
SITE INVESTIGATION WORK AT FOUR FORMER LANDFILL SITES

Responsible Cabinet Member - Councillor Andy Scott, Health and Leisure Portfolio

Responsible Director - Paul Wildsmith, Director of Corporate Services

SUMMARY REPORT

Purpose of the Report

1. To report on the award of grants from the Department of Environment, Food and Rural Affairs (DEFRA) and to seek the release of the funding.

Summary

2. A bid was made in November 2007 to DEFRA under the Contaminated Land Capital Grants Programme for a grant to carry out intrusive site investigation work at four former landfill sites. The four sites are known as Shearwater Landfill, Skipbridge Landfill, Summerhouse Landfill and Highside (Heighington) Landfill. The bid has been successful and grants awarded to the amount of £190,760.

Recommendation

3. It is recommended that the grant funding of £190,760 be released to carry out the intrusive site investigation works.

Reasons

4. The recommendation supports compliance with the Council's statutory duty under Part 2A of the Environmental Protection Act 1990 to inspect its Borough to identify and remediate contaminated land.

**Paul Wildsmith,
Director of Corporate Services**

Background Papers

- 1 Contaminated Land Inspection Strategy 2003 (for copy see following web link www.darlington.gov.uk/Environment/contaminatedland/Contaminated+Land.htm)

Appendix

- 1 Location Plans of Landfill Sites
- 2 Frequently Asked Questions

Carol Whelan : Extension 2570

S17 Crime and Disorder	There are no implications on S17 Crime and Disorder
Health and Well Being	The site investigation work planned to be carried out at the 4 former landfill sites will identify if any contamination which may be present is likely to affect the health and wellbeing of residents and land users.
Sustainability	There are no implications on sustainability
Diversity	There are no implications on diversity
Wards Affected	Lingfield Ward, Hurworth Ward and Heighington and Coniscliffe Ward
Groups Affected	Impact on residents, landowners and land users within the site investigation areas
Budget and Policy Framework	There are no changes to the Council's Budget and Council Policy Framework
Key Decision	This is not a key decision
Urgent Decision	This is not an urgent decision
One Darlington: Perfectly Placed	The site investigation work planned to be carried out at the 4 former landfill sites supports the visionary goals of the Community Strategy to establish a place for living safe and well. The site investigation is also linked to two of the connecting themes within the Community Strategy in that it will improve health and wellbeing by identifying if there is any contamination which may be present and is likely to result in unacceptable risks to human health, controlled waters and the wider environment. The work will also enhance the environment by making sure the sites are safe for their current use either as residential, agricultural or recreational land.

MAIN REPORT

Background

5. A bid was made in November 2007 to DEFRA under the Capital Projects Programme for a grant to carry out site investigation work at four former landfill sites. The four sites are known as Shearwater Landfill, Skipbridge Landfill, Summerhouse Landfill and Highside (Heighington) Landfill. **Appendix 1** shows location plans of the four sites. The Council received notification on 22 February 2008 that it has been successful and that the £190,760 applied for has been granted. This funding now needs to be released and arrangements made to carry out the site investigation works at each of the four sites.
6. The Council along with all other Local Authorities has a statutory duty under Part 2A Environmental Protection Act 1990 to inspect its Borough to identify contaminated land; the strategic approach for doing so is included within the Darlington Borough Council's Contaminated Land Inspection Strategy which was approved by Cabinet on the 11 February 2003 and is currently under review by officers. The Council's Contaminated Land Inspection Strategy identified that landfill sites were to be given first priority.
7. The four former landfill sites above mentioned have been identified as the highest risk sites in terms of land contamination following the risk assessment process contained within the Council's Contaminated Land Inspection Strategy. Parsons Brinckerhoff (PB), the Council's framework partner, have carried out desk studies on the sites on behalf of the Council and consider it necessary to undertake intrusive site investigation work at all four sites.
8. The Council has identified approximately 1,500 brownfield sites with potential land contamination in the Borough. The initial prioritisation is now complete and further risk assessment is being carried out on these sites. Intrusive site investigation is very much standard practice for Local Authorities when carrying out their duties under Part 2A of the Environmental Protection Act 1990.

Information and Analysis

9. DEFRA have approved a grant of £190,760 broken down as follows: Shearwater - £46,360, Skipbridge - £72,200, Highside - £33,915 and Summerhouse - £38,285. The grants cover intrusive site investigation works including risk assessment and subsequent reporting of findings. The site investigation works will involve installing and monitoring ground gas monitoring points and analysis of soil, water and leachate samples.
10. The Council is required to make a 5% contribution to the costs of the site investigation works. This amounts to £10,040 which can be funded from the Environmental Health budget. As the DEFRA grants includes finance for ground gas monitoring a saving will be made of approximately £9094 with regard to ongoing ground gas monitoring carried out at Shearwater, Skipbridge and Summerhouse Landfill.

11. The DEFRA grant also contains funding to cover the costs of project management, contract supervision and staff costs incurred in supporting residents directly affected and providing information on the site investigation and outcome. This work will be carried out by officers of the Environmental Health Section.
12. The Council will be working with Parsons Brinckerhoff to carry out the planned site investigation works over the next 12 months. It is anticipated that Shearwater Landfill will be looked at first.
13. The work funded by the DEFRA grants will enable the Council to make a determination under Part 2A Environmental Protection Act 1990 as to whether or not any of the four former landfill sites under investigation are to be legally classed as “contaminated land”.
14. Darlington Borough Council in the past has used the four sites for depositing household waste. There are, therefore, implications if the land at any or all of the four sites is determined as contaminated land under Part 2A Environmental Protection Act 1990 as the Council may be legally responsible for any remediation work. Grants are available from DEFRA for remediation works and to date a large number of local authorities have been successful in gaining funds, however, there is no absolute guarantee this will be the case in the future.

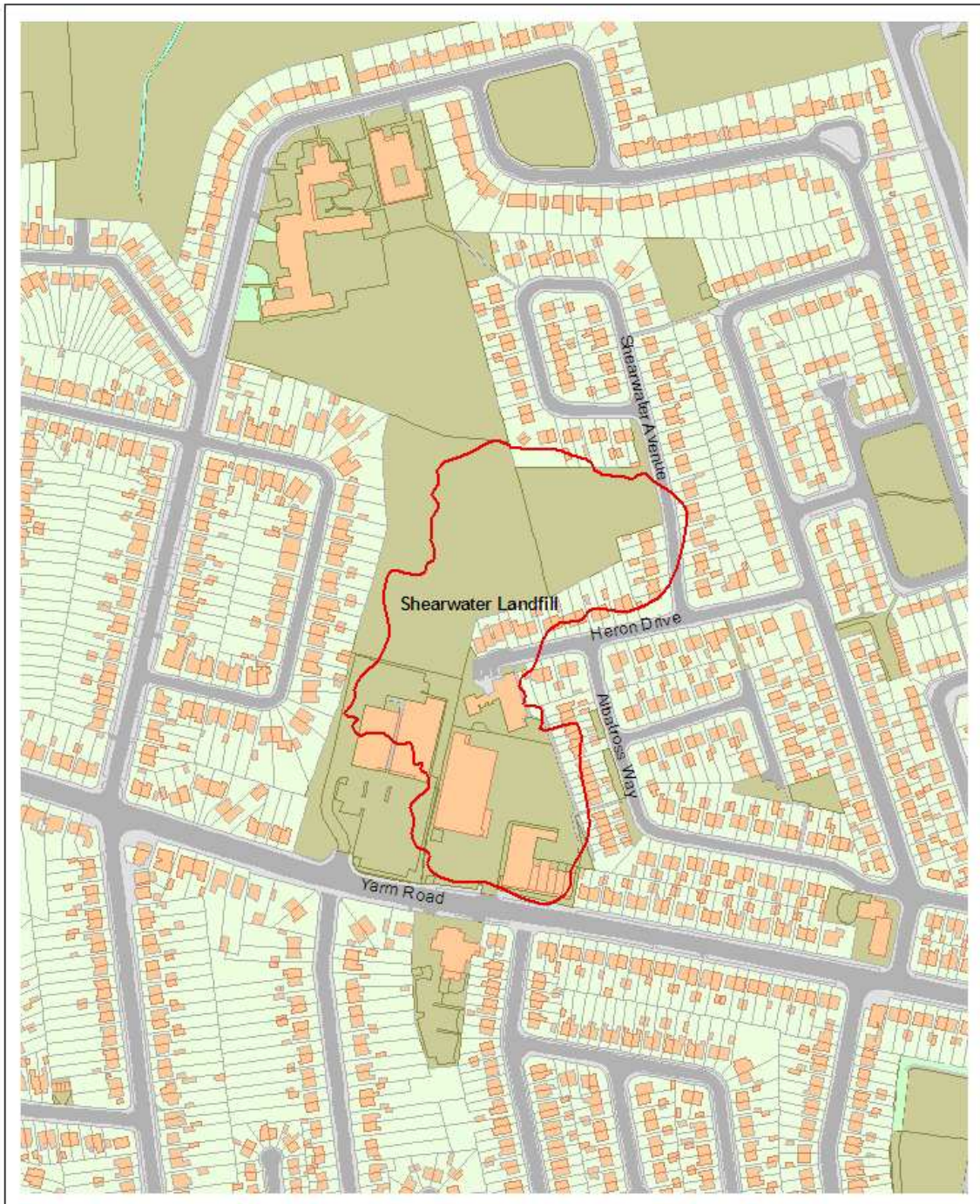
Outcome of Consultation

15. The Environmental Health Section has worked closely with the Communications Section to develop a Communications Strategy to inform and wherever possible reassure stakeholders, in particular residents, about the site investigation works and to manage perceived risks. A letter has been sent to stakeholders including residents notifying them of the site investigation works prior to the release of this Cabinet Report. Residents of Shearwater Avenue, Heron Drive and Albatross Way affected by the site investigation works have also been sent a questionnaire and information pack. The questionnaire includes a section on resident liaison which asks residents if they would be interested in attending a drop in session and/or setting up a resident group to improve communications. The information pack includes information on soil sampling/ground gas monitoring, a map outlining the investigation area and answers to frequently asked questions. These frequently asked questions are attached as **Appendix 2**.

Appendix - Locations plans of landfill sites

Shearwater Landfill

0 50 100 200 Meters



Scale - 1:3250



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Summerhouse Landfill

0 50 100 200 Meters



Scale - 1:3250



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Skipbridge Landfill

0 45 90 180 Meters

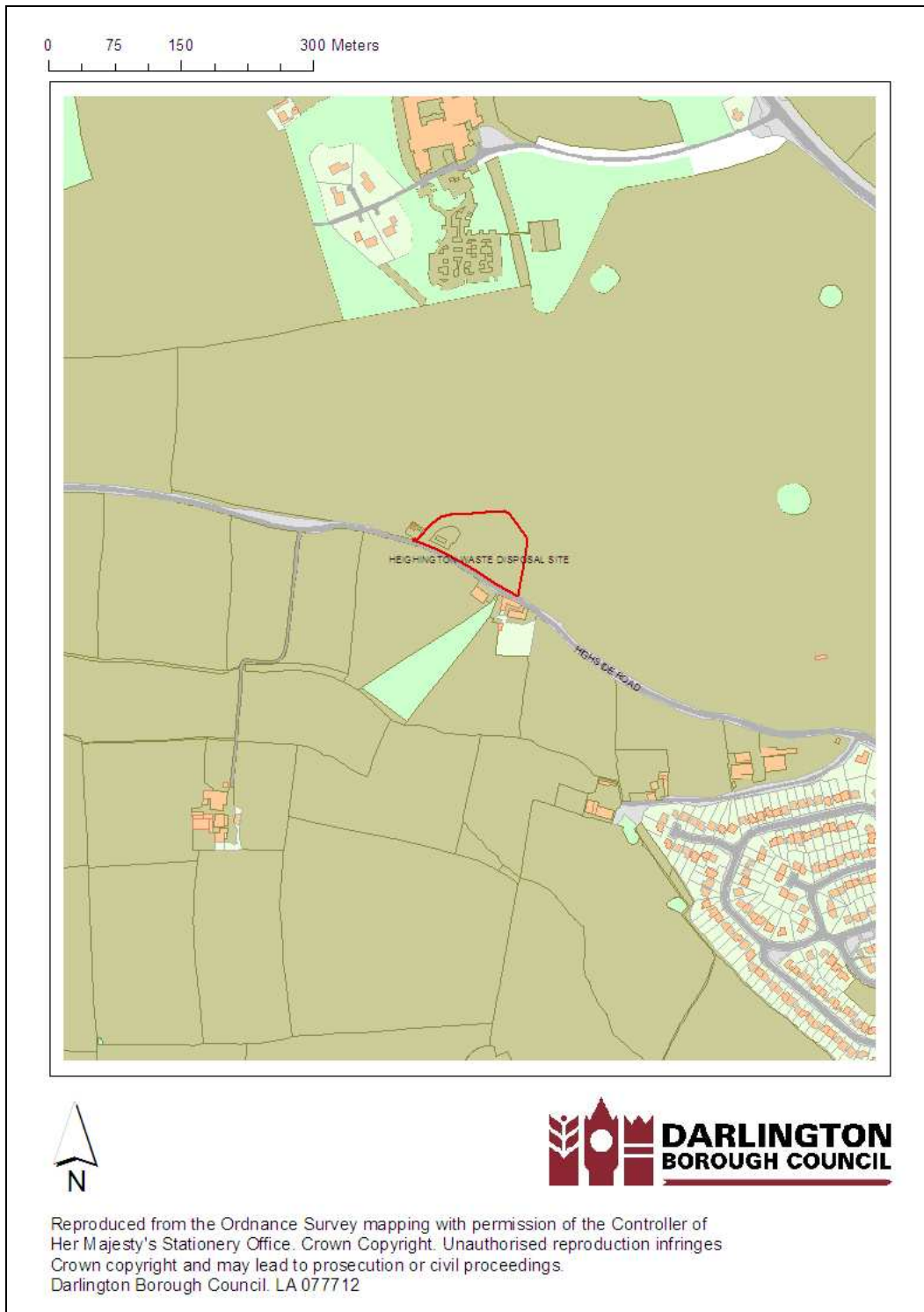


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Highside (Heighington) Landfill



Frequently Asked Questions

Why is the Council carrying out site investigation work in this area?

Darlington Borough Council is acting in accordance with the Council's Contaminated Land Inspection Strategy 2003 in carrying out this investigation and has identified approximately 1,500 sites with potential land contamination within the Borough. The Strategy identifies that former landfill sites are to be given priority and investigated first.

Four former landfill sites have been selected for further investigation during the forthcoming year and an initial assessment, in the form of Desktop Study Reports has already been undertaken. The Council has now secured the necessary funding, in the form of a grant from DEFRA, to commence detailed testing and assessment of these sites. Shearwater Landfill is one of these sites.

Part 2A of the Environmental Protection Act 1990 was introduced in 2000 and placed a statutory duty on all Local Authorities to identify potentially contaminated sites in their area and ensure that they are assessed for contamination and, if found to be necessary, remediated. This is routine work for local authorities and as standard practice can involve site investigations works like those planned to take place at Shearwater Landfill.

Why is the Council investigating Shearwater Landfill again?

Shearwater Landfill was investigated in the 1990s with gas protection measures being installed in 1999 in some properties. Since this date new legislation has been introduced and there has been significant change in guidance. Previous investigations only considered ground gases and local authorities are required to look at all sources of potential contamination including the soil in gardens. The investigation will also provide Darlington Borough Council with the opportunity to review the need for ongoing gas monitoring at Shearwater Landfill.

What have the results of the ground gas monitoring shown to date from the currently monitored houses on Shearwater Avenue and Heron Drive?

Results of ground gas monitoring in residential gardens since the installation of gas protection measures in 1999 show no significant levels of methane and carbon dioxide.

Who will carry out the site investigation works at Shearwater Landfill?

Darlington Borough Council has contracted Parsons Brinckerhoff Ltd (PB) as a specialist environmental consultant to conduct the works. PB has extensive experience investigating the condition of, and potential impacts from, former landfills.

The PB Project Manager is Amy Carter. The PB field team will be led by Chris Leach and James Ware. Chris and James have both been out recently carrying out monthly gas monitoring at the probeholes around the site, so you may recognise them. You will be able to identify PB staff by the PB logo on their clothing and they will be carrying identification. Officers from Darlington Borough Council will also be on site during most of the works.

PB will use specialist subcontractors to perform certain activities, such as installing probeholes, but will always provide a PB supervisor to oversee any works by subcontractors.

You can find more information about PB on their website, <http://www.pbworld.co.uk/>. Information about the environmental consulting group, including descriptions of recent projects similar to the work proposed at Shearwater, is found on the following part of that website: <http://www.pbworld.co.uk/index.php?doc=602>

What do the investigations involve?

The site investigation work will be carried out with the minimum inconvenience to residents and you will be kept fully informed. The site investigations works will involve the following:

- 1) Reviewing locations and condition of existing ground gas monitoring points.
- 2) Collecting soil samples from gardens, and from the recreational area, to be sent for laboratory analysis for contaminants. PB will collect approximately four soil samples from each garden that we believe is built on top of the former landfill, and check to see if there are contaminants from the landfill in the soil. Soil samples will be mostly collected in the upper 20cm of soil, and also at 50cm down. Samples will be collected using a hand tools and in some cases a shovel.
- 3) Installing new ground gas monitoring points around houses, in gardens, and on the recreational land
- 4) Continued monthly ground gas monitoring on 9 occasions over a 6-month period starting from October 2008.
- 5) In the houses that were examined ten years ago, when the positive pressure gas system was installed, checks to see if the indoor sub-slab sampling points installed ten years ago are still present, and if so, monitor gases.
- 6) Collecting groundwater samples from existing boreholes within the recreational land.

PB and Darlington Borough Council do not expect any damage to occur to land or property as a result of this investigation. Darlington Borough Council will arrange appointments for all activities on your property and will not enter your property without your knowledge. You are welcome to be present during all activities on your property.

When soil samples are collected, PB will strive to make sure that your garden is left in the same condition in which it was found. We do not foresee any damage from collection of soil samples. For example, if your lawn is sampled, the turf/grass cover will be peeled back, a sample collected from underneath, and the grass replaced. Where deeper samples are collected this will generally be done in areas such as plant beds or where vegetables are grown. We will try to honour any requests to avoid certain plants or areas (for example, where pets are buried).

New probeholes will be installed in gardens, close to houses. We need to put the probes close to the houses so that we can understand whether ground gases pose a risk to the houses. The new probeholes will be installed using hand held equipment to a depth of approximately 2 metres. The probehole will be left as a metal casing, approximately 50cm tall, painted dark green in colour. These probeholes will not be positioned in the middle of driveways or paths. Again, we will attempt to honour any requests regarding the exact probehole location on your property.

Why do soil samples need to be taken from the garden areas?

The landfill was covered with a clay cap before the houses and gardens were developed. This is standard practice; clay is used to prevent people coming into contact with the waste inside the former landfill, and to prevent rainwater from infiltrating into the landfill and possibly contaminating groundwater. In most places at Shearwater Landfill the cap is at least 2m thick. However, it is possible that around the edges, the clay cap is thinner. It is also possible that the clay cap has been disturbed or damaged over the years, for example by rotavating gardens, digging for fence posts, installing ponds etc.

What contaminants are being tested for?

A range of sampling will be carried out, including ground gas, soil and groundwater sampling. The collected samples will be tested for a number of possible contaminants.

Can residents, including children, continue to use their gardens?

As part of the investigation Darlington Borough Council are carrying out soil sampling to identify what, if anything, is in the soil. At this stage, residents should continue to use and enjoy their gardens and the recreational area on Shearwater Avenue as they normally would.

Living on land with soil potentially contaminated does not mean the soil will affect your health. For the vast majority of sites the health impacts on people will be small or non-existent, especially if the public follow the simple precautionary steps below to minimise exposure. This is standard advice for anyone with a garden.

Do

- Enjoy your garden.
- Wash your hands and any muddy skin thoroughly after working or playing in the garden and before handling food. As always, it is important to make sure children have good hand hygiene as well.
- Try and cut down on the amount of soil and dust brought into the house from the garden.
- Remove dirty footwear after gardening and leave outside or rinse clean with water before bringing inside.
- Wear protective gloves when gardening such as turning soil to remove weeds, trimming the lawn and tidying the garden where necessary.
- Rinse any garden tools with water after use before placing in a shed or bringing into the house.
- Keep children away from fenced off areas and when equipment is being used.

Do Not

- Eat any homegrown foodstuffs such as vegetables and fruit without having first washed it or peeled it as necessary.
- Let children play with the soil or put it in their mouths.
- Do not carry out any deep digging ie to a depth greater than 0.5 metres for example planting a tree or putting in a pond.
- Carry out building works without speaking to Darlington Borough Council.
- Wear soiled clothes or shoes around the house

Darlington Borough Council is working with other agencies and organisations (eg Darlington Primary Care Trust, Health Protection Agency) and we will update this advice if necessary when we receive further information either during or following the investigations.

How long will the investigation at Shearwater Landfill take?

The Council is hoping to start work late September/early October 2008. The work to take soil samples and install a probehole in residential gardens should take between one and two hours. The Council, PB and their contractors will be on site for approximately 4 weeks in total. Ground gas Monitoring is to initially take place on 9 occasions over a period of 6 months and will involve PB visiting your property at least once a month. Residents will not need to be present during the ground gas monitoring however we do request that you give permission to access your garden.

Who will pay for the investigations?

Darlington Borough Council has been awarded funding from DEFRA of £46,360 to undertake the site investigation works.

I have received notification of the Council's intention to investigate my property; why has my neighbour not been contacted?

Your property falls within the boundaries of the investigation area and your neighbour's property does not. The boundary of the investigation area can be found in the attached plan.

When will the results of the investigation be available?

It is likely that the Council will be able to provide residents with the results of the soil sampling in early 2009. The gas monitoring will be available in summer 2009. If any contaminants and/or ground gases are detected, Darlington Borough Council along with its specialist environmental consultant PB will determine if any potential risk is posed using government guidance documents.