

## 2. POLICY AND LEGISLATION

### 2.1 International policies and practices

Policies and practices in other countries were examined in the preparation of the Plan. Hazardous waste management practices in Denmark, Germany, the Netherlands, the UK and the USA were reviewed. Box 2.1 summarises the hazardous waste management systems employed in these countries.

The overall trend observed in overseas practices is the increasing participation of the private sector in waste management, a practice that is reflected in Irish waste management policy (see section 2.3).

### 2.2 EU policy and legislation

**Council Directive 75/442/EEC on waste**, otherwise known as the waste framework directive, sets out

**Box 2.1 Hazardous waste management systems in other countries**

<i>Country</i>	<i>Hazardous waste management structure</i>
Denmark	Type: centralised but becoming increasingly regionalised. Age: central incineration facility established in the early 1970's. Driven by the need to protect groundwater resources. Comment: A network of local collection systems and drop-off points is complemented by a high public awareness. Nineteen major transfer stations nationwide connect to the central incineration facility which is owned by the municipalities. A growing private sector hazardous waste management industry is providing both increased competition and alternatives to incineration.
Germany	Type: waste generators are responsible from 'cradle to grave'. Emphasis on producer responsibility and clean technology Age: first waste acts made during 1970's Comment: Hazardous waste recovery and disposal is by state (bundeslande) owned corporations. Treatment options have been decreed for specific hazardous waste streams.
Netherlands	Type: highly regulated market oriented towards the private sector. Age: national plan first published during 1980's. Comment: Collection and recovery infrastructure is provided by the private sector. The number of collection firms is limited by national law in order to maintain service and environmental standards. Major investment in disposal infrastructure (hazardous waste landfills and incinerators) was provided by central and local government via public-private partnerships. Voluntary sector agreements are widely used.
United Kingdom	Type: highly regulated market oriented towards the private sector. Age: controls began in 1970's with legislation for tracking 'poisonous waste'. Comment: Hazardous waste policy is incorporated into the UK national waste plan. Capacity planning is market driven. The market is wholly private. Regulation is driven by the polluter pays principle and consideration of the BPEO (best practicable environmental option).
United States of America	Type: waste generators are responsible from 'cradle to grave'. Age: controls began in 1970's as public health protection measures. Comment: The cradle to grave approach allows for the identification of liability in cases where land was contaminated by hazardous waste disposal activities. Legislation (RCRA) imposes strict controls on treatment, storage and disposal activities. Only recently has the USA begun to look to prevention and minimisation initiatives.

the objectives of eliminating or reducing the environmental consequences associated with waste generation, recovery and disposal. It incorporates the principles of clean technology and waste prevention, waste recovery and energy recovery from waste, otherwise known as the waste hierarchy. Member states are required to take appropriate measures *to establish an integrated and adequate network of disposal installations taking account of the best available technology not involving excessive costs*. Member States should strive for EU and national self sufficiency while *taking into account geographical circumstances of the need for specialised installations for certain types of waste*, thus implementing the *proximity principle*. The directive requires Member States to draw up waste management plans and to ensure that any facility for the disposal or recovery of waste is issued with a permit to carry out such an activity. The directive stipulates to whom the *polluter pays principle* should apply.

**Council Directive 91/689/EEC on hazardous waste** implemented the waste directive (75/442/EEC) in relation to hazardous waste. It replaced Council Directive 78/319/EEC on toxic and dangerous waste. The requirements for the management and the permitting of hazardous waste recovery and disposal facilities are set out. Hazardous waste management plans are to be drawn up in the context of the waste directive. Pursuant to article 4(1) of the hazardous waste directive, the hazardous waste list was established under Council Decision 94/904/EC. This list forms the basis for the definition of hazardous waste in Irish law. From 1 January 2002 a new list of wastes will apply (see section 1.5).

Significantly, the hazardous waste directive excluded domestic waste from its provisions unless segregated fractions had been separately collected. Proposals have been made for this exclusion to be removed from an amended hazardous waste directive. In consequence, Member States may be required in the near future to ensure that hazardous waste from households and other similar sources is separately collected and/or delivered to specialist collection facilities.

Other relevant pieces of EU legislation have been transposed into Irish law and are referred to, where appropriate, in the following sections.

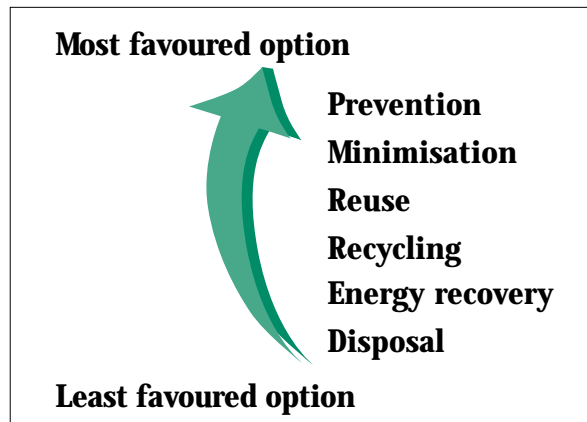


Figure 2.1 Waste hierarchy

### 2.3 National policy

Figure 2.1 reflects national and EU policy and illustrates the hierarchy of waste management options. The hierarchy promotes waste prevention, reuse and recycling and the application of high environmental standards to waste management activities. In the long term, national policy is based on achieving the objectives listed in the Act.

The Department of the Environment and Local Government published a policy statement entitled *Waste Management – changing our ways* in September 1998. The statement identifies the need, within the framework of the Act and in line with directive 75/442/EEC on waste, “to modernise waste management practice and secure the provision of environmentally efficient infrastructure”. The policy statement reiterates the government’s commitment to implementation of the polluter pays principle while recognising the importance of economies of scale in ensuring that waste management solutions are viable and cost effective. It was prepared against a background of increasing waste generation in Ireland and reflected the fact from *Europe’s Environment: The Second Assessment* (European Environment Agency, 1998) that waste “recovery, including recycling, tends to be more successful in countries with a strong waste management infrastructure”.

The policy statement makes a commitment to explore options for “considerably increased funding for waste management in the post-1999 period for measures commensurate with national waste recovery objectives”. This statement is made in the context of a recognition of an increased private sector interest in the provision of waste

management facilities and of a recognition of the importance of economies of scale in planning for waste management capacity and the resultant opportunities for all-Ireland co-operation that should be taken into account.

The policy statement reiterates local authorities' obligations to prepare waste management plans. The Act identifies waste management plans as the means of implementation of the recommendations made in the National Hazardous Waste Management Plan which are relevant to local authorities.

Local authorities are encouraged to be innovative in finding alternative waste management solutions to landfill. In addition to waste segregation and materials recycling, technological solutions available include composting, anaerobic digestion, municipal waste to energy thermal treatment and thermolysis.

Other important points made in the policy statement include:

- *“producer responsibility obligations (PROs) ... will be an increasingly significant aspect of waste management policy”;*
- *“apart from the proposed directive on the landfill of waste, proposals which are currently under consideration [at EU level] are likely to involve – the separate collection and recovery of all spent batteries, and of the hazardous component of household wastes”;*
- *“local authorities ... will generally remain responsible for the supervision and control of waste management activities within their functional areas and for the enforcement of waste management legislation”;* and
- *“local authorities ... should develop an on-going public awareness programme, aimed at generating a clear appreciation of the nature and scale of the waste problem, and providing practical guidance on the day to day choices which can be exercised by individuals”.*

The Department of the Environment published *Sustainable Development: A Strategy for Ireland* in 1997 which outlines the concept of sustainable development and a plan for its integration into key economic sectors in Ireland. The Strategy reflects Ireland's commitment to the principles and agenda for sustainable development agreed at the Earth Summit in Rio de Janeiro in 1992 and also responds to the EU Fifth Action Programme for the

Environment. The general aim of the Strategy is to *“ensure that economy and society in Ireland can develop to their full potential within a well protected environment, without compromising the quality of that environment and with responsibility towards present and future generations and the wider international community”.*

To achieve the aims of the Strategy, the Government has adopted the following principles, the implementation of both being specific objectives of this Plan:

- the Precautionary Principle which aims to deal with causes rather than results of environmental pollution; and
- the Polluter Pays Principle which allocates the costs of pollution to producers and consumers rather than to society at large.

The Strategy recognises that the primary responsibility for the proper management of hazardous waste lies with the holder or generator of the waste.

The Strategy states that, where possible, market-based instruments will be used to achieve waste minimisation and recycling and to realise an increase in waste management efficiency, a policy that is reiterated in the 1998 policy statement. It places an onus on the Agency to develop performance indicators in order to facilitate the implementation of sustainable development. Indicators will play a key role in the review of hazardous waste activities (see chapter 3 and *Environment in Focus: A Discussion Document on Key National Environmental Indicators*, EPA, 1999).

Figure 2.1 illustrates the waste management hierarchy which seeks to promote waste prevention, reuse and recycling and to apply high environmental standards to waste management activities. This hierarchy forms the basis for decisions in relation to waste management.

## 2.4 National legislation

The **Environmental Protection Agency Act, 1992** set out the functions of the Agency.

- Section 52 identifies the general functions of the Agency as being:
  - the licensing, regulation and control of activities for the purposes of environmental protection;

- the monitoring of the quality of the environment;
  - the provision of support and advisory services to local authorities and other public bodies;
  - the promotion and co-ordination of environmental research; and
  - liaison with the European Environment Agency.
- Part IV (Sections 82 to 99) implements integrated pollution control (IPC) licensing. Waste prevention and reduction is at the core of IPC licensing and all licensees are required to implement waste reduction programmes.

The **Waste Management Act, 1996** requires that a National Hazardous Waste Management Plan be prepared. The local authorities' role in waste management planning is set out in Part II of the Act. Local authorities are required under sections 22(8) and 26(5) of the Act to incorporate the

recommendations of the Plan into their waste management plans. Section 26(6) of the Act provides for the inclusion of specific recommendations regarding the functions of any relevant public authority with respect to the effective management of hazardous waste.

The role of the Agency includes preparation and review of the Plan, monitoring of its implementation and measurement of its progress through such instruments as the national waste database, IPC licensing and waste licensing. Full implementation of the Plan will only be achieved with the co-operation of the general public, local government, industry and commercial concerns. The provisions made under the Act include for monitoring, recording and reporting on hazardous waste.

The Act has provided the framework for a series of waste management regulations introduced between 1997 and 2000 as described in Box 2.2.

### ***Box 2.2 Waste Management Regulations***

Waste Management (**Licensing**) Regulations, 2000 (S.I. No. 185 of 2000) - regulates waste licensing by the EPA of specified waste recovery and disposal activities; revokes S.I. No. 133 of 1997 and S.I. No. 162 of 1998.

Waste Management (**Licensing**) Regulations, 1997 (S.I. No. 133 of 1997) - commenced waste licensing by the EPA of specified waste recovery and disposal activities; implemented provisions of certain Council Directives. Now revoked.

Waste Management (**Licensing**)(**Amendment**) Regulations, 1998 (S.I. No. 162 of 1998) - amended S.I. No. 133 of 1997. Now revoked.

Waste Management (**Permit**) Regulations, 1998 (S.I. No. 165 of 1998) - commences waste permitting by local authorities of specified waste recovery and disposal activities; implements registration by local authorities and the EPA of specified activities.

Waste Management (**Movement of Hazardous Waste**) Regulations, 1998 (S.I. No. 147 of 1998) - establishes a consignment note system for the movement of hazardous waste within Ireland; prohibits unauthorised mixing of hazardous waste types.

Waste Management (**Transfrontier Shipment of Waste**) Regulations, 1998 (S.I. No. 149 of 1998) - designates competent authorities for the import, export and transit of wastes; sets out procedural aspects of TFS.

Waste Management (**Hazardous Waste**) Regulations, 1998 (S.I. No. 163 of 1998) - implements management provisions relating to asbestos, batteries, polychlorinated biphenyls, waste oils and general hazardous waste.

Waste Management (**Hazardous Waste**)(**Amendment**) Regulations, 2000 (S.I. No. 73 of 2000) - introduces new provisions in relation to batteries.

Waste Management (**Planning**) Regulations, 1997 (S.I. No. 137 of 1997) - lists contents and requirements of waste management plans to be made for the functional areas of local authorities.

Waste Management (**Register**) Regulations, 1997 (S.I. No. 183 of 1997) - obliges the EPA to create a register of waste licence applications and licenses granted; obliges local authorities to create a register of waste collection permit applications and permits granted.

Waste Management (**Miscellaneous Provisions**) Regulations, 1998 (S.I. No. 164 of 1998) - implements Section 34(1) of the Act in respect of waste oils.

European Communities (**Licensing of Incinerators of Hazardous Waste**) Regulations, 1998 (S.I. No. 64 of 1998) - implements Council Directive 94/67/EC on the incineration of hazardous waste.





*Photo 1 Hazardous waste landfill in the Netherlands.*

## 2.5 Licensing of hazardous waste recovery and disposal facilities

Hazardous waste recovery and disposal facilities are scheduled activities for the purposes of waste licensing by the Agency or waste permitting by local authorities. Table 2.1 lists the licensable activities.

It should be noted that storage facilities for hazardous waste also require a waste licence or permit. For storage on site of generation, a certificate of registration may be required. Storage is classified as a recovery or disposal activity in accordance with the Waste Management Act.

The incineration of hazardous waste is a scheduled activity under the First Schedule to the EPA Act, 1992. The Waste Management (Amendment) Bill 2001 proposes to clarify that any stand alone incineration or thermal treatment facility will require a licence issued under the Waste Management Act.

At the time of publication of this Plan, a number of stand alone hazardous waste activities have applied

for or obtained licences or permits under the Waste Management Act, 1996 (nineteen facilities) and the EPA Act, 1992 (one facility). Seventeen such facilities are currently in operation. Hazardous waste may only be recovered or disposed of at facilities that have applied for and/or received the appropriate licence from the EPA or permit from a local authority.

For certain activities, prescribed under the Permit Regulations, a certificate of registration will be required.

In summary, Section 40(4) of the Act says that the Agency shall not grant a waste licence unless it is satisfied that –

- (a) any emissions from the recovery or disposal activity will not result in the contravention of any relevant environmental standard or any relevant emission limit value prescribed under any other enactment,
- (b) the activity concerned, carried on in accordance with the conditions of the licence, will not cause environmental pollution,

- (c) the best available technology not entailing excessive costs (BATNEEC) will be used to prevent or eliminate or, where that is not practicable, to limit, abate or reduce an emission from the activity concerned,
- (d) the applicant is a fit and proper person to hold a waste licence, and
- (e) the applicant has complied with any requirements relating to financial provision.
- It is the policy of the Agency to require licence holders to develop an environmental management system which incorporates a programme of continuous improvement with respect to environmental impacts. Licensee reporting requirements are an important source of information in relation to hazardous waste and all licence holders are required to maintain comprehensive records.

**Table 2.1 Licensing and permitting of hazardous waste recovery and disposal facilities**

<b>Waste activity</b>	<b>Prescribed date</b>
<b>from Waste Management (Licensing) Regulations, 2000, S.I. No. 185 of 2000</b>	
2. The disposal of hazardous waste (other than at an existing facility)	1 May 1997
9. The disposal of hazardous waste (other than at a landfill facility)	1 May 1998
13. The recovery of hazardous waste at a facility (other than an existing facility)	20 May 1998
22. The recovery of PCB contaminated equipment	1 March 1999
23. The recovery of waste oils	1 March 1999
26. The recovery of hazardous waste	1 October 1999
<b>from EPA Act, 1992</b>	
11.1 The incineration of hazardous waste	16 May 1994 for new activities 1 September 1994 for existing activities
<b>from Waste Management (Permit) Regulations, 1998, S.I. No. 165 of 1998</b>	
<i>Activities subject to waste permit</i>	
4. the recovery of waste which is composed of or contains mercury or its compounds (including electric lamps, light bulbs and fluorescent tubes)	1 October 1998
<i>Activities subject to Registration</i>	
The temporary storage, on the premises where it is produced, of hazardous waste, where the quantities being stored at any one time exceeds -	1 October 1998
(a) in the case of liquid waste, 25,000 litres, or	
(b) in the case of non-liquid waste, 40 cubic metres.	
other than storage carried on [at a facility that may be regulated by a waste licence or IPC licence].	