

East Lothian
Council

Contaminated Land Strategy - Update

October 2012

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1.1 This Document

East Lothian Council is the lead Regulator in respect of Part IIA of the Environment Protection Act 1990, otherwise known as the Contaminated Land Regime. The Statutory Guidance required Local Authorities to develop and publish (by October 2001) a strategic approach to the inspection of land in their area for the purposes of identifying any contamination and to keep this under periodic review. A first assessment of potential sites with contaminated land issues was completed in 2006. The Council is required to undertake a periodic review of its contaminated land strategy. This document represents an update on progress since 2006 and supercedes the earlier published strategy.

The Contaminated Land Regime provides a risk based approach to the identification and remediation of land where contamination poses an unacceptable risk to human health or the environment. This document sets out the Council's strategy in meeting with its Statutory obligations and includes:

- What the Council is obliged to do;
- How the Council will meet the obligations;
- What progress the Council has made;
- What work is still required to be undertaken.

1.2 Background

Government policy has acknowledged that land contamination hinders the pursuit of sustainable development. Legislation and drivers have evolved to deal with the industrial legacies, while meeting the sustainable development and management requirements to promote the re-use of vacant, derelict and brownfield land including the commitment to dealing with contaminated land.

The Second National Planning Framework for Scotland (NPF2) recognises that over 10,000 hectares of land across Scotland is classed as vacant and derelict with some 3,500 hectares (34%) remaining unused for more than 20 years. This land is likely to have been previous industrial land and will have the possibility for contamination to be present. The national strategies are to deal with the historical industrial legacy in the pursuit of more sustainable development.

1.3 East Lothian Council's Strategy

The Contaminated Land Inspection Strategy supports the broad objectives in the East Lothian Council Plan 2012-17 and the East Lothian Single Outcome Agreement particularly with regard to environmental quality and economic development. East Lothian Council strategy and policy is in sympathy with the government policies, but with a particular bias in promoting the protection of public health and enhancing the well-being of local communities. The Part IIA inspection process is an underlying component in the Councils key Corporate and Planning strategies:

- Promote economic development through the provision of attractive sites and premises;
- Promotion of sustainable development through the re-use of brownfield land;
- Enhance the image, promote tourism and regenerate local communities ;
- Promotion of the building of residential properties on brownfield land.

Previously developed land (Brownfield Land) has the potential to be contaminated depending on its prior use. Determining this use and assessing whether contamination is present is a key precursor to ensuring that the Council can meet its strategic Corporate and Planning objectives.

East Lothian Council is fully committed to the Part IIA process, not simply as a mechanism of meeting government compliance obligations, but also in underpinning the key corporate and planning, strategies and objectives.

2 What is Contaminated Land?

Contaminated Land is often used to describe the wide legacy of land which has been affected by historic industrial use. However, the term does have a specific legal definition and an associated process for assessment, as described in the following text.

2.1 Definition of Contaminated Land

Under Part IIA of the Environmental Protection 1990 Act (as amended by the Water Act 2003), contaminated land is defined as “any land which appears to the local authority in whose area it is situated to be in such a condition, by reason of substances in, on or under the land, that:

- (a) Significant harm is being caused, or there is a significant possibility of significant harm being caused,
- (b) Significant pollution of controlled waters is being caused, or there is a significant possibility of significant 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 humans or the wider environment.

2.2 Process for Determining Contaminated Land

The contaminated land regime is centred on a risk based framework for dealing with land affected by contamination. The initial principle is based on pollutant linkage, where the three key elements are:

Source – a natural or artificial substance (solid, liquid or gas) which is in, on or under the land (in the soil or present as a discrete phase) and has the potential to cause harm or cause pollution of the water environment ;

Receptor – in general terms, something that could be adversely affected by a contaminant (e.g. humans, an ecological system, property or water body); and

Pathway – one or more routes or means by which a receptor can be exposed to, or affected by, a contaminant.

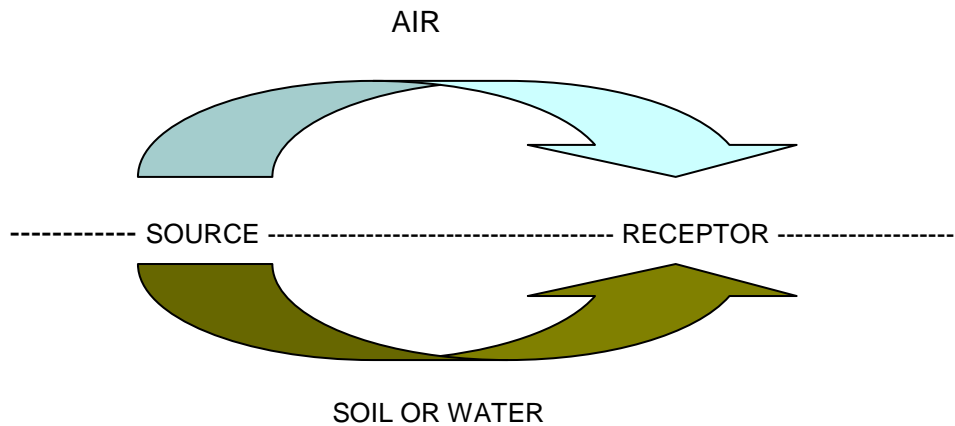


Figure 1: Elements of the pollution linkage

Pollutant linkage is the inter-relationship between a particular source and receptor and the pathways between them. All three elements of the linkage must therefore be present for a risk to exist. If one of the elements of the pollutant linkage is absent there can be no risk. This pollutant linkage is used to create the Conceptual Site Model (i.e. a representation of the pollutant linkages)

In order to determine whether 'harm' is occurring and is significant in accordance with the contaminated land definition, a risk assessment process is applied to each of the identified pollutant linkages. The principles of risk assessment are based on a combination of:

- Probability, or frequency, or occurrence of a defined hazard; and
- Magnitude (including seriousness) of the consequences.

The process of risk assessment is normally undertaken in stages (from qualitative to quantitative) to allow focus on the identified linkages that are considered to be of significance.

2.3 Local Context

East Lothian's industrial past has included a fair number of potentially contaminative sources. Most of the industries which flourished between the 18th Century and the early part of the 20th Century have now disappeared, leaving remarkably few traces. The early chemical and fireclay industries established around Prestonpans in the early nineteenth century were reputed to be in the forefront of the Industrial Revolution in Scotland. The presence of clay deposits brought about the development of potteries, brickworks and tileworks. Preliminary investigations have also found evidence of gas works (Coke and carbonisation), iron foundries, tanneries, soap making, timber

works, power stations, railway yards and paper mills – all of which are known to produce quantities of hazardous waste materials. The factory buildings may have long since vanished, but their waste products and associated contamination problems are likely to be with us for some time.

Contaminated land issues are not confined to industrial activity; other day-to-day activities can also result in serious contamination. Typical sites may include petrol filling stations, coal/gas works, sewage treatment works, disused military airfields, farms and associated storage buildings, animal slaughter processes, engineering works, scrap yards and even fly tipping.

The subsequent decline in industry, post war, resulted in a significant industrial legacy, which the Council now has an obligation to deal with in meeting its core corporate and planning objectives. Historical industrial activity has been reviewed using historical maps, local authority records and registers for consented facilities (such as petrol filling stations and landfill facilities).

The existing contaminated land data-base for East Lothian lists 1576 industry activities, ranging in date from 1852 to the present day. Currently (as of October 2012) there are 916 sites that have been identified as potentially having contaminated land issues. The following figure highlights the primary industrial uses at all 916 locations identified.

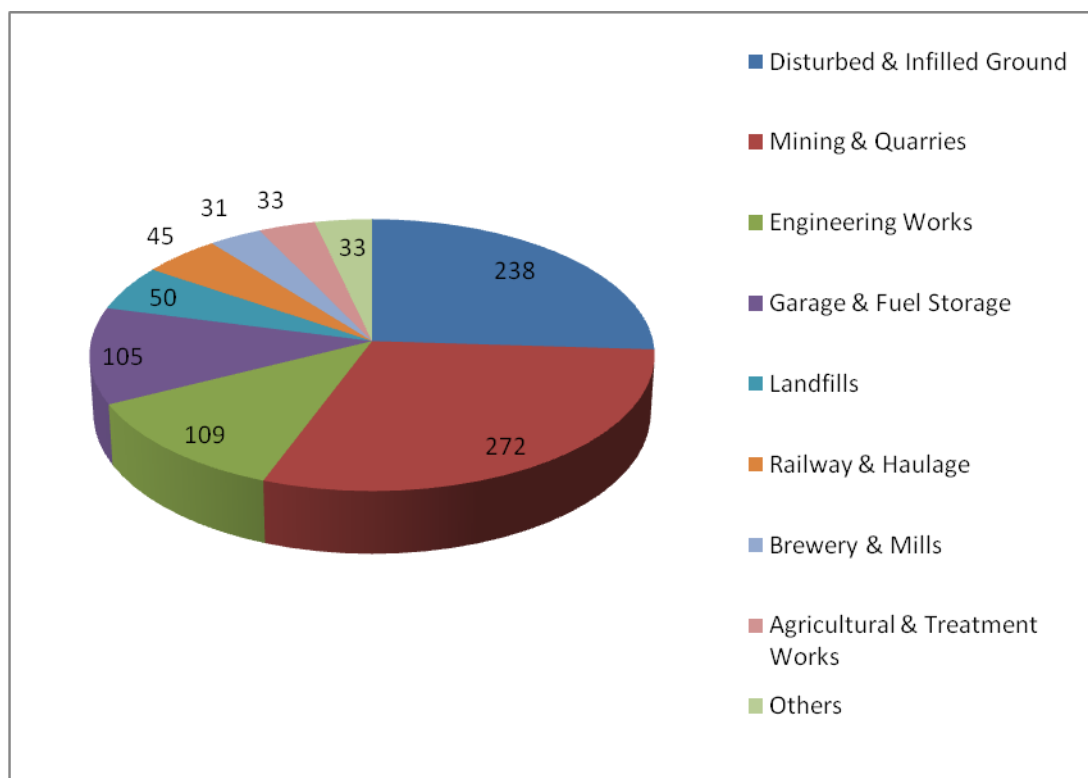


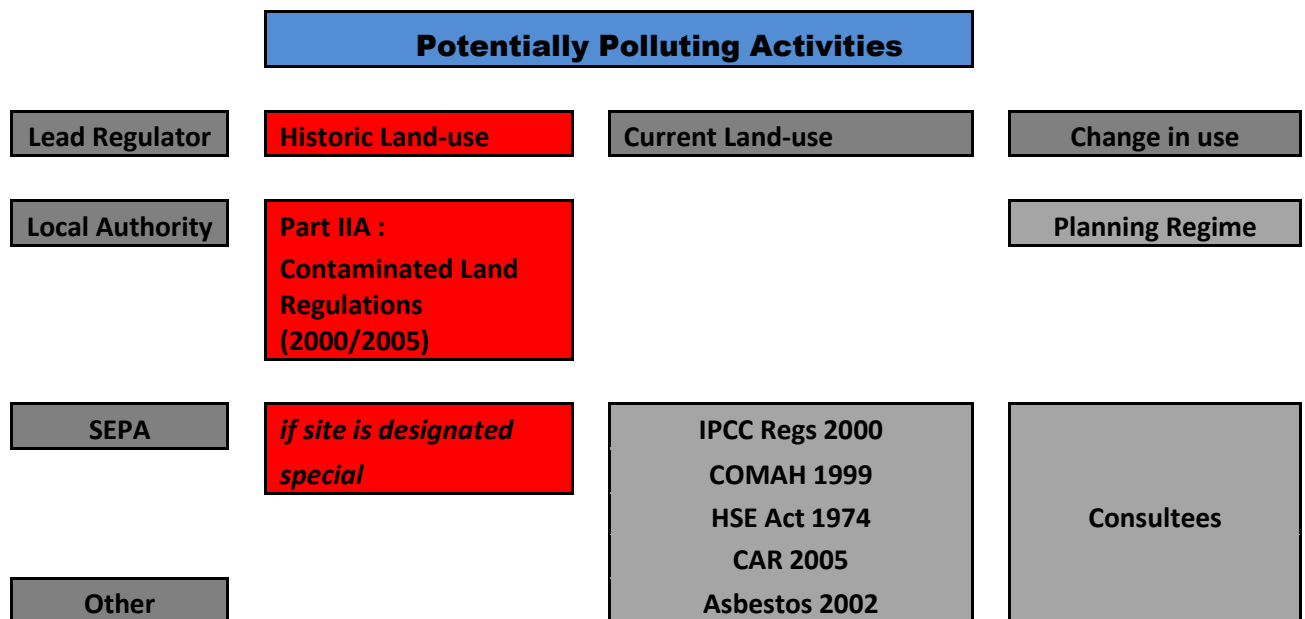
Figure 2: Profile of Historical Industrial Activity

3

Regulatory Framework

The overall regulatory framework which directly or indirectly relates to pollution and contaminated land covers historic, current and changes in land use. The following figure provides a simplistic guide of the regulatory framework, where the blocks highlighted in red identifies the particular area covered in this Strategy Document (the other aspects are also described for context).

Figure 3: Generic Representation of role of Part IIA in dealing with Pollution



3.1 Historical Land Use

The core regulatory obligations are derived from the following parliamentary Acts, Regulations and Guidance:

- The Environmental Protection Act 1990 Part IIA;
- The Environment Act 1995;
- The Contaminated Land (Scotland) Regulations 2000 (amended 2005, 2006);
- Scottish Executive Statutory Guidance (Edition 2, May 2006); and
- Radioactive Contaminated Land (Scotland) Regulations 2007.

The legislation is designed to provide a mechanism to deal with historical contamination, mainly derived from a legacy of the industrial revolution on the basis of current use suitability. The legislation defines Contaminated Land and the roles and responsibilities of the regulators and the powers available to apply regulation.

3.2 Key Legislative Principles

The Local Authority is the lead regulator in relation to land which has the potential to be contaminated from historic land use. However, where a site is designated as a 'special site' by the Local Authority (i.e. where there is significant defined impact to controlled waters) then the lead regulation passes to Scottish Environment Protection Agency (SEPA). The key principles of the legislation are to:

- take a strategic approach to the identification and remediation of contaminated land;
- deal with land contamination issues in an orderly and controlled fashion, tackling the most pressing and serious problems first;
- maintain a risk-based approach, requiring remedial action only where the contamination poses unacceptable risks to human health or the environment and where such remediation would be considered to be reasonable; and
- provide clarity in the law which would then assist in the development of an efficient market in land that is contaminated and which has been remediated.

The regime is based on the polluter pays principle requiring the enforcing local authority to identify the appropriate person/s that is liable for remediation. The standard of remediation is based on a number of factors including the cost and the seriousness of the harm or pollution that is caused. The appropriate person is usually given the opportunity (unless urgent action is required) to develop a Remediation Statement setting out what they will do and when. Where necessary, remediation can be enforced by the Local Authority through serving a Remediation Notice.

3.3 Roles and Responsibilities

East Lothian Council has a responsibility to assess the entire district to identify contaminated land (and to designate 'special sites'). That work is carried out by the Council Environmental Protection Team (Contaminated Land Officer) in the Services for Communities (Housing & Environment) Directorate. In identifying land with the potential to be contaminated, East Lothian Council and SEPA have the following duties and powers:

East Lothian Council	
Duties	Process
Inspect the district to identify contaminated land and to designate special sites	Be rational, ordered and effective; Be appropriate to the seriousness of any potential risk; Ensure that resources are prioritised to investigate areas most likely to identify contaminated land; Identify requirements for the detailed inspection of particular areas of land efficiently.
Ensure remediation of land identified as contaminated	Identify appropriate person(s) to bear responsibility for remediation; Decide what remediation is required and ensure it occurs; Determine who should bear what proportion of liability for meeting costs for works.
Maintain Public Registers	Provision of central accessible database
Powers	
Powers of entry to undertake inspection & remedial works	In addition or in association with existing legislative powers of entry in respect of public benefit or health protection
Recover the cost of remedial works undertaken	The Council has the power to undertake any remedial works deemed necessary and then recover the costs from the appropriate person.

SEPA	
Duties	Process
Ensure remediation of land designated as a special site	Decide what remediation is required and ensure it occurs; liability apportionment
Maintain Public Registers for special sites	Provision of central accessible database
Prepare a national report on the state of contaminated land	Engage with Local Authorities in determining what progress has been made; Provide Technical Support where required; Engage with range of stakeholders to determine overall progress, issues and any required changes to improve the process
To provide specific guidance to local authorities on contaminated land Maintain Public Registers	SEPA provides an expert system supporting Local Authorities in meeting their obligations particularly in respect to integrating with other key legislation.
Powers	
Powers of entry to undertake inspection & remedial works	SEPA have specific powers of entry under various legislation supported where required by other agencies, including police, if there is sufficient evidence to suggest non-compliance with legislation, issue to human health or the wider environment or if a major incident is threatened.
Recover the cost of remedial works undertaken	In respect to Special Sites, SEPA can undertake the work and also recover the costs working in consultation with the Local Authority

3.4 Current Land Use

A current industry or activity that has the potential to cause pollution as a consequence of the operators activities (e.g. landfill, petrol filling station, chemical works) is managed by one or more of the following regulatory regimes most of which will require the operator to apply for a permit which will have strict conditions for preventing or minimising risk from pollution events:

Environmental Liability Directive	The Environmental Liability Directive (ELD) provides a framework for defining liability on operators that cause damage to land, habitats, human health and water resources.
Pollution Prevention and	The Pollution Prevention and Control (PPC) regime aims to prevent requirement for protection of land. SEPA are the lead regulator.
Control of Major Hazards Regulations	This is based on the EU SEVESO II Directive and provides a framework for specific industries (mainly the chemical industry but also for industries with large storage of hazardous materials, explosive manufacturing/storage and nuclear sites). The main objective of the regulations is to prevent and mitigate the effects of those major accidents involving dangerous substances to people and the wider environment.
Health & Safety at Work Act	The Health & Safety at Work Act 1974, is the primary piece of legislation covering occupational health and safety in the United Kingdom. The Health & Safety Executive and Local Authorities are responsible for enforcing the Act and a number of other Acts and Statutory instruments relevant to the working environment.
Control of Substances Hazardous to Health Regulations	This deals with the identification, assessment and management of hazardous materials typically within the workplace environment and underpins the Health & Safety at Work Act requirements.
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.

3.5 Changes in Land Use

The Planning regime provides the primary mechanism by which East Lothian Council manages the suitability for use aspects relating to contaminated land. The Scottish Government Planning Advice Note (PAN 33): Development of Contaminated Land provides advice and guidance to East Lothian Council and developers on dealing with potential contamination.

All land is subject to a lifecycle and a reasonable proportion of land changes use. When this occurs then the land is subject to the requirements of PAN 33 which requires the developer to ensure that any risks associated with contamination are mitigated to a level that is suitable for the intended new use of the land. The process of managing planning conditions is undertaken by the Council's Development Management Team . Planning conditions relating to contaminated land are based on recommendations from the Environmental Protection Team (contaminated land officer).

4 The Strategy

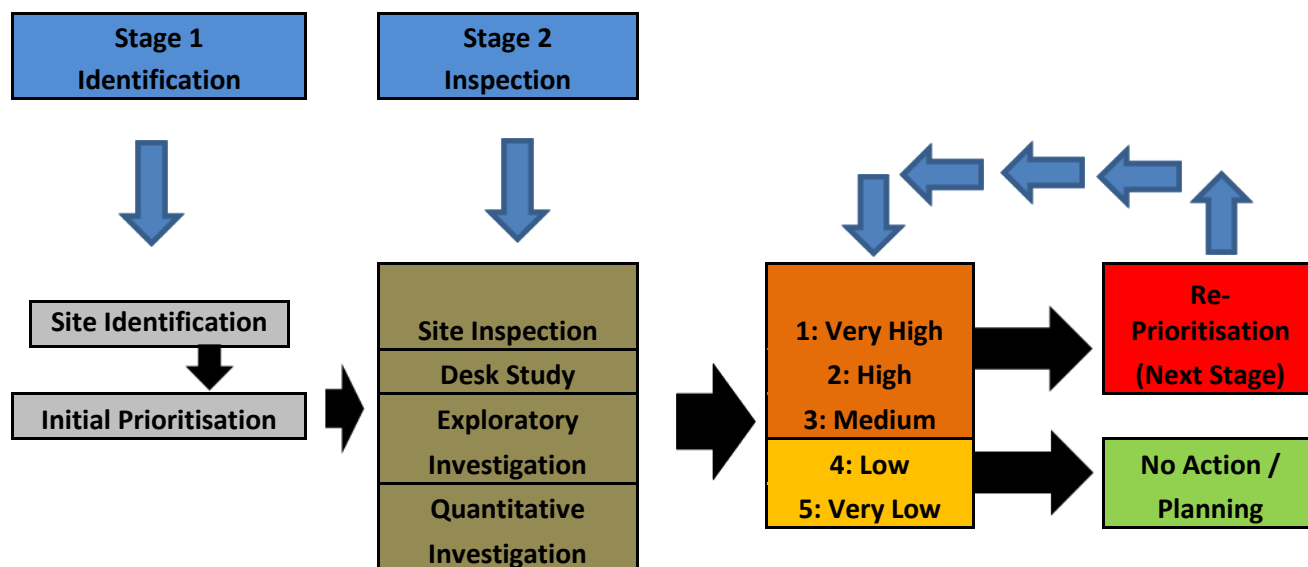
4.1 Framework Processes

The processes and procedures required to meet the requirements of Part IIA are undertaken by East Lothian Council in three stages, namely Identification and Initial Prioritisation (Stage 1), Inspection and Investigation (Stage 2) and Remediation (Stage 3). The common fundamentals required by the Part IIA guidance for the identification and prioritisation of land which has the potential to be contaminated are:

- To deal with land contamination issues in an orderly and controlled fashion, tackling the most pressing and serious problems first and;
- To maintain a risk-based approach, requiring remedial action only where the contamination poses unacceptable risks to human health or the environment and where such remediation would be considered to be reasonable.

This has been embedded within the Stage 1 and 2 processes of identification, prioritisation and inspection. The following figure shows the process, highlighting the inspection mechanisms and the priority levels. When any site is classed as Priority 4 or 5 then no further action is required in respect under Part IIA and any change of use issues are managed under PAN 33.

Figure 4: Simplified Model of the Inspection Process



4.2 Stage 1: Identification & Initial Prioritisation

4.2.1 Identification

Table 1: Key Data Sources of Potential Contaminative Uses

Historical Industry	Former Petrol Filling Stations	Closed Waste Management Sites	Former Licensed Sites
<i>Digitised sources: Historical maps</i>	<i>Digitised sources: Trading Standards</i>	<i>Digitised sources: Council & SEPA</i>	<i>Digitised Sources: Council & SEPA</i>

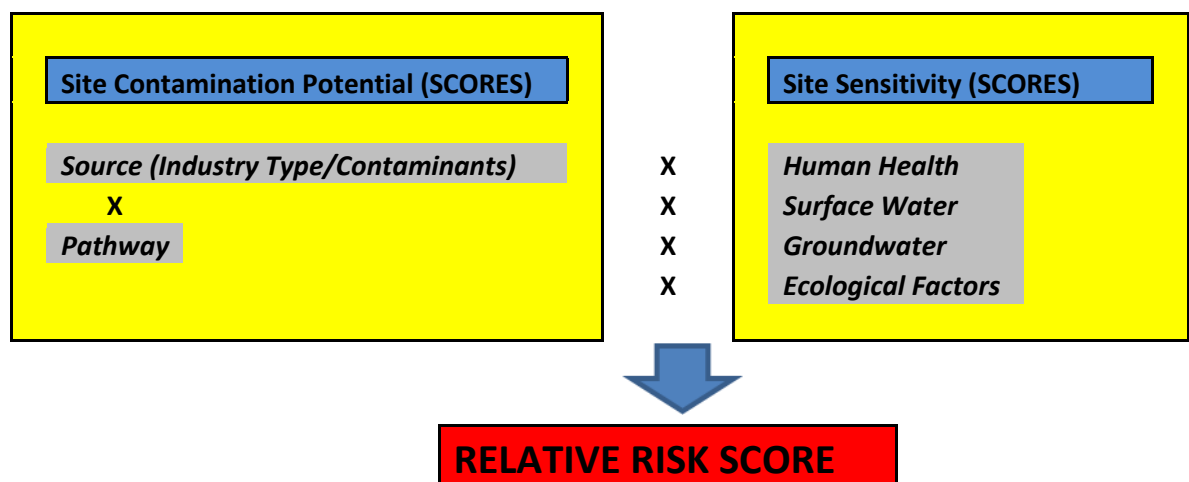
Information from the key data sources highlighted has been integrated into a spatial data management using GIS (ArcView 9). Each of the potential sources were then identified by Industry Type (eg. Brick Works) and classified low, medium or high on the basis of the likelihood of contamination being present.

4.2.2 Initial Prioritisation

A scoring framework based on the 'source-pathway-receptor' risk assessment approach (advocated in the Part II A Guidance) was used to score each potential source (scores the site on a scale of 0 to 90, with 90 being the highest risk). The model used was the **Contaminated Land Risk Evaluator (CLaRE** for short)

programme which is based on Site Contaminative Potential (industry type, age & known pollution incidents) and Site Sensitivity (human health, controlled waters, property & ecological factors). The GIS is used to undertake the detailed spatial calculations, whilst a **Site Risk Assessment Table (SRAT)** - Excel spreadsheet) is used as the database. As a result 916 sites were initially prioritised for inspection, including the sites that have subsequently undergone remediation.

Figure 5: Illustration of the Prioritisation Scoring Model



4.3 Stage 2: Inspection and Investigation

Each site is screened manually to confirm the scoring and requirements for site inspection. Planning Application data is also used to determine whether a site has been dealt with under PAN 33 and hence does not require inspection in respect to Part IIA.

4.3.1 Step 1: Site Inspection

A site visit is undertaken of each site in order of highest prioritised score first. The site visit is undertaken using the key information drawn from the prioritisation process. The objective is to determine if the current profile of the area matches that to which the initial prioritisation was undertaken. Site inspections are undertaken by the contaminated land officer who will examine the area for any typical signs of possible contamination. The sites are then re-rated on the basis of the inspection into Priority 4/5 - no further action (unless a change of use and managed through the planning process) or Priority 1/2/3 - further inspection/ assessment, as required.

4.3.2 Step 2: Desk Study

A desk study is similar to a Site Inspection but will typically involve the development of a qualitative risk assessment and Conceptual Site Model. The desk study may go into more detail on some key factors such as services, planning, historical site layout and profile of the sensitive receptors. The sites are then re-rated on the basis of the desk study into no further action (unless a change of use and managed through the planning process) or further inspection assessment is required.

4.3.3 Step 3: Exploratory Investigation

An exploratory investigation is a basic examination of the underlying soil and water conditions at a site to verify if source(s) of contamination may be present. Sampling and testing is normally targeted based on the profile highlighted within the desk study. The assessment of risk is undertaken qualitatively and then re-rated no further action (unless a change of use and managed through the planning process) or further inspection assessment is required.

4.3.4 Step 4: Detailed Site Investigation

Where an Exploratory Investigation indicates that there is a possibility of an unacceptable risk then a detailed site investigation is undertaken with the objective of assessing the risks using more advanced risk assessment techniques. The extent and nature of investigation will vary from site to site but will typically involve obtaining soil and groundwater samples from identified source areas and then assessment to determine if there are any risks that are unacceptable to humans or the wider environment.

4.4 Stage 3: Remediation

The inspection strategy process may identify parcels of land which are within the terms of the definition of 'Contaminated Land' and hence further action is required to manage any risk that may lead to harm to humans or the wider environment.

East Lothian Council has a duty to secure remediation. According to the regulations, remediation can be assessment actions (e.g. sampling), remedial treatment actions (e.g. excavation and removal) or monitoring actions (e.g. surface water sampling).

The regulations require East Lothian Council to approach sites that fall within the definition of 'contaminated land' as follows:

- Step 1: Establish the 'appropriate person' to bear responsibility for remediation;
- Step 2: Deciding what remediation is required and ensure that it occurs;
- Step 3: Determining who should bear what proportion of the liability for meeting the costs for the work; and
- Step 4: Recording information about regulatory action on a public register.

4.4.1 Step 1: Establish 'Appropriate Person'

The regulations are based on the 'Polluter Pays Principle'. In respect to the Part IIA regulations, appropriate persons are classed into two groups:

- Class A: any person who caused or knowingly permitted a substance to be in or under the land; and
- Class B: the owner or occupier of the affected land.

Where a Class A person cannot be identified then the liability for undertaking remediation reverts to a Class B person. There are a number of exclusion tests within the Part IIA process and it is possible that site may be regarded as 'orphan' where a Class A or B person cannot be identified or where the exclusion tests apply. Where the site is an 'orphan' site then East Lothian Council has an obligation to undertake the remediation (unless the site is designated as Special where the obligation will rest with SEPA). A Class B person is only liable for risks to human health (and not the water environment).

4.4.2 Step 2: Deciding Remediation Required

The term *remediation* has a wide meaning under Part IIA, as it includes assessment of condition, undertaking remedial treatment and monitoring the condition. The main aim of the remedial works should be to remove any pollutant linkage, either through reducing or removing the contamination source, breaking the pathway or removing the receptor. The standard of remediation should be such that significant harm to key receptors is no longer occurring. There are four possible options:

- 1) The appropriate person agrees to undertake remediation and issues a **remediation statement**, in consultation with East Lothian Council;
- 2) East Lothian Council serves a **remediation notice** on the appropriate person(s), where there is no indication provided that the appropriate remediation will be undertaken;
- 3) East Lothian Council uses its powers to undertake remediation itself and issues a **remediation statement**, or
- 4) It is unreasonable to require remediation to be undertaken and East Lothian Council issues a **remediation declaration** (and if circumstances change then a remediation notice can be subsequently served).

4.4.3 Step 3: Determining Liability

The appropriate person identified should bear the liability for the cost of remediation, however, there may be circumstances where there is more than one appropriate person (i.e. a liability group) in these cases liability may be apportioned or shared. Liability should be apportioned to reflect the relative responsibility of each member of the liability group for creating or continuing the risk caused by the significant pollution linkage in question.

4.4.4 Recording Information

The Act and Regulations specify what information is to be made available in public registers, subject to exclusion on the grounds of national security and commercial confidentiality. The public register information relates primarily to remediation activity and will contain particulars relating to remediation notices, appeals against notices, remediation declarations, remediation statements, designation of special sites and convictions for offences as well as contaminated land notifications.

Public registers will also include information on the location and extent of formally determined contaminated land; the name and address of the person who claims to have undertaken the remediation and, a description of the remediation works undertaken and the timeframe.

4.5 Local Strategic Approach

4.5.1 Local Priorities

The initial prioritisation scores and classifies sites on the basis of previous industrial use and current site sensitivity with weighting given to residential, schools and recreational grounds. The classification places each site into Priority 1 to Priority 5. Inspection work is undertaken in this order.

However, when sites are selected for inspection, any land which is occupied with residential property is scheduled ahead of any other current use on the basis that the Council consider Public Health related issues above that of sustainable regeneration related aspects.

All initially classified Priority 1 and 2 sites have been or are undergoing inspection. All Priority 3 sites are being scheduled for inspection where the sites with residential properties will be undertaken first.

4.5.2 Planning

The local planning process dictates that if a planning application for development is made on or adjacent to any of the 916 sites, irrespective of current scoring or classification, they will require to be reviewed by the Contaminated land Officer.

The Contaminated Land Officer reviews the planning application to determine if the development and change of use will impact on the risk. If there is any doubt then a planning condition will require the developer to undertake an investigation of the site. The results of the investigation will determine whether remedial measures are required to ensure the safe development of the site suitable for the proposed end use.

The planning process will use PAN 33 as a framework for the process. All sites processed via the planning system will typically have their classification dropped to Priority 4 or 5. The sites will remain on the Part IIA database systems to manage any future changes of use.

4.5.2 Ad- Hoc Responses

Further information may come to light in respect to contamination encountered within the district that is not on the database system. This may occur from local development, services, regeneration or just simply through local observation.

The Contaminated Land Officer will then have a duty to respond to the new information and place the site through the prioritisation process to determine the priority level for inspection works.

4.6 Targets

- **Site walkovers:** The Council intends to carry out a minimum of forty site walkovers per year at sites where human health, the water environment and/or ecological receptors are potentially being impacted on.
- **Site investigations:** The Council's contaminated land capital budget is limited so it is anticipated that the Council will instruct detailed intrusive investigations only when deemed necessary.
- **Part IIA designations:** as this depends entirely on the outcome of the intrusive investigation, it cannot be predicted how many designations per year would occur. However, it is not anticipated that more than one per year would be likely given the complexity of the identification process.
- **Remediation of sites:** East Lothian Council continues to actively seek remediation of sites via the planning regime when development of a potentially contaminated site is proposed. The Council is also committed to securing voluntary remediation of sites wherever possible and so undertakes full liaison with site owners during all stages of investigation. Given the high costs of remediation, it is not anticipated that the Council will undertake any site remediation itself unless additional funding is made available, e.g. through the Scottish Government flexibility funding, if available. Any remediation carried out by East Lothian Council will only be undertaken on sites currently in its ownership and as identified in the Council's Corporate Risk Strategy.

5 Management

5.1 Information Management

5.1.1 Management

All information pertaining to the identification, prioritisation, inspection, and remediation of sites is contained within a database and Geographic Information System (GIS). This is a live database and is managed by the Contaminated Land Officer.

The databases are linked to a large number of datasets held under license to the Council (e.g. Ordnance Survey mapping, Local Gazetteer, BGS datasets).

5.1.2 Internal Access

The Part IIA process is a dynamic work in progress. All Council staff have access to the licensed underlying data, but none have access to the database and GIS (except the locations of the 916 sites). The Contaminated Land Officer co-ordinates live requests related to any of the 916 sites within the district, where the response is proportionate to the request made.

5.1.3 External Access

The Council receive numerous enquiries in respect to contaminated land primarily from the public, developers and lawyers. Responses made are based on required Part IIA obligations and in respect to data that may be publically available. Responses are limited if information is available commercially from the private sector, copyright or licenses prevent issue, national security or if the request is for overtly commercial purpose.

5.1.3 Public Registers

East Lothian Council is obliged to maintain Public Registers of key data, namely:

- Contaminated Land Identification Notices
- Contaminated Land Remediation Notices
- Details of Appeals against Remediation Notices
- Remediation Declarations
- Remediation Statements
- Details of Special Site Designations
- Details of relevant convictions

The Council are obliged to provide information to SEPA to aid in the preparation of the State of the Contaminated Land Report (this can be accessed via SEPA web site). The information provided is based only on statistical rather than geographical data (i.e. number of inspections undertaken). The Register can be found on the Council website at:

(http://www.eastlothian.gov.uk/downloads/file/5941/contaminated_land_register)

5.2 Communication

5.2.1 Consultees

There are certain circumstances in Part IIA where the Council through the Contaminated Land Officer can consult with other organisations for support. The primary consultees include:

Regulatory Consultees

- *Scottish Environment Protection Agency* – consultation in relation to the Water Environment, Regulation & Special Sites.
- *Health Protection Agency* – consultation to support the assessment of impacts to human health from exposure to contamination.
- *Scottish Natural Heritage* – consultation required when designated ecosystems & regulated sites are impacted by contamination.
- *Historic Scotland* – consultation required when an historic listed monument is impacted by contamination.
- *Scottish Government* – consultation in respect to vacant & derelict land and also in respect to funding mechanisms.

- *Health & Safety Executive* – consultation if there is a particular risk from pollution events to the wider public.
- *Food Standards Agency* – consultation in circumstances where contamination has impacted on food safety.

Non-Regulatory Consultees

- *Local Authorities* – sharing best practice and consultation in respect to sites which are adjacent or on the district boundaries
- *Community Councils* – consultation when risk communication is required if there is a particular contamination issue that affects a local community.
- *Coal Authority* – consultation if there is contamination that arises from historical mining activity.
- *Land Owners, Occupiers & Community* – consultation and risk communication should entry, inspection or remedial works be required.

5.2.2 Risk Communication

East Lothian Council is committed to informing the local residents and community in circumstances where a potential or actual risk to human health is identified. Either in relation to specific sites or for wider risk scenarios the Council undertake to provide generic and site specific advice delivered through guidance notes, informative letters, public/community meetings and/or person to person, as appropriate.

Communication will also be required where access is necessary to undertake Inspection to determine if there is contamination present and whether this presents a risk to humans or the wider environment. The communication will normally take the form of a letter outlining the works that are to be undertaken, the reasons for the work and the process of events.

5.2.3 Best Practice

East Lothian Council is committed to continued improvement in seeking the best solutions to dealing with issues arising from land which may be contaminated. This includes local authority liaison groups, continued liaison with SEPA/Scottish Government, continued training and learning and skills transfer through working with consultants.

6 Review Mechanisms

6.1 Requirement to Review

The original strategy (2001) was prepared to fulfil the requirement to have a strategic approach to identification of contaminated land. However as work has progressed it has become necessary to review the strategy in order to ensure that the approach being taken is still appropriate to circumstances within the authority as well as providing an update as to the course of actions taken.

There is a statutory requirement for all local authorities to review their inspection strategies from time to time and in complying with this, East Lothian Council will produce an annual update and unless circumstances dictate otherwise it is proposed that the strategy will be reviewed every three years.

6.2 Triggers for Review

There may also be circumstances in which it is considered appropriate to undertake investigations of areas of land out with the priorities set in the strategy. Such instances may include:

- Unplanned events, such as an accidental spillage;
- Introduction of new receptors, for example, where a new protected ecosystem is designated, or there is persistent trespass on a site which otherwise does not have a sensitive receptor;
- Identification of localised health effects which appear to relate to a particular area of land;
- Receipt of information from statutory bodies or other interested parties, which reveals that land requires to be inspected and;
- Change in land use.

Decisions on inspections already carried out may require to be reviewed in the following circumstances:

- Following significant changes in legislation, as was the case with the amendments to Part IIA in mid to late 2005
- With the establishment of significant case law
- The introduction of new guideline values or modelling techniques.

6.3 Action taken following Review

Where a review has been carried out, the findings of the review will be reported to Committee. If necessary the strategy will be revised following review.

Appendix I: References

Legislation

Environment Act 1995

Environmental Protection Act 1990 Part IIA.

Contaminated Land (Scotland) Regulations 2000 (SSI 2000 No. 178)

Contaminated Land (Scotland) Regulations 2005 (SSI 2005 No. 658)

The Radioactive Contaminated Land (Scotland) Regulations 2007 (SSI 2007 No. 179)

Scottish Government/Executive Publications – www.scotland.gov.uk

Contaminated Land Inspection Strategies: Advice for Local Authorities July 2001

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

The Radioactive Contaminated Land (Scotland) Regulations 2007 Statutory Guidance, March 2008

Planning Advice Note PAN 33: Development of Contaminated Land, October 2000

Second National Planning Framework for Scotland (NPF2), 2009

Scottish Vacant & Derelict Land Survey 2008

SEPA Publications/Data – www.sepa.org.uk

Part IIA State of Contaminated Land Report

Framework for Local Authority – SEPA Liaison under Part IIA of Environmental Protection Act 1990 (Contaminated Land)

Aquifer and Groundwater Vulnerability Mapping

East Lothian Council Publications – www.eastlothian.gov.uk

East Lothian Council Plan 2012 – 2017

East Lothian Single Outcome Agreement

Contaminated Land Planning Guidance (Land Contamination and Development Management Summary Guidance and Checklists)

Appendix II: Glossary

1. General Terms	Definition
Appropriate Person	Defined in Section 78A(9) of the Regulations as “any person who is an appropriate person, determined in accordance with Section 78F...., to bear responsibility for anything which is to be done by way of remediation in any particular case.”
Brownfield Land	Land which has previously been developed. The term may cover vacant or derelict land, land occupied by redundant or unused buildings and developed land within the settlement boundary where further intensification of use is considered acceptable.
Building	Any structure or erection and any part of a building, including any part below ground, but not including plant or machinery comprised in a building.
Caused or Knowingly Permitted	Test for establishing responsibility, under Section 78F(2) of the Regulations. See paragraphs 9.8 to 9.15 of Annex 2 (Statutory Guidance: 2 nd Edition) for a discussion of the interpretation of this term.
Contaminant	<p>A substance which is in, on or under the land and has the potential to cause harm or to cause pollution of the water environment. Contaminated land is defined at Section 78A(2) of the Regulations 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:</p> <ul style="list-style-type: none"> 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.” <p>This specific definition applies to sites that in their current use are causing unacceptable harm or pollution.</p>
Contaminated Land (Scotland Regulations 2000/2005)	<p>Regulations (SI 2000/178 as amended by SSI 2005/658) made under Part IIA – described in Annex 4 of the Statutory Guidance.</p> <p>Regulations (SI 2005/658) made under Part IIA – described in Annex 5 of the Statutory Guidance.</p>
Current Use	<p>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). This definition is subject to the following qualifications:</p> <ul style="list-style-type: none"> a) The current use should be taken to include any temporary use, permitted under Town and Country

	<p>Planning Legislation, to which the land is, or is likely to be put from time to time;</p> <p>b) The current use includes future uses or developments which do not require a new, or amended, grant of planning permission;</p> <p>c) The current use should, nevertheless, be taken to include any likely informal recreational use of the land, whether authorised by the owners or occupiers or not (e.g. children playing on the land). In assessing the likelihood of any such informal use the Local Authority should give due attention to measures taken to prevent or restrict access to the land; and</p> <p>d) In the case of agricultural land, however, the current agricultural use should not be taken to extend beyond the growing or rearing of the crops or animals which are habitually grown or reared on the land.</p>
Conceptual Site Model	A model demonstrating the linkages between sources, pathways and receptors as the underlying foundation for risk assessment.
Derelict Land (and Buildings)	Land that has been so damaged by development that it is incapable of being used without rehabilitation. In addition the land must currently not be used for the purpose for which it is held or a use acceptable in the Local Plan. Land also qualifies as derelict if it has previous (not remediated) use which could constrain future development (Scottish Vacant & Derelict Land Survey 2007).
Enforcing Authority	<p>Defined in section 78A(9) of the Regulations as:</p> <p>a) In relation to a Special Site, SEPA;</p> <p>b) In relation to contaminated land other than a special site, the Local Authority in whose area the land is situated.</p>
Exclusion	Any determination by the enforcing authority under Section 78F(6) of the Regulations (that is that a person is to be treated as not being an appropriate person – as per paragraph D.5(d) of the Statutory Guidance).
Harm	<p>Defined in Section 78A(4) of the Regulations 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”.</p> <p>With regards to the Water Environment it has the same meaning as in Section 20(6) of the Water Environment and Water Services (Scotland) Act 2003.</p>
Part IIA	Part IIA of the Environmental Protection Act 1990.
Pathway	<p>One or more routes or means by, or through, which a receptor:</p> <p>a) Is being exposed to or affected by a contaminant; or</p>

	b) Could be so exposed or affected.
Pollutant	Is a waste material that pollutes water or soil, the severity of which depends on nature, concentration and persistence.
Pollutant Linkage	Relationship established between a source, pathway and receptor. If there is no pollutant linkage then there is no risk.
Possibility of Significant Harm	A measure of the probability or frequency of the occurrence of circumstances which would lead to significant harm being caused.
Receptor	Either: a) A living organism, a group of living organisms, an ecological system or a piece of property which is i) in a category listed in Table A in Chapter A of the Statutory Guidance as a type of receptor, and ii) is being or could be harmed by a contaminant or b) The water environment which is being or could be polluted by a contaminant.
Register	The Public Register maintained by the enforcing authority containing particulars relating to contaminated land under Section 78R of the Regulations.
Risk Assessment	An assessment combining the principles of: <ul style="list-style-type: none"> • The probability or frequency or occurrence of a defined hazard and; • Magnitude (including seriousness) of the consequences. Qualitative Risk Assessment defines risk generically into High, Medium and Low while Quantitative Risk Assessment is based on defining the risk numerically.
Significant Harm	Defined in Section 78A(5) of the Regulations. It means any harm which is determined to be significant in accordance with the Statutory Guidance in Chapter A (i.e. it meets the descriptions of types of harm in the second column of Table A of that chapter).
Significant Possibility	Of a possibility of significant harm being caused which, by virtue of the section on significant harm (SPOSH, Section 78A(5) of the Regulations), is determined to be significant in accordance with the Statutory Guidance (Chapter A).
Special Site	"Special Sites" are a subset of determined "contaminated land" sites which meet one of the descriptions in the Contaminated Land (Scotland) Regulations 2000 (as amended). Special Sites do not necessarily represent the most heavily contaminated land but reflect where SEPA, the enforcing authority for such sites, are considered better placed to secure the remediation.

2. Specific Terms	Definition
Site Inspection	A basic assessment of a site which involves a site visit.
Desk Study	A more detailed site inspection involving analysis of sources, receptors and pathways with the inclusion of a Conceptual Site Model and Qualitative Risk Assessment.
Preliminary Site Investigation	An initial intrusive investigation to determine and confirm the presence of sources, pathways and receptors
Detailed Site Investigation	A detailed intrusive investigation of the sources pathways and receptors at a site with Conceptual Site Model and qualitative, semi-quantitative and quantitative risk assessment as required.
Remediation	Risk management actions at a site to minimise or mitigate risk resulting from contamination.

Appendix III: Current Status

a) Initial Prioritisation

The initial prioritisation process identified 916 historical industrial sites in the district where there is a potential for contamination. The risk based process prioritised all of these sites into 5 categories:

- Priority 1 or very high risk (CLARE Score: 73-90)
- Priority 2 or high risk (CLARE Score: 55-72)
- Priority 3 or medium risk (CLARE Score: 37-54)
- Priority 4 or low risk (CLARE Score: 19-36)
- Priority 5 or very low risk (CLARE Score: 0-18)

Priority 1, 2 and 3 are all categories where further inspection is required, while Priority 4 and 5 are categories that do not require inspection.

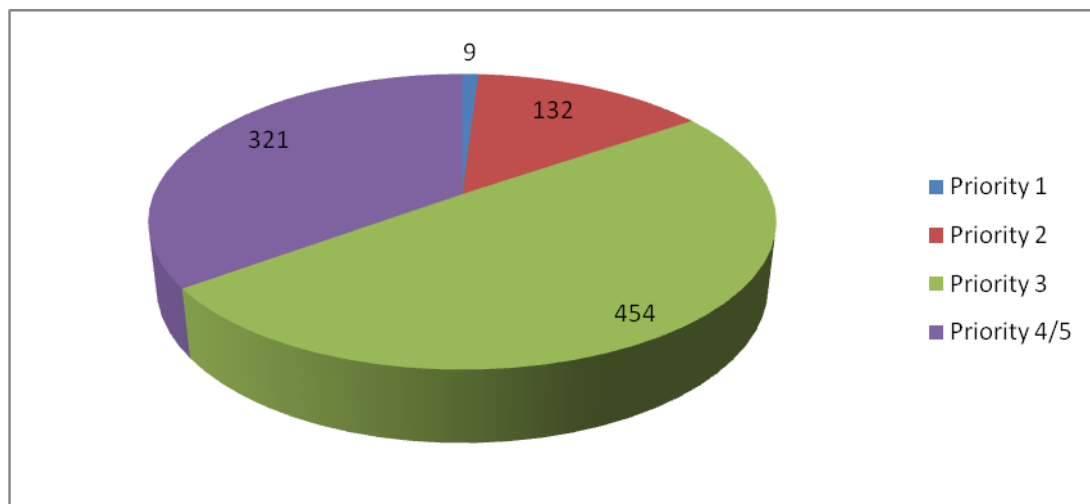


Figure A: Initial Prioritisation of the 916 sites.

b) Inspection Status & Works Undertaken

Screening, site inspection, desk studies, exploratory investigations, detailed investigations are all tools of the overall inspection process. The inspection programme has been operating from 2005 after completion of the initial prioritisation process. The inspection process has also focussed on sites currently with a sensitive end-use (i.e. residential).

The following works have been completed to date (October 2012):

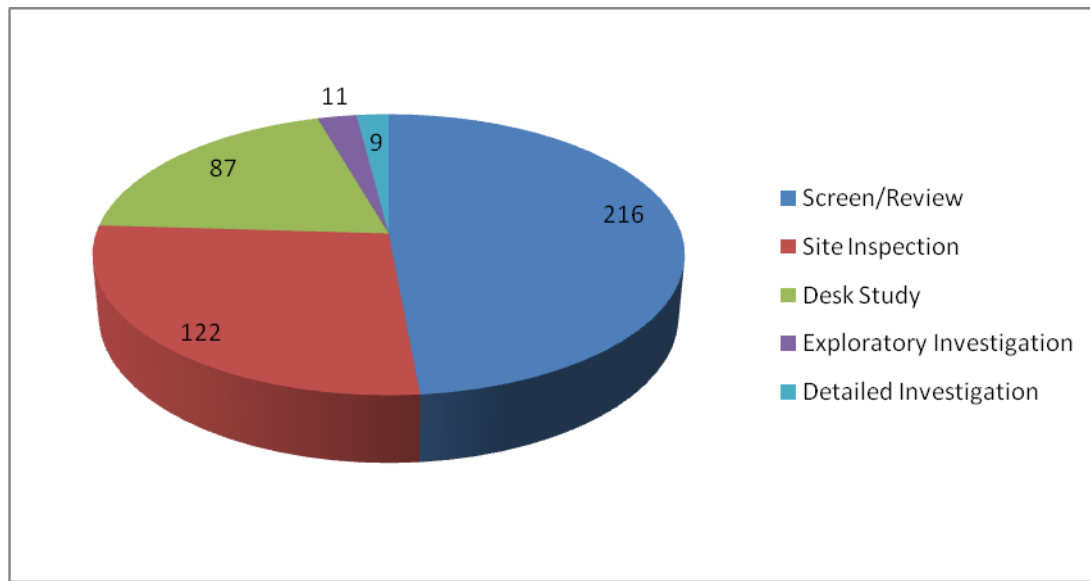


Figure B: *Inspection Works Completed (October 2012).*

445 Inspection Works have been completed on 267 sites primarily linked to Priority 1, 2 and 3 (some sites have been inspected and then re-inspected as part of this process). Of the 267 sites, 158 have been re-prioritised to No Further Action, with a total of 109 sites still in the inspection process (further assessment required). All initially prioritised Priority 1 & 2 sites have been inspected. In Total 588 sites have been completed, were initially prioritised Priority 4/5, or are still in the inspection process. There are 328 sites still to commence some form of inspection.

c) Remediation Works Undertaken

East Lothian Council has been successful in remediating two 'Council owned' sites as part of the ongoing implementation of the Part IIA Strategy for the Council area. The sites are as follows:

i) (part of) Former Prestonpans Gas Works:

Following detailed intrusive site investigations in February & March 2003, it was decided that substantial remediation was required in order to alleviate the unacceptable risks (to human health) identified on the site. The strategy incorporated a 'dig and dump' design in which contaminated materials were excavated and then transported to a licensed landfill.

The works comprised the clearance of above-ground structures, excavation of contaminated tar and oily rubble, removal (pumping out) of contaminated liquid, re-instatement and compaction of voids with inert material and covering with compacted layer of crushed stone. The site has now been remediated to a standard suitable for its current use, as a scaffolding yard.



Site during Remedial Works



Finished, Remediated site

ii) Back Garden areas, Doon Avenue, Dunbar

An intrusive site investigation was undertaken in March 2005 within the rear gardens of the domestic properties. Made ground in the upper metre was found to be impacted on a localised basis by elevated concentrations of typical gasworks contaminants and it was decided that a suitable Remediation Strategy be developed.

The works primarily comprised the precautionary removal of spent oxide impacted soils from the garden areas and along the fence boundary line between the gardens and the adjacent former gasworks site (and reinstatement with clean materials thereafter), and application of lime to ameliorate garden soils impacted by acidic pH. Verification testing indicated that the stated remediation works had been successfully completed. Residual concentrations of the principal contaminants of concern are not considered to represent a potential risk to human health.



Excavations during Remedial Works



Part of the completed Site

d) Ongoing Remedial Actions

As a result of additional intrusive investigations a number of sites, predominantly former landfills, were deemed to require long term monitoring as part of an ongoing remedial strategy. This monitoring takes the form of monthly gas and groundwater checks as well as occasional groundwater sampling and analysis. The sites falling under this regime are as follows:

- Seafeld Tip, West Barns
- Bourhouse Tip, Wester Broomhouse (nr Dunbar)
- East Saltoun Tip
- Pinkie Braes Tip, Musselburgh
- Newhailes Tip, Musselburgh
- Carberry Tip (nr Whitecraig)
- Tynemount Bing, Ormiston

e) Public Registers

There are currently no designated sites within East Lothian, compared to the rest of Scotland where 13 sites have been designated as Contaminated Land with 4 sites being designated as Special Sites. The Council promotes action through the planning system, voluntary remediation and working in partnership to achieve regulatory and corporate aims.

f) Future Actions

There are 109 sites (Priority 2 or 3) which are currently within the inspection process. It is anticipated that all these sites will require at least a review and desk study to be carried out, with a percentage (some of the Priority 2 sites) possibly requiring an exploratory investigation. It is not anticipated that detailed, intrusive investigations will be needed (although this may be dependent on the findings of the exploratory works).

There are also 328 (Priority 3) sites that are still to commence inspection works. It is estimated that on the basis of current operational rates that all sites will have had some form of inspection by 2020. At this point the requirement will be to manage changes of use through the Planning (PAN 33) process.

Appendix IV: Information Sources

Supplier	Data	Use
Ordnance Survey Mapping	Mastermap, Address Point, 1:10000, 1:25000 & 1:50000 mapping	Base information, current use analysis, locating water features
Local Authority	Local Gazetteer, Planning Application data, Local Plan data, Vacant & Derelict Land Survey, Environmental Service Records (local consents, authorisations)	Current use, planning, identifying development areas, locating designated or protected sites, identification of historical sources
Landmark Information Group	Historical Maps : digital maps at all available scales & epochs	Identification of sources
Macaulay Land Use Research Institute	Soil Quality Land Use Maps	Identification of sensitive agricultural areas
SEPA	River Quality, Flooding, PPC facilities, Waste Management Licenses, Radioactive Substances Register	Determination of water sensitivity, location of sources
British Geological Survey	Geological maps (solid, drift, hazard, remote sensing data) & hydrogeological maps	Determination of pathways and assessment of groundwater vulnerability
Aerial Imagery	Current aerial photos of district & WWII photos	Visualisation, confirmation of land use, identification of affected areas
Coal Authority	Coal mine entries, underlying workings	Identification of source & pathway
Scottish Natural Heritage	Protected areas, habitats & species	Determining sensitive receptors
Historic Scotland	Protected historic areas, buildings & monuments	Determining sensitive receptors
Council Trading Standards	Licensed fuel storage areas (including derelict file), details of accidents & spills	Determining potential sources

Appendix V: Priority Definitions

Priority 1 (Very High Risk):

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.

Priority 2 (High Risk):

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

Priority 3 (Medium Risk):

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 a potential to cause significant harm or significant pollution of the water environment but further data collection is required to confirm this.

Priority 4 (Low Risk):

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 a pathway present that has the potential to cause harm or significant pollution to the water environment.

No Inspection Works Required. Dealt with under PAN 33 where there is a development or a change in site use.

Priority 5 (Very Low Risk):

There are no source-pathway-receptor linkages identified. Assessment of the site shows that is unlikely that there is a pathway present that has the potential to cause significant harm or significant pollution to the water environment.

No Inspection Works Required. Dealt with under PAN 33 where there is a development or a change in site use.

Appendix VI: Local Authority Contact

*Scott Callow
Contaminated Land Officer*

*Environmental Protection
East Lothian Council
John Muir House
Haddington
EH41 3HA*

Tel: 01620 827256

E-mail: scallow@eastlothian.gov.uk