East Dunbartonshire Council
Brownfield Land Planning Guidance
Draft November 2021



1. Introduction

1.1. This Planning Guidance is intended to support implementation of the East Dunbartonshire Local Development Plan (LDP). The relationship between the LDP, Supplementary Guidance and Planning Guidance is established in Scottish Government Circular 6/2013, and summarised in the table below.

Document	Purpose and Scope
LDP	Sets out the Council's policies for the development and use of land, including community strategies which identify opportunities for development, for the period up to ten years from adoption. This guidance supports LDP 2017 and LDP2. This guidance refers to policies in LDP2 as the Council's up to date policy position.
Supplementary Guidance	Supplementary Guidance is statutory as it forms part of the development plan, and has that status for decision making. It is limited to the provision of further information or detail in respect of policies or proposals set out in the LDP. Supplementary Guidance will be adopted with the LDP and lasts for the period of the Plan.
Planning Guidance	Non-statutory planning guidance may be used to provide detail on a range of subject areas. This form of guidance should not be termed Supplementary Guidance and will not form part of the development plan. However, adoption of this guidance by the Council gives it formal status, meaning that it may be a material consideration in decision making. Planning guidance can be updated as required and without the need for scrutiny by Scottish Ministers. Such updates are normally required where a specific issue arises during the period of the Plan.

- 1.2. The document has been prepared for developers and any person or organisation who may be involved in the development and management of brownfield land within East Dunbartonshire. It provides an overview of brownfield land sites within East Dunbartonshire, including links to the national Vacant and Derelict Land Survey which monitors vacant and derelict sites over 0.1 hectares throughout Scotland. The survey is maintained by the Scottish Government and updated annually in collaboration with Planning Authorities.
- 1.3. Some brownfield sites, particularly those that have been used for industrial processes, will be affected by contamination. This may include soils contaminated by chemicals, migration of contaminates to ground and surface waters and the production of hazardous gases. The following guidance provides planning agents, developers and other applicants with details of the type and extent of investigations and decontamination schemes required by the Council for these sites. The aim is to enable the speedy and efficient determination of planning applications including the discharge of any conditions relating land contamination.

2. What is brownfield land?

- 2.1. Brownfield land is widely recognised as a blight on communities that harms wellbeing and limits economic, social and environmental opportunities. It is defined in Scottish Planning Policy as: "Land which has previously been developed. The term may cover vacant or derelict land, land occupied by redundant or unused building and developed land within the settlement boundary where further intensification of use is considered acceptable". Land can sometimes remain vacant for long periods of time due to factors such as site contamination, lack of infrastructure, economic constraints or locational issues.
- 2.2. In East Dunbartonshire a significant proportion of our brownfield land has historically been the result of the decline of former industrial and mining uses. Some buildings may no longer be fit for purpose, employers may relocate to alternative locations or the use of land may change from its initial intended purpose. The gradual ceasing of operations at the former oil terminal at Westerhill and the minerals site at Gartshore are examples where large sites have become vacant and/or derelict. East Dunbartonshire also has a number of smaller brownfield sites that once accommodated business and offices that have since been cleared, leaving behind sites within the urban area.
- 2.3. Vacant land is a form of brownfield land that is over 0.1 hectares in size and has a use intended for it in the LDP or via planning permission. It is defined nationally as 'land appropriate for development, having either had previous development on it or preparatory work in anticipation of future development'. A site is classed as derelict if it is on previously developed land which has a physical constraint caused by its previous use which hampers its redevelopment or naturalisation. As with vacant land, it must also be capable of development and be over 0.1 hectares, however it does not have to be covered by an intended use.
- 2.4. Across Scotland there is approximately 11,000 hectares of vacant and derelict land with almost a third of the population living within 500 metres of a derelict site.



Figure 1 – Barrage Balloon brownfield land site at Low Moss, Bishopbriggs

3. Bringing brownfield land back into use

3.1. Reducing the amount of brownfield land has the potential to regenerate neighbourhoods, improve local environments, create employment and improve the perception of the area. The East Dunbartonshire Local Development Plan 2 prioritises the redevelopment of brownfield and previously used land to encourage sustainable economic growth and meet housing needs across the area. The following graphic summarises some of the potential opportunities of re-using brownfield land:



Build new homes -

limit urban sprawl, protect our green spaces and revitalise our town centres.



Provide new allotments and city farms -

make it easier for people to choose fresh, seasonal, locally grown food.



Create new parks and green spaces –

great for physical and mental wellbeing and for biodiversity.



Attract new investment -

creating jobs and wealth in parts of the country that need it most.



Generate renewable energy -

helping to tackle fuel poverty.

Source: Scottish Land Commission Vacant & Derelict Land Taskforce – Statement of Intent (2018)

3.2. The Local Development Plan 2 aims to reduce the amount of brownfield land by promoting new employment, commercial and residential developments together with green space enhancements. Moving forward, the Council will build upon the progress made to date and identify opportunities to further reduce the amount of brownfield land, enhancing neighbourhoods across East Dunbartonshire. Further details on bringing specific sites within East Dunbartonshire back into use can be found in the Council's *Vacant and Derelict Land Audit*.

4. What is land contamination?

- 4.1. Land contamination can arise from a wide range of man-made or natural sources. The history of a site or area is often the best guide to whether a site may be at risk of contamination. The presence of contaminated land in Scotland's rural and urban environment is an example of society's failure to achieve sustainable development.
- 4.2. Preventing new contamination and dealing appropriately with existing land contamination is now a key aspect of Scottish Government Policy on sustainable development. Since 2000, the responsibility for dealing with historically contaminated land has been with local authorities, who must ensure that land within their area is suitable for use and does not cause harm to the public or the wider environment.
- 4.3. Contaminated land can present significant threats to the environment and risks to users of the land. As such, the Council considers that all previously developed land or land used intensively for agriculture has the potential to be contaminated. Prospective developers must therefore consider carefully the history of the site and the possibility that contamination has occurred.

5. Development management and the planning process

5.1. Development management has a key role to play in addressing the problem of historical contamination. In bringing forward and assessing proposals to bring brownfield land back into beneficial use, developers and Planning Authorities respectively must be aware of land quality issues. Whether confirmed or suspected, contamination is a material planning consideration. In addition to human health, consideration of potential contamination risks to water and the wider environment are required irrespective of the proposed development land use.

Environmental Protection Act

- 5.2. The management and remediation of contaminated land that, in its current state, is causing or has the potential to cause significant harm or significant pollution of the water environment, is regulated by legislation contained within the Environmental Protection Act (1990) known as Part IIA.
- 5.3. This states that the applicant is responsible for:
 - (a) providing sufficient correct information to ascertain whether a site is contaminated and that it has successfully been decontaminated. Many of the decisions made by the Local Authority will be on the basis of the information that has been provided to it; and,

- (b) the safe development and secure occupancy of the site.
- 5.4. Following the implementation of Part IIA of the Environmental Protection Act 1990 in Scotland in July 2000, all Local Authorities are required to inspect their area to identify sites that have the potential of being 'contaminated land' as defined by the Act. For the purposes of Part IIA, a site can only be formally identified as 'Contaminated Land' if it meets the following criteria as defined under Section 78A(2) of the Act:

"any land which appears to the Local Authority to be in such a condition, by reason of substances in, on, or under the land, that significant harm is being caused, or there is a significant possibility of such harm being caused; or significant pollution of the water environment is being caused or there is significant possibility of such pollution being caused".

'Harm' is subsequently defined 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."

- 5.5. 'Harm' in relation to the water environment, has the same meaning as in section 20(6) of the <u>Water Environment and Water Services (Scotland) Act 2003.</u> 'Pollution' in relation to the water environment, means the direct or indirect introduction as a result of human activity, of substances into the water environment, or any part of it, which may give rise to harm.
- 5.6. Under Part IIA, failure to remediate land to a standard that removes the significant risks to all receptors is likely to result in formal action being taken post-development, at the expense of those persons deemed 'appropriate' at the time, as defined by the Act. Section 78F(2) of the Environmental Protection Act 1990 defines 'appropriate persons' as those who have caused or knowingly permitted a pollutant to be in, or under the land. As such, they may be liable for the remediation of the site if it is subsequently determined as contaminated land by the Local Authority. However, there are also circumstances under which the current owner or occupier of the contaminated land in question is an appropriate person.
- 5.7. Part IIA is further established in Scotland by the <u>Contaminated Land (Scotland) Regulations 2000 (SSI 2000/178)</u>, as amended and the Scottish Government's Statutory Guidance: Edition 2 provides the detailed framework for the definition, identification and remediation of contaminated land.
- 5.8. The Part IIA regime is underpinned by the core principles of the 'polluter pays' and a 'suitable for use approach'. Whilst local authorities are the primary regulator for the contaminated land regime, the Scottish Environment Protection Agency (SEPA) also have certain responsibilities within the scope of this legislation to regulate activities and assist in the management and remediation of contaminated land see sections below for further details.

Early engagement with Council (Pre-Application Discussion)

- 5.9. Anyone proposing to develop land that may be contaminated is advised to contact the Council at an early stage to discuss land contamination issues before submitting a planning application.

 Advice will be given on what information should be submitted with the application.
- 5.10. In the event that an application does not contain sufficient information for the Council to reasonably assess whether a site may be contaminated then a condition will be attached requiring that a risk assessment be carried out prior to development commencing in order to assess whether the site may be contaminated and whether remediation will be required.

Suitable for Use Framework

- 5.11. The 'suitable for use' framework that is used to deal with land contamination at proposed development sites consists of three elements:
 - Ensuring that land is suitable for its current use by identifying and removing unacceptable risks to human health and the environment;
 - Ensuring that land is made suitable for any future use by assessing the potential risks for contamination as planning permission is given for development and, where necessary, remediating the land before the new use commences;
 - Limiting requirements for remediation to the work necessary to prevent unacceptable risks to human health or the environment from the current use or future use for which planning permission is being sought.
- 5.12. It is the responsibility of the developer to ensure that issues of land contamination are appropriately considered, that remediation takes place (where necessary) and that the land is safe and suitable for use i.e. the site is cleaned up to a level which is appropriate for the proposed end use.

Site Investigation

- 5.13. Site investigations are usually structured operations consisting of several phases. Any report submitted to the Council should take the form of an Environmental Risk Assessment. A phased approach is necessary to ensure that resources are not wasted, as each phase of the investigation informs the next and therefore sampling and analysis can be targeted at areas of a site that are at a greater risk.
- 5.14. The 'Model Procedures for the Management of Land Contamination' (Environment Agency, 2004) outlines the steps to be followed when assessing the risk from potential land contamination. A tiered risk assessment approach is recommended, incorporating a Preliminary Risk Assessment followed by a Generic Quantitative Risk Assessment and finally a Detailed Quantitative Risk Assessment if deemed necessary. This approach is outlined below. Site investigations should be carried out in accordance with relevant British Standards and current UK

guidance e.g. BS 10175:2011 + A2:2017, BS 5930:2015, BS8576:2013 and Land contamination: risk management (Environment Agency, 2019).

Phase 1 - Desk Study and Site Reconnaissance

- 5.15. The purpose of the preliminary desktop study and reconnaissance is to develop an outline conceptual site model and identify all plausible contaminant pathway receptor linkages at the site. This will be a qualitative (descriptive) assessment of risk.
- 5.16. The main objective at this stage is a 'desk study' comprising the collection of all readily available historic and environmental information. Typically, this should include:
 - a plan of the proposed site layout;
 - site reconnaissance or walkover;
 - a description of the site including geology, hydrogeology and current site use;
 - review of current and historical maps;
 - previous, present and proposed uses of the site and direct vicinity;
 - details of any waste disposal practises;
 - details of any spillage or pollution incidents;
 - any excavation and infilling activities; and,
 - review of any previous investigations.
- 5.17. This list is indicative only, and is only used as a guideline for some of the key features. For further details of the conceptual model and preliminary risk assessment, please refer to PAN 33:

 Development of Contaminated Land.
- 5.18. During the initial desktop study, it will be expected that contact is made with the Planning Authority and Environmental Health services.
- 5.19. It is anticipated that a preliminary risk assessment will be required for most cases of development on brownfield land and further assessment is required if there are any gaps in the preliminary risk assessment or if the preliminary risk assessment identifies any potential unacceptable risks. A high degree of confidence in the preliminary risk assessment findings will indicate whether it is necessary for it to be followed by an intrusive or Phase 2 Investigation and Risk Assessment. This is usually required to demonstrate that any other outcome is acceptable.
- 5.20. The conceptual site model will enable a preliminary risk assessment to be made, which will indicate whether a Phase 2 investigation is required. The conceptual site model should be reviewed and revised through the subsequent phases as more information is gathered.
- 5.21. The UK Risk Assessment Framework is based on a staged or tiered approach:
 - Stage 1 Preliminary Risk Assessment;
 - Stage 2 Generic Risk Assessment (GQRA)s; and,
 - Stage 3 Detailed Quantitative Risk Assessment (DQRA).

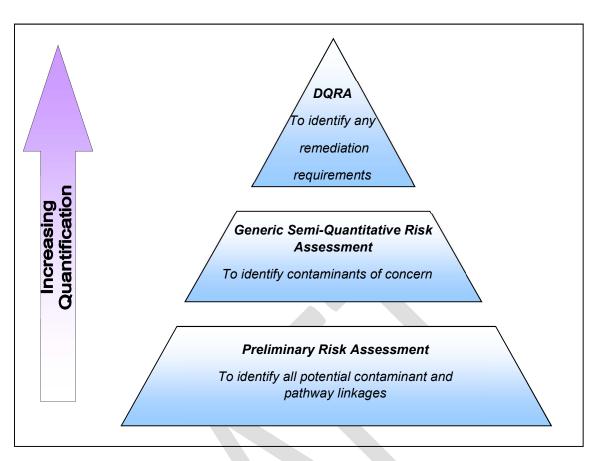


Figure 2 The UK Risk Assessment Framework

Phase 2 - Intrusive Site Investigation, Risk Estimation and Evaluation

- 5.22. Site investigation and risk assessment should be undertaken where the preliminary risk assessment identifies any potential unacceptable risks or to reduce uncertainty in the initial conceptual model. The aim of the investigation should be to provide information to refine and update the outline conceptual site model and to confirm and evaluate the significance of the identified potential pollutant linkages.
- 5.23. A typical site investigation may be an iterative process undertaken in several phases depending on the requirements for further reducing uncertainty in the conceptual site model and refining the risk assessment from a generic quantitative risk assessment to a detailed quantitative risk assessment using site specific assessment criteria. Additional site investigation may also be required to provide data to inform the Remediation Options Appraisal.
- 5.24. All investigations should be site specific and must be carried out by suitably competent and experienced consultants and specialists. This will include access to specialist contractors and engineers. The investigation should include sampling techniques carried out in accordance with British Standards BS10175:2011 (+A2: 2017) Investigation of potentially contaminated sites code of practice and an MCERTS accredited laboratory must be used for analysis of soil samples.

- 5.25. When completed, the results of the investigation should be compared against suitable criteria. Where these are unavailable for a particular substance, it is expected that the most appropriate Risk Assessment Tool is used with full justification for this choice.
- 5.26. Risks to groundwater and surface waters should be assessed in line with current SEPA guidance. In particular SEPA's <u>Position Statement WAT-PS-10-01 Assigning Groundwater Assessment</u>

 <u>Criteria for Pollutant Inputs</u> should be used. Please refer to <u>SEPA contaminated land website</u> or contact SEPA for further advice.

Ground Gas Risk Assessment

- 5.27. Ground gas is a contaminant and should be considered as a potential contaminant source in the preliminary risk assessment on sites where gas generation and/or on site migration is suspected further investigations will be required. This type of investigation must be carried out in accordance with suitable risk assessment methods. Examples of this type of available guidance include:
 - CIRIA Guide C665. Assessing risks posed by hazardous ground gases to buildings (revised);
 - CIRIA 149 Protecting Development from Methane;
 - NHBC Guidance on evaluation of development proposals on sites where methane and carbon dioxide are present; and,
 - CIEH Ground Gas Handbook.
- 5.28. The gas monitoring programme should be designed to enable data to be gathered over a sufficient period of time with a suitable number of monitoring visits and at periods of varying atmospheric pressure.
- 5.29. It is important to consider each potential pollutant linkage during the risk assessment and decide whether it is active at the site and whether it has the potential to harm the receptor before and after mitigation measures.
- 5.30. A tiered approach to estimating risk should be followed involving the direct comparison between observed levels of contamination and firstly Generic Assessment Criteria (GAC), followed by Site Specific Assessment Criteria (SSAC) if deemed necessary.
- 5.31. On completion of the risk assessment process, a recommendation should be made as to whether Phase 3 works (remediation) will be required to remove unacceptable risks and to make the site 'suitable for use'.
- 5.32. A competent and experienced persons must carry out all elements of the site characterisation. Usually, this would involve commissioning consultants or specialists. These persons must be familiar with all elements of modern risk assessment and site investigation techniques. They should also be familiar with current national policy and the legislative framework surrounding land affected by contamination.

5.33. To discharge land contamination conditions the Planning Authority must be satisfied at all the relevant stages that satisfactory reports have been submitted to demonstrate that the development is suitable for use. Failure to appropriately resolve planning conditions can lead to delays in the construction and sale of developments.

Phase 3 – Remediation

- 5.34. If Phase 2 identifies any unacceptable risks, then Phase 3 (known as remediation) will be required. A remediation strategy should comprise an options appraisal, remediation objectives, details of the proposed remediation and verification works, mitigation measures, licences/consents and contingency measures. It should inform and be informed by the site development proposals including any proposed changes to existing ground levels and the layout of buildings, roads and garden areas.
- 5.35. Remediation works can only commence once the remediation strategy has been submitted to and agreed by the Planning Authority.

Contingency Plans

5.36. Contingency Plans are required in the following circumstances;

achieved must be included in the report.

- additional contamination is discovered;
- the remediation works fail; or,
- contamination occurs as a result of the remediation works (e.g. spillage of fuel oil or pathway linkage created by borehole.

Phase 4 – Verification

5.37.	On con	npletion of the remediation works, a verification report is required to be submitted to the
	Plannir	ng Authority. The Planning Authority will not discharge any planning condition relating to
	land co	ontamination until a Verification Report has been submitted and approved in writing. The
	report	should include:
		details of the sampling strategy as carried out
		details of whom carried out the work
		details and justification of any changes from the original remediation statement
		Information on any unexpected discoveries or hotspots encountered and the steps taken
		to address this
		Substantiating data including where appropriate:
		• Laboratory and in situ test results
		Gas and groundwater monitoring data
		 Summary data plots and tables relating to clean up criteria
		 Plans showing treatment areas and details of any differences from original
		remediation statement
		• Waste management documentation – copies of consignment notes, receipts etc.
		 Confirmation that remedial objectives have been met
		Including any evidence that demonstrates whether the remediation objectives have been

- 5.38. Where longer term monitoring is required, e.g. groundwater or gas monitoring, an interim report should be submitted detailing all the verification work undertaken to date. Where the site's remediation criteria have not been met, details of the contingency work must be included as these may comprise further detailed quantitative risk assessment, physical remediation works or mitigation measures.
- 5.39. The report should also detail whether all pollutant linkages have been broken or effectively controlled and whether the site is suitable for its intended use. An updated conceptual site model should also be included.

6. Overall developer requirements

6.1. There are some matters that an applicant has to consider for all parts of the investigation and remediation. These relate to competency, health & safety and construction and are detailed below:

Competency

- 6.2. Care must be taken to ensure that additional pollutant linkages are not created during any works carried out at the site. This could result in the site being determined as contaminated under Part IIA of the Environmental Protection Act 1990. Particular care must be taken when any piling is necessary. Piling can create direct pathways into groundwater; fissures in the strata may allow the migration of gases; and may risk exposing site workers to contaminated arisings. This highlights the need for specialist advice for all parts of the investigation. The Planning Authority encourages developers to contact the Council's Environmental Health service prior to the importation of soils so that the details can be agreed.
- 6.3. Many organisations feel able to complete part of the assessment (usually the desktop study). The Council will have regard both to the content of reports and to professional experience, affiliation and demonstrable expertise. A failure to demonstrate this could lead to the report being rejected.
- 6.4. A specialist consultant should be commissioned to carry out all aspects of the investigation. They should be able to demonstrate:
 - experience;
 - technical expertise in site investigation and remediation; and,
 - familiarity with current UK policy relating to contaminated land, and associated key guidance documents:
 - o familiarity with the legal framework surrounding contaminated land;
 - o Knowledge in the use and application of best practice techniques; and,
 - o Full Quality Assurance and Quality Control.
 - 6.5. In all cases, all reports should be rational, ordered and in sufficient detail to demonstrate a logical progression of the assessment procedure. The reports should be clear and avoid

excessive use of scientific terminology. They should also include a summary written in non-technical language.

Health and Safety

- 6.6. The developer is responsible for ensuring that site workers and members of the public are protected from the potential effects of contamination during the entire process. Enforcement for health and safety matters on construction sites is the responsibility of the Health and Safety Executive (HSE).
- 6.7. Parts of East Dunbartonshire have been subjected to mining activities which can result in the presence of unstable land and mine gases. Any development proposals in these areas will need to afford full consideration to the risks posed by mining legacy issues and where necessary, set out appropriate remedial measures to address the risks in the interests of public health and safety. Further information on coal mining legacy can be obtained from the Coal Authority Mining Reports Service, available from https://www2.groundstability.com/ or by telephoning 0845 762 6848.

Construction (Design and Management) Regulations 2007

- 6.8. The Construction (Design and Management) Regulations 2007 places legal duties on virtually everyone involved in construction work. Anyone having construction or building work carried out has legal duties under the Construction (Design and Management) Regulations 2007 (CDM 2007) unless they are a domestic client.
- 6.9. A CDM coordinator is required for all HSE notifiable projects. The client can appoint themselves the CDM co-ordinator and/or principal contractor, provided they have the necessary competence and resources to comply with the additional CDM duties.
- 6.10. Serious breaches of health and safety legislation on the construction project could result in construction work being stopped by HSE or the Local Authority and additional work may be needed to put things right. In the most serious circumstances investigations could lead to prosecution.
- 6.11. Further information on the CDM regulations can be obtained from the HSE website.
- 6.12. In cases where it is not known whether the site is contaminated, applicants should consult with the Council's Environmental Protection Officer or Environmental Health officer. If there is a possibility of contamination being present, a site investigation will be required. The cost of the site investigation, risk assessment and any remedial action will be borne solely by the developer.
- 6.13. Where site investigation and risk assessment determines that some form of remediation is required, a Remediation Strategy will ordinarily be submitted to the council for approval prior to the determination of the planning application. Conditions relating to the remediation of the site would then be added to any planning consent.

- 6.14. Following remediation, a Verification Report will be submitted for approval by the Council.

 Planning conditions relating to contaminated land will not be discharged until the Verification Report has been received and approved by the Council.
- 6.15. Where planning permission is granted for a site on which the presence of contamination is known or suspected, an advisory note will be attached to the planning permission informing the applicant that the responsibility for the safe development of the site rests with the developer. It will also state 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.



7. Further guidance on developing brownfield sites

The following highlights important external guidance documents. Please note this list is not exhaustive:

- 1. Scottish Executive Planning Advice Note 33: Development of Contaminated Land (PAN 33)
- 2. British Standards Institute BS10175: Investigation of potentially contaminated sites Code of practice
- 3. Department of the Environment, Food and Rural Affairs (DEFRA) Industry Profiles (various titles)
- 4. DEFRA Soil Guideline Values
- 5. Environment Agency and NHBC Guidance for the Safe Development of Housing on Land Affected by Contamination 2008 (R&D 66)
- 6. <u>Planning Advice Note 33: Development of Contaminated Land. Revised October 2000.</u> http://www.scotland.gov.uk/Topics/Built-Environment/planning/publications/pans
- 7. Model Procedures for the Management of Land Contamination. <u>Environmental Protection Act</u> 1990: Part IIA Contaminated Land Statutory Guidance: Edition 2. May 2006 [Ref: SE/2006/44].
- 8. The Scottish Environment Protection Agency: Land Remediation and Waste Management Guidelines. 2009. WAT-PS-10-01 Assigning Groundwater Assessment Criteria for Pollutant Inputs. 2010.
- 9. Invasive Non-Native Species (Nature Scot)