Fife Council

Economy, Planning and Employability Services

# Advice for Developing Brownfield Sites in Fife

www.fifedirect.org.uk/contaminatedland

# Contents



This guide does not replace the statutory guidance.

# Introduction

This guide aims to provide initial advice to anybody who is proposing to develop—or is involved in the development of—land that may be affected by contamination from previous industrial processes. The purpose of this guide is to make developers aware of their responsibilities and to set out the information that is required to enable decision making in the planning process.

Government strategy recommends that 60% of new development should take place on brownfield land. Brownfield is any land that has been used previously. It is often vacant and sometimes there are derelict buildings remaining on site. Brownfield sites can offer attractive development opportunities in prime areas. Fife Council encourages development in accordance with published guidance*. This is to ensure sites are suitable for their proposed end-use.

# Phased Site Investigation

Not all phases of investigation will be required at every site so adopting a phased approach can save time and money. Where contamination is known or suspected, the following procedure is recommended (see Figure 1 on page 3) to assess any risk to water resources and the environment as well as to human health. Normally an environmental consultant would do this.

Contaminated Land Risk Assessment uses a Conceptual Site Model, which may take the form of a diagram, table or prose assessing the probability of occurrence and the magnitude of consequence of exposure, relating to each potential pollutant linkage. It should be updated after each phase of investigation.

- **Desk Study and Site Walkover**

A desk study will consider all potential sources of contamination, likely receptors and possible pollutant linkages connecting them. It may recommend further investigation.

- **Exploratory, Main and Supplementary Intrusive Investigation and Analysis**

If required, an intrusive investigation will attempt to prove or disprove any pollutant linkages by analysing soil, water and ground gas. It may recommend remedial works.

- **Remedial Action Statement (if required) including Verification Plan**

Should remedial action be required, the proposed methodology must be submitted to the Council for approval before any other works commence.

- **Verification Report (of remedial action)**

Following any remedial works, a verification report must be submitted to the Council for approval clearly demonstrating that all pollutant linkages have been broken.

**A checklist for each of these stages is attached and should be included as part of the submitted report. The checklist shows the minimum that is expected. We may return reports that fail to meet these requirements.**

* Including PAN 33, R&D 66, CLR 11 and BS 10175:2011

# The Planning Process

The risk of contamination cannot be ignored on previously used land. It is essential that applicants and their agents provide as much information as possible to the Council at every stage of the planning process. Withholding information could delay your application. It is your responsibility to inform the Council of progress.

Contaminated Land reports submitted in support of planning applications must satisfy the requirements of the published guidance. Developers proposing to develop land that may be contaminated are advised to contact the Council at an early stage to discuss possible land contamination issues before submitting a planning application. Developers can be liable for knowingly permitting residents to live on a site where there is a risk from contamination. Scottish Executive (now Scottish Government) Planning Advice Note 33 (Para 43) says:

> "Where planning consent is granted for a site on which the presence of contamination is known or suspected, an advisory note may be attached to the planning permission informing the applicant(s) that **the responsibility for the safe development of the site rests with the developer**. It may also warn the applicant that the planning authority has determined the application on the basis of the information available to it, but this does not mean that the land is free from contamination".

Unacceptable risk from contamination must be addressed through remedial action without undue environmental impact during and following the development. This might include making future owners aware of any ongoing monitoring or maintenance arrangements through the title deeds.

**Failure to meet these requirements could result in investigation by Fife Council under Part IIA of the Environmental Protection Act 1990 (as amended).**

# Fife Council's Contaminated Land Inspection Strategy

Whilst 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 it—the Council has a duty under Part IIA of the Environmental Protection Act 1990 (as amended) to inspect its area for potentially contaminated land irrespective of whether it is subject to a development proposal. Where contamination is significant, the Council will actively take steps to remove or reduce the risk to people and the environment and can pursue individuals or companies for recompense. The Council's Contaminated Land Inspection Strategy is available online at www.fifedirect.org.uk/contaminatedland.

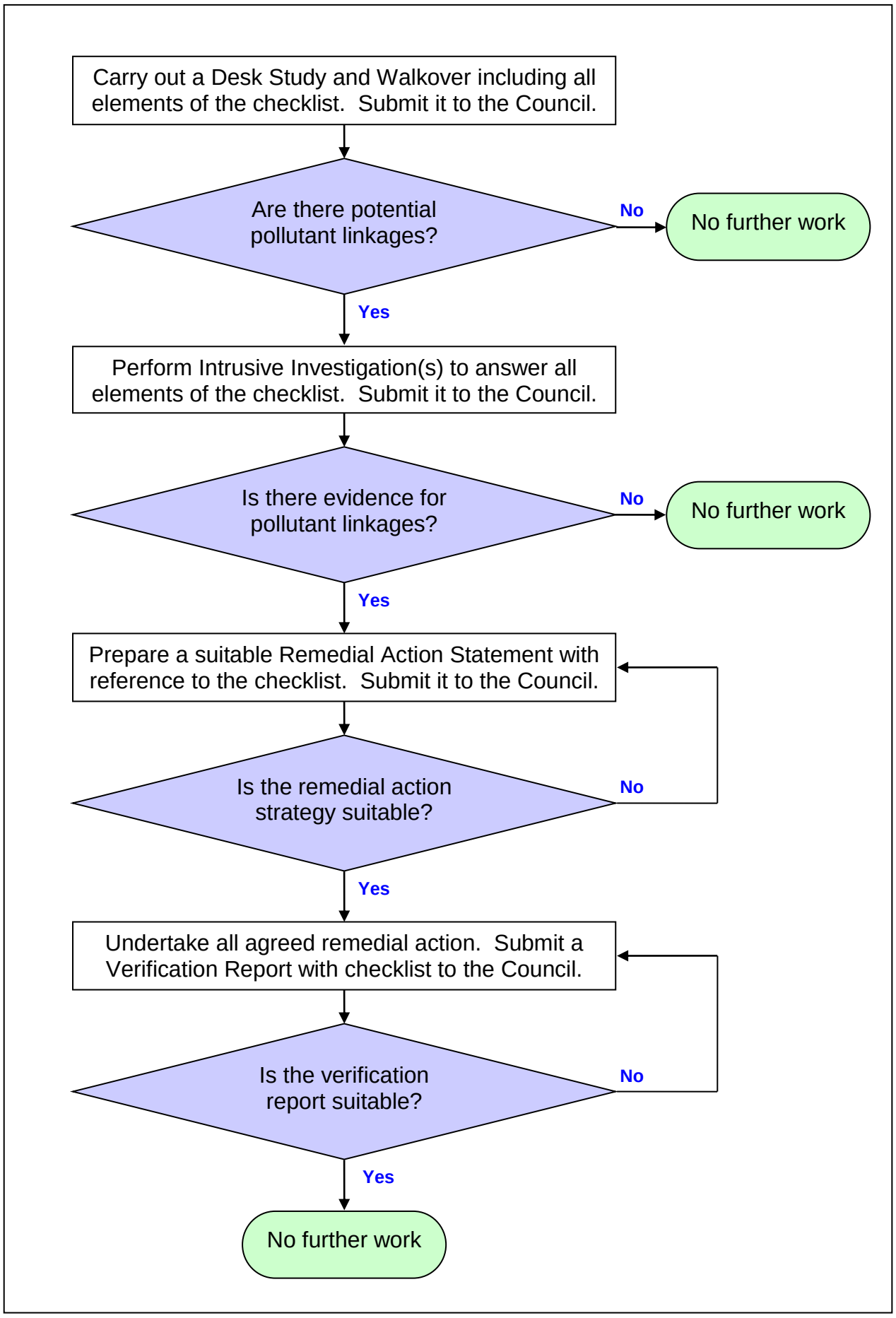


*Fig.1: Procedure for assessing and addressing contaminated land concerns.*

# Choosing Consultants

Some of the processes involved in the development of potentially contaminated land will require the use of specialist environmental consultants or the services of a drilling contractor and analytical laboratory. Take care when appointing a consultant: applicants should ensure their consultants fully understand and can meet the requirements of the attached checklists. Fife Council cannot recommend consultants; reference may be made to trade directories or to www.endsdirectory.com.

# Useful Contacts

Development Management
Fife Council
Kingdom Avenue
GLENROTHES
KY7 5LY
E-mail: development.central@fife.gov.uk
Web: www.fifedirect.org.uk/planning

Land & Air Quality Team
Fife Council
Kingdom Avenue
GLENROTHES
KY7 5LY
Tel: 01592 583141
E-mail: contaminated.land@fife.gov.uk

SEPA (Most of Fife)
Pentland Court
The Saltire Centre
GLENROTHES
KY6 2DA
Tel: 01592 776910

SEPA (West of Cairneyhill)
Bremner House
The Castle Business Park
STIRLING
FK9 4TF
Tel: 01786 452595

# References


- Department of the Environment (now DEFRA) 1995: "Industry Profiles" (various titles) www.defra.gov.uk
- Scottish Executive 2000: "Development Of Contaminated Land" (**PAN 33**) www.scotland.gov.uk
- Environment Agency and NHBC 2000: "Guidance for the Safe Development of Housing on Land Affected by Contamination" (**R&D 66**) www.nhbc.co.uk
- Environment Agency 2004: "Model Procedures for the Management of Land Contamination" (**CLR 11**) www.environment-agency.gov.uk
- Construction Industry Research and Information Association 2007: "Assessing risks posed by hazardous ground gases to buildings" (**C 665**) www.ciria.org.uk
- British Standards Institute 2011: "Investigation of potentially contaminated sites – Code of practice" (**BS 10175:2011**) shop.bsigroup.com

**Contaminated Land**
**CHECKLIST**

Planning Number: ___/_____ Site Name: _____ Date: ___/___/___

**Minimum Requirements — Desk Study with Walkover**

✓

- ❑ **Purpose & Aims** (stating the reason the report was commissioned)
- ❑ **Site location plan and proposed development plan where available**
- ❑ **Environmental setting** (detailing geology, surface and groundwater, property and ecological receptors)
- ❑ **Site history** (with former uses on and adjacent to the site plus historical maps)
- ❑ **Site walkover** (including photographs and detailed site observations)
- ❑ **Conceptual Site Model** (**this is essential**, describing all sources, pathways, receptors, the probability of occurrence, magnitude of consequence and risk)
- ❑ **Interpretation of Conceptual Site Model** **(**including qualitative risk assessment)
- ❑ **Conclusions & recommendations**

Planning Number: ___/_____ Site Name: _____ Date: ___/___/___

**Minimum Requirements — Intrusive Investigation**

*If a ground investigation report is submitted combined with a desk study, it will be expected to contain all of the above elements plus the following:*

✓

- ❑ **Sampling strategy** (referring to BS 10175 for methodology and justification)
- ❑ **Borehole & trial pit logs**
- ❑ **Gas & vapour monitoring results** (including ambient pressure and flow rates)
- ❑ **Chemical test data with quality assurance procedures** (including laboratory certification and chain of custody documentation)
- ❑ **Site Specific Risk Assessment** (including use of applicable guideline criteria derived from the appropriate risk assessment methodology or software)
- ❑ **Interpretation of results** (showing comparison with generic or site-specific criteria and highlighting any elevated concentrations)
- ❑ **Revised Conceptual Site Model** (**this is essential**, updating the probability of occurrence, magnitude of consequence and risk for each pollutant linkage)
- ❑ **Conclusions & recommendations** (including remedial options and/or proposals for further monitoring where required)

*This checklist is available for printing at www.fifedirect.org.uk/contaminatedland*

**Contaminated Land**
**CHECKLIST**

Planning Number: ___/_____ Site Name: _____ Date: ___/___/___

**Minimum Requirements — Remedial Action Statement**

✓

- ❑ **Summary of the current status of the development project**
- ❑ **Detail of chosen remedial option(s)** (including justification of this choice)
- ❑ **Proposed standard of clean-up** (depends on the proposed end-use of the site)
- ❑ **Verification plan** (showing when, how and by whom the work will be inspected)
- ❑ **Revised Conceptual Site Model** (**this is essential**, explaining how it is proposed to break all identified source–pathway–receptor linkages)

Planning Number: ___/_____ Site Name: _____ Date: ___/___/___

**Minimum Requirements — Verification Report**

✓

- ❑ **Copies of previous correspondence with relevant authorities**
- ❑ **Specification of remedial options where appropriate** (*e.g.* concrete class)
- ❑ **Waste transfer documentation where appropriate** (including the type and weight of material taken off-site and its disposal location)
- ❑ **Suitable certification & validation testing of any imported materials**
- ❑ **Certification of any gas preclusion measures** (such as gas-proof membranes or vent trenches, including a photographic record)
- ❑ **Final Conceptual Site Model** (**this is essential**, demonstrating that all identified source–pathway–receptor linkages have been broken)
- ❑ **Validation of chemical test data and results of any further monitoring**

❖

**The purpose of these Checklists is to speed up the processing of planning applications where there are contaminated land concerns.**

**The appropriate checklist(s) should be included as part of any submitted report.**

**The Contaminated Land Team can provide information and advice on all aspects of the above requirements and recommendations.**

*This checklist is available for printing at www.fifedirect.org.uk/contaminatedland*