

EAST AYRSHIRE COUNCIL

CABINET REPORT – 5th March 2008

CONTAMINATED LAND STRATEGY : REVIEW AND UPDATE

Report by Depute Chief Executive/Executive Director of Corporate Support

1. PURPOSE OF REPORT

- 1.1 To advise Cabinet of the review of the Contaminated Land Strategy and to provide an update on the implementation of the Strategy.

2. BACKGROUND

- 2.1 Part IIA of the Environmental Protection Act 1990 (Contaminated Land) requires that each Local Authority should adopt a Strategy for dealing with contaminated land.
- 2.2 East Ayrshire Council formally adopted their Contaminated Land Strategy in October 2001 with a subsequent amendment to reflect minor changes in October 2003.
- 2.3 Various changes to the Strategy are now required to take account of legislation and guidance updated since the previous update in 2003.

3. DISCUSSION AND IMPLEMENTATION

- 3.1 A full review of the Strategy has been carried out to reflect current legislation requirements and the Strategy has been substantially rewritten to reflect this.
- 3.2 There are three main stages involved in assessing potentially contaminated sites under Part IIA : site identification, site prioritisation and site specific assessment. The Strategy has been amended to highlight the adoption of specific developments made relative to identification and prioritisation of sites involving the use of GIS data, historical data and specific software applications relative to site prioritisation.
- 3.3 The approach to site specific assessments has been incorporated to reflect the stages of assessment relative to sites identified for investigation.

- 3.4 Currently 2333 sites have been identified through the adopted process of identification and prioritisation relative to potentially contaminated land (Appendix E of the Strategy). It should be noted not all sites identified will be affected by contamination and the identification process is an indication of the potential for contamination.
- 3.5 All 55 sites identified in the High Risk Category have been assessed and Tier I assessments carried out and formal reports produced. Progress is being made relative to the Moderate Risk sites with formal assessments ongoing in the 1832 identified in the prioritisation programme.
- 3.6 The forward plan, work programme and implementation strategy have been updated to 2009/2010.
- 3.7 A full review of terminology, references and glossary has been carried out and amendments made to the Contaminated Land Strategy.
- 3.8 All legal references have been reviewed with amendments made to Case Law and statutory guidance.
- 3.9 Enviro Ltd continue to provide the contaminated land support service to the Council following formal tendering of the contract.
- 3.10 The Contaminated Land Strategy is available on the members information portal and once approved will be placed on the Council website.

4. FINANCIAL IMPLICATIONS

- 4.1 Mainstream grant funding of £181,000 has been provided by Scottish Government during 2007/08 for Contaminated Land identification and remediation. Future funding arrangements will be rolled up in Council funding allocations from Scottish Government.

5. LEGAL IMPLICATIONS

- 5.1 The requirements relative to the provision and adoption of a Contaminated Land Strategy and the practical arrangements for review and assessment are contained in the Environmental Protection Act 1990, Part IIA.

6. COMMUNITY PLANNING/POLICY IMPLICATIONS

- 6.1 The Contaminated Land Strategy is commensurate with the Community Plan Theme of Improving the Environment.

7. CONCLUSIONS

- 7.1 A comprehensive review of the Contaminated Land Strategy has been carried out providing information on site identification, prioritisation and assessment together with an updated forward plan and work programme.
- 7.2 The review has been carried out to reflect changes in legislative requirements and guidance.
- 7.3 The current status of implementation of the Strategy is outlined in the report and Strategy document.

8. RECOMMENDATIONS

- 8.1 Cabinet is invited to:-
 - (i) Consider approval of the updated and amended Contaminated Land Strategy.
 - (ii) Otherwise note the report.

Elizabeth Morton
Depute Chief Executive/Executive Director of Corporate Support

EM/PLT/EHG

21stFebruary 2008

LIST OF BACKGROUND PAPERS

- 1. East Ayrshire Council Inspection Strategy for the Identification and Remediation of Contaminated Land – October 2003.
- 2. The Contaminated Land (Scotland) Regulations 2005.
- 3. Report to Community Services Committee – 14 September 2005.

Any person wishing to inspect the background papers should contact David Mitchell, Head of Legal, Procurement and Regulatory Services on 01563 576161 or by email to David.Mitchell@East-Ayrshire.gov.uk



East Ayrshire
COUNCIL

INSPECTION STRATEGY

for the
Identification and Remediation
of
Contaminated Land

February 2008

INSPECTION STRATEGY
for the
Identification and Remediation
of
Contaminated Land

**Environmental Health
Department of Corporate Support**

February 2008

EXECUTIVE SUMMARY

As part of the contaminated land provisions contained in Part IIA of the Environmental Protection Act 1990, East Ayrshire Council has a duty to inspect its area to identify Contaminated Land.

Statutory guidance requires that each Local Authority develops and publishes a strategic approach to the identification of Contaminated Land which merits detailed individual inspection.

This Inspection Strategy indicates how East Ayrshire Council will identify potentially contaminated land and how this land will be prioritised in order that it may be assessed in more detail. The Strategy has been extensively updated in February 2008 to reflect changes in legislation and Government Policy and to document progress made by East Ayrshire Council to date in identifying and assessing contaminated land.

The main objectives of East Ayrshire Council with regard to the inspection, identification and remediation of contaminated land are:

1. To protect human health.
2. To protect the water environment.
3. To protect designated ecosystems.
4. To prevent damage to property.
5. To prevent further contamination of land.
6. To encourage voluntary remediation.
7. To encourage the use of brownfield land.

It should be noted that the Inspection Strategy deals with the identification of “**Statutory Contaminated Land**”, i.e. land, which meets the definition of, contaminated land in section 78A(2) of the Act. (See **Section 1.3.5**). Not all land that has contaminants present will meet the definition of Contaminated Land under the Act.

The Statutory Guidance uses a number of such terms and definitions, which are contained in Part IIA of the Act, these are included in a glossary of terminology in Appendix D of this document.

In adopting this Inspection Strategy, East Ayrshire Council is fulfilling its statutory obligations and complying with the underlying principles of Part IIA, by managing contaminated land, in a way, which protects the well being of the Community specifically and the wider environment in general.

CONTENTS

1	INTRODUCTION	3
1.1	WHAT IS CONTAMINATED LAND?	3
1.2	BACKGROUND	3
1.3	REGULATORY CONTEXT	4
1.4	OBJECTIVES OF THE STRATEGY DOCUMENT	9
2	CHARACTERISTICS OF THE EAST AYRSHIRE AREA	11
2.1	GEOGRAPHICAL LOCATION	11
2.2	BRIEF DESCRIPTION / HISTORY	11
2.3	SIZE IN AREA (km ²) AND POPULATION	11
2.4	CURRENT AND HISTORICAL LAND USE CHARACTERISTICS	13
2.5	PROTECTED LOCATIONS (NATURAL & BUILT HERITAGE)	14
2.6	KEY WATER RESOURCE / PROTECTION ISSUES	15
2.7	BROAD GEOLOGICAL CHARACTERISTICS	15
2.8	BROAD HYDROLOGICAL CHARACTERISTICS	16
2.9	CURRENT AND PAST INDUSTRIAL HISTORY	17
2.10	KNOWN INFORMATION ON CONTAMINATION	17
2.11	REDEVELOPMENT HISTORY REMEDIAL ACTIONS & CONTROLS	18
3	OVERALL AIMS	19
3.1	AIMS OF THE COUNCIL	19
3.2	OBJECTIVES	19
4	LOCAL AUTHORITY PRIORITY ACTIONS & TIMESCALES	21
4.1	OVERALL PRIORITY	21
4.2	PRIORITY ACTIONS	21
4.3	TIMESCALES	21
5	PROCEDURES	22
5.1	INTERNAL MANAGEMENT ARRANGEMENTS FOR INSPECTION & IDENTIFICATION	22
5.2	CONSIDERING LOCAL AUTHORITY INTERESTS IN LAND	22
5.3	INFORMATION COLLECTION	22
5.4	INFORMATION & COMPLAINTS	24
5.5	INFORMATION EVALUATION	26
5.6	IDENTIFICATION, PRIORITISATION & SITE-SPECIFIC ASSESSMENT	28
6	GENERAL LIAISON AND COMMUNICATION STRATEGIES	37
6.1	OTHER REGULATORY BODIES	37
6.2	NON-REGULATORY BODIES, LANDOWNERS, OTHER INTERESTED PARTIES & THE WIDER COMMUNITY	39
6.3	RISK COMMUNICATION	40
7	PROGRAMME FOR INSPECTION	43
7.1	DETAILED INSPECTIONS	43
7.2	WORK PROGRAMME	45
8	REVIEW MECHANISMS	49
8.1	TRIGGERS FOR UNDERTAKING INSPECTION	49
8.2	REVIEWING THE STRATEGY DOCUMENT	49
8.3	AUDIT	50
9	INFORMATION MANAGEMENT	51
9.1	GENERAL POLICY	51
9.2	PUBLIC REGISTER	51
9.3	COMMERCIAL CONFIDENTIALITY	52
9.4	ISSUES OF NATIONAL SECURITY	53

9.5	INFORMATION MANAGEMENT	53
9.6	REQUESTS FOR INFORMATION	54
9.7	PROVISION OF INFORMATION TO SEPA	54
9.8	THE STATE OF CONTAMINATED LAND IN SCOTLAND REPORT	54
9.9	EAST AYRSHIRE COUNCIL – SEPA LIAISON	55
	APPENDIX A: Schedule for Implementation of Strategy	56
	APPENDIX B: East Ayrshire Council Contact Points	59
	APPENDIX C: References	60
	APPENDIX D: Glossary of Terms and Abbreviations.....	62
	APPENDIX E: Potentially Contaminated Sites Identified through Identification and Initial Prioritisation Work	67

1 INTRODUCTION

In his foreword to “A better quality of life: A strategy for sustainable development for the UK”, the Prime Minister, the Rt. Hon Tony Blair MP, said:

“The last hundred years have seen a massive increase in the wealth of this country and the well being of its people. But focusing solely on economic growth risks ignoring the impact – both good and bad – on people and on the environment. Had we taken account of those links in our decision making, we might have reduced or avoided costs such as contaminated land or social exclusion.”

Contaminated land degrades the environment and is an example of the failure in the past to move towards sustainable development.

1.1 WHAT IS CONTAMINATED LAND?

“Contaminated Land” is the term given to land containing substances that when present in sufficient concentrations, may cause harm to humans, animals, the environment or property.

1.2 BACKGROUND

East Ayrshire Council is obliged to address the problem of contaminated land in its area under the provisions contained in Part IIA of the Environmental Protection Act 1990 inserted in the Act by Section 57 of the Environment Act 1995, which came into force on 14th July 2000.

The regime provides a system for the identification, prioritisation and remediation of Contaminated Land, where the contamination is causing unacceptable risk to human health or the wider environment. The extent of risk will be addressed in the context of current use and the circumstances of the land.

Under the regime the Local Authority’s duty to “cause its areas to be inspected from time to time for the purpose of identifying Contaminated Land (section 78B), requires that a “strategic approach” to inspection be taken and that this approach is described and published in a written strategy.

Changes to the legislative regime were implemented in April 2006 as a result of enactment of the Contaminated Land (Scotland) Regulations 2005. The main purpose of the changes has been to prevent disproportionate regulation being applied to contaminated land causing only trivial amounts of pollution to the water environment; and to align the regime to the Water Environment and Water Services (Scotland) Act 2003. There have also been changes in Government policy in relation to assessment of significant harm to human health since publication of the previous version of the Strategy in 2003.

This document outlines East Ayrshire Council’s overall strategy, which has been put in place in order that the statutory requirements concerning inspection duties may be met. The current version of the document updates the Strategy to reflect subsequent changes in legislation and policy and details the progress made to date on implementation of the Strategy.

1.3 REGULATORY CONTEXT

This section provides an overview of the current regulatory context. Additional information is contained in the Statutory Guidance. Definitions of key terms are provided in the glossary attached.

1.3.1 Contaminated Land regime

Legislation relating to contaminated land in Scotland comprises the following:

- The Environmental Protection Act 1990 Part IIA
- The Environment Act 1995
- The Contaminated Land (Scotland) Regulations 2000 and 2005
- Scottish Executive Statutory Guidance (Edition 2, May 2006)

It is essential to bear in mind the importance of the Statutory Guidance (as amended) which serves to supplement many of the statutory provisions found under Part IIA EPA 1990.

1.3.2 Prevention of new contamination

There is specific legislation in place, or being created, to prevent “new” land contamination, the most significant being:

- Integrated Pollution Control (IPC) under Part I of the EPA 1990.
- Pollution Prevention and Control Regulations 2000 (PPC).
- Waste Management Licensing under Part II of the EPA 1990.
- Control of Major Hazard Regulations (COMAH) 1999.
- Health & Safety Legislation, (Health & Safety at Work Act/1974), (Control of Substances Hazardous to Health Regulations 1988).
- Water Environment and Water Services (Scotland) Act 2003 (WEWS Act).
- Water Environment (Controlled Activities) (Scotland) Regulations 2005 (CAR).
- Control of Asbestos at Work Regulations 2002.
- Planning regime.

Historical land contamination meeting the definition of Contaminated Land will be addressed by the contaminated land provisions contained in Part IIA of the Environmental Protection Act 1990, or for development sites, through the planning process.

The WEWS Act implements the EU Water Framework Directive in Scotland and repealed all existing water legislation, including the Control of Pollution Act 1974 and the Groundwater Regulations 1998. Under CAR, authorisations are required for discharges

to all wetlands, surface waters and groundwaters; disposal to land; abstractions from all wetlands, surface waters and groundwaters; impoundments (dams and weirs) of rivers, lochs, wetlands and transitional waters; and engineering works in inland waters and wetlands.

1.3.3 The role of the Local Authority

Local Authorities have the following duties and powers:

Duties to:

- Inspect their areas to identify Contaminated Land and to designate Special Sites in liaison with SEPA.
- Ensure remediation of land identified as contaminated
- Maintain public registers of Contaminated Land identified and remediated.

Powers to:

- Undertake inspections under statutory powers of entry in extreme cases
- Enforce action under a Remediation Notice
- Recover cost for remediation undertaken itself.

1.3.4 The role of the Scottish Environment Protection Agency (SEPA)

SEPA has the following duties and powers:

Duties to:

- Ensure remediation of land designated as a Special Site.
- Maintain a remediation register for Special Sites.
- Prepare a national report on the state of Contaminated Land.

Powers to:

- Provide site specific advice to local authorities on contaminated land.
- To recover cost for remediation undertaken itself

1.3.5 Definition of Contaminated Land under Part IIA

Section 78A(2) defines Contaminated Land for the purposes of Part IIA as:
“any land which appears to the Local Authority in whose area it is situated to in such a condition, by reason of substances in 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”.

This definition reflects the intended role of the Part IIA regime, which is to enable the identification and remediation of land on which contamination is causing unacceptable risks to human health or the wider environment. The revised statutory guidance takes into account the changes introduced by the Contaminated Land (Scotland) Regulations

2005 in respect of water pollution and those introduced by The Radioactive Contaminated Land (Scotland) (Amendment) Regulations 2007 which came into force on 10th December 2007.

In terms of the definition of contaminated land, it must be remembered that unless land falls within this specific definition, it will not constitute statutory Contaminated Land. **It does not necessarily include all land where contamination is present.**

1.3.6 Pollutant linkages and risk assessment

The definition of Contaminated Land given above is based on the principles of risk assessment. The Statutory Guidance defines risk as a combination of:

- a) the probability, or frequency, of occurrence of a defined hazard; and
- b) the magnitude (including the seriousness) of the consequences.

One of the key elements of the regime is the application of the suitable for use principle which means that the site is being considered for its current use only. Changes in land use are dealt with under the planning process.

There are two steps in applying the definition of Contaminated Land. The first step in assessing in whether a site represents Contaminated Land is for the local authority to establish that a significant pollutant is present. A pollutant linkage consists of three parts:



These are defined in the Statutory Guidance as follows:

- i. A **contaminant** is a substance which is in, on or under the land and which has the potential to cause harm or to cause pollution of the water environment.
- ii. A **pathway** is one or more routes or means by, or through, which a receptor (a) is being exposed to, or affected by, a contaminant, or (b) could be so exposed or affected.
- iii. A **receptor** is either:
 - (a) a living organism, a group of living organisms, an ecological system or a piece of property which (i) is in a category listed in Annex 3, Table A of statutory guidance, as a type of receptor, and (ii) is being, or could be, harmed, by a contaminant; or
 - (b) a water environment which is being, or could be, polluted by a contaminant.

If any of the three elements of the POLLUTANT LINKAGE are missing then the land in question cannot be classed as CONTAMINATED LAND

The receptors are set out in the statutory guidance (Annex 3, Table A) and comprise:

- Human beings
- Ecological systems or living organisms forming part of a system within certain protected locations, including:
 - Sites of Special Scientific Interest (SSSIs)
 - National Nature Reserves
 - Marine Nature Reserves
 - Special Areas of Conservation (SACs) or candidate SACs
 - Special Protection Areas (SPAs) or candidate SPAs
 - Ramsar sites
 - Areas of Special Protection for Birds
- Property in the form of:
 - Crops
 - Livestock
 - Home-grown produce
 - Owned or domesticated animals
 - Wild animals subject to shooting or fishing rights
- Property in the form of buildings, including:
 - Any structure or erection, and any part of a building including any part below ground level but not plant or machinery housed in a building
 - Ancient Monuments
- Water environment is defined (from WEWS Act) as surface water (including inland water (other than groundwater), transitional water and coastal waters), groundwater and wetlands

If all three elements are in place, the second stage is for the local authority to satisfy itself that:

- a) such a pollutant linkage exists in respect of the land; and
- b) that the pollutant linkage meets the definition of Contaminated Land with respect to significant harm (or significant possibility of significant harm) for human health or pollution of the water environment.

An area of land can only be determined as Contaminated Land if a significant risk has been proven.

This is the most complex part of the identification of Contaminated Land and involves the use of risk assessment methods. This is discussed further in **Section 5.6**.

1.3.7 Dealing with Contaminated Land

Once an area has been identified as Contaminated Land in accordance with the regulations and Statutory Guidance, the approach for dealing with it will be the same regardless of whether the local authority or SEPA is the regulator. There are four main stages to this approach:

1. Establishing who is the “appropriate person” to bear responsibility for the remediation (or “clean-up”) of the land.
2. Deciding what remediation is required and to ensure that this occurs, either through:
 - i) Reaching a voluntary agreement.
 - ii) Serving a Remediation Notice under the regulations.
 - iii) In certain circumstances by carrying out remediation work themselves.
3. Determining who should bear what proportion of the liability for meeting the costs of the work.
4. Recording certain information about regulatory action on a public register.

Under Part IIA, remediation is defined as any one or more of:

- Assessment actions (i.e. site investigation, sampling etc);
- Remedial treatment actions (i.e. remedial options such as dig and dump);
- Monitoring actions (i.e. visual inspection, follow up sampling).

In terms of the overall objectives for remediation, the ultimate aim is to ensure that in its current use, the land no longer meets the definition of Contaminated Land. This involves ensuring that

- a) the pollutant linkage is no longer significant through :
 - i) Removing or treating the pollutant;
 - ii) Breaking or removing the pathway; or
 - iii) Protecting or removing the receptor; and
 - iv) Remedying the effect of any significant harm or significant pollution of the water environment resulting.

In terms of what constitutes remediation, the regulator must take into account the following factors, namely whether it is reasonable, practicable, effective and durable. It is for the regulator to determine the standard of remediation required but in doing so, must be mindful of cost, technical constraints etc. Further, the regulator must adhere to any constraints as set out in the Statutory Guidance.

The Part IIA regime is based on the polluter pays principle, although there are a number of complex exclusions detailed within the Statutory Guidance. The starting point is the notion of the “appropriate person” (an individual or corporation): that is, the person who must bear liability for anything which the regulator requires in respect of remediation. A ‘Class A’ person is defined as the person(s) who caused or knowingly permitted the substance(s) by reason of which the Contaminated Land in question is such land, to be in, on or under that land.

Due to the complex nature of contamination, it is possible for more than one party to be classified as the appropriate person in relation to one specific site. The regime also provides for circumstances where the original polluter cannot be found. In these situations, residual liability may lie with the current owner/ occupier of the site (class B person).

1.3.8 Case law

The legislative regime and accompanying statutory guidance are complex, therefore case law is relevant to interpretation of the legislation. The most significant cases to date relate to *Circular Facilities vs. Sevenoaks District Council* and *National Grid Gas plc vs. Environment Agency*. The first case was heard on appeal in the High Court in England whilst the second was heard on appeal to the House of Lords. Both cases were related to identification of the appropriate person, and in particular, determining whether or not persons ‘knowingly permitted’ contamination to be present.

1.4 OBJECTIVES OF THE STRATEGY DOCUMENT

1 Secure compliance with statutory duty imposed by Section 78B-(1) of The Environmental Protection Act 1990 (as amended) which states:

“Every local authority shall cause its area to be inspected from time to time for the purpose-

(a) of identifying contaminated land; and

(b) of enabling the authority to decide whether any such land is land which is required to be designated as a special site.”

2. To meet the statutory guidance requirements contained in Paragraph B9 for a strategic approach to the identification of land meriting detailed inspection, which is required to:

(a) be rational, ordered and efficient;

(b) be proportionate to the seriousness of any actual or potential risk

(c) seek to ensure that the most pressing and serious problems are located first

- (d) ensure that resources are concentrated on investigating in areas where Contaminated Land is most likely to be found,
- (e) and ensure that requirements for the detailed inspection of land are efficiently identified.

3 To inform all interested individuals, groups and organisations in a Clear and transparent manner of the strategic approach adopted by East Ayrshire Council in regard to Contaminated Land.

4 To assist SEPA in its preparations of its State of Contaminated Land Reports submitted to the Scottish Executive.

This Contaminated Land Strategy has been developed to meet these requirements. It has been structured in terms of the final version of a technical advice note entitled "Contaminated Land Inspection Strategies Advice for Scottish Local Authorities" prepared and issued by The Scottish Executive Environment Group in July 2001. It has also been prepared to comply with the requirements of Edition 2 of the Statutory Guidance.

2 CHARACTERISTICS OF THE EAST AYRSHIRE AREA

2.1 GEOGRAPHICAL LOCATION

The East Ayrshire Local Authority area is located in the West of Scotland and stretches from East Renfrewshire in the North, to Dumfries & Galloway in the South, it borders South Lanarkshire in the East, with North and South Ayrshire to the West.

2.2 BRIEF DESCRIPTION / HISTORY

Under regionalisation in 1975 Ayrshire became part of the Region of Strathclyde and was divided into four districts, Cumnock and Doon Valley, Cunninghame, Kilmarnock and Loudoun and Kyle and Carrick.

Under a further reorganisation of Local Government in Scotland, Strathclyde Region and its districts were replaced and Ayrshire was divided into three Local Authority areas namely, North, East and South Ayrshire.

East Ayrshire Local Authority came into existence on 1st April 1996, and it comprises the former Kilmarnock and Loudoun District and Cumnock and Doon Valley district which were within Strathclyde Region.

2.3 SIZE IN AREA (km²) AND POPULATION

East Ayrshire covers an area of approximately 1268 km² and is predominantly rural in nature with a population of 120,310 located in rural and urban settlements.

N.B. Statistics for localities with population over 500.

Source: General Register for Scotland (Census 2001) 2003.

The Local Authority area can be divided into five separate geographical areas:

- (i) Northern area:
- (ii) Irvine valley
- (iii) Kilmarnock area
- (iv) Cumnock area
- (v) Doon valley



2.4 CURRENT AND HISTORICAL LAND USE CHARACTERISTICS

2.4.1 The Northern Area.

This area extends from the East Renfrewshire boundary to Kilmarnock and is primarily made up of agricultural land in its Western part, to afforested plateau moorland in the Eastern portion. The settlements of Lugton, Dunlop, Stewarton, Fenwick and Laigh Fenwick, Waterside and Kilmaurs are located in this area.

Historical land use: mining for iron ore, dairy farming, textiles and light engineering during and following the Second world war.

Current land use: mainly residential and agricultural with limited industrial sites in and around Lugton and Stewarton.

2.4.2 The Irvine Valley.

This natural feature has agricultural lowlands in the Western portion rising to higher plateau moorlands in the East. Located in this area are the settlements of Moscow, Hurlford and Crookedholm, Galston, Newmilns, Darvel and Priestland.

Historical land use: agriculture, coal mining, weaving and lace factories with some iron and steel foundries in the Hurlford area.

Current land use: small to medium size communities, agricultural in nature with sand and gravel workings in and around Loudoun Hill, small textile associated industry and light engineering in the settlements of Darvel Newmilns and Galston, with retail outlets and small businesses in Hurlford and Crookedholm.

2.4.3 The Kilmarnock Area.

This area forms the hinterland of East Ayrshire and comprises of high quality agricultural lowlands and urban concentrations, the town of Kilmarnock being the most densely populated town in East Ayrshire. Other settlements in the area are, Knockentiber, Crosshouse and Gatehead all lying to the West of Kilmarnock.

Historic land use: agriculture, coal mining, shoe, whisky, carpet, brick and ceramic manufacturing industry, along with medium to heavy engineering.

Current land use: significant residential housing, existing retail and industrial developments in and around Kilmarnock itself, with agricultural activities surrounding the settlement areas.

2.4.4 The Cumnock Area.

This rural area is upland in nature surrounding Cumnock, ranging to extensive plateau moorland in the North and East to the foothills of the Southern uplands. As well as Cumnock, which is the second largest town in East Ayrshire settlements in the area include Auchinleck, Mauchline, New Cumnock, Catrine, Sorn, Muirkirk, Logan, Lugar and Ochiltree.

Historic land use: agriculture, limestone and coal mining, iron, pottery, brick and tar works, cotton mills and textiles.

Current land use: although the mills and mines are now closed, there is considerable proposed and existing opencast coal workings in the area, along with wind farms to the South of New Cumnock. there is also limited industry in small industrial estates and at the larger Egger (Barony) site.

2.4.5 Doon Valley Area.

This area consists of lowland agricultural land in the North to high rugged granite hills surrounding Loch Doon in the South. The settlements of Drongan, Rankinston, Patna, Waterside, Dalmellington and Bellsbank run from North to South with Dalrymple to the West.

Historic land use: Hill farming, weaving, coal mining, iron and brickworks.

Current land use: mainly agricultural in the lowlands along with forestry commission land throughout the area. There is considerable opencast workings in many parts of the area. Wind power in the form of wind turbine farms is also a recent proposal in the upland areas

2.5 PROTECTED LOCATIONS (NATURAL & BUILT HERITAGE)

2.5.1 Natural Heritage

East Ayrshire contains many sites which are designated worthy of protection, these sites comprise:

- 111 Listed wildlife sites
- 19 Sites of Special Scientific Interest
- 1 Local nature reserve (Proposed)
- 1 Special Protection Area (SPA)
- 1 Special Area for Conservation (SAC)

2.5.2 Built Heritage

There are many buildings and conservation areas which are deemed worthy of preservation and protection, this built heritage comprises of :

- 1055 Sites of Archaeological Significance
- 619 Listed Buildings
- 28 Scheduled Ancient Monuments
- 24 Conservation Areas
- 7 Outstanding Conservation Areas
- 3 Historic Gardens and Designed Landscapes
- 2 Archaeological Locations

2.6 KEY WATER RESOURCE / PROTECTION ISSUES

Scottish Water is the main supplier of drinking water in the area, abstraction is from freshwater lochs and reservoirs. The water is tested for wholesomeness under the Water Supply (Water Quality) (Scotland) Regulations 1990 and Water Act 1980. (There is one abstraction from a spring source at the village of Rankinston).

There are 247 private water supplies in the area which supply approximately 325 individual properties, they are routinely inspected for quality by the Local Authority with regard to the Private Water Supply (Scotland) Regulations 1992. Since April 2006, water abstractions are required to be licensed under the Controlled Activities Regulations 2005 (CAR). Data on licences held within the district of East Ayrshire is not yet available from SEPA.

2.7 BROAD GEOLOGICAL CHARACTERISTICS

2.7.1 Solid Rocks

Two different sequences of rock comprise the bedrock of East Ayrshire with the Southern Upland Fault forming the boundary between them. The fault, which is aligned north-eastwards, lies to the south and east of Dalmellington and New Cumnock.

Steeply dipping sandstone and shale of the Southern Uplands are present on its south-east side. Sequences of rocks that comprise the Midland Valley of Scotland lie to the north-west of the fault. Midland Valley rocks are varied and include volcanic lavas, sandstones and conglomerates of Devonian age. Much of East Ayrshire is underlain by rocks of Carboniferous age that include thick deposits of lavas / limestones that have been quarried and mined and coal-bearing strata which have also been mined.

Red sandstones of Permian age from the Mauchline area have been used for building stone and are an aquifer for groundwater.

2.7.2 Quaternary (drift) deposits

Quaternary deposits blanket much of East Ayrshire. Till, deposited from the last ice sheet, covers much of the area of Carboniferous bedrock although may be absent on older rocks forming upland areas.

Post-glacial deposits of peat and alluvium occur across East Ayrshire, peat occupies poorly drained hollows and areas of high ground whereas alluvium is associated with streams and rivers.

2.8 BROAD HYDROLOGICAL CHARACTERISTICS

The Scottish Environment Protection Agency (SEPA) routinely inspects the quality of the rivers which flow through the East Ayrshire Local Authority area, the major ones being the Rivers Irvine, Ayr, Doon and Lugar Water. The water quality of these rivers is generally good with the River Doon being of good/excellent quality.

There are also a number of freshwater lochs in the area with Loch Doon being designated as a Site of Special Scientific Interest (SSSI). The quality of these lochs is generally good.

The hydrogeology of the district is complex with a range of aquifer types present. A number of small areas are underlain by highly productive aquifers (red sandstone of Permian age; Dinantian and Namurian rocks of Carboniferous age) according to the Hydrogeological Map of Scotland. Most of the district is underlain by locally important aquifers (Westphalian Coal Measures of Carboniferous age). The Permian Red Sandstone aquifer in the Mauchline area is abstracted, including for use as the public water supply.

SEPA has also now published characterisation and impacts analyses for the Scotland river basin district required by Article 5 of the EU Water Framework Directive. Section 6.8 of this document identifies groundwater bodies for which lower objectives may be specified under Article 4 of the directive, including those where achieving good groundwater chemical and quantitative status is considered to be not feasible or disproportionately expensive. The whole East Ayrshire District, with the exception of the area of Permian Red Sandstone referred to above, has been classified in this way. This will have implications for assessment of groundwater contamination in affected areas under Part IIA.

2.9 CURRENT AND PAST INDUSTRIAL HISTORY

East Ayrshire is home to many of the great industries which made Scotland prosperous – whisky blending, mining, engineering and textiles.

In the early to mid 19th century the areas previous major industries of weaving and agriculture were displaced in East Ayrshire when it became one of the powerhouses of the industrial revolution with the introduction of steam power to many processes.

New processes using new minerals had created the conditions for a massive expansion of the iron smelting industry and it's consumption of coal. The mining of ironstone and coal developed on a large scale along with associated industries such as heavy engineering, brick and pottery manufacture, manufacturing of textiles, lace and knitwear. These activities, along with whisky blending / bottling and traditional agricultural produce ensured that the area's industry was healthy well into the 20th century.

When the great ironworks started to shut down in the 1920's the coal mining industry began to decline, a trend, which continued, till the closure of Barony pit in Auchinleck brought deep mining in the area to an end. Opencast mining has now replaced the traditional "Pits" in East Ayrshire.

Since the war the whole area has been affected by the decline of the manufacturing industries. The engineering industry has been transformed over recent decades in that the traditional "heavy" engineering companies, which employed large numbers of people have given way to a wider base of specialist and high value engineering.

Other potentially contaminative activities within the district include landfills, waste treatment sites, vehicle manufacture, town gas works, sewage works, and power stations.

Agriculture, and leading from that, primary food and drink sectors, are however still significant in both employment and turnover terms. Today the service industry employs 70% of the labour force, manufacturing and construction industries support approximately 27% of employees, while agriculture and forestry accounts for 3% of the total number employed.

2.10 KNOWN INFORMATION ON CONTAMINATION

Information on known contamination in the Council area is centred on historical records from various sources e.g.:

Planning and Building Control records of ;

- Planning applications and permissions.
- Industrial sites.
- Vacant and derelict land.

Trading Standards records of;

- Petroleum storage tanks (location and condition)
- Details of accidents /incidents with regard to spillages etc.

Environmental Health records of;

- Local authority air pollution control (LAAPC) authorised and Part B PPC permitted sites
- Known potentially contaminated sites, e.g. landfills and gasworks

SEPA published registers of;

- Pollution events on/in vicinity of sites.
- Prosecutions relating to the water environment.
- Landfill sites and monitoring data.

Health and Safety Executive for;

- Records of accidents/incidents with regard to pollution etc.

2.11 REDEVELOPMENT HISTORY REMEDIAL ACTIONS & CONTROLS

Information, pertaining to the recent history of development in East Ayrshire, is held by the Council's Planning & Economic Development Division.

Certain details of all planning and building warrant applications since local Government reorganisation in 1996 are computerised and can be accessed by the Division's Geographical Information System.

Planning application and building warrant files are kept however in paper form and along with other information files and data is available to assist in the identification of Contaminated Land. The data and information is site specific and will be accessed on a site to site basis.

3 OVERALL AIMS

3.1 AIMS OF THE COUNCIL

The overriding aim of East Ayrshire Council is to ensure that Contaminated Land is managed in a way which protects the well being of the community specifically and the wider environment in general

In East Ayrshire Council's commitment to develop Local Agenda 21 as a means to achieve sustainability, four strategies have been adopted in order that the concept of LA21 can be realised, they are:

- Economic Strategy
- Social Strategy
- Equal Opportunities Strategy
- Environmental Strategy

The Environmental Strategy in particular sets out challenges, which are aimed at addressing a wide range of environmental issues. Included amongst these are areas where contaminated land has a direct bearing, e.g. pollution control, protection of the natural and built environment and the reuse and development of urban land. The reuse, remediation or development of contaminated land will play an important part in the Council's overall policy of working towards sustainability.

By returning contaminated land to beneficial use, the pressure on greenfield sites will be eased, the community will benefit by having a cleaner and healthier environment, economic regeneration programmes can be initiated on previously developed land and social amenity spaces can be created.

Where a change of use or a new development is proposed on known or suspected contaminated land, then Environmental Policy 18 contained in the East Ayrshire Local Plan and Planning Advice Note 33 will have effect. The reuse and development of contaminated land is however subservient to the protection of the community specifically and the environment in general.

The aim of the Council is therefore to provide a basis to meet these challenges by identifying sites which pose an unacceptable risk to either the community or the environment and addressing that risk in a suitable manner.

3.2 OBJECTIVES

There are seven main objectives that East Ayrshire Council considers as prerequisite in order to meet its aims and to comply with statutory guidance.

1 TO PROTECT HUMAN HEALTH

As the protection of the community is paramount in the Councils approach to the management of contaminated land, it is logical that areas which contain the largest concentrations of human receptors i.e.; towns and settlements, will be included in the first areas where preliminary screening of potentially contaminated sites will take place.

2 TO PROTECT THE WATER ENVIRONMENT

After a preliminary assessment by the Local Authority, SEPA will be consulted when determining whether a site is contaminated on the basis of pollution of the water environment. This will be undertaken using SEPA Form A.

3 TO PROTECT DESIGNATED ECOSYSTEMS

The locations of designated and protected sites i.e. SSSIs, environmentally sensitive areas and wildlife habitats, will be noted with regard to the possibility of contamination migrating from adjacent potentially contaminated land.

4 TO PREVENT DAMAGE TO PROPERTY

The same criteria will be carried out with regard to the next priority level i.e. property in the form of crops, livestock or buildings and built heritage such as historic monuments and archaeological sites.

5 TO PREVENT FURTHER CONTAMINATION OF LAND

As well as the current legislation which is in place to prevent “new” contamination of land or the water environment, the Local Authority will consult with SEPA to ensure that any remedial actions or works do not lead to further contamination.

6 TO ENCOURAGE VOLUNTARY REMEDIATION

Where possible the Local Authority will liaise with owners / occupiers of contaminated sites and seek voluntary remedial action from these parties before taking enforcement action.

7 TO ENCOURAGE RE USE OF BROWNFIELD LAND

In its effort to achieve sustainability the Local Authority is committed to easing the pressure on greenfield locations by encouraging and promoting the re-use of previously developed sites. (including contaminated sites).

4 LOCAL AUTHORITY PRIORITY ACTIONS & TIMESCALES

4.1 OVERALL PRIORITY

The main priority of the Council is to identify the areas where contaminated land is most likely to be found and concentrating resources on the most pressing and serious problems first.

4.2 PRIORITY ACTIONS

Information from other statutory bodies (and other sources) on potentially contaminated land will be collected and sites prioritised for inspection based on, specific local characteristics and the **likelihood and significance** of key receptors being exposed to unacceptable risk.

If during the course of data collection, an imminent risk of harming key receptors is identified, then that site will be progressed as very high priority.

The Council is the largest single land owner within East Ayrshire having responsibility for schools, depots, open spaces, playing fields, housing etc.

Like any land that has been subject to an industrial past, some Council owned land may require further investigation to ensure that the users of council owned land are safe from harm.

The East Ayrshire Local Plan (December 2007) is now in its finalised draft and (subject to final consultation, any subsequent Public Local enquiry and final approval) will be a reference source with regard to Council owned land which is proposed to be developed, by reason that:

1. Land identified for development within the December 2007 Local Plan will need to be a priority for investigation. Such land will be investigated as part of the area based inspections; and
2. The database and findings from the area inspections will act as a key information source as to suitability of land for future development types that will be considered in future Local Plans.

The method of prioritising sites is described in detail in **Section 5.6**.

4.3 TIMESCALES

The programme for the implementation of the Strategy is detailed in **Section 7.2 and illustrated in Appendix A**.

5 PROCEDURES

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

5.1 INTERNAL MANAGEMENT ARRANGEMENTS FOR INSPECTION & IDENTIFICATION

Community Services will be the lead department responsible for the implementation of Part IIA EPA 1990. Designated individuals from the Environmental Health (Pollution Control) section, will deal with the day to day issues arising from the implementation of the Strategy and contaminated land matters in general, reporting directly to the Team Leader (Pollution Control) and the Principal Officer (Environmental Health & Licensing).

A contaminated land working group, with representatives from Environmental Health & Licensing, Planning & Building Control, Economic Development, and Property & Legal Services has been set up in order that information needed for, and arising from, the Strategy can be obtained and included in the data required for;

- (i) Remediation & Enforcement Action
- (ii) Liaison with external organisations
- (iii) Detailed inspection
- (iv) Enquiries

5.2 CONSIDERING LOCAL AUTHORITY INTERESTS IN LAND

Land will be inspected on a priority risk basis, which is described later in this section. Equal weight will be given to private and Council owned land.

5.3 INFORMATION COLLECTION

The following information sources will be used to identify potential contamination sources, pathways and receptors. This list is not exhaustive and if other information sources come to light they will be accessed as a matter of course. The information listed does not necessarily form a complete or reliable record. East Ayrshire Council believes the information obtained from third parties is reliable but cannot guarantee its authenticity.

Information Source	Information Type	Use
Historic Maps	Digital maps purchased from Ordnance Survey (through Landmark)	To identify sources
Geological maps	1:50,000 solid and drift geology maps from British Geological Society.	To characterise sources and pathways.
Hydrogeological and Hydrological Maps	Ground Water Vulnerability Maps produced by British Geological Society WFD Characterisation Map produced by SEPA	To identify receptors (the water environment)
Macaulay Land Use Research Institute (MLURI)	Soil Maps inc. publication on background levels of contaminants in Scottish soils	To identify sources.
Environmental Services Records	Records of Complaints & Investigations LAAPC authorisations and Part B PPC permits. Waste disposal facilities, including transfer stations (closed or operational) Animal burial sites	To identify known information on contamination.
Planning Services Records	Detailed Planning Records of development in the area, including information on ground conditions presented in surveys. Also responsible for completing the Scottish Vacant and Derelict Land Survey.	To identify known information on contamination.
Scottish Environment Protection Agency (SEPA) Records	(1) Published Records of River Quality, consented discharges to the water environment, surface, bathing, and shellfish water classifications, (2) Pollution events. (3) Public Registers of Integrated Pollution Control of Authorised Part A & Part B Processes. (4) Waste Management Licences (5) Radioactive Substances Registers.	To identify sources of contamination, pathways, receptors.

Information Source	Information Type	Use
Industry Profiles and CLR8	Produced by Department of Environment Information on processes, materials and wastes associated with individual industries. CLR8 provides information on potential contaminants for the assessment of land.	To identify sources.
Company Records	Information about company activities etc.	To identify sources.
Coal Authority, MOD, Ayrshire Archivist.	Mines register, Military Sites, Old County Council records.	To identify sources.
Health & Safety Executive (HSE)	Records of accidents/incidents.	To identify information on contamination.
Trade Directories	Information on past use of site. Available from local library.	To identify sources of contamination.
East Ayrshire Local Plan	Published by the Council and is a valuable source of up to date information on land use.	To identify receptors and particularly historic monuments and protected areas of the environment.
Scottish Natural Heritage	Presence and nature of SSSIs, other designated areas (SACs, SPAs, Ramsar sites etc.), and other features of known natural heritage interest.	To identify receptors.
Historic Scotland	Records of historic/protected buildings and archaeological sites.	To identify receptors.
Scottish Executive	Use of land, assessment of animal or crop effects.	To identify receptors, pathways.
Trading Standards	Licensed fuel storage tanks. Details of accidents/ spillages	To identify sources

5.4 INFORMATION & COMPLAINTS

The Council may receive information and complaints regarding contaminated land from members of the public, businesses or voluntary organisations etc. whether their interest in the land is direct or indirect.

These complaints may have an impact on the approach to inspection and will be dealt with in the following manner.

5.4.1. Complaints

A complaint regarding contaminated land will be dealt with in the same manner as that currently used by Environmental Health to deal with statutory nuisance complaints. All complainants may expect:

- (i) their complaint to be logged and recorded
- (ii) to be contacted by an officer regarding the complaint within two days if a high priority or five days if a low priority depending on the nature of the complaint.
- (iii) to be kept informed of the progress of the resolution of the complaint.

It is stressed however that for sites to be addressed under Part IIA they must meet the statutory definition.

5.4.2 Confidentiality

All complainants will be asked to supply their names and addresses and the address giving rise to the complaint, if different. The complainant's details 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 court and an adverse effect on the complainant's health was an important reason for the original contaminated land designation. Confidentiality may not apply if the complainant is an appropriate person.

5.4.2. Anonymously Supplied Information

Anonymously supplied information relating to contamination will also be logged, recorded and investigated and again be related to the priority risk assessment as required.

5.4.3. 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 the person or organisation will be kept informed of progress towards resolution.

5.4.4 Anecdotal Evidence

Any anecdotal evidence provided to the Council relating to contaminated land will be noted. In all cases the contaminated land officer will determine if further investigation is required.

5.5 INFORMATION EVALUATION

The evaluation of information on actual harm or pollution of a site against the potential level and type of contaminant and any linkages with it and receptors will determine the need for further information or evidence to confirm or deny that the site is statutorily defined as Contaminated Land. This evaluation will assist in determining what level of priority for further investigation is merited by the site. Linkages involving harm to human health or the water environment will be given equal priority in accordance with the revised Statutory Guidance.

5.5.1 Risk Assessment

The risk assessment will be carried out through development of a conceptual site model. This is a representation of the relationship between contaminant sources, pathways and receptors that could be harmed by contaminants. The model includes a representation of the environmental system and the biological, physical and chemical processes that determine the transport of contaminants from sources through various media to receptors. This model can be represented in pictorial, written or a network diagram. The risk assessment methodology is detailed in **Section 5.6**.

5.5.2 Other Regulatory Actions

There are other regulatory actions that can be taken to deal with contamination on land i.e. where there are overlaps with Planning, SEPA and PPC.

Planning

The Strategy contained in this document will provide the Council's Planning & Building Control Service with comprehensive and specific site information that can be utilised during its consideration of planning applications and in the preparation of updated Local Plans. It is anticipated that the planning application process and Planning Advice Note (PAN 33) will be the primary mechanisms to ensure that where land contamination is an issue it will be addressed as part of any redevelopment proposals.

SEPA

Advice and information will be sought from SEPA in relation to contamination of controlled water. If SEPA identifies a risk to the water environment from

Contaminated Land then the Council will be notified to enable designation of the land and remedial action taken under Part IIA.

Pollution Prevention and Control Regulations 2000

The Pollution Prevention and Control (PPC) regime aims to prevent new pollution from industrial processes, including a requirement for protection of land. Part A processes listed in the regulations are regulated by SEPA and Part B processes by local authorities. For Part A processes, site operators are required to prepare a baseline site report documenting the condition of the site prior to receiving a permit to operate. If the site condition is such that areas of land meet the definition of Contaminated Land then submission of a site report may trigger action under Part IIA.

Existing processes regulated under IPC and LAAPC are being brought under this legislation by sector by the end of 2007. It also applies immediately to any new process or any substantial change to an existing process.

The Water Environment (Controlled Activities) (Scotland) Regulations 2005

The Controlled Activities Regulations (CAR) form part of implementation of the EU Water Framework Directive and license a range of activities affecting the water environment, including water abstractions, discharge consents, impoundments and engineering works. CAR has repealed both the regime provided for in the Control of Pollution Act (COPA) 1974 for point source pollution, as well as the Groundwater Regulations 1988.

Existing discharge consents under COPA have automatically transferred to the new regime while applications for existing abstractions have been made to allow them to be transferred over to the CAR system. All new applications after the 1st April 2006 will be subject to a risk assessment and a charging scheme which is proportional to environmental risk. The CAR regime therefore has implications for both assessing contamination sources associated with discharges to the water environment and receptors, e.g. abstractions.

5.5.3 Effectiveness of Previous Actions/Regimes

Assessing the effectiveness of any remediation or de-contamination actions, such as, a requirement of a planning consent, will be carried out during a site “walk over” when the suitability of the sites current use will be assessed.

5.5.4 Characteristics of the Local Authority

Section 2 of the Strategy deals with characteristics of the authority including geographical areas. There may be a coincidence between the geography and the location of possible sites and sensitive receptors. Industrial areas are also highlighted in this section. By assessing the geography and industrial sites it is possible to identify possible pollutant linkages.

5.6 IDENTIFICATION, PRIORITISATION & SITE-SPECIFIC ASSESSMENT

There are three main stages involved in assessing potentially contaminated sites under Part IIA, i.e. Identification, Initial Prioritisation and Site-Specific Assessment.

In order to concentrate resources on sites with the most pressing and serious problems (i.e. those where Contaminated Land is most likely to be found), a method of prioritisation is required. East Ayrshire Council has purchased a prioritisation system from Enviro Consulting Ltd that sets out a detailed methodology for carrying out the initial identification and prioritisation of potentially contaminated land within the Council's area, which:

- Provides a method for prioritisation of potentially contaminated sites up to the point of first contact with the site owner; and
- Develops basic protocols to ensure a consistent and defensible process for meeting the Council's responsibilities with regard to the Regulations.

Enviro has developed software which implements this methodology enabling the identification and prioritisation of sites in close liaison with East Ayrshire Council. The software is called Enviro's Contaminated Land Inspection and Prioritisation System (electronic) – ECLIPSe and comprises a Microsoft Access database which interacts with the Council's GGP Geographical Information System (GIS).

5.6.1 Identification

The first stage in implementation of the Strategy is identification of potentially contaminated sites. This relies on the information sources listed in **Section 5.3**, principally historical OS maps supplemented by other information held by the Council.

Historical OS maps and land use data in digital format were purchased by the Council in early 2001 for use with a Geographical Information System (GIS). The historic Ordnance Survey maps cover Epochs 1-7 (Circa 1840s- Present Day). The digital maps have been scrutinised to establish an overview of East Ayrshire and the range of sites where possible contamination has occurred from the current former occupying industries.

The process involves use of GIS data and ECLIPSe software with the following stages:

1. Identification of sites through detailed review of all available OS historical maps from each publication date (epoch) for the whole district. The sites are assigned to an industry category based on the DoE Industry Profiles and CLR8.

2. Creation of boundaries (polygons) for each potentially contaminated site based on consolidation of the information obtained from the separate epochs.
3. Integrating the data with existing information held by Environmental Health to provide a single consistent list of sites. This adds sites such as petrol stations and local authority regulated sites but eliminates sites that have already been investigated under Part IIA and do not need to go through the prioritisation process.
4. Comparing the data with information held by the Planning Dept. to screen out sites being dealt with under the planning regime for a change of use.

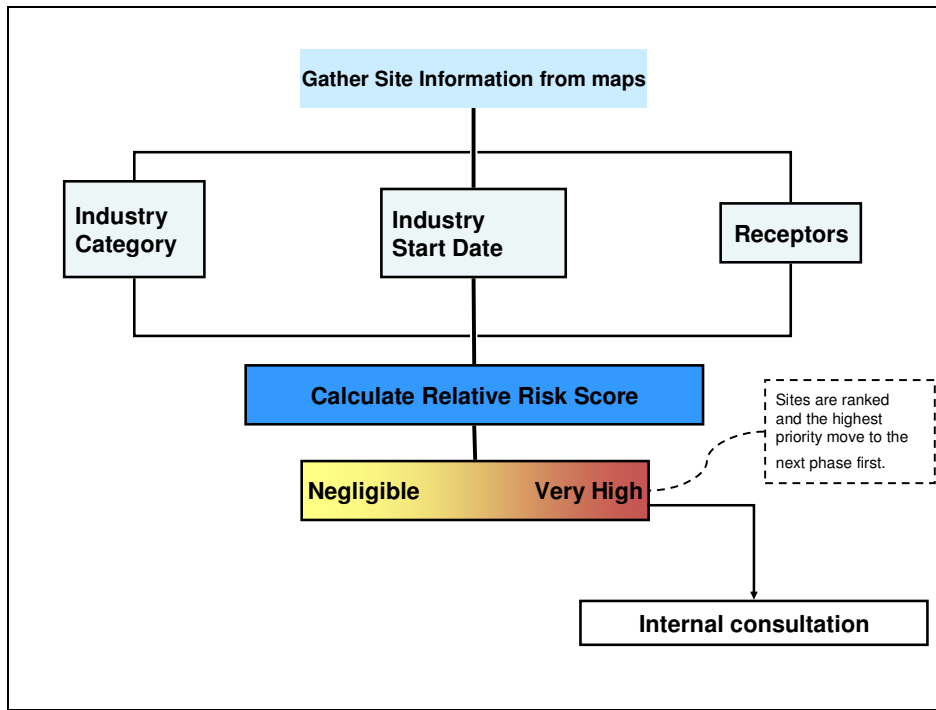
The results of this exercise reflect the industrial history of East Ayrshire, but it does not provide a list of statutory Contaminated Land sites. Each site requires further assessment in relation to potential source-pathway-receptor pollutant linkages.

5.6.2 Initial Prioritisation

The ECLIPSe software is then used to undertake initial prioritisation of the potentially contaminated sites identified. Information from various sources, on the history of the site, potential contaminants and receptors is taken directly from the GIS or inputted into the software.

The initial prioritisation within ECLIPSe is based on a combination of site contaminative potential (based on industry type and age) and site sensitivity (based on sensitivity of site with respect to human health and the water environment. Each site is allocated a Relative Risk Score which allows prioritisation from negligible to very high potential risk. Those sites with the highest scores will be the most likely to be potentially contaminated land. The prioritisation system is summarised in Box 1.

Box 1: The ECLIPSe Prioritisation System



The prioritised sites are then taken forward for site-specific assessment starting with the sites with the highest relative risk scores.

5.6.3 Site-Specific Assessment

Site-specific assessment is undertaken in a phased approach and in accordance with relevant UK guidance, such as Model Procedures for Management of Land Contamination (CLR11), BS10175: 2001 Code of Practice for Investigation of Potentially Contaminated Sites and the Dept. of Environment Contaminated Land Report (CLR) series.

Desk Study Assessment

Site-specific assessment will normally involve completion of a **Desk Study assessment** (also referred to as a Tier 1 or Phase 1 assessment) as a first stage. The objectives of the assessment are:

- To assess the presence, likely extent and nature of any potential contamination associated with current and historical activities on and around the site
- To develop an initial conceptual site model and undertake a qualitative environmental risk assessment of potential source-pathway-receptor linkages

- To consider the status of the site with respect to the definition of contaminated land and to identify further works and actions, if any, required to clarify the status.

The assessment involves a desk-based review of existing information together with completion of a site walkover survey provided that access can be gained. Specific aspects undertaken include:

- Review of the history of the site and surrounding area from historical Ordnance Survey maps and any additional information available, including anecdotal information and other data sources
- Review of current activities and the current condition of the site;
- Liaison with SEPA on the contamination status of the site and other relevant regulatory information held;
- Assessment of the environmental setting of the site from a review of published geological, hydrogeological and hydrological information, and regulatory data;
- Completion of a site visit to assess visual evidence of contamination (e.g. soil staining or vegetation stress), possible migration pathways and impacts on receptors;
- Development of a conceptual model for the site identifying potential contamination sources, pathways and receptors and completion of a qualitative risk assessment.

Following completion of the desk study assessment, the site is re-prioritised to identify the need for further investigations. The method to be used for re-prioritising sites that have been assessed is described later in this section.

Further Assessment Stages

Depending on the information available, further stages of assessment may involve:

- Initial monitoring or sampling
- Intrusive investigations
- Quantitative Risk Assessment

Initial monitoring or sampling may be completed as a first stage to investigate harm is being caused. Examples would include monitoring of surface waters to identify any impact from a site or sampling of soils from the near surface to assess whether people could be exposed to contaminants. This approach will be a quick and low cost approach effective on some sites to identify if there is a need for urgent action to protect human health or the water environment.

Intrusive investigations (also referred to as Phase 2 investigation) may be required on some sites to further develop the conceptual site model and to

assess potential pollutant linkages in detail. This may involve the digging of trial pits, drilling of boreholes, monitoring for soil, groundwater and gases, and laboratory analysis of soils, water and gas samples for contaminants which may be present in quantities harmful to key receptors. The information obtained is then fully interpreted to assess the presence and extent of contamination, presence of pathways and sensitivity of receptors. This allows the conceptual site model and environmental risk assessment to be updated.

Quantitative Risk Assessment (QRA) may also be undertaken to decide whether there is a significant risk of harm to key receptors. Relevant data sets will be used to assess the risk to each of the receptors. Whilst there is currently no single “look up table” available data sources and risk assessment models will be evaluated and used as appropriate to undertake site specific risk assessment to assist in determining whether the site meets the statutory definition of Contaminated Land. Details of specific QRA tools are given below.

Human Health:

CLEA UK is the primary tool for assessment of risks to human health from contaminated land which is used to produce Soil Guideline Values for contaminants under different end use. Following release of CLEA UK, the CLEA 2002 model has now been withdrawn. CLAN 6/06 provides details of Government policy with respect to assessment of significant possibility of significant harm (SPOSH) and the use of SGVs in site assessment, which has been the subject of considerable debate within the contaminated land community.

Other models (which are in no specific order) that may be used as appropriate for assessment of sites include: SNIFFER 2000, RBCA, RISC Human, Risk Assistant etc.

Water Environment:

Assessment of sites in relation to significant pollution of the water environment will be undertaken in accordance with the criteria stated in Part 4 of Annex 3 of Edition 2 of the Statutory Guidance. Further guidance is provided in the SEPA Guide on Water Pollution arising from land containing chemical contaminants (as amended).

QRA models (which are in no specific order) that may be used as appropriate for assessment of risks to the water environment include: Environment Agency P20 methodology (amended in 2006), ConSim, RBCA, etc.

Reprioritisation of Sites undergoing Site-Specific Assessment

Assessment of sites under Part IIA is often based on incomplete information and identification of potential (rather than clearly demonstrable) impacts, making it difficult to decide whether or not to determine a site as Contaminated Land without undertaking further investigations. For example, a desk-based assessment may identify a potential source of contamination but it is not known to what extent it is actually present, particularly following previous site redevelopment. This leads to competing priorities between sites and a need to prioritise resources between sites assessed through site-specific investigations (Phase 1 or Phase 2).

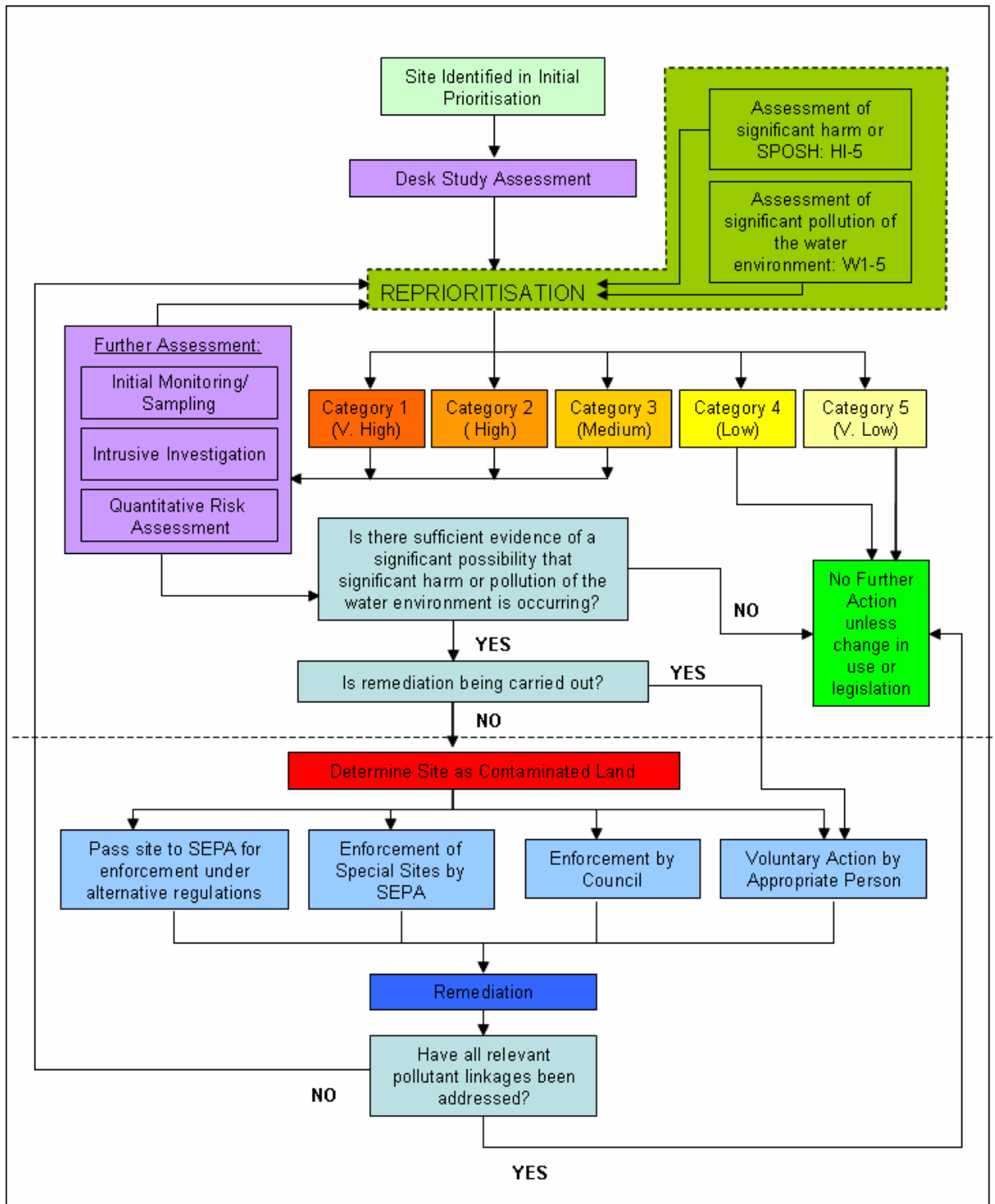
A system has therefore been developed to prioritise between potentially contaminated sites based on the information that is available. The system is summarised in Box 2. The aim of the assessment is to decide whether a site should be:

- a. determined as Contaminated Land or
- b. confirmed as not requiring determination under current conditions (in which case no further action is required unless there is a change in use or relevant legislation).

Potentially contaminated sites are classified from Category 1 (Very High priority) to Category 5 (Very Low) priority using the system. Sites are assessed separately with respect to the two parts of the definition of Contaminated Land, i.e. significant harm and significant pollution of the water environment. The overall categorisation of sites is based on the higher of the two categories.

The system is also designed to identify any sites requiring urgent action to be taken to protect human health or the water environment.

Box 2: Flow-Chart for Prioritisation of Sites under Site-Specific Assessment



The priority categories that have been defined are summarised below along with actions that may be required to progress assessment of the site under Part IIA.

Priority	Definition	Actions Required
Very High (Category 1)	The presence of contamination on the site is known or considered to be highly likely and there are sensitive receptor(s) present. Assessment of the site shows that there is a high likelihood that there is a pathway present that has the potential in the short term to cause significant harm or significant pollution of the water environment but further data collection is required to confirm this.	<p>Action urgently required:</p> <ul style="list-style-type: none"> • Precautionary measures may be required to protect human health or prevent pollution of the water environment; • The owner of the site should be established to determine any background information, or previous investigation or remediation data; then • Further investigation of the site will be required as a priority.
High (Category 2)	The presence of contamination on the site is considered likely and there are sensitive receptor(s) present. Assessment of the site shows that there is likely to be a pathway present that has the potential to cause significant harm or significant pollution of the water environment but further data collection is required to confirm this.	<p>Consider further action in the short term:</p> <ul style="list-style-type: none"> • The owner of the site should be established and contacted to determine any further background information or previous investigation data; then • Verification sampling of land (accessible with or without permission) or water monitoring should be undertaken; then • Following reassessment, further investigation of the site may be required.
Medium (Category 3)	The presence of contamination on the site has not been confirmed but is considered possible and there are sensitive receptor(s) present. Assessment of the site shows that it is possible that there is a pathway present that has the potential to cause significant harm or significant pollution of the water environment but further data collection is required to confirm this.	<p>Consider further action in the medium term:</p> <ul style="list-style-type: none"> • The owner of the site should be established and contacted to determine any further background; then • Verification sampling of land (accessible with or without permission) or water monitoring should be considered; • Following reassessment, further investigation of the site may be required.

Priority	Definition	Actions Required
Low (Category 4)	There is less certainty that a contamination source, pathway and receptor are in place. Assessment of the site shows that there is a low likelihood that there is a pathway present that has the potential to cause significant harm or significant pollution of the water environment.	Site placed on hold: <ul style="list-style-type: none"> • The site should be retained on the prioritisation database and further works should only be undertaken if the site changes use or if additional information of concern comes to light. This should be recorded within the Planning Process.
Very Low (Category 5)	There are no source-pathway-receptor linkages identified. Assessment of the site shows that it is unlikely that there is a pathway present that has the potential to cause significant harm or significant pollution of the water environment.	No action is required

6 GENERAL LIAISON AND COMMUNICATION STRATEGIES

In order that the Strategy can be taken forward with due regard to other regulatory bodies, non-regulatory organisations, landowners and other interested parties, an effective system for liaison and communication is required.

Where possible, direct dialogue with individuals who have been nominated, as contacts for local authority liaison will be the preferred channel, and in areas where no direct contact has been nominated the council will attempt to formulate other communication lines.

Liaison and communication with stakeholders is a major part of the Strategy. As well as providing information which may help to identify potentially contaminated land, other regulatory and non-regulatory bodies, landowners and interested parties will be consulted, where sites may also have a bearing on their own particular area of concern or interests.

A specific stakeholder engagement strategy may need to be developed as part of work on assessing or remediating specific sites of high sensitivity or public interest. The publicly-funded Scotland and Northern Ireland Forum for Environmental Research (SNIFFER) has published useful guidance on communicating understanding of contaminated land risks.

Consultation with the following organisations will be required in order that the Strategy complies with statutory guidance.

6.1 OTHER REGULATORY BODIES

6.1.1 The Scottish Environment Protection Agency (SEPA)

A document has been formulated which provides a framework for liaison between SEPA and the local authority in carrying out their duties under Part IIA. Under this framework the local authority will :

- (i) Consult with SEPA when developing their strategies for inspection.
- (ii) Consider checking whether SEPA has information relevant to the identification of land as contaminated.
- (iii) Have regard to advice from SEPA in relation to determination of pollution of the water environment.
- (iv) Seek advice from SEPA in the designation of potential special sites.
- (iv) Notify SEPA of land identified as contaminated and land designated as a special site.

6.1.2 Scottish Natural Heritage (SNH)

SNH will be consulted where contaminated sites are located near protected areas, or other designated ecosystems such as SSSIs, nature reserves, etc. As well as addressing concerns that contaminants could migrate to these adjacent areas, consultation will be initiated where intrusive sampling within designated sites is proposed, or where the removal or remediation of soils etc may potentially have an adverse effect on established flora and fauna.

6.1.3 Historic Scotland

The protection of built heritage such as conservation areas, listed buildings and ancient monuments in the local authority area will be addressed on a site to site basis with regard to the effects which contaminated land may have on them and their surroundings. Historic Scotland will be consulted especially where remediation works are to be carried out, as alterations to such sites cannot be carried out without prior permission from the Scottish Ministers.

6.1.4 The Scottish Government

The Government may be consulted if any sites registered in the vacant and derelict land survey and listed as uncontaminated are subsequently found to be contaminated (and vice versa). It may be the case that the list will be amended after the inspection of the Local Authority area has been completed.

6.1.5 The Health and Safety Executive (HSE)

As well as providing information on past or potential releases from industrial premises the HSE may be consulted where there is a perceived risk from hazardous substances present on a site which could be dangerous to the public or site workers etc.

This may be especially relevant during intrusive sampling or remediation works.

6.1.6 The Food Standards Agency Scotland

Where contaminated land may have a potential to affect food safety, i.e. the possibility of causing harm to receptors in the form of ;

- Crops and livestock, produce grown domestically, or on allotments, for consumption, or food collected from the countryside.

Advice on food safety aspects will be sought from the Agency both in general and on a site specific basis.

6.1.7 The Director of Public Health

The Director of Public Health will be consulted in circumstances where contaminated land is deemed to represent an immediate and significant risk to human health.

6.2 NON-REGULATORY BODIES, LANDOWNERS, OTHER INTERESTED PARTIES & THE WIDER COMMUNITY

6.2.1 Other Local Authorities

Formal liaison with neighbouring Councils has already been initiated in the form of a contaminated land bench marking group.

6.2.2 Community Councils

Local community councils are a valuable source of data especially for “first hand” or local historical information. Where suspect sites lie within these community council areas, they will be consulted with particular reference to local concerns and the needs of their communities.

6.2.3 The Coal Authority and other Mining Companies.

Information on historical mining activities as well as current opencast operations in the East Ayrshire area will be accessed to assess potential sources of contamination and to form communication lines.

6.2.4 Miscellaneous Statutory/Non Statutory Bodies

There may be areas which require to be inspected where other statutory/non statutory bodies have an interest or some pertinent relationship with regard to either the area in question or adjacent land.

These statutory or non-statutory bodies could include:

- West of Scotland Archaeological Service (WSAS)
- The Royal Society for the Protection of Birds (RSPB)
- Forestry Commission
- Scottish Water
- Scottish Power
- Scottish Wildlife Trust

This list is not exhaustive and where possible all relevant bodies with interests or who may be involved with aspects of contaminated land issues should be consulted on a site to site basis.

6.2.5 Landowners, Occupiers and other Interested Parties

Where potentially contaminated land is to be inspected, early communication with the owner or appropriate person responsible for the land will be initiated. This is especially desirable in the case of voluntary remediation, where the Council will seek to encourage land remediation by agreement rather than by enforcement.

As it may be impossible, or impractical, to notify all stakeholders and interested parties, of the local authority's intentions towards a specific site, the assigned contaminated land officer will be the contact point within the council for all enquiries, complaints, comments or concern with regard to the site.

6.2.6 The Wider Community

The local authority in its commitment to address the problem of contaminated land realises the importance of two way communication between itself and the wider community. To this end Individuals or groups who wish to put forward their views, comment on proposals or contact the Local Authority for information on contaminated land issues will be able to:

- Access the contaminated land page on the Council's web site
- Contact the contaminated land officer direct by telephone or letter
- Contact the local Councillor

6.3 RISK COMMUNICATION

East Ayrshire Council recognises that concerns raised by members of the public need to be treated as legitimate concerns.

In order to reduce concern over individual sites, it is intended that East Ayrshire Council undertake to provide generic and site specific advice to the key stakeholders (i.e. the local affected public, local community groups etc.) by provision of council documents, informative letters and public meetings as appropriate.

The key areas for risk communication are viewed as being:

6.3.1 Strategy information

1. Circulate the draft Strategy to key representative groups / organisations.
2. Advise the public of the Strategy via appropriate press releases.
3. Provide access to the contaminated land Strategy at local libraries, Council Headquarters and the Council web site for public scrutiny.

6.3.2 Detailed inspections

1. Letters will be forwarded to all owners, occupiers and appropriate persons of suspected contaminated land falling within a particular risk group when that

risk group is next to be considered. This will permit persons to make any representations as necessary. Letters will only be forwarded in the event that a Desk Study Assessment indicates further inspection is required.

2. Phase 2 investigations will only occur following a letter circulated to parties listed in (1) above advising of the intention, the date (a minimum of 5 days notice) and likely time on site.
3. The results of the Phase 2 investigation will be communicated to the owners, occupiers and appropriate persons at appropriate stages, however, parties are to appreciate that the planning to implementation stage of any detailed inspections may involve long-term actions to ensure accurate conclusions.
4. If appropriate, the local elected member and affected parties will also be advised of any results etc. in the most appropriate manner given the specific circumstances.

6.3.3 Designations of Contaminated Land

East Ayrshire Council will formally notify SEPA, all owners, occupiers and appropriate persons of any decisions to designate land as statutorily contaminated. The designation notice will include:

- A description of the pollutant linkage;
- A summary of the evidence;
- A summary of the assessment of the evidence; and
- A summary of the way in which the Council has satisfied the requirements of the Statutory Guidance (Part 4 and Chapter A).

Designation notices will be included in the public register with the exception of commercially confidential information and information relevant to National Security.

6.3.4 Enforcement and Remediation Actions

All enforcement actions and voluntary statements will be entered in the public register.

6.3.5 Public Register

East Ayrshire Council will maintain and keep available for viewing a public register of all documents etc. as required by the Contaminated Land (Scotland) Regulations 2005.

Specific details of the register are contained in **Section 9**

The limited extent of Part IIA of the Environmental Protection Act 1990 and the powers vested with East Ayrshire Council will inevitably fail to satisfy the hopes and expectations of many members of the public. However, by the provision of adequate information, it is hoped that the public will perceive that the Council is acting responsibly and ensuring their safety at all times.

7 PROGRAMME FOR INSPECTION

7.1 DETAILED INSPECTIONS

Land that is suspected of being contaminated by reason of the former occupying industry or activity requires a detailed inspection in order to establish the actual extent and nature of any contaminants present. This information is a pre-requisite for determining whether land is statutorily contaminated.

As described in **Section 1.3.6**, land may only be designated as contaminated if a source of contamination is present, a pathway exists to a receptor, and significant harm occurs or pollution of the water environment or is likely to occur.

The detailed inspection provides the information for all these requisite parts, and it is therefore vital that detailed inspections provide sufficient reliable information to ensure that decisions made in relation to individual sites are transparent, correct and based upon scientific principles. As described in **Section 5.6**, completion of a site visit would normally be an integral part of completion of a Desk Study Assessment.

7.1.1 Arrangements for Detailed Inspections

The Council has specific powers of entry under section 108 of the Environment Act 1995 and an inspection using statutory powers of entry will only be conducted where:

1. A reasonable possibility of a pollutant linkage exists; and
2. For the purposes of intrusive investigation, the pollutant linkage is likely.

In the event that a walkover survey or intrusive investigation is required, the Council may authorise a suitably qualified person to conduct such investigations and / or confirm previous findings.

A site investigation comprising some or all of the detailed inspection stages may also be conducted voluntarily by other persons. The Council reserves the right to request further inspection to be carried out if the submitted documentation does not provide an appropriate basis for due consideration of the state of the land.

7.1.2 Site Specific Liaison

To reduce unnecessary concern, it is the intention of East Ayrshire Council to only contact relevant parties (owners and occupiers of land etc.) where it becomes apparent that public safety and environmental protection matters may otherwise be prejudiced. Desk Study Assessments, including site walkover

surveys, will therefore be conducted by the Council without prior contact with owners etc. of land.

In the event that further investigation is required the owner, occupier and, if known, the appropriate person(s), will be contacted by letter in order to explain the reasons behind the proposed investigation and the possibility that further investigation may also be required. The letter will give a minimum of five working days notice of the intended investigation. Should the proposed investigation date be unsuitable, a mutually convenient date and time will be arranged.

In the event that documentation is available to these parties, a copy may be forwarded to the Council for its consideration at the following address:

Environmental Health & Licensing
East Ayrshire Council
Western Road
Kilmarnock KA3 2LL

The Contaminated Land regime is such that voluntary investigation and remediation of land is a cornerstone principle. Incentives such as exemptions from landfill tax aim to encourage voluntary actions etc. Arrangements for inspections carried out by persons other than the Council should therefore be discussed with the Environmental Health Section in order to agree timescales etc.

If a site is likely to fall within the definition of a Special Site (for example by reason of its former history, or by nature of pollution of the water environment), then it will be referred to SEPA for comment on whether it should be determined as Contaminated Land. Scottish Natural Heritage, Historic Scotland and other persons will also be invited to comment in regard to intrusive investigations if appropriate, i.e. on sites of nature or archaeological importance.

7.1.3 Determination of Sites

A risk-based approach underpins this Strategy in order to ensure the process is systematic and objective, and provides a consistent and defensible basis for considering uncertainties, discussing options and making decisions. Decisions about contaminated land require to be made in recognition of technical, regulatory, societal, financial, commercial and legal factors. Decisions to be made will therefore be complex and conflicting factors will require resolution. It is vital that a holistic approach be adopted and the best outcome be achieved.

As discussed in **Section 5.6**, the components of a site assessment will be broad in nature and site specific. Detailed inspections and risk assessments will aim as a minimum requirement to provide sufficient information to secure an appropriate

basis upon which the Council can determine whether the site falls within the definition of Contaminated Land.

Once a site has been assessed to fall within the definition of Contaminated Land, it will be necessary to identify the appropriate person(s). This will involve liaison with the Council's Legal Services Dept. and affected stakeholders. This will ultimately lead to serving of a Remediation Notice or agreeing voluntary remediation in accordance with the provisions of the Statutory Guidance.

7.1.4 Appointment of Consultants

Consultants may be required to undertake certain works on behalf of the Council in relation to its own land or privately owned land. All appointments of Consultants will be conducted in accordance with established Council procedures for such appointments.

7.1.5 Health and Safety Procedures

The protection of health and safety of workers and the general public is paramount during the inspection and development of contaminated land. All works will therefore be expected to meet relevant health and safety legislation and associated Health and Safety Executive Guidance, Codes of Practice etc.

In the course of its inspection of a site, the Council may identify a risk arising at a workplace from contamination. In such instances, the relevant enforcing authority for health and safety matters will be notified and if appropriate the relevant enforcing authority for health and safety matters will become responsible for enforcing the particular pollutant linkage under health and safety legislation.

East Ayrshire Council (and neighbouring local authorities) is generally responsible for the enforcement of health and safety legislation in retail and leisure premises. The Health and Safety Executive (HSE) is responsible for factories and other high-risk premises. Further details relating to enforcement responsibilities are contained within the Health and Safety (Enforcing Authority) Regulations 1998.

7.2 WORK PROGRAMME

The inspection process has been broken down into a series of milestones, which are described below. These are also shown in Appendix A.

Stage 1 First Draft of Strategy for Internal Consultation

An initial draft Strategy was produced for scrutiny within East Ayrshire Council and put out for consultation in April 2001. The Strategy was prepared with reference to the draft guidance prepared by the Scottish Executive.

Stage 2 Second Draft of Strategy for Public Consultation

A revised draft Strategy was made available for consultation to the relevant statutory and non-statutory bodies in June 2001.

Stage 3 Publication of Strategy

The finalised version of the Strategy took into account any amendments necessitated by the consultation with statutory and non – statutory bodies.

The finalised document was ratified by the Policy and Resources Committee and published in October 2001. It was made available at local libraries, the Council headquarters and also on the East Ayrshire Council web page.

A further updates of the Strategy were produced in 2003 and 2007.

Stage 4 Dealing with Urgent Sites

The Council has an implicit duty to take action on sites that pose an imminent danger of serious harm or serious pollution of the water environment by reason of a significant pollutant linkage.

Any sites which meet these criteria may require urgent remediation. Where it is considered that urgent action is required, East Ayrshire Council is relieved of its duty to:

- Consult appropriate persons on the service of Remediation Notices; and
- Allow a three-month period between notification of appropriate persons and serving of a Remediation Notice.

There are no sites that have been identified to date as requiring urgent action in this way.

Stage 5 Identification and Initial Prioritisation

The methods being used for identification and initial prioritisation of potentially contaminated sites are described in detail in **Section 5.6**. This stage is due for completion by the end of May 2008.

The initial survey of the East Ayrshire Area to identify potentially contaminated sites has been completed. This has identified a total of approximately 2330 sites within the district. These are currently being cross-referenced against other datasets held by the council including council landholdings and sites already assessed under Part IIA. A breakdown of the list of sites by contaminative use is provided in Appendix E.

The exact number of sites that will ultimately be assessed to meet the definition of statutory Contaminated Land is unknown at this stage. However it is anticipated that the numbers will be low due to the conditions, which need to be satisfied before land is deemed to be Contaminated Land in terms of the legislation.

Within this stage of the work programme, the database of land meriting inspection by reason of its industrial past will be provided to other relevant Departments of the Council to assist in meeting their duties and especially to ensure decisions over future developments take due cognisance of contaminated land issues.

Sites will be prioritised for site-specific assessment using ECLIPSe. The ECLIPSe database will be maintained to incorporate new information that becomes available or changes that occur over time to allow the prioritisation to be updated. Sites that are dealt with through the planning regime or are subject to site-specific assessment under Part IIA will be tagged in ECLIPSe to show this and to remove them from the initial prioritisation.

Stage 6 Site-specific Inspections and Assessments

As discussed in **Section 5.6**, the aim of the site-specific assessment is to identify sites either falling within the definition of Contaminated Land or confirmed as not requiring determination under current conditions. In the second case, no further action is required unless there is a change in use or relevant legislation. However, the rate of progress for assessment of specific sites will be dependent on where they lie within the overall prioritisation of potentially contaminated sites, This will ensure that action is directed towards the highest risk sites or those requiring urgent action.

This section summarises progress made to date and forward plans.

(i) Desk Study Assessment

Desk Study (or Phase 1) Assessments are in progress for sites initially identified as high priority by East Ayrshire Council. The numbers of sites assessed to date is as follows:

- 2003-4:19 sites

- 2006-7: 17 sites
- 2007-8: 21 sites

Further desk study assessments of high priority sites will be undertaken in a staged manner following completion of the initial prioritisation work in 2008.

(ii) Initial Monitoring/ Sampling

Initial monitoring of surface waters has been undertaken on a number of sites for which desk study assessments have identified potential for pollution of the water environment. This has focused on former landfills and gasworks sites. The numbers of sites monitored to date is as follows:

- 2005-6: 10 sites
- 2006-7: 18 sites
- 2007-8: 13 sites

This information has been used to update the assessment for these sites. Further sites are likely to be subject to initial monitoring following completion of desk study assessments.

(iii) Intrusive Investigations

Dependent on the results of the desk study assessment and/ or initial monitoring/ sampling, completion of intrusive investigations may be appropriate. The numbers of sites for which intrusive investigations have been carried out to date are as follows:

- 2003-4: 2 sites
- 2004-5: 2 sites

Further intrusive investigations are likely to take place following completion of initial prioritisation, desk study assessments and/ or initial monitoring on high priority sites, subject to the availability of funding.

(iv) Quantitative Risk Assessment

Use of Quantitative Risk Assessment may be appropriate for some sites to further evaluate identified pollutant linkages. This has not been required to date but will be considered on a site by site basis.

8 REVIEW MECHANISMS

The Strategy will be reviewed on a regular basis to ensure that it remains effective and up to date. This will also allow monitoring of the effectiveness of inspection in meeting legal requirements and allow any necessary reassessment of the status of particular areas of land in response to specific circumstances or events.

8.1 TRIGGERS FOR UNDERTAKING INSPECTION

There may be instances where inspections have to be carried out outwith the general inspection framework. Triggers for undertaking non-routine inspections are as follows:

- Unplanned events e.g. incident such as a spill have occurred.
- Introduction of new receptors e.g., trespassing by young people.
- Supporting Voluntary Remediation - e.g. potentially liable party wishing to undertake a clean up before their land has been inspected by the local authority.
- Identification of localised health effects, which appear to relate to a particular area of land.
- Responding to information from other statutory bodies, owners, occupiers, or other interested parties.

While these occurrences may trigger non-routine inspections, if this Strategy is to prove effective they must not be allowed to significantly interfere with the standards laid down in the general inspection framework.

8.2 REVIEWING THE STRATEGY DOCUMENT

It is a fundamental requirement of the legislation that a review of the Strategy is carried out from time to time. In some instances the Strategy will be reviewed earlier. This may be as a result of :

- a. significant changes in legislation
- b. revision of guideline values for exposure assessment.
- c. significant case law or other precedent.

It is important that all decisions are made and recorded in a consistent manner that will allow efficient review.

A review of the Strategy was conducted in April 2007 and the Strategy amended to take into consideration updates to legislation, policy and technical guidance on

contaminated land plus progress made on implementation of the Strategy to date. Annual or biannual reviews of the Strategy will be undertaken in accordance with progress on the identification and assessment of sites,

8.3 AUDIT

An internal and external audit will take place on a regular basis.

The internal audit will be carried out by the Principal EHO of the Environment Section using an appropriate audit plan.

The external audit will be carried out by South Ayrshire, North Ayrshire or Inverclyde Councils using an agreed audit plan.

9 INFORMATION MANAGEMENT

9.1 GENERAL POLICY

Information collated in connection with the Council's obligations under Part IIA of the Environmental Protection Act 1990 will be stored on the Council database and as such can not be directly accessed by members of the public.

Information pertaining to contaminated land will be made available on request unless that information breaches the considerations of National security or commercial confidentiality.

East Ayrshire Council remains committed to protecting the health of the public as its priority obligation, and stresses that this policy does not place economics above health considerations.

Accordingly, East Ayrshire Council will maintain a public register of necessary information and will also release appropriate information to appropriate parties (e.g. owners of land, occupiers of land and appropriate persons) in administering the Part IIA regime. Any queries in relation to relevant information held by the Council should be addressed in the first instance to:

The Principal Officer
Environmental Health & Licensing
East Ayrshire Council
Western Road
Kilmarnock
KA3 1LL

9.2 PUBLIC REGISTER

The Contaminated Land (Scotland) Regulations 2000 as amended require East Ayrshire Council to maintain a public register of Contaminated Land. The register will be updated by the Environmental Health Section and will be located at Environmental Health & Licensing, Western Road, Kilmarnock. Access to the register will be possible during Council Office opening hours, facilities for copying entries will be available for which the Council may adopt a charging policy.

The regulations clearly specify the information that must be recorded within the register as:

- Contaminated land identification notices
- Contaminated land Remediation Notices;
- Details of Appeals against remediation notices.
- Remediation declarations (prepared by East Ayrshire Council)
- Remediation Statements

- Details of Special Site designations
- Notifications of claimed remediation
- Details of relevant convictions
- Dates of relevant guidance
- Other environmental control preclusions

The Environmental Information (Scotland) Regulations 2004 extend the right of access to environmental information held by or for public authorities in Scotland and promote dissemination of environmental information. The implementation of the new regulations is aligned with the Freedom of Information (Scotland) Act 2002. Under Part IIA, there is a requirement to record certain prescribed information about regulatory actions on a public register, specifically information relating to determination of sites and Remediation Notices served.

The Environmental Information (Scotland) Regulations are likely to extend the provision of information on request to a wide range of material relating to implementation of Part IIA. There are some exceptions to provision of information but these are subject to a public interest test. Authorities can recover in full the cost of supplying the information.

9.3 COMMERCIAL CONFIDENTIALITY

East Ayrshire Council will not, without the relevant person's permission, include any information on the register which:

1. Relates to the affairs of any individual or business; and
2. Is commercially confidential to that individual or the person carrying on that business (excluding valuations etc.)

Upon preparation of any information etc. for the consideration of the Council, individuals are advised that information considered confidential should be highlighted in a covering letter with an explanation as to why the intimated matters should be treated as confidential. Due consideration will be given to all such information and the decision of the Council in regard to the individual items of information will be communicated to the individual prior to inclusion on the register.

The Council will also undertake to advise individuals in writing of any information that it believes to be commercially confidential. Individuals will be permitted 21 days to make representations directly to the Council, and if dissatisfied with the decision of the Council in favour of including the information in the register, the individual will be advised of their rights of appeal to the Scottish Ministers within 21 days.

In such instances the following procedures will apply:

1. If after 21 days from notification of the decision to deny information commercial confidentiality status an appeal has not been lodged, East Ayrshire Council will enter the information into the register;
2. Whilst any appeal is pending the information will not be included in the public register;
3. In the event that an appeal is upheld, the information will be excluded from the register and an exclusion statement will be entered in its place;
4. In the event that the appeal is withdrawn or the appeal is quashed, the information will be entered in the register 7 days after the decision is received; and
5. Commercial confidentiality status will lapse after 4 years and the information will be entered into the register, (the individual or company involved will be reminded that the 4 years is coming up and asked if they wish to continue confidentiality). The same decision process will be followed for re-designations as original designations.

The Scottish Ministers have the power to direct specified information or descriptions of information to be included irrespective of any commercial confidentiality.

9.4 ISSUES OF NATIONAL SECURITY

The Scottish Ministers have the power to direct East Ayrshire Council to exclude from the register specific information or descriptions of information, or refer such information for determination by the Scottish Ministers.

Any party may advise the Scottish Ministers and East Ayrshire Council of information they believe to be of National Security status. Such information will not be entered in the public register until the Scottish Ministers determine its inclusion is appropriate.

9.5 INFORMATION MANAGEMENT

The Council's Geographical Information System (GIS) and ECLIPSe will be the primary tools used to manage information collated in relation to this Strategy. Data links between the GIS and ECLIPSe will ensure consistency of information between the two systems.

The Environmental Health Section provides the lead role within East Ayrshire Council and keeps records obtained in pursuance of its obligations. However, other Departments also play vital roles in the area of contaminated land and information appropriate to their involvement will be shared whilst maintaining the Council's over-arching Confidentiality Policy. To this end, consideration will be given to the likely end users of the information to indicate whether information is stored within the corporate GIS or ECLIPSe system.

9.6 REQUESTS FOR INFORMATION

Potential developers of sites and environmental consultants may apply to the Environmental Health Section for information pertaining to specific sites.

Information will only be provided in a general context and will not contravene the policies adopted to protect land from blight and other similar negative effects.

In the majority of cases, the information provided will be information that is available from existing public documents (e.g. historical maps etc.).

Information provided in this process will be guidance only.

Any expressed opinions should not be regarded as factual evidence of a particular circumstance.

The following disclaimer statement will accompany all information provided:

The contents of this [fax][letter] are intended as guidance only and are based upon the best information available to the Environmental Health Section of East Ayrshire Council as at the date shown above. The information should not be relied upon as a statement of fact nor presented to a third party as a statement of fact. The Council accepts no liability in respect of the recipients (or anyone with whom they share the information) use or reliance on this information.

9.7 PROVISION OF INFORMATION TO SEPA

East Ayrshire Council is required or permitted to provide information to the Scottish Environment Protection Agency in the following circumstances:

1. To assist SEPA in its role of regulator for Special Sites;
2. To request advice from SEPA in relation to specific sites; and
3. To assist SEPA prepare the Annual State of Contaminated Land in Scotland Report.

9.8 THE STATE OF CONTAMINATED LAND IN SCOTLAND REPORT

The Scottish Environment Protection Agency is required to prepare an Annual Report on the state of contaminated land in Scotland. The Aims of the report are as follows:

- To compile information on the general nature, extent and distribution of land identified as contaminated under Part IIA of the Environmental Protection Act 1990;
- To assess the scale of the environmental impact of contaminated land and highlight where Part IIA is reducing this impact;
- To summarise regulatory activity under Part IIA; and
- To assess the effectiveness of Part IIA in addressing contaminated land.

9.9 EAST AYRSHIRE COUNCIL – SEPA LIAISON

East Ayrshire Council in association with all other Scottish Local Authorities has met with SEPA to discuss the requirements of the regime and mechanisms for routine transfer of information.

A framework has been agreed with a view to ensuring the efficient collation and transfer of information.

APPENDIX A: Schedule for Implementation of Strategy

Year	2001-2												2002-3												2003-4											
Month	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M
Stage 1: Draft Consultation Strategy (Internal)	■	■	■	■	■	■																														
Stage 2: Draft Consultation Strategy (Public)			■	■																																
Stage 3: Publication of Strategy							■																													
Stage 4: Dealing with Urgent Sites																																				
Stage 5: Identification & Initial Prioritisation																																				
Stage 6: Site-Specific Inspections and Assessments														■	■	■										■	■	■	■	■	■	■	■	■	■	■



Action completed



Action timetabled for this period



Action may occur during this period

Year	2004-5												2005-6												2006-7											
Month	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M
Stage 1: Draft Consultation Strategy (Internal)																																				
Stage 2: Draft Consultation Strategy (Public)																																				
Stage 3: Publication of Strategy																																				
Stage 4: Dealing with Urgent Sites																																				
Stage 5: Identification & Initial Prioritisation																																				
Stage 6: Site-Specific Inspections and Assessments																																				



Action completed



Action timetabled for this period



Action may occur during this period

Year	2007-8												2008-9												2009-10											
Month	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M
Stage 1: Draft Consultation Strategy (Internal)																																				
Stage 2: Draft Consultation Strategy (Public)																																				
Stage 3: Publication of Strategy																																				
Stage 4: Dealing with Urgent Sites																																				
Stage 5: Identification & Initial Prioritisation																																				
Stage 6: Site-Specific Inspections and Assessments																																				



Action completed



Action timetabled for this period



Action may occur during this period

APPENDIX B: East Ayrshire Council Contact Points

East Ayrshire Council

Council Headquarters
London Road
Kilmarnock
KA3 7BO
Tel: 01563 576000

East Ayrshire Council

Web Site:
www.east-ayrshire.gov.uk

Environmental Health & Licensing

Principal Officer
Environmental Health & Licensing
Western Road
Kilmarnock
KA3 1LL

Contaminated land Officer

Tel: 01563 554016
e-mail address
Chris.Johnson@east-ayrshire.gov.uk

Planning and Economic Development

6 Croft Street
Kilmarnock
KA11 JB
Tel: 01563 576790

APPENDIX C: References

British Standards Institution, BS 10175: Investigation of Potentially Contaminated Sites: Code of Practice, 2001

DEFRA, CLAN 6/06, Assessing Risks from Land Contamination – a Proportionate Approach, Soil Guideline Values: the Way Forward, November 2006

DEFRA/ EA, Assessment of Risks to Human Health from Land Contamination: An Overview of the Development of Soil Guideline Values and Related Research, CLR7, 2002

DEFRA/ EA, Potential Contaminants for the Assessment of Land, CLR8, 2002

Department of the Environment (DoE), Industry Profiles (various).

East Ayrshire Council, Environmental Strategy: Building a Local Agenda 21 for East Ayrshire (February 2000)

East Ayrshire Local Plan, Finalised Version (April 2003)

Environment Act 1995 (HMSO 1995)

Environment Agency, Model Procedures for the Management of Land Contamination, CLR11, 2003

Environmental Protection Act 1990 (HMSO 1990)

Environmental Information (Scotland) Regulations 2004 (HMSO 2004)

Macaulay Land Use Research Institute (MLURI), Background Levels of Contaminants in Scottish Soils, 2003

Scottish Environment Protection Agency, Scotland River Basin District Characterisation and impacts analyses required by Article 5 of the Water Framework Directive, Summary

Scottish Executive Contaminated Land Inspection Strategies: Advice for Local Authorities (August 2000)

Scottish Executive Rural Affairs Department Circular 1/2000 (12th July 1990)

Scottish Executive, Environmental Protection Act 1990: Part IIA, Contaminated Land Statutory Guidance: Edition 2, Paper SE/2006/44, May 2006

Scottish Executive, Planning Advice Note (PAN) 33, Development of Contaminated Land, October 2000.

Scottish Statutory Instrument 2000 No.178, The Contaminated Land (Scotland) Regulations 2000

Scottish Statutory Instrument 2005 No.658, The Contaminated Land (Scotland) Regulations 2005

SEPA, Water Pollution Arising from Land containing Chemical Contaminants, December 2001

SNIFFER, Method for Deriving Site-Specific Human Health Assessment Criteria for Contaminants in Soil, 2000

SNIFFER/ EA, Communicating Understanding of Contaminated Land Risks, 1999

Water Environment (Controlled Activities) (Scotland) Regulations 2005 (HMSO 2005)

APPENDIX D: Glossary of Terms and Abbreviations

The Statutory Guidance uses a number of terms which are defined in Part IIA of the EPA 1990, other Acts or in the guidance itself. The meanings of the most important of these terms are set out below, along with a reference to the section in the Act or the paragraph in which the relevant term is defined. The references refer to the Statutory Guidance (Edition 2, May 2006) unless otherwise stated.

Animal or crop effect: significant harm of a type listed in box 3 of Table A of Chapter A.

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 any thing which is to be done by way of remediation in any particular case.”

Building effect: significant harm of a type listed in box 4 of Table A of Chapter A.

Caused or knowingly permitted: test for establishing responsibility for remediation, under section 78F(2); see paragraphs 9.8 to 9.15 of Annex 2.

Class A person: a person who is an appropriate person by virtue of section 78F(2) (that is, because he has caused or knowingly permitted a pollutant to be in, on or under the land). *Paragraph D.5(a)*

CLEA: (Contaminated Land Exposure Assessment) model.

Class B person: a person who is an appropriate person by virtue of section 78F(4) or (5) (that is, because he is the owner or occupier of the land in circumstances where no Class A person can be found with respect to a particular remediation action). *Paragraph D.5 (b)*

Conceptual site model: the inter-relationship between contaminant sources, pathways and receptors leading to a pollutant linkage and environmental risk.

Contaminant: a substance, which is in, on or under the land and which has the potential to cause harm or to cause pollution of the water environment. *Paragraph A.13*

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”.

Contaminated Land (Scotland) Regulations 2005: regulations (SI 2005/658) made under Part IIA.

Current use: any use which is currently being made, or is likely to be made, of the land and which is consistent with any existing planning permission (or is otherwise lawful under town and country planning legislation).

Ecological system effect: significant harm of a type listed in box 2 of Table A of Chapter A.

Enforcing authority: defined in section 78A(9) as:

- (a) in relation to a Special Site, SEPA;
- (b) in relation to contaminated land other than a special site, the local authority in whose area the land is situated.

EQS: (Environmental Quality Standards)

Harm: defined in section 78A(4) as:

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

Harm in relation to the water environment means

- (a) harm to the health of human beings or other living organisms,
- (b) harm to the quality of the water environment, including
 - (i) harm to the quality of the water environment taken as a whole,
 - (ii) other impairment of, or interference with, the quality of aquatic ecosystems or terrestrial ecosystems directly depending on them
- (c) offence to the senses of human beings,
- (d) damage to property, or
- (e) impairment of, or interference with, amenities or other legitimate uses of the water environment.

Section 3(c) Contaminated Land (Scotland) Regulations 2005 and section 20(6) of the Water Environment and Water Services (Scotland) Act 2003.

Human health effect: significant harm of a type listed in box 1 of Table A of Chapter A.

Inspection using statutory powers of entry: any detailed inspection of land carried out through use of powers of entry given to an enforcing authority by section 108 of the Environment Act 1995. *Paragraph B.21*

Intrusive investigation: an investigation of land (for example by exploratory excavations to obtain soil or groundwater samples) which involves actions going beyond simple visual inspection of the land, limited sampling or assessment of documentary information. *Paragraph B.20(c)*

Local authority: defined in section 78A(9) as meaning any Scottish local authority.

Part IIA: Part IIA of the Environmental Protection Act 1990.

Pathway: one or more routes or means by, or through, which a receptor:

- (a) is being exposed to, or affected by, a contaminant, or
- (b) could be so exposed or affected. *Paragraph A.15*

Pollutant linkage: the relationship between a contaminant, a pathway and a receptor.
Paragraph A.18

Pollution in relation to the water environment: means the direct or indirect introduction, as a result of human activity, of substances into the water environment, or any part of it, which may give rise to any harm”
Section 3(l)(ii) Contaminated Land (Scotland) Regulations 2005

Possibility of significant harm: a measure of the probability, or frequency, of the occurrence of circumstances which would lead to significant harm being caused.
Paragraph A.27

Receptor: either:

(a) a living organism, a group of living organisms, an ecological system or a piece of property which:

(i) is in a category listed in Table A in Chapter A as a type of receptor, and

(ii) is being, or could be, harmed, by a contaminant; or

(b) a water environment which is being, or could be, polluted by a contaminant.

Paragraph A.14

Register: the public register maintained by the enforcing authority under section 78R of particulars relating to contaminated land.

Remediation: defined in section 78A(7) as:

(a) the doing of anything for the purpose of assessing the condition of – (i) the contaminated land in question;

(ii) any water environment affected by that land; or

(iii) any land adjoining or adjacent to that land;

(b) the doing of any works, the carrying out of any operations or the taking of any steps in relation to any such land or waters for the purpose –

(i) of preventing or minimising, or remedying or mitigating the effects of, any significant harm, or any pollution of the water environment, by reason of which the contaminated land is such land; or

(ii) of restoring the land or waters to their former state; or

(c) the making of subsequent inspections from time to time for the purpose of keeping under review the condition of the land or waters.”

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.

Risk: the combination of:

(a) the probability, or frequency, of occurrence of a defined hazard (for example, exposure to a property of a substance with the potential to cause harm); and (b) the magnitude (including the seriousness) of the consequences. *Paragraph A.9*

SEPA: the Scottish Environment Protection Agency.

Significant harm: defined in section 78A(5). It means any harm, which is determined to be significant in accordance with the statutory guidance in Chapter A (that is, it meets

one of the descriptions of types of harm in the second column of Table A of that Chapter).

Significant pollutant linkage: a pollutant, which forms the basis for a determination that a piece of land is contaminated land. *Paragraph A.21*

Significant possibility of significant harm: a possibility of significant harm being caused which, by virtue of section 78A(5), is determined to be significant in accordance with the statutory guidance in Chapter A.

SNIFFER: Scottish and Northern Ireland Forum for Environmental Research

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)”.

The effect of the designation of any contaminated land as a special site is that SEPA, rather than the local authority, becomes the enforcing authority for the land.

Substance: defined in section 78A(9) as:

“any natural or artificial substance, whether in solid or liquid form or in the form of a gas or vapour”.

Water environment: means all surface water, groundwater and wetlands defined as follows:

“Surface water” means inland water (other than groundwater), transitional water and coastal water.

“Groundwater” means water which is below the surface of the ground in the saturation zone and in direct contact with the ground or subsoil.

“Wetland” means an area of ground the ecological, chemical and hydrological characteristics of which are attributable to frequent inundation or saturation by water and which is directly dependent, with regard to its water needs, on a body of groundwater or a body of surface water.

“Inland water” means (a) all standing or flowing water on the surface of the land (other than transitional water), and (b) all groundwater, within the landward limits of coastal water.

“Transitional water” means water (other than groundwater) in the vicinity of river mouths which is partly saline in character as a result of its proximity to coastal water but which is substantially influenced by freshwater flows.

“Coastal water” means water (other than groundwater) within the area extending landward from the 3 mile limit up to the limit of the highest tide or, where appropriate, the seaward limits of any bodies of transitional water, but does not include any water beyond the seaward limits of the territorial sea of the United Kingdom adjacent to Scotland.

Nothing in this Part applies to any water contained in:

(a) artificial swimming pools,

(b) mains or other pipes belonging to Scottish Water or which are used by Scottish Water or any other person for the purpose only of providing a supply of water to any premises,

- (c) water treatment works,
 - (d) sewers and drains which drain into sewers,
 - (e) sewage treatment works,
 - (f) artificially created systems for the treatment of pollutants.
- Section 3(1(ii)) Contaminated Land (Scotland) Regulations 2005 and section 3 of the Water Environment and Water Services (Scotland) Act 2003.*

APPENDIX E: Potentially Contaminated Sites Identified through Identification and Initial Prioritisation Work

Contaminated Areas by ECLIPSe Category

EclipseDes	ECLIPRisk	Area (m²)	No. Polygons
All Military Establishments	Moderate	269716	11
Ceramics - Tableware & other ceramics	Low	141968	5
Civilian Manufacture & Sotrage of Weapons, Ammunition, Explosives and Rockets	High	747	7
Coal Gasification / Carbonisation	High	1074401	35
Coal Storage/Depot	Low	29677	1
Disturbed or Filled Ground including Infilled Quarries	Moderate	14550281	1375
Dry Cleaners	Low	11664	10
Fine Chemicals Manufacture	High	49523	3
Food Preparation/Processing (inc Brewing)	Low	535403	58
Foundries	Low	1429	1
Foundries	Moderate	92104	14
Garages/ Filling Stations	Moderate	38638	20
Landfill and Other Waste Treatment / Disposal including Incinerators	High	85938	10
Mechanical Engineering	Moderate	3015	1
Minerals Processing (Bricks, Cement, Tarmac etc)	Moderate	472901	152
Oil Shale and Coal Mining	Low	1212904	28
Paint and Ink Manufacture	Moderate	4680	2
Power Station / Electricity Sub-Station	Moderate	209725	47
Printing Works	Low	33980	3
Pulp and Paper Manufacturing	Moderate	6783	3
Quarrying of all stone and ores, open cast mines & associated	Low	2223526	220
Railway Yards/Sidings	Low	377766	17
Road Haulage Yards	Low	334558	6
Saw Mills	Low	130699	28
Sewage Works	Moderate	383153	48
Smithies (small scale general blacksmith)	Low	50967	69
Tanneries & Animal Processing Works	Moderate	13129	3
Textile Production and Dying	Moderate	243899	49
Vehicle Manufacture	Moderate	71682	41
Works/Factories (use not specified)	Moderate	486179	66
TOTAL		23141035	2333

Contaminated Areas by Risk Category

ECLIPRisk	Area (m²)	Number Polygons
HIGH	1210609	55
MODERATE	16845885	1832
LOW	5084541	446
TOTAL	23141035	2333

NOTE:

Land use categories are indicative only. Where multiple historical land uses are identified within a single potentially contaminated land polygon, the most recent land use category is listed.

Land use categories for all the constituent polygons within each site are available within the detailed GIS layers and will be made available in ECLIPSe.

These have NOT been included in these statistics due to overlapping and embedded polygons which would have given a false figure for the overall area of contaminated land and number of polygons.