate the development of business and employment sites subject
 - Improve infrastructure throughout the District

- **GREENER CRAVEN**
 - Work to reduce energy consumption across Council operations
 - Work to reduce waste and increase recycling levels within the District

- **WORKING WITH COMMUNITIES**
 - Support local citizens to become more actively involved in their communities
 - Improve the opportunities available to residents of Greatwood and Horse Close, South Skipton
 - Increase partner and community involvement in service delivery

- **FINANCIAL RESILIENCE**
 - Ensure the Council remains financially sustainable and has robust arrangements in place for securing value for money
 - Implement major projects in the Asset Management Plan to support the achievement of value for money

1.17.3 Objectives of the strategy

- To meet the requirements of DETR Circular 02/2000 in publishing a written strategy having regard to new and emerging regulation and DEFRA's Statutory Guidance .
- To detail the strategic approach to be followed for the inspection of land within the Craven District.
- To make information available to all relevant sections of the Council to enable consideration to be given about land contamination in policy making processes, and bringing sites forward for housing and economic development.
- To avoid any unnecessary blight of land.
- To provide information to the Environment Agency for its annual report on the state of Contaminated Land.
- To make available to interested parties, information about the Council's intentions with respect to Contaminated Land.
- To provide a mechanism whereby the strategy is reviewed on a regular basis to allow for changes in guidance etc.

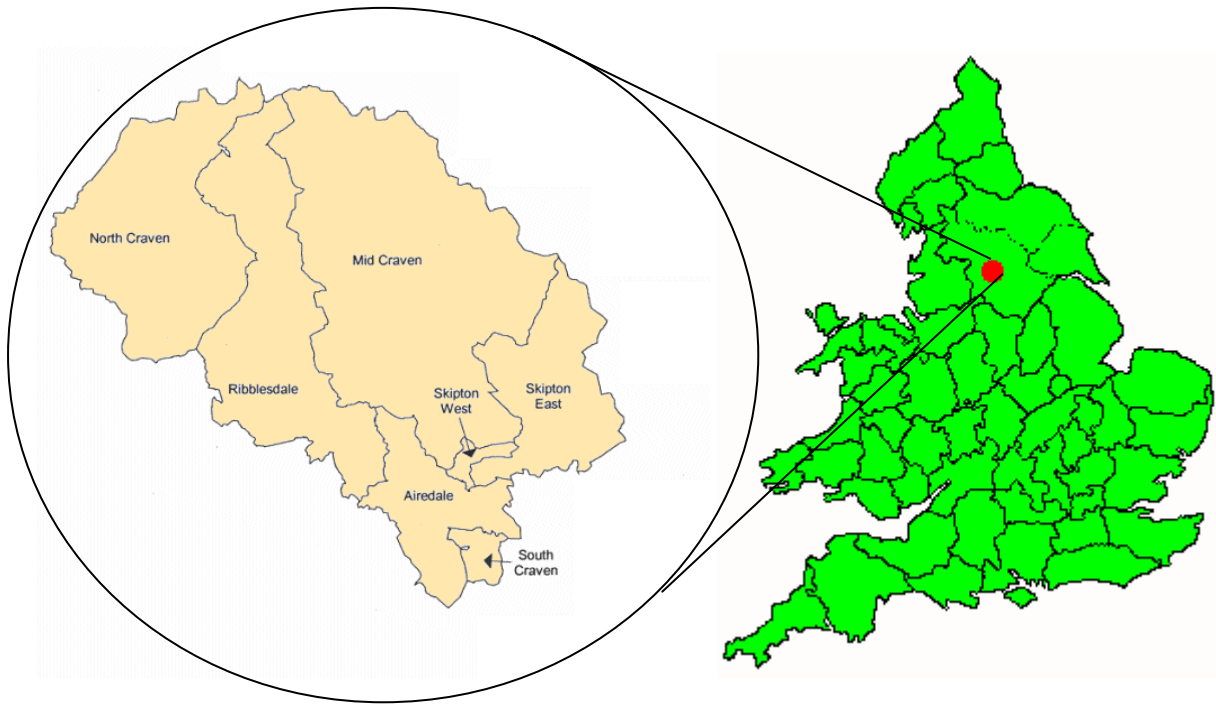
CHAPTER 2: Characteristics of Craven District

This section will give the background to Craven District and an explanation of how this influences the Council's approach to inspecting for contaminated land.

2.1 Geographical Location

Craven District is situated at the western end of North Yorkshire, England's largest county.

The plan area is flanked by Bradford Metropolitan District to the south-east, Harrogate Borough to the east, the Yorkshire Dales National Park to the north, Lancaster District to the north west, Ribblesdale District to the west, and Pendle district to the south and south-west (see map 1).



Map 1

2.1.1 Broad Geological Characteristics

The underlying rock of the Craven District is principally limestone and sedimentary millstone grit. The millstone grit bedrock predominantly lies towards the east and south of the district. To the north and west of the district, principally within the Yorkshire Dales National Park, limestone is the principal underlying rock. As a result limestone related scenery (pavements, dry valleys etc.) dominates the overall landscape characteristic. Whilst much of the district is upland with exposed limestone and grit geology, the lowland areas and valleys are largely covered by drift deposits. The nature and thickness of these deposits is important in understanding the risks posed by land contamination to potentially sensitive receptors. In addition, permeable drift deposits, for example, sand and gravel units, may also be classified as minor aquifers themselves and could also be potentially sensitive receptors to contamination.

2.1.2 Broad Hydro-geological Characteristics

The Craven district contains four principal natural watercourses that originate within and/or flow through the District. These watercourses are the Rivers Aire, Ribble, Wharfe, and Wenning. Data supplied by the Environment Agency for the year 2008 indicate that the water quality of the above rivers is generally categorised as “Good” to “Very Good”, where they run through the district. Clearly protection of these watercourses, from possible contamination, will be a major objective of this strategy.

The Groundwater Vulnerability Map of England and Wales, produced by the former National Rivers Authority in 1992, identifies a large portion of the District as a major aquifer at a low vulnerability. It should be noted, however, that within these areas major aquifers of a high vulnerability were also identified. Given the scale of the Groundwater Vulnerability maps it

should be borne in mind that the site specific vulnerability of groundwater will be addressed as part of any individual or specific contaminated land investigation. We will also have regard to Groundwater Source Protection Zones, which have recently been identified by the Environment Agency.

2.1.3 Groundwater Source Protection Zones

Across England and Wales the Environment Agency have defined source protection zones for 2000 groundwater sources such as wells, boreholes and springs used for public drinking water supply. These zones show the risk of contamination from any activities that might cause pollution in the area - the closer the activity, the greater the risk. The maps show three main zones (inner, outer and total catchment) and a fourth zone of special interest, which is occasionally applied to a groundwater source.

The source protection zones are used by the Environment Agency in conjunction with their Groundwater Protection Policy to set up pollution prevention measures in areas which are at a higher risk, and to monitor the activities of potential polluters nearby. Copies of the source protection zone maps are available directly from the Environment Agency.

2.2 Brief Description/History

Craven District is predominantly rural in character. The main town and District Centre is Skipton, the single largest town in the District. Skipton is located in the south-east of the District. Other settlements of note within the District are Settle, Grassington, Ingleton, Bentham, Sutton, Glusburn, Gargrave, Cowling, Carleton, Hellifield, Bradley and Crosshills.

A significant portion of the District is located within the Yorkshire Dales National Park or designated as an Area of Outstanding Natural Beauty in recognition of the high landscape quality predominant within the District. Historically, inhabitants have pursued agricultural practices. Evidence exists however, of the exploitation of natural resources throughout the District, winning materials such as lead, lime and gritstone for building. Presently materials are still being exploited via quarrying operations scattered across the District.

2.3 Size

Within North Yorkshire, the largest County in England, Craven District covers a total area of 1179 square kilometres.

2.4 Population Distribution

The population of Craven District is estimated to be around 56000, with approximately 26% of the population resident in Skipton.

2.5 Land owned by the Council

The Council owns a variety of land types throughout the District. These holdings principally relate to car parks, recreation space and some allocated industrial and commercial buildings and land.

2.6 Current Land Use Characteristics

The principal land use within the District, other than for residential purposes, is for agricultural purposes. In terms of industrial activity, this is generally concentrated in established industrial areas within and around existing settlements. Examples of key industrial activities within the district include a large diversity of businesses based on the industrial estates mainly around the Crosshills/Skipton area and Systagenix (formerly Johnson and Johnson) at Gargrave. Lead mining/quarrying and lime production no longer takes place within the district although a number of large scale quarrying operations exist for the purposes of minerals extraction.

2.7 Protected Locations

Biodiversity and landscape quality are the major natural assets of the district, including:

- A portion of the Yorkshire Dales National Park
- A portion of the Forest of Bowland Area of Outstanding Natural Beauty (AONB)
- 64 Sites of Special Scientific Interest (SSSI)
- 7 National Nature Reserves
- 6 Special Areas of Conservation (SAC)
- 2 Special Protection Area's (SPA)
- 1 Ramsar Site

The majority of the land area of the district is identified as either National Park or AONB. This fact is a reflection of the overall quality of the landscape within the District. In addition, the 64 Sites of Special Scientific Interest and 7 National Nature Reserves provide clear evidence of the nature conservation significance of whole of the district.

2.8 Key Property Types

In addition to a diverse natural environment, Craven district has a diverse built heritage including;

- 1578 Listed Buildings
- 167 Scheduled Ancient Monuments
- 42 Designated Conservation Areas

The overall quality of the built environment within the district is high. This is reflected in the wealth of listed buildings, scheduled ancient monuments and designated conservation areas that exist across Craven.

2.9 Key Water Resource/Protection Issues

In terms of drinking water, Yorkshire Water Plc is the key water supplier in the district. In addition, there are approximately 750 recognised private water supplies scattered across

the district. These are regularly sampled by the Council for water quality according to regulatory requirements.

With regard to sewerage provision, Yorkshire Water and United Utilities are the key sewerage providers. Where public sewage treatment is not provided, septic tanks private sewage treatment systems and cesspools are in existence.

Licensed surface water and groundwater abstraction within the district is regulated by the Environment Agency, and a register is kept by them. Craven District Council operates an ongoing private water sampling programme and keeps a register of all known private water supplies within the district.

2.10 Known information on Contamination

The Council holds some information regarding land contamination, primarily as part of the Development Control Process. As a large portion of the district is within the Yorkshire Dales National Park however, the National Park Authority is responsible for delivering development control within that part of Craven.

Through the planning process site investigations are often required where previous use may indicate contamination. The requirement to undertake such investigations would form part of a planning condition attached to a planning consent. Planning records would therefore form an important resource during the investigation process.

2.11 Current and Historical Use

Craven District has a varied industrial history, which may influence the level and types of contaminated land present. The principal activities are set out below:

2.11.1 Lead Mining

Evidence of lead mining exists in areas of the district (especially in the southern portion). Lead mining operations however ceased many years ago. From the remains still visible today, operations within the district related to lead extraction rather than the processing which was probably undertaken elsewhere although some of these operations were quite large in scale given the extent of the visible legacy.

2.11.2 Lime Manufacture

In parts of the district where limestone forms the underlying geology, evidence of lime kilns, used in the production of quick-lime and other lime products, remain. Prior to the introduction of cement as a building material, the production of lime was of significance as lime products were widely used in mortars and plaster. The scale of operation within the district was generally small, i.e. local operations to meet local needs. Often associated with lime kilns are quarries which were worked to win limestone, the raw material in lime production. In comparison with modern operations however, these now redundant quarries also tended to be smaller in scale.

2.11.3 Quarrying Operations

Both historically and at present, quarrying for materials such as stone, roofing materials etc. are important economic activities within Craven. Quarrying still takes place at several locations throughout the district, particularly in the northern parts.

Historically, evidence of quarrying (presumably for building materials and for lime production) on a smaller scale is still present throughout the district. Depending upon the underlying rock, quarries were worked to win materials for lime production, building materials, in areas roofing materials and more recently larger scale operations for road construction.

2.11.4 Woollen Industry

The woollen industry was a principal industrial activity within the district. Principally focussed around the market towns activity of this type clustered around water sources and/or the transport corridors. Remnants of this industrial activity can be found in the form of the many mill buildings located adjacent to waterways such as the Leeds-Liverpool Canal or the natural watercourses such as the Rivers Aire and Ribble some of the mill buildings still remain in industrial use.

2.11.5 Tanning

Although this process is not unique to Craven, tanning operations have historically occurred throughout the district. Remnants of this industrial process such as tanning pits can be found in places around the District.

2.11.6 Coal Mining

Coal mining operations within the District have taken place on a relatively small scale in and around the village of Ingleton. These mines are no longer in operation although evidence remains of their existence.

2.11.7 Gasworks and Waste Disposal Activities

Gasworks and Waste Disposal Activities are also known to have existed in the area. Many towns had their own town gas works and waste disposal was also localised. These sites were often controlled by former small local authorities.

2.12 Radon

The presence of Radon in, on or under the land does not constitute 'contaminated land'. In 1996, the National Radiological Protection Board published formal advice on radon-affected areas in England. In 2007 the Health Protection Agency (now known as Public Health England) and British Geological Society launched a new dataset for England and Wales providing indicative maps covering the whole of England and Wales indicating the possibility of homes exceeding the action level of 200 Bq.m³ (400 Bq.m³ Industrial/commercial premises) in each 1km square of the Ordnance Survey National Grid.

2.13 Redevelopment Controls

The emphasis on the re-use of previously developed land over many years means that a number of contaminated sites have, and will continue to be, redeveloped for various uses, including those of a sensitive nature such as housing. The Council's planning policies provide that development on contaminated land will not be permitted unless evidence has been submitted to show that the possibility, nature and extent of any contamination has been properly investigated and taken into account and that any remediation measures to deal with contamination are effectively implemented. There also has to be no long term

detrimental effect on the environment, or unacceptable risks to the health and safety of the population as a result of the disturbance of contaminants during and after development.

CHAPTER 3: Craven District Council's Aims and Objectives

Craven District Council's corporate visions and objectives are referred to in item 1.16 'Craven District Councils' Visions and Priorities'. These objectives are reflected in the aims and objectives of the Council's contaminated land inspection strategy.

3.1 Aims

- a) To ensure compliance with and enforcement of Part 2A of the Environmental Protection Act 1990
- b) To protect human health, controlled waters, ecosystems and property.
- c) To prevent the further contamination of land
- d) To ensure that the planning process deals effectively with any land contamination so that land is suitable for its proposed use.
- e) To encourage voluntary remediation.
- f) To encourage re-use of brownfield sites.
- g) To encourage sustainable methods of remediation of land as appropriate.

This list is presented in priority order and in all cases will have regard to significance and likelihood, as required by regulations.

3.2 Objectives

- To evaluate development proposals within the district as they are identified and compare these with historical records of contaminative uses.
- To ensure that developments on potentially contaminated sites will not be permitted unless evidence has been submitted to show that the possibility, nature and extent of contamination has been properly investigated and assessed and that any remediation measures necessary to deal with the contamination are effective either:
 - i. prior to granting planning permission, or
 - ii. where the risks are lower, by imposing conditions for development and;
- To ensure there is no long term detrimental effect on the environment or unacceptable risks to the health and safety of the local population as a result of the disturbance of contaminants during and after development.
- To further evaluate all 2300 records on the Council's database to develop a list of potentially contaminated sites across the district and to prioritise such sites based on risk.
- To compare the database of potentially contaminated sites with those in Council ownership to establish any potential liabilities.

- To regularly update Craven District Council’s Planning Department on information collected as a result of the inspection programme.
- To help, encourage and support voluntary remediation.
- To continue to support ongoing training for Council officers in implementing both Part 2A and supporting the development process.

3.3 Strategic Inspection (Prioritisation)

In order to investigate and where necessary inspect land in the district in an ordered and rational manner, sites need to be prioritised according to risk.

The Council acquired historic maps of the district from Landmark, indicating where previous contaminative uses and potentially contaminative uses of the land have been identified. The Government (initially through the Department of the Environment) has issued a variety of guidance documents such as the DoE Industry Profiles in an effort to identify the various industrial processes that may have polluted or contaminated land. Each document relates to a specific industry profile and includes details on its potential for pollution. The Council’s Environmental Protection Team will use the Landmark maps, the database supplied by Urban Vision and the appropriate “Industry Profiles” during evaluations. The list is detailed at Appendix A.

An appropriate and compatible Geographical Information System (GIS) system (Cartology) is already used by Environmental Protection for other functions and will be used in conjunction with the historic Landmark maps. Cartology will enable identification of potentially contaminated sites, possible receptors and pathways linking the two. However as Cartology is only an illustrative tool, the Urban Vision database will be required to work in conjunction with Cartology in this process.

The Urban Vision database and the CLARE software stores contaminated land information in an orderly and systematic format and linking the two resulted in approximately 2700 records of potentially contaminated sites in the Craven District. The CLARE database will be checked to eliminate any duplicate records to arrive at a list of sites. The Urban Vision list of potential sites formed the starting point for the prioritisation of sites and the CLARE software will provide more detailed risk assessment according to the potential likelihood of a pollutant linkage being present.

The historic land use database identifies areas of potentially contaminated land from analysis of historic ordnance survey maps, following governmental advice on the identification and classification of potentially contaminative land uses.

It should be emphasised that only a small proportion of sites subject to potentially contaminated land use will meet the strict definition of contaminated land. Due to the past uses of the land, many of these sites will contain substances in, on, or under the ground, which have the potential to cause harm. However, in order to be designated as contaminated land these sites must have both a pathway by which significant harm may be caused and a receptor on which significant harm can be inflicted. If either the pathway or the receptor is missing from the pollutant linkage, the site may be land in a contaminative

state but cannot be designated as contaminated land. Priority will be given to the assessment of those sites which pose the greatest risk to receptors.

For the prioritisation process the Council's priorities are where:

1. Human health is affected.
2. Controlled waters are affected
3. Protected organisms or ecosystems are affected
4. Buildings are affected

Sites where contamination is known to be present and where sensitive receptors are very likely to be affected will be given high priority for more detailed inspection, with lower priority being given where contamination is only suspected to be present.

The risks associated with the sites will be assessed and the priority of the site decided in relation to all other sites, e.g. sites likely to have the highest priority will be sites where the contaminants present are the most acutely toxic to human health and which also have a high mobility i.e. being able to move easily off site and/or into a water course. It is anticipated that some site walkover survey work will be necessary in order to obtain any missing data in relation to pathways and receptors.

For the formulation of a final site inspection list for a more detailed inspection the CLARE database has a risk assessment tool, which will further review, refine and prioritise sites. In order to arrive at a list of sites forming an inspection programme, a number of stages will be involved.

The prioritisation process will result in a list of sites for detailed inspection, these sites will then be categorised according to the risk they may pose.

Throughout the assessment, any sites which are considered to be causing significant harm will take priority in line with statutory guidance and action will be pursued on priority sites within 3 days of notification or identification. Such sites may be identified through the process of prioritisation and inspection in developing or implementing the strategy, by referral from the Environment Agency, during consultation or by complaint.

3.4 Land in Council Ownership

Along with all other sites within the district, land in Council ownership will be prioritised according to the risk posed.

Where land owned by the Council is found to be contaminated land and is not a special site, there will be no enforcing authority. The Council will therefore deal with these sites as though it was the enforcing authority and will undertake the same consultations, assessments and seek appropriate remedial works as necessary. A formal relationship between the Environmental Protection Team and Craven District Council's Asset and Property Management Section will be developed to ensure that the identification, assessment and remediation of Council owned land is undertaken in accordance with Statutory Guidance as for privately owned sites.

To ensure transparency and consistency when dealing with land in Council ownership, the same procedures will be followed and detailed records will be maintained in the same way as for privately owned sites, in order of risk.

3.5 Consultation

The data sources cited later in Section 4 may not identify all potentially contaminated sites. It is feasible that an area of land might be used for a high-risk contaminative activity (*e.g.* waste disposal) without ever being recorded on a map. Local consultation will therefore play a major role in identifying the gaps in this database.

Consultation on this Strategy will also be publicised in the local press and it is anticipated that a number of interested residents will come forward with information on past land uses.

3.6 Dealing with Urgent Sites

If any verifiable reports of sites causing significant harm are identified during the initial consultation stages, the general approach to inspection of such sites will be that they are given priority over routine site identification. Indeed, if there is a critical need, investigative work may have to begin before completion of the final draft of the revised inspection strategy. The regulations recognise this scenario is realistic and the proposed approach is in line with the guidance.

This stage may include declaring some “special sites” and passing the lead regulatory role for these sites to the Environment Agency.

3.7 General Approach to Inspection

The Council’s first priority in dealing with contaminated land is to protect human health. Land within the District has been prioritised; concentrating on areas with a high population density, as these areas will have the largest number of receptors (humans) and will be afforded the highest priority by the Council. These areas of higher density population are statistically more likely to have all three elements of a pollutant linkage (source, pathway, receptor). Consequently the risk of significant harm to human health arising is most likely in these areas.

The approach to detail inspection will be based on the final prioritised list. This list is based on the potential contaminants in the ground and proximity of receptors.

3.8 Local Development Framework/ Local Plan Land

Craven District Council is the Local Planning Authority for the part of Craven District that is outside the Yorkshire Dales National Park. The Council’s Planning Policy team produces planning policy and guidance documents that influence and shape the location and design of new development in the area to ensure it is sustainable. The planning policy team is preparing a new local plan which is a document containing text and maps, setting out how land should be used in the future to achieve economic, environmental and social goals. Policies in a local plan are used to decide planning applications.

Evidence and information arising from this Contaminated Land Strategy is reflected in the local plan preparation process. As part of the preparation of that plan, sustainability appraisal of reasonable alternative strategies and development sites are undertaken. Craven District Council's testing objectives within the sustainability appraisal checking framework include whether a potential strategy or development site would have a positive or negative impact on the safe remediation of contaminated land.

The Yorkshire Dales National Park is a separate planning authority. There are mechanisms in place to enable both the National Park and Craven District planning authorities to consult Council Environmental Health officers and the Environment Agency on matters concerning potentially contaminated land.

3.9 Threats to controlled waters, protected areas of the environment and buildings

It is anticipated that the investigation of towns and villages will bring to light information that would reveal any imminent threats to controlled waters or protected areas of the environment posed by contaminated land. If the evidence demonstrates a need for urgent action, this will be taken as soon as practicable alongside the rolling programme of inspections. If, however, the evidence is not conclusive then these areas will be included in a specific investigation of such threats, to be undertaken once the investigation of the towns and villages is complete. This will include areas of the District with low population density such as common land, moor land, forested areas and other open spaces.

3.10 Final Prioritisation

The initial prioritisation has been completed. This identified 2700 potentially contaminated land sites within the district. The list is based on a score generated by the current day land use and the historical land use data.

Further risk assessment based on the number, type and distance of potential receptors from a source, combined with possible pathways, to link the sources and receptors will be required to produce the final prioritised list. This work will be undertaken using the CLARE software.

3.11 Timetable

Following final prioritisation, the Council does not intend to produce a timetable for carrying out detailed inspections. Sites will be investigated based on the prioritised list, starting with the highest ranked site.

CHAPTER 4: Procedures - Arrangements for Identification, Inspection and Collection of Information.

4.1 Internal Management Arrangements for Inspection and Identification

Procedures have been drawn up to describe how contaminated land issues will be handled within the Council. This section will detail the level of service the business community and members of public can expect from the Council in dealing with these issues.

The day-to-day responsibility for gathering and assimilating information for the prioritising of sites within the District rests with specific authorised officers within the Environmental Protection Team. This involves populating the Contaminated Land database with potentially contaminated sites captured from current and historical maps. It also involves amassing and responding to information from a variety of sources for entry onto this database. Specific, authorised officers in the Environmental Protection Team will also undertake the initial site visits/assessments; however it is most likely that that certain aspects of the investigation and remediation will require the involvement of specialists in various aspects such as:

- Intrusive site investigations
- Laboratory analysis of potentially contaminated soils
- Specialist consultations
- Remedial techniques

As well as implementing the strategy, a major function of the Environmental Protection team in addressing land contamination is through the planning process. The team works closely with Craven District Council's Planning and Building Control Departments in developing procedures and agreeing planning conditions.

Other duties undertaken by the Environmental Protection Team with respect to land contamination issues include the investigation and collation of information/requests or enquiries by the public, solicitors and other bodies as part of searches or similar.

A suitably experienced Officer, under the guidance of the Environmental Health Manager is acting as the Lead Officer on Contaminated Land. The Environmental Protection Manager will deal with the day-to-day implementation of the revised strategy once approved by elected members and will also be responsible for serving remediation notices, subject to consultation with the Council's solicitor.

Elected members will be informed at the earliest opportunity of any plans to designate an area of Council-owned land as 'contaminated land', or land where the Council is the "appropriate" person and may be liable for remediation costs.

If the Environmental Protection Team considers at any time that some particular contaminated land might be required to be a Special Site, it will first consult with the Environment Agency. Having regard to any advice received, the Council then needs to decide whether or not the land is required to be designated as 'contaminated land'. If the answer is yes, the Council should then notify the Environment Agency, who then have 21 days to consider and respond, either agreeing or disagreeing with the notification received.

4.2 Information Management

The Council's corporate Geographical Information System (or GIS) will be the primary tool used to map any potentially contaminated land sites. A risk assessment software package,

Contaminated Land Risk Evaluator (CLARE), will be used to correlate all information and determine the proximity of potential receptors (residents, controlled waters) to sources of contamination. CLARE will be used to produce a final prioritisation list.

4.3 Complaints and voluntary information provision

From time to time, the Council may receive a complaint regarding contaminated land from a member of the public, business or community group. Interested residents may also voluntarily supply information relating to land contamination that is not directly affecting themselves, their families or their property. These complaints or acts of information provision may impact on the approach to inspection and so the procedures to be adopted are detailed here.

4.3.1 Complaints

A complaint regarding contaminated land will be dealt with following the same procedure as currently used by Environmental Health to deal with statutory nuisance complaints.

All complainants may expect:

- their complaint to be logged and recorded
- to be contacted by an officer regarding their complaint within five working days of receipt
- to be kept informed of progress towards resolution of the problem.

Every effort will be made to resolve complaints quickly and efficiently. The legislative framework does, however, present a number of obstacles to speedy resolution of problems:

- i. Proof of a viable pollutant linkage before any formal designation as contaminated land is permissible, which might only be possible with detailed investigation
- ii. Prior consultation with interested parties before designation as contaminated land
- iii. A minimum of a three month period between designation and serving of a remediation notice
- iv. The requirement for the enforcing authority to make every effort to identify the original polluter of the land (or “Class A” person)

The regulations allow conditions (ii) and (iii) to be waived in extreme cases, but not conditions (i) and (iv).

4.3.2 Voluntary provision of information

If a person or organisation provides information relating to contaminated land that is not directly affecting their own health, the health of their families or their property, this will not be treated as a complaint. The information will be recorded and may be acted upon. There will, however, be no obligation for the Council to keep the person or organisation informed of progress towards resolution, although it may choose to do so as general good practice.

4.4 Confidentiality

All complainants will be asked to supply their names and addresses and, if appropriate, the address giving rise to the complaint. The identity of the complainant will remain confidential. The only circumstance in which this information might be made public would be in the case of a remediation notice being appealed in a court of law and an adverse effect on the complainant's health was an important reason for the original contaminated land designation.

4.5 Anonymously supplied information

The Council does not normally undertake any investigation based on anonymously supplied information, and this general policy will be adopted for contaminated land issues. This policy does not, however, preclude investigation of an anonymous complaint in exceptional circumstances.

4.6 Anecdotal evidence

Any anecdotal evidence provided to the Council relating to contaminated land will be noted, but no designation of contaminated land will occur without robust scientific evidence. In all cases, the Environmental Health & Housing Manager will use knowledge and experience to decide what, if any, further investigation is required following a complaint or a provision of information.

4.7 Risk Assessment

Risk is defined as the combination of:

- (a) The probability, or frequency, of occurrence of a defined hazard (for example, exposure to a substance with the potential to cause harm); and
- (b) The magnitude (including the seriousness) of the consequences.

As required by Statutory Guidance the Council has undertaken the initial prioritisation of its area using the principle of risk assessment to evaluate the information gathered. The prioritisation process resulted in a list of sites for priority inspection such that the detailed inspection process will commence with the sites most likely to contain serious contaminants that are likely to harm a number of people. Sites will be listed according to their priority however following assessment, not all sites will require detailed inspection.

4.7.1 Risk Assessment of Controlled Waters

Advice will be sought from the Environment Agency on risk assessment if controlled waters are the receptor in a particular pollutant linkage. It is anticipated that risk assessments and remediation will be carried out in accordance with current Environment Agency guidance.

4.8 Interaction with Other Regulatory Regimes

There are other regulatory actions that can be taken to deal with contamination on land. Overlaps with planning, water pollution, waste management licensing and Integrated Pollution Prevention Control (IPPC) legislation are considered the most important and are addressed here. Any issues of land contamination that may previously have been dealt with under the statutory nuisance regime will now be dealt with through the Part 2A regime.

4.9 Planning

The vast majority of contaminated land issues are currently addressed through the planning regime, where contamination is a material consideration. While the introduction of Part 2A will undoubtedly lead to the problems of additional sites being addressed, it is anticipated that redevelopment of brownfield sites, and the associated planning controls, will remain the primary mechanism for dealing with contaminated land. Any remediation agreed as a planning condition will be dealt with under planning controls and not under Part 2A.

Environmental Health already works closely with Planning and Building Control on all issues relating to pollution and the current arrangements for consultation are believed to be sufficiently robust to encompass contaminated land issues.

The Council also gives advice to developers through its developers guide. This guide has been produced and adopted by most Local Authorities in North Yorkshire. This guide gives detailed information for developer on what information is required as far as contaminated land is concerned when they submit their planning applications. (See Appendix D)

4.10 Duty of Site Operator under Environmental Permitting Regulations.

Under legislation to regulate pollution from industrial processes, site operators are required to undertake a site condition survey prior to receiving a licence to operate. If the site condition is such that areas of land meet the definition of contaminated land, then submission of a site survey may trigger action under Part 2A. Existing processes will be brought under the Part 2A regime, although it will apply to any new processes or any substantial change to an existing process.

4.11 Information Collection

Many sources of information will be required to identify potential sources of contamination and potential receptors. Some of the resources are detailed below.

Resource	District Specific	Use
Historic maps	Paper copies and 25 years of planning applications	To identify sources
Geological maps	Identification of the geology of the District	To characterise sources and pathways
Hydrogeological Maps	The Groundwater Vulnerability Maps	To identify receptors (controlled waters)
Maps	Produced by the Environment Agency will be used to assess the potential for contamination of groundwater	(Controlled waters)
Source Protection Zones	Areas of groundwater that receive special protection by the Environment Agency are identified on the EA website.	To characterise receptors (controlled waters)
Environmental Health records	The District Council maintains records of complaints and investigations	To identify known information on contamination
Planning records	The District Council holds detailed planning records of development in the area including information on ground condition presented in surveys	To identify known information on contamination
Local Development Framework	This is a valuable source of up-to-date information on land use	To identify receptors (particularly historic monuments and protected areas of the environment)
Integrated Pollution Control register	The Council has a public register containing details of authorised industrial processes in the District since 1990	To identify sources of contamination
Waste Management Licences	The Environment Agency maintain a public register of sites licensed for waste management activities.	To identify sources of contamination
Register of licensed surface water and groundwater abstractions	Provided by the Environment Agency.	To identify receptors of contamination
Register of closed landfill sites	The Environment Agency will provide a register of closed landfill sites	To identify sources of contamination

The main source of information on historical contaminative uses within the district has been the historical maps on potentially contaminative land uses purchased from Landmark. This will be cross-referenced against other identified sources of information with regard to the possible presence of contaminants and information on pollution.

Information was also sought from statutory and non-statutory Consultees on any information relevant to contamination during the draft strategy consultation in 2001. See contact details for statutory Consultees at Appendix B. Anecdotal information was obtained from some of the Parish Councils identifying sites where potentially contaminative uses do or have occurred within the parishes. All this information will be checked and cross-referenced with information already held from other sources.

The information will not be disregarded and even if there is no issue at present the information is held and reviewed should circumstances change, such as receptors being introduced through the planning process. Further consultation on a site-specific basis, will be undertaken once the detailed site inspection stage is reached, through more extensive research into historic land use and through consideration of other sources of information.

4.12 Receptors

The Council's priorities for receptors and information has been gathered from various sources and preliminarily examined with respect to the location of potentially sensitive targets. Information on human receptors that has already been captured onto the GIS system using current land use data sets, identifying the following:

- Residential Areas
- Allotments
- Recreational Areas
- Commercial and Industrial Areas
- Special Area of Conservation
- Special Protection Area
- Site of Importance for nature Conservation

With respect to ecological receptors the following have been included on the GIS:-

- Sites of special scientific interest
- Designated Conservation Areas
- Areas of Outstanding Natural Beauty
- Nature Reserves
- Ramsar Sites

Officers will liaise with the officer responsible for the councils GIS system to obtain updated information with respect to such sites within the district. Regard will also be had to aspects of the historic environment and information is already held on GIS on the location of scheduled monuments.

4.13 Controlled Waters

Controlled waters are defined in Section 78A (9) by reference to Part 3 (Section 104) of the Water Resources Act 1991 and includes "territorial waters which extend seaward for three miles, coastal waters, and inland fresh waters, that is to say, the waters in any relevant lake or pond or of so much of any relevant river or water course as is above the freshwater limit and ground waters, that is to say, any waters contained in underground strata". Section 78A(9) was amended by section 86 of the Water Act 2003 so that for Part 2A purposes "ground waters" does not include waters contained in underground strata but above the saturation zone.

Information on the quality of ground water for the major aquifers is available from the Environment Agency. This covers a ground water observation network of boreholes, which

are regularly monitored for ground water levels and quality. This information is not sufficient to identify pollution of controlled waters on this scale and the impact on controlled waters will be assessed on a site-specific basis. Information on pollution of controlled waters is also likely to be received from:

- Notification by the Environment Agency.
- Notification by another sources/business.
- Notification by a member of the public.

4.14 Special Sites

Part 2A of The Environmental Protection Act 1990 creates a particular category of contaminated land called 'Special Sites' which the Government considers the Environment Agency is best placed to regulate on the basis of its particular expertise and experience. The descriptions of land required to be designated as 'Special Sites' is set out in the Contaminated Land (England) Regulations 2006.

In cases where the Council believe that land, if found to be contaminated land, would be deemed to be a 'Special Site', we will ask the Environment Agency to carry out a site inspection on our behalf, prior to determination of that land as contaminated land. However, the responsibility for formal determination of any land as contaminated land remains with the Council

Once land has been determined to be contaminated land, and where the Environment Agency and Council agree (or the Secretary of State decides) that the land is also a Special Site, the Environment Agency will take over the role of enforcing authority from the Council

CHAPTER 5: Procedures - Arrangements for Detailed Inspections

5.1 Categorisation and Prioritisation

The categorisation and prioritisation exercise of the District has identified a list of sites that justify more detailed investigation according to the risk they pose. These site specific investigations will enable the Council to determine whether it has sufficient information to conclude that one or more significant pollutant linkages occur at a site and thereby establishing whether or not a particular site is contaminated land according to the definition in the Act and if the land is, is it likely to be a 'Special Site'. Although a list exists it is intended that the sites will be dealt with under the planning process. When a site has been investigated the list will be updated. Where sites are being considered under the planning regime the following stages detail how sufficient evidence can be obtained to decide whether a site can or cannot be determined as contaminated land.

5.2 Desktop Study and Site Walkover

The first stage of the site investigation is to collect and assess as much information as possible about a particular site from maps, historical records, the records held by other Council departments and from consultation with other bodies.

Much of this information will be available as a result of the prioritisation process but it is likely that further knowledge will be required to fill in any gaps. This will involve a site visit to carry out a visual inspection and if necessary, limited sampling of surface deposits to assess the validity of the desktop study data. This forms a preliminary risk assessment and will be undertaken in accordance with DEFRA and the Environment Agency's 'Model Procedures for the Management of Land Contamination, CLR 11'.

The site owner, occupier or their agent will be contacted prior to any site visit to discuss the Council's concerns and to arrange access. It is preferable, if possible, to arrange for the site owner, occupier or their agent to be present at such a site visit as this can aid the process of identification. This could also encourage the voluntary remediation of the land.

If following this stage it is shown that a pollutant linkage does not exist, or is not significant then the investigation will cease and no further action will be taken. It may be however, that circumstances will be identified whereby a significant pollutant linkage could occur at some point in the future. Arrangements will then be made to keep the situation under review.

The Environmental Protection Team has a checklist detailing the information to be collected for a desktop study and procedural guidance for site visits. A copy of the Site Inspection Summary of Potentially Contaminated Land is attached at Appendix C.

5.3 Reviewing Site Specific Information Provided by Others

Before carrying out an intrusive investigation the Environmental Protection Team will check:-

- Whether detailed information has been provided, by the Environment Agency, the owner of the land, another Local Authority or some other source sufficient to make a determination on the status/condition of the land;
- Whether someone such as the landowner has offered to make the necessary information available within a reasonable period of time;

Before proceeding with any intrusive investigation:

- On or within close proximity to an area of land of special scientific interest (SSSI) consultation with Natural England on any specific consents or approvals that may be required will be undertaken.
- Any intrusive investigation remediation work consultation with Natural England will be undertaken to establish whether any existing 'contaminated' sites are of conservation value or are of great geological value where the use of intrusive techniques would be potentially damaging.
- On any site designated as a Scheduled Ancient Monuments, consultation with the Yorkshire & Humber Regional Office of English Heritage will be undertaken.
- On any site of national archaeological importance, consultation with the Sites and Monuments Records of the County Archaeological Section will be undertaken.

- On any site, consultation with the ground water section of the Environment Agency will be undertaken to avoid contamination of water resources under or surrounding land to be inspected.

5.4 Detailed Site Inspection

If the evidence from the preliminary risk assessment shows there is a reasonable possibility that a significant pollutant linkage exists, an intrusive site inspection will be necessary before a determination can be made that the land is contaminated according to the statutory definition.

5.5 Intrusive Site Inspection

If an intrusive investigation is required to assess the significance of the pollutant linkage it will be necessary for the Council to employ 'suitable persons' on its behalf to undertake:

- The detailed investigations (trial pitting and drilling)
- Laboratory analysis of soils and water
- Specialist risk assessment
- Remediation proposals.

Detailed specification of investigation and sampling including health and safety procedures to be followed will be formulated on a site-specific basis and will be in accordance with current scientific and authoritative guidance. Intrusive investigations will be undertaken according to the British Standards Code of Practice, BS: 10175:2011 – "Investigation of Potentially Contaminated Land" and according to the principles in Contaminated Land Report CLR 11 "Model Procedures for the Management of Land Contamination". British Standards BS 5930 "Code of Practice for Site Investigation" will be applied in relation to all site investigations to ensure analysis and sampling comply with ISO standards ISO 10381 series (ISO, 2002–2007) and ISO 13530, "Analysis and Sampling" series 1 - 4, 14507, 1689.

5.6 Statutory Powers of Entry to Undertake Site Inspections

Section 108 (6) of the Environment Act 1995 and Section 108 of the Environment Act 1995 as modified by The Radioactive Contaminated Land (Modification of Enactments) (England) Regulations 2006 (Regulation 18) provides the Council with powers to enter, or to authorise in writing, other "suitable persons" to enter premises to carry out an inspection of the land – known as 'inspection using statutory powers of entry'.

These powers, which an authorised person can exercise, are extensive and include:

- To enter at any reasonable time (or in urgent cases at any time, if need be by force) any premises/land to make such examinations and investigations as necessary.
- To take samples; photographs; carry out tests; install monitoring equipment etc.

Before inspecting using statutory powers of entry, the Council will ensure: -

- In all cases that there is a reasonable possibility that a pollutant linkage exists on the land and further (in the case of intrusive work) that;
- The contaminant is actually present and a receptor(s) exists, given the current land use.
- It cannot obtain the information from third parties (within a reasonable timescale) without the need for entering the site.
- Only properly authorised officers will carry out an inspection.

Where the Council is arranging an intrusive inspection of a site the Council will always serve such a notice on the site owner/occupier giving at least 7 days' notice of the date of the investigation to residential occupiers and to occupiers of land where heavy plant is to be used. Consent to enter must be obtained from the landowner/occupier and if refused, access to investigate will be obtained by warrant under Schedule 18 of the Environment Act 1995. This is to prevent unnecessary expense and wasted time should consultants/plant etc. visit to inspect and find that access is being denied.

Schedule 18 of the Environment Act 1995 makes clear the circumstances when the Council must pay compensation for loss or damage as a result of the use of these powers. The Council will ensure therefore that only suitable persons and appropriate technical procedures are used for site investigations and will ensure that the utmost care is taken at all times. Site conditions will be carefully recorded prior, during and after completion of any necessary works including the taking of photographic records.

5.7 Arrangements for Inspection by the Environment Agency

If a site, determined by the Council to be contaminated land is designated a 'special site' by the Council, then the Environment Agency will become the regulatory authority.

The Environment Agency will therefore need to inspect such sites at various stages during the assessment process. In some cases the Council will notify the Environment Agency of the existence of a potential 'special site' as early as possible and make arrangements with the Agency to carry out the inspection of the land on behalf of the Council. This could occur for example where land has been occupied by the Ministry of Defence or land, which may be contaminated land by virtue of radioactive contamination.

In instances where the Council feels that there is a reasonable possibility of a pollutant linkage being present but is unsure and where the presence of that pollutant linkage would require the site to be designated a 'special site', the Council will make arrangements for the Environment Agency to have a formal role at the inspection stage. Such instances could be where the pollutant linkage would be the pollution of controlled waters in the circumstances described in Regulation 3(b) of the Contaminated Land (England) Regulations 2006. Procedures will be agreed with the local Environment Agency office to undertake this process.

5.8 Liaison with Neighbouring Local Authorities

Officers have already established good contact with neighbouring Local Authorities staff working in land contamination and will liaise with them at the earliest opportunity about

cross boundary priority sites. Each such site will be dealt with individually and consultation will be carried out to determine whether it is appropriate for one or both authorities to undertake a detailed inspection. This may depend on the extent of the site falling within each authority area where the potential contaminant(s) and receptor(s) are located etc. Information held by the two authorities will be shared and the Craven District Council will ensure that both authorities are involved in the decision making process.

5.9 Site Risk Assessment

Site-specific risk assessments will be undertaken according to the principles in Contaminated Land Report CLR 11 'Model Procedures for the Management of Land Contamination'. This procedure involves a number of stages from preliminary risk assessment to quantitative and qualitative risk assessments and remedial options appraisal and essentially is comprised of the following general stages:

- 1. Hazard Identification** - where a desktop study and site inspection is used together with information about previous contaminative uses, general physical and geological conditions, so as to gain a preliminary understanding of potential risks associated with the identification of the contamination likely to be present on the site.
- 2. Risk Estimation** - includes the design and execution of a detailed investigation and analysis to collect sufficient data to allow estimation of the risk that contaminants may pose to receptors.
- 3. Risk Evaluation** - where all available risk based information is reviewed to decide whether the estimated risks are unacceptable, taking into account their nature, scale and any technical uncertainties, which may be associated with the risk estimation process. The estimation process includes the use of models and detailed guidance to assess the risks to human health and other receptors such as controlled waters, ecological systems etc.

5.10 Soil Guideline Values (SGV's)

To complement the risk based approach of the contaminated land regime, a set of guidelines were published in the form of The Contaminated Land Report (CLR) series of guidance documents (CLR 7-10, Soil Guideline Values (SGV's) and Toxicological (TOX) series). These are intended to "provide regulators, developers, landowners and other interested parties with relevant, appropriate and scientifically based information and advice on the assessment of risks arising from the presence of contamination in soil".

Soil Guideline Values (SGVs) are 'intervention values' i.e. levels above which there are an unacceptable risk to human health and are not intended as clean-up standards. However to date only a limited number of contaminants have had SGVs calculated and published by DEFRA and the Environment Agency.

5.11 Risk Assessment for Other Substances

It is likely that guideline values will be required for substances that are not yet covered by SGVs. In such cases, reference may be made to other sources of information such as generic guideline values from other countries however these will only be used for comparison on a site specific basis and within the UK context, adopting the principles outlined in the CLR7 documentation.

5.12 Risk Assessment Models

While generic guidelines will be used where they exist, it may be necessary to further define the risk by generating a site-specific value for a contaminant. To achieve this, a risk assessment model will be used. Where SGV's do not exist for specific contaminants, site-specific assessment criteria can be derived using The Contaminated Land Exposure Assessment or CLEA model. This is used in accordance with the principles outlined in CLR7-10 and the relevant Soil Guideline Values (SGV) and Toxicological (TOX) reports. However other risk assessment models that adopt either deterministic or probabilistic methods of deriving the risk will be considered.

5.13 Risk Assessment for Controlled Waters

Where the receptor in a pollutant linkage is found to be controlled waters the Environment Agency will be notified and their advice sought on risk assessment The Council will adhere to the EA document "Environment Agency Technical Advice to Third Parties on Pollution of Controlled Waters for Part 2A of the Environmental Protection Act 1990, No 07/02. Environment Agency 2002".

If a contaminant linkage is identified the Council will request the Environment Agency to carry out further work on the Council's behalf.

It is anticipated that risk assessments and remediation will be carried out in accordance with Environment Agency guidelines.

5.14 Risk Assessment for Radioactivity

The Radioactively Contaminated Land Exposure Assessment (RCLEA) is the recommended model for radiation exposure assessments in connection with the Part 2A regime. It is based on the CLEA methodology for non-radioactive contaminated land. RCLEA may be used to carry out initial screening assessments as the sole modelling tool in determining land as radioactively contaminated, provided all the conditions in the Statutory Guidance are met. Local authorities are still the lead regulator for land affected by contamination however with regard to radioactive contamination of land the Council would designate the land as a 'special site' and would become the responsibility of the Environment Agency to secure the remediation of the site.

CHAPTER 6: Procedures - Determinations, Enforcement and Remediation Notices

This chapter deals with procedures on how the Council will deal with land that is considered or determined to be contaminated land. It also details how the Council will record and process the information to ensure the remediation of land. It also discusses the enforcement process.

6.1 Determinations on Land Being Contaminated Land

Once the Council is satisfied that a significant pollutant linkage exists at a particular area of land, the Council will undertake the formal process of determining the land as contaminated land.

The council must be satisfied that either:

- i) Significant harm is being caused
- ii) There is a significant possibility of significant harm being caused
- iii) Significant pollution of controlled waters is being caused
- iv) There is significant possibility of significant pollution of controlled waters
- v) Harm, so far as attributable to radioactivity, is being caused
- vi) There is significant possibility of harm, so far as attributable to radioactivity, is being caused.

The Council has to decide if it can make a determination on the condition of the land and in making a determination will carry out appropriate scientific and technical assessments on all relevant information it has acquired on the land in question. The determination will identify all three elements (pollutant, receptor and pathway) of a significant pollutant linkage or linkages and will identify their significance in accordance with the statutory guidance.

6.2 Where a Determination on Land Being 'Contaminated Land' cannot be made

Situations may arise where it is not possible, with the information available, to determine whether a pollutant linkage is significant in accordance with statutory guidance. In such cases and where additional data collection is not possible or is unlikely to help in deciding whether land is contaminated land, the Council will on the balance of probabilities consider the land not to fall within the statutory definition. However, the decision will be kept under review in the event that additional information comes to light, or when it revisits its decision at some point in the future.

If the Council considers further information should be collected before making a determination, it will collect (or arrange to collect) the relevant information before proceeding further.

Inspection may identify contamination that would form a significant pollutant linkage should new receptors be introduced. In such circumstances this information will be recorded and the site monitored where the introduction of relevant new receptors are

likely. The information will also be made available to the Council's Planning and Building Control Departments should such a site be identified for future development.

6.3 Land Which May be a 'Special Site'

Both the Council and the Environment Agency can identify potential Special Sites, but a site cannot be designated as a special site until the Council determines it to be 'contaminated land'.

Once the Council is satisfied that a site has been determined as contaminated land and is designated as 'a special site', the Council will notify the Environment Agency of this fact in writing. If the Agency disagrees on the designation, it must notify the Council of that fact in writing within 21 days. If the Agency agrees or fails to inform the Council within 21 days, then the land will be designated a special site. The responsibility of securing remediation then passes to the Environment Agency although the Council must complete the formal notification process. This will involve the Council also notifying the owner, occupier and appropriate person with respect to that site or land.

6.4 Format of Information

The purpose of a detailed inspection is to generate information the Council needs to determine whether or not land is 'contaminated land' according to the statutory definition. All information supporting such a decision must be technically robust, defensible and the decision process must be transparent and consistent. To ensure this is the case for all sites within the district all factual information will be recorded in an ordered, specified manner to aid decision making and to ensure consistency.

A written record of determination will be made and will include:

- The exact boundary of the site that is determined including grid references.
- A description of the pollutant linkage(s) confirmed, including a conceptual model;
- A summary of the risk assessment(s) upon which the pollutant linkage(s) were considered to be significant;
- A summary of the way that the requirements of the statutory guidance were satisfied

6.5 Liability

Land may be declared contaminated upon the identification of one significant pollutant linkage. Full liability therefore cannot be decided until all significant pollutant linkages on the site have been identified. Only then can the procedure relating to the apportionment of liability commence. The apportionment of liability has five distinct stages as follows:

- Identifying potential appropriate persons and liability groups
- Characterising remediation actions
- Attributing responsibility to liability groups
- Excluding members of liability groups
- Apportioning liability between members of a liability group

These procedures are complex and cumbersome and will be undertaken in accordance with the statutory guidance. All appropriate persons for any one linkage are a 'liability group'. These may be Class A or class B persons.

6.5.1 Appropriate Persons

Class A – These are generally speaking the polluters who caused the contamination in the first place but also include persons who 'knowingly permitted' the pollution to occur. This includes developers who leave contamination on a site which subsequently results in the land being determined to be contaminated.

Class B – Where no Class A persons can be found liability reverts to the owner or occupier of the land. These are the Class B persons.

The Council will make all reasonable enquiries to identify class A persons before liability reverts to the current owner occupiers.

The matter of appropriate persons must be considered for each significant pollutant linkage. Therefore where a site has had a series of contaminative uses over the years, each significant pollutant linkage will be identified separately and liability considered for each.

6.5.2 Apportionment of Costs

Usually the members of a liability group will have the total costs falling on the group as a whole apportioned between them. It may also be necessary to apportion costs between liability groups. The Council will have regard to statutory guidance in the application of the exclusion and apportionment tests

6.6 Enforcement

6.6.1 Remediation Notices

The Council will complete the extensive consultation process and give ample encouragement and opportunity to appropriate persons to arrive at informal solution before remediation notices are served. The Council will do all it reasonably can do to consult the appropriate person(s), owners occupiers etc. about their views on the state of the land.

Remediation notice will be served as a last resort (not withstanding urgent cases) and only after the aforementioned consultation process. The serving of remediation notices will not be undertaken unless the Council is satisfied that:

- The remediation actions will not otherwise be carried out and;
- That the Council has no powers to carry out the work itself

If it is satisfied of these two facts the Council will serve a remediation notice on each appropriate person however this can only be undertaken three months after formally notifying the appropriate persons that the land is determined as contaminated land. This

three-month period will not apply where there is an imminent risk of serious harm and urgent action is deemed necessary.

The Council will specify on the remediation notice what remediation measures are necessary to be carried out. These works will be both appropriate and cost effective and in accordance with the statutory guidance will employ 'best practicable techniques'. The purpose of the remediation is to ensure that after its completion the land is no longer contaminated land by taking the shortest and lowest cost means to do so. The required remediation works must be 'reasonable', balancing the costs of doing the works against the cost of failing to, in terms of the harm or potential harm from the continuing pollution. In most cases this would involve focusing remediation on the pathway, rather than the receptor or the contaminant to break the pollutant linkage. It will not therefore necessarily involve the removal of the contaminant from the land.

6.6.2 Remediation by the Council

Before the Council can serve a remediation notice it will first determine whether it has the power to carry out any of the remediation actions itself.

There are five specified circumstances where the Council have the power to carry out remedial actions:

- Where urgent action is required
- Where no appropriate person can be found (and the site is an orphan site)
- Where one or more appropriate persons are excluded (on grounds of hardship)
- Where the Council has made an agreement with the appropriate person(s) that it should carry out the remediation
- In default of a remediation notice

6.6.3 Remediation on Council Owned Land

Where land owned by the Council is identified as contaminated land and is not a special site, the Council is prohibited from taking formal action requiring remediation. The Council will therefore deal with these sites as though it was the enforcing authority and will seek appropriate remedial works as necessary in order to satisfy the demands of the regime to be open, transparent and consistent. The detail of the remedial works will be entered onto the Public Register as a Remediation Statement.

Where possible, the highest standards of remediation shall be employed to ensure that the land no longer falls within the definition of contaminated land.

6.7 Urgent Action

The Council will undertake urgent remedial work at a site where it is satisfied that there is an imminent danger of serious harm, serious pollution of controlled waters or serious harm attributable to radioactivity being caused by the contaminated land. In such circumstances the Council will use its Statutory Powers of Entry to undertake the remedial works, which may involve forced entry onto the land. See Chapter 5.6.

The Council will only undertake remediation in urgent cases where it is the enforcing authority if it is of the opinion that the risks would not be mitigated by enforcement action. In the case of a special site once the site has been determined to be contaminated land and the Council has notified the Environment Agency of its designation as a special site in accordance with the statutory guidance, the Agency becomes responsible for the remediation of the site.

In appropriate cases the Council will seek to recover costs of remediation works it has completed.

6.8 Appeals

Regulation 8 of the Contaminated Land (England) Regulations 2000 dealt with the procedure of appeal to the Magistrates Court however section 108 of the Clean Neighbourhoods and Environment Act 2005 provided that all appeals against remediation notices be made to the Secretary of State for the Environment, Food and Rural Affairs. The rights of appeal against a remediation notice and the appeal procedure are contained with the Contaminated Land (England) Regulations 2006 at Regulation 8. Any appeals made after the implementation date of the above regulations should be made to the Secretary of State.

In the case of an appeal against a remediation notice being duly made, the remediation notice concerned is suspended and remains suspended until such time as either the appeal is finally determined or the appeal is withdrawn.

Duly Made means within the stipulated timescale and in accordance with the requirements of the Regulations.

As with all other notices served by the Council's Environmental Protection Team, the remediation notice(s) sent to the appropriate person(s) will contain all necessary notes on the rights of appeal against the notice(s)

CHAPTER 7: Communication and Liaison

Much of the work proposed in this strategy will be collaborative and require effective liaison with other bodies.

7.1 Statutory Consultees

Contacts have already been established with officers of all statutory Consultees.

Statutory Consultees for the Contaminated Land Inspection Strategy are:

- Environment Agency
- Natural England
- English Heritage

- Department for Environment, Food and Rural Affairs
- Food Standards Agency
- North Yorkshire County Council
- Yorkshire Dales National Park

Each organisation has been consulted as part of the strategy. As Environment Agency operational boundaries are defined by river catchments, Preston, York and Leeds Environment Agency Regional offices all deal with areas of the Craven District. Following discussion with the Environment Agency, initial liaison has been carried out through the Leeds regional office.

7.3 Communicating with Owners, Occupiers and Other Interested Parties

Craven District Council's approach to its regulatory duties is to seek voluntary action before taking enforcement action. This approach will be adopted for issues of land contamination, recognising that in many cases as much or more effective remediation can be achieved through agreement than by enforcement.

This approach requires effective communication with owners, occupiers and other interested parties. The Environmental Protection Manager will be the central contact point within the authority on contaminated land issues and as such will ensure owners, occupiers and other interested parties are kept informed at each stage of an investigation, regardless of whether there is a formal designation of contaminated land.

Where a formal designation of contaminated land is required, the following actions will be undertaken:

7.3 Designating an Area of Contaminated Land

In designating an area of contaminated land Craven District Council will:

- Write to the owner and / or the occupier of the land at least 5 working days prior to designation, explaining in summary the reason for designation.
- Write to the owner and / or the occupier explaining the land has been designated as contaminated land and seeking appropriate remediation without service of a notice.
- If requested, dispatch a copy of the written risk assessment to the owner and / or occupier of the land within 5 working days of receipt of a request.
- Write to the owner / occupier of neighbouring properties and / or the complainant within 5 working days of designation.

7.4 Serving a Remediation Notice

In serving a Remediation Notice Craven District Council will:

- Provide a written remediation notice to the owner / occupier specifying action required.
- Write to the owner / occupier of neighbouring properties and / or the complainant within 5 working days of notice being served.

Should an urgent designation of contaminated land be required, these steps will be observed as far as practicable although some deviation from the time scales specified is to be expected.

7.5 Powers of Entry

Under Section 108(6) of the Environment Act, the Council has been granted powers of entry to carry out investigation. At least seven days' notice will be given of proposed entry onto any premises, unless there is an immediate risk to human health or the environment.

7.6 Enforcement Action

The Council will have regard to the Enforcement Concordat and its Enforcement Policy to ensure consistent, fair, and transparent practices are used when taking enforcement action.

7.7 Risk Communication

The complex nature of contaminated land issues do not lend themselves to easy explanation to the layperson. Development of effective methods of risk communication is therefore essential.

The Council will treat any concerns raised by a member of the public seriously and with respect, recognising the importance of the issue to the individual. In all instances, the Council will recognise and try to overcome the critical barriers to effective risk communication.

These regulations grant only limited powers to local authorities to deal with materials present in, on or under the ground. Many members of the public believe that any material that is not naturally present in the ground should be removed, especially if it is in the vicinity of their own home. It will be critical to explain this can only be done where there is a risk of significant harm, and it is to be expected that some members of the public will have difficulty accepting this.

It is important to appreciate that the expectations of some members of the public will not be met by the powers local authorities may exercise under contaminated land legislation.

7.8 Public Register

The Contaminated Land (England) Regulations 2000 (as modified in 2006) require the Council to maintain a register for contaminated land. The Contaminated Land Public Register will serve as a permanent record of all regulatory activity undertaken to ensure the remediation of any site, which has been determined to be contaminated land. The

regulations clearly specify the information that can be recorded on this register. This register will therefore include:

- Remediation notices
- Details of site reports obtained by the authority relating to remediation notices
- Remediation declarations, remediation statements and notifications of claimed remediation
- Designation of sites as “special sites”
- Any appeals lodged against remediation and charging notices
- Convictions

The public register will not include details of historic land use and other records used in the investigation of potentially contaminated land. These are research documents and as such will not be made available to the public

7.9 Provision of Information to the Environment Agency

As Local Authorities are the lead regulators on contaminated land, with the Environment Agency regulating only some categories of sites. A memorandum of understanding has been drawn up between the Environment Agency and the Local Government Association that describes how information will be exchanged between the Local Authority and the Environment Agency. The Council will therefore provide information to the Environment Agency following the guidelines agreed.

The Local Authority must also provide information to the Environment Agency whenever a site is designated as contaminated land, and whenever a remediation notice, statement or declaration is issued or agreed. The Environment Agency has provided standard forms allowing this information to be provided in a consistent format and the Council will adopt these to fulfil its reporting requirements.

Once notification of a determination of contaminated land has been received, the Environment Agency has the power (under Section 78(V) of the Environmental Protection Act 1990) to provide site specific guidance concerning:-

- Remedial options
- The standard to which land or waters should be remediated
- The reasonableness of remediation in regards to cost and the seriousness of the impact to controlled waters
- Identification of appropriate persons and the application of exclusion tests
- Appointment of liability and recovery of costs of remediation

The Environment Agency will only use its power under Section 78(V) where it can clearly provide added value to the Council in the particular site-specific circumstances.

Whenever a remediation notice, statement or declaration is issued or agreed, the Council must notify the Environment Agency. The Environment Agency has provided standard forms allowing this information to be provided in a consistent format and the Council will adopt these to fulfil its reporting requirements.

The Environment Agency is required to prepare an Annual Report for the Secretary of State on the state of contaminated land in England and Wales. The report will include:-

- A summary of local authority inspection strategies, including progress against the strategy and its effectiveness.
- The amount of contaminated land and the nature of contamination.
- Measures taken to remediate land.

The national report will be reliant on information provided by Local Authorities, as they are the lead regulators. A memorandum of understanding on Land Contamination Protocol has been drawn up between the Environment Agency and the Local Government Association that describes how information will be exchanged between the Local Authority and the Environment Agency. The Council will therefore provide information to the Environment Agency following the guidelines set out in this national agreement.

7.10 Provision of Information to Interested Parties

Implementation of the strategy will result in a vast amount of information, including historical information, which will be held by the Council and which could be useful to other parties. Information can be requested through Council Searches, under the Freedom of Information Act 2000 and under the Environmental Information Regulations 2004. Regard will be had for the Data Protection Act 1998 when providing information. Some of this information will be of a more general nature whereas some, when relating to site inspection information could be of a confidential nature.

7.11 Environmental Enquiry - General information

The Council will respond to requests made by the public, solicitors or other interested parties on a site specific basis under the Environmental Information Regulations 1992 (as amended in 2004). These regulations require the Council to make any environmental information they hold available on request, subject to certain exemptions. For the purpose of the Regulations 'information' includes records registers, reports, returns and information on computers.

Requests should be made in writing and addressed to:

Craven District Council
Environmental Protection
1 Belle Vue Square
Broughton Road
Skipton
North Yorkshire
BD23 1FJ

☎ 01756 706355

E-mail: environmentalhealth@cravendc.gov.uk

Requests should include:

- Specific details on the information required
- A plan of the site
- A site address

A charge will be made for such requests and will be required as an advance payment before the information is provided. Charges are reviewed annually and are included in the Council's Approved Scheme of Charges.

The Council will respond in writing within 20 working days and will provide as much relevant environmental information about a site as is held by the Council.

7.12 Information from detailed site inspections

Certain site specific information obtained and held as a result of detailed site inspection may be confidential or may be interpretative in nature e.g. risk assessment findings. Such information may be unverified and/or interpretive and while being used during the decision making process will be regarded as confidential and will not be divulged to the public as part of an environmental enquiry. Once the Detailed Inspection is complete and a decision has been made that the site is, or is not contaminated land such information can be provided.

If the site is determined to be Contaminated Land once the detailed site inspection and risk assessment of site is complete, such information will be entered into the Public Register.

The public register is paper-based, which is accessible to view, on request, during normal office hours Mondays to Fridays at The Environmental Protection Offices at the aforementioned address. Facilities are available to obtain copies of register entries but a charge will be made according to the Council's Scheme of Charges.

CHAPTER 8: Review Mechanism

This strategy outlines the approach the Council will take to inspect land within its district for contamination. It is anticipated that the process of inspection will be continuous, particularly in light of new information or if a change in land use is proposed. This section describes instances when inspections will occur outside the general inspection framework, circumstances under which previous inspection decisions should be reviewed and the measures to be taken to ensure the strategy itself and the Public Register remain effective and up to date.

8.1 Triggers for Undertaking Non-Routine Inspections

It is recognised that circumstances may arise where inspections have to be undertaken outside the strategic framework.

Non routine inspections may be undertaken under the following circumstances:-

- Proposed changes in the use of surrounding land.
- Unplanned changes in the use of land (e.g. unauthorised use by a sensitive receptor).
- Unplanned events - spillages, accidents, fires, flooding etc.
- Reports of localised health effects relating to a particular area of land.
- Reports of unusual site conditions from:
 - Voluntary organisations
 - Business
 - The public
- Responding to information from other statutory bodies.
- Responding to information from owners, occupiers of land or other relevant parties.

Flexible trigger review mechanisms are built into the inspection programme to allow for priorities to be amended in the light of unforeseen circumstances.

8.2 Triggers for Reviewing Inspection Decisions

Circumstances may arise where it will be necessary to review the findings of previous inspections. This may be necessary where there are:-

- Significant changes in legislation.
- Revision of guideline values for exposure assessment.
- Establishment of significant case law or other precedent.
- Reports of localised health effects relating to a particular area of land.
- Reports of unusual site conditions from:
 - Voluntary organisations
 - Business
 - The public
- Responding to information from other statutory bodies.
- Responding to information from owners, occupiers of land or other relevant parties.

It is therefore important to ensure that all factual information is documented in an ordered, specified manner to aid decision making, to ensure consistency and to allow an efficient review.

8.3 Review of the Strategy

This is the third review of the strategy since 2001. This review has been triggered by the introduction of new statutory guidance. The strategy would normally be for a five year period, but we would need to ensure the strategy remains effective and up to date, therefore the strategy will be kept under regular review in the context of emerging regulation and statutory guidance. Any significant changes will be reported and the strategy amended as required.

8.4 Review of Register

The register is required to contain detail of all the information prescribed by the Contaminated Land (England) Regulations 2006 including full particulars of any convictions for a failure to comply with a remediation notice, which includes the name of the offender, The Council will however have regard to the Rehabilitation of Offenders Act 1974 and Government recommendations that the register should be regularly reviewed with the aim of identifying and removing spent convictions. Nevertheless, the register will continue to record that an offence has taken place.

Appendix A

Industry Profiles

These Industry Profiles provide developers, local authorities and anyone else interested in land contamination, with information on the processes, materials and wastes associated with individuals industries.

They are not definitive studies but they introduce some of the technical considerations that need to be borne in mind at the start of an investigation for possible contamination.

Their usefulness to the risk management process is such that the decision was made to provide access to them and the 47 original publications in the series have been scanned and made into documents by DEFRA and are available as free PDF downloads from the Environment Agency at <http://www.environment-agency.gov.uk/research/planning/33708.aspx>.

Original printed versions of the documents are still available for purchase from the DEFRA website from their land quality pages.

- Airports
- Animal & Animal processing works
- Asbestos manufacturing works
- Ceramics, cement and asphalt manufacturing works
- Chemical Works - coatings, paints and printing inks manufacturing works
- Chemical Works - cosmetics and toiletries manufacturing works.
- Chemical Works - disinfectants manufacturing works
- Chemical Works - explosives, propellants and pyrotechnics manufacturing works
- Chemical Works - fertiliser manufacturing works
- Chemical Works - fine chemicals manufacturing works
- Chemical Works - inorganic chemical manufacturing works
- Chemical Works - linoleum, vinyl and bitumen-based floor covering manufacturing works.
- Chemical Works - mastics, sealants, adhesives and roofing felt manufacturing works
- Chemical Works - Organic
- Chemical Works - pesticide manufacturing works
- Chemical Works - pharmaceutical manufacturing works
- Chemical Works - rubber processing works
- Chemical Works - soap and detergent manufacturing works
- Dockyards and dockland
- Engineering Works - aircraft manufacturing works
- Engineering Works - electrical and electronic equipment manufacturing works (including works manufacturing equipment containing PCBs)
- Engineering Works - railway engineering works
- Engineering Works - ship building repair and ship breaking including naval shipyards
- Engineering Works - vehicle manufacturing works
- Gas works, coke works and other coal carbonisation plants

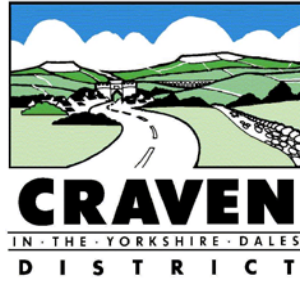
- Metal manufacturing, refining and finishing works - electroplating and other metal finishing works
- Metal manufacturing, refining and finishing works - iron and steel works
- Metal manufacturing, refining and finishing works -lead works
- Metal manufacturing, refining and finishing works - non-ferrous metal works (excluding lead works)
- Metal manufacturing, refining and finishing works - precious metal recovery works
- Oil refineries and bulk storage of crude oil and petroleum products
- Power stations excluding nuclear power stations
- Profile of miscellaneous industries
- Pulp and paper manufacturing works
- Railway land
- Road vehicle fuelling, service and repair - garages and filling stations
- Road vehicle fuelling, service and repair - transport and haulage centers
- Sewage works and sewage farms
- Textile works and dye works
- Timber products manufacturing works
- Timber treatment works
- Waste recycling, treatment and disposal sites - drum and tank cleaning and recycling plants
- Waste recycling, treatment and disposal sites - hazardous waste treatment plants
- Waste recycling, treatment and disposal sites - landfills and other waste treatment or waste disposal sites
- Waste recycling, treatment and disposal sites - metal recycling sites
- Waste recycling, treatment and disposal sites - solvent recovery works

Appendix B

STATUTORY CONSULTEE CONTACT DETAILS

<p>Liz Hart Area Contaminated Land Officer Environment Agency Coverdale House, Aviator Court Amy Johnson Way Clifton Moor York YO30 4OZ Liz.hart@environment-agency.gov.uk Tel: 01904 82257</p>	<p>Natural England Consultation Hub Natural England Government Buildings Otley Road, Lawnswood Leeds LS176 5QT consultations@naturalengland.org.uk Tel: 01653 696082</p>
<p>Ian Smith Regional Planner, English Heritage (Yorkshire Region) 37 Tanner Row York YO1 6WP ian.smith@english-heritage.org.uk 01904 601901</p>	<p>Mr Tony Norris Waste Management Officer Environmental Management NYCC County Hall Northallerton DL7 8AH tony.norris@northyorks.gov.uk 01609 780780</p>
<p>Dr Alan Dowding Chemical Safety & Incident Prevention Division, Branch B Food Standards Agency Aviation House, Room 707C 125 Kingsway London WC2B 6NH alan.dowding@foodstandards.gsi.gov.uk</p>	<p>CRCE Team Public Health England Chemical Hazards and Poisons Division Nottingham City Hospital Hucknall Road Nottingham NG5 1PB crcenottingham@phe.gov.uk 0844 2254524</p>

Appendix C



Environmental Protection Act 1990, Part 2A

**Site Inspection Summary
of Potentially Contaminated Land**

SITE DETAILS			
Site name & address			
Grid reference			
Cartology reference			
Prioritisation score		Site area (m ²)	
Landowner(s) / occupiers - if known			
Former potentially contaminative use	The former use of this site as a has the potential to have caused contamination. This report considers the potential for this contamination to impact any of the receptors identified in the statutory guidance via possible significant pollutant linkages.		

Source protection zone	
Depth to groundwater table	
Licensed water abstractions (authorised by the EA)	
Discharge consents, waste management licences & other permits	
Areas of ecological importance	
Areas of archaeological importance	

PLANNING RECORDS

SITE WALKOVER	
Date of site walkover	
Current use of site & surrounding area	
Descriptions of buildings and ground cover	
Location, type and condition of surface water / foul drainage	
Discharges to controlled waters	
Relevant names of adjacent buildings or roads	
Flow direction and appearance of streams and rivers, evidence of groundwater	
Location and type of tanks, underground storage tanks, bunds, pits, walls, fences, remaining buildings etc.	
Evidence of previous investigations (boreholes, backfilled trial pits etc.) Level of ground in relation to adjacent areas and other parts of the site	
Signs of ground settlement or subsidence	
Geology / geomorphology / landscape / natural processes (landslips etc.)	
Site access and any identifiable constraints for investigation of the site (including overhead services)	
Visibly contaminated areas or malodorous areas	

Signs of vegetation distress	
Visible evidence of foundations	
Present day potentially contaminative activities	
Any known contamination incidents	
Presence of underground services	
Site security	
Access for investigation plant and equipment	
Adjacent land conditions, uses, and nature of any businesses / activities	

OTHER INFORMATION	
Including: <ul style="list-style-type: none"> - Discussions with site personnel and/or site owners - Correspondence with the Environment Agency - Previous Work / Site Reports 	

POTENTIAL FOR LAND CONTAMINATION

(Details from industry profiles and local records)

CONCEPTUAL SITE MODEL

Contaminated land is assessed on the basis of a simple risk based model. This approach has been formalised in Part 2A of the Environmental Protection Act 1990 as pollutant linkages, in that a site must have a SOURCE, a PATHWAY and a RECEPTOR.

A site can only be defined as contaminated land if there is at least one complete significant pollutant linkage on site. The conceptual site model below allows an initial assessment of the site to be made, to determine whether there is the potential for pollutant linkages to be present and hence the requirement to undertake an intrusive investigation.

	Petroleum Hydrocarbons (BTEX)	Fuel /Lube Oils	Solvents & Phenols	PCBs	PAHs	Dioxins / Furans	Metals	Cyanides	Corrosives / Acids	Pesticides	Radioactive Materials	Asbestos	Landfill Gas
Human Health													
Ingestion of soil and dust													
Ingestion of vegetables & soil attached to vegetables													
Inhalation of indoor & outdoor dust													
Inhalation of indoor & outdoor vapours													
Dermal contact with soils and dusts													
Risk of fire/explosion													
Controlled Waters													
Migration of soluble or mobile contaminants into groundwater													
Migration of soluble or mobile contaminants into surface water bodies													
Surface run-off into surface water bodies													
Ecological Systems													
Impact on areas of ecological importance													
Crops & Animals													
Impact on crops or domestically grown produce.													
Impact on livestock and wild animals subject to shooting / fishing rights.													
Building Materials & Services													
Impact on building foundations													
Permeation through water pipes													
Potential adverse impact on scheduled monuments													

RECOMMENDATIONS

Based on this desk study it is recommended that an intrusive investigation IS / IS NOT undertaken.

If relevant, provide details of the aims of the intrusive investigation.

Appendix D.

Development on Land Affected by Contamination -
Technical Guidance for Developers, Landowners & Consultants.

Produced by: Yorkshire and Humberside Pollution Advisory Council
Version 5.2 – January 2014

Follow link.

[Developers Guide](#)

Appendix E

GLOSSARY OF TERMS

This document uses a number of terms which are defined in Part 2A or in the statutory guidance. The meanings of the most important of these terms are detailed below, and where appropriate, a reference to the relevant section of Part 2A has been included.

Appropriate Person	Defined in Section 78A(9) as: 'Any person who is an appropriate person, determined in accordance with Section 78F, to bear responsibility for anything which is to be done by way of remediation in any particular case.'
Contaminant	A substance which is in, on or under the land and has the potential to cause significant harm or significant pollution of controlled waters.
Contaminant Linkage	The relationship between a contaminant, a pathway and a receptor.
Contaminated Land	Defined in Section 78A(2) 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) Significant harm is being caused or there is a significant possibility of such harm being caused; or b) Significant pollution of the water environment is being caused or there is a significant possibility of such pollution being caused.' OR with respect to radioactive contamination it is defined as: 'Any land which appears to the local authority in whose area the land 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 harm being

Controlled Waters	Has the same meaning as in Part III of the Water Resources Act 1991, and includes relevant territorial waters, coastal waters, inland freshwaters and ground waters. Except that “ground waters” does not include waters contained in underground strata but above the saturation zone.’
Ecological Systems	<p>Only the following ecological systems can be considered for the purposes of Part 2A:</p> <ul style="list-style-type: none"> • A site of special scientific interest • A national nature reserve • A marine nature reserve • An area of special protection for birds • A “European site” within the meaning of regulation 8 of the Conservation of Habitats and Species Regulations 2010 • Any habitat or site afforded policy protection on nature conservation (i.e. candidate Special Areas of Conservation, potential Special Protection Areas and listed RAMSAR sites); or • Any nature reserve established under section 21 of the National Parks and Access to the Countryside Act 1949.
Enforcing Authority	Special sites will be enforced by the Environment Agency and all other contaminated land sites will be enforced by the local authority in whose area the land is situated.
Environment Agency	An executive non-departmental public body (responsible to the Secretary of State for Environment, Food and Rural Affairs) which aims to protect and improve the environment and to promote sustainable development.
Geology	The study of the structure of rocks, minerals and soils in specific geographical areas.
Harm	<p>Defined in Section 78A(4) as:</p> <p>‘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</p>

	<p>to his property.’</p> <p>OR with respect to radioactive contamination is defined as:</p> <p>‘Lasting exposure to any person being resulting from the after effects of a radiological emergency, past practice or past work activity.’</p>
Part 2A	Part 2A of the Environmental Protection Act 1990.
Pathway	A route by which a receptor is being / could be exposed to, or affected by, a contaminant.
Pollution of Controlled Waters	<p>Defined in Section 78A(9) as:</p> <p>‘The entry into controlled waters of any poisonous, noxious or polluting matter or any solid waste matter.’</p>
Prioritisation	The process of scoring sites based on the potential contaminants, pathways and receptors. This creates a prioritised list of potentially contaminated sites, which can then be inspected in priority order.
Property	<p>Only the following property can be considered for the purposes of Part 2A:</p> <p>a) Property in the form of:</p> <ul style="list-style-type: none"> i) crops, including timber; ii) produce grown domestically, or on allotments, for consumption; iii) livestock; iv) other owned or domesticated animals; v) wild animals which are the subject of shooting or fishing rights. <p>b) 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>
Public Register	Register maintained by the Council of particulars relating to contaminated land.
Receptor	Something that could be adversely affected by a contaminant, for example a person, an organism, an ecosystem, property, or controlled waters.

Remediation	Removing identified significant contaminant linkages, or permanently disrupting them, to ensure that they are no longer significant and that risks are reduced to an acceptable level. Remediation may involve a range of treatment, assessment and monitoring actions to secure the overall clean-up of the land.
Remediation Notice	Defined in Section 78E(1) as a notice specifying what an appropriate person is to do by way of remediation and the periods within which he is required to do each of the things so specified.
Remediation Statement	In any case where the enforcing authority is precluded from serving a remediation notice, the responsible person shall prepare and publish a “remediation statement”. The document will detail what remediation actions are being / have been / are expected to be done, appropriate timescales and the name and address of the responsible person.
Risk	A combination of the probability / frequency of occurrence of a defined hazard and the magnitude (including the seriousness) of the consequences.
Significant Harm to Human Health	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.
Significant Possibility	The decision on whether the possibility of significant harm / pollution being caused is significant is a regulatory decision to be taken by the relevant enforcing authority. Decisions will be made in line with the statutory guidance.
Special Site	Defined by Section 78A(3) as: ‘Any contaminated land – a) which has been designated as such a site by virtue of section 78C(7) or 78D(6)...; and b) whose designation as such has not been terminated by the appropriate Agency under section 78Q(4)...’

Substance	<p>Defined in Section 78A(9) as:</p> <p>‘Any natural or artificial substance, whether in solid or liquid form or in the form of a gas or vapour.’</p> <p>OR with respect to radioactive contamination is defined as:</p> <p>‘Whether in solid or liquid form or in the form of a gas or vapour, any substance which contains radionuclides which have resulted from the after- effects of a radiological emergency or which are or have been processed as part of a past practice or past work activity, but shall not include radon gas or the following radionuclides: Po-218, Pb-214, At-218, Bi-214, Rn-218, Po-214 and Tl-210.’</p>
------------------	--