

# Contaminated Land Strategy 2024



#### **Document Status and Approval Schedule**

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This document supersedes all previous Contaminated Land Strategy reports by City of York Council.

#### FOREWORD

The industrial history of our country has left a legacy of land where there is a potential for contamination to exist. This contamination may pose a risk to human health and / or the environment.

Part 2A of the Environmental Protection Act 1990 places a duty on local authorities to address these possible risks through the contaminated land regime. Dealing with contamination helps make the environment clean and safe.

The Statutory Guidance states that enforcing authorities should only use Part 2A where no appropriate alternative solution exists, to minimise unnecessary burdens placed on taxpayers, businesses, and individuals. City of York Council will use the planning system to fulfil its responsibility to investigate potentially contaminated sites. Hundreds of sites in the city have already been investigated and remediated through this route.

This strategy is a requirement under the contaminated land regime, as set out in the Statutory Guidance. The council's first contaminated land strategy was published in July 2001 with subsequent updates in 2005, 2010, 2016 and 2024. This 2024 version incorporates recent changes in contaminated land guidance and provides an update on progress made to date.

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## I. INTRODUCTION

#### I.I The Contaminated Land Regime

The contaminated land regime places a duty on local authorities to inspect their areas and identify land where contamination is causing unacceptable risks to human health or the environment. The regime provides a system for dealing with contaminated land, to ensure that unacceptable risks are removed and that the land is suitable for its current use.

Part 2A of the Environmental Protection Act 1990 (Part 2A) establishes a legal framework for dealing with contaminated land in England. It was created by Section 57 of the Environment Act 1995, and it came into force in April 2000 with the implementation of the Contaminated Land (England) Regulations 2000. The regulations have subsequently been modified to change various definitions and widened to include land contaminated by radioactivity.

Central government has produced <u>Statutory Guidance</u> to explain how the contaminated land regime should be implemented and to provide procedures for determining whether land is contaminated in the legal sense of the term. Separate <u>Statutory Guidance for radioactive contaminated land</u> is also available. Please note that Statutory Guidance is legally binding and must be strictly followed by the council.

The Environment Agency's Land Contamination: Risk Management must be followed when assessing and managing the risks from contamination.

#### I.2 Definition of Contaminated Land

The legal definition of contaminated land, as defined in Section 78A(2) (as modified) of the Environmental Protection Act 1990, is:

"Any land which appears to the local authority in whose area it is situated to be in such a condition, by reason of substances in, on or under the land, that

a) significant harm is being caused or there is a significant possibility of such harm being caused; or

b) significant pollution of the water environment is being caused or there is a significant possibility of such pollution being caused."

Where 'harm' means harm to person (such as death, life threatening diseases, other diseases likely to have serious impacts on health, serious injury, birth defects, and impairment of reproductive functions), harm to other living organisms or interference with the ecological systems of which they form part, and harm to property (such as damage to crops, livestock or buildings).

The legal definition of contaminated land is slightly different if harm is due to radioactivity, as defined in Regulation 5(1) of The Radioactive Contaminated Land (Modification of Enactments) (England) Regulations 2006:

"Any land which appears to the local authority in whose area the land is situated to be in such a condition, by reason of substances in, on or under the land, that

- a) harm is being caused; or
- b) there is a significant possibility of harm being caused."

Where 'harm' means lasting exposure to any person resulting from the after effects of a radiological emergency, past practice, or past work activity.

#### I.3 Contaminant Linkages

For land to be determined as contaminated land there needs to be one or more contaminant-pathway-receptor linkages (contaminant linkages) by which a relevant receptor might be affected by the contaminant in question.

#### Figure 1.1: Contaminant Linkage



A **contaminant** is a substance which is in, on or under the land and which has the potential to cause significant harm to a relevant receptor, significant pollution of controlled waters, or harm attributable to radioactivity. Common contaminants include heavy metals, oils and tars (petroleum hydrocarbons), polycyclic aromatic hydrocarbons (PAHs), asbestos and landfill gas.

A **pathway** is a route by which a receptor is or might be affected by a contaminant (such as inhaling dust or eating vegetables that have been grown in contaminated soil).

A **receptor** is something that could be adversely affected by a contaminant. The receptors covered by the contaminated land regime include people, ecological systems, property, and controlled waters.

#### I.4 Other Regulatory Regimes

The contaminated land regime is one of several ways in which land contamination can be addressed. Other legislative regimes include the Town and Country Planning Act 1990, the Building Act 1984, the Environmental Damage (Prevention and Remediation) Regulations 2009, the Environmental Permitting (England and Wales) Regulations 2016, and the Water Resources Act 1991 (Amendment) (England and Wales) Regulations 2009. The Statutory Guidance states that enforcing authorities should only use Part 2A where no appropriate alternative solution exists.

## I.5 The Planning System

The planning system has been, and continues to be, the council's preferred means of dealing with potentially contaminated sites in York. The planning system places the onus on the developer/applicant to deal with potential contamination issues as part of the wider planning process. They must ensure that a site can and will be made suitable for its proposed future use and that there are no unacceptable risks to human health or the environment. Further information is available in the Yorkshire and Lincolnshire Pollution Advisory Group's technical guidance 'Development on Land Affected by Contamination'.

Land contamination is a material planning consideration, and Public Protection is consulted on all relevant planning applications. We ensure that all possible contamination risks have been assessed, and that any contamination can be suitably and sustainably mitigated. Climate change impacts (including flooding) should be factored into site works and long-term remediation to ensure that they are sustainably robust. We recommend that planning conditions are attached to planning consents as necessary, to ensure that appropriate investigation, remediation, and verification work is undertaken.

The planning policies for the growth and regeneration of York are detailed within the Local Plan. The development of land affected by contamination is covered under policy ENV3.

## 2. AIMS AND OBJECTIVES

The aim of this strategy is to outline how the council will implement the contaminated land regime within the city, in a proportionate and cost-effective manner. It is not the intention to reiterate the specifics set out in the legislation and Statutory Guidance or other guidance available which covers the many aspects involved when assessing land for contamination.

The objectives of the contaminated land regime, as detailed in paragraph 1.4 of the Statutory Guidance, are:

- To identify and remove unacceptable risks to human health and the environment.
- To seek to ensure that contaminated land is made suitable for its current use.
- To ensure that the burdens faced by individuals, companies and society as a whole are proportionate, manageable and compatible with the principles of sustainable development.

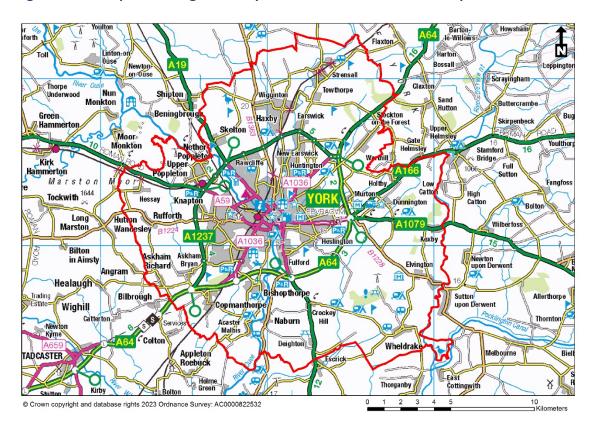
It is the local authority's responsibility to meet these requirements. The council believes that the best way of achieving these objectives is through the planning system, and only using its powers under Part 2A where it is necessary and proportionate to do so.

## 3. THE CITY OF YORK

#### 3.1 Characteristics of the Area

The City of York lies in the centre of the vale of York, approximately 30 miles north-east of Leeds and 50 miles inland from the east coast. York is one of England's most historic cities, with a diverse history that can be traced back nearly 2,000 years. The landscape of the area is broadly characterised as flat and lowlying agricultural land, which rises slightly towards the east.

Figure 3.1 shows the extent of the City of York Council area, which covers approximately 105 square miles. The 2021 census recorded a population of 202,821 residents.



#### Figure 3.1: Map Showing the City of York Council Boundary

## 3.2 Past Industrial Activity

Contamination can arise from a wide variety of processes and activities associated with industry and its development and growth. The industrial history of an area provides a useful insight into the land which might contain and be affected by contamination.

Former major industries in York include railway carriage works, confectionary, flour milling, sugar production, printing, and the manufacture of optical instruments. Numerous former factories, petrol stations, landfill sites and airfields are also present.

## 3.3 Geology

The geology of a site can influence whether a contaminant is likely to remain close to the source or to migrate through the ground. Sandstone and sandy soils, with large grain sizes, are highly permeable and they allow contamination to move easily. Whereas mudstone and clayey soils, with small grain sizes, have negligible permeability which prevents the movement of contamination.

The bedrock beneath most of York is Sherwood Sandstone, apart from a small area of Mercia Mudstone in the Strensall area. Much of this is overlain by superficial geological deposits of either silt and clay or sand and gravel, principally of glacial origin. Bands of alluvium deposits are also present along the paths of the River Ouse, the River Foss, and the River Derwent.

#### 3.4 Hydrogeology

Water beneath the earth's surface is called groundwater and it can be found within layers of rock or superficial deposits. Within York, the Sherwood Sandstone is designated as a principal aquifer (meaning that it has a high capacity for groundwater storage) and it supports many water abstractions for domestic, agricultural, and industrial uses. Whereas the Mercia Mudstone is designated as unproductive strata and it does not support any major water abstractions.

The superficial geological deposits within York are either designated as secondary

aquifers (sands and gravels) or unproductive strata (silts and clays).

Groundwater vulnerability is classified based on the characteristics of the aquifer. Where the Sherwood Sandstone is covered by permeable sand and gravel deposits, the groundwater is vulnerable to pollution by surface activities (including land contamination). Where the Sherwood Sandstone is covered by a substantial thickness of clay, which has a low permeability, the groundwater is generally protected against pollution from surface activities.

The Environment Agency is responsible for water quality and resources, so we will work with them on site-specific groundwater issues.

#### 3.5 Hydrology

York has three main surface watercourses, which are the River Ouse, the River Foss and the River Derwent. These river systems are used as water supplies, mostly for agricultural spray irrigation. There are also several licensed abstractions from the River Ouse and the River Derwent for public drinking water supplies.

The Environment Agency is responsible for water quality and resources, so we will work with them on site-specific surface water issues.

## 3.6 Ecological Systems

Several areas of ecological importance are present within York and details of these are listed below:

- Sites of Special Scientific Interest (SSSIs) Acaster South Ings, Askham Bog, Church Ings, Clifton Ings and Rawcliffe Meadows, Derwent Ings, Fulford Ings, Heslington Tillmire, Naburn Marsh, River Derwent, and Strensall Common.
- Special Areas of Conservation (SACs) Lower Derwent Valley, River Derwent, and Strensall Common.
- Special Protection Areas (SPAs) Lower Derwent Valley.
- National Nature Reserve (NNRs) Lower Derwent Valley

• RAMSAR – Lower Derwent Valley.

We will work with the council's Design & Sustainability Team, Natural England, and The Environment Agency on site-specific issues to avoid harm or damage to ecological systems.

#### 3.7 Historic Buildings, Monuments & Archaeological Deposits

York's rich history has provided a complex mosaic of buildings and streets unique in character. It's wealth of historic buildings include: 22 scheduled monuments (including York Minster, the City Walls, Clifford's Tower and St Mary's Abbey), 35 conservation areas and over 1,500 listed buildings.

The importance of York is highlighted by the city's status as only one of five historical centres in England designated as an Area of Archaeological Importance. It is Britain's largest, deepest and best preserved urban archaeological site. York's low-lying location and underlying clay mean that archaeological deposits are waterlogged beneath the water table and remain in an excellent state of preservation.

We will work with the council's Design & Sustainability Team, and Historic England on site-specific issues to avoid harm or damage to any features of historical or archaeological interest. As a matter of routine, the <u>York Historic</u> <u>Environment Record (HER)</u> will be consulted to identify archaeological interests before the start of intrusive ground investigations or remedial activities.

## 4. THE INSPECTION PROCESS

## 4.1 Information Collection

We have collated data from historical maps, aerial photographs, trade directories, Landmark Information Group, Environment Agency, British Geological Survey, Natural England, Historic England, and City of York Council to identify potential contaminant sources (such as past industrial activities and waste disposal sites) and relevant receptors. The council has developed a geographical information system (GIS) and an associated database to store and manage this information, which has enabled potentially contaminated land to be identified.

We have currently identified 3,695 potentially contaminated sites within the city and this list will be updated as new information comes to light. Please note that a significant number of potentially contaminated sites are likely to be suitable for their current use or will have already been dealt with through the planning system.

## 4.2 **Prioritisation**

In 2008, we purchased a sophisticated GIS based site prioritisation tool (called ConSEPT) from the British Geological Survey. This was used to prioritise all 3,695 potentially contaminated sites. The ConSEPT prioritisation tool is based on the contaminant linkage concept, and it scores the different sources, pathways and receptors for a site and its surroundings. The total scores allow potentially contaminated sites to be ranked in priority order. Each site is allocated to one of five priority categories (A to E). Table 4.1 shows how the council has defined these categories and the number of potentially contaminated sites within each category.

## Table 4.1: Priority Categories

Category	Number of Sites	Description
A	88	<b>High risk.</b> The presence of contaminants is likely. One or more contaminant linkages are likely to exist. There is a high risk of an unacceptable impact on identified receptors. The current use of the site may not be suitable.
В	1,563	<b>Medium risk</b> . Contaminants may be present and contaminant linkages are likely to exist. There is a medium risk of an unacceptable impact on identified receptors.
С	469	<b>Medium-low risk</b> . Contaminants may be present and contaminant linkages could exist. There is a medium-low risk of an unacceptable impact on identified receptors.
D	374	<b>Low risk</b> . Contaminants may be present, but contaminant linkages are unlikely to exist. There is a low risk of an unacceptable impact on identified receptors.
E	1,201	<b>Very low risk</b> . Contaminants are unlikely to be present and contaminant linkages are unlikely to exist. There is a very low risk of an unacceptable impact on identified receptors.

## 4.3 Detailed Inspection

The purpose of carrying out a detailed inspection is to gain sufficient information to determine whether there is a significant contaminant linkage, and whether the site meets the legal definition of contaminated land.

The first phase of investigation (Phase I) is to collect and assess as much information as possible about a particular site from maps and historical records and by undertaking a site walkover survey. If the findings confirm that there is

potential for contamination to be present, then further investigation will be required.

The next phase of investigation (Phase 2) is to carry out a site investigation to determine the nature and extent of any contamination on a site. The sampling and analysis of soil, water and/or ground gases may be required to assess the amount and type of contamination present. A risk assessment will then be carried out in line with current guidance and best practice, to determine whether the level of contamination at a site could pose an unacceptable risk to human health or the environment.

#### 4.4 Determination of Contaminated Land

Once a detailed inspection is complete, the council will have identified any significant contaminant linkage(s) and carried out a robust, appropriate, scientific, and technical assessment of all the relevant and available evidence. We can then decide whether a site meets the legal definition of contaminated land. Making a determination is a complex process and we will always refer to the Statutory Guidance and seek advice from the Environment Agency and other relevant experts as necessary.

We encourage voluntary remediation and the remediation of sites through the planning system, but if no solution can be reached, then the site will be determined as contaminated land and the polluter or other appropriate person will have a legal responsibility to remediate it. This may involve cleaning up the contamination, breaking the pathway, or modifying the receptor. A written record of determination will be produced, and the site will be entered onto the public register.

## 5. **PROGRESS AND PRIORITIES**

#### 5.1 Progress

Considerable progress has been made since the publication of the council's first Contaminated Land Strategy in 2001. We have collated detailed information on possible sources, pathways and receptors and have prioritised all of the potentially contaminated sites.

All 88 high priority sites (Category A) have been investigated, either through Part 2A or through the planning system. Funded by central government contaminated land capital grants, we carried out numerous detailed Part 2A investigations at the highest priority and most complex sites between 2004 and 2014. None of these sites were found to pose an unacceptable risk to health or the environment, so they were not determined as contaminated land and no further action was warranted.

Since the withdrawal of the central government contaminated land capital grants programme in 2014, the council has used the planning system to fulfil its responsibility to investigate potentially contaminated sites. Hundreds of sites in the city have already been investigated and remediated through this route.

## 5.2 Priorities

Our current priorities are to:

- Investigate potentially contaminated sites via the planning system. Review planning applications and associated contaminated land reports, to ensure that land is investigated and remediated appropriately and sustainably by developers and does not pose a risk to human health or the environment.
- Only use Part 2A powers where it is necessary and proportionate to do so.
- Respond to land search enquiries which request information regarding the condition of sites and the surrounding area.

#### 6. STRATEGY CONSULTATION AND REVIEW

Several statutory bodies, adjoining local authorities, internal council departments, and other relevant organisations have been consulted in the preparation of this strategy. All consultation responses have been carefully considered, and it is also our intention to continue to take contributions from consultees who have not yet made a response and from any other individual or organisation that would like to comment on this strategy. We propose to consider these responses as part of our regular reviews of the strategy.

As recommended in the Statutory Guidance, we aim to review this strategy at least every five years to ensure that it remains up to date and relevant. The next review is due in **May 2029**.

## 7. ACCESS TO INFORMATION

#### 7.1 Public Register

The Part 2A public register is currently blank. No sites have been found to meet the Part 2A definition of contaminated land, so we have not determined any sites as contaminated land.

## 7.2 Enquiries

Requests for information and enquiries regarding contaminated land can be made by telephone, email or in writing. We aim to respond to all requests within 3 working days. Please note that there may be a charge to cover our costs to reply to some types of enquiries, but you will always be advised in advance if there is a charge.

Please note that circumstances may arise where specific information cannot be released due to commercial confidentiality, an ongoing investigation, or where legal action is required to enforce a remediation notice.

Enquiries should be directed to the council's public protection team:

Tel: 01904 551525

Email: <a href="mailto:public.protection@york.gov.uk">public.protection@york.gov.uk</a>

Address: Public Protection, City of York Council, Eco Depot, Hazel Court, James Street, York, YO10 3DS