Dealing with contaminated land in England

A review of progress from April 2000 to December 2013 with Part 2A of the Environmental Protection Act 1990

April 2016

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Foreword

We are pleased to publish this report *Dealing with contaminated land in England*. It summarises the results of a survey about implementation of Part 2A of the Environmental Protection Act 1990.

While many contaminated sites are successfully remediated during development, others are unsuitable for development or the development took place when the problems of contaminated land were less well understood.

Land affected by contamination can be a blight on communities and may present unacceptable risks to people and the environment. Preventing our land from becoming polluted is the best way of making sure that future generations do not inherit a legacy of contamination. This is the aim of our various environmental regulations and permitting regimes. However if contamination does occur, and cannot be dealt with via any other means then the Part 2A regime provides a mechanism for resolving these issues.

Part 2A of the Environmental Protection Act 1990 was introduced to provide a better way to identify and remediate contaminated land not being dealt with through the development process. The legislation came into force in 2000 in England and is supported by statutory guidance that sets out how land should be investigated and remediated and how liability should be established.

This report highlights some of the findings of a survey about Part 2A carried out by a consortium led by Cranfield University for Defra in 2014. We thank the local councils of England that supplied information for this report.

Executive summary

This report gives an overview of the findings of a survey commissioned by Defra in 2014 about contaminated land activity in England. The report documents progress made in particular on identifying and remediating contaminated land sites. It uses information submitted by 197 of 326 local councils (60%) in England.

The number of councils that did not respond to the survey means caution is needed in interpreting the results and reaching conclusions. It should also be noted that those councils that did reply to the survey did not all respond to every question. However, it is possible to summarise:

- The main priority for local councils' inspection strategies is to assess the risks posed to human health.
- Since the Part 2A regime was introduced in April 2000, local councils have spent at least £32 million on inspecting more than 11,000 sites. This has led to the determination of more than 511 contaminated land sites where remediation was needed.
- Although significant progress has been made there are at least another 10,000 sites identified by preliminary inspection that need further investigation to establish the risks that they pose.
- Of the 511 contaminated land sites reported to the survey, the majority were posing unacceptable risks to human health. Arsenic, lead and benzo(a)pyrene are the most common substances causing contamination.
- Of the reported sites determined as contaminated land, remediation has been initiated on at least 493 sites, with work being reported as being complete at 433 of these sites.
- A variety of remediation options have been used to clean up contaminated land, with the most common techniques reported being excavation and disposal or capping.
- The majority of individual remedial actions were completed within a year although a significant number of sites took more than a year to complete all the remedial actions.
- More than £52 million has been granted for remediation by the regulators using public monies since the introduction of the regime in 2000. Most of this was spent on making land and water safe for people to use and on cleaning the environment for communities and to support growth

The survey responses show that the proactive identification and remediation of contaminated land is an ongoing process that will take many years to complete. Between 2000 and 2013 public funding has had an important role in delivering the benefits that people, communities and the environment gain from contaminated land being managed.

Contents

Background

Part 2A of the Environmental Protection Act 1990 (EPA 1990) requires the Environment Agency to prepare a report on The State of Contaminated Land "from time to time, or at the request of the Secretary of State". This report follows on from 2 previous reports: *Dealing with contaminated land in England* issued in 2002 and *Dealing with contaminated land in England and Wales,* issued in 2009.

Local councils and the Environment Agency were asked to provide summary information on Part 2A since its introduction in April 2000 until 31 December 2013. The local councils were asked to provide data on site inspection, determination decisions, how remediation was carried out and who paid. The Environment Agency provided supporting information on special sites. 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. Any site information relating to the period after 31 December 2013 has been excluded from this report.

Aim and scope of this report

The aim of this report is to present information from the survey led by Cranfield University for the Department for Environment, Food and Rural Affairs (Defra) in 2014. The survey explored the progress being made on implementing Part 2A in England from April 2000 up to the end of 2013. See the survey results. Learn more about Part 2A and how it works in section: 'Overview of Part 2A'.

During the survey all local councils were invited to provide information on how land contamination is managed in their areas. Those councils with sites determined as contaminated land under Part 2A were asked to provide summary data on the inspection, determination, remediation, cost recovery and liability at those sites, but not site specific details.

Where comparison to previous reports is made it is important to note the questions asked were usually different and that the response rates for each report vary. In 2002 there was a 95% response rate and in 2009 it was 91%. For the 2014 survey, 60% of local councils in England responded, and not all of those answered every question. For some parts of the survey the response rate was 14%. For further information on the data summarised in this report see the published Defra research outputs (SP1011) or contact the relevant local councils who hold the Part 2A public registers for their areas. The Environment Agency hold information on special sites and provided a full response to the survey.

A separate report is available for Wales from Natural Resources Wales.

A second survey led by Cranfield University for Defra collated views from contaminated land practitioners on how land contamination is being managed in England. The findings of the second survey are not reported here but can be downloaded.

Gathering information

Local councils in England were invited to provide information on their Part 2A activity from April 2000, when the contaminated land legislation came into force, until December 2013. The information was gathered through an online survey that was sent to the Environment Agency and 326 primary local councils who are responsible for delivering Part 2A; comprising district councils, borough councils, city councils and unitary authorities. The survey was open for a 7 week period (from Monday 27 January until Friday 14 March 2014) and was designed and administered by a consortium led by Cranfield University on behalf Defra.

Identifying contaminated land

How land contamination is identified

Part 2A is one regulatory way of identifying and managing land contamination, but preventing or limiting releases of pollutants and controlling activities that release them are the most effective ways to avoid land becoming contaminated in the first place. Regulatory regimes aimed at preventing land from becoming contaminated include the Environmental Permitting (England and Wales) Regulations 2010 and the Environmental Damage (Prevention and Remediation) Regulations 2009.

In 2005 we estimated that less than 2% of the land area of England was likely to have been affected by industrial activities of a type that could have caused contamination[1].

Historic contamination can be identified and dealt with in a number of ways, which include:

- voluntary action by site owners, those responsible for the site or polluters dealing with existing land contamination
- using the planning system to remediate existing contamination during the development of contaminated sites for new uses (Town and Country Planning Act, 1990)
- using direct regulation, including Part 2A of the EPA1990

Local councils' inspection strategies

Local councils are required to have a written inspection strategy that describes their strategic approach to identifying contaminated land in their areas. The statutory guidance does not specify a timeframe for when councils should review their strategies, but does recommend as good practice that it should be done at least every 5 years.

Local councils were asked when their current strategies had been published. Of the 193 councils that responded, 29% said that they continue to implement their original strategy from 2000 or 2001 and 71% published their current strategy between 2002 and 2014. 11% published their current strategy in 2013, most likely following review in response to revised statutory guidance which was published in 2012. The majority (87%) of the 193 responding councils said they plan to review their strategies in the next 5 years. This data is summarised in figure 1.

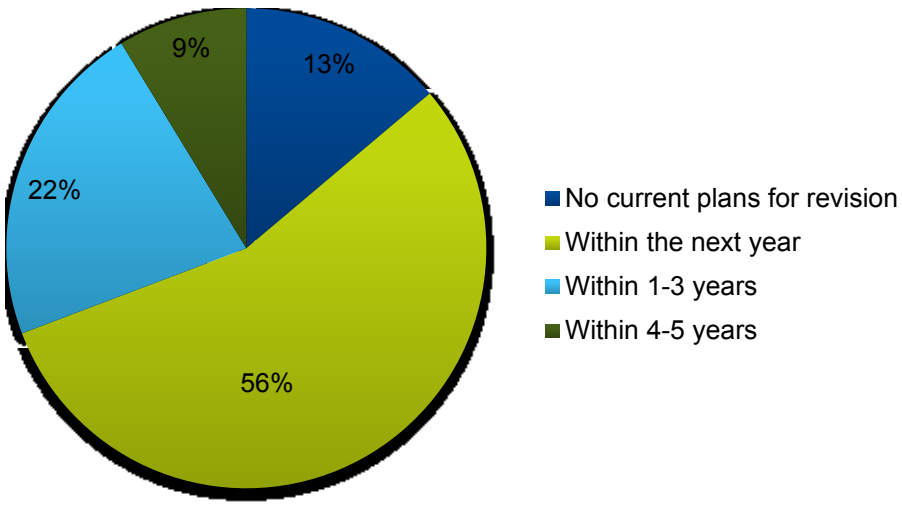

Figure 1 - Local councils' responses to when they plan to review their contaminated land inspection strategy

[1] ENVIRONMENT AGENCY (2005) Indicators for land contamination. Available from: https://www.gov.uk/government/publications/indicators-for-land-contamination

As inspection strategies are updated the priorities in them may change. A total of 193 local councils responded about changing priorities and their responses are shown in figure 2. Of those 193, 32% (62 local councils) said they had changed their priorities since their first inspection strategy was published, and the most common reasons given were

- a lack of funding
- new risk analysis work being done
- a greater emphasis on planning

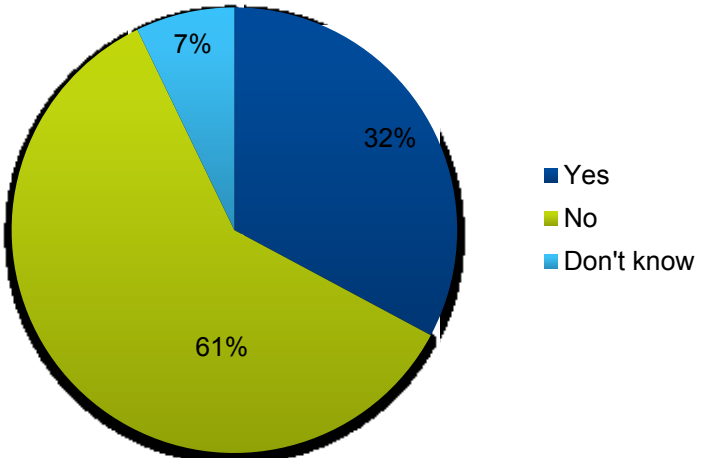

Figure 2 - Local councils' responses to whether the priorities within their inspection strategy have changed since its first publication

Progress on achieving the objectives set out in the strategies

Local councils were asked about the progress they were making towards achieving the objectives set out in their inspection strategies. Figure 3 shows how the 193 councils who responded thought they were progressing. About half of responding councils think they are behind target. A similar question was asked in the 2007 survey and is included in figure 3 for comparison.

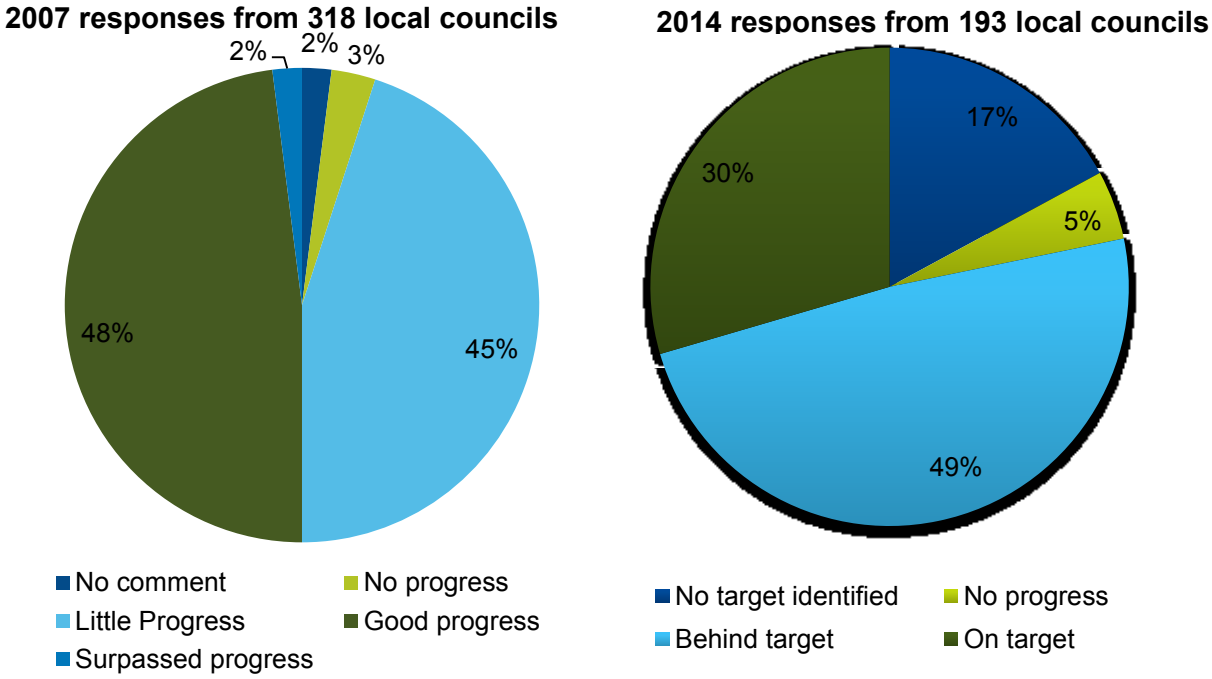

Figure 3 - Progress towards achieving inspection strategies' objectives up to the end of March 2007 and December 2013. Based on a 91% response rate in 2007 and 60% in 2014.

When asked to estimate the time period required to complete the inspection of all sites identified as requiring further work, 163 local councils said that they did not know. The 21 councils who did offer an estimate gave variable estimates of 3 years or more, and 5 local councils reported their inspections as being complete.

How contaminated land is identified

Local councils were asked to estimate how many and in what way potentially contaminated sites had been brought to their attention (see figure 4). A total of 181 local councils provided a response. Where local councils did not routinely record this information, they were asked to make an estimate based on the information available. Responses indicate that 88% of potentially contaminated sites were identified through the process of preliminary inspection as part of the implementation of the inspection strategies. Local councils' responses indicate their preliminary inspections include prioritisation based on risks to receptors, information from in house or external companies' environmental searches and consultation with the Environment Agency. Planning applications or the property owner reporting evidence of contamination accounted for about 12% of sites. This suggests the investigative work done by local councils to establish a list of sites for further investigation is important in identifying land that is potentially affected by contamination.

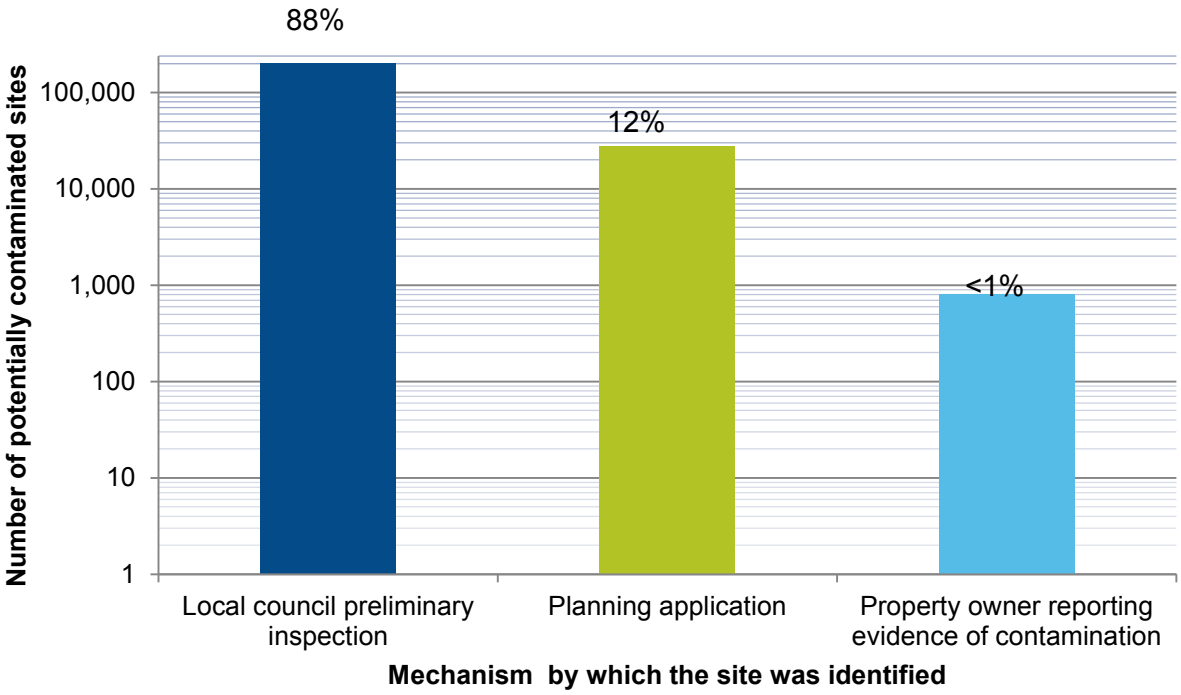

Figure 4 - Number of potential Part 2A of sites brought to the attention of local councils and the main mechanisms by which they were identified. (This graph uses a logarithmic scale in order to be able to display the large range of numbers of sites in the data set)

Detailed inspections

A total of 187 local councils gave a figure for the number of sites where they had begun detailed inspection. Their responses totalled more than 11,000 sites, which is around 5% of the total number of sites brought to the attention of local councils by preliminary inspection. Local councils were also asked how many potentially contaminated sites still required detailed inspection. Of the 186 who responded to this question, 47% said they have 50 or more sites still requiring detailed inspection, 19% have 10 to 50 sites and 34% have less than 10. This equates to over 10,000 sites still requiring detailed inspection.

Timescales and priorities for detailed inspection

When asked to estimate how long it takes from starting a detailed inspection until the point where no further information is required, 168 local councils responded. Half of those who responded

estimate it took less than 6 months. The other half estimated it takes longer than 6 months (see figure 5). This reflects the differences in the complexity, size and character of sites. For special sites, the Environment Agency estimate detailed inspection typically takes 12+ months to complete due to their complexity and the constraints of public finance.

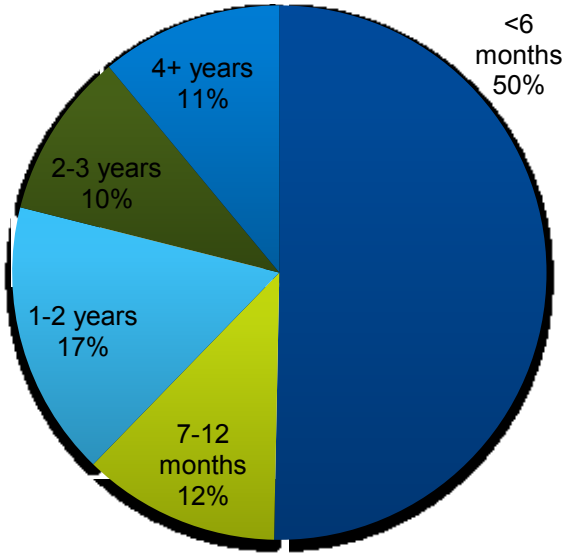

Figure 5 - Time taken to do a detailed site inspection

Local councils were asked if their remaining sites had been prioritised for inspection. Of the 190 local councils who responded, 66% have prioritised their remaining potentially contaminated sites for further inspection. Councils primarily give priority to sites with potential risks to people's health but also consider water, ecosystems and buildings.

Costs of detailed inspection

A total of 78 local councils estimated the total costs (excluding officer costs) of doing their detailed inspections between 1 April 2000 and 31 December 2013. About half (38) said their total costs were less than £100,000. Twenty eight local councils estimated their costs were between £101,000 and £300,000, 4 local councils estimated £301,000 to £500,000 whilst 8 local councils estimated their costs were over £500,000. This reflects the variations in the numbers of sites dealt with by different councils, and the complexity of site conditions and contaminant linkages. Based on those responses, the total estimated cost of detailed inspections is around £32 million. In addition to the 78 local councils who estimated their costs, another 20 local councils did not do any detailed inspections between 1 April 2000 and 31 December 2013 and 86 do not hold detailed information on costs so were unable to provide cost estimates.

Of the 78 local councils who provided costs for their detailed inspections, approximately a third reported they were reliant on central funding (see figure 6), spending just over £10 million between them. This was funding given to local councils as part of the capital grants programme. Defra and the Environment Agency's records of capital grant funding show that between 2006 and 2012 over £21 million was offered to all local councils for detailed inspections. £3 million alone was paid between 2010 and 2014.

Source of funding	%	Cost
Local council funding	66	£20,996,929
Central funding	33	£10,689,113
Third party funding	1	£355,663
Total	100	£32,041,705

Figure 6 - Sources of funding for local council inspections, including special sites (based on responses from 78 local councils)

Sites determined as contaminated land

Determining contaminated land

Following inspection, sites may be determined as contaminated land if there are one or more significant contaminant linkages. However, each site could contain multiple properties and determinations.

Following determination as contaminated land, land can be further designated as a special site. The descriptions for when land can be designated as a special site are set out in the Contaminated Land (England) Regulations 2006. Special sites are therefore a subset of the total number of contaminated land sites. Special sites are regulated by the Environment Agency.

Numbers of determinations

Collectively, the 66 out of the 197 local councils who responded to this part of the survey reported that they had determined a total of 511 contaminated land sites. More detail on when the determinations were made is shown in figure 7. The low response rate to this survey however, means that a lower number of determinations are reported here than in the previous State of Contaminated Land report which indicated that 659 sites had been determined up to March 2007. Currently 54 determined sites are regulated by the Environment Agency as designated special sites.

Year	How many sites were determined	How many contaminative land uses were involved	How many individual properties were affected	How many sites were further designated as special sites
2000	6	4	6	1
2001	17	14	26	6
2002	30	12	33	7
2003	30	13	36	4
2004	115	6	116	2
2005	118	11	144	3
2006	15	11	100	7
2007	16	14	23	7
2008	16	6	43	3
2009	24	9	117	5
2010	83	16	234	4
2011	27	9	52	5
2012	8	6	18	1
2013	6	9	139	6
Total	511	140	1087	54

Figure 7 - Annual number of sites determined as contaminated land based on responses of 197 of 326 local councils. The number of special sites was provided by the Environment Agency

Reasons for determination

An unacceptable risk to human health is the main reason given by those 66 local councils for determining a site as contaminated land, followed by risks to water and then property. These reasons are summarised in figure 8 and are consistent with the priorities in local councils' inspection strategies. Sites can have multiple contaminant linkages and therefore multiple reasons for determination can be given for the same site. This means that in total the number of contaminant linkages will be greater than the number of determined sites.

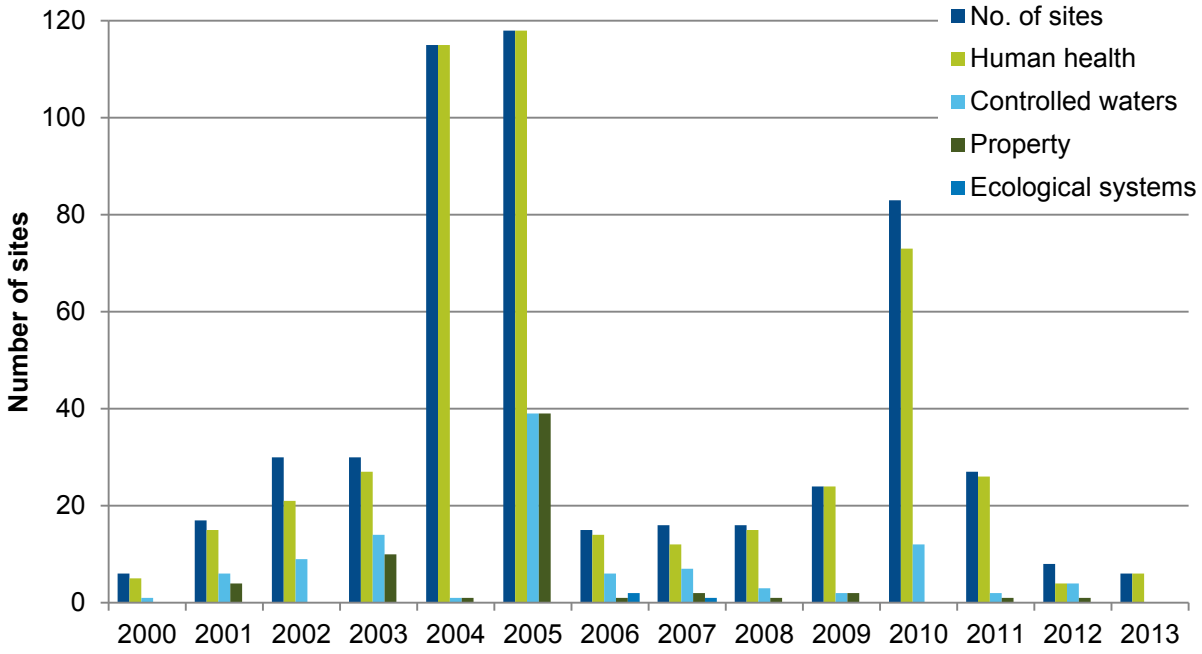

Figure 8 - Significant contaminant linkages at contaminated land sites

As a result of the revised statutory guidance being published in 2012, 4 local councils have reconsidered determinations at 5 sites. The revised statutory guidance that supports Part 2A included clarification on whether local councils could reconsider, change or revoke their determinations in light of any new information brought to the council's attention.

The 2012 revisions also introduced the concept that cost-benefit analysis considering the socio-economic impacts of determination should be taken into account when making decisions. Of the 10 local councils who have determined sites since 2012 and replied to the survey, 3 said that cost benefit analysis had been used in the determination process for the sites concerned.

Determination of a site as contaminated land can be based on multiple contaminant linkages involving multiple substances. Metals/metalloid substances are most frequently identified as the contaminant responsible for determination, followed by organics such as hydrocarbons. This is shown in figure 9, with figure 10 providing more detail about the specific substances most frequently found.

Asbestos is listed in 16 of the determinations. Whilst the risks from occupational exposure to asbestos are relatively well understood, standards for environmental exposure from soil have not yet been set. Industry led research continues to work towards identifying appropriate assessment methods and environmental standards for asbestos.

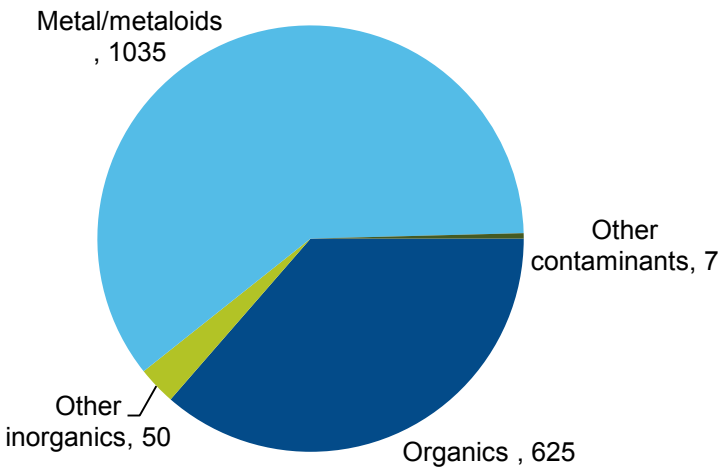

Figure 9 - Type of substances most frequently identified that lead to determination

Of the metals/metalloids, arsenic and lead are the most frequent substances identified in determinations, followed by nickel, chromium and cadmium. Benzo(a)pyrene, a bi-product of combustion, and polycyclic aromatic hydrocarbons (the wider group of substances of which it is part) are the most frequently identified organic substances.

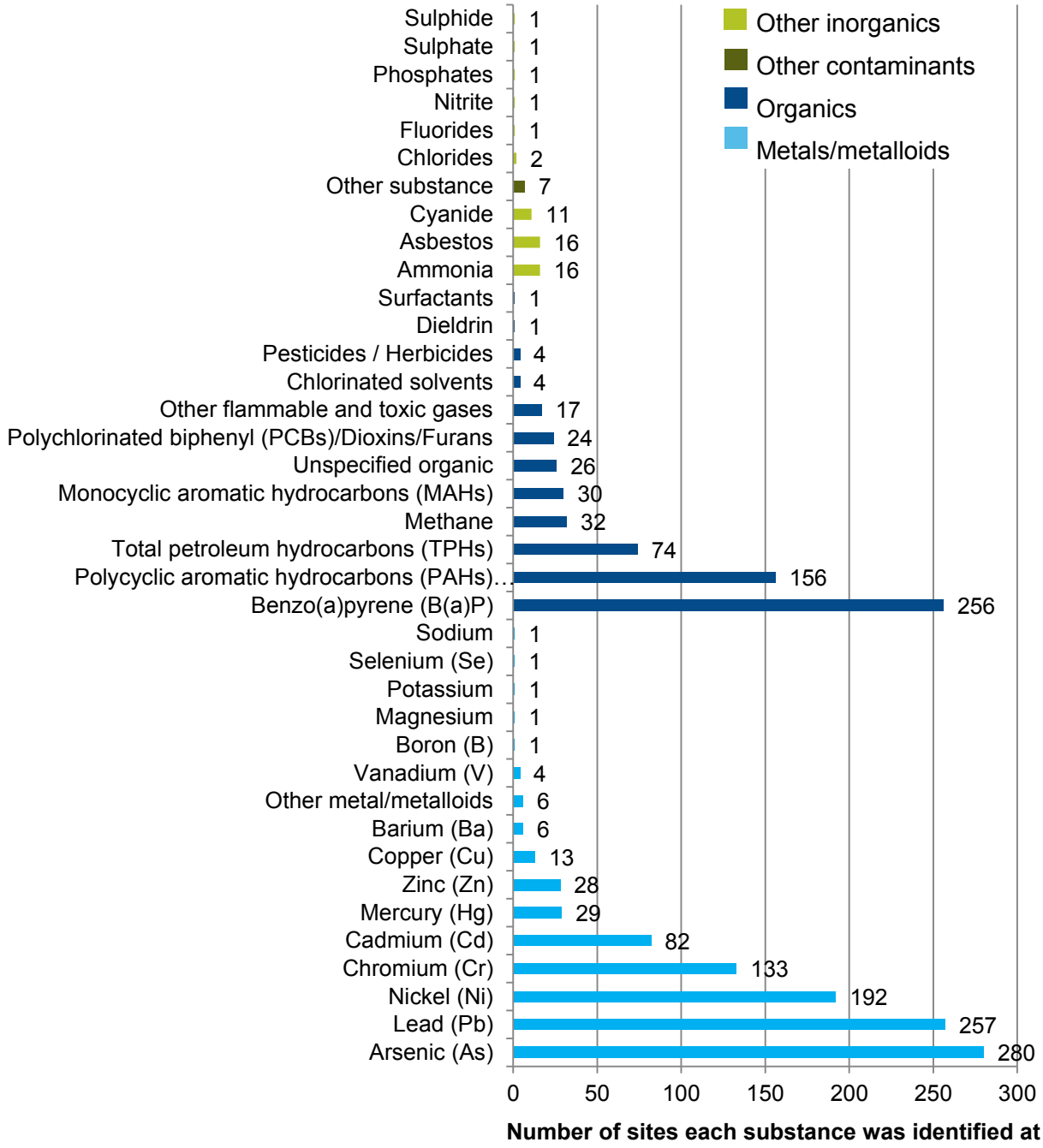

Figure 10 - Most frequently identified substances on determining sites. Multiple substances may be identified at an individual site.

Remediating contaminated land

Once sites are determined as contaminated land, a range of further investigations normally commence to identify who might be liable to pay for remediation and decide what form of remediation should take place. To remediate a contaminated land site, the significant contaminant linkages should be broken, so that no unacceptable risks remain or risks are reduced as far as practicable. Remediation can, therefore, be achieved by:

- removing or reducing the source of contamination

- blocking the pathway (route) between the contamination and the receptor (person or thing affected)
- reducing exposure to the contamination
- removing the receptor altogether

Remediation under Part 2A can include:

- assessment actions, aiming to better understand the contaminant linkages present
- remedial treatment actions, aimed at breaking the contaminant linkages
- monitoring actions, aiming to measure the success of the remedial treatment

As part of the remediation, assessment actions can also be used to determine the most appropriate remedial treatment options. Under Part 2A, along with other legislation that deals with land contamination, remediating a site does not necessarily mean the source of contamination has to be removed.

Progress on remediation

Of the 66 local councils who reported 511 contaminated land determinations, 51 responded to this part of the survey providing information on 444 sites. Together with the Environment Agency's remediation records for special sites (54 in total), information on remediation was provided for a total of 498 sites.

Remediation has begun at all 444 local council regulated sites and has been fully completed at 430 sites. The Environment Agency have begun remediation at 48 special sites and completed remediation at 30 special sites. Remediation is ongoing at 17 special sites and one site was de-designated. Local councils were asked at how many sites where remediation was complete, they or their predecessor local council carried out the remediation. Of the 444 sites, 377 were remediated by the local council or its predecessor.

Under Part 2A remediation decisions can be recorded in 3 ways:

- remediation statement, where the appropriate person(s), enforcing or another party carry out remediation and a statement is published describing this
- remediation notice, where the regulator serves notice on appropriate person(s) requiring them to carry out remediation, or
- remediation declaration, where restrictions apply that mean remediation cannot be done or would not be beneficial and therefore no further action is proposed to address the contaminant linkage(s) in question.

Each statement, notice and declaration is recorded on the public register by the enforcing authority.

A total of 51 local councils and the Environment Agency provided information on how remediation was secured. They included sites where remediation has been completed and those where remediation is ongoing. Statutory notices (including remediation statements and notices) were issued at 159 sites and voluntary remediation was agreed at 296 sites. A combination of statutory notices and voluntary agreements were used at 15 sites. These data are shown in figure 11.

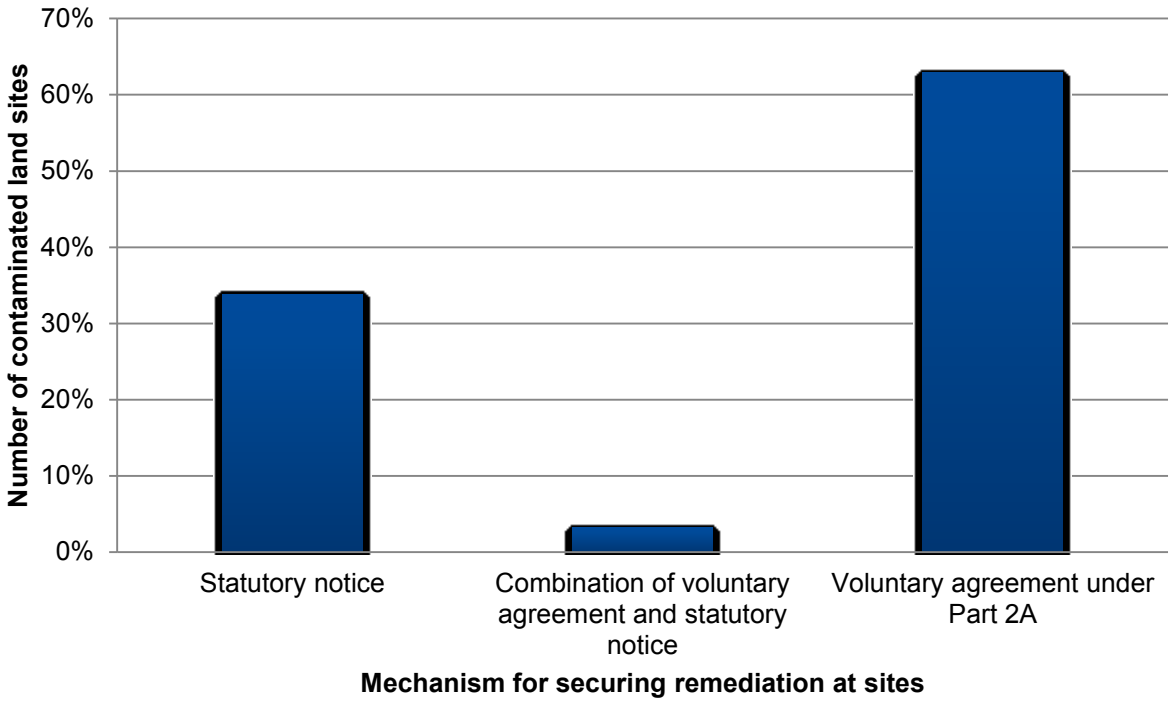

Figure 11 - Mechanisms for securing remediation at determined sites

Contaminated land sites can have multiple remediation statements, notices and declarations and they may be used in combination, for example where remedial treatment is phased or when different linkages are dealt with in different ways. A total of 51 local councils and the Environment Agency provided information on the number of notices, statements and declarations issued, see figure 12. They stated a satisfactory outcome had been reached in all cases.

	Remediation notices	Remediation statements	Remediation declarations
Contaminated land sites regulated by councils	18	380	18
Contaminated land sites regulated by the Environment Agency (special sites)	1	66	6
Total	19	446	24

Figure 12 - Number of remediation notices, statement and declarations issued both for contaminated land and special sites

The Environment Agency and 46 local councils provided information on what approaches they used to support their decision when selecting remedial actions. Of those 46, 72% said they used more than one approach to support their decisions and then provided further information on those approaches, see figure 13. The Environment Agency takes all of the approaches shown in figure 13 into account to support their decisions.

Approach	Response	%
Options appraisal	44	96
Cost benefit analysis	32	70
Sustainability assessment	11	24
Durability considerations	18	39
Climate change adaptation	3	7

Figure 13 - Approaches local councils use for remediation decision making

Remediation under Part 2A is intended to remove unacceptable risks of harm to people and the environment to make the land suitable for its current use. It is not intended to improve the land so it is suitable for any future use. Other regimes such as the planning regime are more appropriate where land use will change. Information on whether a site's land use had changed as part of or following the completion of remediation was provided by 51 local councils and Environment Agency. The majority of contaminated land sites (96%) did not have any land use change. Similarly 94% of the remediated special sites did not have any land use change. Land use did change following remediation at 3% of the remediated sites (including special sites) and land use changed as part of remediation at 1% of sites. These figures are low because Part 2A focuses on risks associated with the current use of the land, it would not be enforceable under Part 2A to remediate for future land uses.

The Environment Agency and 51 local councils provided information on the progress of remediation at sites where they did the remediation. Remediation has commenced at 398 sites. Remediation has subsequently been completed at 377 of the 385 sites remediated by local councils and 12 of the 13 sites remediated by the Environment Agency. This is equivalent to 98% of local council sites and 92% of Environment Agency sites where remediation has commenced.

Timescales for remediation

The estimated timescales for assessment actions, remedial treatment actions and monitoring actions are shown in tables 14 and 15.

Time estimate	Sites where assessment action has been taken	Sites where remedial treatment action has been taken	Sites where monitoring action has been taken
Less than 1 year	41%	60%	38%
1 to 4 years	54%	39%	33%
Greater than 5 years	5%	1%	28%
Total	100%	100%	100%

Figure 14 - Percentage of sites and estimated time taken for remedial actions where remediation has been completed, including local council and Environment Agency sites

Time estimate	Sites where assessment action has been taken	Sites where remedial treatment action has been taken	Sites where monitoring action has been taken
Less than 1 year	11%	56%	6%
1 to4 years	64%	18%	38%
Greater than 5 years	25%	26%	56%
Total	100%	100%	100%

Figure 15 - Percentage of sites and estimated time taken for remedial actions where remediation is ongoing including local council and Environment Agency sites

Treatment and verification

A variety of treatment options are available to remediate contaminated land, for example excavation and disposal, bioremediation, vapour extraction or capping. Multiple techniques may be used at each site. A total of 51 local councils reported that the most commonly used techniques are capping, which was used at 68% of sites, and excavation with offsite disposal, which was the

method used at 65% of sites. This may reflect the fact that a high proportion of determined sites involve domestic housing where access to the property (and hence application of more process based remediation techniques) was limited.

The statutory guidance, and good practice in general, indicate that remediation should include appropriate verification. Local councils were asked what percentage of the sites they remediated were required to produce a verification report. Of the 51 local councils who responded to this question, 67% said they required a verification report at more than three quarters of the sites they remediated.

Costs & liabilities for remediating contaminated land

The 'polluter pays' principle, whereby the person who caused the pollution pays for it to be cleaned up, is an important principle of Part 2A. Those responsible for the clean up/remediation are defined in the regulations as

- Class A: those persons who caused or knowingly permitted the pollution
- Class B: a site owner or occupier – who would only be liable if a Class A appropriate person cannot be found for a particular significant contaminant linkage

Further information on liabilities is defined in sections 78J and 78K of the Environmental Protection Act 1990 and statutory guidance. Once a site has been determined as contaminated land the liabilities are apportioned to the appropriate persons. There is provision in section 78P for a regulatory authority to waive or reduce the costs to be paid by appropriate persons if a case for hardship can be made. Where appropriate persons cannot be found for all contaminant linkages, they may become orphan linkages and the costs of dealing with them fall to the state.

A total of 51 local councils and the Environment Agency for special sites provided information on the cost and liabilities of the sites they remediated.

Circumstances of remediation

Remediation carried out by the local council or Environment Agency

The circumstances under which sites were remediated directly by the local council or Environment Agency are shown in figure 16. This demonstrates that at the majority of remediated sites (371 out of 460), the responsibility for carrying out remediation fell to either the local council or the Environment Agency.

Circumstances of remediation	Number of sites	%	Number of special sites	%
Remediation undertaken on an urgent basis	47	13	0	0
Remediation by the local council via a written agreement with the appropriate person, where they pay the costs	21	6	1	6
Remediation by the local council as the polluter (Class A)	12	3	0	0
Remediation by the local council as landowner (Class B)	192	54	0	0
Remediation by the local council/Environment Agency on behalf of the appropriate persons where a case for hardship has been proven	76	22	7	39

Remediation by the local council/Environment Agency at an orphan site where no appropriate persons have been identified or section 78J water pollution exclusion applies (abandoned mines prior to 31st December 1999)	5	1	6	3
Other	0	0	4	22
Total	353	100	18	100

Figure 16 - Circumstances by which sites were remediated

Where significant risks need to be dealt with very quickly, remediation can be undertaken on an urgent basis. This happened at 47 sites (13%) where the local council directly remediated the site. With regard to the special sites where remediation was done by the Environment Agency, a cost recovery decision was made at 7 sites on the grounds of hardship. At 6 special sites no appropriate persons were identified or a section 78J water pollution exclusion applied. Section 78J relates to mining activities prior to 31st December 1999 where the appropriate persons are deemed to bear no liability for pollution that may be caused as a result of abandoning a mine.

All remediation

For the sites that have been or are currently being remediated (those shown in figure 12), local councils and the Environment Agency were asked which liability groups were pursued to meet the costs of remediation. A response was provided for 123 sites and these are shown in figure 17. The polluter (Class A) has been pursued to bear the costs of remediation at 61% of sites, land owners and occupiers (Class B) were the second most frequently pursued (26% of sites). Where 'other' mechanisms (6% of sites) were cited, these were noted as hardship. Hardship is applied when meeting the costs of remediation is considered to result in undue financial burden to the polluter or land owner.

Comparing the circumstances under which remediation was done and those pursued to meet the costs of remediation, it appears that the Class A polluter cannot be found or made to pay in the majority of cases. In such cases the costs of remediation can fall to the landowner or public purse. The results of the survey and the numbers summarised in figures 17 and 18 indicate that although it is often possible to identify the polluter, they cannot always be made to pay for remediation, for example because a company no longer exists or hardship applies.

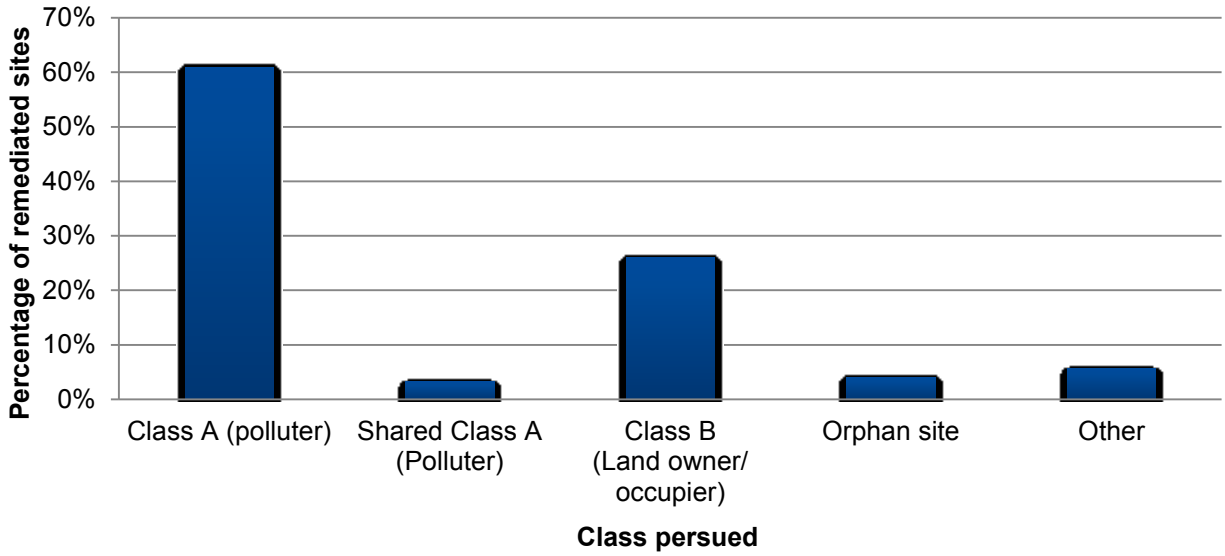

Figure 17 - Class of persons pursued to meet the cost for remediation for all remediated sites

A total of 51 local councils and the Environment Agency provided information on the number of sites where hardship had been applied that led to a decision to reduce costs or not to pursue cost

recovery. This refers to those sites remediated by the local council, Environment Agency or other appropriate persons. The principle of hardship has been applied to 104 sites, which accounted for 22% of local council sites where remediation had commenced and 14% of special sites.

Funding

Local councils were asked to estimate the costs of remediating contaminated land (excluding officer and any legal costs). A total of 51 local councils responded giving a cumulative total of around £29.8 million. The cumulative total offered to local councils for remediation from the capital grants programme since 2006 was £52.5 million.

The capital grants programme has paid for 85% of remediated contaminated land sites and 44% of special sites.

Response	Number of remediated contaminated land sites	%	Number of Special Sites	%
Class A appropriate	30	7	14	29
Class B appropriate	26	6	13	27
Direct funding from Defra (i.e. Contaminated Land Capital Projects Programme)	378	85	21	44
Other public funding (e.g. local council funding) because no liable party was found	9	2	0	0
Don't know	1	0.2	0	0
Total	444	100	48	100

Figure 18 - Number of remediated sites funded by various mechanisms

A total of 14 local councils have been successful in obtaining external funding for remediation from sources other than the Contaminated Land Capital Grant Scheme. The external funding secured is in the region of £2.2 million which represents about 7% of the cumulative total reported to be spent by local councils on remediation

Appeals

Local councils, or the Environment Agency for special sites, can serve a remediation notice on an appropriate person requiring them to undertake remedial action at a site. The Environmental Protection Act Part 2A provides the ability for the regulator to prosecute those who fail to comply with such a remediation notice. The Act also provides the ability for appropriate persons to appeal against remediation notices served on them.

Two appeals have been made against two remediation notices issued by local councils. Two appeals were made to the Secretary of State against one remediation notice served by the Environment Agency. The Secretary of State in 2009 decided to dismiss both of the appeals made against the notice issued by the Environment Agency and confirmed the remediation notice in the modified form appended to this decision. There have been no prosecutions for failing to comply with a remediation notice (section 78M).

Charging notices can be issued by a local council or the Environment Agency to recover costs of remediation (where they have to undertake remediation on behalf of the polluter). A total of 51 local councils and the Environment Agency reported that no appeals have been made against charging notices. Local councils were not asked how many charging notices had been issued.

Conclusions

An overview of this report and the findings of the survey commissioned by Defra in 2014 about contaminated land activity in England are presented in this section.

Response rate

A total of 197 out of 326 local councils (60%) in England and the Environment Agency responded to the survey. However, not all of the local councils were able to provide a response to every question, so for some questions the response rate reduces to 14 % (46 councils). Due to these response rates caution is needed in interpreting the results and reaching conclusions.

Inspections

The main priority for local councils' inspection strategies is to assess the risks posed to human health. Most local councils have reviewed or plan to review their original inspection strategies and for nearly two thirds of councils the priorities within the strategy have remained the same.

Over 200,000 potential contaminated land sites have been identified by local councils preliminary inspections of their areas and over 11,000 sites have had detailed inspection. £21 million was offered to local councils from the capital grants scheme to fund those detailed inspections.

Determinations

Of the 511 contaminated land sites reported to the survey, the majority were posing unacceptable risks to human health. Arsenic, lead and benzo(a)pyrene are the most common substances causing contamination.

Remediation

Information on remediation was provided for 498 sites. Remediation has been completed at 460 of those sites. Remediation was mostly secured by voluntary agreement or regulatory notice and less than 5% used a combination of both. The most commonly used remediation techniques were capping and excavation with off-site disposal. The majority of individual remedial actions were completed within a year although a significant number of sites took more than a year to complete all the remedial actions required

Costs & liabilities

At the majority of remediated sites, the responsibility for carrying out remediation fell to either the local council or the Environment Agency. Whilst the Class A polluters were often pursued to meet the costs of remediation, they could either not be found or made to pay in the majority of cases. More than £52 million has been granted for remediation by the regulators using public monies since the introduction of the regime in 2000. Most of this was spent on making land and water safe for people to use and on cleaning the environment for communities and to support growth.

Overview of Part 2A

This section provides a summary of Part 2A EPA1990. Full details of all aspects of the legislative regime can be obtained from the Environmental Protection Act 1990, the Contaminated Land (England) Regulations 2006 (as amended) and the statutory guidance (Defra 2012).

What Part 2A

Part 2A is the primary legislation for the Contaminated Land regime. It came into force in England on 01 April 2000.

It provides a framework for identifying land where historical contamination has resulted in an unacceptable risk to human health or the environment, and aims to ensure land identified as 'contaminated land' under the regime will be remediated where possible. Local councils are the lead regulators for Part 2A.

The overarching objectives of the Government's policy on contaminated land and the Part 2A regime are to:

(a) identify and remove unacceptable risks to human health and the environment.

(b) seek to ensure that contaminated land is made suitable for its current use.

(c) ensure that the burdens faced by individuals, companies and society as a whole are proportionate, manageable and compatible with the principles of sustainable development

How Part 2A works

The Part 2A statutory guidance requires local councils to write an inspection strategy for their areas. Inspections involve local councils looking at previous land uses and activities that may have caused contamination and assessing the potential risks from these to people and the environment. Part 2A provides a legal definition of contaminated land. The accompanying statutory guidance introduces the idea of significant contaminant linkages that must be present in order to define land as contaminated land. Where all of these conditions are met, a local council can then determine the site to be contaminated land under Part 2A.

Once a site has been determined as contaminated land decisions can be taken about how to deal with it and who should pay. In some specific circumstances (that are defined in the Contaminated Land (England) Regulations 2006) the Environment Agency becomes the enforcing authority. This happens when a site is designated by the local council as a special site

In either case, remediation should be carried out by the appropriate person(s). There are two classes of appropriate person:

1. Class A: those persons who caused or knowingly permitted the pollution
2. Class B: a site owner or occupier – but would only be liable if a Class A appropriate person cannot be found for a particular significant contaminant linkage.

The provision for remediation follows the 'polluter pays' principle. Where an appropriate person may be unable to pay for remediation, the regulators must consider hardship. The regulator may also be able to recover costs if they do the remediation. However, where no appropriate person can be found the cost of remediation may be met by taxpayers.

Remediation can be achieved by breaking the source-contaminant-receptor linkages. For example, removing or reducing the source of contamination, blocking the pathway between the contamination and the receptor, reducing the exposure of the receptor to the contamination or removing the receptor all together.

The remedial actions are documented in one of three ways and may include a combination of further assessment, treatment or monitoring actions (as described in Remediating contaminated land)

Enforcing authorities have a duty to maintain a public register that records regulatory action taken regarding the remediation of contaminated land. The register includes details of:

- remediation notices served
- appeals against remediation notices
- remediation statements and declarations
- designation of special sites
- any convictions on appropriate persons failing to comply with a remediation notice

Information can be excluded from the public register on the grounds of national security or commercial confidentiality. Local councils keep their registers at their main offices. The Environment Agency keep registers for special sites at their relevant local office.

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