

# 11 Costs of Land Remediation

- 11.1** Land remediation is the removal or nullification of contaminants from soil or groundwater. This contamination may be due to illegal dumping, inadequate management of licensed dumping facilities, pollution effects from current economic activity or residual impacts of previous economic activity.
- 11.2** In 2001, the EU Commission notified Ireland that while regulations introduced by Ireland following previous EU proceedings had considerably improved the legal framework for the management of waste, there were systemic deficient administrative practices in their application. The Commission cited examples of unauthorised waste storage, the unauthorised tipping of waste and the unauthorised operation of landfill sites such as those at Tramore and Kilbarry.
- 11.3** A European Court of Justice judgement in 2005 found that Ireland had not complied with its obligations under Directive 75/442/EEC.<sup>1</sup> This ruling required Ireland to take action on the remediation of contaminated sites.
- 11.4** Currently, there are 31 sites identified where it is necessary to remove or nullify the contaminants from the soil or ground water. These sites can be classified as either unlicensed sites, licensed sites, sites on which there had been industrial activity and sites where there is a need to create a wetland or to compensate for wetland lost as a result of the area being used for a landfill.
- 11.5** The Department of Environment, Community and Local Government (DECLG) has incurred significant costs associated with the remediation of land. The costs incurred up to June 2013 set out in Figure 11.1 below. The costs of individual sites are set out in Annex A to this report.

**Figure 11.1 Number of sites, cost to date and estimated future costs at June 2013**

Description	No. of sites	Cost to date	Estimated future cost
		€m	€m
Unlicensed sites	4	1.3	6.6
Licensed sites	21	38.4	1.5
Industrial site <sup>a</sup>	1	52.3	Not available
Wetland creation	5	7.4	2.0
<b>Total</b>	<b>31</b>	<b>99.4</b>	<b>10.1</b>

Source: Department of the Environment, Community and Local Government

Note: a As outlined in paragraph 11.9, the Department of Agriculture, Food and the Marine took charge of this site in 2012.

<sup>1</sup> As amended by Directive 91/156/EEC.

- 11.6** Funding for the land remediation has been provided both from Vote 25 Environment, Community and Local Government and the Environment Fund. DECLG has indicated that it is the availability of funds rather than the nature of work that determines where funds will be sourced. An increasing number of programmes are funded by the Environment Fund rather than the Vote.
- 11.7** DECLG has indicated that there has been limited recovery of cost from those responsible for unlicensed sites. However, a number of cases are before the courts.

### **Haulbowline**

- 11.8** The most expensive site remediation to date relates to the industrial site at Haulbowline Island in Cork. Prior to 2012, €52.3 million has been spent by DECLG on the site, including payments for soil investigations, disposal of waste material, foreshore ecological surveys and professional fees.
- 11.9** Since 2012, the Department of Agriculture, Food and the Marine has taken charge of the remediation work on the site at Haulbowline, with expenditure of €702,000 incurred on the Department's Vote in 2012. An application for a waste licence permit to facilitate further land remediation of part of the site will be submitted in late 2013. The future cost of land remediation at this site is not known, pending planning permission for a specific scheme for remediation and subsequent approval of a waste licence permit. Once permission for a specific scheme is received, a tender will issue for the implementation of the approved remediation. A financial plan for the remediation of Haulbowline Island will be finalised following receipt of planning permission and the waste licence permit for the necessary remediation works.

### **Kerdiffstown**

- 11.10** In addition to projects related to the European Court judgment, DECLG has funded the Environmental Protection Agency in relation to managing the response to an underground landfill fire at Kerdiffstown, Naas in January 2011.<sup>1</sup> The Environmental Protection Agency incurred expenditure of €2.2 million in 2012, in addition to €4.1 million in 2011. A recent remedial options report for the long-term remediation of the Kerdiffstown site outlined a number of options which are being reviewed. The associated works for each option will require a competitive tender process.

### **Remediation of Mines**

- 11.11** The Department of Communications, Energy and Natural Resources (DCENR) has incurred costs in relation to remedial works at a State owned mine in Avoca and remediation work completed at the Silvermines site in 2009 and 2010. This follows a Government decision (in June 2005), that the State would undertake remediation work at both sites. In addition, the Government approved the preparation of legislation to empower the State to undertake works at these sites and at other sites where it might be considered necessary in the future.

<sup>1</sup> There had been fires on the site on previous occasions.

- 11.12** A 2008 feasibility study identified the scale of work required to resolve issues at the Avoca site and estimated the cost of this programme to be in the region of €58 million. The study was funded by DCENR at a cost of €615,000. The Government decided in July 2010 to proceed with a more limited programme to address prioritised hazards. The allocation to address these issues is €3 million and is recorded in the capital commitments. Work is expected to commence in 2014.
- 11.13** In 2012, expenditure of €70,000 was incurred in relation to works carried out at Avoca on behalf of DCENR by Wicklow County Council. The total expenditure to date is €685,000. According to DCENR, should funding become available to implement the full programme identified in the study, the cost would be in excess of €50 million.
- 11.14** Following another Government decision in June 2008, future funding for the Silvermines remediation project was to be addressed in the context of the Estimates process. By the end of 2012, expenditure on the Silvermines project totalled €11.6 million. However, in the context of the current economic situation, funding for DCENR's capital projects, including the Silvermines project, was reduced and in consequence this necessitated a rescheduling of previously anticipated elements of the project.
- 11.15** In March 2012, An Bord Pleanála granted planning permission for a Mine Waste Management Facility on part of the Silvermines site. The estimated cost of providing the facility is €6 million. However, this facility will not proceed until such time as sufficient funds are in place to execute the full project to completion.
- 11.16** Costs prior to 2010 were €9.6 million for the Avoca and Silvermines sites. In recent years, the expenditure outturn has been significantly less than the estimate provision in each year.

**Figure 11.2 Estimate provision and outturn for 2010 to 2012 for mining services**

	Estimate Provision	Outturn
	€m	€m
<b>2010</b>	6.7	2.0
<b>2011</b>	4.7	2.0
<b>2012</b>	4.0	0.3

Source: Appropriation accounts for the Vote for Communications, Energy and Natural Resources

## Conclusion and Recommendation

- 11.17** Responsibility for the management of the remediation of land is shared by a number of government departments and agencies. Funding for land remediation is through various Votes and the Environment Fund.
- 11.18** Remediation of land at 34 sites in the State has so far cost over €119 million. The estimated cost to complete the remediation of the two mines and 30 sites associated with the European Court judgement may exceed €66 million. It is expected that substantial costs will arise in respect of future work at the Haulbowline and Kerdiffs town sites, but those costs have not been quantified pending decisions on the specific approaches to be taken.

**Recommendation 11.1:** The remediation of land at any site is generally a long term project, spanning several accounting periods. Accordingly, it should be accounted for in a similar manner to the accounting for capital projects. This should include the disclosure of the contingent liability (unless it was prejudicial to the State's interests to do so), the contracted commitments, details of the amount spent to date and the amount spent in the current period.

Funding from multiple State sources for the same project should be disclosed in a single primary disclosure note.

### Department of the Environment, Community and Local Government

**Accounting Officer's Response:** Where commitments are identified they are currently included in the overall commitments in the appropriation account. Where a project within the control of this Department receives funding from both the Environmental Fund and Voted funding, this will be disclosed in the notes to the Department's appropriation account.

### Department of Communications, Energy and Natural Resources Accounting

**Officer's Response:** The Department agrees that the contracted commitments and details of spend in the current period should be disclosed in the notes to the accounts.

## Annex A

### Costs of Land Remediation by Site at June 2013

Site	Approved cost	Payment from		Expected future cost
		Environment Fund	Vote for DECLG	
	€'000	€'000	€'000	€'000
<b>Unlicensed Sites</b>				
Ardristan, Carlow	N/A	54	—	935
Kilpedder, Wicklow	N/A	54	—	—
Whitestown, Wicklow	N/A	—	763	5,300
Castleruddery, Wicklow	N/A	350	50	435
<b>Licensed Sites</b>				
Ballyjamesduff, Cavan	528	—	396	—
Bailieborough, Cavan	932	—	699	—
Powderstown, Carlow	1,034	—	771	5
Drumaboden, Donegal	1,276	—	957	—
Dundalk, Louth	3,417	—	2,562	—
Dungarvan, Waterford	4,240	407	2,473	74
Drogheda, Louth	3,107	—	2,525	—
Silliot Hill, Kildare	8,901	—	6,365	311
Dunsink, Dublin	5,171	—	3,878	—
Kilbarry, Waterford	7,019	353	4,734	177
Longpavement, Limerick	5,988	263	4,228	—
Tramore, Waterford	4,986	123	3,558	—
Marlinstown, Westmeath	3,129	—	500	39
Basketstown, Meath	5,668	—	891	109
Killerney, Roscommon	1,310	—	250	—
Doora, Clare	1,469	143	847	112
Ballymurtagh, Wicklow	2,315	178	555	60
Carrick-on-Shannon, Leitrim	1,064	63	186	17
Killurin, Wexford	1,810	318	—	318
Mohill, Leitrim	844	—	187	38
Greenwood Site, Cork	380	—	—	285

Site	Approved cost	Payment from		Expected Future cost
		Environment Fund	Vote for DECLG	
	€'000	€'000	€'000	€'000
<b>Wetland Creation</b>				
Sallybank, Limerick	32	—	24	—
Baggot Estate, Limerick	452	75	—	264
Longpavement, Limerick	85	—	52	12
Tramore landfill, Waterford	7,642	1,488	5,432	722
Suir River Wetlands, Waterford	1,700	41	281	953
<b>Industrial Sites</b>				
Haulbow line Site, Cork <sup>a</sup>	N/A	41,089	11,280	Not available
<b>Total costs</b>		<b>45,001</b>	<b>54,443</b>	<b>10,165</b>

Source: Department of the Environment, Community and Local Government

Note: a In addition, €702,000 was incurred by the Department of Agriculture, Food and the Marine after it took charge of the site in 2012.