



North Tyneside Council

Working in partnership with

CAPITA

Contaminated Land Strategy

2020



Executive Summary

Part 2A of the Environmental Protection Act 1990 requires every Local Authority to produce a written Strategy setting out how it will identify and deal with contaminated land within its Borough.

This Contaminated Land Strategy sets out the Authority's process for prevention and control of contaminated land using planning and legislative processes. This Strategy replaces the Authority's Contaminated Land Strategy produced in 2014.

The Strategy links to the Local Plan approved by Council in July 2017 which promotes the remediation of contaminated land by new developments. The Strategy highlights development as a route to bring contaminated land back into beneficial uses and improve the environment.

The Strategy describes the methodology used for the risk based inspection of the Borough and how the Authority will deal with contamination. The planning regime allows planning conditions to be applied to proposed developments within the Borough, and thus allow for the control of remediation on contaminated sites.

The Strategy clarifies what is to be considered as "Contaminated Land" based on the Statutory Guidance. This guidance requires contamination to be placed into categories of either human health risk or pollution of controlled waters.

The Guidance emphasises that only the top risk categories will be considered a "significant risk" and will require action.

The Strategy clarifies the legal determination of Contaminated Land. This highlights that Contaminated Land must demonstrate harm, or the significant possibility of significant harm being caused to land or controlled waters.

The Strategy emphasises the need to demonstrate the cause of the contamination, the person(s) responsible for contaminant linkages and the responsibilities for those involved.

The Strategy acknowledges the often sensitive nature of the information to assess if land is contaminated and the need not to cause 'blight' i.e. has a detrimental effect on an area or properties. The Strategy addresses blight by ensuring good risk communication. The Strategy requires when land investigation is completed to produce a Written Statement if no Significant Contaminant Linkage has been identified and to have robust processes in place for the handling and storage of information. The contaminated land database is a live working document.

When land is investigated and found to be "Contaminated Land" (i.e. top risk categories), the Authority will, prior to determination of the land, produce a Risk Summary for those parties affected by the contaminants. The Risk Summary would identify the risk and impact of the contaminant linkage. The Risk Summary would advise whether the risk was caused by short or long term exposure, any uncertainties in the assessment and the remediation methods proposed. The Strategy promotes the use of Voluntary Remediation and the regeneration of land.

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Chapter 1

1.0 Introduction

Part 2A of the Environmental Protection Act 1990 came into force on the 1st April 2000. Section 57 of the Environment Act 1995 placed an obligation on the Authority to “cause its areas to be inspected from time to time for the purpose of identifying contaminated land” (section 78B). The Authority has a statutory duty to produce a written strategy for the inspection of the land. The first Contaminated Land Strategy was completed in July 2001. This document is the third review of the Authority’s Contaminated Land Strategy. The second review was written to take into account the new technical guidance published by DEFRA (Department for Environment, Food and Rural Affairs) in April 2012. This third review replaces the previous Strategy produced in 2014.

1.1 Regulatory Context

Part 2A of the Environmental Protection Act 1990 specifies that the primary regulatory role for the Contaminated Land Regime rests with the Authority.

“The overarching objectives of the government’s policy on contaminated land are:

- 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;
- c. To ensure that the burdens faced by individuals, companies and society as a whole are proportionate, manageable and compatible with the principle of sustainable development.”

1.2 The Role of the Authority

The Authority has a duty under Part 2A of the Act to carry out the following actions:

- To inspect the area for contaminated land;
- To determine whether any particular site meets the statutory definition of Contaminated Land;

- To act as enforcing authority for all Contaminated Land, unless the site meets the definition of a “Special Site”, for which the Environment Agency is the enforcing authority;
- To consult with the Environment Agency on pollution of controlled waters;
- To ensure the remediation of Contaminated Land;
- To maintain a Public Register of Contaminated Land remediation.

1.3 The Role of the Environment Agency

The Environment Agency has responsibilities for the following:

- To assist Local Authorities in identifying Contaminated Land, particularly in cases where water pollution is involved for those sites which may be potential special sites. At sites that are not potential special sites, the nature of the Environment Agency’s response to advice on pollution of controlled waters would be dependent on the sensitivity of the site and may be more generic.
- To provide consultation on contaminated land inspection strategies;
- To provide site-specific guidance to Local Authorities on contaminated land for those sites which may be potential special sites;
- To act as the enforcing authority for any land designated as a 'special site';
- To publish periodic reports on contaminated land;
- To ensure the remediation of special sites (for definition of special sites see Appendix 1);
- To maintain a Public Register of special sites remediation.

1.4 Definition of Contaminated Land

Section 78A(2) of the Environmental Protection Act 1990 gives the statutory definition of contaminated land for the purposes of Part 2A as:

“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 controlled waters or there is a significant possibility of such pollution”.*

This definition is based upon a risk assessment approach. The remediation of the land is required only if the contamination causes a significant possibility of significant harm to human health, ecology or controlled waters. To be determined as Part 2A contaminated land there must be a 'Significant Contaminant Linkage' (Contaminant, Pathway and Receptor) or significant possibility of such a linkage. Contaminants maybe present in land but if they are not causing such a Significant Contaminant Linkage then no action will be required.

1.5 Controlled Waters

The contaminated land regime deals with the pollution of controlled waters as a receptor. Section 78A (9) of Part 2A provides the definition for the term “pollution of controlled waters” as the entry into controlled waters of any poisonous, noxious or polluting matter or any solid waste matter.

Controlled waters are rivers, streams, estuaries, canals, lakes, ponds and groundwater as far out as the UK territorial sea limit. The statutory definition of controlled waters is given under section 104(1) of Water Resources Act 1991.

The term “controlled waters” in relation to England has the same meaning as in Part 3 of the Water Resources Act 1991, except that “ground waters” does not include waters contained in underground strata but those above the saturation zone.

1.6 Development of the Inspection Strategy

The purpose of this Strategy is to ensure that all those affected by and involved in contaminated land inspection have a clear understanding of the reasons for the identification and inspection of potentially contaminated land sites.

The Strategy indicates how the priority of inspection is risk rated, based on potential contaminants and exposure to relevant receptors.

Relevant statutory bodies that have regulatory function in contaminated land have been appropriately consulted and are listed in Appendix 2.

1.7 Statutory Requirements of the Legislation

The statutory requirements of the Authority are: -

- To produce a written strategy;
- To demonstrate how the Authority will deal with contaminated land in a rational and risk based approach;
- To ensure the Authority inspects its area from time to time to identify any contaminated land and ensure that the land is suitable for its current use;
- To establish the responsibilities for remediation of the contaminated land in a proportionate manner including the role of the Regulators and the role of the Appropriate Persons;
- To demonstrate the hierarchy of mechanisms for ensuring contaminated land is remediated;
- To maintain a Public Register detailing the regulatory action taken under Part 2A of the Environmental Protection Act 1990. This will be kept at the Authority's office of Public Protection. Details of register are attached in Appendix 3 and discussed in section 10.5.

Chapter 2

2.0 Contaminant Linkages and Risk Assessment

The Statutory Guidance states that:

“Under Part 2A the starting point should be that land is not contaminated land unless there is reason to consider otherwise. Only land where unacceptable risks are clearly identified, after a risk assessment has been undertaken in accordance with this Guidance, should be considered as meeting the Part 2A definition of Contaminated Land.”

2.1 Contaminant Linkage

The term contaminant linkage refers to the relationship between a contaminant, a pathway and a receptor. For risk to exist there must be a contaminant present in, on or under the land in a form and quantity that poses a hazard and one or more pathways via which the contaminant(s) could reach and affect a receptor.

To identify a contaminant linkage the following must be found:

- A contaminant and
- A relevant receptor (e.g. Controlled Water see table in Appendix 4) and
- A pathway by means of which either:
 - a) that contaminant is causing significant harm to that receptor; or
 - b) there is significant possibility of such harm being caused by that contaminant to the receptor.

The definition of Contaminated Land applies to controlled waters as well as land pollution. The Flood and Water Management Act 2010 has placed the responsibility for surface waters onto Local Authorities. Internal consultation would take place with the Surface Water Management Team in the event of a potential contamination incident.

2.2 Risk

Part 2A of the Environmental Protection Act 1990 takes a risk based approach to assessing contaminated land. When carrying out risk assessment under the Part 2A regime, the Authority will focus on land that might pose an unacceptable risk to human or environmental receptors.

The Environmental Protection Act 1990: Part 2A Contaminated Land Statutory Guidance 2012 defines, “risk” as the combination of:

- (a) the likelihood that harm, or pollution of water, will occur as a result of contaminants in, on or under the land; and
- (b) the scale and seriousness of such harm or pollution if it did occur.

Risk assessments will be based on information that is:

- (a) scientifically-based and
- (b) authoritative and
- (c) relevant to the assessment of risks arising from the presence of contaminants in soil and
- (d) appropriate to inform regulatory decisions in accordance with the Environmental Protection Act 1990: Part 2A Contaminated Land Statutory Guidance.

The Authority will only consider risks in relation to the current use of the land.

2.3 Risk Categories

The revised Part 2A Contaminated Land Statutory Guidance 2012 provides risk categories to assist Enforcing Authorities to assess whether a site poses a significant possibility of significant harm to human health or the significant possibility of significant pollution to controlled waters. The Guidance has four risk categories for both human health and controlled waters.

The Guidance states that land is risk assessed, based upon the contaminants and the current use. Those areas on completion of site investigation, risk assessed within

Human Health Categories 1 and 2 would be determined as contaminated land as they would show 'significant possibility of significant harm to human health'. The guidance indicates that land assessed within Human Health Categories 3 and 4 do not demonstrate sufficient evidence of risk to be capable of being determined as contaminated land.

The Authority will also consider the Significant Possibility of Significant Pollution of Controlled Waters posed by the land.

Pollution of Controlled Waters Categories 1 and 2 would comprise cases where the authority considers that a significant possibility of significant pollution of controlled waters exists. Categories 3 and 4 would comprise cases where the authority considers that a significant possibility of such pollution does not exist.

The risk categories are summarised in the Table in Appendix 4.

2.4 Responsibility for Determination of Risk

The revised Part 2A guidance places the responsibility for determination of Contaminated Land upon the Authority. The Authority may use external experts to advise it on regulatory decisions under the Part 2A regime, but ultimately the decision as to whether land falls under the definition of “contaminated” remains the sole responsibility of the Authority. The Authority would consult the Environment Agency if land was considered a Special Site. **Special sites are contaminated land sites** that due to specific **land** uses, past activities or water pollution are passed from the local council to the Environment Agency to regulate. The Authority would place weight on their expertise prior to making a determination. If land is considered to be contaminated land under the legal definition then the Authority must produce a Risk Statement and issue it to the appropriate persons to communicate the risk found. There is a right to appeal a Remediation Notice served in relation to Part 2A of the Environmental Protection Act 1990:

- to a magistrates' court, if the notice was served by a Local Authority;
- or to the Secretary of State, if the notice was served by the Environment Agency.

2.5 “Normal” Presence of Contaminants

The revised Part 2A Contaminated Land Statutory Guidance states that normal levels of contaminants in soil should not be considered to cause land to qualify as Contaminated Land, unless there is a particular reason to consider otherwise.

Defra commissioned the British Geological Society (BGS) in 2011/2012 to give guidance on what are normal levels of contaminants in English soils. The BGS produced guidance on normal soil concentrations in regions for eight contaminants. These contaminants are arsenic, asbestos, benzo[a]pyrene (BaP), cadmium, copper, mercury, nickel and lead. However, asbestos was never taken forward by the BGS as it was too difficult to capture.

If it is established that land is at, or close to normal levels of these 7 contaminants, the Authority will not consider it further in relation to the Part 2A regime.

2.6 Use of Generic Assessment Criteria and other Technical Tools

The Authority will, during detailed investigation of site, carry out risk based assessments on contaminants based on available Defra Soil Guideline Values (SGV's). Defra produced 9 Soil Guideline Values (SGV's) to assist in the assessment of potentially contaminated sites. The Authority will, in the absence of Defra SGV Guideline Values, use Generic Assessment Criteria (GAC's) produced by a variety of sources. The GAC's currently used by the Authority are those produced by The Chartered Institute of Environmental Health (CIEH) in conjunction with Land Quality Management Ltd (LQM).

The Authority will use GAC's and other technical tools to help inform certain decisions under the Part 2A regime, provided: -

- (i) It can be proven how they were derived and how they can be used appropriately and
- (ii) That they have been produced in an objective, scientifically robust and expert manner by reputable organisations.

Site Specific Values (SSV's) can be produced using the Contaminated Land Exposure Assessment (CLEA) tool. The Environment Agency has published calculations for deriving SGV's as a spreadsheet for use by professionals in conjunction with the wider guidance. The CLEA software is written using Microsoft Excel and uses VBA macros to support functionality. In addition, a specific spreadsheet has been published to support the assessment of dioxins in soil.

The Authority will, during detailed investigation of site, carry out risk based assessments on controlled waters based on available guidance including but not exclusive of:

- The Water Framework Directive 2000;
- Drinking water standards June 2017;
- Hydrogeological Risk Assessment for Land Contamination – Remedial Targets Methodology' (2006);
- Environmental Quality Standards Directive 2016.

Chapter 3

3.0 Characteristics of North Tyneside

3.1 Geographical Setting

North Tyneside stretches from the eastern boundary of Newcastle upon Tyne to the North Sea and from the southern boundary of Northumberland to the River Tyne; an area of 8,367 hectares and has a mid-year population estimate currently of 203,000. The location of North Tyneside and corresponding wards are shown in Figures 1.1 and 1.2 of Appendix 6.

North Tyneside is a mixture of rural, urban and industrial areas with the major towns consisting of Wallsend, North Shields, Tynemouth and Whitley Bay, along the river and coastline plus the towns of Longbenton, Forest Hall and Killingworth between the main towns and the rural hinterland.

The River Tyne is a commercial river with ship repair, offshore fabrication, fishing and port related industries. The Borough contains a number of industrial estates, business parks and retail outlets.

3.2 Industrial Heritage

North Tyneside's position on the North Sea coast and along the northern banks of the River Tyne means that shipbuilding, fishing and coal mining have each played an important role in shaping its character.

3.2.1 Shipbuilding

Shipbuilding and repair are one of the oldest industries on the Tyne. Most shipyards on the north bank built small sailing vessels. In 1759 the Hurry family opened a large ship building yard at Howdon. The Howdon yard flourished throughout the Napoleonic Wars and shipbuilding also occurred extensively in North Shields from

1811 about Low Lights and Milburn Place but in peacetime declined until virtually unused by 1846.

In 1849 John H.S. Coutts shipbuilding company moved to Willington Quay. This yard was subsequently taken over by Palmer Bros and later in 1912 by J.T. Eltringham & Co. Shipbuilding continued in operation until 1921.

In 1849 T. & W. Smith began their glass-roofed shipyard at North Shields and early on became experts in the use of pontoon docks. Their neighbour, from 1884, was H.S. Edwards, who developed an early interest in oil tankers. The Edwards and Smith families took over these yards in North Shields.

Wallsend Yards carried out extensive shipbuilding from 1863 with different company ownerships but predominantly Swan and Hunter and Swan Hunters between 1880 to 1993. The yards were expanded into neighbouring sites such as the Allen's chemical works in 1883, Davis Yard in 1897, and Neptune Yard in 1903. The yard was taken over by Dutch company and has now been acquired by the Authority in partnership with other interested parties.

Ship building later diversified to heavy industrial activities such as offshore manufacturer and this is occurring about the former AMEC yards about Howdon and Willington Quay.

3.2.2 Coal Mining

A wide range of coal seams at comparatively shallow depth led to mining in the North Tyneside area at an early date – certainly the monks of Tynemouth Priory owned pits in the 12th Century. However, at the eastern end of the borough only Preston Colliery survived into the 20th Century and that was forced to close in 1929. Near Carville Hall, Wallsend, a shaft was sunk in 1778 which reached the High Main Seam in 1781. Most of the riverside collieries were flooded out during the 1850s and it was 10 years or more before they could be re-opened. Wallsend was amongst the first to be salvaged and continued in operation until the closure of the Rising Sun Pit in 1969. The Killingworth and West Moor Colliery was established in 1802 by the

Grand Allies. They had an extensive system of waggonways connecting their pits with the coal staithes in the Tyne. West Moor pit closed in 1882, leaving the company with the associated mines near Seaton Burn, which remained open until 1963. In the middle of North Tyneside, the extensive workings in the Backworth Royalty began in 1813 and eventually extended to Burradon and West Cramlington. Backworth Colliery was the last mine to close in North Tyneside when the Eccles Pit was shut in 1980.

3.2.3 Mining and Groundwater Constraints for Sustainable Development and Drainage Systems

The North East had extensive coal fields that were exploited over a long period of time. During the mining operations the mines were dewatered to allow access to the coal seams. This act of dewatering artificially lowered the groundwater. Once the cessation of mining occurred the groundwater began to rise to pre mining levels.

The Coal Authority and the Environment Agency have identified the issue of rising mine waters potentially impacting on groundwater and that developers may wish to utilise Sustainable Drainage Systems (SuDS) schemes for the drainage solution on developments within the North East. The Coal Authority and the Environment Agency have been working together to produce a groundwater constraints map. As in some areas with specific geology and a high water table, infiltration sustainable drainage system (SuDS) (or any SuDS with a component of infiltration) may not work and could result in groundwater flooding risks.

Infiltration systems may also result in mine water pollution, flooding risks and impacts on pumping infrastructure. North Tyneside is part of the Bates mining block. This mining block has an active pumping station situated at Blyth.

The Coal Authority (CA) and the Environment Agency (EA) have worked together to develop a management tool, in the form of a GIS based risk map, to help protect and manage the groundwater resource, reduce pollution risk and empower the competent planning and flood risk authorities.

The purpose of this management tool and the project is to help raise awareness of the current situation and to identify the associated risks to and from recovered, rising and actively controlled mine waters.

The constraints map can be found on the Coal Authority's Interactive Map Viewer. Currently the viewer provides the constraints map layer, available under the planning theme, which can be clicked on to show the mining block and category.

3.2.4 Fishing

Fishing industry has been established since the 13th Century initially around the Tynemouth Priory and Low lights areas. Tynemouth Council opened its own Fish Quay in 1870. The Fish Quay was repeatedly lengthened until the 1920's. Salt herring became a major export, and there are smokehouses at North Shields. There was a canning factory in 1902 which has since closed. In 1980, the fish industry built modern processing units. The North Shields Fish Quay Development Co. was established in 1993 to take the industry through to the 21st Century.

3.3 Environment

3.3.1 Geology

The borough of North Tyneside is underlain by a series of rocks types known as the Carboniferous Coal Measures, which consist of cyclical deposits of coal, mudstones, sandstones and marine limestone's. The Coal Measures are in turn overlain by the Lower Permian Yellow Sands and the Upper Permian Magnesian Limestone.

During the Pleistocene period the area of North Tyneside was subjected to several periods of glaciation which left much of the borough covered with glacial deposits comprising mainly Glacial Till (boulder clay) but also includes laminated clays, silts, sands and gravels.

3.3.2 Hydrogeology

The aquifer designation data issued by the Environment Agency is based on the following guidance:

- Protect Groundwater and Prevent Groundwater Pollution, published March 2017;
- The Environment Agency's Approach to Groundwater Protection, Version 1.2 February 2018.

These designations reflect the importance of aquifers in terms of groundwater as a resource (drinking water supply) but also their role in supporting surface water flows and wetland ecosystems.

The majority of North Tyneside is designated as a Secondary A aquifer; these are permeable layers capable of supporting water supplies at a local rather than strategic scale and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers.

However, there are two areas within the Borough that are designated areas of principle aquifer; these are the Permian Limestones found at Tynemouth and Marden in Whitley Bay. These are layers of rock or drift deposits that have high intergranular and/or fracture permeability - meaning they usually provide a high level of water storage. They may support water supply and/or river base flow on a strategic scale. In most cases, principal aquifers are aquifers previously designated as major aquifer.

Groundwater is not abstracted for public supply in North Tyneside, but it remains a potential resource.

3.3.3 Hydrology

Groundwater is not utilised as a water resource within North Tyneside. Potable drinking water is sourced from outside the Borough.

Within North Tyneside there are limited water resources. The main bodies of water in the Borough include: -

- The North Sea;
- The River Tyne Estuary;
- Briardene Burn;
- Seaton Burn.

The River Tyne Estuary, Briardene Burn and Seaton Burn are the only water courses to have been classified by the Environment Agency using its General Quality Assessment. The remaining water courses within the Borough are classed as controlled water.

3.3.4 Areas of Special Interest and Ecology

The generally flat topography and lack of tree cover across the Borough results in a countryside which is generally visually unremarkable. Features of interest often relate to the area's mining history including reclaimed spoil heaps. Areas of nature conservation value can include ponded areas formed by mining subsidence. Agriculture and particularly arable farming has had an important influence on the environment of the northern part of the Borough where hedgerows have been removed to create large fields. The open countryside in the north of the Borough is an important recreational area for the urban conurbation, with a network of footpaths and bridleways based on the old colliery waggonways. The coastal strip is an area of high quality environment and is valued both for its natural characteristics and wildlife and as a recreational resource.

There are two Special Sites of Scientific Interest (SSSI) within North Tyneside, both relating to the coast and these designations overlap. The first, the Tynemouth to Seaton Sluice Cliffs SSSI, comprises three separate areas of cliffs and rocks of special geological interest and the second, the Northumberland Shore SSSI, is a continuous coastal strip of special ornithological interest. The latter has recently been given the international designation of the Northumberland Coast as a Special Protection Area (SPA). In addition, a third SSSI lies within Gosforth Park immediately to the west of the borough boundary (within Newcastle upon Tyne City), of

importance for flora and fauna. There is a Marine Conservation Zone known as the Coquet to St Mary's Marine Conservation Zone which was designated in 2016. There are also 25 Local Wildlife Sites (LWS formerly known as Sites of Nature Conservation Importance SNCI) designated by the Northumberland Wildlife Trust within the district providing a variety of habitats of botanical, geological, ornithological and other wildlife interest. The sites include subsidence ponds, ancient grasslands, the remains of a salt marsh and an inter-tidal rocky outcrop. There are 7 Local Nature Reserves (LNR). In addition, the Council has established a voluntary marine nature reserve covering areas around St Mary's Island. The Council has also defined 23 sites of local nature conservation interest (SLCI) which are nevertheless significant in their local context. There is one RAMSAR site identified within the Borough. The **Ramsar** Convention on Wetlands of International Importance especially as Waterfowl Habitat is an international treaty for the conservation and sustainable use of wetlands. It is also known as the Convention on Wetlands. It is named after the city of **Ramsar** in Iran, where the Convention was signed in 1971.

This ecology will be taken into consideration when remediating sites. The land may have ecological value due to its past industrial use. The ecology could be so important as to outweigh any detriment caused by contamination and will not require remediation provided no unacceptable risk. For example, the poor soil quality created by the former spoil of colliery areas supports rare plant species that thrive in such conditions. It is envisaged that these areas should be preserved provided that there is no detriment being caused to the area.

3.4 Historic Uses and Geology influencing Contaminant Risk

The historic and current land use patterns will influence the likelihood and pattern of contamination present within the Borough.

A large proportion of contamination will be present along the River Tyne corridor due to its extensive use for heavy industry. The mining legacy of North Tyneside will have resulted in many coal referral areas requiring safeguards for new developments across the Borough. Mine water levels were observed to increase from 2009, mine water levels have been observed to be falling since 2016. This has been due to an

increased rate of pumping. If the pumping rates are decreased in the future then it is feasible that the mine waters may rise again and could still have impact on the Borough with regards to contamination.

The areas of Upper Permian Magnesian Limestone located at Tynemouth and Marden in Whitley Bay must be considered with regard to water pollution, as this particular geological sequence has been recognised as an aquifer. The ecology could be so important, however as to outweigh any detriment caused by contamination and will not require remediation provided that there is no unacceptable risk to human health or controlled waters.

3.4.1 Redevelopment History

Following the introduction of the 1947 Town and Planning Act, the planning system evolved from an ad hoc concern with issues of public health and urban social unrest to a comprehensive attempt to introduce order into the management of land use. It is planning legislation in association with the Government guidance that has enabled safeguards to be introduced on developments in the borough of North Tyneside.

Heavy industry and coal mining dominated the area from the 1800s through to the 1980s. Much of the area's industrial past was prior to any regulatory legislation and therefore pollution was not a consideration. Many landfill sites in the area were operated prior to the introduction of regulatory legislation such as the Control of Pollution Act 1974. Such pre licensed landfill sites are considered to pose a greater potential risk as there was no record kept of waste materials and the integrity of landfill sites may be less effective due to the lack of regulation.

Heavy industry was mainly located along the River Tyne and hence this area is likely to be an area with possible pollution problems. The standard of past remediation must be reviewed when considering the likelihood of a Contaminant Linkage as standards of remediation have improved as better understanding of contamination is known. The remediation will be considered during review of potentially contaminated land sites.

The former Tyne and Wear Development Corporation have redeveloped industrial land within the borough for housing such as the Royal Quays development site and appropriate remediation was carried out to ensure the development was fit for current housing use. The Council has completed the reclamation of Brenkley Colliery and associated waggonways in 1998 and the Blyth and Tyne railway land site at Tynemouth in 1993.

3.5 Authority Owned Land

The Authority owns approximately 30.24% of the land within the borough of North Tyneside. The majority of land is held within housing and environmental services who own many of the housing estates and recreational areas within the Borough. An internal procedure was agreed to ensure appropriate consultation with environmental health with regard to the suitability of the use of the council land. This consultation has been established for leases and sales of land.

Chapter 4

4.0 Current Contaminated Land Issues

4.1 Coal mining

Coal mining can act as a source or pathway to contaminants such as gas or leachate. It is therefore important to consider coal mining for any new developments in the borough. The Coal Authority is a Government body and a statutory consultee for planning. Interactive maps have been provided for local authorities and developers showing high risk and low risk areas within the Borough based on mining carried out in area. The risk rating is used to determine the appropriate levels of gas protection on new developments. More information on the Coal Referral areas can be found on the Coal Authority's website <http://coal.decc.gov.uk>

The coalfield is divided into 2 areas, referred to as Development High Risk Area and Development Low Risk Area:

- The High Risk Area (15% of the coalfield area) is where coal mining risks are present at shallow depth which are likely to affect new development;
- The Low Risk Area (85% of the coalfield) is where past coal mining activity has taken place at sufficient depth that it poses low risk to new development.

Any development within a Development High Risk Area requires a Coal Mining Risk Assessment to be submitted with the planning application.

The aim of a Coal Mining Risk Assessment is to identify site specific coal mining risks and set out the proposed mitigation strategy to show that the site can be made safe and stable for the development being proposed.

The National Planning Policy Framework 2019 requires Local Planning Authorities to:

- Give substantial weight to the value of using suitable brownfield land within settlements for homes and other identified needs, and support appropriate opportunities to remediate despoiled, degraded, derelict, contaminated or

unstable land.

Areas of the Borough affected by coal mining may have some of the following potential issues:

- Heavy metals;
- Some areas affected by Stythe gas;
- Elevated Polycyclic Aromatic Hydrocarbons (PAHs) related to coal source material;
- Spoil heaps on fire;
- Lagoons.

Stythe Gas (Blackdamp) can arise from coal mining and has the potential to cause land contamination. Stythe Gas has been identified in one area of the Borough and the Coal Authority as the responsible person remediated by a permanent venting system, thus breaking pathway to residential houses. Monitoring equipment with gas detection alarms were also fitted to the affected properties as a precautionary measure. At present no further areas of Blackdamp problems have been identified.

4.2 Quarrying

Quarrying is not a direct source of contamination; however, there is concern that the unknown materials used to backfill historic quarries could lead to the presence of contaminants. Prior to 1974 there was no regulation over landfilling of areas and as a result closed landfills and areas of unknown filled ground have the potential to contain methanogenic (gas producing) materials.

Chapter 5

5.0 Aims, Objectives and Milestones of the Strategy

5.1 Aims

The overall aim of this Strategy is to set out the procedure for identification and remediation of contaminated land to ensure that all land within the Borough is suitable for its current use.

The statutory Part 2A guidance requires a strategic inspection to prioritise sites in order of risk. This risk ranked prioritisation has been carried out within the Borough using a two tier, strategic and detailed, inspection method.

This strategy complies with the overarching objectives of the Government's policy on contaminated land, which are as follows:

- (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 are proportionate, manageable and compatible with the principles of sustainable development.

5.1.1 The Strategic Prioritisation of Contaminated Land Inspection

The Authority prioritised inspection of land in the original Strategy issued in 2001 by auditing the historical maps, geology and receptors to create a database and geographical information system of areas of potentially contaminated land using Environmental Consultants.

A total of 1,134 potentially contaminated sites were identified within North Tyneside.

Sites were accorded a Prioritisation Number (ranking methodology) reflecting the seriousness of any actual or potential risk to human health and/or the environment. These initial interim scores should not be considered to provide an absolute indication of risk but are a tool to help ascertain an initial indication of risk. The priority of inspection will be based in descending order of priority: -

- To protect human health;
- To protect controlled waters;
- To protect designated eco systems;
- To prevent damage to property and ancient monuments.

5.1.2 Detailed inspection and risk assessment

Detailed inspection of land is based on the preliminary risk categories and priority. The detailed inspection would be based on a comprehensive review of any planning or environmental information and a site walkover to determine likelihood of significant contaminant linkage based on the new government risk categories.

5.2 Objectives

Objectives of the Strategy are defined as follows:

- A systematic risk based approach to the inspection of contaminated land to ensure it is suitable for current use;
- To encourage voluntary remediation by good communication of risk strategy;
- To ensure the remediation of Orphan Sites;
- To utilise remediation via redevelopment or regeneration of Brownfield sites in the planning regime to minimise cost to taxpayer;
- To prevent further contamination by the use of other regulatory regimes such as the Environmental Damage (Prevention and Remediation) Regulations 2015, Building Regulations or Environmental Permitting Regulations 2016;
- To remediate by formal statutory means in a proportionate manner to ensure suitable for end use.

5.3 Milestones

The Authority carried out an audit of the borough in 2001 which identified a total of 1,134 potentially contaminated sites. Highest priority for detailed inspection was given to sites with human health risk and a number of landfill sites were investigated. The following progress has arisen:

- Proactive gas monitoring and maintenance on gas protection measures completed on two closed landfill sites to ensure acceptable level of risk;
- Remediation measures to the Low Flatworth landfill agreed as part of the Tyne Tunnel development ensured integrity of the landfill by an improved cap layer and gas venting trench;
- Intrusive investigation works completed on a number of potential contaminated sites and pollution incidents concluded with declaration statement that sites were not Part 2A sites.

No sites in North Tyneside have been formally identified as Contaminated Land and required to be placed on a Public Register. The Authority will continue to assess the landfills within the Borough with risk to human health as a priority for its strategic inspection.

Any complaint or enquiry about potential contamination of land will be investigated to determine the appropriate level of action required based on risk to human health.

5.4 Review of Strategic Inspection of Borough

The Authority carried out a strategic inspection of land in 2001. This entailed an audit of North Tyneside historical data, geology and current land uses to identify any potentially contaminated land. All current potentially contaminated land has been categorised and prioritised by risk assessment detailing the source, pathway and receptor of each contaminant. A Geographical Information System (GIS) is used and a Microsoft Access Database has been developed for data storage. This database holds information about the land quality within the Borough including remediation details and archived site investigation reports. The GIS incorporates historical maps, current land use maps, geological maps, groundwater vulnerability maps, and other

environmental information such as the location of closed landfill sites, water courses and their classifications.

The GIS has been used to identify potentially contaminative sources and risk-ranked these according to the Contaminant-Pathway-Receptor, 'Contaminant Linkage' methodology; and has prioritised these into four preliminary priority categories. PPC1 is the highest risk category and PPC4 is the lowest risk category. Currently the number of sub areas categorised are as follows: - 20 PPC 1, 903 PPC2, 225 PPC3 and 91 PPC4 categories. The PPC categorisation may alter as additional information becomes available through further investigation. These sites will be investigated further to reassess the priorities.

Preliminary Priority Category (PPC)	CLR 6 Part II Priority Category (PC) Definitions	Source	Pathway	Receptor (Target)
PPC1	<p>PC1</p> <ul style="list-style-type: none"> • Site probably or certainly not suitable for present use and environmental setting • Contaminants probably or certainly present and very likely to have an unacceptable impact on key targets • Urgent action needed in the short-term 	High contaminating Usage	High Permeability	Human, Groundwater, Surface Water

PPC2	<p>PC2</p> <ul style="list-style-type: none"> • Site may not be suitable for present use and environmental setting. • Contaminants probably or certainly present and likely to have an unacceptable impact on key targets • Action may be needed in the medium-term 	High-moderate contaminating usage	High-moderate permeability	Human, Groundwater, Surface Water
PPC3	<p>PC3</p> <ul style="list-style-type: none"> • Site considered suitable for present use and environmental setting • Contaminants may be present but unlikely to have an unacceptable impact on key targets • Action unlikely to be needed whilst site remains in present use or undisturbed 	Moderate-low contaminating usage	Moderate permeability	Human, Groundwater, Surface Water
PPC4	<p>PC4</p> <ul style="list-style-type: none"> • Site considered suitable for present use and environmental setting •Contaminants may be present but very likely to have an unacceptable impact on key targets • No action needed whilst site remains in present use or undisturbed 	Low contaminating usage	Low permeability	Human, Groundwater, Surface Water

Chapter 6

6.0 Contaminated Land Prevention Actions

Use of the contaminated land legislation should be a last resort. The Strategy sets out mechanisms available to prevent contamination. The Strategy endorses the 'polluter pays' principle and where possible places the onus on the polluter to remediate environmental damage. This is discussed in detail in chapter 9. The main method of prevention is by the planning regime to ensure new receptors are not created by changes of use.

6.1 Contaminated Land Actions Addressed at Planning

The National Planning Policy Framework (NPPF) identifies land contamination as a material consideration in planning and was reviewed in 2019. NPPF supports the initiative to achieve sustainable development. The NPPF requires that no development should lead to unacceptable risks from pollution and that it is suitable for its new use.

The local plan reflects the NPPF to ensure that any development is sustainable and suitable for its current use.

The planning regime ensures any applications that are submitted to the Authority are assessed on a site by site basis to ensure the land is rendered suitable for its proposed use and on surrounding area by the applying of appropriate conditions. This land would require further assessment if there was any further change in land use.

The Contaminated Land Officer is consulted on all developments that may be affected by potential contamination. Procedures have been set up with the planning department regarding the consultation process. The Authority website has information available for developers regarding planning requirements and discharge of conditions advice for land contamination issues. This can be found on both the Planning Portal and the Environmental Health web pages.

6.2 Prevention of Future Land Contamination

The creation of newly contaminated land can easily occur due to a pollution incident, or unforeseen contamination. Such pollution incidents would be investigated to determine appropriate action to be taken. Part 2A cannot be used to prevent future contamination.

There is legislation in place to regulate industrial processes and places the responsibility on the company in charge of the process to prevent contamination. These powers are available to minimise risk of pollution incidents from industries, particularly with regard to landfill sites and large industrial processes. The Environmental Permitting (England Wales) Regulations 2016 as amended place an obligation on large industries in the event of the process ceasing; to submit surrender documents providing evidence that the land is the same quality as found prior to the process.

Methods of prevention can therefore be achieved via the following means;

- Planning control system;
- Integrated Pollution Prevention and Control (IPPC);
- Industrial Emissions Directive (2010/75/EU);
- European Commission Guidance concerning baseline reports under Article 22(2) of the Industrial Emissions Directive
- Landfill (England and Wales) Regulations 2002;
- Environment Agency Liaison;
- Environmental Protection Act 1990;
- Water Resources Act 1991;
- Environmental Damage (Protection and Remediation) (England) Regulations 2016 and as amended 2018;
- Building Regulations
- Communication and consultation between relevant council functions.

The use of Legislation to prevent land contamination is discussed further in Chapter 9 - Mechanisms to Deal with Contaminated Land.

Chapter 7

7.0 Priority of Contaminated Land Actions and Review of Time-Scales

7.1 Detailed Inspection Priority

The Authority is carrying out detailed inspection of its land in accordance with Part 2A. The detailed inspection of an area is carried out in accordance with its risk ranking. This risk ranking is a number based upon prioritisation, with greater priority given to human health.

7.2 Complaint/Pollution Incident Investigation

With any sites that come to light as an emergency site or as a complaint the Authority will ensure that they will take priority with regards to initial assessment and until they are no longer deemed a threat to human health.

7.3 Risk Based Inspection

During the strategic review of land detailed, investigations will be carried out based on the preliminary risk rating categories (PRRCs); as discussed in section 5.4 of Chapter 5. It is the Authority's policy to give a higher weighting to the risks posed to human health, and therefore priority will be given in the first instance to known landfill or unknown filled ground.

There are a number of former landfill sites identified within the Borough. It is believed that the majority of these sites were created before the 1974 Control of Pollution Act; legislation that improved regulation and control of landfill. Pre-1974 landfill sites were not restricted in the type of fill and their design was less effective against pollution migration. Due to this lack of regulation it is recognised that there may be an increased potential for gas generating material to have been deposited into sites. Such pre-1974 landfill sites close to residential houses and schools are considered to have the greatest potential of gas migration and to affect a large number of people and properties. The Strategy therefore has identified pre-1974 landfill sites as priority

for further investigation and review.

7.4 Priority Contaminated Land Actions

The actions required by the Authority on completion of site investigation have been clarified in the revised Part 2A Contaminated Land Statutory Guidance (April 2012). This guidance stipulates that on completion of the detailed site investigation, risk communication must occur. This can either be in the form of a Written Statement if the land investigated is not deemed contaminated land, or if there is considered an issue, a Risk Summary would be provided. It is preferable that remediation be carried out on a voluntary basis; however, this may not always be possible. When a voluntary approach cannot be agreed then formal action will be taken to ensure remediation is carried out.

The main priority of the Authority's Contaminated Land Strategy, therefore, is to:

- Prioritise potentially contaminated sites in an ordered, rational and efficient manner;
- Carry out detailed site investigation in a staged approach initially via a desk top study and a site walkover. If after review of the data collected it is considered that further detailed information is required, then a Phase 2 detailed inspection will be carried out in accordance with BS 5930:1999+A2:2010 Code of Practice for Site Investigations and BS 10175:2011+A2:2017, Code of Practice for The Investigation of Potentially Contaminated Sites;
- Communicate with other regulatory bodies and appropriate persons affected by the investigation, or the significant contaminant linkage to ensure that all available information is gathered;
- Utilise other legislation where appropriate to prevent or remediate contamination. Such legislation includes The Water Resources Act 1991, The Water Resources Act 1991 (Amendment) (England and Wales) Regulations 2009, Environmental Permitting (England and Wales) Regulations 2016, Environmental Permitting (England and Wales) Regulations 2018 (As Amended) and the Environmental Protection Act 1990;

- Upon completion of the site investigation a Written Statement will be issued if no further action is needed. However, a Risk Summary will be produced to the appropriate persons connected to land potentially affected by contamination and other interested parties. This is a new requirement created by the revised Guidance;
- Ensure the working database of information collected from a variety of sources is continually updated and reviewed;
- Take action where required to prevent or remediate significant harm or the significant possibility of significant harm to human health, ecology, animals and the environment.

7.5 Site Investigation

The decision to carry out further site investigations is based upon a risk assessment of all information collated. This allows for sites to be prioritised and actioned accordingly. The assessment of an individual site is a phased process.

7.5.1 Desk study reports

Phase One desk study reports will be carried out to obtain more detailed site specific information. This will include a review of information held by other departments within the Authority, for example planning or building control records and other publicly available sources of information including the Coal Authority and the British Geological Survey. A review of information held will occur in light of new guidance values or standards, or if there is a change of current land use.

7.5.2 Site Inspections

Site inspections would include site walkovers to confirm the current site use and to determine if there is any visual olfactory evidence of contamination present. This would aid in the assessment of whether there is a Contaminant Linkage present. If further investigation is warranted, then the extent of the site investigation would be determined either by the Authority or an externally appointed environmental consultant. Prior to this intrusive investigation, risk communication would be issued

to appropriate persons affected by potential contaminant linkage.

7.5.3 Preliminary Site investigation

Small scale sampling of a site may be the first phase of an investigation to target areas based on a Phase One report; this may in turn lead to a more in-depth investigation of a site, depending on the results of the initial small scale investigation. The risk would be continually reviewed to determine action required.

7.6 Production of Risk Summaries

If land is considered to be contaminated land in accordance with Part 2A, the Authority will; prior to determination as per the Statutory Guidance 2012, “*produce a risk summary for any land where, on the basis of its risk assessment, the authority considers it is likely that the land in question may be determined as contaminated land.*” This will set out the reasoning behind the Authority’s decision to determine the land as contaminated land under Part 2A. This will include a description of the risks and other factors the authority considers to be relevant in formulating the decision to designate the land that is under assessment.

7.7 Written Statements

The revised Part 2A guidance requires the local authority following completion of investigation, to produce a Written Statement for land if it is found that the land does not require remediation. This is to remove uncertainty and blight of land. The Authority will produce a Written Statement for land not considered contaminated land following completion of an investigation. It will lay out the rationale as to why the Authority has decided not to designate the land. This decision will be based on the current use and should a significant change of use be proposed, then the written statement may no longer be valid for that site and the site would then be reassessed accordingly.

7.8 Initiate/Support Voluntary Remediation

The Strategy encourages the appropriate persons to carry out voluntary remediation. Any sites designated as contaminated under the legal definition would be remediated to a standard required for the current use to prevent a contaminant linkage. North Tyneside has currently one industrial site that has undergone Voluntary Remediation.

7.9 Determination of Contaminated Land

The decision to designate land as contaminated under Part 2A of the Environmental Protection Act 1990 lies with the Authority. The Authority may take advice from other bodies (i.e. The Environment Agency) or other suitably qualified practitioners.

The revised Contaminated Land Guidance outlines four possible grounds for the determination of land as contaminated land:

- (a) Significant harm is being caused to a human or relevant non-human, receptor;
- (b) There is a significant possibility of significant harm being caused to a human, or relevant non-human, receptor;
- (c) Significant pollution of controlled waters is being caused;
- (d) There is a significant possibility of significant pollution of controlled waters being caused.

Once land has been determined as contaminated land, the Authority will serve a Determination Notice upon the appropriate persons. The Determination Notice will be placed upon a Public Register and will include information on the decision process and as a minimum will include the following:

- Outline of the contaminated land area on a plan;
- Risk summaries, explaining each contaminant linkage risk, its uncertainty, its timescale over which the risk becomes manifest, together with a conceptual site model, photographs, plans, cross sections and tables required to show how the decision was made;
- A summary as to why the Authority considers Section 1 of the Contaminated

Land Statutory Guidance (April 2012) has been met.

7.10 Service of Remediation Notices

If a site has been determined as being contaminated under Part 2A, the Authority will issue a Remediation Notice. The Remediation Notice will be served after a 3 month consultation period from the serving of a Determination Notice. Prior to determination, the Authority will issue a risk summary explaining why the land is considered contaminated and briefly describe the remediation required. If after consultation with the appropriate persons Voluntary Remediation cannot be agreed or additional information has not been provided to that would require a review of the determination notice, the lead regulator for Part 2A will issue a Remediation Notice to the appropriate person. If Voluntary Remediation is agreed the Appropriate Person shall issue a Remediation Statement to the lead regulator. The identification of an Appropriate Person would follow the criteria set down in the current guidance (April 2012); explanatory leaflets on Appropriate Persons A and B can be found on the Authority's Environmental Health web page. The Remediation Notice will provide details of the remediation required.

The Authority when issuing the Remediation Notice will decide on the appropriate Remediation Strategy. The enforcing authority may consult relevant technical documents (e.g. produced by the Environment Agency or other professional and technical organisations). It may also act on the advice of a suitably qualified experienced practitioner.

7.11 Dealing with Emergency Sites

Sites identified as an emergency site where the contamination is deemed to be an imminent risk to health, or those sites highlighted through the Authority's complaints process will take priority with regards to the initial assessment and until such time they are no longer deemed an imminent threat to human health.

7.12 Funding

The Authority requires a budget for detailed site investigation work and is responsible for costs arising from orphan sites. An orphan site is one in which the person liable for site contamination cannot be reasonably identified or when a liable person is identifiable but is deemed in law not to have the capacity to carry out or meet the costs of assessment, remediation or mitigation required. The cost for intrusive site investigation is borne by the Authority. There is a duty on the Authority to remediate contaminated land and the cost of remediation would be placed upon the polluter or owner. The burden of remediation would be placed upon the Authority when site was an orphan site as no polluter can be found or the cost is too great for the owner. There is no longer specific grant funding for remediation of land available.

7.13 Timescales

Timescales for the implementation of the original Strategy have been reviewed and additional tasks with expected timescales are set out in Table labelled Work Program. The table shows that the strategic inspection and audit of North Tyneside land was completed to give a priority scoring system for inspection. The detailed inspection of land is now ongoing dependent upon the number and complexity of contaminant linkages.

Table: Work Programme

Task	Objective	Progress	New Target
Completion of Preliminary Priority Categorisation Within North Tyneside	To identify from historical data the potentially contaminated land areas within the borough.	Achieved June 2001	Update status of sites will be identified through planning regime.
Detailed Desk Top Study to Prioritise and Risk Assess land	To review risk rating and priority based on site specific data.	Achieved June 2001 to March 2003	This will be carried out as required.
Site Inspections (including walkover surveys) and Site Investigations Where Necessary	To ensure that there is sufficient information to determine whether the land is contaminated under Part 2A of the Environmental Protection Act 1990.	There have been 3 site investigations between 2014 and 2018. The investigations arose as follows: Site investigation carried out at petrol station and concern over potential contamination into an allotment from a drainage pipe. Testing showed no elevated contaminants. Site investigation was undertaken about a former closed landfill site to consider potential contaminants leaching into residential gardens.	Site investigations will be carried out as required.

Task	Objective	Progress	New Target
		<p>Assessment of sampling concluded that the gardens were suitable for current use and were not determined as Contaminated Land. Site investigation was carried out to evaluate white discharge next to the wagon way onto a field. Testing showed no elevated contaminants.</p>	
<p>Risk Summary: Designated Contaminated land</p>	<p>To clarify the risk for the contaminant linkages and local authority opinion that it is likely to be determined as Contaminated Land formal consultation will occur. To encourage remediation and avoid need for Determination Notice.</p>	<p>Formal consultations to owners, occupants and person with interest to land have been made to relevant persons when further site investigation is considered. There have been 3 areas of land that have required such consultation. There has been no necessity to make formal determination of contaminated land. Formal consultation will be required prior to Formal determination of land and within 21 days from site investigation conclusion.</p>	<p>This will be carried out as required</p>
<p>Voluntary Action</p>	<p>To avoid the need to serve a statutory notice and work in</p>	<p>There has been no voluntary remediation carried out via the formal contaminated land</p>	<p>Advice and support for voluntary remediation</p>

Task	Objective	Progress	New Target
	partnership with polluters or owner/occupiers to attain a suitable standard of remediation.	legislation. This is available for any interested party to prevent determination as contaminated land. Remediation would need to be commenced within 7 working days of notification of designation as contaminated land or prior to determination.	will be carried out. as requested.
To Serve Remediation Notices, When Required	When voluntary remediation is not carried out within a specified time limit a Remediation Notice will be served to ensure that a suitable remediation standard is achieved.	No remediation notices have been served. Remediation Notice will be served at the end of a 3 month consultation period, starting from the date of determination that land is contaminated land.	This will be carried out as required
To Remediate Land Designated as Contaminated Land Under Part IIA	To ensure the protection of human health and the environment.	No formal remediation has been required. This would arise at the end of the Remediation Notice consultation period	This will be carried out as required
To Produce Written Statements if no further action required	The statement should make clear that on the basis of its assessment and current use, the authority has concluded that the land does not	There have been 3 written statements produced relating to residential properties adjacent to a landfill and Earsdon Waggon Way clarifying the lands suitability for use.	This will be carried out as required.

Task	Objective	Progress	New Target
	meet the definition of contaminated land under Part 2A.		
To Deal With Urgent Sites	To ensure that all sites requiring urgent remediation measures are attended to as soon as is possible after their identification.	No urgent remediation measures have been required. Urgent remediation measures would commence within 5 working days of notification.	This will be carried out as required.
To respond to Planning Consultation	To ensure end use is suitable for the land and surrounding area.	Approximately 500 Planning consultations received annually.	To respond to planning applications and review discharge conditions relevant to contaminated land.

7.14 Contaminated Land Strategy Review

The Authority has a duty to review its Contaminated Land Strategy from time to time. The process of strategy review will occur every five years.

The purpose of a review is to ensure priority is continually given to the highest risks. Procedures for inspection are based on the highest priority first. Risk is based on its potential to cause harm. Potential harm is graded accordingly from human receptor, controlled water, ecology to building.

Chapter 8

8.0 Communication Strategies

Contaminated land is a sensitive issue and it is important that a comprehensive risk communication strategy is in place. This will allow the risk associated with a contaminant linkage and the timescale over which it is envisioned harm or pollution will occur to be communicated in a clear and concise manner.

The Strategy must be issued for consultation to show the procedures for site investigation and methods of dealing with sites that are deemed contaminated under the legal definition.

8.1 Statutory Consultees

The Authority has consulted internally and externally on the Contaminated Land Strategy. Details of the consultees are given in Appendix 2.

8.2 Non-statutory Consultees

The Strategy is available for the general public of North Tyneside via the Authority's website so that all procedures are transparent. The general public are invited to comment on the Contaminated Land Strategy.

8.3 Communicating with appropriate persons, owner/occupiers

The Authority will seek to gain Voluntary Remediation for those sites that are determined as Contaminated Land under Part 2A of the Environmental Protection Act 1990. Voluntary action can reduce tax payer costs and may achieve a standard of remediation equal to, or better than, what the authority would otherwise have specified in a Remediation Notice.

The opportunity for Voluntary Remediation will be provided when issuing the risk summary prior to determination. If Voluntary Remediation within a reasonable

timescale can be obtained, it will not be necessary to determine the land as contaminated land and it would not be placed on the register. Hence Remediation Notices will only be served when no voluntary action can be agreed, or voluntary action fails to be undertaken within the stipulated timescales.

In order for voluntary action to take place and be effective, it is important to communicate with the 'Appropriate Person', the 'Owner(s)/Occupier(s)' if different to the appropriate person, and other interested parties. The Environmental Health Team is the appropriate Authority point of contact for all issues regarding Contaminated Land. These Officers will endeavour to keep all interested parties up to date on investigation works as they proceed.

8.4 Risk Communication

The use of a risk based approach to the identification and management of contaminated land provides a consistent and defensible basis for considering uncertainties, discussing options and making informed decisions on the level of remediation required. It ensures the remediation is proportionate to risk. This approach utilises both risk assessment (the identification, estimation and evaluation of risk) and risk management (evaluation and selection of suitable remedial measures). It is important to ascertain effective risk communication to all interested parties (including identified appropriate persons and any persons affected by the contaminated land in question) throughout the process of risk assessment and risk management.

The aim of the contaminated land regime is to ensure the polluter pays. The communication of risk allows all parties with an interest in the land to understand its short term and long term risk.

The Authority has provided information on its website on the main issues relating to the contaminated land. This includes the following:

- What Contaminated Land Means for You;
- Owner/Occupier Responsibilities and Liability as Appropriate Person;

- Leaflet on Voluntary Remediation, Remediation Notices and the Public Register;
- Specific Details on why the Land appears to be contaminated;
- Whether or not the impact is immediate and irreversible;
- Whether or not the individual(s) or communities affected can exercise a degree of control over exposure.

All of these factors should be taken into account when communicating with all interested parties regarding contaminated land issues.

The most effective communication is a two-way process that respects the views of all participants. When communicating with any party regarding contaminated land issues the Authority will endeavour to:

- Be clear and consistent;
- Present all information in a simple visual way;
- The council will invite feedback on the issues raised.

The contaminated land regime grants powers to the Authority to deal with materials present in, on or under the land and contaminated land is only designated under the legal definition discussed in section 1.4.

Chapter 9

9.0 Mechanisms to deal with Contaminated Land

Enforcing authorities should seek to use Part 2A only where no appropriate alternative solution exists. The Part 2A regime is one of several ways in which land contamination can be addressed.

The Authority will endeavour to use alternative measures to deal with land contamination before it is deemed necessary to take action under Part 2A of the Environmental Protection Act 1990. These are discussed in the following sections.

9.1 Voluntary Action

The Authority will seek to minimise unnecessary burdens on the taxpayer, businesses and individuals. The Authority will encourage voluntary action to deal with land contamination issues. The level of remediation must be proportionate to potential exposure and harm caused by the contaminant. This risk will be influenced by its current end use and potential exposure to contaminants. A Risk Statement would be issued by the Authority to the Appropriate Person(s). This statement would identify contaminant risk, the uncertainties of risk, and its effect with time as well as providing methods to remediate.

It is important that those responsible for causing contaminated land understand the impacts a contaminant linkage will have. The Authority encourages Voluntary Remediation and will support those responsible for causing a Contaminant Linkage in recognising the potential risk and harm that may result. The Authority will advise on remediation to encourage Voluntary Remediation. The borough of North Tyneside has one industrial site that has undergone Voluntary Remediation.

9.2 Planning Regime

Land contamination can be addressed when land is developed (or redeveloped) under the planning system.

The National Planning Policy Framework 2019 (NPPF) identifies contaminated land as a material consideration in planning decisions. Development must be sustainable, and the planning regime encourages the effective use of land by reusing land that has been previously developed (brownfield land), provided that it is not of high environmental value.

The sections 170,178 and 179 of the National Planning Policy Framework sets out the position on contaminated land as follows:

- Section 170 (e) of the NPPF indicates planning policies and decisions should contribute to and enhance the natural and local environment by preventing new and existing development from contributing to, being put at unacceptable risk from, or being adversely affected by, unacceptable levels of soil, air, water or noise pollution or land instability.
- Section 178 of the NPPF indicates planning policies and decisions should ensure that:
 - a) a site is suitable for its proposed use taking account of ground conditions and any risks arising from land instability and contamination. This includes risks arising from natural hazards or former activities such as mining, and any proposals for mitigation including land remediation (as well as potential impacts on the natural environment arising from that remediation);
 - b) after remediation, as a minimum, land should not be capable of being determined as contaminated land under Part 2A of the Environmental Protection Act 1990; and
 - c) adequate site investigation information, prepared by a competent person, is available to inform these assessments.

- Section 179 of the NPPF indicates that:

Where a site is affected by contamination or land stability issues, the responsibility rests with the developer and/or landowner.

The planning regime allows the remediation of land contamination and protects against the creation of contaminated land.

The North Tyneside Local Plan adopted July 2017 sets out the Authority's position on contamination as follows:

'DM5.18 Contaminated and Unstable Land

Where the future users or occupiers of a development would be affected by contamination or stability issues, or where contamination may present a risk to the water environment, proposals must be accompanied by a report which:

- a. Shows that investigations have been carried out to assess the nature and extent of contamination or stability issues and the possible effect it may have on the development and its future users, biodiversity, the natural and built environment; and
- b. Sets out detailed measures to allow the development to go ahead safely and without adverse effect, including, as appropriate:
 - i. Removing the contamination;
 - ii. Treating the contamination;
 - iii. Protecting and/or separating the development from the effects of the contamination;
 - iv. Validation of mitigation measures; and
 - v. Addressing land stability issues.

Where measures are needed to allow the development to go ahead safely and without adverse effect, these will be required as a condition of any planning permission.'

The Coal Authority and the Environment Agency are statutory consultees and the Authority's Contaminated Land Officer; as a material consideration; will give recommendation and conditions based on the information provided with the planning application and the proposed end use.

The developer must therefore provide appropriate levels of information to allow the consultee to make an informed decision. Pre-planning advice on contaminated land issues are provided on the Environmental Health pages of the Authority's website.

Planning policies and validation systems ensure that the proposed development is made suitable for its new use. The Contaminated Land Officer will take into account ground conditions and land instability (including from natural hazards or former activities such as mining), pollution arising from previous land use and any proposals for mitigation including land remediation or impacts on the natural environment arising from that remediation. The applicant must provide adequate site investigation information, prepared by a competent person and for the discharge of conditions will be required to provide a remediation statement and validation report. This will ensure the land is suitable for use and cannot be deemed a Part 2A site.

9.3 Building Regulations

The Building Regulations sets the standards that buildings must be constructed to and they lay down health and safety standards for the construction of all types of building work, including new build, extensions, internal alterations, underpinning, cavity wall insulation and change of use. The regulations provide another tool to ensure adequate internal protection of buildings against shallow mine gas or landfill gas.

9.4 Environmental Damage Regulations

The Environmental Damage (Prevention and Remediation) Regulations came into force in England on 1 March 2009 and were updated and amended in 2015 by The Environmental Damage (Prevention and Remediation) (England) Regulations 2015 and Environmental Damage (Prevention and Remediation) (England) (Amendment)

Regulations 2015. The Regulations are based on the 'polluter pays principle' so those responsible prevent and remedy environmental damage, rather than the taxpayer paying and are only applicable to commercial concerns.

9.5 Environmental Permitting Regulations

Some facilities could harm the environment or human health unless they are controlled. The Environmental Permitting Regime requires operators to obtain permits for some facilities, to register others as exempt and provides for ongoing supervision by regulators. The aim of the regime is to:

- Protect the environment so that Statutory and Government policy environmental targets and outcomes are achieved;
- Deliver permitting and compliance with permits and certain environmental targets effectively and efficiently in a way that provides increased clarity and minimises the administrative burden on both the regulator and the operators;
- Encourage regulators to promote best practice in the operation of facilities;
- Continue to fully implement European legislation.

Chapter 10

10.0 Information Management

The status of land within the borough of North Tyneside will be reviewed as additional data is obtained via the planning regime and commissioned site investigation work. A data management system is in place to allow for the continuous review of the allocated risk priority of sites and to prevent blight of land. This information is currently stored via a number of sources and is linked to the contaminated land software. This system is currently being reviewed and updated.

10.1 Data Storage and Accessibility

The Authority uses a computerised Geographical Information System (GIS) and Microsoft Access Database system to store the data in relation to land contamination. It should be noted that this system is a working document and it will be constantly changing with data being updated as new information becomes available.

10.2 Internal Responsibility for Data Management

Within the Authority it is the responsibility of the Contaminated Land Officer, based within Environmental Health, for data management.

10.3 Internal Access to Information

Information highlighting possible areas of reduced land quality has been passed to the Planning, Building Control and evaluation areas of the Authority to ensure that the Pollution Control Team is consulted on any development and planning issues within 250m of these areas.

The GIS/MS Access Database is a working document and as such is a draft document. The initial preliminary categorisation of contaminated sub areas is based upon the limitations of digitised data. The digitised data does not take into account

any remediation or intrusive site investigations which may have been carried out via planning conditions. As desk top studies are carried out the data will be updated but may be insufficient to make a written statement. Information held within this system will therefore be treated as confidential.

Some of the data within the system, such as the Historical Ordnance Survey Maps and the British Geological Society Maps, are the subject of copyright restrictions and as such cannot be issued or copied to any third parties.

10.4 Public Access to Information

The public will have free access to the public register. The Authority will ensure full compliance with the access provisions contained in the Environmental Information Regulations 2004 (or as subsequently amended or replaced).

10.5 Register Information

Under section 78R (1) of the Environmental Protection Act 1990 the Authority has a duty to maintain a public register of all land that has been determined as contaminated and subsequently remediated. A current copy of the Contaminated Land Register and contents is provided in Appendix 3.

All information held on the public register will be held in accordance with the confidentiality provisions set out in s.78S and s.78T of the Environmental Protection Act 1990.

The register will also include information about the condition of the land in question. The register will contain details of contaminated land within North Tyneside or contaminated land in adjoining councils when the land is adjacent to the Borough boundary. A copy of any register entries held by these adjoining authorities will be included on the Authority's Register. The register will be held at the following location and will be available for viewing during working hours by appointment only between 9am – 5pm Monday to Thursday and 9am – 4.30pm Friday excluding Bank Holidays:-

North Tyneside Council
Quadrant West
The Silverlink North
Cobalt Business Park
North Tyneside
NE27 0QQ

Contact: Environmental Health on 0191 643 6100 (working hours only).

Members of the public are entitled to free inspection of the Register. The register is also available on the North Tyneside Council website.

[North Tyneside Council Contaminated Land Register](#)

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Glossary of Terms

Appropriate Person(s): any person(s) who have been identified as being responsible for anything which is to be done by way of remediation.

Attribution: the process of apportionment between liability groups.

Charging Notice: a notice placing legal charge on land determined as contaminated by an enforcing authority to enable the authority to recover from the appropriate person any reasonable cost incurred by the authority in carrying out remediation.

Class A liability group: a liability group consisting of one or more Class A persons.

Class A persons: a person who has caused or knowingly permitted a pollutant to be in, on or under the land.

Class B liability group: a liability group consisting of one or more Class B persons.

Class B person: a person who is the owner or occupier of the land in circumstances where no Class A person can be found with respect to a particular remediation action.

Contaminant: a substance which is in, on or under the land and which has the potential to cause harm or to cause pollution of controlled waters.

Contaminated Land: "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."

Contaminant Linkage: the relationship between a contaminant, a pathway and a receptor.

Controlled Waters: Defined by reference to Part III of the Water Resources Act 1991 (Amendment) (England and Wales) Regulations 2009, this embraces territorial and coastal waters, inland fresh waters, and ground waters.

Current use: any use of the land which is currently being made, or is likely to be made, of the land.

Enforcing Authority:

- a) in relation to a Special Site, it is the Environment Agency;
- b) in relation to contaminated land other than a Special Site, the local authority in whose area it is situated.

Harm: "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".

Intrusive Investigation: an investigation of land (for example by exploratory excavations) which involves actions going beyond simple visual inspection of the land, limited sampling or assessment of documentary information.

Liability Group: the persons who are appropriate persons with respect to a particular significant pollutant linkage.

Orphan Linkage: a significant pollutant linkage for which no appropriate person can be found, or where those who would otherwise be liable are exempted by one of the relevant statutory provisions.

Owner: "A person (other than a mortgagee not in possession) who, whether in his own right or as trustee for any other person, is entitled to receive the rack rent of the land, or where the land is not let at a rack rent, would be so entitled if it were so let."

Part 2A: Part 2A of the Environmental Protection Act 1990.

Pathway: one or more routes or means by, or through, which a receptor:

- a) is being exposed to, or affected by, a contaminant; or
- b) could be so exposed or affected.

Pollutant: a contaminant which forms part of a pollutant linkage

Pollution of Controlled Waters: "the entry into controlled waters of any poisonous, noxious or polluting matter or any solid waste matter."

Polycyclic Aromatic Hydrocarbons(PAH): PAHs are one of the most widespread organic pollutants. They are present in fossil fuels and are also formed by incomplete combustion of carbon-containing fuels such as wood, coal, diesel, fat, tobacco, and incense.

Possibility of Significant Harm: a measure of the probability, or frequency, of the occurrence of circumstances which would lead to significant harm being caused.

RAMSAR: Ramsar sites are wetlands of international importance, designated under the Ramsar Convention. The Ramsar Convention is an international agreement signed in Ramsar, Iran, in 1971, which provides for the conservation and good use of wetlands. The UK Government ratified the Convention and designated the first Ramsar sites in 1976.

Receptor: either:

- a) a living organism, a group of living organisms, an ecological system or a piece of property which:
 - i) is in category listed in Table A within Appendix 5 of this document; and
 - ii) is being, or could be, harmed, by a contaminant; or
- b) controlled waters which are being, or could be, polluted by a contaminant.

Register: the public register maintained by the enforcing authority including details of the formally designated contaminated sites and any remediation actions carried out.

Remediation:

- a) the doing of anything for the purpose of assessing the condition of -
 - i) the contaminated land in question;
 - ii) any controlled waters affected by that land; or
 - iii) any land adjoining or adjacent to that land.

- b) the doing of any works, the carrying out of any operations or the taking of any steps in relation to any such land or waters for the purpose -
 - i) of preventing or minimising, or remedying or mitigating the effects of any significant harm, or any pollution of controlled waters, by reason of which the contaminated land is such land; or
 - ii) of restoring the land or waters to their former state; or

- c) the making of subsequent inspections from time to time for the purpose of keeping under review the condition of the land or waters."

Remediation Action: any individual thing which is being, or is to be, done by way of remediation.

Remediation Notice: a notice specifying what an appropriate person is to do by way of remediation and the periods within which he is required to do each of the things so specified.

Remediation Package: the full set or sequence of remediation actions, within a remediation scheme, which are referable to a particular significant pollutant linkage.

Remediation Scheme: the complete set or sequence of remediation actions (referable to one or more significant pollutant linkages) to be carried out with respect to the relevant land or waters.

Remediation Statement: a statement prepared and published by the responsible person detailing the remediation actions which are being, have been or are expected to be, done as well as the periods within which these things are being done.

Risk: the combination of:

- a) the probability, or the frequency, of occurrence of a defined hazard (for example exposure to a property of a substance with the potential to cause harm); and
- b) the magnitude (including the seriousness) of the consequences.

Significant Harm: any harm which is determined to be significant in accordance with the statutory guidance in Chapter A (that is, it meets one of the descriptions of types of harm in the second column of Table A within Appendix 5 of this document).

Significant Pollutant: a pollutant which forms part of a significant pollutant linkage.

Significant Pollution Linkage: a pollutant linkage which forms the basis for a determination that a piece of land is contaminated land.

Significant Possibility of Significant Harm: a possibility of significant harm being caused which is determined to be significant in accordance with the statutory guidance in Chapter A.

Shared Action: a remediation action which is referable to the significant pollutant in more than one significant pollutant linkage.

Single-linkage Action: a remediation action which is referable solely to the significant pollutant in a single significant pollutant linkage.

Special Site: any contaminated land that has been designated as such, by reason of the contaminants within it. The effect of the designation of any contaminated land as a special site is that the Environment Agency, rather than the local authority, becomes the enforcing authority for the land.

A site where the contamination is such that the Environment Agency has become the enforcing authority for the purposes of Part 2A of the Environmental Protection Act 1990.

Substance: any natural or artificial substance, whether in solid or liquid form in the form of a gas or vapour.

Suitable for Use: This describes the requirement for the use of a piece of land to be suitable for the level of contaminants present within the land. An example of this is that a higher level of contaminants is acceptable in, on or under the land if the land is to be used a hardstanding car park, than if it were to be used for an area of garden.

Appendix 1

Definition of Special Sites

Special sites are areas of contaminated land under Part 2A of the Environmental Protection Act 1990 for which the Environment Agency, and not the local authority, are the main regulator. This means it is the Environment Agency's responsibility to ensure the appropriate remediation is carried out.

Special sites are not necessarily the most seriously contaminated sites.

There are four main categories of special site described in the regulations:

- some water pollution cases – includes areas of contaminated land affecting drinking water supply or (potentially) polluting controlled waters within a major aquifer;
- industrial cases – includes specific circumstances such as acid tar lagoons, sites where explosives were manufactured, or a site for an authorised process under the Environmental Permitting (England and Wales) Regulations and its predecessor regimes;
- defence cases;
- radioactivity cases – where land is contaminated land by virtue of radioactivity which can include nuclear sites.

1 Water pollution – sites where:

- drinking water supplies are affected;
- water quality criteria are affected;
- listed substances are affecting defined aquifers.

2 Industrial land use – sites with:

- waste acid tar lagoons;
- petroleum refineries;
- explosives manufacture or processing;
- authorised processes (for example Integrated Pollution Control sites, Pollution Prevention and Control sites and Environmental Permitting Regime sites);

- nuclear sites.

3 Defence

- land currently owned or occupied by the Ministry of Defence and those of visiting forces;
- chemical weapons or biological agents manufacture, processing or disposal.

4 Radioactivity

- land affected by radioactivity from any substances.

(Dealing with Contaminated Land in England and Wales, 2009, Environment Agency)

Appendix 2

Relevant statutory bodies that have regulatory function in contaminated land and have been consulted

Environment Agency

Groundwater and Contaminated Land Team
Environment Agency
Tyneside House
Skinnerburn Road
Newcastle Business Park
Newcastle upon Tyne
NE4 7AR

Natural England,

North East Region
The Quadrant,
Newburn Riverside,
Newcastle upon Tyne,
NE15 8NZ

Newcastle City Council

Environmental Protection
Civic Centre
Barras Bridge
Newcastle upon Tyne
NE99 1RD

Northumberland Council

Environmental Health
County Hall
Morpeth
Northumberland
NE61 2EF

North Tyneside Council Public Health Team

Wendy Burke
Director of Public Health
Quadrant Third Floor Right
Cobalt Business Park
North Shields
NE27 0BY

Public Health England

North East PHE Centre
Centre Director
Floor 2 Citygate
Gallowgate
Newcastle-upon-Tyne
NE1 4WH

South Tyneside Council

Environmental Health
Town Hall & Civic Offices,
Westoe Road
South Shields
Tyne & Wear
NE33 2RL

Consultation was undertaken using the Engagement Hub as a means of publicising the strategy. All comments were made to the environmental health email address and coordinated by Environment Health.

Appendix 3

Contaminated Land Register

Each enforcing authority has a duty to maintain a Register in accordance with the public register provision of section 78R (1) of the Environmental Protection Act 1990.

Before any information is included on the register the authority must consider whether that information should be excluded on the basis that:

- a) its inclusion would be against the interests of national security; or
- b) the information is commercially confidential.

The register will include details of the following:

- remediation notices which have been served;
- appeals against remediation notices and the appeal outcomes;
- remediation declarations;
- remediation statements;
- appeals against charging notices;
- designation of special sites;
- notification of claimed remediation;
- convictions under Section 78M of the Environmental Protection Act 1990 (removed when conviction spent);
- Guidance issued under Section 78V(1) of the Environmental Protection Act 1990;
- Other environmental controls - cases where Section 78YB of the Environmental Protection Act 1990 prohibits a remediation notice being served;
- Environment Agency site specific advice;
- site information.

Where land is determined as being a special site then the register will also include:

- the notice designating it a special site;
- an identification of the description of land under which it is a special site;

- any notice given by the appropriate Agency of its decision to adopt a remediation notice;
- any notice given by or to the enforcing authority terminating the designation of the site as a special site;
- the date of any site specific guidance issued by the Environment Agency (Site specific guidance for special sites may be required to be publicly available under the Environmental Information Regulations 1992 as amended 2004).

Currently no sites within the borough of North Tyneside have been legally determined as contaminated land.

The Contaminated Land Register will take the following format:

Location	Reference	Determination	Remediation Statement	Determination Statement	Grid Reference

Appendix 4

Summary of Risk Categories

Cat-egory	Human Health	Controlled Waters
1	The significant possibility of significant harm exists where there is an unacceptably high probability, supported by robust science based evidence that significant harm would occur if no action is taken to stop it. Significant harm may already have been caused.	There is a strong and compelling case for considering that a significant possibility of significant pollution of controlled waters exists. And that it is likely that high impact pollution would occur if nothing were done to stop it.
2	The land poses a significant possibility of significant harm, may include land where there is little or no direct evidence that similar land, situations or levels of exposure have caused harm before, but nonetheless the authority considers on the basis of the available evidence, including expert opinion, that there is a strong case for taking action under Part 2A on a precautionary basis.	On the basis of the available scientific evidence and expert opinion, the risks posed by the land are of sufficient concern that the land should be considered to pose a significant possibility of significant pollution of controlled waters on a precautionary basis, and where there is a relatively low likelihood that the most serious types of significant pollution might occur.
3	The legal test for significant possibility of significant harm is not met. This will include land where the risks are not low, but nonetheless the authority considers that regulatory intervention under Part 2A is not warranted	The risks are such that it is very unlikely that serious pollution would occur; or where there is a low likelihood that less serious types of significant pollution might occur.
4	There is no risk or that the level of risk posed is low. There are only normal levels of contaminants in soil or contaminant levels do not exceed relevant generic assessment criteria. Estimated levels of exposure to contaminants in soil are likely to form only a small proportion of what a receptor might be exposed to anyway through other sources of environmental exposure.	There is no risk, or that the level of risk posed is low, e.g. no contaminant linkage has been established in which controlled waters are the receptor in the linkage; or the water pollution is similar to that which might be caused by “background” contamination.

North Tyneside Council will use these Risk Categories to help in the identification of high priority sites under Part 2A.

Appendix 5

Receptors and Harm

Environmental Protection Act 1990: Part 2A Contaminated Land Statutory Guidance 2012

Relevant types of receptor	Significant harm	Significant possibility of significant harm
<p>Any ecological system, or living organism forming part of such a system, within a location which is:</p> <ul style="list-style-type: none"> • a site of special scientific interest (under section 28 of the Wildlife and Countryside Act 1981) • a national nature reserve (under s.35 of the 1981 Act) • a marine nature reserve (under s.36 of the 1981 Act) • an area of special protection for birds (under s.3 of the 1981 Act) • a “European site” within the meaning of regulation 8 of the Conservation of Habitats and Species Regulations 2010 • any habitat or site afforded policy protection under paragraph 6 of Planning Policy Statement (PPS 9) on nature conservation (i.e. candidate Special Areas of Conservation, potential Special Protection Areas and listed Ramsar sites); or • any nature reserve established under 21 of the National Parks and Access to the Countryside Act 1949. 	<p>The following types of harm should be considered to be significant harm:</p> <ul style="list-style-type: none"> • harm which results in an irreversible adverse change, or in some other substantial adverse change, in the functioning of the ecological system within any substantial part of that location; or • harm which significantly affects any species of special interest within that location and which endangers the long-term maintenance of the population of that species at that location. <p>In the case of European sites, harm should also be considered to be significant harm if it endangers the favourable conservation status of natural habitats at such locations or species typically found there.</p> <p>In deciding what constitutes such harm, the local authority should have regard to the advice of Natural England and to the requirements of the Conservation of Habitats and Species Regulations 2010.</p>	<p>Conditions would exist for considering that a significant possibility of significant harm exists to a relevant ecological receptor where the local authority considers that:</p> <ul style="list-style-type: none"> • significant harm of that description is more likely than not to result from the contaminant linkage in question; or • there is a reasonable possibility of significant harm of that description being caused, and if that harm were to occur, it would result in such a degree of damage to features of special interest at the location in question that they would be beyond any practicable possibility of restoration. <p>Any assessment made for these purposes should take into account relevant information for that type of contaminant linkage, particularly in relation to the ecotoxicological effects of the contaminant.</p>

Relevant types of receptor	Significant harm	Significant possibility of significant harm
<p>Property in the form of:</p> <ul style="list-style-type: none"> • crops, including timber; • produce grown domestically, or on allotments, for consumption; • livestock; • other owned or domesticated animals; • wild animals which are the subject of shooting or fishing rights. 	<p>For crops, a substantial diminution in yield or other substantial loss in their value resulting from death, disease or other physical damage. For domestic pets, death, serious disease or serious physical damage. For other property in this category, a substantial loss in its value resulting from death, disease or other serious physical damage.</p> <p>The local authority should regard a substantial loss in value as occurring only when a substantial proportion of the animals or crops are dead or otherwise no longer fit for their intended purpose.</p> <p>Food should be regarded as being no longer fit for purpose when it fails to comply with the provisions of the Food Safety Act 1990. Where a diminution in yield or loss in value is caused by a contaminant linkage, a 20% diminution or loss should be regarded as a benchmark for what constitutes a substantial diminution or loss.</p> <p>In this Chapter, this description of significant harm is referred to as an “animal or crop effect”.</p>	<p>Conditions would exist for considering that a significant possibility of significant harm exists to the relevant types of receptor where the local authority considers that significant harm is more likely than not to result from the contaminant linkage in question, taking into account relevant information for that type of contaminant linkage, particularly in relation to the ecotoxicological effects of the contaminant.</p>
<p>Property in the form of buildings. For this purpose, “building” means any structure or erection, and any part of a building including any part below ground level, but does not include plant or machinery comprised in a building, or buried services such as sewers, water pipes or electricity cables.</p>	<p>Structural failure, substantial damage or substantial interference with any right of occupation. The local authority should regard substantial damage or substantial interference as occurring when any part of the building ceases to be capable of being used for the purpose for which it is or was intended.</p> <p>In the case of a scheduled Ancient Monument, substantial damage should also be regarded as occurring when the damage significantly impairs the historic, architectural, traditional, artistic or archaeological interest by reason of which the monument was scheduled.</p> <p>In this Chapter, this description of significant harm is referred to as a “building effect”.</p>	<p>Conditions would exist for considering that a significant possibility of significant harm exists to the relevant types of receptor where the local authority considers that significant harm is more likely than not to result from the contaminant linkage in question during the expected economic life of the building (or in the case of a scheduled Ancient Monument the foreseeable future), taking into account relevant information for that type of contaminant linkage.</p>

Appendix 6

Location of North Tyneside



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Appendix 7

Powers of Entry

The Statutory Guidance 2012 states that the authority should consult the landowner before inspecting the land unless there is a particular reason why this is not possible, for example because it has not been possible to identify or locate the landowner. Where the owner refuses access, or the landowner cannot be found, the authority should consider using statutory powers of entry.

The authority has specific powers of entry under Section 108 of the Environment Act 1995 to authorise suitable persons to carry out inspection of the land. This can involve entering premises, taking samples or carrying out related activities for the purpose of enabling the authority to determine whether any land is contaminated land. Where the authority chooses to utilise these powers, at least seven days' notice will be given of proposed entry onto any premises, unless there is an immediate serious risk to human health or the environment.

Under Section 108 of the Environment Act 1995 the local authority is given the power to authorise a person to exercise specific powers of entry. North Tyneside Council will not carry out any inspection using these statutory powers of entry that takes the form of an intrusive investigation if:

- a) it has already been provided with detailed information on the condition of the land, whether by the Environment Agency or some other person such as the land owner, which provides an appropriate basis upon which the authority can determine whether the land is contaminated in accordance with the requirements of the guidance; or,
- b) a person offers to provide such information within a reasonable and specified timescale, and then provides such information within that time; or,
- c) prior to an inspection under its powers of entry the council will be satisfied that a pollutant linkage exists. This means that as well as a reasonable possibility of the presence of source, pathway and receptor, they also make

d) a pollution linkage.

References

Within the development of its Contaminated Land Strategy North Tyneside Council has referred to the following literature. The new legislation regarding Contaminated Land has been designed to supersede existing statutory legislation documents. It is designed to operate alongside current regimes of pollution control legislation.

Statutory Guidance

1. Environmental Protection Act 1990 Part I – Integrated Pollution Control
2. Environmental Protection Act 1990 Part II – Waste Management License
3. Environmental Protection Act 1990 Part IIA – Contaminated Land Statutory Guidance 2012
4. Environmental Protection Act 1990 Part III – Statutory Nuisance
5. Environment Act 1995 - Section 57
6. “Contaminated Land (England) Regulations 2006
7. Contaminated Land (England) Regulations 2006 as amended 2012,
8. Pollution Prevention and Control (England and Wales) Amendment) (No 2) Regulations 2003
9. The Water Resources Act 1991 (Amendment) (England and Wales) Regulations 2009
10. The Environmental Damage (Prevention and Remediation) Regulations 2009

Non Statutory Guidance

1. BS 10175:2011+a2:2017 Code of Practice for the Investigation of Potentially Contaminated Sites
2. BS 5930:1999+A2:2010 Code of practice for site investigation Land contamination: risk managements
3. Land contamination: risk managements
4. Babbie (2001): Identification, Prioritisation and Risk Ranking of Potentially Contaminated Land in North Tyneside Methodology
5. British Geological Survey and The Environment Agency (2000): Technical Report WE/99/14: Some Guidance on the Use of Digital Environmental Data.
6. CIRIA (1995): Remedial Treatment for Contaminated Land Vol III; Site Investigation and Assessment.
7. DoE May (1991) “Public Registers of Land Which May Be Contaminated”
8. DoE (1994): CLR No 1 Vol One and Two. ”A Framework For Assessing The Impact of Contaminated land on Groundwater and Surface water.
9. DoE (1994) CLR No 2 Vol One and Two: “Guidance on Preliminary Site Inspection of Contaminated Land
10. DoE (1994) CLR No 3: Documentary Research on Industrial Research
11. DoE (1994) CLR No 4: “Sampling Strategies for Contaminated Land”
12. DoE (1994) CLR No 5 “Information Systems for Land Contamination”
13. DoE (1994) CLR No 6 “Prioritisation and Categorisation Procedure for Sites which may be Contaminated.

14. DoE Industry Profiles (1995 and 1996)¹⁵ DoE May 1991 “Public Registers of Land Which May Be Contaminated”
15. Environment Agency (May 2001): Contaminated Land Inspection Strategies: Technical Advice For Local Authorities
16. Environment Agency (2006): Remedial Targets Methodology: Hydrogeological Risk Assessment for Land Contamination
17. Environment Agency (2001): Land Contamination: Technical Guidance on Special Sites: Petroleum Refineries. Research and Development Technical Report Ref P5-042/TR/05
18. “The Environment Agency’s approach to groundwater protection February 2018 Version 1.219. Environment Agency (2001): Technical Aspects of Site Investigation Research and Development Technical Report P5-065/TR.
19. Environment Agency (2001): Secondary Model Procedure for the Development of Appropriate Soil Sampling Strategies for Land Contamination. Technical Report Ref P5-066/TR
20. Environment Agency and Local Government Association: Land Contamination Protocol.
21. Protecting our Water, Soil and Air A Code of Good Agricultural Practice for farmers, growers and land managers 2009
22. Environment Agency and DEFRA - Groundwater protection: Groundwater protection guides covering: requirements, permissions, risk assessments and controls (previously covered in GP3). 201729. SNIFFER (1999): Communicating Understanding of Contaminated Land Risks.
23. The New Dutch Intervention Values for Soil Remediation
24. The Kelly Indices (Formally GLC) Guidelines for Contaminated Soils