

Contaminated Land Inspection Strategy



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Aim

Under Part 2A of the Environmental Protection Act 1990 (EPA), Local Authorities have a statutory duty to prepare, implement and keep under periodic review its Contaminated Land Inspection Strategy.

The existence of contamination represents a threat to the sustainable development of the country as a whole.

The aim of the strategy is to identify actual and potential contaminated sites within the district by rational, ordered, and efficient investigation, to remove unacceptable risk to human health and the environment and prevent the creation of new contaminated sites.

This updated strategy supersedes all previous versions.

Scope

The overarching objectives of the government's policy on contaminated land and the Part 2A regime are set out in statutory guidance:¹

- a) To identify and remove unacceptable risks to human health and the environment;
- b) To seek to ensure that contaminated land is made suitable for its current use; and
- c) 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.

Land may have become contaminated as a result of a current or historic land use. Examples of potentially contaminating land uses include heavy industry such as steel and engineering works, collieries, scrap yards, railway land, agriculture and industrial and waste disposal sites (see appendix A for list of potentially contaminative uses). Spills and leakages of substances may also lead to contamination. The part 2A regime provides a risk-based approach to defining and identifying contaminated land and a means to remediate land that poses a significant risk to human health or the environment. This regime also works closely with planning and development control processes to ensure that potentially contaminated land is identified and risks do not arise from redevelopment through monitoring of applications and changes of land use.

The purpose of this strategy is to ensure a rational, ordered, timely and efficient approach to dealing with potentially contaminated sites within the Newark & Sherwood district.

¹ Statutory Contaminated Land guidance from Defra published April 2012, available at www.gov.uk/government/publications/contaminated-land-statutory-guidance



Background Information - Characteristics of the local authority's area

The District of Newark and Sherwood, at over 65,000 ha, is the largest in Nottinghamshire, covering nearly one third of the County. The District comprises much of the central and eastern parts of rural Nottinghamshire, with the more urbanised parts of the County, including Nottingham and Mansfield conurbations, lying to the west. Lincolnshire adjoins the eastern boundary of the District, with Lincoln to the northeast and Grantham to the southeast.

The District is home to approximately 122,956² people however there is a dispersed pattern of settlement. Newark is the largest town but most of the settlements are small and range from hamlets with circa one hundred residents to larger villages with a few thousand residents.

Most of the District is open countryside in agricultural use with the remnants of Sherwood Forest in the west, and the Trent Valley in the east being the two most dominant natural features of the landscape.

The market town of Newark on Trent (population 29,748^{2,3}) forms the largest populated area in the district. The town has a rich heritage of buildings and archaeological remains from various periods. Most of the jobs in this part of the District are located within Newark, with a significant proportion of these in the manufacturing sector.

In the northwestern part of the District the main settlements are those that grew as a result of the exploitation of the area's coal reserves from the 1920s onwards. The principal colliery settlements are Ollerton/Boughton (11,1033³), Rainworth (7,074³), Edwinstowe (5,318³), Blidworth (4,293³), Clipstone (6,128³) and Bilsthorpe (3,373³). The decline of the coal industry has seen the loss of 6500 jobs since 1980. Collieries at Ollerton, Rainworth, Blidworth, Bilsthorpe, Clipstone and Edwinstowe (Thoresby) have now all closed. Contamination is associated with many of these large former colliery sites and previous uses.

There are a number of historic RAF and MOD sites across the district and the potential for contamination to remain from these former uses exists. Predominantly they are now used for agriculture or are vacant land. Some of these sites have come through the planning process and have been remediated, others have been voluntarily remediated by the MOD as part of their program to investigate and remediate legacy MOD sites or prior to change of ownership of land.

² Office for National Statistics (ONS) district level mid year 2021 population estimate

³ Office for national Statistics (ONS) ward level mid year 2021 population estimates





Local Objectives/Priorities

The Newark and Sherwood District Council welcomes the Part IIA regime, which complements the Council's own visions and ambitions.

Our objectives are:

- Improve health and wellbeing,
- Increase the supply, choice, and standard of housing,
- Raise peoples' skills levels and create employment opportunities for them to fulfil their potential,



- Reduce crime and anti-social behaviour,
- Protect and enhance the district's natural environment and green spaces,
- Reduce the impact of Climate Change,
- Celebrate and invigorate community spirit, pride of place and a sense of belonging,
- To be a top performing, modern and accessible Council.

Which are framed through the Theme of:

Serving People, Improving Lives.

This strategy will assist across several of these strategic objectives and priorities.

Geology

Sherwood Forest lies on an outcrop of Sherwood Sandstone. Soils here are light and relatively poor and consequently extensive areas have been given over to Forestry Commission plantations. The parklands of the Dukeries estate are also found in this part of the County and both Thoresby Hall and Rufford Park lie within the District.

Coal measures also underlie much of this area and reserves have been extensively worked since the 1920's by means of a number of deep mines.

Mercia mudstone lies under the central farming plateau of the District where there are substantial areas of high quality agricultural land. To the south around Southwell, the clay is dissected by a number of streams, forming steep sided, wooded valleys known as The Dumbles.

Around Gunthorpe and Hoveringham, the clay is cut through by the River Trent to produce a narrow trench with river cliffs.

To the north of Newark the valley profile changes and becomes very flat, wide and open. Throughout the length of the river valley there are substantial deposits of sand and gravel, whilst to the south of Newark, there are large reserves of high quality gypsum.

Regulatory Context

Section 57 of the Environment Act 1995 created Part 2A of the EPA and together with the Contaminated Land (England) Regulations 2006 is the legislative framework for the contaminated land regime. The regime places responsibility on Newark & Sherwood District Council as a regulator to:

- · Identify any contaminated land within its boundaries;⁴
- · Require remediation of contaminated land⁵ unless deemed a "special site", in which case the Environment Agency (EA) becomes the enforcing authority;



- · Establish responsibility, in line with current guidance, for the remediation of contaminated land;⁶
- · Ensure that any necessary remediation action takes place, either by agreement or enforcement action;
- · Determine liability for the costs of any remediation; and
- ⁴ EPA s78B
- ⁵ EPA s78E
- ⁶ EPA s78F
 - · Maintain a public register of contaminated land matters, as may be prescribed.⁷

However, development or a change of land use provides the opportunity to deal with land contamination. Other legislation continues to be applicable and may still be used and take precedence over Part 2A:

- · Building Regulations 2010 (as amended);
- · Environmental Damage (Prevention and Remediation) Regulations 2009 (as amended);
- · Pollution Prevention and Control Act 1999;
- · Water Resources Act 1991;
- · Town and Country Planning Act 1990;
- · Radiative Substances Act 1993;
- · Waste management licencing (Part II of the EPA); and
- · Statutory nuisance (Part III of the EPA).

As the Part 2A regime is one of several ways in which land contamination can be addressed, the Contaminated Land Statutory Guidance¹ states that "enforcing authorities should seek to use Part 2A only where no appropriate alternative solution exists".

The guidance explains that Part 2A is concerned with identifying and dealing with land only where there are unacceptable risks posed by land contamination and that the starting point should be that land is not contaminated unless there is reason to consider otherwise. It goes on to explain the "suitable for use" approach. This introduces the concept of risk assessment on a site-by-site basis, where the level of contamination is assessed on the basis of the current use and circumstances of the land, and a wide range of environmental factors.

The most significant change in the guidance is a new four category system to help local authorities determine whether land is or is not contaminated on the basis of a significant possibility of significant harm to human health.



A similar system can be used for determining whether or not a significant possibility of significant pollution of controlled waters exists. This is described in detail in the guidance.

The guidance does not apply to radioactive contamination of land, which is now covered by separate statutory guidance published by the Department of Energy and Climate Change in April 2012. Both sets of guidance will apply in the event that land is affected by radioactive and non-radioactive contaminants.

National Planning Policy Framework

On 27th March 2012, the former Planning Policy Guidance Notes and Planning Policy Statements (PPS) were replaced by the National Planning Policy Framework (NPPF). This included the

⁷ EPA s78R

withdrawal of PPS23: Planning and Pollution Control that gave legislative and technical guidance in relation to development on land affected by contamination.

The underlying principle in the new NPPF is a presumption in favour of sustainable development. With regard to land contamination, the NPPF states that planning policies and decisions should ensure that new development is appropriate for its location and that developers and/or landowners are responsible for securing the safe development of land. The NPPF encourages the re-use of previously developed (brownfield) land, provided it is not of high environmental value. As a minimum, land should not be capable of being determined as contaminated land under Part 2A after it has been remediated via the planning process. The NPPF has been updated several times since its release but the principals surrounding dealing with brownfield land remain the same.

Role of the Environment Agency

When contaminated land is identified, the local authority must ensure it is managed and dealt with in an appropriate manner. Other agencies and authorities can also have a role. In certain cases, the EA will provide site-specific guidance to local authorities on land contaminated and will assist in identifying contaminated land where there is a risk of pollution of controlled waters.

The EA can take over as the enforcing authority where the local authority identifies a "special site", as defined in the legislation⁸. These can be described as sites which are likely to present the greatest threat to health or the environment.

¹ Statutory Contaminated Land guidance from Defra published April 2012, available at www.gov.uk/government/publications/contaminated-land-statutory-guidance



Strategy Progress to date

NSDC use the GeoEnviron database that is supplied in the UK by STM Environmental Ltd. Geoenviron is a computer based environmental management system, which among other things includes a module dedicated to managing information related to identification, risk assessment and remediation of contaminated land. The module has built within it, a site prioritisation system for use in tier 1 of the risk management process.

The prioritisation system follows the principle of Source-Pathway-Receptor as advocated by the Environment Agency's Land Contamination Risk Management (LCRM) guidance and is therefore suitable for use under Part IIA. It incorporates a numerical scoring system that reflects the magnitude of the probability or consequences of adverse effects occurring at a location. The system therefore allows for a consistent and transparent approach to be established during the process of site prioritisation. The prioritised list contains approximately 1400 records however to date no site has been determined as contaminated land under Part 2A of the Environmental Protection Act 1990.

To date, no further assessment of these sites has taken place.

The Department for Environment, Food and Rural Affairs (Defra) have advised that they now expect the vast majority of contaminated land to be remediated through the planning process, where (after remediation) as a minimum, land should not be capable of being determined as

⁸ Definition of 'special sites' is included under the EPA 1990 Part 2A section 78. See glossary for more details.

contaminated land under Part IIA of the EPA. This has been, and continues to be, NSDC's preferred means of dealing with potentially contaminated sites.

A guide 'Development on Land Affected by Contamination' has been developed by the Yorkshire and Lincolnshire Pollution Advisory Group (YALPAG)⁹ to give technical guidance for developers, landowners and consultant. The YALPAG guide is available on the NSDC website.

Relevant applications for planning consent are scrutinised by officers within Environmental Protection. Where these coincide with data held on potentially contaminated sites, from Part 2A prioritisation, GIS data, site knowledge or if information within the application indicates contamination is a possibility, Environmental Protection provide advice and comment to the Planning Department to ensure that appropriate action is taken and the site is assessed and remediated to ensure it is suitable for the intended use.

This approach requires liaison and cooperation with colleagues in the Planning Department and is controlled by the use of a phased land contamination planning condition.



Furthermore, review, analysis and comment is made on a substantial amount of data in relation to developments of all sizes throughout the district, including desk study, site investigation, remediation and verification reports. Therefore, a proportion of the prioritised sites have been investigated through the planning system and, where necessary, undergone some form of remediation to make the site "suitable for use". Notable recent developments include the redevelopment of the former Thoresby Colliery site in Edwinstowe which will be a mixed use site including large areas of residential dwellings and the former Flowserve works in Balderton which will be residential. Both of these are active projects which Environmental Protection remain involved in.

It should be noted that in some cases the remediation undertaken has been limited, for example, residual contamination may well remain at a site intended for commercial use and further remediation would be necessary if the site was to be used for a more sensitive land use, such as housing with gardens.

Surveying sites and site inspection

Part 2A of the EPA requires that local authorities cause their areas to be inspected with a view to identifying contaminated land and to do this in accordance with the statutory guidance. Two types of inspection are intended, they are:

- Strategic inspection: collecting information about previous land uses and prioritising them for further detailed inspection; and
- Detailed inspection: taking soil samples and carrying out risk assessments in order to make determinations about the site in relation to contaminated land.

As an in-house task the detailed inspection of sites through intrusive investigation, analysis of samples (soil, water and gas), risk assessment and remediation is beyond the technical capability of

⁹ Yorkshire and Lincolnshire Pollution Advisory Group (YALPAG) is a regional group including Local Authorities from Lincolnshire and Yorkshire. YALPAG guidance is available on the <u>NSDC website</u>

NSDC. Such work would be contracted out to consultants, is expensive and might commonly cost tens of thousands of pounds with upper bound cost estimates for site remediation of several hundred thousand pounds not being uncommon.

Defra has removed grant funding for new cases, though the statutory duty for local authorities to inspect land for land contamination remains. Furthermore Defra suggests that local authorities seek to minimise unnecessary burdens on the taxpayer.

Given the above situation NSDC will not pursue site inspections beyond the strategic inspection stage. That is to say that NSDC will not undertake intrusive sampling (soil, water



or gas), risk assessments or remediation exercises unless they are funded by a third party or unless appropriate funds are otherwise allocated. In exceptional circumstances NSDC will carry out and fund the works as necessary and seek recompense where appropriate. These cases will be reviewed and authorised on an individual basis.

In order to achieve the aims of this strategy in identifying actual and potential contaminated sites by rational, ordered and efficient investigation and remove unacceptable risk to human health and the environment as well as prevent the creation of new contaminated sites, NSDC will:

- Reinforce a "suitable for use" approach enabling developers to design and implement appropriate and cost effective remediation schemes as part of their redevelopment project of contaminated sites to bring brownfield land back into beneficial use;
- Identify sites which do not come under the EPA, Part 2A but could still be contaminated, to ensure that the land is suitable for its current use or can be made suitable for its intended future development use, where a receptor may be introduced;
- Record information on a public register stored as part of the corporate geographical information system (GIS) and Geoenviron database, showing the sites identified under Part 2A of the EPA; and
- Continue to provide specialised knowledge and guidance when requested as part of
 the established formal review mechanism in place between Environmental Health
 and Planning Development Control. This review mechanism is intended to enable
 effective monitoring of contaminated land sites undergoing redevelopment or with
 permission for redevelopment.

Enforcement action

Under the EPA 1990, NSDC is the local enforcing authority for contaminated land in the Newark & Sherwood district.

If land is identified which poses a risk of significant harm or the pollution of controlled waters, NSDC may instigate appropriate enforcement action to clean up the land, to protect residents and the wider environment.

The enforcement role applies only to sites that are identified as contaminated land. When such a site is identified, the authority will:



- · Establish who is responsible for the contamination
- · Decide what remedial action is required
- · Ensure that the remedial action is carried out
- · Determine who should bear what proportion of the costs of the remediation
- · Record information about the regulatory action on a public register

All enforcement action is taken in accordance with the relevant legislation and guidance¹⁰ and the NSDC Corporate Enforcement policy.¹¹

¹⁰ Environmental Protection Act 1995 Part 2A section 78A www.legislation.gov.uk/ukpga/1995/25/section/57

¹¹ NSDC Enforcement Policy available to view at https://www.newark-sherwooddc.gov.uk/media/newark-and-sherwood/images-and-files/strategies-and-policies/pdfs/Corporate-Enforcement-Policy-2015.pdf



Glossary

The full list of definitions under the EPA Part 2A (Contaminated Land) are available at section 78A of the legislation.¹⁰

Categories of Land

It is the responsibility of NSDC to decide, in accordance with the guidance, whether land in the district is contaminated land. Where the potential receptors are human or controlled waters, the guidance requires the use of 4 categorisations:

Categories 1 and 2 "encompass land which is capable of being determined as contaminated land on grounds of significant possibility of significant harm to human health", or "cases where the authority considers that a significant possibility of significant pollution of controlled water exists".

Categories 3 and 4 "encompass land which is not capable of being determined on such grounds" (human health), or "cases where the authority considers that a significant possibility of such pollution does not exist".

Part 2A makes this decision a "positive legal test", and so the starting assumption should be that land is not contaminated unless there is reason to consider otherwise (rather than assuming that all land is contaminated and then demonstrating that it is not).

Where the potential receptors are ecological systems or property, the guidance does not require 4 categorisations. It does however clarify what receptor types are relevant, and what should be considered "significant harm" or "significant possibility of significant harm".

Contaminated Land

As defined under the EPA Part 2A section 78A "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) pollution of *controlled waters* is being, or is likely to be, caused."

Although a site may contain contaminants, it will not necessarily meet the definition of "contaminated land" under EPA Part 2A section 78A. This decision is based on the potential which any contamination has to cause harm, under the current use of the land.



The EPA s78A (2) defines contaminated land as ".... 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:

¹⁰ Environmental Protection Act 1995 Part 2A section 78A www.legislation.gov.uk/ukpga/1995/25/section/57

- (a) significant harm is being caused or there is a significant possibility of such harm being caused; or
- (b) significant pollution of controlled waters is being caused, or there is a significant possibility of such pollution being caused."

The terms "current use", "harm", "significant harm" and "significant possibility of such harm" have specific meanings in the guidance.

Contaminated Land Statutory Guidance

Statutory contaminated land guidance was published by Defra in April 2012.¹

Controlled waters

"Controlled waters" are all natural inland and near coastal waters, including groundwater. Therefore, all ponds, lakes, rivers, streams, estuaries and coastlines are controlled waters. Pollution of controlled waters means the addition of any "poisonous, noxious or polluting matter or any solid waste matter".

Pollutant Linkage

The guidance defines what is meant by a "contaminant linkage". This linkage must occur for the land to be defined as contaminated land under Part 2A and all three elements must exist in relation to a particular area of land:

- The source The cause or source of the contamination is identified. For example, the source might be a leaking tank or contaminated ground or water. The location of the contamination is identified, such as in soils, ground or surface waters.
- · A pathway The pathway is the route the source takes to reach a given receptor.

 Pathways include, for example, air, water, soil, animals, vegetables and eco-systems.
- · A receptor If contamination is to cause harm, it must reach a receptor. A receptor is a person, animal, plant, eco-system, property or a controlled water. Each receptor must be identified and their sensitivity to the contaminant must be established.

Significant harm



This is defined in the statutory contaminated land guidance.

Significant possibility of significant harm

In determining whether there is a significant possibility of significant harm, the local authority will use a risk assessment approach, considering both the severity and the likelihood of the possible harmful effect. This will involve establishing:

- ¹ Statutory Contaminated Land guidance from Defra published April 2012, available at www.gov.uk/government/publications/contaminated-land-statutory-guidance
- · The nature and degree of harm predicted
- · The susceptibility of the receptors to which harm might be caused
- · The timescale within which the harm might occur

More details are available in the statutory contaminated land guidance.

Source Protection Zones

An area around a major groundwater abstraction (drinking water source) where ground contamination may result in the contamination of the water source. Source protection zones are defined by the EA and there are restrictions on development of some kinds (e.g. landfill sites) within them.¹²

Special Site

A contaminated land site that is regulated by the EA instead of the Local Authority. The definition is given in Section 78C (7) and 78D (6) of the Environmental Protection Act 1990.

Responsibilities

Coordination of the delivery of the contaminated land strategy sits within the Environmental Protection Unit which in turn is within the Public Protection Division.

This strategy is implemented having regard to the Corporate Enforcement Policy and Service Standards. 13, 14

NSDC will act in accordance with the guidance and standards set out in this strategy, and in any supplementary policies.

Supporting procedures

This strategy is supported by the Corporate Enforcement Policy. 13



Monitoring

A review of the strategy will be carried out every five years or should any changes in legislation or relevant codes of practice or guidance require it to be updated sooner. Any review and updated strategy will be published on the NSDC website.

This strategy and any updates or changes to it will be ratified in accordance with the NSDC constitution.¹⁴

- 12 https://www.gov.uk/guidance/groundwater-source-protection-zones-spzs
- 13 <u>https://www.newark-sherwooddc.gov.uk/media/newark-and-sherwood/images-and-files/strategies-and-policies/pdfs/Corporate-Enforcement-Policy-2015.pdf</u>
- 14 https://www.newark-sherwooddc.gov.uk/constitution/

Consultation

A consultation of this strategy will be undertaken with key stakeholders, partners and the public. Questions and views will be incorporated into the final version of the strategy.

Communication

An electronic copy of this strategy will be published on the NSDC website.

Implementation

This strategy will be implemented and maintained by the Public Protection division.



APPENDIX A: POTENTIALLY CONTAMINATIVE INDUSTRIES.

The list below gives a broad indication of the type of sites that are known to use, or to have used in the past, materials that could pollute the soil. The list is not exhaustive and inclusion on the list does not necessarily infer a pollutant linkage.

Abattoirs

Adhesives manufacture Agriculture/farming Aircraft manufacture

Airports Animal burial

Animal by-product processing Anodisers

Anti-corrosion treatment Asbestos products Asphalt works

Automotive engineering Battery manufacture

Bearings manufacture

Blacksmiths

Boiler makers Bookbinding

Brass and copper tube manufacture

Brass founders Brewing Car manufacture

Carbon products manufacture

Cement works

Chemical manufacture and storage

Chrome plating
Ceramics manufacture
Coal carbonisation
Coal merchant

Concrete batching Coppersmiths

Descaling contractors (chemical)

Detergent manufacture

Distilleries

Dockyards Drum cleaning Dry cleaners

Dye works Dyers and finishers Electricity generation

Electricity generation Electrical engineers Electro platers Engineering works

Explosives manufacture (including fireworks)

Fertiliser manufacture

Fellmongers
Fibre glass works
Food processing
Foundries

Fuel manufacture Fuel storage Garages and depots

Gas mantle manufacture

Gas works Glass works

Glue manufacture Gum and resin manufacture Laundries

Leather manufacture Metal coating Metal manufacture

Metal sprayers and finishers

Mining

Mirror manufacture Motor vehicle manufacture

Oil fuel distributors and suppliers Oil merchants Oil refineries

Oil storage

Paint and varnish manufacture

Paper works

Pesticides manufacture

Petrol stations

Photographic film works Photographic processing Paper manufacture Plastics works Plating works Power stations Print works

Printed circuit board manufacture Radioactive materials processing

Railway land

Railway locomotive manufacture Refiners of nickel and antimony

Resin manufacture Rubber manufacture Scrap metal dealers

Sealing compound manufacture

Sewage works

Sewage sludge disposal areas Sheet metal merchants and works

Sheet metal met Ship breakers Ship builders Skein silk dyers

Small arms manufacture Smokeless fuel manufacture Soap manufacture

Solvent manufacture Solvent recovery Steel manufacture Stove enamellers

Synthetic fibre manufacture

Tank cleaning Tanneries

Tar and pitch distillers Textile manufacture Thermometer makers Timber treatment

Timber preservatives manufacture

Tin plate works Transport depots

Tyre manufacture and retreading



Hatters
Hide and skin processors
Ink manufacture
Iron founder
Iron works
Knackers yards
Lacquer manufacture

Vehicle manufacture Vulcanite manufacture Vulcanisers Waste disposal Waste recycling Waste treatment Zinc works