

EVALUATION OF THE WASTE MANAGEMENT PLAN FOR COUNTY KILDARE 2005 – 2010

KILDARE COUNTY COUNCIL



NOVEMBER 2012



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Abstract: This is an evaluation of the Waste Management Plan for County Kildare 2005-2010.

EXECUTIVE SUMMARY

The Waste Management Plan for County Kildare 2005-2010 was made in January 2006.

Under the transposing regulations (S.I. 126 of 2011) of the Waste Framework Directive (WFD) (2008/98/EC) there is a requirement to evaluate existing waste management plans by 31 December 2012 and consequent to such an evaluation, to determine if the plan requires varying, reviewing or replacing.

In 2011, the Department of the Environment, Community and Local Government (DECLG) established a National Coordination Committee (NCC) to assist local authorities and the wider waste regions with the evaluation process. Nominees from each Waste Management Region, in addition to representatives from the Environmental Protection Agency (EPA) and the DECLG are represented on the NCC.

A technical support working document has been prepared through the work of the NCC to provide guidance in respect of the evaluation process. This evaluation of the Waste Management Plan for County Kildare 2005-2010 has been carried out having regard to the *Evaluation of Regional Waste Plan – Technical Support Working Document* (DECLG, 2012), the WFD and the new national waste policy document published in July 2012 by the DECLG called *A Resource Opportunity – Waste Management Policy in Ireland*. Of all the legislative changes that have occurred since the Plan was made, the implementation of the WFD and its transposition in to Irish law has had the most significant impact on waste management plans.

The WFD made it mandatory for member states to implement a five step waste hierarchy and obliges Member States to move towards self-sufficiency. *A Resource Opportunity – Waste Management Policy in Ireland*, stated that all waste management plans will ensure compliance with the 'proximity' and 'self sufficiency' principles. The objective of this policy is to increase recycling, promote resource efficiency and eliminate Ireland's over reliance on landfill. The policy document promotes a shared services approach.

Changes to the Waste Hierarchy

Before the WFD, Ireland had a six step waste hierarchy in its national policy. The WFD has mandated a five step waste hierarchy. The changes to the waste hierarchy are:

| Six Step Waste Hierarchy | Five Step Waste Hierarchy |
|---|--|
| <ul style="list-style-type: none"> Prevention | <ul style="list-style-type: none"> Prevention |
| <ul style="list-style-type: none"> Minimisation | <ul style="list-style-type: none"> Preparing for reuse |
| <ul style="list-style-type: none"> Reuse | <ul style="list-style-type: none"> Recycling |
| <ul style="list-style-type: none"> Recycling | <ul style="list-style-type: none"> Other recovery, e.g. energy recovery |
| <ul style="list-style-type: none"> Energy Recovery | <ul style="list-style-type: none"> Disposal |
| <ul style="list-style-type: none"> Disposal | |

Self-Sufficiency Principle

A Resource Opportunity – Waste Management Policy in Ireland, 2012 states that "a key objective of the new waste management plans will be to ensure a sufficiency of waste management infrastructure within the State to manage municipal waste".

Proximity Principle

The application of the 'proximity principle' does not entail interpreting administrative waste management planning boundaries in such a manner as to inhibit the development of waste infrastructure which will support the attainment of national waste management policy objectives through the rational development and use of such infrastructure.

Shared Services

A Resource Opportunity – Waste Management Policy in Ireland, 2012, proposed a shared service approach to planning of waste management in order to achieve more efficient outcomes under a new regional waste management planning configuration. It is currently expected that the existing ten waste management planning regions will reduce to no more than three. The evaluation of each of the existing ten waste management plans will be carried out to ensure compliance with the WFD by 31 December 2012. These plans will remain applicable until new plans have been put in place at the start of 2014.

Recommendation

Following the examination and evaluation of the changes to the waste hierarchy, the self-sufficiency and proximity principles and the new shared services approach to waste management planning, it is recommended that the Waste Management Plan County Kildare 2005-2010 be replaced.

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1 INTRODUCTION

1.1 Changes in County Kildare

Kildare County is 1,688 km². The most recent population census was in 2011. At the time of writing the Waste Management Plan for County Kildare, the most recently available census data in Ireland was for 2002. The population of Kildare has increased 28% since 2002. It is more appropriate to now look back at 2006 data in order to note population and household number changes over the timeframe of the Plan. The population of County Kildare has increased by 13% since 2006. Nationally in the same period, the population increased by 8.2%. There has been a 19% increase in households, when compared with occupied household numbers or a 30% increase in the total number of households in the County. Nationally, the total number of housing units increased by 12.7% since 2006. The population of Kildare has increased at a faster rate compared to national data, and the growth in the number of households has been significantly greater than the national rate.

Table 1.1: Population Change in County Kildare

| County Kildare | Census 2002 | Census 2006 | Census 2011 |
|----------------------------|-------------|-------------|-------------|
| Population | 163,944 | 186,335 | 210,312 |
| Household Numbers | 50,477 | 60,957 | 79,170 |
| Occupied Household Numbers | no data | no data | 72,731 |

During the lifetime of the Plan, there have been changes in landfill infrastructure in the County. Arthurstown Landfill owned and operated by South Dublin County Council and located in Kill, Co. Kildare closed its gates at the end of 2010 and is completing its restoration. Bord na Móna opened a new landfill at Drehid Co. Kildare and commenced waste acceptance in early 2008. A third large landfill, KTK in Kilcullen for the disposal of commercial and industrial waste is undergoing its closure and restoration phase. The EPA took over the remediation of a waste licensed landfill owned by Neiphin Trading at Kerdiffstown due to significant non-compliances.

1.2 Reasons for Evaluating the Plan

The Waste Management Plan for County Kildare 2005-2010 was made in early 2006. It is a requirement of the Directive on Waste 2008/98/EC, commonly referred to as the Waste Framework Directive, that all waste management plans are evaluated to determine how the plans will support the implementation of the objectives and provisions of Directive. The Directive was transposed into Irish law with the passing of the European Communities (Waste Directive) Regulations 2011. The deadline for completion of evaluations is the 31st December 2012.

Article 28 of the Directive requires Member States to include an "evaluation of how the plan will support the implementation of the objectives and provisions of this Directive" as part of the waste management plan process. Section (22) (2) (d) of the Act requires all evaluations of waste management plans to be completed by 31st December 2012.

The key provisions of the WFD that impact on waste management planning are the introduction of a five step waste hierarchy and the introduction of the 'self-sufficiency' principle.

Following the transposition of the European Communities (Waste Directive) Regulations into Irish law in 2011, the Department of Environment, Community and Local Government (DECLG) published *A Resource Opportunity – Waste Management Policy in Ireland* in 2012. This is the first and only national waste policy that has been published since the existing Plan was adopted. Some of the objectives in this new waste policy will directly impact on waste management planning in Ireland.

The European Communities (Waste Directive) Regulations and *A Resource Opportunity – Waste Management Policy in Ireland* together mean that there are three topics for discussion; the new waste hierarchy, the 'self-sufficiency' and 'proximity' principles and the changes to the waste management planning regions in Ireland – referred to as shared services.

1.2.1 The New Mandatory Waste Hierarchy

The WFD, for the first time requires that member states include the waste hierarchy in national waste legislation. Before the WFD, there was no legislative requirement to abide to a waste hierarchy. There were slightly different interpretations of the waste hierarchy internationally.

A six step waste hierarchy was included in the 1998 Irish national policy document, *Changing Our Ways* and the policy concept was strengthened in the two following policy documents, *Preventing and Recycling Waste: Delivering Change* (2002) and *Taking Stock and Moving Forward* (2004). The six steps were: Prevention, Minimisation, Reuse, Recycling, Energy Recovery and Disposal.

The EU waste policy document, the 6th Environmental Action Programme states that the EU's approach to waste management is based on 3 principles:

1. Waste Prevention
2. Recycling and Reuse (where recovery is included in the term recycling)
3. Improving Final Disposal and Monitoring

The new waste hierarchy as laid down in the WFD is:

- Prevention;
- Preparing for reuse;
- Recycling;
- Other recovery, e.g. energy recovery; and
- Disposal.

The differences between the old waste hierarchy and the new mandatory waste hierarchy are:

- A reduction from 6 to 5 steps,
- the introduction of a new concept – 'preparing for reuse,'
- removal of the individual steps of minimisation and reuse, these are now included in waste prevention; and
- a change from energy recovery to other recovery, e.g. energy recovery.

Minimisation and reuse of products as a waste prevention practice is at the pinnacle of the waste hierarchy. Technically prevention is not a waste management measure because it pertains to substances or objects before they become waste. Second in priority is preparing for reuse, where products for which an owner has no further use are prepared for reuse by a new owner. The EU Waste Framework Directive (2008/98/EC) defines 'reuse' and 'preparing for reuse'.

"Reuse means any operation by which products or components that are not waste are used again for the same purpose for which they are conceived", and "preparing for reuse means checking, cleaning or repairing recovery operations, by which products or components of products that have become waste are prepared so that they will be reused without any other pre-processing".

The EU Commission published a draft document called, *Guidance on the interpretation of key provisions of Directive 2008/98/EC on waste* in 2011. It attributes the following meanings to the definitions of reuse and preparing for reuse. "Reuse is a means of waste prevention; it is not a waste management measure. If a person is taking over a material directly from the current owner with the intention of reusing it either for the same or another purpose, this gives evidence that the material is not a waste. This may in certain cases even involve the necessity of performing some repair activities. The key difference between reuse and preparing for reuse is that in the former case the material or object has not become a waste, whereas in the case of preparing for reuse, the material in question has become waste in the meaning of the waste definition" (EU Commission 2011) where 'waste' is defined as "any substance or object which the holder discards or intends or is required to discard".

There is a new definition of recovery in the WFD, it is “any operation the principal result of which is waste serving a useful purpose by replacing other materials which would otherwise have been used to fulfil a particular function, or waste being prepared to fulfil that function, in the plant or in the wider economy.” It includes preparation for reuse and recycling so therefore “other recovery” is any operation meeting the above definition but failing to comply with the specific requirements for preparation for reuse or for recycling”.

Recycling is defined in the WFD as “any recovery operation by which waste materials are reprocessed into products, materials or substances whether for the original or other purposes. It includes the reprocessing of organic material but does not include energy recovery and the reprocessing into materials that are to be used as fuels or for backfilling operations.”

The common idea behind recycling is that a material is processed in order to alter its physicochemical properties allowing it to be used again for the same or other applications. The EU Commission 2011 document states that “composting is only defined as recycling if a product is created that meets the end-of-waste criteria. If a product meeting approved standards is not produced, in the case of generation of a fertiliser or stabilisation of biowaste for landfilling, then the operation is defined as recovery”.

1.2.2 Self-Sufficiency Principle

The WFD introduced the ‘self-sufficiency’ principle. *A Resource Opportunity – Waste Management Policy in Ireland*, 2012 stated that all waste management plans will ensure compliance with the ‘proximity’ and ‘self sufficiency’ principles.

Article 16 of the Waste Framework Directive (2008/98/EC) requires Member States “to take appropriate measures, in cooperation with other Member States where this is necessary or advisable, to establish an integrated and adequate network of waste disposal installations and of installations for the recovery of mixed municipal waste collected from private households, including where such collection also covers such waste from other producers, taking into account best available techniques.

The network shall be designed to enable the Community as a whole to become self-sufficient in waste disposal as well as in the recovery of waste, and to enable Member States to move towards that aim individually, taking into account geographical circumstances or the need for specialised installations for certain types of waste”.

A Resource Opportunity – Waste Management Policy in Ireland, 2012 states that “a key objective of the new waste management plans will be to ensure a sufficiency of waste management infrastructure within the State to manage municipal waste”.

1.3 Structure of the Evaluation Report

The evaluation of the Waste Management Plan for County Kildare has been carried out having regard to the *Evaluation of Regional Waste Plan – Technical Support Working Document* prepared by the Department of the Environment, Community and Local Government (DECLG).

The structure of the evaluation report is as follows:

- Chapter 1: This section is an introduction to the evaluation report and includes a brief introduction to the existing waste management plan, a summary of relevant changes in Kildare over the lifetime of the Plan and explains the reasons for evaluating the Plan.
- Chapter 2: The next section, Chapter 2 identifies all relevant EU Directives and Regulations, Statutory Instruments, National Waste Policy, the County Development Plan and Regional Planning Guidelines which should be considered for the preparation of the next generation waste management plan.
- Chapter 3: The third chapter outlines an evaluation of the current waste policies; lessons learned during the implementation period and identifies future recommendation for consideration for the preparation of the next generation of waste management plans.

- Chapter 4: Chapter 4 reports the latest published key waste data which is for the year, 2010. This data was compiled on behalf of all waste management regions by the NCC. It is a standardised format so that regional data is comparable.
- Chapter 5: This is a section on waste recovery and disposal infrastructure in the County. It provides a summary of waste treatment and disposal infrastructure in Kildare, including facilities permitted by the local authorities and licensed by the EPA. The infrastructure in Kildare includes bring sites, recycling centres, waste transfer stations, biological treatment facilities, landfills, authorised treatment facilities for end-of-life vehicles and closed historic landfills.
- Chapter 6: The final chapter is a short summary of the key findings of the evaluation and reasons for the recommendation to replace the Plan.

2 LEGISLATIVE DEVELOPMENTS

This section examines relevant waste management legislative and policy changes since the existing waste management was made. Changes in legislation and policy are identified under the following groupings:

- EU Directives and Regulations
- Statutory Instruments
- National Policy
- County Development Plan
- Regional Planning Guidelines

2.1 EU Directives and Regulations

| Area | EU Directives and Regulations |
|---|---|
| Waste Framework Directive | <ul style="list-style-type: none"> • Directive 2008/98/EC on waste (Waste Framework Directive) |
| Trans-frontier Waste Shipments | <ul style="list-style-type: none"> • Regulation (EC) No. 1013/2006 and S.I. No. 149/1998 |
| IPPC Directive | <ul style="list-style-type: none"> • Directive 2008/1/EC of the European Parliament and of the Council of 15 January 2008 concerning integrated pollution prevention and control |
| Packaging Directive | <ul style="list-style-type: none"> • Directive 94/62/EC on packaging and packaging waste |
| Batteries and accumulators and Waste Batteries and Accumulators | <ul style="list-style-type: none"> • Directive 2006/66/EC on batteries and accumulators and waste batteries and accumulators and repealing Directive 91/157/EEC entered into force on 26 September 2006 • Directive 2008/12/EC of the European Parliament and of the Council of 11 March 2008 amending Directive 2006/66/EC on batteries and accumulators and waste batteries and accumulators, as regards the implementing powers conferred on the Commission. • Directive 2008/103/EC of the European Parliament and of the Council of 19 November 2008 amending Directive 2006/66/EC on batteries and accumulators and waste batteries and accumulators as regards placing batteries and accumulators on the market |
| Ozone Depleting Substances | <ul style="list-style-type: none"> • Regulation (EC) No 1005/2009 of the European Parliament and of the Council of 16 September 2009 on substances that deplete the ozone layer |
| End-of-Life Vehicles | <ul style="list-style-type: none"> • Directive 2000/53/EC on end-of-life vehicles ("2015 targets") • S.I. No. 282/2006 – Waste Management (End-of-Life Vehicles) Regulations 2006 and S.I. No. 142/2010 – Waste Management (End-of-Life Vehicles)(Amendment)Regulations 2010. • Directive 2000/53/EC of the European Parliament and of the Council of 18 September 2000 on end-of-life vehicles |
| The Re -using, Recycling and Recovering of Motor Vehicles | <ul style="list-style-type: none"> • Directive 2005/64/EC of the European Parliament and of the Council of 26 October 2005 on the type-approval of motor vehicles with regard to their re-usability, recyclability and recoverability |
| Waste Electrical and Electronic Equipment | <ul style="list-style-type: none"> • WEEE Directive 2012/19/EC |
| Mining and Mineral Waste Directive | <ul style="list-style-type: none"> • Directive 2006/21/EC on the management of waste from the extractive industries (the mining waste directive) |

A summary of these Directives and Regulations are outlined in Appendix 1.

2.2 Statutory Instruments

The following schedule of Statutory Instruments in relation to waste management has been transposed into Irish Law:

| Area | Statutory Instruments |
|--|---|
| Packaging Waste | <ul style="list-style-type: none"> • S.I. No. 308 of 2006 - Waste Management (Packaging) (Amendment) Regulations 2006 • S.I. No. 798 of 2007 - Waste Management (Packaging) Regulations 2007 |
| End of Life Vehicles (ELVs) | <ul style="list-style-type: none"> • S.I. No. 282 of 2006 - Waste Management (End-of-life) Vehicles Regulations 2006 • S.I. No. 142 of 2010 – Waste Management (End-of-Life Vehicles) (Amendment) Regulations 2010 |
| Waste Electrical and Electronic Equipment (WEEE) | <ul style="list-style-type: none"> • S.I. No. 290 of 2005 – Waste Management (Electrical and Electronic Equipment) • S.I. No. 340 of 2005 - Waste Management (Waste Electrical and Electronic Equipment Regulations) • S.I. No. 375 of 2008 – Waste Management (WEEE) (Amendment) Regulations 2008 • SI 143 of 2010 Waste Management (Waste Electrical and Electronic Equipment) (Amendment) Regulations 2010 • SI 355 of 2011 European Communities (Waste Electrical and Electronic) Regulations 2011 |
| Restriction of Hazardous Substance | <ul style="list-style-type: none"> • S.I. No. 341 of 2005 – Waste Management (Restriction of Certain Hazardous Substances in Electrical and Electronic Equipment) • S.I. No. 376 of 2008 - (Restriction of Certain Hazardous Substances in Electrical and Electronic Equipment) |
| Tyres | <ul style="list-style-type: none"> • S.I. No. 664 of 2007 - Waste Management (Tyres & Waste Tyres) Regulations 2007 |
| Batteries & Accumulators | <ul style="list-style-type: none"> • S.I. No. 268 of 2008 - Waste Management (Batteries and Accumulators) Regulations 2008 • SI No. 556 of 2008 - Waste Management (Batteries and Accumulators) (Amendment) Regulations 2008 |
| Back Yard Burning | <ul style="list-style-type: none"> • S.I. No 286 of 2009 – Prohibition of Waste Disposal By Burning |
| Plastic Bag Levies | <ul style="list-style-type: none"> • S.I. No. 62 of 2007 - Waste Management (Environmental Levy)(Plastic Bag) Order 2007 • S.I. No. 66 of 2007 - Waste Management (Environmental Levy)(Plastic Bag)(Amendment) Regulations 2007 • S.I. No. 167 of 2007 - Waste Management (Environmental Levy)(Plastic Bag)(Amendment) (No 2)Regulations 2007 |
| Landfill Levy | <ul style="list-style-type: none"> • S.I. No. 168 of 2008 Waste Management (Landfill Levy) Order 2008 • S.I. No. 199 of 2008 - Waste Management (Landfill Levy) Regulations 2008 • S.I. No. 496 of 2009 – Waste Management (Landfill Levy) Order 2009 • S.I. No. 550 of 2009 – Waste Management (Landfill Levy) Amendment Regulations 2009 • S.I. No. 496 of 2009 Waste Management (Landfill Levy) Order 2009 • S.I. No. 31 of 2010 – Waste Management (Landfill Levy) (Amendment) Regulations 2010 • S.I No. 13 of 2010 – Waste Management (Landfill Levy) Order 2010 • S.I No. 434 of 2011 – Waste Management (Landfill Levy) Regulations 2011 • S.I. No . 221 of 2012 Waste Management (Landfill) (Amended) Regulations 2012 |

| Area | Statutory Instruments |
|--|--|
| Waste Permitting & Collection | <ul style="list-style-type: none"> • S.I. No. 820 of 2007 - Waste Management (Collection Permit) Regulations 2007 • S.I. No. 87 of 2008 - Waste Management (Collection Permit)(Amendment) Regulations 2008 • S.I. No. 821 of 2007 - Waste Management (Facility Permit & Registration) Regulations 2007 • S.I. No. 86 of 2008 - Waste Management (Facility Permit & Registration) (Amendment) Regulations 2007 • S.I. No. 508 of 2009 - Waste Management Food Waste Regulations 2009 • S.I. No. 5242 of 2008 - (Certification of Historic Unlicensed Waste Disposal and Recovery Activity) Regulations 2008 |
| Transportation/Shipment of Wastes | <ul style="list-style-type: none"> • S.I. No. 419 of 2007 - Waste Management (Shipments of Waste) Regulations 2007 |
| Broker and Dealers | <ul style="list-style-type: none"> • S.I. No. 113 of 2008 - Waste Management (Registration of Brokers and Dealers) Regulations 2008 |
| Extractive Industries | <ul style="list-style-type: none"> • S.I. No. 566 of 2009 - Waste Management (Management of Waste from the Extractive Industries) Regulations 2009 |
| Registration of Sewage Sludge Facility | <ul style="list-style-type: none"> • S.I. No. 32 of 2010 - Waste Management (Registration of Sewage Sludge Facility) Regulations 2010 |
| Waste Directive | <ul style="list-style-type: none"> • S.I. No. 126 of 2011 European Communities (Waste Directive) Regulations 2011 |
| Waste Treatment | <ul style="list-style-type: none"> • S.I. No. 252 of 2008 European Communities (Transmissible Spongiform Encephalopathies and Animal By-Products) Regulations 2008 |

A summary of these Regulations are outlined in Appendix 2. A new set of Food Waste Regulations for the household sector are due before the end of 2012.

2.3 National Policy

A new national waste policy document was published in July 2012 called *A Resource Opportunity – Waste Management Policy in Ireland*. The objectives of this policy are on increasing recycling, promoting resource efficiency and eliminating Ireland's over reliance on landfill.

The policy document clearly sets out nine measures to achieve these objectives; a summary of which are given below:

- Planning for the Future
- Regulation of Household Waste
- Collection
- Compliance and Enforcement
- Prevention
- Prevention
- Reuse
- Recycling
- Recovery
- Disposal

2.3.1 Planning for the Future

To promote efficiency within Local Authorities, the number of waste management planning regions will be reduced from ten to no more than three. To ensure efficiencies are achieved Local Authorities will adopt a "shared services" approach towards waste management planning by pooling existing experience, expertise and knowledge to implement future Regional Waste Management Plans. This approach, will in turn, allow for the redeployment of resources to focus on implementation and enforcement of the Plans. All future waste management plans will promote the waste hierarchy as revised by the Waste Framework Directive and ensure compliance with the 'proximity' and 'self sufficiency' principles. The DECLG and the EPA will monitor the implementation of these Plans.

Proximity Principle

In May 2005 a Policy Direction issued under Section 60 of the Waste Management Acts 1996 – 2005 regarding the Proximity Principle stated that this is one of the fundamental components in regards to the regulation of the movement of waste. The application of the proximity principle does not entail interpreting administrative waste management planning boundaries in such a manner as to inhibit the development of waste infrastructure which will support the attainment of national waste management policy objectives through the rational development and use of such infrastructure.

Self Sufficiency Principle

A Resource Opportunity – Waste Management Policy in Ireland, 2012 states that “a key objective of the new waste management plans will be to ensure a sufficiency of waste management infrastructure within the State to manage municipal waste”.

The WFD introduced the ‘self-sufficiency’ principle. Article 16 of the Waste Framework Directive (2008/98/EC) obliges Member States “to take appropriate measures, in cooperation with other Member States where this is necessary or advisable, to establish an integrated and adequate network of waste disposal installations and of installations for the recovery of mixed municipal waste collected from private households, including where such collection also covers such waste from other producers, taking into account best available techniques.

The network shall be designed to enable the Community as a whole to become self-sufficient in waste disposal as well as in the recovery of waste, and to enable Member States to move towards that aim individually, taking into account geographical circumstances or the need for specialised installations for certain types of waste”.

2.3.2 Regulation of Household Waste Collection

Revisions to the waste collection permitting system aims to ensure that collected waste is managed in accordance with the waste hierarchy and that customers charters are adopted by all collectors outlining their commitment to deliver mandated levels of service and procedures for dealing with customer queries and complaints.

For the first time, householders will be obliged to demonstrate that they are managing their waste in an approved and environmentally acceptable manner. To ensure that changes to the waste collection regime are effective, Local Authorities and waste collectors will work in partnership delivering awareness and education measures.

Regulatory measures to support enforcement of the waste collection market will remain under review but enforcement initiatives will focus particularly on serious criminal offenders using a multi-agency approach, aimed at ensuring targeted, timely and effective enforcement outcomes.

2.3.3 Compliance and Enforcement

The Network for Ireland’s Environmental Compliance and Enforcement (NIECE) will support waste enforcement initiatives. The policy commits to providing training and upskilling of all Local Authority staff involved in waste enforcement.

2.3.4 Prevention

Local Authorities will be required to place greater emphasis on waste prevention policy measures in future waste management plans and they will be expected to participate in the Local Authority Waste Prevention Demonstration Programme. By participation in this programme Local Authorities will develop waste prevention guidelines to assist local communities, farmers, SME’s, etc and to improve their waste prevention measures.

2.3.5 Reuse

The areas of reuse and preparation or reuse will be encouraged and promoted through the National Waste Prevention Programme, Local Authorities, the PRI compliance team and the enterprise support agencies. A public sector reuse policy will be developed in consultation with the National Procurement Service and other relevant bodies.

2.3.6 Recycling

To increase Ireland's recycling rate, the introduction of food waste collections i.e. brown bin will be implemented over a 4 year period. The implementation of this collection regime will be supported by the introduction of Household Food Waste Regulations and strengthening of the waste collection permitting system and enforcement. The benefits of food waste recycling will be promoted to correspond with the roll out of the 3-bin collection system.

2.3.7 Recovery

Policy objectives of future waste management plans together with a reform of the waste collection permitting system will provide the necessary foundation to ensure the legal status of the waste hierarchy is preserved and that innovation in the development of recovery infrastructure is promoted.

In order to promote recovery initiatives, the policy is committed to developing appropriate standards for the production of fuel from waste to ensure acceptances and marketability of such fuels.

2.3.8 Disposal

To support the diversion of biodegradable municipal waste (BMW) from landfill, the landfill levy is set to increase from €65 to €75 per tonne. In addition to the landfill levy, landfill bans are proposed to further encourage the diversion of waste. It is proposed to remove the landfill levy exemption for shredder residue from end of life vehicle processing to support the achievement of recovery and recycling targets.

Additional legislative supports will be introduced as necessary to strengthen the EPA's enforcement powers to ensure that landfill gate fees and financial provision at licensed facilities are appropriate.

2.3.9 Implementation

Each waste management region will be required to prepare an annual progress reports on the implementation of the waste management plans. These reports will be assessed by the National Compliance Committee. Key Performance Indicators (KPI's) will be use to measure performance.

2.4 County Development Plans

This section of the report examines the consideration of the Waste Management Plan for the Kildare 2005 - 2010 within the County Development Plan and the Regional Planning Guidelines

2.4.1 Kildare County Development Plan 2011-2017

Section 7.10 of the Kildare County Development Plan 2011-2017 sets out the following specific policies in relation to Waste Management:

Waste Management

It is the policy of the Council:

- WM 1: To have regard, in the assessment of planning applications for waste management facilities *inter alia*, to the Waste Management Plan for County Kildare then prevailing, Waste Management Act 1996, EU Landfill Directive, EPA Landfill Manuals, EU Packaging and Packaging Waste Directive and DoEHLG policy statements viz. *Changing Our Ways* and *Preventing and Recycling Waste – Delivering Change and Taking Stock and Moving Forward*.
- WM 2: To require the submission of either a certificate of exemption or a valid planning permission for a Waste Facility Permit application, in accordance with the Waste Management (Facility Permit and Registration) Regulations 2007 as amended.
- WM 3: To provide each town, village or settlement, subject to the availability of finance with appropriate recycling facilities in the form of a kerbside collection, civic site and bring bank recycling facilities.
- WM 4: To encourage waste prevention, minimisation, reuse, recycling and recovery as methods of managing waste. Where waste management is not being carried out properly, the Waste Management Acts 1996 to 2008 will be used as a means of ensuring specific national policies and regulations are adhered to.
- WM 5: To ensure that recycling facilities (i.e. bottle banks, bring centres etc) in close proximity to large scale residential developments are in accordance with the following:

Any bring bank facility shall include receptacles for glass, cans and textiles. All applications for bring bank facilities will be assessed on a case by case basis having regard to the following:

- i. Proximity to residential areas.
 - ii. An area of at least 10m by 4m in size.
 - iii. Truck access and clearance heights.
 - iv. A hard standing area.
 - v. A vehicle set down area only with no permanent parking provision.
 - vi. Suitable lighting, noise mitigation, screening and/or landscaping as considered necessary by the council.
- WM 6: To promote and facilitate communities to become involved in environmental awareness activities and community-based recycling initiatives or environmental management initiatives, which will lead to local sustainable waste management practices.
- WM 7: To ensure the provision of residual landfill in County Kildare (either directly by the Council or in co-operation or partnership with other local authorities and the private sector) is subject to the specific requirements of the County Kildare Waste Management Plan.
- WM 8: To strictly control the raising of land for the purpose of private housing in the interests of pollution control, drainage, flood alleviation and amenity.
- WM 9: To require that all intensive agricultural waste, organic waste, municipal sludge and industrial sludge recovered through land spreading, be carried out under an accepted Nutrient Management Plan which must demonstrate nutrient uptake and capacity in spread lands, sufficient storage facilities, compliance with relevant legislation including the Nitrates Regulations 2009, Waste Management Act 1996–2008, Sludge Management Plan for Kildare, River Basin Management Plans, the Kildare County Councils Sludge Protocol and any future revisions/replacements of these documents.
- WM 10: To prepare an inventory of legacy landfill sites at which waste disposal and recovery took place between 1977 and 1997 and carry out a risk assessment of these sites

2.5 Regional Planning Guidelines

The Regional Planning Guidelines for the Greater Dublin Area 2010 – 2022 acknowledges that investment in waste management infrastructure is needed to cater for population growth and economic development with the Region.

In the development of future waste management plans for the Region waste policy needs to adopt the following policy objectives:

- Further coordinate waste management plans to maximise potential economies of scale and to enable the market to pass on the benefits to businesses and households.
- Develop a greater range of choice in terms of waste treatment solutions including commercial energy recovery options.
- Decouple the link between waste generation and GDP.
- Expand policies to promote and support source reduction and reuse, to reduce stresses on waste management infrastructure and to create better synergies between businesses and across sectors.
- Promote improvements to quality of recycling infrastructure to reduce costs.
- Continue to invest in increasing opportunities for recycling and safe disposal of waste.
- Expand treatment capacities and options to reduce the quantity of organic materials entering the waste stream.
- Development of opportunities, as outlined above, shall not compromise the integrity of ecologically sensitive areas, in particular infilling with inert materials which can give rise to fragmentation of habitats. A change in the regulations that effectively exempts land filling once it achieves land reclamation would support this endeavour.

The Regional Planning Guidelines (RPGs) supports the waste management hierarchy and increased and coordinated efforts should be made in the areas of source reduction and reuse of waste across the industrial, commercial and residential sectors of the GDA.

The RPGs sets out specific strategic waste management policy recommendations in order to ensure continued investment in integrated waste facilities to promote reuse and recycling of household and commercial waste and that high standard options for treatment and final disposal of waste are available within GDA.

These strategic waste management policy recommendations are:

Strategic Recommendations

- PIR36: The new waste management strategy across the regions of the GDA should seek to facilitate a balanced use of resources and greater adaptability and robustness of services. Integrated waste management should be considered from the perspective of the GDA as one singular functioning economic and spatial unit and to increase economies of scale.
- PIR37: Encourage the expansion of increased levels of diversion of biodegradable waste from landfill through provision of or support for biological treatment facilities and home composting.
- PIR38: Ensure that developments include adequate space for domestic recyclable waste storage both within and outside dwellings; and ensure that larger development proposals, master plans and local area plans incorporate bring banks and recycling facility requirements to facilitate sustainable development and optimal rates of recycling.
- PIR39: The reuse of waste should be encouraged and reinforced through encouragement of business clustering across the GDA. Opportunities to facilitate source reduction, the reuse of wastes, by-products and associated energy throughout the GDA should be examined as part of economic policies. Development of these opportunities shall not compromise the integrity of ecologically sensitive areas, in particular infilling with inert materials which can result in loss and fragmentation of wetlands.

PIR 40: Waste management facilities should be appropriately managed and monitored according to best practice to maximise efficiencies and to protect human health and the natural environment.

PIR41: Plans and projects associated with waste management that have the potential to negatively impact on Natura 2000 sites will be subject to a Habitats Directive Assessment (HDA) according to Article 6 of the Habitats Directive and in accordance with best practice and guidance.

3 EVALUATION OF POLICY

A facilitated workshop was held on the 25th July 2012 to evaluate the policy objectives of the Waste Management Plan for County Kildare 2005-2010. Attendees included staff who were and are involved in implementing the Waste Management Plan for County Kildare 2005-2010.

Each of the policy objectives and the targets were discussed individually to determine:

- If the objective and or target had been achieved.
- The current status of Kildare with respect to the objective and target
- The promoters or barriers to the achievement of the objective or target.
- The environmental significance of the achievement or otherwise of the objective or target.
- The lessons learned during the period of the plan and suitability of the objective for future waste management planning.

The Waste Management Plan for County Kildare sets out specific policy objectives for municipal, industrial and agricultural wastes and for priority wastes under the following headings:

- public awareness and education
- prevention and minimisation
- waste collection and charging
- waste recovery and recycling
- market development
- waste treatment
- final disposal
- energy recovery from waste
- litter prevention
- sludge management
- National Hazardous Waste Management Plan
- priority waste streams
- illegal landfilling and unauthorised sites
- location of waste management facilities
- location of facilities requiring a waste permit

An evaluation of each of the policy objectives has been conducted and is summarised in the following sections.

3.1 Public Awareness and Education

The objective of the public awareness and education programme is to promote and support waste minimisation, waste recovery, recycling and the correct management of waste. The objectives were set to support existing initiatives and new initiatives which are based on national waste policies.

3.1.1 Assessing Implementation

During the lifetime of the Plan, KCC supported:

- the Annual Environmental Awards
- the Schools Environmental Education Program
- Green Schools
- home composting
- the roll-out of two-bin collection systems

The Schools Education Programme features the following:

- Visits to all schools or raise awareness of environmental issues. During the lifetime of this Plan, 128 schools have been visited.
- Tours by school groups to Silliot Hill IWMF. Approximately 5,000 students have visited the site to learn about the various waste recovery activities happening on site.
- 111 Green Schools are registered in County Kildare and 88 of those have received Green Flags. This is a significant increase on the numbers partaking in 2005.

Home composting is now commonplace throughout the County and with the number of retailers and other waste collectors selling the composting bins, KCC has decided to cease retailing them.

KCC supported the roll of the 2-bin collection system. Waste collection in Kildare County has been controlled by the private sector since 2011. This is discussed in more detail in Section 3.3.

KCC integrated recycling into other activities run by the Council such as Christmas advertising. KCC supports Repak Week annually and the Tidy Towns initiative along with National Springclean. KCC found that national campaigns such as the Race Against Waste campaign were very effective in disseminating a consistent message to the public. KCC found the supporting tools such as leaflets and posters to be of great assistance.

A significant role of the Environment Awareness Officer (EAO) is to answer phone and email queries from the public and also meet people face to face in order to answer those queries and give out useful information.

KCC distributed the Acorn Environment Newsletter, to schools and libraries on a mailing list throughout the County twice yearly until 2010. The Council received good feedback on it. Unfortunately due to budget restrictions, it was not issued since 2010.

KCC implemented a Community Environmental Education Programme since the last Plan was adopted. It was initially part of the Tidy Towns and is now under waste management. The programme features the following:

- visits to community organisations (e.g. Tidy Towns groups, ICA branches and residents associations)
- regular information and training sessions for Tidy Towns groups
- assisting community groups to obtain funding grants from Local Agenda 21, Environmental Partnership Fund, Residents Associations Grants, grant aid for litter bins, sponsorship for wheelie bins, anti-litter and anti-graffiti grants.
- assistance with community clean ups throughout the year
- community composting projects:
 - Almost a dozen community composting schemes have received funding. KCC is promoting the message to compost green waste. However the funding and resources to promote new composting schemes ceased in 2010. KCC is keen to progress this successful scheme if funding became available.

KCC has maintained the environmental education and awareness pages on their website as per the objectives of the Plan. The Council also supports Freetradeireland.ie, jumbletown.ie and schoolbookexchange.ie.

The Council developed a public information campaign for broadcast on local radio as per the objectives of the Plan. The campaign has particular emphasis on waste prevention and minimisation techniques and has been very well received. KCC proposes to continue using radio to communicate their public awareness and education campaigns.

KCC circulated a commercial food waste leaflet to relevant business in the County.

3.1.2 Lessons Learned and Recommendations

An objective of the Plan was to establish a Green Town. On evaluating the objective, it was found to be too ambitious. There were not adequate resources to support a project of this scale. It is believed that the establishment of a Green Town would need support from a larger area, such as a Region or nationally. The Council has learned that all objectives should be achievable and have a plan in place to progress them.

KCC has received requests from the public to set up or to support a reuse initiative in County Kildare. This should therefore be an objective in the next phase of planning which will also tie in with the objectives of the most recent national policy document *A Resource Opportunity – Waste Management Policy in Ireland*.

National campaigns such as the Race Against Waste campaign was very effective and offered much needed support to local awareness and education campaigns.

KCC continues to employ an EAO to work in conjunction with community groups, schools, industry and members of the public to raise awareness of a range of environmental issues. When the Plan was conceived the EAO was solely focussed on waste management issues, now that role has widened to encompass energy, water and sustainable management. In addition the range of waste management issues has grown and KCC was unable to fund the appointment of a Green Business Officer so the EAO has taken on elements of that role too. It is recommended that appropriate resources are available to implement future waste management objectives. KCC envisages, public awareness and education as being one of two key roles that they will play in supporting waste management in County Kildare. Limited resources which restricted the creation of a Green Business Officer has in turn restricted green procurement.

In summary the objectives of the Plan in relation to public awareness and education were in the main part achieved and were suitable for the County. The Council faced difficulties in achieving objectives that were overly ambitious and have learned from that. They also were challenged by budget cuts which impacted on the resources available to public awareness and education.

3.2 Prevention and Minimisation

The policy objectives to prevent and minimise waste included using KCC as a model of best practice, appointing a Green Business Officer, supporting reuse, promoting community composting and working with commerce and industry.

3.2.1 Assessing Implementation

An objective of the Plan is to ensure that the Council acts as a model of best practice in waste prevention and minimisation at their new Civic Offices. During the Plan timeframe, the new Civic Offices were completed and became operational. KCC initiated the Greencheck campaign in the Civic Offices which included the removal of individual waste bins at desks and replacement with recycling trays. The Greencheck campaign was established to recycle paper, cardboard, newsprint, fluorescent tubes, batteries and printer cartridges.

KCC has carried out a detailed waste audit of the Councils waste arisings from the Civic Offices. There is ongoing work in terms of waste minimisation and the next phase of the campaign will be energy use. The Greencheck campaign went out to other offices and whilst the initiatives are not as advanced as in Head office, they have switched to default settings on printers to save paper and ink.

The energy committee are driving new initiatives in coordination with the EAO, for example, the Civic Offices power down at 7pm. Sustainable practices such as grey water reuse are in place.

It is proposed to roll out the Greencheck campaign across all offices in KCCs ownership. However there are challenges in convincing all employees to cooperate.

The Environmental Department of KCC is also hoping to implement a 3-bin system in the canteen in order to source segregate food waste. This will require more inter-departmental cooperation.

KCC has a shoppers' awareness campaign through which work is ongoing with local community groups. A plastic bag levy enforcement officer checked for compliance with charging for issuing of plastic bags.

An objective of the Plan is to actively support local organisations in developing repair and /or reuse facilities. As mentioned above in Section 3.1, there have been calls for this from the public. It has not progressed as KCC would have wished due to budget cuts but will be prioritised in the future.

KCC has implemented specific themes of the Sixth Environmental Action Plan as per the objectives of the Plan, for example, there has been a significant improvement in the estimates of materials and waste streams in and out of the County.

The Farm Wastes Plastics Collection scheme is run by private waste collectors in Kildare and is enforced by the Council.

Litter Prevention

Litter prevention is driven through the public awareness and education campaigns directed at schools and communities. The DECLG funds anti-litter grants which KCC promote and assist communities in applying for them. The Anti-Litter League, run by Irish Business Against Litter and with the support of KCC is an effective project in raising awareness of litter in a number of Kildare towns.

KCC has developed and promoted the Litter Management Plans with the latest edition adopted in July 2012, the Litter Management Plan 2011 to 2015.

Waste Minimisation

The KCC EAO was working with packaging producers from 2005 to 2009/10 to promote minimisation of packaging waste. There have not been sufficient resources since 2009/10 to continue this work or any packaging audits.

3.2.2 Lessons Learned and Recommendations

The Greencheck campaign is also hoping to implement a 3-bin system in the canteen in order to source segregate food waste. The difficulty to date has been that the awarding of canteen contracts has been the remit of Corporate Affairs and a requirement for a 3-bin system has not been included in the contracts. A recommendation going forward therefore is that there is buy in from Corporate Affairs on waste management plan objectives.

Enforcement of the Farm Waste Plastic Collection is an issue for KCC because the Council believes that the legislation is too weak to secure a conviction so there is no way to enforce it. In addition the payment of the levy is not enforceable by KCC. Going forward, policy objectives regarding farm plastics needs to take the above into account. KCC recommends that these issues in the legislation are addressed.

Looking forward, KCC hopes to offer more support for reuse.

3.3 Waste Collection and Charging

The policy objective of the Plan is to enforce the waste collection permit regulations, to require pay-by-use collection systems for household waste, to ensure that source segregation is the minimum pre-treatment prior to landfilling, that a minimum of 95% of householders have a waste service, commercial and industrial waste producers will be required to segregate their wastes, a 2-bin system will be required pre 2006 and a 3-bin system post 2006 for municipal waste, to consider bye-laws for waste presentation and collection and to enforce the Waste Management (Movement of Hazardous Waste) Regulations and the Waste Management (Trans Frontier Shipment of Waste) Regulations.

3.3.1 Assessing Implementation

KCC enforces the Waste Management (Collection Permit) Regulations in the County. They make use of roadblocks with An Garda Síochána as time permits or if there is a specific reason. Check points in conjunction with a number of other Agencies have also been held and have been useful. KCC finds multi-agency checks to be beneficial.

KCC promoted the 2-bin collection system whilst they were involved in waste collection in County Kildare. The household kerbside collection coverage in Kildare in 2010 is shown in Table 3.1. There is good coverage of the 3-bin system in urban areas. However it has not been rolled out to all householders as per the policy objective.

Table 3.1: Household Kerbside Collection Coverage (2010)

| County | 2 –bin coverage ¹ | 3 –bin coverage ¹ | Unserviced occupied households ² |
|---------|------------------------------|------------------------------|---|
| Kildare | 64% | 36% | 19% |

¹Calculated based on the number of households serviced with a 2-bin, 3-bin household waste kerbside collection as a fraction of the total number of households serviced with a kerbside waste collection.

²This is calculated based on the difference between the number of occupied houses (CSO 2011 data) and the number of households serviced with a kerbside waste collection as a fraction of the total number of occupied households.

The Waste Management (Food Waste) Regulations 2009 came into force in December 2009. The Regulations impose obligations on the major sources of food waste, to segregate these materials and make them available for separate collection. Alternatively, these materials can be treated on the premises where they arise under specified conditions. KCC produced and disseminated a leaflet on the Food Waste Regulations to relevant businesses in 2010.

The following conditions were standard in waste collection permits issued by KCC. The conditions shown (which have been summarised) support the objectives of the Waste Management Plan.

- The permit holder shall at all times ensure that it carries on its waste collection activities in a manner that is consistent with the objectives of the Waste Management Plan for County Kildare.

Household Waste Conditions

- Where the permit holder collects kerbside waste from domestic premises, the permit holder shall implement and maintain a separate system for kerbside collection of dry recyclables from domestic premises.
- The permit holder shall operate a charging regime, which gives effect to the polluter pays principle and the Waste Management Plan for County Kildare where the waste collection activities are to take place. This shall be achieved by implementing a 'pay by use' system in order to:
 - ensure the lowest possible levels of presentation of waste;
 - ensure the optimum segregation of waste presented and collected; and
 - maximise waste recycling and recovery.
- Where the permit holder collects kerbside waste from domestic premises, the permit holder shall implement an education and awareness programme.
- The permit holder shall ensure that a separate system for kerbside collection of organic waste from households (in urban areas) shall be implemented in 2010 to achieve the targets in the "EU Landfill Directive (1999/31/EC) for Diversion of Biodegradable Waste from Landfill".

- The permit holder shall provide any apartment complexes it collects from with a source separated collection system in accordance with the policy objectives of the Waste Management Plan for County Kildare and any variation thereof. Separate wheelie bins are to be provided for the source separate collection of dry recyclables and mixed residual wastes.
- Permit holders collecting from apartment complexes are required to provide a separate collection of organic waste provided the waste storage arrangements at the apartment complex are suitable.

Commercial and Industrial Waste Conditions

- The permit holder shall implement and maintain a separate system for kerbside collection of dry recyclables from commercial and industrial premises.
- Where the permit holder provides for the collection of commercial and or industrial waste they shall provide a source separate collection system.
- Where the permit holder provides a commercial or industrial premises with a door-to-door collection service for residual waste they shall make available to that premises a separate collection service for dry recyclable wastes.
- The permit holder shall ensure that a separate system for kerbside collection of organic waste from commercial and industrial premises shall be implemented by 2010 to achieve the targets in the "EU Landfill Directive (1999/31/EC) for Diversion of Biodegradable Waste from Landfill".
- The charging system for organic waste shall incentivise businesses to participate in source segregation of organic waste. The frequency of collection must ensure the organic waste is suitable for further biological treatment.

3.3.2 Lessons Learned and Recommendations

Although KCC has appropriate conditions in the waste collection permits to require a pay-by-use system and a 3 –bin collection system, there has not been adequate legislative support to enforce those conditions.

In 2005 Kildare County Council was providing a waste collection service in the County but subsequently withdrew from the market in 2011. The household, commercial and industrial waste collection markets are serviced by the private sector. This is referred to as a 'side by side' market structure where private sector collectors compete with one another for customers.

The latest management policy document *A Resource Opportunity – Waste Management Policy in Ireland*, DECLG 2012 which is underpinned by a *Regulatory Impact Analysis*, DECLG 2012 states that there are some positive and negative effects of the current waste market structure. The areas of poor or problematic performance in terms of the Government's objectives include low rates of householder participation in some areas, insufficient levels of segregation of household waste, non-incentivised pricing structures, illegal waste activity and insufficient implementation of the polluter pays principle. It has been decided to preserve the current side by side market structure, and to strengthen significantly the regulatory regime which applies to household waste collection. Waste collectors will be required to manage waste in accordance with the waste hierarchy, to deliver mandated service levels and operate pricing structures to incentivise environmentally sustainable behaviours by householders. This will be achieved by strengthening the waste collection permitting system.

It is expected that the imminent Food Waste Regulations will address some of the issues above.

All householders will be required to demonstrate that there are availing of an authorised waste collection service or managing their waste lawfully. The Policy document does not specify how this will be implemented but it will be up to local authorities to educate householders and raise awareness of the requirement and it will also be enforced by local authorities.

In terms of enforcing waste collection permit holders, KCC recommends that a more immediate impact on illegal operators is required as the court system is so slow.

KCC also acknowledge that they need to raise public awareness of 'the man in the van' who does not hold a waste collection permit. National support on this would be useful. KCC believes that multi-regional cooperation is needed to enforce the collection of mixed skip bags.

Some of the policy objectives relating to collection and charging are no longer applicable. The objectives of the next phase of waste management planning should address how KCC will enforce compliance with the conditions of the waste collection permits. As noted above it is anticipated that a strengthened regulatory regime will give more power to KCC for enforcement.

3.4 Waste Recovery and Recycling

The key policy objectives in relation to waste recovery and recycling are:

- Waste infrastructure must demonstrate collection and recycling efficiencies that are in compliance with national recovery and recycling targets.
- To continue to provide for or arrange the provision of Bring Centres.
- To require developers to make provision for Bring Centres.
- To provide 3 Recycling Centres. The Council may also request provision of Recycling Centres by the private waste sector. The Council will have regard to the range of materials accepted at Recycling Centres and will accept WEEE.
- To promote the provision of biological treatment for biodegradable waste by the private sector.
- To promote the development and use of biofuels.
- To encourage the provision of an adequate range of waste recovery and recycling infrastructure.
- To potentially direct waste to appropriate facilities.
- To improve the quality of waste statistics.
- To audit municipal waste collection permit holders in 2005 and 2006 and extend it to commercial and industrial waste thereafter.
- For state or semi-state bodies in Kildare to prepare waste management plans.

There is a standard condition in the waste facility permit to require a waste facility permit holder to demonstrate collection and recycling efficiencies. It is that "the permit holder shall ensure that all waste activities at the facility are consistent with the objectives of the Waste Management Plan for the county of Kildare and the current National Hazardous Waste Management Plan."

In addition there is a condition that requires a waste facility permit holder to prepare a Plan in advance of operations and to include details of reuse, recovery and recycling.

KCC carry out enforcement audits of waste facilities in the County. The majority of waste permitted facilities in County Kildare are for soil and stone recovery.

Bring Banks and Recycling Centres

The numbers of facilities in place in 2010 are shown in Table 3.2. There has been an increase in the number of Bring Bank locations (40 no.) since 2003. Recycling centres are located at Athy and Silliot Hill, Kilcullen and are operated by a private waste company under a contract with KCC. It has been identified that there is a need for a Recycling Centre in the north west of the County and KCC IS progressing plans for a site in Celbridge.

Table 3.2: Bring Banks and Recycling Centres (2010)

| | Bring Banks ¹ | Recycling Centres |
|-------------------|--------------------------|-------------------|
| No. of facilities | 55 | 2 |
| Tonnage Collected | 3,866 | 5,008 |

The tonnage of material collected at Bring Banks and Recycling Centres is a significant increase on the tonnage collected in 2003 (1,020 t at Bring Banks and 4,340 t at Recycling Centres). There has also been an increase in the range of materials that are accepted at Recycling Centres and WEEE is accepted free of charge at both facilities. KCC has included a requirement in their planning conditions requiring developers to provide Bring Centres at residential developments.

KCC had hoped to consider innovative design of Bring Centres and an underground Bring Centre was installed but became problematic due to drainage issues. KCC installed CCTV at Bring Centres suffering from anti-social behaviours.

KCC has promoted the development of biological treatment facilities and encouraged the provision of adequate recycling and recovery infrastructure in the County through the policy objectives of the plan and by holding pre-planning meetings with developers and issuing waste facility permits.

There has been a significant improvement in the quality of waste statistics through the Waste Management (Facility Permit) Regulations 2007, the Waste Management (Collection Permit) Regulations and the new online data management system as designed by Fitzpatrick's Software for some of the waste management Regions including Kildare.

There is a pilot study underway in Kildare using biofuels to fuel Council vehicles.

3.4.1 Lessons Learned and Recommendations

In order to enforce national collection, recovery and recycling efficiencies at waste permitted facilities, consideration should be given to a system like the EPA licensing system whereby recycling, recovery and reuse targets are set in the authorisation, or the facility has to demonstrate continuous improvement. This would strengthen that particular policy objective.

KCC recommends that there would be some national guidance on the collection of gypsum waste.

KCC has learned that it is not possible to require state or semi-state bodies to have a waste management plan but feel that they can continue to promote good waste management practice through their education and awareness programme.

3.5 Market Development

As KCC is no longer involved in waste collection, their role in determining markets for materials is somewhat limited. However they continue to assess recycling markets.

3.6 Waste Treatment

The policy objective of the Plan is to ensure waste is source segregated to optimise recovery, recycling and reuse. The following waste fractions are used as headings for evaluating the policy objectives:

- organic waste
- green and garden waste
- segregated fractions in materials recovery facilities
- residual waste

¹ No. of Bring Banks and Recycling Centres 2010 (National Waste Report 2012)

3.6.1 Assessing Implementation

KCC was supportive of private sector development of biological waste treatment facilities. Bord na Móna has applied to the EPA for a waste licence to develop a Mechanical Biological Treatment (MBT) facility at Drehid adjacent to their existing landfill facility. There have been no other significant development proposals in the County for the treatment of biological waste.

As per Section 3.1.1 home composting is widespread in the County and KCC has set up a dozen community composting schemes.

There are two Recycling Centres in the County with plans for a third. Both of the recycling centres at Silliot Hill and Athy accept green and garden waste as per the policy objective.

KCC was supportive of private sector development of Materials Recovery Facilities (MRFs). There are no significant MRFs managing segregated fractions of waste in Co. Kildare. There is a large number of MRFs in Dublin which provide capacity.

3.6.2 Lessons Learned and Recommendations

As all waste in Kildare is collected and thus controlled by the private sector, KCC's role with respect to waste treatment will be to encourage provision of facilities in line with the waste management plan and the development plan, to enforce waste permitted facilities and to communicate and raise awareness of reuse, reduction of waste and recycling of materials. Therefore the policy objectives for next phase of planning shall be amended slightly to reflect that new role.

3.7 Final Disposal

The statement with regard to Final Disposal in the Waste Management Plan for County Kildare 2005-2010 is relevant going forward, in that KCC does not intend to provide its own landfill site.

3.8 Energy Recovery from Waste

KCC completed the capping of Silliot Hill landfill during the timeframe of the Plan. There is an extensive gas collection system on site with a landfill gas flare. There is not sufficient landfill gas to generate electricity at the site.

3.9 Litter Prevention

KCC adopted a new Litter Plan in July 2012 for the period 2011-2015. KCC has found that limited resources are a barrier to litter enforcement in the County. Going forward, they plan to encourage increased involvement by the Tidy Towns groups in litter prevention and will support the Tidy Towns in going so.

3.10 Sludge Management

A sludge hub centre was developed at Osberstown in accordance with the recommendations of the Kildare Sludge Management Plan. The process of thermal drying and the facility was provided through a Design Build Operate contract.

3.11 National Hazardous Waste Management Plan

KCC has a staff member responsible for the enforcement of appropriate management of hazardous waste. The staff member receives alerts from KCC which instigates enforcement action.

Household hazardous waste is accepted at the two recycling centres in Kildare.

Two of the policy objectives relation to the National Hazardous Waste Management Plan are no longer relevant, i.e. the enforcement of the hazardous waste Regulations due to the set-up of the National TFS office and; encouragement of hazardous waste management service providers to extend operations to SME and agricultural sectors.

There are 23 no. sites on the Section 22 Register, all of which are Local Authority sites.

3.12 Priority Waste Streams

3.12.1 Packaging Wastes

As mentioned in Sections 3.2.1 and 3.2.2:

- KCC worked with Repak Ltd. carrying out packaging audits from 2005 to 2009/10. Insufficient resources, particularly the lack of a Green Business Officer have been the barrier to the enforcement of the Packaging Regulations.
- KCC has a shoppers' awareness campaign through which work is ongoing with local community groups. A plastic bag officer was checking compliance with charging for issuing of plastic bags.
- Enforcement of the Farm Waste Plastic Collection is an issue for KCC because the legislation is too weak to secure a conviction so there is no way to enforce it. In addition the payment of the levy is not enforceable by KCC. Going forward, policy objectives regarding farm plastics needs to take the above into account. KCC recommends that these issues in the legislation are addressed.

Going forward, resources will have to be allocated to the enforcement of the Packaging Regulations and supporting activities in order to fulfil Local Authority requirements.

3.12.2 Healthcare Wastes

KCC has commenced food waste inspections to enforce the Waste Management (Food Waste) Regulations 2009. Healthcare facilities are not included in the list of priority facilities for this preliminary round of inspections.

3.12.3 Waste Electrical and Electronic Equipment

KCC has made provision for the acceptance of WEEE at its Recycling Centres and KCC has undertaken public awareness and education campaigns on the appropriate management of WEEE.

3.12.4 Polychlorinated Biphenyls

KCC has taken measures to ensure that the premises in which PCBs are stored are appropriately labelled.

KCC recommends that there is a requirement for increased awareness of PCBs for Council staff and the commercial/industrial sector.

3.12.5 End of Life Vehicles

KCC has issued three waste facility permits for end of life vehicle (ELV) dismantling facilities in Kilcock, at the Curragh and in Enfield. The Council continues to enforce the conditions of these permits. The Council took an ELV operator to the High Court and has secured an Order under Section 57 and 58 of the Waste Management Act. KCC has spent a significant amount of time and resources in enforcing the unauthorised activities at these ELV facilities.

3.12.6 Batteries

The Council has enforced the requirements of the Directive and continues to support the schools battery recycling scheme. Batteries are accepted at the Recycling Centres and KCC carries out inspections of labelling on batteries as per their enforcement function.

3.12.7 Construction and Demolition Wastes

KCC required construction and demolition (C&D) waste plans as part of planning permissions for developments. Those plans were audited by KCC's Environmental Department. KCC appointed a dedicated overseer to assess the C&D waste management plans and to enforce them.

KCC believes that the planning condition is the promoter for good practice, particularly amongst smaller C&D waste operators. The barrier currently is limited resources resulting in fewer audits.

There has been a reduction in the volume of fly-tipping of C&D waste materials which is attributed to the downturn in the construction sector. KCC continues to deal with small scale fly-tipping.

3.12.8 Waste Tyres and Waste Oils

KCC has issued and enforced permits for the collection of waste tyres and waste oils. The Council prepared and distributed education and awareness flyers for waste tyre producers. Waste oils are accepted at the two Recycling Centres.

3.13 Unauthorised Waste Management Activity and Contaminated Sites

3.13.1 Assessing Implementation

KCC investigates all reports concerning unauthorised waste management activities including backyard burning. As part of their enforcement of waste permitted facilities, checks are carried out for unauthorised activities.

In 2007, KCC produced an Unauthorised Waste Enforcement Policy which was based on EPA guidance.

It is the policy of the Council to recover all costs relating to proven unauthorised activities from the landowner/operator. Where site investigations are required, they are carried out in accordance with the Code of Practice.

3.13.2 Recommendations

The policy objectives in relation to unauthorised waste management activity and contaminated sites remain applicable going forward. There is further work required on the assessment of sites for the Section 22 and 26 registers.

3.13.3 Historic Unlicensed Waste Disposal and Recovery Sites

KCC has commenced the identification of historic waste disposal or recovery sites. There are two types of sites, those which were owned by the Local Authorities and those operated by the private sector. The Local Authority sites are governed by the Waste Management (Certificate of Historic Unlicensed Waste Disposal and Recovery Activity) Regulations 2008. The private sites are governed under Section 22 and 26 of the Waste Management Act 1996, as amended. It is a requirement of local authorities to identify historic waste disposal or recovery sites and to place them on a register. Non-hazardous sites are to be placed on the Section 22 Register and hazardous sites are to be placed on the Section 26 register. Once sites are on the registers, there is a requirement to carry out risk assessments. The process of registering and carrying out risk assessments of all historic waste disposal and recovery sites in Kildare has not yet been completed. Sites that received local authority waste have been prioritised. Following completion of the appropriate level of risk assessment for a site, the local authority may apply to the EPA for a Certificate of Authorisation (CoA).

It is government policy that local authorities progress the local authority owned sites prior to addressing the private sites. KCC has identified and placed 23 no. sites on the Section 22 Register.

3.14 Location of Waste Management Facilities

This policy objective regarding the location of waste management facilities is valid going forward.

The Waste Management Plan for County Kildare 2005-2010 noted some difficulties with respect to siting of waste permitted facilities but these issues were since resolved by the introduction of the new Waste Management (Facility Permit) Regulations 2007.

3.15 Environmental Considerations

It is a requirement of the evaluation process to consider the environmental impacts of the implementation of the Plan's policy objectives. The purpose of identifying the environmental impacts (positive and negative) is to inform policy makers of the potential impacts on the environment related to the implementation of the waste management plan.

Furthermore, the identification of the environmental impacts will assist the scoping process associated with the preparation of the Strategic Environmental Assessment (SEA) and Appropriate Assessment (AA) to be completed to accompany the review or replacement of the Waste Management Plan.

The preparation or variation to any plan or programme must be assessed under the SEA Directive, transposed as European Communities (Environmental Assessment of Certain Plans and Programmes) Regulations 2004, SI 435 of 2004, for non-spatial plans or programmes.

The requirement to undertake a SEA is defined under Article 9(1) of the legislation where it defines the types of plans and programmes which require a SEA:

- (a) which are prepared for agriculture, forestry, fisheries, energy, industry, transport, waste management, water management, telecommunications and tourism, and which set the framework for future development consent of projects listed in Annexes I and II to the Environmental Impact Assessment Directive, or
- (b) which are not directly connected with or necessary to the management of a European site but, either individually or in combination with other plans, are likely to have a significant effect on any such site.

Article 9(2) provides the competent authority with a right to determine whether a SEA is required for a plan or programme which:

1. only determines use of a small area at a local level or,
2. is a minor modification and is likely not to have significant effects on the environment.

Article 9(4) provides the competent authority with the criteria under which the determination for a SEA should be made. These criteria are provided in Schedule 1 of the SEA regulations.

If a SEA is deemed necessary (i.e. the screening process has shown that significant effects on the environment are likely), the following SEA process must be followed:

- Undertake scoping with the environmental authorities and other interested stakeholders.
- Preparation of an environmental report (in accordance with Schedule 2 of the SEA regulations).
- Consultation with the environmental authorities and other interested stakeholders to scope the environmental report.
- Publishing the environmental report alongside the draft Plan, seeking comment from the environmental authorities, consultation stakeholders and the general public.
- Adopting the Plan by publishing the environmental report and a SEA statement showing how the SEA process influenced the preparation of the Plan.

The primary functions of waste policy objectives are to:

- protect human health
- protect the environment
- ensure compliance with EU or National Policy
- achieve statutory diversion, recycling , recover or reuse targets
- improve waste management practices
- target enforcement priorities

The implementation of most waste policies objectives impact on one or more of the above functions however for the purpose of identification significant environmental impacts only policy objectives that whose primary function is the protection of the environment are considered. Table 3.3 shows the potential significant environmental impact of waste policy.

Table 3.3: Waste Policy – Significant Environmental Impacts

| Policy Objective | Environment Impacts |
|------------------|--|
| Waste Collection | <p>The percentage of uncollected household waste in Kildare is estimated at 19%. The environmental impacts associated with uncollected waste may include:</p> <ul style="list-style-type: none"> - Backyard burning which impedes air quality and may include the possibility of damaging human health. - Fly tipping which leads to deterioration of the natural environment and water and ground pollution from waste degradation, It can also lead to a reduction in biodiversity depending on the location of the fly tipping. <p>The roll out of the 3-bin collection service target was not achieved. Consequently the biodegradable content on municipal waste landfilled remains high. The impacts associated with landfilling BMW are:</p> <ul style="list-style-type: none"> - Increased production of greenhouse gas emissions, impacts on climate change, increased the strength of leachate production with potential risks to ground and surface water quality. |

| Policy Objective | Environment Impacts |
|--|---|
| Closed Landfills and Former Hazardous Waste Disposal Sites | Kildare has commenced conducting either Tier 1, 2 or 3 assessments on former landfill sites and this work is ongoing. However, until all work is completed these sites have the potential to impact on land use and surface and groundwater quality. |
| Unauthorised Waste Activity | KCC is committed to regulating unauthorised ELV operations but as mentioned in Section 3.12.5 one site in particular presents a significant challenge to the enforcement team. Until these operations are regularised or ceased there is potential for localised environmental pollution of soil. |

4 WASTE INDICATORS

This section comprises a summary of the waste indicators for County Kildare. Over the period of the Plan, there have been significant changes to the manner in which waste data is collated and the type of data collated. With time, the accuracy of the data has also improved. Initiatives such as an electronic reporting system for waste collection permit returns and amendments to the Local Authority Electronic Questionnaire (LAEQ), which each of the local authorities submit annually to the EPA in respect of the National Waste Database (NWD) have resulted in more accurate data returns.

For the above reasons, the data collated for the Plan is not directly comparable to the latest published waste data for 2010, and therefore is not included in any detail in this evaluation report.

The existing Plan used the most recently published waste data at the time, which was for 2003. It reported waste arisings of:

- 62,636 tonnes of household waste
- 70,178 tonnes of commercial waste
- 1,631 tonnes of litter and street sweepings

4.1 Key Waste Data

Waste arisings statistics were provided by the National Coordination Committee and were collated using a number of information sources such as:

- National Waste Database 2010
- EPA Local Authority Questionnaire
- Local Authority e-Annual Environmental Reports (AER) system
- Compliance schemes
- Estimates using indicator and population data.

For the purposes of the evaluation of the waste management plans, the National Co-ordination Committee prepared a guidance document (draft) to assist Local Authorities with the preparation of key waste data and indicators. Key waste data and indicator information is recommended to be prepared for the following waste streams:

- | | |
|-----------------------------------|--------------------------------------|
| • Household | • Construction and Demolition |
| • Commercial | • Contaminated soil |
| • Municipal | • Industrial (non hazardous and |
| • Biological Municipal Indicators | • hazardous) waste |
| • Packaging Waste | • Mining |
| • WEEE | • Agricultural |
| • Batteries | • Healthcare |
| • Tyres | • Other waste stream |
| • End of Life Vehicles | • Waste Oils |
| • Sludges | • Waste from Power and Thermal Plant |

To assist with the evaluation of the waste management plans, waste data from the sources listed above was inputted in to an automated data management reporting and validation tool operated by Fitzpatrick's. All data relates to 2010. This data management tool reports specific waste data and indicator information by waste stream. A full copy of all key waste data and indication information for all waste streams is contained in Appendix 3.

A summary of the key waste data and indicator information is outlined hereunder. Table 4.1 is a summary of all reported waste data in County Kildare.

Table 4.1: Summary of Waste Data for Kildare

| Waste Steams | Kildare (Tonnes) |
|--|------------------|
| Agricultural Waste | 19,707 |
| Commercial (Municipal) | 74,400 |
| Construction & demolition waste | 34,030 |
| Contaminated soil | 328 |
| ELVs | 1,999 |
| Farm Plastics | 398 |
| Healthcare Waste | 530 |
| Industrial (Manufacturing) Waste (Hazardous) | 3,582.07 |
| Industrial (Manufacturing) Waste (Non Hazardous) | 12,529 |
| Industrial (Municipal) | 51.94 |
| Industrial Effluent Sludges | 1.29 |
| Mining Waste | 0 |
| Other | 202 |
| Septic Tank Sludge | 2,472 |
| Sewage Cleaning Sludges | 186 |
| Soil and Stones | 245,778 |
| Tyres | 834 |
| Waste Oils | 1,807 |
| Wastes from Power and Thermal Plants | 0 |
| Water Treatment Sludge | 0 |
| WEEE | 111.15 |
| Household Waste Managed | 80,382 |

Table 4.2 over itemises the individual components of household waste within the County as reported in the NWD 2010.

Table 4.2: Household Waste Data

| Ref. | Household Waste | Kildare | Source/Comment |
|------|---|---------|---|
| A | Kerbside (MDR) | 12,696 | National Waste Report, Appendix B |
| B | Kerbside (Biowaste) | 4,322 | National Waste Report, Appendix B |
| C | Kerbside (Glass) | 32 | National Waste Report, Appendix B |
| D | Home composting | 2,400 | National Waste Report, Appendix B |
| E | Residual Waste Direct to Landfill (Kerbside) | 45,232 | EPA LA Questionnaire |
| F | Residual Waste to Int. Waste Processing Facility (Kerbside) | 4,965 | EPA LA Questionnaire |
| G | Bring Banks | 3,866 | National Waste Report, Appendix B |
| H | Recycling Centres (Excl WEEE, Bulky & Residual sent for disposal) | 906 | National Waste Report, Appendix B |
| I | Bulky Waste – Recovered | 392 | EPA LA Questionnaire |
| J | Bulky Waste – Disposed | 392 | EPA LA Questionnaire |
| I-2 | Other Bulky Waste Collected – Recovered | 788 | Local Authority e-AER system |
| J-2 | Other Bulky Waste Collected – Disposed | 788 | Local Authority e-AER system |
| K | Delivered for disposal (direct to recycling centres) | 2,925 | National Waste Report, Appendix B |
| L | WEEE and Battery Collections | 679 | Compliance Schemes |
| M | Mobile Collections | - | National Waste Report, Appendix B |
| N | Uncollected Waste | 14,558 | EPA |
| O | Household Waste Generated – Total (A to N) | 99,940 | Includes uncollected waste |
| P | Household Waste Managed – Total (A to M) | 80,382 | Excludes uncollected waste |
| Q | Household Waste Recycled – Total (A+B+C+D+G+H+I+1-2+L+M) | 26,081 | |
| R | Household Waste Recovered: Total (40% of F) + Q | 28,066 | Assumption 40% of residual waste brought to intermediate facilities is recovered. |
| S | Household Waste Disposed: P-R | 52,315 | Excludes uncollected waste |

Total household waste reported as generated within County is 94,940 tonnes of which 14,558 tonnes or 15.3% is estimated to be uncollected.

Key household waste indicator data is presented in Table 4.3 such as – household waste generated and managed and recycling and disposal rates per capita.

Table 4.3: Key Household Indicator Data

| | Kildare Region | |
|------|--|---------|
| Ref. | Household Waste Indicators | Kildare |
| T | Household Waste Generation Per Capita (t/capita) | 0.45 |
| U | Household Waste Managed Per Capita (t/capita) | 0.38 |
| V | Household Waste Recycling Rate (%) | 32% |
| Y | Household Waste Recycling Rate per capita (t/capita) | 0.12 |
| X | Household Waste Recovery Rate (%) | 35% |
| Y | Household Waste Recovery Rate (t/capita) | 0.13 |
| Z | Household Waste Recovery Rate (t/capita) | 65% |
| Z1 | Household Waste Disposal Rate (%) | 0.25 |
| | 2011 Census Details | Kildare |
| | Total No of Occupied Houses | 72,731 |
| | Population | 210,312 |

Key municipal waste indicators data is outlined in Table 4.4. Municipal waste consists of collected C & I waste, managed household waste and street sweepings. The municipal waste recovery rate is reported as 40%

Table 4.4: Municipal Waste Indicators

| | Kildare Region | |
|-----|---|-------------------|
| Ref | Municipal Waste | Kildare |
| | Municipal Waste Collected (t) (=V+P+X) | 155,042.68 |
| V | Commercial & Industrial Waste Collected | 74,452.62 |
| P | Household Waste Managed | 80,381.66 |
| X | Street Sweepings | 208.40 |
| - | Municipal Waste Recovered (t) (=R+W) | 62,314.55 |
| R | Household Waste Recovered (Tonnes) | 28,066.34 |
| W | Commercial Waste Recovered (Tonnes) | 34,248.20 |
| - | Municipal Waste Recovery Rate (%) | 40% |
| - | Municipal Waste Disposal Rate (%) | 60% |

The biodegradable content of municipal waste (BMW) is calculated using approved factors for various waste streams. These factors are determined by the EPA. Table 4.5 identifies the BMW content of municipal collected/managed for the County and the estimated quantity consigned to landfill.

Table 4.5: Biodegradable Municipal Waste

| Biodegradable Municipal Waste | Kildare Total | BMW Content | Estimate of BMW (t) |
|---|-------------------|-------------|---------------------|
| Commercial & Industrial Waste Collected | 74,452.62 | 77% | 57,328.52 |
| Household Waste Managed | 80,381.66 | 65% | 52,248.08 |
| Street Sweepings | 208.40 | 65% | 135.46 |
| Total | 155,042.68 | | 109,712.06 |

| BMW content in MSW generated in Kildare and sent to landfill | | BMW Content | Estimated BMW Quantities Sent to Landfill (t) |
|--|-----------|-------------|---|
| Municipal Waste Sent to Landfill | 92,728.13 | 58% | 53,782.32 |

4.2 Summary of Achievements

Table 4.1 shows how Kildare's waste data compares to national averages.

Table 4.6: Comparison of Kildare and National Waste Data

| Waste Indicator Data | Kildare Average | National Average |
|--|-----------------|------------------|
| Household Waste Recycling | 32% | n/a |
| Household Waste Recovery | 35% | 41% |
| Household Waste Disposal | 65% | 59% |
| Commercial Waste Recovery | 46% | 45% |
| Municipal Waste Recovery | 40% | 42% |
| Municipal Waste Disposal | 60% | 58% |
| BMW Content of MSW to Landfill | 58% | 57% ² |
| No. of Bring Banks | 55 (2.8%) | 1,922 |
| No. of Civic Amenities/Recycling Centres | 2 (1.8%) | 107 |

² 860,000 t BMW landfilled nationally divided by 1,495,565 t of MSW landfilled nationally.

5 INFRASTRUCTURE

Waste management infrastructure within County Kildare consists of a combination of recovery and disposal infrastructure that is provided by both the public and private sectors. For the management of municipal solid waste the infrastructure consists of the following:

- Bring Banks
- Civic Amenities/Recycling Centres
- Waste Transfer Stations
- Biological Treatment Facilities
- Landfills

The nature, scale and provider of the infrastructure are all factors that define the regulatory framework that governs the development and operation of these facilities. All waste infrastructure operates under either:

- a Certification of Registration issued by the Environmental Protection Agency,
- a Waste Permit issued by Local Authorities, or
- a Waste Licence issued by the Environmental Protection Agency.

5.1 Bring Banks and Civic Amenities/Recycling Centres

Bring Banks are used for the collection of segregated glass (clear, brown and green) and ferrous and non-ferrous metals. These facilities are classified as “recovery” facilities. Civic Amenities/ Recycling Centres accept a wide range of materials for recovery and can be classified as either “recovery” or “recovery/disposal” facilities. The latter are facilities that also accept residual waste for disposal. 3,886 tonnes of recoverable materials were collected at Bring Banks in Kildare in 2010, and 5,008 tonnes of recoverable materials were collected at Civic Amenities/Recycling Centres located at Silliot Hill IMWF, Killcullen and Athy.

Table 5.1: Bring Banks and Civic Amenities/Recycling Centres 2010

| Facilities | No. of Sites |
|-----------------------------------|--------------|
| Bring Banks | 55 |
| Civic Amenities/Recycling Centres | 2 |

5.2 Waste Transfer Stations and Material Recovery Facilities

Waste transfer stations and material recovery facilities are being considered in a single category because most, if not all, waste transfer stations now conduct some level of material separation. These facilities be classified as either “recovery” or “recovery/disposal” facilities. There is just one waste licensed waste transfer station in operation in Kildare which is owned by KCC and operated under contract by Oxigen. That facility is shown in Table 5.2.

There are no waste permitted waste transfer stations or material recovery facilities for MSW in County Kildare. There are two waste permitted facilities recycling fluorescent tubes and recovering waste cooking oil in the County.

Table 5.2: Waste Transfer Facilities with a Waste Licence

| Licence Number | Licensee | Location | Facility Type | Status | Licensed Tonnage |
|----------------|------------------------|---------------------|---------------|-------------|------------------|
| 14 | Kildare County Council | Sillliott Hill IWMF | WTS | Operational | 62,700 |

Table 5.3: Waste Transfer & Material Recovery Facilities with a Waste Facility Permit

| Permit Number | Permit Holder | Location | Facility Type | Status | Permitted Tonnage | Activity |
|-------------------|---------------------------|--------------|---------------|-------------|-------------------|----------------------------|
| WFP-KE-08-0348-01 | Irish Lamp Recycling Ltd. | Athy | Recycling | Operational | 11,000 | Fluorescent tube recycling |
| WFP-KE-10-0060-01 | Bolton RVO | Castledermot | Recovery | Operational | 50,000 | Waste oil recovery |

5.3 Biological Treatment

There is one waste licensed composting facility in Kildare. The details are shown in Table 5.4. There are three waste permitted composting facilities in County Kildare, details of which are shown in Table 5.5.

Table 5.4: Biological Treatment Facilities with a Waste Licence

| Licence Number | Licensee | Location | Facility Type | Status | Licensed Tonnage |
|----------------|------------------|-----------------------------|---------------|-------------|------------------|
| 198 | Bord na Mona Plc | Kilberry, Athy, Co. Kildare | Composting | Operational | 96,000 |

Table 5.5: Biological Treatment Facilities with a Waste Facility Permit

| Permit Number | Permit Holder | Location | Facility Type | Status | Permitted Tonnage tpa |
|-------------------|------------------------------------|--------------|-----------------------------------|-------------|-----------------------|
| WFP-KE-10-0064-01 | Cleary Composting & Shredding Ltd. | Monasterevin | Composting | Operational | 10,000 |
| WFP-KE-09-0059-01 | Kildangan Stud | Kildangan | Composting stable and green waste | Operational | 10,000 |
| WFP-KE-12-0065-01 | Paul Mooney | Maynooth | Composting green waste | Operational | 10,000 |

5.4 Landfill

Table 5.6 is a list of waste licensed landfill facilities in County Kildare. There are four waste licensed landfills in Kildare. The EPA has taken over as the licensee for the landfill formerly owned and operated by Neiphin Trading Ltd.

Table 5.6: Landfills

| Licence Number | Licensee | Location | Status | Licensed Tonnage |
|----------------|-----------------------------|---|-------------|------------------|
| 81 | KTK Sand & Gravel Ltd | KTK Pit, Kilkullen, Co. Kildare | Closed | n/a |
| 4 | South Dublin County Council | Arthurstown, Kill, Co. Kildare | Closed | n/a |
| 47 | NeiphIn Trading Ltd | Kerdiffstown, Naas, Co. Kildare | Closed* | n/a |
| 201 | Bord Na Mona plc | Drehid Waste Management Facility, Co. Kildare | Operational | 360,000 |

*The EPA is currently remediating this site.

5.5 End of Life Vehicle Treatment Facilities

KCC has issued waste facility permits in respect of end of life vehicle treatment facilities. These are referred to as Authorised Treatment Facilities (ATFs) and are included in Table 5.7.

Table 5.7: Authorised Treatment Facilities

| Permit No. | Operator | Address | Permitted Annual Capacity |
|-------------------|--------------------------|---------------------------|-------------------------------------|
| WFP-KE-10-0061-01 | All Spares (Kildare) Ltd | The Curragh, Co. Kildare. | 300 vehicles/a |
| WFP-12-0067-01 | Kellys N4 Recovery | Enfield, Co. Kildare. | 500 t/a ELVs & 3000 t/a scrap metal |
| WFP-KE-09-0352-01 | Kilcock Car Dismantlers | Kilcock, Co. Kildare. | 8700 t/a |

6 EVALUATION RECOMMENDATION

There is a requirement to evaluate the Waste Management Plan for County Kildare 2005-2010 under the transposing regulations (S.I. 126 of 2011) of the Waste Framework Directive (WFD) (2008/98/EC). Consequent to the evaluation, a determination should be made whether the plan requires varying, reviewing or replacing.

Following the evaluation of the Waste Management Plan for County Kildare 2005-2010, it is recommended that the Plan be replaced.

This recommendation is based on three key findings of the evaluation which are derived from the WFD and the new waste policy document for Ireland, *A Resource Opportunity – Waste Management Policy in Ireland* (DECLG, 2012):

- Changes to the waste hierarchy.
- Requirement to comply with the 'proximity' and 'self-sufficiency' principles.
- A new shared service approach to waste management planning in Ireland.

The Waste Framework Directive (WFD) set out the legal framework for the preparation of waste management plans. This Directive mandated the implementation of a waste hierarchy which amends the one that was in place in Irish policy. The new 5 step waste hierarchy replaces the previous 6 step waste hierarchy. The differences between the waste hierarchy in the Waste Management Plan for County Kildare 2005-2010 and the new mandatory waste hierarchy are:

- A reduction from 6 to 5 steps,
- the introduction of a new concept – 'preparing for reuse',
- removal of the individual steps of minimisation and reuse, these are now included in waste prevention, and
- a change from energy recovery to other recovery, e.g. energy recovery.

The obligation to implement the new waste hierarchy means that the objectives of the Waste Management Plan for County Kildare 2005-2010 will have to change in order to support the implementation of the WFD.

A Resource Opportunity – Waste Management Policy in Ireland (DECLG, 2012), stated that all waste management plans will ensure compliance with the 'proximity' and 'self sufficiency' principles. The objective of this policy is to increase recycling, promote resource efficiency and eliminate Ireland's over reliance on landfill. The policy document also promotes a shared services approach.

The structure of waste management in Ireland has undergone significant changes over the lifetime of the Plan, resulting in privatisation of the majority of waste collection, treatment and disposal capacity in the Country. In addition during the lifetime of the Plan, Ireland went through a period of extraordinary economic growth followed by a recession. The economic climate directly impacted on waste generation leading to rapid growth followed by a sudden decline. It also impacted on resources, such as funding for infrastructure and education and awareness. The structure of waste management in Ireland in 2012 is significantly different from where it was in 2005.

The proposed shared service approach to the future planning of waste management currently predicts that the existing ten waste management planning regions in Ireland will reduce to no more than three. In order to ensure compliance with the 'proximity' and 'self-sufficiency' principles and the new waste hierarchy, the objectives of the Waste Management Plan for County Kildare 2005-2010 will have to be amended.

It is recommended that in order to sufficiently meet the proposed future waste policy in Ireland that the Waste Management Plan for County Kildare 2005-2010 be replaced.

Appendix 1

EU Directives



Table A1.1 is a list of the EU Directives and regulations that came into place since the last Plan was made. The rest of this Appendix includes a summary of each of the Directives and regulations.

Table A1.1: EU Waste Directives and Regulations Adopted in Plan Timeframe

| Area | EU Directives and Regulations |
|---|---|
| Waste Framework Directive | <ul style="list-style-type: none"> • Directive 2008/98/EC on waste (Waste Framework Directive) |
| Trans-frontier Waste Shipments | <ul style="list-style-type: none"> • Regulation (EC) No. 1013/2006 and S.I. No. 149/1998 |
| IPPC Directive | <ul style="list-style-type: none"> • Directive 2008/1/EC of the European Parliament and of the Council of 15 January 2008 concerning integrated pollution prevention and control |
| Packaging Directive | <ul style="list-style-type: none"> • Directive 94/62/EC on packaging and packaging waste |
| Batteries and accumulators and Waste Batteries and Accumulators | <ul style="list-style-type: none"> • Directive 2006/66/EC on batteries and accumulators and waste batteries and accumulators and repealing Directive 91/157/EEC entered into force on 26 September 2006 • Directive 2008/12/EC of the European Parliament and of the Council of 11 March 2008 amending Directive 2006/66/EC on batteries and accumulators and waste batteries and accumulators, as regards the implementing powers conferred on the Commission. • Directive 2008/103/EC of the European Parliament and of the Council of 19 November 2008 amending Directive 2006/66/EC on batteries and accumulators and waste batteries and accumulators as regards placing batteries and accumulators on the market |
| Ozone Depleting Substances | <ul style="list-style-type: none"> • Regulation (EC) No 1005/2009 of the European Parliament and of the Council of 16 September 2009 on substances that deplete the ozone layer |
| End-of-Life Vehicles | <ul style="list-style-type: none"> • Directive 2000/53/EC on end-of-life vehicles ("2015 targets") • S.I. No. 282/2006 – Waste Management (End-of-Life Vehicles) Regulations 2006 and S.I. No. 142/2010 – Waste Management (End-of-Life Vehicles)(Amendment)Regulations 2010. • Directive 2000/53/EC of the European Parliament and of the Council of 18 September 2000 on end-of-life vehicles |
| The Re using, Recycling and Recovering of Motor Vehicles | <ul style="list-style-type: none"> • Directive 2005/64/EC of the European Parliament and of the Council of 26 October 2005 on the type-approval of motor vehicles with regard to their reusability, recyclability and recoverability |
| Waste Electrical and Electronic Equipment | <ul style="list-style-type: none"> • WEEE Directive 2012/19/EC |
| Mining and Mineral Waste Directive | <ul style="list-style-type: none"> • Directive 2006/21/EC on the management of waste from the extractive industries (the mining waste directive) |

Waste Framework Directive (Directive on Waste)

The Council Directive on Waste (75/442) was revised and replaced in April 2006 with 2006/12/EC in order to modernise and streamline its provision. The principle purpose of this Directive is to limit the generation of waste (with a lot of emphasis on prevention) and to optimise the organisation of waste treatment and disposal. However, this Directive is repealed by [Directive 2008/98/EC](#) with effect from 12 December 2010.

Directive 2008/98/EC will also repeal two other existing legislations. They are namely Directives 75/439/EEC (Waste Oil) and 91/689/EEC (Controlled Management of Hazardous Waste Directive). These two areas are now covered within the scope of the revised Waste Framework Directive.

The new Directive sets down the basic concepts and definitions related to waste management and it:

- establishes a legal framework for the treatment of waste
- aims at protecting the environment and human health

Under this Directive Member states need to look specifically at:

- Waste hierarchy (it is important to specify ways of prevention, preparation for reuse, recycling and other recovery – notably energy recovery and disposal)
- Waste Management - waste must be treated in conditions that ensure the protection of health and the environment.
- Permits & Registrations - any establishments or undertaking intending to carry out waste treatment must obtain a permit from the competent authorities; and any incineration or co-incineration method aimed at energy recovery must only be carried out if this recovery takes place with a high level of energy efficiency- equal to or above 60% for installations in operation and permitted in accordance with applicable Community legislation before 1 January 2009 or 65% for installations permitted after 31 December 2008.
- Plans & Programmes - prevention programmes must be drawn up with a view to breaking the link between economic growth and the environmental impacts associated with the generation of waste. Waste management plans should contain, the type, quantity and source of waste, existing collection systems and location criteria)
- Article 29(5) calls upon the Commission to create a system for sharing information on best practice regarding waste prevention and to develop guidelines in order to assist the Member States in the preparation of their waste prevention programmes.

Article 21 of this Directive outlines the requirements relating to waste oils requiring each Member State to ensure:

- waste oils are collected separately, where possible
- waste oils are treated
- waste oils of different characteristics are not mixed and waste oils are not mixed with other kinds of waste or substances, if such mixing impedes their treatment, where technically feasible and economically viable

Amongst others, it also allows individual member states to apply additional measures such as technical requirements, producer responsibility, economic instruments or voluntary agreements.

Trans-frontier Waste Shipments

Regulation 1013/2006 aims at strengthening, simplifying and specifying the procedures for controlling waste shipments to improve environmental protection. It looks to include into EC legislation the provisions of the Basal Convention and the Decision on the control of transboundary movements of wastes destined for recovery operations that was adopted by the OECD in 2001.

This Regulation applies to the shipment of almost all waste types excluding radioactive waste and a few other types which have separate control measures. It applies to the shipments of waste:

- between Member States, within the Community or with transit through third countries
- imported into the Community from third countries
- exported from the Community to third countries
- in transit through the Community, on the way from and to third countries.

Annex V of the Regulation lists wastes for which export is prohibited.

The number of Lists of Waste (LoW), whose shipment is authorised, has been reduced from three to two:

- Wastes subject to notification are set out in the "Amber List" (Annex IV). Wastes listed in Annexes II and VIII to the Basal Convention are subject to the "Amber List". This classification applies to the shipments of all waste intended for disposal and hazardous waste intended for recovery.
- Wastes subject only to information requirements are set out in the "Green List" (Annex III). Wastes listed in Annex IX to the Basal Convention are subject to the "Green List", which applies to non-hazardous waste intended for recovery.

The Regulation includes other general provisions, such as:

- a ban on the mixing of waste during shipment
- the making available to the general public of appropriate information
- the obligation on the part of the notifier
- the obligations required by the competent authority
- the consignee and the facilities concerned to keep documents and information
- Exports to third countries of waste intended for disposal are prohibited, except to European Free Trade Association (EFTA) countries which are party to the Basel Convention
- Member States must make provision for the organisation of checks throughout the entire waste shipment and waste recovery/waste disposal process
- Imports from third countries of waste intended for disposal or recovery are prohibited, with the exception of imports:
 - from countries to which the OECD Decision applies
 - third countries which are party to the Basel Convention
 - countries which have concluded a bilateral agreement with the Community or Member States, or
 - other areas during situations of crisis.

Dublin City Council was appointed in October 2009 as the competent authority under this Regulation for the control of the export and import of hazardous and non-hazardous waste.

The IPPC Directive

Directive 2008/1/EC ("the IPPC Directive"), which replaces Directive [96/61/EC](#), requires industrial and agricultural activities with a high pollution potential to have a permit. Integrated Pollution Prevention and Control (IPPC) concerns new or existing industrial and agricultural activities with a high pollution potential, as defined in Annex I to the Directive (e.g. energy industries, production and processing of metals, mineral industry, chemical industry, waste management, livestock farming, etc.).

To receive a permit an industrial or agricultural installation must comply with certain basic obligations. In particular, it must:

- use all appropriate pollution-prevention measures, namely the best available techniques (which produce the least waste, use less hazardous substances, enable the substances generated to be recovered and recycled, etc.)

- prevent all large-scale pollution
- prevent, recycle or dispose of waste in the least polluting way possible
- use energy efficiently
- ensure accident prevention and damage limitation
- Return sites to their original state when the activity is over.

In addition, the decision to issue a permit must contain a number of specific requirements, including:

- emission limit values for polluting substances (with the exception of greenhouse gases if the emission trading scheme applies)
- any soil, water and air protection measures required
- waste management measures
- Measures to be taken in exceptional circumstances (leaks, malfunctions, temporary or permanent stoppages, etc.)
- minimisation of long-distance or transboundary pollution
- release monitoring
- All other appropriate measures.

All permit applications must be sent to the Competent Authority (the EPA in Ireland's case), which will then decide whether or not to authorise the activity. Applications must include information on the following points:

- a description of the installation and the nature and scale of its activities as well as its site conditions
- the materials, substances and energy used or generated
- the sources of emissions from the installation, and the nature and quantities of foreseeable emissions into each medium, as well as their effects on the environment
- the proposed technology and other techniques for preventing or reducing emissions from the installation
- measures for the prevention and recovery of waste
- measures planned to monitor emissions
- Possible alternative solutions.

The decision to license or reject a project, together with the reasons for or/and against, must be made public and sent to the other Member States concerned. The Member States must, in accordance with their relevant national legislation, make provision for interested parties to challenge this decision in the courts.

Each Member State is responsible for inspecting industrial installations within their state and ensuring they comply with the Directive.

Packaging Directive

Two amendments to Directive 94/62 on Packaging and Packaging Waste have been issued since 2005. These amending acts are Directives 2005/20/EC and Regulation (EC) No. 219/2009. The Council Directive 2005/20/EC simply extends the deadlines for some countries affected by the enlargement of the European Union. The 2004 deadlines remain unchanged for Ireland.

The Regulation (EC) No. 219/2009 makes changes to Annex 1 of the Packaging Directive. It recommends that as a priority the following items be addressed:

- CD and video cases
- flower pots
- tubes and cylinders around which flexible material is wound
- release paper of self-adhesive labels and wrapping paper

Directive on Batteries and Accumulators and Waste Batteries and Accumulators

Directive 91/157/EEC is repealed by Directive 2006/66/EC. Two amendments to the 2006 Directive were issued in 2008. They were namely, Directives 2008/12/EC and 2008/103/EC.

Directive 2006/66/EC applies to all types of batteries and accumulators unlike the repealed Directive 91/157/EEC which applied only to batteries containing mercury, cadmium or lead.

This Directive promotes:

- A high rate of collection and recycling of waste batteries and accumulators – is there a specific target
- The improvement in the environmental performance of all involved in the life-cycle of batteries and accumulators, including their recycling and disposal
- A reduction in the amount of hazardous substances -in particular, mercury, cadmium and lead - released into the environment
- It prohibits batteries or accumulators which do not meet the following requirements be placed on the market after 26 September 2008:
 - batteries and accumulators, whether or not incorporated in appliances, containing more than 0.0005% by weight of mercury (except for button cells, which must have a mercury content of less than 2% by weight) being placed on the market
 - portable batteries and accumulators, including those incorporated in appliances, with a cadmium content by weight of more than 0.002% (except for portable batteries and accumulators for use in emergency and alarm systems, medical equipment or cordless power tools).

Member States must:

- ensure that a high proportion of spent batteries and accumulators are recycled
- promote and maximise separate waste collections - collection rates of at least 25% and 45% have to be reached by 26 September 2012 and 26 September 2016 respectively
- prevent batteries and accumulators being thrown away as unsorted municipal refuse
- Make arrangements enabling end-users to discard spent batteries and accumulators at collection points in their vicinity and have them taken back at no charge by the producers
- Ensure that manufacturers design their appliances so that the removal of batteries and accumulators can be removed safely and readily
- ensure that, from 26 September 2009 at the latest, batteries and accumulators that have been collected are treated and recycled using the best available techniques
- As a minimum, treatment must include removal of all fluids and acids
- Batteries and accumulators must be treated and stored (even if only temporarily) in sites with impermeable surfaces and weatherproof covering, or in suitable containers.

The recycling of battery and accumulator content to produce similar products or for other purposes has to reach the following levels by 26 September 2011:

- at least 65% by average weight of lead-acid batteries and accumulators, including the recycling of the lead content to the highest degree that is technically feasible
- 75% by average weight of nickel-cadmium batteries and accumulators, including the recycling of the lead content to the highest degree that is technically feasible
- At least 50% by average weight of other battery and accumulator waste.

If there is no viable end market, or if a detailed assessment of environmental, economic and social impact concludes that recycling is not the best solution, Member States may dispose of batteries and accumulators containing cadmium, mercury or lead in landfills or underground storage areas. Otherwise, it is prohibited to put waste from industrial and automotive batteries and accumulators into landfill or incineration plants. Only residues from treating and recycling them may be disposed of in these ways.

Treatment and recycling may take place outside the Member State concerned or even outside the Community, provided EU legislation on the [shipment of waste](#) is respected.

The “producers” have to bear the cost of collecting, treating and recycling the batteries and accumulators covered by the Directive as well as fund campaigns to inform the public of these arrangements. All producers of batteries and accumulators have to be registered.

Each Member States must send the Commission, reports on the implementation of the Directive and the measures they are taking to encourage developments affecting the impact of batteries and accumulators on the environment (including new recycling and treatment techniques). The first report will cover the period until 26 September 2012; subsequent reports are to be produced every three years. On the basis of these reports, the Commission must publish its own report on the implementation of the Directive and its impact on the environment and the functioning of the internal market.

A review of the Directive will be carried out after the second round of reports from the Member States. The Commission will examine the appropriateness of further risk management measures, minimum collection targets and minimum recycling obligations, and if necessary propose amendments to the Directive.

The amendments set out Directive 2008/12/EC are technical in nature and concern committee procedure only and as a result does not need to be transposed into Irish Law.

Ozone Depleting Substances

Regulation (EC) no. 1005/2009 replaces [Regulation \(EC\) No 2037/2000](#). The purpose of the 2009 revision was to bring the Community rules into line with technical developments and changes made to the 1987 Montreal Protocol on Substances that Deplete the Ozone Layer. This Regulation covers:

- controlled substances such as chlorofluorocarbons (CFCs), halons, carbon tetrachloride, methyl bromide, hydrochlorofluorocarbons (HCFCs), etc. (see Annex I)
- new substances (see Annex II)
- products and equipment containing or relying on such substances
- Hydrochlorofluorocarbons (HCFCs) shall be phased out
- No HCFCs may be produced after 31 December 2019
- Halons may be placed on the market and used for critical uses (see Annex VI).

Systems must be put in place for the recovery of controlled substances contained in refrigeration units, air-conditioning units, heat pump equipment, equipment containing solvents, fire protection systems and fire extinguishers. Leak detection systems are also required for larger installations with a timeline of 14 days for the repair of any leaks.

This Regulation prohibits the:

- Production and placing on the market and use of controlled substances or products and equipment containing these substances, with the exception of certain uses as feedstock or process agents, or laboratory and analytical uses (the quantity of these produced annually must be authorised and be restricted by a system of quotas; and producers and importers must have a licence which is granted for a limited period by the competent authority- EPA and KCC)
- placing on the market and use of fire protection systems and fire extinguishers containing controlled substances, particularly halons
- use of methyl bromide from 18 March 2010, except in an emergency, to prevent the spread of pests or disease. However, this derogation applies only for a period not exceeding 120 days and a quantity not exceeding 20 tonnes
- Any producer or importer authorised to use or place controlled substances on the market may transfer those rights to other producers or importers of such substances within the Community
- Any transfer shall be notified in advance to the Commission
- A producer may also be authorised to exceed established levels of production, on condition that the maximum level of national production is not exceeded
- Imports and exports of controlled substances and of products and equipment containing such substances shall be prohibited. (Derogations exist for certain uses of controlled substances or for their destruction according to appropriate methods.)
- Imports and exports shall be subject to the issue of a licence
- The total quantity annually authorised under licenses, including licenses for hydrochlorofluorocarbons, shall not exceed 110 ODP tonnes.

End-of-Life Vehicles

Directive 2000/53/EC on End-of-life-Vehicles (ELVs) is still current. It applies to vehicles and end-of-life vehicles, including their components and materials and aims to decrease vehicles and end-of-life vehicles, including their components and materials. Amending acts were published in 2005 and 2008.

Council Decision 2005/673/EC replaces Annex II to Directive 2000/53/EC. Annex II deals with 'Materials and components exempt from Article 4(2)(a).

The amendments made by Directive 2008/33/EC are technical and concern committee procedure only and do not as a result need to be transposed by the Member States. Directive 2008/112/EC clarifies the meaning of 'hazardous substance' and brings the parent Directive of ELVs in line with hazardous classes and categories.

Some key points of End-of-Life Vehicles Directives & subsequent amendments are:

- Since 1 July 2003, the use of mercury, hexavalent chromium, cadmium and lead in the components of vehicles placed on the market has been prohibited with some minor exemptions
- Member States must establish national collection systems for waste arising from vehicles to increase the rate of re-use and recovery to:
 - 85% no later than 1 January 2006 increasing to 95% no later than 1 January 2015 for re-use and recovery (in average weight per vehicle and year)
 - The rate of re-use and recycling (in average weight per vehicle per year) should reach 80% no later than 1 January 2006 increasing to 85% no later than 1 January 2015.
 - For vehicles produced before 1980, the targets are lower.
- The owner or holder of the end-of-life vehicle shall receive a certificate of destruction when the vehicle is transferred to an authorised treatment facility (ATFs)
- ATFs are required to recover all environmentally hazardous components and re-use and recover where practicable vehicle components
- Member States must ensure that producers use material and component coding standards.
- Evaluate progress made through implementation reports.
- Member States shall submit implementation reports to the Commission every three years based on information collected nationally.

The Re -using, Recycling and Recovering of Motor Vehicles

Directive 2005/64/EC on the type-approval of motor vehicles with regard to their reusability, recyclability and recoverability amends Council Directive 70/156/EEC. The aim is to ensure that vehicles are designed so as to facilitate processing at the end of their life cycle. This Directive helps facilitate the recycling and recovery of component parts of end-of-life vehicles by obliging manufacturers to incorporate recycling from the vehicle design stage onwards. Vehicle manufacturers must comply with minimum thresholds for the re-use, recycling and recovery of the component parts and materials of new vehicles. Manufacturers must design vehicles from the viewpoint of dismantling and recycling them, for example by using a large proportion of materials which are potentially able to be recycled and recovered.

This Directive bans the re-use of some component parts, which it lists, in the construction of new vehicles. It applies to cars, station wagons and people carriers (category M1 vehicles) and to light-duty trucks (category N1 vehicles), new models and models already in production in accordance with a timetable set out in the Directive. It does not apply, however, to special purpose vehicles (armoured vehicles, ambulances, etc.), to multi-stage built light-duty vehicles (provided that the base vehicle complies with this Directive), or to vehicles produced in small series (fewer than 500 vehicles a year in each Member State).

Waste Electrical and Electronic Equipment

Directive 2002/95/EC is still current. Two amendments were published in 2008 namely Directive 2008/34/EC and Directive 2008/35/EC. The amendments made to Directive 2002/95/EC are minor and are technical in nature and concern committee procedure only and as a result do not need to be transposed by the Member States.

Renewable Energy Directive

The EU has adopted a number of measures to fight climate change and promote renewable energy. This package is designed to achieve the EU's overall 20:20:20 environmental target, which consists of a 20% reduction in greenhouse gases, a 20% share of renewable energy in the EU's total energy consumption and a 20% increase in energy efficiency by 2020. The EU has adopted a Directive (2009/28/EC)^[1] on the Promotion of the Use of Energy from Renewable Sources in April 2009 which includes a common EU framework for the promotion of energy from renewable sources. The Directive sets a mandatory national target for the overall share of energy from renewable sources for each Member State. To ensure that the mandatory national targets are achieved, Member States have to follow an indicative trajectory towards the achievement of their target. It also establishes sustainability criteria for biofuels and bioliquids.

Ireland's mandatory national target is to supply 16% of its overall energy needs from renewable sources by 2020. This target covers energy in the form of electricity, heat and transport fuels. For electricity alone, Ireland's national target is 40% by 2020.

Mining and Mineral Waste Directive

A comprehensive framework for the safe management of waste from extractive industries at EU level is now in place - [Directive 2006/21/EC](#) (the mining waste directive). This Directive applies to waste resulting from the extraction, treatment and storage of mineral resources and the working of quarries. Waste covered by this Directive no longer falls within the scope of [Directive 1999/31/EC on the landfill of waste](#). It focuses on high environmental risks that facilities, such as tailing ponds, which may cause a significant risk(s) to the environment and/or to the public.

No extractive facility may operate without a permit issued by the competent authority, which is the EPA in Ireland. The EPA must ensure that new facilities are for example suitably located, monitored and inspected by competent persons and that environmental pollution is prevented.

Operators of facilities that present a potential risk to the public or to the environment must draw up a policy for preventing major accidents, draw up a safety management system and draw up an internal emergency plan. In conjunction to these, the EPA must also draw up an external emergency plan. It is hoped that by having two emergency plans in place that the potential impact of major accidents on public health and the environment is reduced and that the restoration of the environment following such an accident is ensured.

Facility operators must provide a financial guarantee before beginning operations to ensure that the objectives of this Directive are covered. This guarantee will also ensure the existence and availability of funds to restore the site when the facility is closed.

Member States must ensure that facility operators draw up a waste management plan, to be reviewed every five years. The objectives of the plan must be as follows:

- to prevent or reduce the generation of waste and/or its harmful nature
- to encourage waste recovery through recycling, re-use or reclaiming
- to encourage the short and long-term safe disposal of waste.

The plan must also include at least the following:

- a description of the waste and its characterisation (chemical, physical, geological, etc.)
- a description of the substances used to process the mineral resources, methods used to transport and process the waste
- the control and monitoring procedures
- where applicable, the classification of the waste facility (Category A)
- planned measures for the closure of the facility and after-closure monitoring
- measures for the prevention of water and soil pollution.

This Directive also introduces specific measures aimed at limiting cyanide concentrations in tailings ponds and waste waters when cyanide is used to extract minerals.

It details the responsibilities set upon the EPA. For example, they must satisfy themselves that facility operators have taken the measures necessary to prevent **water and soil contamination**, in particular by:

- evaluating leachate generation (leachate means any liquid percolating through the deposited waste, including polluted drainage)
- preventing leachate generation and preventing surface water or groundwater from being contaminated by the waste
- treating contaminated water and leachate in order to ensure their discharge.

The EPA must inspect facilities at regular intervals, including after their closure. Operators are required to keep up-to-date records of all waste management operations and to make them available for inspection. Only the EPA can deem a site closed. Every three years, Member States must send the European Commission a report on the implementation of the Directive.

^[1] Directive 2009/28/EC of the European Parliament and of the Council of 23 April 2009 on the Promotion of the Use of Energy from Renewable Sources and Amending and Subsequently Repealing Directives 2001/77/EC and 2003/30/EC <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2009:140:0016:0062:EN:PDF>

Appendix 2

Waste Regulations



Table A2-1 is a list of statutory instruments in relation to waste management that have been transposed into Irish Law in the period of the existing Plan. The rest of Appendix 2 includes summaries of each of these statutory instruments.

Table A2-1: Relevant Statutory Instruments

| Area | Statutory Instruments |
|--|---|
| Packaging Waste | <ul style="list-style-type: none"> S.I. No. 308 of 2006 - Waste Management (Packaging) (Amendment) Regulations 2006 S.I. No. 798 of 2007 - Waste Management (Packaging) Regulations 2007 |
| End of Life Vehicles (ELVs) | <ul style="list-style-type: none"> S.I. No. 282 of 2006 - Waste Management (End-of-life) Vehicles Regulations 2006 S.I. No. 142 of 2010 – Waste Management (End-of-Life Vehicles) (Amendment) Regulations 2010 |
| Waste Electrical and Electronic Equipment (WEEE) | <ul style="list-style-type: none"> S.I. No. 290 of 2005 – Waste Management (Electrical and Electronic Equipment) S.I. No. 340 of 2005 - Waste Management (Waste Electrical and Electronic Equipment Regulations) S.I. No. 375 of 2008 – Waste Management (WEEE) (Amendment) Regulations 2008 SI 143 of 2010 Waste Management (Waste Electrical and Electronic Equipment) (Amendment) Regulations 2010 SI 355 of 2011 European Communities (Waste Electrical and Electronic) Regulations 2011 |
| Restriction of Hazardous Substance | <ul style="list-style-type: none"> S.I. No. 341 of 2005 – Waste Management (Restriction of Certain Hazardous Substances in Electrical and Electronic Equipment) S.I. No. 376 of 2008 - (Restriction of Certain Hazardous Substances in Electrical and Electronic Equipment) |
| Tyres | <ul style="list-style-type: none"> S.I. No. 664 of 2007 - Waste Management (Tyres & Waste Tyres) Regulations 2007 |
| Batteries & Accumulators | <ul style="list-style-type: none"> S.I. No. 268 of 2008 - Waste Management (Batteries and Accumulators) Regulations 2008 SI No. 556 of 2008 - Waste Management (Batteries and Accumulators) (Amendment) Regulations 2008 |
| Back Yard Burning | <ul style="list-style-type: none"> S.I. No 286 of 2009 – Prohibition of Waste Disposal By Burning |
| Plastic Bag Levies | <ul style="list-style-type: none"> S.I. No. 62 of 2007 - Waste Management (Environmental Levy)(Plastic Bag) Order 2007 S.I. No. 66 of 2007 - Waste Management (Environmental Levy)(Plastic Bag)(Amendment) Regulations 2007 S.I. No. 167 of 2007 - Waste Management (Environmental Levy)(Plastic Bag)(Amendment) (No 2)Regulations 2007 |
| Landfill Levy | <ul style="list-style-type: none"> S.I. No. 168 of 2008 Waste Management (Landfill Levy) Order 2008 S.I. No. 199 of 2008 - Waste Management (Landfill Levy) Regulations 2008 S.I. No. 496 of 2009 – Waste Management (Landfill Levy) Order 2009 S.I. No. 550 of 2009 – Waste Management (Landfill Levy) Amendment Regulations 2009 S.I. No. 496 of 2009 Waste Management (Landfill Levy) Order 2009 S.I. No. 31 of 2010 – Waste Management (Landfill Levy) (Amendment) Regulations 2010 S.I No. 13 of 2010 – Waste Management (Landfill Levy) Order 2010 S.I No. 434 of 2011 – Waste Management (Landfill Levy) Regulations 2011 S.I. No.221 of 2012 Waste Management (Landfill) (Amended) Regulations 2012 |

| Area | Statutory Instruments |
|--|--|
| Waste Permitting & Collection | <ul style="list-style-type: none"> • S.I. No. 820 of 2007 - Waste Management (Collection Permit) Regulations 2007 • S.I. No. 87 of 2008 - Waste Management (Collection Permit)(Amendment) Regulations 2008 • S.I. No. 821 of 2007 - Waste Management (Facility Permit & Registration) Regulations 2007 • S.I. No. 86 of 2008 - Waste Management (Facility Permit & Registration) (Amendment) Regulations 2007 • S.I. No. 508 of 2009 - Waste Management Food Waste Regulations 2009 • S.I. No. 5242 of 2008 - (Certification of Historic Unlicensed Waste Disposal and Recovery Activity) Regulations 2008 |
| Transportation/Shipment of Wastes | <ul style="list-style-type: none"> • S.I. No. 419 of 2007 - Waste Management (Shipments of Waste) Regulations 2007 |
| Broker and Dealers | <ul style="list-style-type: none"> • S.I. No. 113 of 2008 - Waste Management (Registration of Brokers and Dealers) Regulations 2008 |
| Extractive Industries | <ul style="list-style-type: none"> • S.I. No. 566 of 2009 - Waste Management (Management of Waste from the Extractive Industries) Regulations 2009 |
| Registration of Sewage Sludge Facility | <ul style="list-style-type: none"> • S.I. No. 32 of 2010 - Waste Management (Registration of Sewage Sludge Facility) Regulations 2010 |
| Waste Directive | <ul style="list-style-type: none"> • S.I. No. 126 of 2011 European Communities (Waste Directive) Regulations 2011 |
| Waste Treatment | <ul style="list-style-type: none"> • S.I. No. 252 of 2008 European Communities (Transmissible Spongiform Encephalopathies and Animal By-Products) Regulations 2008 |

A new set of food waste regulations for household waste are expected before the end of 2012.

Packaging

S.I. No. 798 of 2007 – Waste Management (Packaging) Regulations 2007 replace the Waste Management (Packaging) Regulations 2003 as amended by the Waste Management (Packaging) (Amendment) Regulations 2004 and the Waste Management (Packaging) (Amendment) Regulations 2006 and are designed to promote the recovery and recycling of packaging waste. They are intended to facilitate the achievement of the targets established by Directive 94/62/EC on packaging and packaging waste as amended by European Parliament and Council Directive 2004/12/EC of 11 February 2004 amending Directive 94/62/EC on packaging and packaging waste.

The Regulations sets out obligations on the producers and sets out additional obligations on major producers which are to be met by 31st December 2008 and are designed to promote the recovery and recycling of packaging waste such as paper, cardboard, glass, plastic, steel, aluminium and wood. These included ensuring *“that in any quarterly period, the aggregate weight of packaging waste which is accepted or, as appropriate, collected by that major producer for the purposes of recovery:*

“(a) is not less than 55% of the aggregate weight of packaging material and packaging imported or packed/filled and supplied by that major producer in the preceding quarterly period, and

(b) that a minimum 50% of the aggregate weight of packaging material and packaging imported or packed/filled and supplied by that major producer in the preceding quarterly period is recovered by way of recycling”

From 31st day of December 2008, a major producer who is an importer of packaged products or is a packer/filler is required to ensure:

- a minimum of 60% of packaging waste by weight is recovered
- a minimum of 55% of packaging waste by weight is recycled in total, including material specific recycling targets as follows:
 - 60% by weight for glass
 - 60% by weight for paper and board
 - 50% by weight for metals
 - 22.5% by weight for plastics
 - 15% by weight for wood

An exemption from certain obligations is available to major producers who participate in a packaging waste recovery scheme operated by Repak.

Plastic Bag Levy

The plastic bag levy was first introduced in Ireland on 4th March 2002 at the rate of 15 cent per bag. Since then, a number of statutory instruments have been adopted which have revised the levy to its current rate of 22 cent per bag through the Plastic Bag (Amendment) (No. 2) Regulations (S.I. 167 of 2007). All of the revenue generated from the scheme is directed to the Environment Fund.

The principal aim of the scheme is to decrease plastic bag usage from an estimated 328 (Source DoEHLG) per capita to 21 or lower.

Currently the Regulations do not differentiate between biodegradable plastic bags and other plastic bags. It is considered that biodegradable bags still take a considerable time to degrade.

Batteries and Accumulators

Waste Management (Batteries and Accumulators) Regulation S.I. No. 268 of 2008 and Waste Management (Batteries and Accumulators) (Amendment) Regulation S.I. No. 556 of 2008 bringing Ireland in line with Directive 2006/66/EC ensuring that batteries and accumulators that do not meet the requirements of the Directive are not placed on the market or are withdrawn on and from 26 September 2008 onwards

Regulation S.I. No. 268 of 2008 prohibits the marketing of batteries and accumulators that contain specific hazardous substances and that are inappropriately labelled. Batteries and accumulators subject to these prohibitions are listed in Part II of the Regulations. They provide for the free take back of waste batteries and accumulators, in-store and at designated locations, from 26 September 2008.

The Regulations impose obligations on persons who supply batteries and accumulators to the Irish market, whether as retailers, importers or manufacturers if they chose to be self-compliers. An exemption from these obligations is available to persons who participate in a scheme for the collection, treatment, recovery and disposal of waste batteries and accumulators in an environmentally sound manner operated by either WEEE Ireland or European Recycling Platform (ERP).

The EPA and local authorities have enforcement roles under the legislation with the EPA largely responsible for enforcing producer obligations and local authorities for distributor obligations.

WEEE

The EU Directive 2002/96/EC on waste, electrical and electronic equipment, as amended by Directive 2003/108/EC (the WEEE Directive) is implemented in Irish law by:

- S.I. 290 of 2005 Waste Management (Electrical and Electronic Equipment Regulations 2005) and
- S.I. 340 of 2005 Waste Management (Waste Electrical and Electronic Equipment) Regulations 2005 as amended by (S.I. No. 375 of 2008) (the WEEE Regulations).

The WEEE Regulations place obligations upon “Producers” and “Distributors” with respect to EEE and WEEE. Those categories of EEE covered by the WEEE Regulations are set out in the First Schedule to the WEEE Regulations and include broad categories of items such as large and small household appliances and lighting equipment, toys, leisure and sports equipment,

The 2008 Regulation allows for the organisers of trade shows and exhibitions to ensure that exhibitors fulfil their producer and distributor obligations. They allow for the identification of the producer throughout the business to business supply chain and they also require that distributors of business to business (B2B) electrical and electronic equipment to provide information to B2B customers. It makes provisions for displaying environmental management costs, and point of sale signage. They also provide alternative systems for the registration of distributors.

Table 2.1 over summarises the main requirements of each stage of the supply chain under the WEEE Regulations

Table 2.1: Overview of Requirements of WEEE Regulations

| | Role |
|-------------------------------|--|
| Consumer | - Bring back WEEE and batteries to retailer free of charge or to a local civic amenity (special conditions apply) |
| Producer | - Finance the take back of WEEE - Register with national registration body - WEEE Register Society Ltd - Self-comply & join approved compliance scheme with WEEE Ireland & European Recycling Platform - Appropriately label products with the “crossed out wheelie bin symbol” |
| Retailers/Distributors | - Register with the relevant LA - Display environmental charges, three point price display & statutory notices - Take back of products on a like for like basis - Dispose of, store & transport WEEE in accordance with the Regs |
| Distance Sellers | - Businesses that sell via the internet must comply with labelling and pricing requirements on Irish websites and Non-Irish websites distributing EEE to private households in the Republic of Ireland. |

Broadly speaking, the table indicates that for producers to comply, they must register with WEEE Register Society Ltd as a self complier or a member of an approved compliance scheme to finance the collection and environmentally sound management of WEEE. Retailers/Distributors must register with the local authority within their functional area and facilitate the acceptance (through take back schemes), storage and disposal of WEEE and batteries.

The Regulations for WEEE and batteries also apply to distance sellers (i.e. websites, mail order catalogues) which not only include Irish web sites but also non-Irish web sites that supply to the Irish market.

The Waste Management (Waste Electrical and Electronic Equipment) Regulations 2005 (as amended by the 2008 Regulations) have been amended by the Waste Management (Waste Electrical and Electronic Equipment) (Amendment) Regulations 2010 (SI 143 of 2010). The purpose of this legislation is to transpose Directive 2008/112 into Irish law in order to harmonise how labelling to indicate the presence of hazardous substances is to be carried out. Varying timelines have been set for the implementation of this legislation with some of the amendments in relations to labelling of “dangerous substance or mixture” not coming into effect until 2015.

These Regulations give further effect to the provisions of European Parliament and Council Directive 2002/96/EC as amended by European Parliament and Council Directive 2003/108/EC and by Article 5 of Directive 2008/112/EC of the European Parliament and of the Council.

They are designed to promote the recovery of waste electrical and electronic equipment. They will facilitate in particular the achievement of the targets for the collection, treatment, recovery and disposal of waste electrical and electronic equipment in an environmentally sound manner established by Directive 2002/96/EC on waste electrical and electronic equipment as amended by Directive 2003/108/EC.

Regulations impose obligations on persons who supply electrical and electronic equipment to the Irish market, whether as retailers, importers or manufacturers. An exemption from these obligations is available to persons who participate in a scheme for the collection, treatment, recovery and disposal of waste electrical and electronic equipment in an environmentally sound manner operated by an approved body established in accordance with the provisions of Part IV of these Regulations.

Amending SI

S.I. No. 397/2011 — European Communities (Waste Electrical and Electronic Equipment) (Amendment) Regulations 2011

The purpose of these Regulations is to revoke the Waste Management (Waste Electrical and Electronic Equipment Regulations) 2005 (S.I. No. 340 of 2005).

Enforcement

Section 37

(3) Each local authority shall be responsible for the enforcement of the provisions of articles 14(1), 14(2), 14(3), 14(4), 14(5), 14(6), 15, 17, 18(2), 30, 40 and 41 of these Regulations within their functional areas and shall take such steps as are necessary for this purpose.

(4) The Agency or, as appropriate, the relevant local authority, shall be responsible for the enforcement of the provisions of articles 14(8), 20, 21, 22 and 42 of these Regulations within the State and shall take such steps as are necessary for this purpose.

Registration of Distributors

Section 40. (1) Each local authority shall cause to be established and maintained a register (hereafter in this Part referred to as 'the register') of distributors within its functional area, who transport or, as appropriate, store waste electrical and electronic equipment that has been accepted in accordance with the provisions of article 14.

(2) Each local authority shall be required to provide for the maintenance of the register, and the inspection of each premises registered therein.

Restriction of Hazardous Substances (RoHS)

Regulation S.I. no. 341 of 2005 and its subsequent amendment in 2008 on the Restriction of Certain Hazardous Substance in Electrical and Electronic Equipment include gives effect to provisions set out in European Parliament and Council Directive 2002/95/EC on the restriction of the use of certain hazardous substances in electrical and electronic equipment.

Enforcement of the Regulations is overseen by the EPA and by Local Authorities. Under the Regulation, electrical and electronic equipment put on the market must not contain the following from 1 July 2006:

- Lead
- Mercury
- Cadmium
- hexavalent chromium
- polybrominated biphenyls (PBB)
- polybrominated diphenyl ethers (PBDE).

The scope of the legislation applies to electrical and electronic equipment falling under categories 1-7 and category 10 (listed in the First Schedule of the Regulation), as well as electric light bulbs and luminaries in households. The following 10 categories have been identified in the WEEE Directive as belonging to EEE:

1. Large household appliances
2. Small household appliances
3. IT and telecommunications equipment
4. Consumer equipment

5. Lighting equipment
6. Electrical and electronic tools
7. Toys, leisure and sports equipment
8. Medical devices
9. Monitoring and control instruments
10. Automatic dispensers

The second schedule lists the electrical and electronic equipment that need to be taken into account under these Regulations and which fall under the categories set out above (in the first schedule).

The Directive and Regulation do not apply to the reuse of electrical and electronic equipment put on the market before 1 July 2006 or to spare parts used to repair this equipment. Regulation S.I. no 376 of 2008 makes one main amendment to the 2005 Regulation, that is it replaces the word "board" with "Agency".

Landfill Levy

The Waste Management (Landfill Levy) Regulations 2002 introduces a levy which be applied to each tonne of waste that is sent to landfill. The amount of the levy has been revised on a number of occasions with the most recent Regulation - Waste Management (Landfill Levy) Order 2010 (SI 13 of 2010) setting the rate at €30 per tonne since the 1 February 2010 to each tonne of waste disposed of at authorised landfill facilities and unauthorised landfill facilities.

A summary of landfill levy rates which have been applied to date is as follows:

| Year | Levy (€) Per Tonne |
|------|--------------------|
| 2010 | 30 |
| 2009 | 25 |
| 2008 | 20 |
| 2006 | 20 |
| 2002 | 15 |

There are a number of exemptions from the levy namely:

- Certain hazardous waste from construction and demolition activity and excavation spoil used for site engineering, restoration or remediation purposes
- Dredge spoil from inland waterways and harbours.

The 2011 Regulations inversed the landfill levy to €50/tonne, while the 2012 Regulation increased the levy to €65/tonne from 01/07/12

Waste Disposal by Back Yard Burning

Regulation S.I. No. 286 of 2009 prohibits the disposal of waste by burning. Under the regulations "burining" means the combustion of waste:

- (a) with or without control of the combustion air, and
- (b) without an adequate stack or chimney so as to result in the emission of combustion products to the atmosphere in a manner that causes or is likely to cause environmental pollution

Failure to comply with the new regulations is an offence and fines of up to €3,000 are applicable for summary offences brought to court.

The Regulations provide exemptions for certain agricultural practices but only as a last resort and after specified steps are taken to reduce, and recycle waste arisings.

This included the "the burning of waste relates solely to material consisting of uncontaminated (free of dangerous substances, preservatives or other artificial impregnation or coating) wood, trees, tree trimmings, leaves, brush, or other similar waste generated by agricultural practices, but excluding garden and park wastes and cemetery wastes and wastes arising from infrastructural development works". This exemption applies until 1 January 2014 when such activities will require registration with local authorities and be subject to the controls set out in the facilities permit.

Some situations where the disposal of waste by burning is permissible include:

- waste that is sent for disposal at a facility in accordance with the conditions of a waste licence or an IPPC licence which has been granted by the EPA
- untreated or uncontaminated (free of preservatives, paints, varnishes, laminate or other artificial impregnation or coating) wood waste and other similar materials used in barbecues for the purpose of cooking food, or
- burning of waste at events as may be determined locally by a local authority

End-of-Life Vehicles

The ELV Regulations are designed to implement the EU Directive on end-of-life vehicles in Ireland. The Directive requires member states to achieve:

- 85% reuse/recovery with 80% reuse/recycling by average weight deposited for appropriate treatment by 1st January 2006, and
- 95% reuse/recovery with 85% reuse/recycling by average weight per vehicle and year, by the 1 of January 2015.

The Regulations place obligations on manufacturers and importers of cars and vans ("producers"), who are required to put in place a national system for the collection and disposal of end-of-life vehicles (ELVs). An ELV is a car or van which is discarded or is to be discarded by its registered owner.

From 1 January 2007 owners of intact end-of-life cars and vans can deposit them free-of-charge at authorised treatment facilities. An exception to the free take-back principle is provided where a vehicle is missing its essential components or where waste has been added to the vehicle

Each producer's system must consist of at least 43 Authorised Treatment Facilities (ATFs - 1 per functional area of local authority where the population of the functional area is less than or equal to 150,000 with supplemental facilities for each additional 150,000 persons). Producers were required to register with each local authority by 21 July 2006 and must apply for renewal of registration on 31 January each year.

The registered owners of the ELV may not be charged where the ELV is deposited at the authorised treatment facility unless essential components of the vehicle are missing. Indeed, where the ELV has no or a negative market value, the producer is responsible for meeting the costs of treatment and recovery of the ELV. When an ELV is deposited at an ATF, a Certificate of Destruction will be issued to the registered owner. The ELVs must be treated within 10 days of deposit at the facility.

Where a waste facility wishes to become an ATF, it must meet specific environmental standards relating to the storage, treatment and recovery of ELVs as well as holding a waste licence or waste permit. There are special provisions made for ATFs which do not form part of a producer's national system for the collection of ELVs. These must maintain records of aggregate weights in relation to reuse, recycling, recovery and disposal.

Producers must use approved coding to facilitate identification of components that are suitable for reuse and recovery and must make dismantling information available for each type of new vehicle put on the market within 6 months of the vehicle being put on the market in Ireland, although these obligations only apply where more than 500 vehicles are produced in a particular series.

The Waste Management (End-of-Life Vehicles) Regulations 2006 were amended by the Waste Management (End-of-Life Vehicles) (Amendment) Regulations 2010 (SI 142 of 2010). These latest Regulations are designed to implement the provisions of Directive 2000/53/EC of the European Parliament and of the Council on end-of-life vehicles and Directive 2008 /112 (classification, labelling and packaging of substances and mixtures) into Irish law. The 2010 Regulations also appoint the EPA as the regulatory body to enforce the requirements of Part IV of the legislation in respect of heavy metal content, the provision of documentation to Authorised Treatment Facilities by manufacturers, etc.

Waste Tyres

S.I. No. 664 of 2007 came into force in Irish law on 1st January 2008. These Regulations impose obligations on persons who supply tyres to the Irish market including manufacturers, wholesalers, suppliers, traders, or retailers as well as on collectors of waste tyres. A producer is defined in the Regulations as "*any person who, irrespective of the selling technique used, including by means of distance communication –*

- (i) *manufactures and sells tyres under his or her own brand,*
- (ii) *resells tyres produced by other suppliers under his or her own brand,*
- (iii) *retreads or remoulds tyres,*
- (iv) *imports tyres on a professional basis into the State,*
- (v) *exports waste tyres for the purposes of recovery, including reuse, or as appropriate,*
- (vi) *any person or persons who distributes from a producer who is deemed not to be registered under the provisions of article 4(2)(b), tyres to suppliers or any other person;"*

There are a number of exemptions from these Regulations, namely members of TRACS - Tyre Recovery Activity Compliance Scheme. This is a voluntary compliance scheme that has been developed by the tyre industry and approved by the Minister for the Environment, Heritage and Local Government. Producers, suppliers and authorised waste collectors who opt not to participate in a collective compliance scheme operated by an approved body are described as self compliers. Self compliers are required to register with their respective Local Authority on an annual basis. A deadline of 1st February 2008 was set for existing producers. Self complying producers entering the market after 1 February 2008 will be obliged to register no later than the date of commencement of business

A self complying producer will not be deemed to be registered for supplying tyres in a local authority functional area unless in possession of a Certificate of Registration or a Certificate of Renewal of Registration that has been issued by the local authority concerned.

They are also required to prepare and present waste management plans and reports when submitting applications for registration and submit a report to the EPA by the 28th February of each year.

The Regulations also impose obligations on farmers who store waste tyres for the purposes of anchoring silage covering. The Regulations does allow for a farmer who requires waste tyres to anchor silage covering, to store up to eight waste tyres for every square metre of the floor area of his or her silage pit, without the need to have a waste permit.

Shipment of Waste

Waste Management (Shipment of Waste) Regulations 2007 (S.I. No. 419 of 2007) gives effect to provisions of Regulation (EC) No. 1013 of the European Parliament and of the Council of 14 June 2006 on shipments of waste (referred to as the TFS Regulation in Ireland).

The Irish waste management Regulations designates the National Competent Authority for the purposes of the TFS Regulation and broadens and clarifies the powers to be given to the Authority. Dublin City Council is designated as the competent authority under article 53 of the TFS Regulation, responsible for the regulations of the export, transit and import of all wastes shipments that come under the TFS Regulations. Broadly speaking, the TFS Regulation provides for a system of general notifications in respects of "green list" wastes. If shipping hazardous waste, a prior notification and consent procedure will apply.

Waste Permitting

S.I. No. 524 of 2008 - (Certification of Historic Unlicensed Waste Disposal and Recovery Activity Regulations 2008

These Regulations entered into force on 8th December 2008. They require that all local authority landfills in operation between 15 July 1977 and 27 March 1997 be identified and investigated. This requirement falls out of Regulations 5 and 6 and the definition of a "closed landfill".

Both the closed landfill identification methodology and the later risk assessment stage is governed by the Code of Practice - Environmental Risk Assessment for Unregulated Waste Disposal Sites" issued by the EPA in 2007.

Under Article 6 of S.I. No. 524, all closed landfill sites identified must be subject to a risk assessment. If a closed landfill which was hitherto operated by a local authority has been sold, the legislation still requires the local authority to undertake the assessment. Accordingly, the landowner's consent for this exercise is automatically required and must be granted.

On completion of the risk assessment, a local authority is required to make an application to the EPA for a "certificate of compliance with the requirements of these Regulations". This is termed a "certificate of authorisation" (see Article 7(1)). An application fee of €5,000 applies. The EPA is required within 4 months to issue a "draft certificate of authorisation", with a local authority being given 30 days in which to comment on its requirements. After comments have been received, the EPA then issues the final certificate.

The certificate of authorisation will:

- determine the adequacy of the Risk Assessment submitted by the local authority
- specify additional measures to ensure that the closed site complies with the Directives on Waste and Groundwater
- Require a validation report to be drawn up in accordance with Chapters 7.3 and 8.2.4 of the Code of Practice which sets out the content of a remediation strategy report for the site.

Facility Permits

Waste Management (Facility Permit & Registration) Regulations 2007 (S.I. No. 821 of 2007, amended by S.I. No. 86 of 2008)

The Waste Management Acts, 1996 to 2008 (Act) require that waste disposal and recovery activities in Ireland hold an authorisation.

Depending on the authorisation required (e.g. license or permit) these activities are controlled by either the Environmental Protection Agency (EPA) or the Local Authorities within their own county. All non-exempted Local Authority waste facility activities are regulated by the EPA.

One of the principal legislative texts governing the form of authorisation required for waste facilities is the Waste Management (Facility Permit & Registration) Regulations 2007 (S.I. No. 821 of 2007, amended by S.I. No. 86 of 2008). The thresholds for the activities concerned are set out in Classes 5 and 6 of the Third Schedule to the Waste Management (Facility Permit & Registration) Regulations, S.I. No. 821 of 2007, as amended by S.I. No. 86 of 2008.

Some key points from these Regulations are:

- Large inert waste facilities accepting natural soils and sub-soils for deposition on land now require a waste licence from the EPA. This type of waste activity may have previously operated under a waste facility permit issued by the relevant Local Authority.
- For licensing purposes, the term 'Soils Recovery Facility' is intended to mean a facility for the recovery, via land reclamation/redevelopment, of uncontaminated natural earth-forming materials such as soil, sub-soils, stone and rock.
- An application for a waste licence in respect of such facilities must be made to the Agency within 180 working days after 1st June 2008 (i.e. by 13th February 2009). Provided a valid application is

made by the due date, an existing permit will continue to apply until a decision in respect of the application is made.

- The EPA issue Certificates of Registration to local authorities for smaller scale waste activities listed in the Third Schedule Part II of the Waste Management (Facility Permit Registration) Regulations, S.I 821 of 2007 as amended. Local Authorities are the competent authorities for granting and enforcing Waste Permits and Certificates of Registration issued to Private Operators for those waste activities listed in the Third Schedule to the Waste Management (Facility Permit & Registration) Regulations.
- The 2008 amendment requires that Local Authorities check applications requirements within 10 working days of receipt of applications. Local Authorities must serve notice no more than 5 working days after making their decision in accordance with sub-article (2) of the Regulation.
- A waste facility permit holder may, at any time, submit an application to a local authority to review a waste facility permit but no later than 60 working days before the date of expiry of an existing waste facility permit if it is to remain in force until such time as a reviewed waste facility permit is granted or refused.
- A local authority, or in some cases the Agency, shall decide on an application for a certificate of registration as quick as possible whether they are going to refuse or grant a certificate of registration but at a maximum they can decide up to:
 - (a) 25 working days, or
 - (b) In the case of WEEE refer to the Waste Management (Waste Electrical and Electronic Equipment) Regulations 2005.

Waste Collection

Waste Management (Collection Permit) Regulations 2007 (SI 820 of 2007) as amended by the Waste Management (Collection Permit)(Amendment) Regulations 2008 (SI 87 of 2008) amend and replace the Waste Management (Permit) Regulations, 1998 and the Waste Management (Collection Permit) Regulations, 2001 respectively and provide for a system of permitting by local authorities of commercial waste collection activities and the permitting or registration of waste facility activities.

The 2007 Regulation sets out the procedures for making permit applications, public consultation, consideration by local authorities of submissions in relation to permit applications, and the grant, refusal and review of permits by local authorities. It also sets out what fees are payable by the applicant to the respective local authority.

Most importantly the Regulations introduced multi-regional permits for waste collectors who operate in one or more local authority functional area. In this instance, the waste collector applies to either the nominated authority in the case of a specific waste management region or local authority in which is registered business is located "where the principal waste collection activities are proposed to take place."

The Office of Environmental Enforcement of the EPA published guidance in the Regulations in May 2008 benefit to other stakeholders including private sector waste operators and the general public.

Food Waste

The Waste Management (Food Waste) Regulations 2009 - S.I. 508 of 2009 came into force on 1 January 2010. Schedule 1 of these Regulations lists 11 classes of major waste producers that are affected. This includes deli-counters, pubs, offices, hotels and guest houses, the health care sector, schools and higher education, other state buildings, canteens on construction sites and railway stations, marinas, ports and airports.

In general the obligation on producers to separate and segregate food waste applies from 1 July 2010. Small generators of food waste (<50 kgs per week) – if falling within Schedule 1 - are generally exempt until 1 July 2011 provided that they send in a written declaration to the "competent authority" by 1 July 2010 which is the relevant Local Authority .

Subject to that provision, the deposit of food waste by obligated waste producers into the black bin after the relevant date of 1 July 2010 is banned, as well as its management via macerators and the public sewer.

When food waste is to be dealt with on or off-site, it must pass via an authorised treatment process to one of five options - use as a fertiliser, use as a soil improver, pet food manufacture, use as fuel (but not incineration) or to another treatment process approved by the EPA.

The Regulations also make amendments to the Collection Permit Regulations and Facility Permit Regulations by requiring applicants for authorisations under these provisions to include specified Food Waste Regulations compliance-related information within their permit or certificate applications.

Several reports will need to be submitted by each major producer to the enforcement bodies (local authorities) annually, e.g. food waste implementation reports, annual environmental reports and food waste management plans. The food waste management implementation reports is required at least once a year, dependent on the quality. The food waste management plans are only required from operators of, for example, trade shows, exhibitions and events.

In determining the adequacy of a food waste management plan, a local authority shall ensure compliance with:

- (a) the requirements of these Regulations, and
- (b) the policy objectives of the National Strategy on Biodegradable Waste, and
- (c) the objectives and targets of the relevant waste management plan, and
- (d) the requirements of Directive 1999/31/EC.

Waste Treatment

The European Communities (Transmissible Spongiform Encephalopathies and Animal By-Products) Regulations 2008 (S.I. 252 of 2008) govern the use, treatment and disposal of materials of animal origin that are by-products of the rendering, textile, food and other such industries. They implement European Regulation 1774/2002 concerning the health rules for the disposal of animal by products not intended for human consumption.

In relation to the land application of material that has been processed to the requirements of these Regulations, a further Order, the Diseases of Animals Act 1966 (Transmissible Spongiform Encephalopathies) (Fertilisers and Soil Improvers) Order 2008 (S.I. No. 253 of 2008), places certain stipulations on the application to land of compost or similar material derived from catering waste, former foodstuffs and fish by-products, particularly to pasture land such as time delays prior to animals grazing the land (if applicable). In this context, "Catering waste" is defined as all food originating in restaurants, catering facilities and kitchens, including central kitchens and household kitchens.

Technical Standards

EU Regulation 1774/2002 defines three categories of animal by-product, with these being determined in accordance to the potential risk of animal-related disease being spread by inadequate processing or disposal methods. The most hazardous is termed "Category 1" material.

Under EU & National Regulations Category 2 and Category 3 wastes are permitted to be used as feedstock in a biogas (anaerobic) system. This legislation mandates that such facilities must be equipped with a number of features:

- a pasteurisation/hygenisation unit which cannot be by-passed
- continuous time and temperature monitors
- adequate safety system to prevent insufficient heating
- adequate facilities for cleaning and disinfecting of vehicles and containers.

Processing Standards

Stringent processing criteria are required when animal by-products are being used as a raw material in a biogas plant. At a minimum these include:

- Maximum particle size before entering the composting reactor: 12 mm
- Minimum temperature in all in the reactor/unit: 70°C
- Minimum time in the reactor at 70°C (all material): 60 minutes

Waste Brokers and Dealers

The purpose of these Regulations is to provide for a registration system of waste brokers and dealers who arrange for the shipment of waste to and from Ireland and also the passage of waste through the State.

The regulations are necessary in order to comply with the provisions of Regulation (EC) No. 1013/2006 of the European Parliament and of the Council of 14 June 2006 on shipments of waste and Directive 2006/12/EC of the European Parliament and of the Council of 5 April 2006 on waste.

Amendments to the Waste Management Act

Section 19. The Act shall have effect with the following specified modifications:

(3) by the addition in section 22 of subsection 8 bis

"8 bis. There shall be included in a waste management plan sufficient information, in the form of criteria for site identification, to enable the Environmental Protection Agency (when considering an application for a waste licence) or a local authority (when considering an application for a waste permit), to decide whether to grant to the applicant a waste licence or a waste permit or refuse to grant to the applicant such a licence or permit, for future waste recovery or disposal facilities."

Waste from Extractive Industries

These Regulations provide for measures and procedures to prevent or reduce as far as possible any adverse effects on the environment, in particular water, air, soil, fauna and flora and landscape, and any resultant risks to human health, brought about as a result of the management of waste from the extractive industries - which includes quarries and peat - and transpose Directive 2006/21/EC of the European Parliament and of the Council of 15 March 2006 on the management of waste from the extractive industries into Irish legislation.

Where an existing licence for a facility covered by these Regulations exists there is provision for avoidance of duplication by both the operators and competent authority.

Major-accident prevention and information

Section 6 (3) For the purposes of the requirements under paragraph 2, each operator shall, before the start of operations, draw up a major-accident prevention policy for the management of extractive waste and put into effect a safety management system implementing it, in accordance with the elements set out in Section 1 of Schedule 1, and shall also put into effect an internal emergency plan specifying the measures to be taken on site in the event of an accident.

The local authority shall draw up an external emergency plan specifying the measures to be taken off-site in the event of an accident.

As part of the application for a licence the operator shall provide the Agency with the information necessary to enable the local authority to draw up that plan. The Agency shall as soon as possible (and no later than 3 months) after receiving the licence application notify the local authority that an external emergency plan is required for the applicant.

When drawing up an external emergency plan, the local authority should consult with the Principal Response Agencies in whose area the waste facility is located. Any external emergency plans should take account of the provisions of the Framework referred to above, and be compatible with the major emergency plans of the relevant Principal Response Agencies.

Designation of competent authority for the implementation of Directive 2006/21/EC and guidance

Section 22. (1) The Agency is the competent authority for the management of waste from extractive industries at Category A waste facilities.

(2) Save as provided for in paragraph (3) the local authority is the competent authority in respect of:

- (a) all non-category A facilities, other than such waste facilities already licensed or licensable by the Agency, and
- (b) implementation of Regulation 6.

Sewage Sludge Facility

These Regulations provide for the registration and regulation of sewage sludge facilities in order to meet the requirements of the Waste Framework Directive. The Regulations have implications for those involved in the collection and management of sewage sludge or septic tank waste, to register the storage facility with the Local Authority in whose area the facility is located.

Under the Regulations Local Authorities are obliged to maintain a register of sludge storage facilities, and can attach conditions of operation to any facility that it registers. Facilities already regulated under other environmental legislation such as licenced facilities under the Waste Management Acts are excluded.

Register of sewage sludge facilities

Section 4. (1) The local authority shall enter particulars of all sewage sludge facilities registered by it pursuant to these Regulations in the register established and maintained by it pursuant to section 19 of the Act.

(2) For the purposes of Regulation 4(1), the local authority may prescribe the information to be entered therein, and the form and manner in which such information shall be entered and maintained, which information shall include, but not necessarily be limited to, the name and address of operator to whom a certificate of registration has issued.

(3) All entries and additions made by the local authority to the register referred to in Regulation 4(1) for the purposes of these Regulations are prescribed for the purposes of section 19 of the Act.

Determination of an application for a certificate of registration

Section 7. (1) Subject to Regulations 7(2), 7(3) and 8, the local authority shall issue to each applicant a certificate of registration in such form and manner and containing such information as it may prescribe which shall be valid for such period as may be specified by it but which shall not exceed five years and shall enter particulars of that sewage sludge facility in the register referred to in Regulation 4(1)

(2) The local authority shall not issue a certificate of registration or a renewal of registration, as the case may be, unless it is satisfied that:

(4) The local authority may, if it considers it proper to do so in any particular case, regard any applicant as a fit and proper person for the purposes of these Regulations, notwithstanding that the applicant concerned is not a person to whom Regulation 7(3) applies.

Renewal of a certificate of registration

Section 9. (5) Where an operator fails to apply for renewal of registration in accordance with Regulation 9(4), the local authority shall remove the holder's particulars from the register referred to in Regulation 4.

Inspections of registered sewage sludge facilities

Section 12. (1) The local authority shall carry out appropriate periodic inspections of registered sewage sludge facilities.

(2) The Agency shall carry out appropriate periodic inspections of local authority operated registered sewage sludge facilities.

Waste Directive Regulations

These Regulations provide for measures to protect the environment and human health by preventing or reducing the adverse impacts of the generation and management of waste and by reducing overall impacts of resource use and improving the efficiency of such use and transpose Directive 2008/98/EC of the European Parliament and of the Council of 19 November 2008 on waste and repealing certain directives, referred to in these Regulations as the waste directive.

The vast bulk of the waste directive is already transposed by the Waste Management Act 1996 and various regulations made there under and where required the Regulations amend the 1996 Waste Management Act, provide for standalone aspects not amenable for direct inclusion into the Act by way of specific amendments and also other consequential amendments to regulations affected by the transposition.

Amendment SI

These Regulations, European Communities (Waste Directive) (No. 2), Regulations 2011, make a small number of additional amendments to the Waste Management Act 1996, omitted through typographical error, from the European Communities (Waste Directive) Regulations 2011 (S.I. 126 of 2011).

*Part 2 – Amendments to Act of 1996
Insertion of section 21A into Act of 1996*

Regulation 7

The Act of 1996 is amended by inserting the following section after section 21: “Waste hierarchy”.

21A.(1) The following waste hierarchy shall apply as a priority order in waste prevention and management legislation and policy:

- (a) prevention
- (b) preparing for re-use
- (c) recycling
- (d) other recovery (including energy recovery) and
- (e) disposal.

(2)(a) When applying the waste hierarchy referred to in subsection (1), the Minister, the Agency and the local authorities, in carrying out their respective functions under this Act, shall take measures to encourage the options that deliver the best overall environmental outcome.

(b) Such measures may require specific waste streams departing from the hierarchy where this is justified by life-cycle thinking on the overall impacts of the generation and management of such waste.

(4) In carrying out their respective functions under this Act and related waste management legislation and policy, the Minister, the Agency and the local authorities shall take into account the general environmental protection principles of precaution and sustainability, technical feasibility and economic viability, protection of resources as well as the overall environmental, human health, economic and social impacts, in accordance with Article 1 of the Waste Directive and section 32(1).”.

Content of Waste Management Plans

Regulation 8

Section 22 of the Act of 1996 is amended:

(2) (a) Subject to subsection (3) and section 24, in order that plans in combination cover the entire geographical territory of the State, each local authority shall make a waste management plan for non-hazardous waste in relation to its functional area.

- (c) The plans shall:
- (i) lay down measures to protect the environment and human health by preventing or reducing the adverse impacts of the generation and management of waste and by reducing overall impacts of resource use and improving the efficiency of such use,
 - (ii) be in accordance with the waste hierarchy set out in section 21A,
 - (iii) meet the protection of human health and the environment obligations set out in section 32(1), and
 - (iv) meet the principles of self-sufficiency and proximity set out in section 37A.
- (6) (a) A waste management plan shall—
- (i) set out an analysis of the current waste management situation in the geographical entity concerned (if regional, for example, for the region),
 - (ii) set out the measures to be taken to improve environmentally sound preparing for re-use, recycling, recovery and disposal of waste, and
 - (iii) (I) set out an evaluation of how the plan will support the implementation of the objectives and provisions of the Waste Directive,
 - (II) set out such measures or arrangements as are to be taken or entered into by the local authority or local authorities, with a view to securing the objectives of the plan, and
 - (III) with regard to hazardous waste, cover the matters specified in subsection (8) in so far as they relate to its functional area.
- (b) A waste management plan shall contain, as appropriate, and taking into account the geographical level and coverage of the planning area, at least the following:
- (i) the type, quantity and source of waste generated within the territory, the waste likely to be shipped from or to the national territory, and an evaluation of the development of waste streams in the future; and
 - (II) a requirement that, in order to fulfil this obligation, liaison shall be undertaken, as appropriate, with the Minister, the Agency, Dublin City Council and other relevant local authorities;
 - (ii) existing waste collection schemes and major disposal and recovery installations, including any special arrangements for waste oils, hazardous waste or waste streams addressed by specific Community acts;
 - (iii) an assessment in accordance with section 37A of the need for new collection schemes, the closure of existing waste installations, additional waste installation infrastructure and, if necessary, the investments related thereto;
 - (iv) sufficient information on the location criteria for site identification and on the capacity of future disposal or major recovery installations, if necessary;
 - (v) general waste management policies, including planned waste management technologies and methods, or policies for waste posing specific management problems;
 - (vi) information as respects the integration and implementation of measures consequential on, or incidental to, the requirements of section 27A in relation to waste prevention programmes;
 - (vii) the measures taken by the Minister to give effect to Article 22 of the Waste Directive in relation to biowaste.
- (c) A waste management plan may contain, taking into account the geographical level and coverage of the planning area, the following:
- (i) organisational aspects related to waste management including a description of the allocation of responsibilities between public and private actors carrying out the waste management;
 - (ii) an evaluation of the usefulness and suitability of the use of economic and other instruments in tackling various waste problems, taking into account the need to maintain the smooth functioning of the internal market;
 - (iii) the use of awareness campaigns and information provision directed at the general public or at a specific set of consumers.
- (d) Waste management plans shall conform to the waste planning requirements laid down in Article 14 of European Parliament and Council Directive 94/62/EC of 20 December 19947 on packaging and packaging waste, and the strategy for the implementation of the reduction of biodegradable waste going to landfills, referred to in Article 5 of Council Directive 1999/31/EC of 26 April 19998 on the landfill of waste as well as national legislation and policy on biodegradable waste.”,

Separate Collection of Waste and Recovery

Regulation 14

Section 29 of the Act of 1996 is amended:

(a) by substituting the following subsection for subsection (1):

(1) A reference in this section to the implementation and operation of a source separation programme for waste shall be construed as a reference to the taking of steps in a systematic manner for the purposes of:

- (a) separating specified waste from other waste and the holding of such waste so separated prior to its collection, recovery or disposal, and
- (b) giving effect to the requirements of Article 22 of the Waste Directive in relation to bio-waste.", and

(b) by inserting the following subsections after subsection (2):

(2A)(a) It shall be the duty of waste producers and holders to ensure that waste undergoes recovery operations in accordance with sections 21A and 32(1).

(b) A person who contravenes paragraph (a) shall be guilty of an offence.

(c) The Agency and the local authorities, in carrying out their functions under this Act and related waste management legislation and policy, shall take the necessary measures to ensure that waste undergoes recovery operations in accordance with this section and sections 21A and 32(1).

(2B) Where necessary to comply with subsection (2A) and to facilitate or improve recovery, waste shall be collected separately if technically, environmentally and economically practicable and shall not be mixed with other waste or other material with different properties.".

Principles of self-sufficiency and proximity.

Regulation 17

The Act of 1996 is amended by inserting the following section after section 37:

Section 37A.(1)(a) In carrying out their respective functions under this Act and related waste prevention and management legislation and policy, the Minister (in cooperation with other Member States where this is necessary or advisable), the Agency, An Bord Pleanála and the local authorities shall take appropriate measures to establish an integrated and adequate network of waste disposal installations and of installations for the recovery of mixed municipal waste collected from private households, including where such collection also covers such waste from other producers, taking into account best available techniques.

(2) The network shall be designed to enable the Community as a whole to become self-sufficient in waste disposal as well as in the recovery of waste referred to in subsection (1), and to enable the State to move towards that aim individually, taking into account geographical circumstances or the need for specialised installations for certain types of waste.

(3) The network shall enable waste to be disposed of or waste referred to in subsection (1) to be recovered in one of the nearest appropriate installations, by means of the most appropriate methods and technologies, in order to ensure a high level of protection for the environment and public health.

(4) The principles of proximity and self-sufficiency shall not mean that the State has to possess the full range of final recovery facilities within the State.".

Part 3 Regulations to Give Effect to Waste Directive

Re-use and recycling

31. (1)(a) The Minister or any Minister of the Government concerned shall take measures, as appropriate, to promote the re-use of products and preparing for re-use activities, notably by encouraging:

- (i) the establishment and support of re-use and repair networks,
- (ii) the use of economic instruments, procurement criteria, quantitative objectives, or (iii) other measures.

(b) The Minister or any Minister of the Government concerned, the Agency or the local authorities shall, in carrying out their respective functions under the Act of 1996, take measures to promote high quality recycling and, to this end, shall set up separate collections of waste where technically, environmentally and economically practicable and appropriate to meet the necessary quality standards for the relevant recycling sectors.

(c) Subject to section 29(2B) of the Act of 1996, by 2015 separate collection shall be set up for at least the following waste:

- (i) paper
- (ii) metal
- (iii) plastic; and
- (iv) glass.

(2) In order to comply with the objectives of the Waste Directive, and move towards a European recycling society with a high level of resource efficiency, and without prejudice to any other targets or obligations which may apply as a result of waste prevention and management legislation and policy, the Minister, the Agency and the local authorities shall, in carrying out their respective functions under the Act of 1996, take the necessary measures designed to achieve the following targets:

(a) by 2020, the preparing for re-use and the recycling of waste materials such as, at least, paper, metal, plastic and glass from households and possibly from other origins as far as these waste streams are similar to waste from households, shall be increased to a minimum of overall 50% by weight;

(b) by 2020, the preparing for re-use, recycling and other material recovery, including backfilling operations using waste to substitute other materials, of non-hazardous construction and demolition waste excluding naturally occurring material defined in category 17 05 04 in the list of waste shall be increased to a minimum of 70% by weight.

Protection of human health and environment

Section 32. (1) A person holding, treating or otherwise in control of waste shall ensure that waste management is carried out without endangering human health, without harming the environment and, in particular:

- (a) without risk to water, air, soil, plants or animals,
- (b) without causing a nuisance through noise or odours, and
- (c) without adversely affecting the countryside or places of special interest.

(2) A person who contravenes paragraph (1) shall be guilty of an offence.

(3) The Agency and the local authorities shall, in carrying out their respective functions under the Act of 1996, take the necessary enforcement measures to ensure that waste management is carried out in accordance with paragraph (1).

Monitoring

Section 47. (1) Each local authority and the Agency shall carry out, or cause to be carried out, such monitoring of the nature, extent and effects of emissions to the environment arising from the holding, recovery or disposal of waste as it considers to be necessary for the performance of its functions under this Part.

(2) Each local authority and the Agency shall keep and maintain or cause to be kept and maintained, such records of any monitoring carried out by it under paragraph (1) as it considers reasonable and necessary.

(3)(a) Where it appears necessary so to do for any purpose of this Part, a local authority or the Agency may require any person who holds or is in control of the recovery or disposal of any waste to carry out or arrange to have carried out such monitoring in relation to the activity concerned as the local authority or the Agency may specify and to keep and to supply to the local authority or the Agency such records of the said monitoring as the local authority or the Agency may specify.

(4) Each local authority and the Agency shall, if so requested by the Minister, supply to the Minister or to any person specified by the Minister, at such intervals and in such manner as the Minister may require, records of any monitoring carried out under this Regulation that are in its possession or control.

(5) Each local authority and the Agency shall carry out or take or cause to be carried out or taken such monitoring or other measures as it considers necessary to verify that any monitoring or records of such monitoring required by it under paragraph (3) to be carried out or kept are being carried out or kept.

Enforcement and penalties

50. (1) Each legal authority, the Agency or Dublin City Council, as appropriate, shall take the necessary enforcement measures to prohibit the abandonment, dumping or uncontrolled management of waste.

(2) A prosecution for a summary offence under this Part may be taken by the local authority.

Information

Section 49.....

(3) Information obtained under this Regulation by a local authority, or any summary or compilation of, or any report based on, such information may, and shall if the Minister or the Agency so requests, be furnished to the Minister or the Agency, as the case may be.

Reporting

Section 52.....

(4) Local authorities ...shall provide such information to the Agency in writing, or other form of notification, including electronic means, as may be specified by the Agency for the purposes of compliance with this Regulation.

Appendix 3

Waste Indicator Data



HOUSEHOLD WASTE

Kildare Region

| Ref. | Household Waste | Kildare County Council | Regional Total | Source/Comment |
|------|---|------------------------|----------------|--|
| A | Kerbside (MDR) | 12,696 | 12,696 | National Waste Report, Appendix B |
| B | Kerbside (Biowaste) | 4,322 | 4,322 | National Waste Report, Appendix B |
| C | Kerbside (Glass) | 32 | 32 | National Waste Report, Appendix B |
| D | Home composting | 2,400 | 2,400 | National Waste Report, Appendix B |
| E | Residual Waste Direct to Landfill (Kerbside) | 45,232 | 45,232 | EPA LA Questionnaire |
| F | Residual Waste to Int. Waste Processing Facility (Kerbside) | 4,965 | 4,965 | EPA LA Questionnaire |
| G | Bring Banks | 3,866 | 3,866 | National Waste Report, Appendix B |
| H | Recycling Centres (Excl WEEE, Bulky & Residual sent for disposal) | 906 | 906 | National Waste Report, Appendix B |
| I | Bulky Waste - Recovered | 392 | 392 | EPA LA Questionnaire |
| J | Bulky Waste - Disposed | 392 | 392 | EPA LA Questionnaire |
| I-2 | Other Bulky Waste Collected - Recovered | 788 | 788 | Local Authority e-AER system |
| J-2 | Other Bulky Waste Collected - Disposed | 788 | 788 | Local Authority e-AER system |
| K | Delivered for disposal (direct to recycling centres) | 2,925 | 2,925 | National Waste Report, Appendix B |
| L | WEEE and Battery Collections | 679 | 679 | Compliance Schemes |
| M | Mobile Collections | - | - | National Waste Report, Appendix B |
| N | Uncollected Waste | 14,558 | 14,558 | EPA |
| O | Household Waste Generated - Total (A to N) | 94,940 | 94,940 | Includes uncollected waste |
| P | Household Waste Managed - Total (A to M) | 80,382 | 80,382 | excludes uncollected waste |
| Q | Household Waste Recycled - Total (A+B+C+D+G+H+I+I-2+L+M) | 26,081 | 26,081 | |
| R | Household Waste Recovered: Total (40% of F) + Q | 28,066.34 | 28,066 | Assumption 40% of residual waste brought to intermediate facilities is |
| S | Household Waste Disposed: P - R | 52,315 | 52,315 | Excludes uncollected waste |

HOUSEHOLD WASTE INDICATORS

Kildare Region

| Ref. | Household Waste Indicators | Kildare Co. Council | Region |
|-----------------------------|--|----------------------------|---------------|
| T | Household Waste Generation Per Capita (t/capita) | 0.45 | 0.45 |
| U | Household Waste Managed Per Capita (t/capita) | 0.38 | 0.38 |
| V | Household Waste Recycling Rate (%) | 32% | 32% |
| Y | Household Waste Recycling Rate per capita (t/capita) | 0.12 | 0.12 |
| X | Household Waste Recovery Rate (%) | 35% | 35% |
| Y | Household Waste Recovery Rate (t/capita) | 0.13 | 0.13 |
| Z | Household Waste Disposal Rate (%) | 65% | 65% |
| Z1 | Household Waste Disposal Rate per capita (t/capita) | 0.25 | 0.25 |
| 2011 Census Details | | Kildare Co. Council | Region |
| Total No of Occupied Houses | | 72,731 | 72,731 |
| Population | | 210,312 | 210,312 |

COMMERCIAL (Municipal) WASTE INDICATORS

| Kildare Region | | | |
|-----------------------|---|------------------------|----------------|
| Ref | | Kildare County Council | Regional Total |
| T | Commercial Waste Collected (Tonnes) | 74,400.68 | 74,400.68 |
| - | Commercial Waste Sent Direct to Landfill (Tonnes) | 4,668.49 | 4,668.49 |
| - | Commercial Waste Collected Per Capita (t/capita) | 0.35 | 0.35 |

INDUSTRIAL (Municipal) WASTE INDICATORS

| Ref | | Kildare County Council | Regional Total |
|-----|---|------------------------|----------------|
| U | Industrial Waste Collected (Tonnes) | 51.94 | 51.94 |
| - | Industrial Waste Sent Direct to Landfill (Tonnes) | - | - |
| - | Industrial Waste Collected Per Capita (t/capita) | 0.000 | 0.000 |

COMBINED Tonnages

| Ref | | Kildare County Council | Regional Total |
|-----|--|------------------------|----------------|
| V | Commercial (Municipal) + Industrial (Municipal) Collected | 74,452.62 | 74,452.62 |
| - | Assumed Recovery Rate for Commercial/Ind (Municipal) Waste | 46% | 46% |
| W | Recovered Tonnage (t) | 34,248.20 | 34,248.20 |

National Rate

| | 2011 Census Details | Kildare | Regional Total |
|--|-----------------------------|---------|----------------|
| | Total No of Occupied Houses | 72,731 | 72,731 |
| | Population | 210,312 | 210,312 |

Data Sources: Local Authority e-AER Online System

Municipal Waste Indicators

| Kildare Region | | | |
|-----------------------|---|--------------------------------|-------------------|
| | | Kildare Co. Council | Region |
| | Municipal Waste Collected (t) (=V+P+X) | 155,042.68 | 155,042.68 |
| V | Commercial Waste Managed | 74,452.62 | 74,452.62 |
| P | Household Waste Managed | 80,381.66 | 80,381.66 |
| X | Street Sweepings | 208.40 | 208.40 |
| - | Municipal Waste Recovered (t) (=R+W) | 62,314.55 | 62,314.55 |
| R | Household Waste Recovered (Tonnes) | 28,066.34 | 28,066.34 |
| W | Commercial Waste Recovered (Tonnes) | 34,248.20 | 34,248.20 |
| - | Municipal Waste Recovery Rate (%) | 40% | 40% |
| - | Municipal Waste Disposal Rate (%) | 60% | 60% |

Biodegradable Municipal Waste Indicators

| Kildare Region | | | | |
|-----------------------|---|-------------------|-------------|---------------------|
| Ref | Biodegradable Municipal Waste | Regional Total | BMW Content | Estimate of BMW (t) |
| | Commercial & Industrial Waste Collected | 74,452.62 | 77% | 57,328.52 |
| | Household Waste Managed | 80,381.66 | 65% | 52,248.08 |
| | Street Sweepings | 208.40 | 65% | 135.46 |
| | Total | 155,042.68 | | 109,712.06 |

| BMW content in MSW generated in the region and sent to landfill | | | | |
|--|----------------------------------|-----------|-------------|---|
| | | | BMW Content | Estimated BMW Quantities Sent to Landfill (t) |
| | Municipal Waste Sent to Landfill | 92,728.13 | 58% | 53,782.32 |
| | | | | |

Packaging Waste Managed (Estimate)

| Kildare Region | | |
|----------------------------------|-------------------------------|-----------------------|
| | Kildare County Council | Regional Total |
| Packaging Waste Managed (tonnes) | 39,681.50 | 39,681 |

Data Source - Quantity estimate using packagin waste managed indicator and population data.

Packaging Wastes (including Self Compliers)

| Kildare Region | | |
|--|-------------------------------|-----------------------|
| | Kildare County Council | Regional Total |
| Packaging Waste Placed on the market (t) | 2,345.08 | 2,345 |
| Packaging Waste Recovered (t) | 1,696.64 | 1,697 |

Data Source: EPA National Waste Report 2010

CONSTRUCTION & DEMOLITION WASTE

| Kildare Region | | |
|----------------------------------|-------------------------------|-----------------------|
| | Kildare County Council | Regional Total |
| C&D Waste Collected (t) | 34,030.20 | 34,030.20 |
| Soil & Stone Waste Collected (t) | 245,778.05 | 245,778.05 |
| Total C&D Waste Recovered (t) | 166,598.53 | 166,598.53 |

This is C&D waste materials recovered at facilities in Kildare in 2010.

Data Sources: EPA National Waste Report 2010

Contaminated Soils

| Kildare Region | | |
|------------------------|---------------------------------------|---------------------------|
| | Kildare County Council | Regional Total |
| Contaminated Soils (t) | 327.73 | 327.73 |

Data Source: Local Authority e-AER System

Mining Waste

| Kildare Region | | |
|-----------------------|-------------------------------|-----------------------|
| | Kildare County Council | Regional Total |
| Mining Waste (tonnes) | 0.00 | 0.00 |

Data Source - Local Authority e-AER System

WEEE Waste

Kildare Region

| | Kildare County Council | Regional Total |
|--|------------------------|----------------|
| Household WEEE (Compliance Scheme) Collected for Recovery (t) | 661 | 661.00 |
| Household WEEE (Compliance Scheme) Collected for Recovery/per capita (kg/capita) | 3.14 | 3.14 |
| Other WEEE Collected for Recovery (t) | 111.15 | 111.15 |

| 2011 Census Details | Kildare County Council | Regional Total |
|---------------------|------------------------|----------------|
| Population | 210,312 | 210,312 |

Data Sources: Compliance Schemes
Local Authority e-AER System

TYRES

Kildare Region

| | Kildare County Council | Regional Total |
|---------------------|------------------------|----------------|
| Tyres Collected (t) | 833.63 | 833.63 |

Data Source - Local Authority e-AER System

BATTERY WASTE

Kildare Region

| | Kildare County Council | Regional Total |
|--|------------------------|----------------|
| Separately Collected (Compliance Scheme) for Recovery (t) | 17.93 | 17.93 |
| Separately Collected (Compliance Scheme) for Recovery/per capita (kg/capita) | 0.09 | 0.09 |
| Batteries (Non-Municipal) | 198.29 | 198.29 |

| 2011 Census Details | Kildare County Council | Regional Total |
|---------------------|------------------------|----------------|
| Population | 210,312 | 210,312 |

Data Sources: Compliance Schemes

ELV Waste

| Kildare Region | | |
|-----------------------|-------------------------------|-----------------------|
| | Kildare County Council | Regional Total |
| ELV Waste | 1,998.88 | 1,998.88 |

Data Source - Local Authority e-AER System

AGRICULTURAL AND FARM PLASTICS

| Kildare Region | | |
|--|-------------------------------|-----------------------|
| | Kildare County Council | Regional Total |
| Agricultural Wastes Collected (excl. farm plastics) (t) | 19,707.00 | 19,707.00 |
| Farm Plastics Collected (t) | 398.28 | 398.28 |
| Total Agricultural Wastes Collected (incl. farm plastics) (t) | 20,105.28 | 15,015 |

Data Source: Local Authority e-AER System

SLUDGE WASTES

| Kildare Region | | |
|---------------------------------------|-------------------------------|-----------------------|
| | Kildare County Council | Regional Total |
| Wastewater (Sewage) Sludge Generation | 31,923.09 | 31,923.09 |
| Sewage Cleaning Sludge | 185.82 | 185.82 |
| Septic Tank Sludges Collected | 2,471.73 | 2,471.73 |
| Water Treatment Sludges Collected | 0.00 | - |

Data Source: Local Authority e-AER System

Industrial (and Hazardous)

| Kildare Region | | |
|---|-------------------------------|-----------------------|
| | Kildare County Council | Regional Total |
| Industrial Waste (Non-Hazardous) Collected for Treatment (Off-Site) (t) | 12,529.19 | 12,529.19 |
| Industrial Waste (Hazardous) Collected for Treatment (Off-Site) (t) | 3,582.07 | 3,582.07 |
| Industrial Sludges Collected for Treatment (Off-Site) (t) | 1.29 | 1.29 |

Data Source: Local Authority e-AER System

Healthcare Waste

Kildare Region

| | Kildare County Council | Regional Total |
|---------------------------------------|------------------------|----------------|
| Healthcare Waste Collected (t) | 529.91 | 529.91 |
| Healthcare Waste Sent to Landfill (t) | 43.00 | 43.00 |

Data Source - Local Authority e-AER System

Secondary Wastes

Kildare Region

| | Kildare County Council | Regional Total |
|---------------------------------------|------------------------|----------------|
| Secondary Wastes Collected (t) | 78,135.74 | 78,135.74 |
| Secondary Wastes Sent to Landfill (t) | 6,987.12 | 6,987.12 |

Data Source - Local Authority e-AER System

Other Wastes

| Kildare Region | | |
|-----------------------|-------------------------------|-----------------------|
| | Kildare County Council | Regional Total |
| Other - 16 04 xx | 0.00 | 0.00 |
| Other - 16 05 xx | 158.49 | 158.49 |
| Other - 16 07 xx | 43.94 | 43.94 |

Data Source: Local Authority e-AER System

Waste Oils

| Kildare Region | | |
|-----------------------|---------------------------------------|---------------------------|
| | Kildare County Council | Regional Total |
| Waste Oils (t) | 1,807.06 | 1,807.06 |

Data Source: Local Authority e-AER System

Wastes from Power & Thermal Plants

| Kildare Region | | |
|---|-------------------------------|-----------------------|
| | Kildare County Council | Regional Total |
| Wastes from Power & Thermal Plants Collected (t) | 0.00 | 0.00 |
| Wastes from Power & Thermal Plants Sent to Landfill (t) | 0.00 | 0.00 |

Data Source - Local Authority e-AER System