

<b>4.0 WASTE MANAGEMENT POLICY .....</b>	<b>56</b>
4.1 EVALUATION OF POLICY OPTIONS.....	56
4.1 (a) <i>Provision of Services and Waste Management Facilities</i> .....	56
4.1 (b) <i>The Management of Individual Waste Streams</i> .....	58
4.1 (c) <i>Objectives of Section 22(6) of the Act</i> .....	58
4.1 (d) <i>Enforcement and Implementation of the Act</i> .....	60
4.2 STATEMENT OF POLICY .....	61

---

## 4.0 WASTE MANAGEMENT POLICY

---

### 4.1 Evaluation of Policy Options

#### 4.1 (a) Provision of Services and Waste Management Facilities

The Waste Management Strategy Study for Co. Kildare (1999) addresses the following waste management options in detail:

- Materials recycling facility;
- Composting facility;
- Anaerobic digestion facility;
- Waste-to-energy plant;
- New landfill site;
- Civic amenity sites;
- Other available waste treatment facilities;
- Some combination of the above options.

The above options are discussed in more detail in Appendix VII, Options for the future management of waste in County Kildare.

The collection systems, pre-treatment requirements, outlets for segregated materials, disposal residues and capital and operating costs associated with each option were examined in the strategy study report.

The recommendations of the strategy study report in relation to the provision of services and waste management facilities to be provided by Kildare County Council in order to effectively manage its waste in the period to 2018 are as follows:

1. The provision of kerbside type collection in the following towns; Naas, Newbridge, Kildare, Celbridge, Leixlip, Maynooth and Athy. These towns had a combined population in excess of 70,000 persons in 1996 representing 52% of the total county population.
2. An intensive bring system for the remaining population of approximately 67,000 persons. This represents a requirement for 67 neighbourhood recycling centres based on the 1996 population records.
3. The Council should also provide at least 3 No. Civic Amenity sites located as to provide ease of access to the majority of the county's population.
4. Provide, or arrange for the provision of, a waste processing and biological treatment plant. The facility should be capable of being extended in future if or when additional organic wastes are directed there.

5. Provide, or arrange for the provision of, a new engineered landfill disposal site capable of accepting residual waste material generated in the County over a 20-year period. It is recommended that this facility be developed as a residual site and so a transfer station will also be required.
6. Notwithstanding recommendations 4 and 5 above it was also recommended that an examination be undertaken of the feasibility of directing all, or a significant proportion, of Co. Kildare's waste to suitable facilities in the Dublin, Midlands and South-East regions, as and when these are proposed/developed.

The costs incurred in establishing the recommended waste management infrastructure estimated in the Strategy Study are presented in Table 4.1.

**Table 4.1: Estimated Capital and Operating Costs of Recommended Waste Management Infrastructure**

ITEM	CAPITAL COST, IR£	ANNUAL OPERATING COST, IR£
Rural Bring Network	300,000	75,000
Urban Kerbside Recycling	400,000	300,000
Civic Amenity Sites (3 no.)	800,000	175,000
Materials Processing Plant (cap. 150,000 tpa)	3,000,000	450,000
Biological Treatment Facility (cap. 25,000 tpa)	3,170,000	306,250
Baling Transfer Station (cap. 100,000 tpa)	3,500,000	1,000,000
Landfill (cap. 100,000 tpa) (phased over 20 years)	12,000,000	1,000,000
Landfill Aftercare	2,000,000*	300,000
<b>Totals</b>	<b>25,170,000</b>	<b>3,606,250</b>

\* Dependant on EPA waste licence requirements

The recommendations as presented in the Strategy Study report were based on:

- the requirements of national and EU policy and legislation;
- the appreciation of the waste types and quantities generated in Co. Kildare, both currently and in the future;
- the nature of the existing arrangements in the County;
- the review of the available management options carried out; and on
- the economic assessment made of those options.

#### 4.1 (b) The Management of Individual Waste Streams

The Council has the option of arranging that individual waste fractions such as organic, inert, hazardous or recyclable wastes be dealt with separately. Separation of the waste fractions can be done either at source or at destination, e.g. waste management facility. Dealing with individual waste fractions separately is environmentally more favourable but inevitably more costly. The Council will encourage and seek to expand on the existing home composting trials and will introduce community-based green waste composting during the period of the plan on a trial basis.

The separate collection of (kerbside collection) will be provided in all major towns during the period of the Plan. The number of bring centres will be increased from 23 to 67.

#### 4.1 (c) Objectives of Section 22(6) of the Act

Section 22(6) of the Act stipulates that the Waste Management Plan shall contain reasonable and necessary objectives. Assuming that the period of the Plan is five years, then the objectives and targets as set for the period 1999 to 2004 under the following headings:

- Prevention;
- Minimisation;
- Encouragement and support of recovery;
- Safe disposal; and
- Implementation of the polluter pays principle in respect of non-hazardous waste.

The binding objectives of the Council are those required to meet national targets (Recycling for Ireland, 1994 as amended), the Packaging Directive, the EU Landfill Directive and the objectives set out in the recent policy statement entitled “Waste Management – Changing Our Ways”.

The national recycling targets currently are as follows:-

- 20% of combined household waste/commercial waste to be recycled by 1999;
- 50% of household waste to be diverted from landfill by 2013;
- 100,000 tonnes of organic waste to be diverted from landfill by 1999,
- 27% of packaging waste to be recycled by 1999.

In response to the Packaging Directive (94/62/EC) the Irish targets are:-

- 25% recycling rate for packaging waste by 2001,

- 50-65% recovery rate by the year 2005;
- 25-45% recycling rate by the year 2005;
- 15% minimum recycling rate for each material by 2005.

The Landfill Directive proposes the following targets:-

- By the year 2006, reduce amount of biodegradable material going to landfill to 75% of the total amount of biodegradable material produced in 1995.
- By the year 2009, reduce amount of biodegradable waste going to landfill to 50% of 1995 levels.
- By the year 2016, reduce amount of biodegradable waste going to landfill to 25% of 1995 levels.

Section 4 of the Minister of the Environment and Local Government's policy statement on waste in September 1998 entitled "Waste Management – Changing Our Ways" defines clear targets for the management of waste in Ireland over the next fifteen years as follows ;

- A major general objective is to stabilise, and in the longer term reverse, the growth in waste generation, though it is recognised that achievement of this objective will require determined and ambitious measures from producers and consumers, as well as local authorities. In addition, and in the shorter term, more sustainable practices need to be applied in relation to the management of waste arisings. An adequate, national infrastructure to meet modern waste management needs should facilitate the achievement of the following targets over a fifteen year timescale:
  - a diversion of 50% of overall household waste away from landfill,
  - a minimum 65% reduction in biodegradable wastes consigned to landfill,
  - the development of waste recovery facilities employing environmentally beneficial technologies, as an alternative to landfill, including the development of composting and other feasible biological treatment facilities capable of treating up to 300,000 tonnes of biodegradable waste per annum,
  - recycling of 35% of municipal waste,
  - recycling at least 50% of C&D waste within a five year period, with a progressive increase to at least 85% over fifteen years,
  - rationalisation of municipal waste landfills, with progressive and sustained reduction in numbers, leading to an integrated network of some 20 state-of-the-art facilities incorporating energy recovery and high standards of environmental protection, and
  - an 80% reduction in methane emissions from landfill, which will make a useful contribution to meeting Ireland's international obligations.

Table 4.2 summarises these targets as they apply to County Kildare..

**Table 4.2: Summary of the Targets to be met by County Kildare**

<b>WASTE</b>	<b>2001</b>	<b>2005/6</b>	<b>2009</b>	<b>2013</b>	<b>2016</b>
Municipal to be recycled	20% <sup>1</sup>			35% <sup>4</sup>	
Household to be diverted from landfill				50% <sup>4</sup>	
Packaging Waste to be recycled	25% <sup>2</sup>	50% <sup>2</sup>			
Biodegradable Municipal waste to be diverted from landfill		25% <sup>3</sup>	50% <sup>3</sup>		75% <sup>3</sup>
Biodegradable waste to be diverted from landfill. ( <i>Municipal &amp; Industrial</i> )				65% <sup>4</sup>	

*All targets based upon 1998 arisngs apart from Landfill Directive Targets*

Notes:-

1. “*Recycling for Ireland*” (1994)
2. Packaging Directive Targets
3. Landfill Directive Targets (based upon 1995 arisings)
4. “*Changing Our Ways*” (1998)

Of the obligatory targets set out in Table 4.1 those in the Packaging Directive and those in the EU Directive on the Landfill of Waste are most pertinent during the period of this Plan. Kildare County Council will therefore concentrate on these objectives for the period of this Plan. The Council will also have regard to the later target dates required by the “*Changing Our Ways*” policy document and will seek to meet the interim targets necessary to ensure these targets will be fully met by their respective dates.

#### 4.1 (d) Enforcement and Implementation of the Act

The Council will adopt a policy of information such that all waste producers in the County will be made fully aware of their responsibilities. The Council’s approach will be to introduce procedures for information and advice prior to enforcement. To this end the Council has already issued leaflets on ‘Litter and The Law’.

Litter Wardens will also play an important role in the enforcement of the Waste Management Act. Their initial role has included an information campaign, advising commercial and industrial premises and the general public of their responsibilities under the Litter Pollution Act 1997. The Wardens are also responsible for the investigation of reports of illegal dumping and prosecution where evidence is found under both the Litter Pollution and Waste Management Acts.

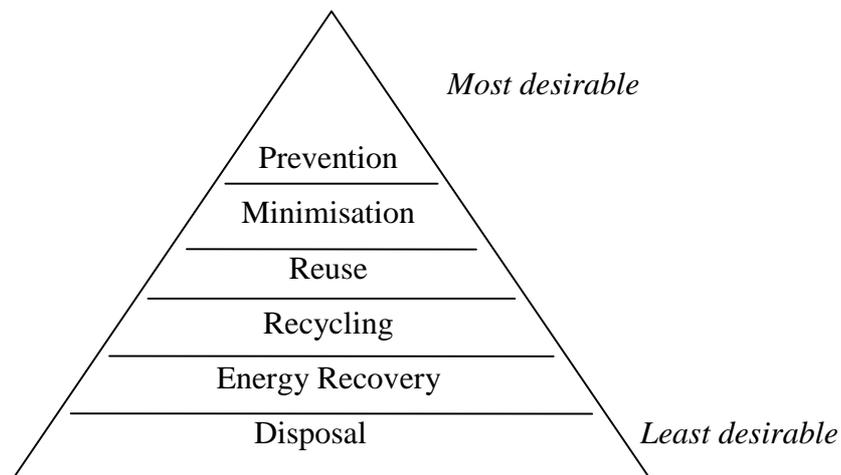
The Council will seek to ensure that the requisite staff and resources are made available so that its responsibilities under the following statutes and statutory instruments are fully and effectively discharged:

- ◆ Litter Pollution Act 1997;
- ◆ Waste Management (Planning) Regulations 1997;
- ◆ Waste Management (Packaging) Regulations 1997;
- ◆ Waste Management (Farm Plastics) Regulations 1997;
- ◆ Waste Management (Use of Sewage Sludge in Agriculture) Regulations 1998;
- ◆ Waste Management (Movement of Hazardous Waste) Regulations 1998;
- ◆ Waste Management (Permit) Regulations 1998;
- ◆ Waste Management (Miscellaneous Provisions) Regulations 1998.

#### **4.2 Statement of Policy**

Kildare County Council's waste management policy for the period of this Plan will comprise the following specific policy actions (as recommended in the Waste Management Strategy, 1999). These actions are prioritised in accordance with the Government's policy objectives as stated in the document "Changing Our Ways" (DoELG, September 1998). Figure 4.1 below shows the hierarchy of waste management.

**Figure 4.1: Hierarchy of Waste Management**



### ***Specific Policy on Waste Prevention***

1. The Council will continue to operate its schools programme, and will endeavour to step up its information and advisory campaign through the media, environmental bulletins, the internet and its staff. The Council will establish a task force to oversee this campaign.
2. The Council will continually review disposal charges as an economic incentive for waste prevention.
3. The Council will review the recommendations of the “Consultancy Study on Plastic Bags” (currently available for public consultation) and which has been prepared by the Department of Environment and Local Government.

### ***Specific Policy on Waste Minimisation***

1. The County Council will carry out a detailed eco-audit of its activities in order to identify baseline conditions concerning its in-house purchasing policies, consumption patterns and waste production. The audit and its findings will be widely publicised in order to provide an example to the wider community and in particular to small and medium enterprises in the County. The audit will provide sustainability indicators such as amount of waste produced, recovered and landfilled.
2. Based on the findings of the audit targets will be established for in-house waste minimisation and recovery; purchasing policies and working procedures will be amended progressively in accordance an agreed implementation plan.
3. The audit process will be viewed as the first step in the achievement of full certification via an Environmental Management System such as ISO 14001.
4. The County Council will seek to capitalise on the presence in the County of major companies recognised as world-leaders in the application of waste minimisation techniques to disseminate the message to small and medium sized enterprises.
5. The County Council will initiate a public information programme for environmental issues in general and waste management in particular. The programme should be designed to be informative and attractive and be aimed at specific sectors such as householders, small businesses, schools.
6. The County Council will ensure that economic instruments, and in particular the price mechanism, are applied to waste services in such a manner as to encourage and promote waste minimisation and waste recovery.

### ***Specific Policy on Recovery/Reuse***

1. The Council will provide facilities at its civic amenity centres to recover reusable materials such as clothing and books.
2. The Council will develop a repair and renovation centre where goods or furniture may be deposited for repair by the voluntary sector – possibly in conjunction with FAS.

### ***Specific Policy on Recovery/Recycling***

1. The County Council will support and encourage commerce and industry in the achievement of statutory targets for the recovery and recycling of packaging waste.
2. The County Council will liaise with and support REPAK with respect to the implementation of the Waste Management (Packaging) Regulations 1997.
3. The Council will arrange for the provision of a kerbside type collection system for packaging waste and newsprint to all households in the following towns:

- Naas;
- Newbridge
- Kildare;
- Celbridge;
- Leixlip;
- Maynooth;
- Athy.

4. The Council will arrange for the provision of an intensive bring system for the recovery of household recyclable material in the remainder of the County. As the population of the remainder of the County is currently estimated at 67,000 persons this will necessitate the development of 67 neighbourhood recycling centres. These centres should provide, at a minimum, receptacles for the collection of glass, beverage cans and textiles.

It is anticipated that this system will necessitate capital expenditure, by or on behalf of the Council, of approximately IR£250,000. Operating costs are estimated at IR£50,000 per annum. This measure is designed to recover a further 10% of household waste.

5. The Council will arrange for the provision of a minimum of 3 No. dedicated Civic Amenity sites so located as to provide ease of access to the majority of the County's population. These sites should incorporate comprehensive bring facilities for recyclable materials, green waste and household hazardous wastes. Green waste is to be shredded and composted. Consideration will be

given to ‘Community Composting’ schemes. Such schemes may be carried out in schools, institutions or in small rural villages.

Provision will be made at Civic Amenity Sites for the reception and further management of household hazardous materials in accordance with the recommendations of the Proposed National Hazardous Waste Management Plan. These measures should ensure that a further 5-10% of household waste is removed from the waste stream.

### ***Specific Policy on Energy Recovery***

1. Kildare County Council in the short-term will dispose of municipal solid waste arisings (upon closure of Silliot Hill Landfill) through landfill in adjacent authorities. Particular consideration will be given to disposal at Arthurstown Landfill. South Dublin County Council have indicated their agreement in principle to use of this disposal outlet. Energy recovery from landfill gas at Silliot Hill will be explored and, if feasible, implemented.

In the short to medium term, Kildare County Council will provide a materials recovery facility, biological treatment centre and residual landfill to enable the County to achieve recycling targets as outlined in the Government Policy Document “Changing Our Ways”

In the medium to long term, Kildare County Council will consider alternative arrangements for the disposal of residual waste in co-operation with neighbouring Local Authorities.

### ***Specific Policy on Disposal***

1. The Council will provide restoration and aftercare for the Silliot Hill landfill post closure.
2. Kildare County Council in the short-term will dispose of municipal solid waste arisings (upon closure of Silliot Hill Landfill) through landfill in adjacent authorities. Particular consideration will be given to disposal at Arthurstown Landfill. South Dublin County Council have indicated their agreement in principle to use of this disposal outlet. In order to ensure that the waste transfer can be achieved, a waste transfer facility will be required at Silliot Hill. Energy recovery from landfill gas at Silliot Hill will be explored and, if feasible, implemented.

In the short to medium term, Kildare County Council will provide a materials recovery facility, waste transfer facilities, biological treatment centre and residual landfill to enable the County to achieve recycling targets as outlined in the Government Policy Document “Changing Our Ways”.

In the medium to long term, Kildare County Council will consider alternative arrangements for the disposal of residual waste in co-operation with neighbouring Local Authorities.

3. The Council will encourage private sector collectors in the use of approved privately operated disposal facilities
4. The Council will provide, or arrange for the provision of, a waste processing and biological treatment plant.
5. All municipal solid waste, collected by or on behalf of the County Council, will be directed to this facility where the organic fraction and certain recyclables may be extracted by processing. The feasibility of directing digested sewage sludge and/or industrial organic wastes at this facility will be examined. The facility will be capable of being extended in future if or when additional organic wastes are directed there.
6. The Council will provide, or arrange for the provision of, a new engineered landfill disposal site capable of accepting residual waste material generated in the County over a 20-year period. This facility will be developed as a residual site and so a transfer station will also be required. The Council has already initiated site selection for a waste management facility.
7. Notwithstanding the Council's efforts to establish a waste management facility, the Council will have due regard to developments by or in adjoining local authorities.
8. The County Council is developing measures designed to limit the quantity of construction and demolition (C&D) waste landfilled in the County. The measures under consideration include a ban on:
  - (i) the acceptance of such materials at public site(s) apart from material required for engineering purposes and
  - (ii) the granting of planning permissions for the landfilling of such material at private sites – except where such development is a necessary and minimal adjunct to a C&D waste recycling undertaking.

The Council is also considering the inclusion of a condition in planning permissions for all major development proposals requiring the developer to submit a Construction Waste Management Report prior to the commencement of activity.

### ***Specific Policy on Waste Collection***

1. The County Council will ensure that all householders within its administrative area are provided with a regular and efficient system for the collection of waste.
2. The Council is currently reviewing waste collection services in the county. On-vehicle-weighing is being considered as an option. The Council considers this approach appropriate to the application of the 'polluter pays principle'.
3. The Council will regulate all waste collectors in accordance with the waste collection (permitting) regulations as and when they are implemented.

### ***Specific Policy on Animal Slurries***

Spreading of Slurry related materials can contribute to elevated nutrient levels in freshwaters and groundwaters. Where these conditions exist, the following will be considered:

- (a) requirement of nutrient management plans under the 1990 Local Government (Water Pollution) (Amendment) Act 1990 as inserted by the Waste Management Act 1996
- (b) enactment of bye-laws under the Local Government Act, 1994 (Bye-Laws) Regulations 1999
- (c) Local Government (Water Pollution) Act, 1977 (Water Quality Standards for Phosphorous) Regulations 1998

Recommendations as contained in the following documents will be implemented:

- Protection of our Freshwaters (nutrient management planning guidelines for local authorities), DoELG
- Managing Irelands Rivers and Lakes (a catchment based strategy against eutrophication), DoELG
- Code of Good Agricultural Practice (to protect waters from pollution by nitrates), DoAFF, DoELG
- Groundwater Protection Schemes, DoELG, EPA, GSI

### ***Specific Policy on Sludge***

A Sludge Management Plan for County Kildare is currently being prepared in accordance with the guidance document *Sludge Management Plans: A Guide to their Preparation and Implementation (DoELG 1998)* with reference to the recommendations in the *Strategy Study On Options For The Treatment And Disposal of Sewage Sludge In Ireland (DoELG 1998)*. The Sludge Management Plan considers all forms of non-hazardous sludge arising and predicted to arise in the county over the next 20 years and proposes sustainable management strategies for them. The following are the main subjects addressed within the document:

- Quantities of non hazardous sludge arising in County Kildare
- Existing strategies for management of non hazardous sludges
- Continuation of existing management strategies
- Sludges requiring new management strategies
- The potential for agricultural use of biosolids
- Sludge hub centres and satellites
- Evaluation of new management strategies
- Procurement Strategy
- Synergies and other counties
- Implementation Procedures
- Public information Strategy
- Quality Control
- Specific recommendations of the sludge management plan

In the interim, Kildare County Council intend to enter into a service contract for two years, extendable on a yearly basis for the treatment of digested sludge arising from the main wastewater treatment plants at Osberstown and Leixlip. The preferred treatment process is the in-vessel composting process and it is intended to locate this temporary plant at the landfill site at Silliot Hill. On completion of the contract period the plant will be decommissioned and removed off site.

#### ***Specific Policy on Hazardous Waste***

1. The County Council will review and consider the objectives of the Proposed National Hazardous Waste Management Plan and the County Council will implement any action statutorily required of it under section 22(8) of the Waste Management Act.
2. The Council will provide appropriate facilities for the collection of waste oils and household hazardous waste. The Council has also introduced a number of collection points for batteries. Battery collection facilities will be increased depending on the success of the initial trials.

#### ***Specific Policy on Litter Prevention***

1. A programme of education will be undertaken in both primary and secondary schools. The programme will include visits to schools countywide, with the objective of involving the students in litter surveys, plans and schemes to make their towns or specific areas litter free. The involvement of these groups will have a wider effect, through influence on adults and younger people with whom they come in contact.
2. The Council has arranged to have a leaflet "*Litter and the Law*" printed and distributed to householders, business and schools in the county to remind members of the public of their duties under the Litter Pollution Act 1997. It is anticipated that this leaflet will also promote public awareness of the

responsibility of individuals to keep their property (including footpaths and grass margins outside same) free of litter.

3. The Council will continue to operate a number of schemes as described in Section 5.3 (b) which are designed to assist the community in their endeavours to clean up their areas. These schemes include the following:
  - Skips Scheme;
  - Litter Bins Scheme;
  - Wheeled Bins for Residents Associations;
  - Cemetery Clean Ups;
  - Tidy Estates Competition/Grants Scheme;
  - Tidy Towns Grants Scheme; and
  - Clean Up Week.
4. The Council will continue to operate a street cleaning programme throughout the period of this plan. The Council have provided new mechanised litter sweepers in Newbridge, Celbridge and Kildare/Monasterevan.
5. The number of litter bins and their location shall be reviewed and additional bins will be provided, as required, in all towns.
6. The Council appointed two full-time Litter Warden to patrol the county. In addition, a number of Council staff members have been appointed as part-time litter wardens, which will further strengthen the Council's anti-litter policy.