

Developing Contaminated Land within Lincolnshire

**A guide to submitting planning applications to develop land
that may be contaminated**



**Produced by
Lincolnshire Environmental Protection Liaison Group**

**Endorsed by
Lincolnshire Development Control Officers Forum**

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Aim

This guidance note has been produced to provide initial advice to anybody who is proposing to develop or is involved in the development of land, which may be affected by contamination, through the planning process.

Introduction

Local Authorities in Lincolnshire are receiving an increasing number of planning applications for developments on previously used land – often referred to as “brownfield” sites. In many cases these sites are affected by the presence of contamination from historic industrial processes. The purpose of this guide is to make developers aware of their responsibilities and to set out what information the Council is likely to require in order to assess a planning application for land which may be contaminated.

It has been produced by the Lincolnshire Environmental Protection Liaison Group to provide a consistent and transparent county-wide approach to the development of contaminated land. It is written in accordance with relevant national guidance and legislation.

The Lincolnshire Approach

Government guidance recognises that potential contamination is a material planning consideration and that the development phase is the most cost-effective time to deal with the problem. Planning legislation and guidance places the responsibility on owners and developers to establish the extent of any potentially harmful materials on their sites.

It is the Council's duty to ensure that owners and developers carry out the necessary investigations and put forward proposals for dealing with any contamination in a responsible and effective manner.

Councils have an additional duty under Part IIA of the Environmental Protection Act 1990 to devise a strategy to identify all contaminated sites, whether or not they are subject to development proposals. Where contamination is found to be significant, the Council must actively take steps to remove or reduce the risk to people and the environment. Copies of the Council's contaminated land strategy are available on request.

Liaison with the Council

Where a developer is proposing to develop land that may be contaminated, it is advisable to contact the Council to discuss land contamination issues before submitting a planning application. The Council will advise on what must be submitted with a planning application. This early contact should reduce time delays or misunderstandings at a later stage in the process.

Overview of Contaminated Land Policy and Legislation

Part IIA of the Environmental Protection Act 1990 (Part IIA) came into force on the 1st April 2000. It introduced a new regime specifically to address the legacy of contaminated land, including its identification and remediation. Implementation of Part IIA is detailed in the DETR circular 02/2000, "*Contaminated Land*".

In broad terms, it applies where land is causing unacceptable risks assessed on the basis of the *current* use and circumstances of the land. However the planning system must operate on a wider basis, because contamination can also have a potential impact on any future development and land use which goes wider than that. In particular, when a development is proposed, it is necessary to consider the risks assessed on the basis of the *new* use or development and circumstances of the land. These factors are outside the scope of the Part IIA contaminated land regime. However, the basic principles upon which Part IIA is based will also apply in the context of planning control, including the approach to risk assessment, intervention, and remediation. It is the Government's intention that any land that has been developed through the planning process should not be able to meet the definition of contaminated land under the terms of Part IIA.

Land contamination is a material consideration for the purposes of town and country planning. Before granting permission, the Council as Local Planning Authority will ensure that full account is taken of the condition of the land concerned and that appropriate remediation is carried out to deal with unacceptable risk, or required by planning conditions.

The possibility of contamination should be assumed when considering planning applications in relation to **all** land subject to previous industrial use and also where sensitive uses are being considered (see Appendix A for examples). In addition for planning purposes it is immaterial whether the contamination arises from human activities or is present naturally. In certain areas of Lincolnshire there are naturally occurring elevated levels of metals, such as arsenic, that need consideration. You may wish to consider contacting your local Council for advice on this matter.

What is required of the Developer?

Where a development is proposed, it is the responsibility of the developer to ensure that contaminated land issues are appropriately considered, that remediation takes place if necessary, and that the land is safe and "suitable for use". In simple terms, suitable for use means that it is cleaned up to a level that is appropriate for the proposed end use. For example a site that will be used for industrial use with a mainly hard covering will not necessarily need to be cleared up to the same standard as if the site were to become a domestic garden.

Where contamination has occurred or is suspected, the Council will expect the following site investigation procedure to be carried out.

The Site Investigation Procedure

The site investigation procedure will identify the type and extent of any contamination and identify possible areas that may require remedial works in order to make a site suitable for use. The investigation can be split into three phases, although not every site will require each phase to be carried out. This approach allows resources to be targeted at the areas that are most likely to be contaminated. The phases should be submitted individually as separate reports. It is generally advisable that the Developer consults and agrees the findings and proposals of each phase with the Council before moving on to the next phase.

- **Phase I – Desktop Study**

The desktop study is the collection of information in order that the '*conceptual site model*' can be established. This model considers all potential sources of contamination, likely receptors (for example proposed future users of the site) and possible pathways between them. Where all three exist this is defined as a pollutant linkage. The study should document the site history and identify all potentially historical contaminative land uses. The conclusions of the report should contain recommendations for any progression to Phase II, if required.

- **Phase II – Detailed Investigation**

The 'Detailed Investigation' phase is the on-site validation of the conceptual model. Through intrusive investigation, chemical testing and quantitative risk assessment, the Phase II study can confirm possible pollutant linkages. It should also provide appropriate remediation options, if these are required.

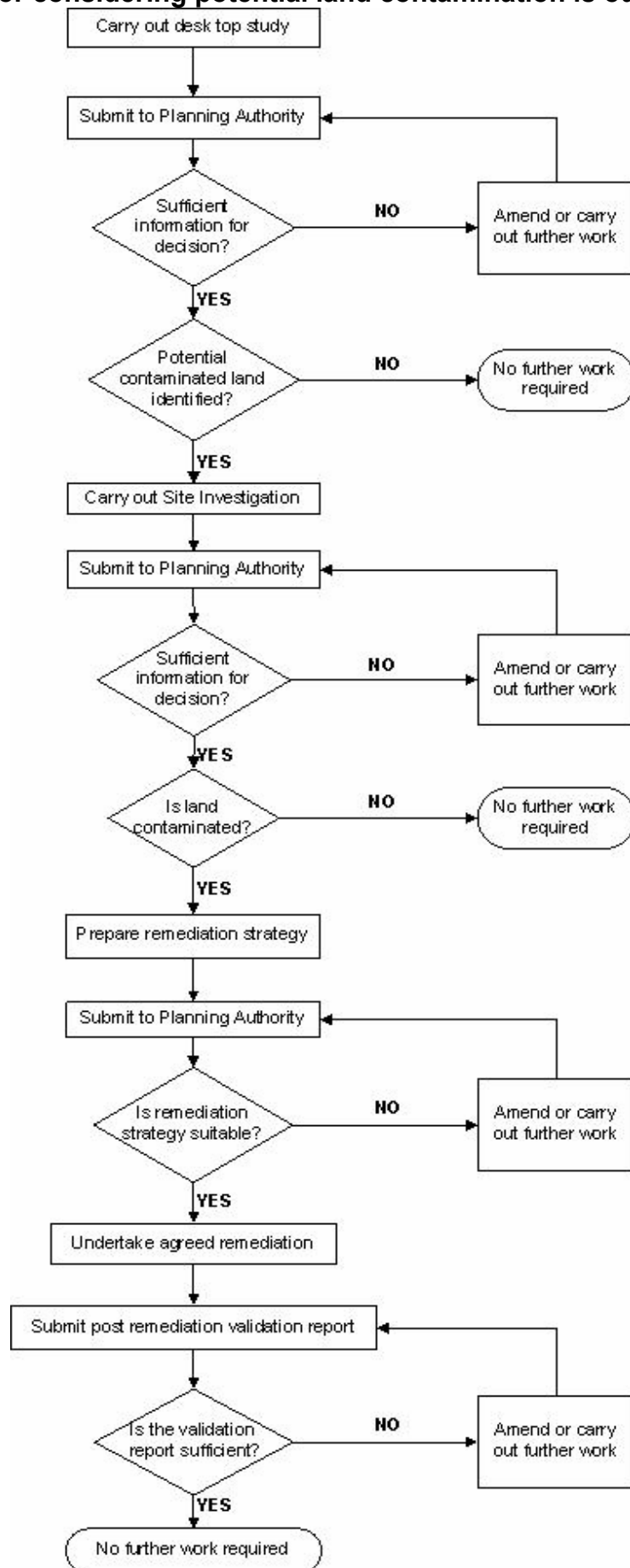
- **Phase III – Remediation Strategy / Validation Report**

The remediation phase of the process is split into two sections. Firstly, the 'Remediation Statement' is a document detailing the objectives, methodology and procedures of the proposed remediation works. The Developer must submit this for approval before any works commence. Secondly, following completion of the works, a 'Validation Report' must be submitted demonstrating that the works have been carried out satisfactorily and remediation targets have been achieved.

A checklist for each stage of this procedure has been included in appendix B of this document.

Omitting any significant part of this process is likely to considerably delay the planning process. If after reading this document, you feel you need further advice or assistance, please contact your local council. Contact details are contained in appendix D.

The procedure for considering potential land contamination is outlined below



Other useful information

Using Consultants

Depending on the type or extent of the contamination, some of the processes involved in the development of the land may require using a specialist consultant or service (e.g. analytical laboratory). Care should be taken in appointing a consultant and the developer should look for experience in the particular area required and that the person or company contracted carries professional indemnity insurance if appropriate.

Some useful contacts for consultants groups and associated services are included in appendix C. This is not an exhaustive list and there are other groups and industry bodies that represent those providing services in contaminated land.

Please note: The Council will not recommend individual consultants or companies.

Opportunities for Contaminated Land Development

Tax Relief

The Finance Act 2001 contains tax relief for the development of contaminated land in certain circumstances. More details of the tax relief are on the Inland Revenue's website, www.inlandrevenue.gov.uk/budget2001/revbn22.htm

Landfill Tax Credit Scheme

Through the landfill tax credit scheme it may be possible to apply for grants to fund schemes for land reclamation. Contact details for further information are as follows:

Entrust (The Environmental Trust Scheme Regulatory Body Limited)
Acre House
2 Town Square
Sale
Cheshire
M33 7WZ
Tel: 0161 972 0044 / Fax: 0161 972 0055
www.entrust.org.uk

For more general information on the redevelopment of contaminated and brownfield sites, visit www.brownfieldsites.com.

Other useful contacts

English Heritage:

Yorkshire Region (North Lincs & NE Lincs Councils)

37 Tanner Row
York
Y01 6WP
Tel 01904 601 901
Web: <http://www.english-heritage.org.uk/>

East Midlands Region (Other Lincs Councils)

44 Deringate
Northampton
NM1 1UH
Tel: 01604 735400

English Nature:

Humber Pennines Team (North Lincs & NE Lincs Councils)

Bull Ring House
Northgate
Wakefield
W Yorks
WF1 3BJ
Tel: 01924 334500
Fax: 01904 201507
Web: <http://www.english-nature.org.uk/>

East Midlands Team (Other Lincs Councils)

The Maltings
Wharf Road
Grantham
Lincolnshire
NG31 6BH
Tel: 01476 584800
Fax: 01476 584838

Regional Development Agency:

Yorkshire Forward Lincs & NE Lincs Councils)

Victoria House
2 Victoria Place
Leeds
LS11 5AE

Tel: 0113 3949600
Fax: 0113 243 1088
Web: <http://www.emda.org.uk>

East Midlands Development Agency (North (Other Lincs Councils)

Apex Court
City Link
Nottingham
NG2 4LA

Tel: 0115 988 8300
Fax: 0115 853 3666
<http://www.yorkshire-forward.com>

**Environment Agency:
Anglian Region**

Contaminated Land Officer
The Environment Agency
Waterside House
Waterside North
Lincoln
LN2 5HA

Tel: 01522 513100

Fax: 01522 785989

Web: <http://www.environment-agency.gov.uk/>

Midlands Region

Contaminated Land Officer
The Environment Agency
Trentside Offices
Scarrington Road
West Bridgford
Nottingham
NG2 5FA

Tel 0115 945 5722

Department for Environment, Food and Rural Affairs:

DEFRA Helpline
Department for Environment, Food and Rural Affairs
Ergon House
17 Smith Square
London

SW1P 3JR

Tel: 08459 33 55 77

Fax: 020 7238 3329

Web: <http://www.defra.gov.uk>

Health & Safety Executive:

HSE Infoline
Caerphilly Business Park
Caerphilly
CF83 3GG

Tel: 08701 545500

Fax: 02920 859260

Web: <http://www.hse.gov.uk>

Recommended references

This list is not exhaustive or exclusive, but indicates the more relevant guidance and information available.

British Standard BS 10175:2001 *Investigation of potentially contaminated sites – Code of Practice* ISBN 0 580 33090 7.

Department for Environment, Food and Rural Affairs and The Environment Agency (2002). CLR7 Assessment Of Risks To Human Health From Land Contamination: An Overview Of The Development Of Soil Guideline Values And Related Research. Environment Agency. ISBN 1 857 05732 5

Department of the Environment (1997). Planning Policy Guidance Note 23, Planning and Pollution Control. HMSO, London.

Department of the Environment, Transport and the Regions and Environment Agency (2000). Model Procedures for the Management of Contaminated Land. Contaminated Land Research Report No11, London: DETR (in press).

DoE Industry Profiles (1995) (*Various titles*). A list of the industries addressed can be viewed at <http://www.defra.gov.uk/environment/landliability/pubs.htm>

DoE Report CLR2 (1994 – 2 volumes). *Guidance on preliminary site inspection of contaminated land.*

DoE Report CLR3 (1994) *Documentary research on industrial sites.*

Environment Agency Technical Report P5-065/TR (2000 – 2 volumes) *Technical aspects of site investigation.* ISBN 1 85705 5446 and ISBN 1 85705 5454

Environment Agency Technical Advice to Third Parties on Pollution of Controlled Waters for Part IIA of EPA 1990

Environment Agency Technical Report P5-066/TR (2000) *Secondary model procedure for the development of appropriate soil sampling strategies for land contamination*

Environmental Protection Act 1990, Part IIA. Contaminated Land, DETR Circular 02/2000, Department of the Environment, Transport and the Regions, 20th March 2000

Guidance for the Safe Development of Housing on Land Affected by Contamination. R&D Publication 66. Joint publication by Environment Agency and NHBC. ISBN 0-11-310177-5.

Office of the Deputy Prime Minister (2002). Planning Policy Guidance Note 23, (Planning and Pollution Control) - Consultation Paper. ODPM

Performance Standard for Laboratories Undertaking Chemical Testing of Soil. Environment Agency February 2003 version 2

APPENDIX A

Box 1 - Examples of Potentially Contaminating Uses of Land

Examples of the wide range of industries that might contaminate the land they are sited upon include:

- Smelters, foundries, steel works and metal processing and finishing installations
- Coal and mineral mining and processing, both deep mines and opencast
- Heavy engineering and engineering works; e.g. car manufacture, ship building
- Military/defence related activities
- Electrical and electronic equipment manufacture and repair
- Gasworks, coal carbonisation plants, power stations
- Oil refineries, petroleum storage and distribution sites
- Manufacture and use of asbestos, cement, lime and gypsum
- Manufacture of organic and inorganic chemicals including pesticides, acids/alkalis, pharmaceuticals, solvents, paints, detergents and cosmetics
- Rubber industry including tyre manufacture
- Munitions and explosives production, testing and storage sites
- Glass making and ceramics manufacture
- Textile industry including tanning and dyestuffs
- Paper and pulp manufacture, printing works and photographic processing
- Timber treatment
- Food processing industry and catering establishments
- Railway depots, dockyards, garages, road haulage depots, airports
- Landfill storage and incineration of waste
- Sewage works, farms, stables and kennels
- Abattoirs, animal waste processing and burial of diseased livestock
- Scrap yards
- Dry cleaning premises
- All types of laboratories

Examples of other uses/types of land which might be contaminated:

- Radioactive substances used in industrial activities not mentioned above (e.g. gas mantle production and luminising works)
- Burial sites and graveyards
- Agriculture - excessive application or use in sensitive areas of fertilisers, pesticides, herbicides or fungicides
- Disposal of sewage sludge
- Natural contamination by radioactivity (including radon), concentrations of certain metal ions in excess, methane production in former coal mines etc.

The DOE Industry Profiles contain more information on the likely types of contaminants expected from particular industrial and commercial sectors. These are not exhaustive in either covering all uses that have the potential to cause contamination or in covering all forms of contamination likely from a particular sector but will provide a useful starting point.

Box 2 - Examples where the Possibility of Contamination should be Considered for Planning Applications

- Where the development/application is for housing, school, hospital, residential home, park or other "open" recreation land;
- Where the land is currently being used for any of the following National Land Use Database (NLUD) classifications (National Land Use Database - Previously Developed Land V2.2 October 2000)
 - 11.6 - Agricultural Buildings
 - 6.1 - Mineral workings and quarries or 6.2 Landfill Waste Disposal
 - 13 - Defence land and buildings
 - 11 - Industrial and Commercial;
- where it is known or suspected that the land was previously used for any of these purposes;
- where it is known or suspected that the land may have been radioactively contaminated or have natural radon or methane contamination;
- where other land nearby, is being, or has been, used for one of those purposes such that it may have had an impact on the land subject to the planning application;
- where the land has been reclaimed, re-contoured or "filled" - whether by landfill or otherwise;
- where it is known that, or there appear to have been "spills" or other pollution incidents.

APPENDIX B

Checklist for Reports Submitted in Support of Planning Applications

The Checklist has been designed to aid in the processing of planning applications. It provides a guide on what the Council will require when assessing the content of any site reports submitted as part of a planning application or in response to a planning condition. If any of the items listed below are not submitted in the reports then a full explanation why should be included. The list is not exhaustive, as the contents of any site reports will vary due to site specific issues e.g. the past use of the site, the nature and extent of the contamination, and the proposed end use of the site.

1. Desktop Reports (submit for approval with your application or, if you have planning permission before work starts)

- Purpose and aims of study;
- Site location and layout plans appropriately scaled and annotated;
- Appraisal of site history;
- Appraisal of site walkover survey;
- Assessment of environmental setting, to include:
 - * Geology, hydrogeology, hydrology;
 - * Information on coal workings (if appropriate);
 - * Information from Environment Agency on abstractions, pollution incidents, water quality classification, landfill sites within 250m etc.
- Assessment of current / proposed site use and surrounding land uses;
- Review of any previous site contamination studies (desk based or intrusive) or remediation works;
- Preliminary (qualitative) assessment of risks, to include:
 - * Appraisal of potential contaminant sources, pathways, and receptors (pollutant linkages);
 - * Conceptual site model.
- Recommendations for intrusive contamination investigation (if necessary) to include:

- * Identification of target areas for more detailed investigation.

2. Detailed Investigation Reports (submit for approval with your application or, if you have planning permission before work starts)

- Review of any previous site investigation contamination studies (desk-based or intrusive) or remediation works;
- Site investigation methodology, to include:
 - * Plan showing exploration locations, on site structures, above/below ground storage tanks etc, and to be appropriately scaled and annotated;
 - * Justification of exploration locations;
 - * Sampling and analytical strategies;
 - * Borehole / trial pit logs.
- Results and findings of investigation, to include:
 - * Ground conditions (soil and groundwater regimes, including made ground);
 - * Discussion of soil/groundwater/surface water contamination (visual, olfactory, analytical).
- Conceptual site model;
- Risk assessment - Based on contaminant source - pathway - receptor model. (to assess the consequences and likelihood of occurrence). Details of the site specific risk assessment model selected and the justification in its selection and use should be stated;
- Recommendations for remediation should include all relevant information which should follow the "suitable for use" approach - based both on the current use and circumstances of the land and its proposed new use;
- Recommendations for further investigation if necessary.

3. Remediation Statements (submit for approval with your application or, if you have planning permission before work starts)

- Objectives of the remediation works;
- Details of the remedial works to be carried out, to include:
 - * Description of ground conditions (soil and groundwater);
 - * Type, form and scale of contamination to be remediated;

- * Remediation methodology;
- * Site plans/drawings;
- * Phasing of works and approximate timescales;
- * Consents and licences e.g. (discharge consents, waste management licence, asbestos waste material removal licence etc.);
- * Site management measures to protect neighbours.
- Details of how the works will be validated to ensure the remediation objectives have been met; to include:
 - * Sampling strategy;
 - * Use of on- site observations, visual/olfactory evidence;
 - * Chemical analysis;
 - * Proposed clean-up standards (i.e. contaminant concentration).

4. Validation Reports (submit for approval after remediation works undertaken)

- Include information as detailed in 3. above.
- Details of whom carried out the work.
- Details of and justification for any changes from original remediation statement.
- Substantiating data - should include where appropriate:
 - * Laboratory and in situ test results;
 - * Monitoring for groundwater and gases;
 - * Summary data plots and tables relating to clean-up criteria;
 - * Plans showing treatment areas and details of any differences from the original remediation statement;
 - * Waste management documentation.
- Confirmation that remediation objectives have been met.

Appendix C

Useful contacts and addresses for Consultants and associated services

Association of Consulting Engineers:

Alliance House
12 Caxton Street
Westminster
London
SW1H 0QL
Tel: 0207 222 6557
Fax: 0207 222 0750
Web: www.acenet.co.uk

Provides a free listing of all its members categorised by way of 18 specialisms, one of which is contaminated land.

Association of Geotechnical and Geoenvironmental Specialists:

Forum Court
83 Copers Cope Road
Beckenham
Kent
BR3 1NR
Tel: 0208 658 8212
Fax: 0208 663 0949
Web: <http://www.ags.org.uk/>

Members are both consultants and contractors involved in the geo-environment offering services in ground investigation, contaminated land assessment and remediation, laboratory testing and analysis, environmental audits, hydrogeology and pollution control. Copies of membership list and details of publications are available from the Administrator.

British Consultants Bureau:

1 Westminster Palace
Gardens
1-7 Artillery Row
London
SW1P 1RJ
Tel: 0207 222 3651
Fax: 0207 222 3664
Web: <http://www.bcb.co.uk/>

A non-profit making multidisciplinary organisation of almost 300 independent consultancy firms and individuals. It has an environmental group representing engineers, architects, environmentalists, lawyers, economists and other disciplines. Direct enquiries are accepted to assist in identifying appropriate consultants.

Environmental Data Services (ENDS):

40 Bowling Green Lane
London
EC1R 0NE
Tel: 0207 814 5300
Fax: 0207 415 0106
Web: www.ends.co.uk

Holds a detailed database of consultants and offers a free service to anyone (including non-members); searches usually provide a minimum of five consultants meeting the criteria provided. ENDS directory of Environmental Consultants is a detailed directory of over 400 consultancies which includes information on choosing a consultancy. ENDS also publishes an analysis of the environmental consultancy market.

UK Accreditation Services:

21-47 High Street
Feltham
Middlesex
TW13 4UN
Tel: 0208 917 8555
Web: <http://www.ukas.com/>

Technical enquiry office answers specific questions/enquiries relating to laboratories involved in chemical analysis of contaminated land. Directory of accredited laboratories revised annually

Specialist in Land Condition (SiLC)

Institute of Environmental
Management & Assessment
St Nicholas House
70 Newport
Lincoln
LN1 3DP
Tel: 01522 540069
Web: www.silc.org.uk

A SiLC Professional and Technical Panel (PTP) established to develop a system for the registration of individuals completing the Land Condition Record (LCR). The use of a registered SiLC will give the highest level of credibility to the information provided. The above web site address gives a list of registered SiLC's.

Appendix D

Contacts details for your Local Council

East Lindsey District Council	Manby	01507 601111
Boston Borough Council	Boston	01205 314200
City Of Lincoln Council	Lincoln	01522 881188
North East Lincolnshire Council	Grimsby	01472 324770
North Kesteven District Council	Sleaford	01529 414155
North Lincolnshire Council	Scunthorpe	01724 296296
South Holland District Council	Spalding	01775 761161
South Kesteven District Council	Grantham	01476 406080
West Lindsey District Council	Gainsborough	01427 615411