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**The Development of an Audit Methodology to  
Generate Construction Waste Production  
Indicators for the Irish Construction Industry**

**Volume 1**

**Mark Kelly**

This thesis is submitted in satisfaction of the  
requirements for the degree of Doctor of Philosophy  
in Construction Management at the Galway-Mayo  
Institute of Technology

Supervisors: Dr. Patrick Walsh & Mr. John Hanahoe

Submitted to the Higher Education and Training  
Awards Council

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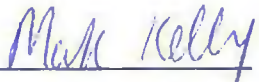
## Declaration

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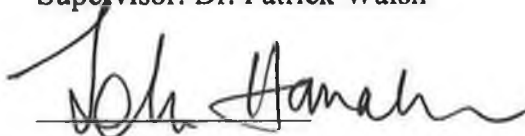
To Whom It May Concern:

The following thesis entitled "The Generation of Construction Waste Production Indicators for the Irish Construction Industry - A Benchmarking Report for 2005" represents one hundred percent of the candidate Mark Kelly's own work.

Signed:

  
Candidate: Mark Kelly

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## Abstract

This study develops waste production indicators for the Irish construction industry. Construction and demolition waste (C&D W) was conservatively estimated to account for approximately 13.1 per cent of all waste produced in Ireland in 2004 (EPA, 2005a). This was equal to 11.2 million tonnes making it the second-highest waste producing sector behind agriculture. This estimate was based on construction and demolition waste collected and managed at licensed and permitted facilities throughout the country. There was no data available on construction and demolition waste production from Irish construction projects sites.

An original audit tool was designed and tested on 58 construction projects throughout the country generating waste production indicators ( $\text{kg}/\text{m}^2$ ) for new construction in 2005. These factors were applied to estimated construction output to benchmark national waste production in 2005. Two detailed surveys were also carried out to assess the management and collection of C&D W in 2005.

A set of waste production indicators for new construction was produced:

- $70.27 \text{ kg}/\text{m}^2$  for new residential construction.
- $86.82 \text{ kg}/\text{m}^2$  for new private non-residential construction.
- $138.94 \text{ kg}/\text{m}^2$  for new social infrastructure construction.
- $48.48 \text{ kg}/\text{m}^2$  for new productive infrastructure construction.

A compositional analysis identified inert waste (excluding excavated materials); wood; paper, plastics and packaging; and metals as the major contributors to the construction waste stream.

The indicators were applied to construction output to produce a total national construction and demolition waste estimate of 20.8 million tonnes for 2005. Construction and demolition waste accounted for 12.3 million tonnes with soil and stones accounting for 8.5 million tonnes (EPA, 2005a). The licensed and permitted facilities survey identified a significant lack of data available on tonnages sent for processing and/or deposited to permitted sites within local authority functional areas.

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It is recommended that the new audit tool and generated indicators be incorporated into a voluntary waste information system to facilitate the benchmarking of waste production on construction and demolition projects in Ireland.



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I wish to express my gratitude to the staff of the Department of Building and Civil Engineering, especially my supervisors Dr. Patrick Walsh and Mr. John Hanahoe for their continued guidance, encouragement and support throughout the course of my research.

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Finally, I thank my parents and especially Fiona for their patience, understanding and encouragement during the course of my research.

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## **Dissemination of Published Work**

During the course of the study, papers were presented at the following conferences:

- 'Environ 2005' conference organised by the Environmental Sciences Association of Ireland and hosted by the Sligo Institute of Technology in January 2005.
- 'Environ 2006' conference organised by the Environmental Sciences Association of Ireland and hosted by the University College Dublin in January 2006.
- 'Environmental Future Research Needs 2006' conference organised by the Environmental Protection Agency in Portlaoise, Co. Laois, June 2006.

The author was also a guest speaker on the construction and demolition waste management national road show organised by the National Construction and Demolition Waste Council presenting in Athlone, Sligo and Galway during 2005. The Galway seminar was hosted at the Galway-Mayo Institute of Technology. Over 150 industry professionals attended the three seminars.

A paper was submitted for publication to the Environmental Sciences Association of Ireland following the presentation at the 'Environ 2006' conference. A second draft was submitted in July 2006 following draft 1 revisions.

This study was based on a research project funded by the Environmental Protection Agency under the ERDTI Programme 2000-2006. The results will be reproduced in the project final report and synopsis report, which are due for completion in October 2006.

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## Acronyms

AER	Annual Environmental Report
B&C	Building and Construction
BAT	Best Available Technology
BRE	Building Research Establishment
C&D W	Construction and Demolition Waste
CIF	Construction Industry Federation
CIRIA	Construction Industry Research and Information Association
CIOB	Chartered Institute of Building
CF	Conversion Factor
CSO	Central Statistics Office
DoEHLG	Department of the Environment, Heritage and Local Government
EC	European Commission
EEA	European Environment Agency
EPA	Environmental Protection Agency
EPI	Environmental Performance Indicators
ERL	Environmental Resources Ltd.

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ERU	Environmental Research Unit
EWC	European Waste Catalogue
FIEC	European Construction Industry Federation
GIS	Geographical Information System
HWF	Hazardous Waste Facility
IPC	Integrated Pollution Control
IWMF	Integrated Waste Management Facility
KPI	Key Performance Indicators
LCA	Life Cycle Analysis
MSW	Municipal Solid Waste
NAHB	National Association of Homebuilders Research Centre
NCDWC	National Construction and Demolition Waste Council
OECD	Organisation for Economic Co-operation and Development
PSA	Point Source Assessment
SMARTWaste	Site Methodology to Audit, Reduce and Target Waste
WSF	Waste Skip Factor
WTS	Waste Transfer Station

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## **Organisation of the Thesis**

### **Chapter 1: Introduction and Methodology**

This chapter introduces the scope of the study outlining the main aims and objectives. The methodology is described to illustrate the logic behind the research strategies adopted.

### **Chapter 2: Waste Definitions, Legislation and Policy Actions**

This chapter examines the legal responsibilities involved in the management of the construction and demolition waste stream by investigating relevant definitions, legislation and policy actions.

### **Chapter 3: Characteristics of Construction and Demolition Waste**

This chapter identifies the main characteristics of the construction and demolition waste stream focusing on the origin, composition and quantities produced.

### **Chapter 4: Examination of Methodologies used to Generate Construction and Demolition Waste Production Estimates in Ireland**

This chapter examines the methodologies used by the Environmental Protection Agency to generate national construction and demolition waste production estimates over the past decade.

### **Chapter 5: Assessment of UK Construction and Demolition Waste Audit Tools**

This chapter examines the use of four audit tools used on construction projects in the UK to establish guidelines for the development of a new audit model on Irish construction projects.

### **Chapter 6: The Development and Testing of an Original Waste Audit Tool on Selected 'Snapshot' Construction Projects in Ireland**

This chapter outlines the considerations taken in the development of a new audit tool for use on construction projects in Ireland. The testing parameters are outlined in detail including the design guidelines and auditing procedures.

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**Chapter 7: The Generation of Construction Waste Production Indicators from  
'Snapshot' Point Source Assessments on Irish Construction Projects**

This chapter presents the results from the audited projects. Fifty-four sites provided data for the generation of waste production indicators ( $\text{kg}/\text{m}^2$ ) for the Irish construction industry. A compositional analysis is also outlined.

**Chapter 8: The Application of Waste Production Indicators to Benchmark  
Construction and Demolition Waste Management in 2005**

This chapter details the application of the generated waste production indicators to construction output to produce national estimates for 2005. This is compared to construction and demolition waste collected and managed at licensed and permitted facilities during this period.

**Chapter 9: Conclusions and Recommendations**

This chapter outlines the main conclusions of the study and provides some recommendations for continued research in this area.

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## **Chapter 1: Introduction and Methodology**

### **1.1 Introduction**

### **1.2 Scope of Study**

The study is concerned with the generation of waste production indicators (also referred to as unit waste skip factors) for the Irish construction industry. These factors will be used to benchmark waste production for new construction in 2005. A systematic acquisition of data measuring waste production on sites throughout the country is carried out using an original audit tool to create unit waste factors. This process includes the following steps:

- ❑ Identify the legal obligations of the Irish construction industry by examining relevant legislation, regulations and policy actions.
- ❑ Investigate the characteristics of the construction and demolition waste (C&D W) stream.
- ❑ Examine the audit methodologies used by the Environmental Protection Agency (EPA) to generate national estimates for C&D W production in Ireland over the past decade.
- ❑ Assess audit formats used in the UK to measure waste production on construction projects.
- ❑ Design and test an audit methodology to measure C&D W production on Irish sites.
- ❑ Generate waste production indicators from point source assessments on construction projects throughout the country.
- ❑ Apply the generated indicators to construction output to estimate national C&D W production.

### **1.3 Main Aims and Objectives**

The main aims of this thesis are to:

1. Design and test an original waste audit methodology on Irish construction projects.
2. Generate waste production indicators ( $\text{kg/m}^2$ ) for new construction projects in Ireland.

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To achieve these aims, a number of objectives must be met:

- ❑ Define C&D W and determine the legal responsibilities associated with its management.
- ❑ Characterise the waste stream by its origin, composition and quantities produced.
- ❑ Investigate the methodologies previously used to estimate C&D W production in Ireland.
- ❑ Explore the use of different audit tools, which have been used in the UK construction industry.
- ❑ Identify a design framework to develop a new audit tool for use on Irish construction projects.
- ❑ Develop a testing structure to examine the application of a new audit tool on Irish construction projects.
- ❑ Demonstrate the use of generated indicators in estimating national C&D W (excluding excavated materials) production.
- ❑ Assess the licensed and permitted capacity available to estimate the amount of excavated material collected and managed in 2005.

#### **1.4 Methodology**

A number of different research methods were considered during the course of this study. The initial chapters (chapters 2 and 3) involve an extensive literature review to establish the legal obligations associated with the management of C&D W and to define the characteristics of the waste stream. This preliminary qualitative analysis helps to develop more insightful questions about the topic. A significant gap is discovered in the characterisation of the waste stream, specifically the lack of reliable and accurate statistics for annual C&D W production. The next logical step is to examine the development of the methodologies used to generate annual C&D W statistics in Ireland.

Chapter 4 examines the development of methodologies used by the EPA to generate annual C&D W estimates in their *National Waste Database Reports* (EPA, 1996a, 2000, 2003, 2005a). It is revealed that one of the main limitations in the production of annual estimates is the lack of waste production indicators from construction sites in Ireland.



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It is concluded that a national survey should be undertaken to develop unit waste factors for new construction. The next step is to identify the best methodology to carry out this survey.

Chapter 5 examines waste audits developed by Skoyles (1978), the Construction Industry Research and Information Association (CIRIA) (Coventry *et al.*, 2001) and the Building Research Establishment (BRE, undated). A comparative analysis using general design guidelines (Patterson, 1999) is undertaken concentrating on methodologies used; results and limitations. Each aspect is assessed to determine their applicability within the scope of the study.

Following this, the most appropriate strategy considered is to design an original audit methodology for use on Irish construction projects. Chapter 6 outlines the development and testing of the audit tool using general design guidelines (Patterson, 1999). The logic of the audit design includes clear protocols and procedures for data collection and analysis. The original audit format is tested on 54 'snapshot' projects and four case studies over a two-year period (2004 to 2005). These multiple 'snapshot' case studies provide a representative sample of new construction in Ireland.

The results of the audited projects are presented in Chapter 7. Each of the waste production indicators utilise easily understandable units of analysis ( $\text{kg}/\text{m}^2$ ). The combination of the individual unit waste skip factors provides an embedded analysis of different categories of new construction. The criteria for interpreting the data is outlined as each 'snapshot' case study is selective focusing on the type and quantity of waste produced on site. Each project is considered individually before a sample mean is calculated for the relevant new construction category. The use of multiple 'snapshot' case studies allows the investigator to provide statistical generalisations. The mean, standard deviation and 95 per cent confidence interval is calculated for each category.

The study continues in Chapter 8 using the generated waste production indicators to establish national estimates for 2005. The equivalent construction output of the new construction categories is estimated based on data produced by the Central Statistics Office (CSO, 2005a, b, c and 2006a, b) and the Department of the Environment, Heritage and Local Government (DoEHLG, 2005c).

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This is applied to the respective unit waste skip factors to establish a national estimate for new construction in 2005. Based on previous research (EPA, 2003, 2005a), this estimate is expressed as a percentage of the overall C&D W production thereby producing a national estimate for the total C&D W production in Ireland in 2005.

This estimate is then used for comparative purposes when assessing the amount of excavated materials i.e. soil and stones, collected and managed in 2005. A combination of qualitative and quantitative analysis is used to carry out two surveys of licensed facilities and permitted sites. A total licensed and permitted capacity expressed in tonnages is determined, which does not represent the amount of excavated materials collected and managed in 2005. A significant lack of data is identified in the reporting submissions of the licensed and permitted facilities.

### ***Conclusions***

This study employs a combination of research methods to identify a strategy to develop waste production indicators for the Irish construction industry. A qualitative approach is used to design an original audit format for use on Irish construction projects. The audit methodology is tested on 58 case studies providing new measurable results. This quantitative approach is reinforced by the active participation of the author.

The resulting unit waste skip factors provide the construction industry with a set of indicators for different categories of new construction. This enables the construction industry to benchmark their waste performance on site. In addition, national estimates are derived when the generated unit waste skip factors are applied to equivalent construction output allowing the industry to measure their total waste production.

The next chapter begins the study by examining the legal responsibilities involved in the management of C&D W in Ireland.

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## Chapter 2 Waste Definitions, Legislation and Policy Actions

### 2.1 Introduction

The generation of C&D W unit waste factors will reflect current waste management practices on construction sites throughout the country. The first step in establishing current practice is to define the waste fraction and outline the legal obligations of the industry involved. The main aims of this chapter are to:

- Provide a definition for C&D W.
- Describe the implementation of legislation, regulations and policy actions over the past decade to determine the current legal obligations being imposed on the Irish construction industry with respect to C&D W management.

### 2.2 Definitions

Waste is a human concept defining a material with no intrinsic worth or value, or a material discarded despite its inherent worth or value. The Waste Framework Directive (91/156/EEC) (Council of European Communities, 1991) provides a standard definition of waste:

*“Waste shall mean any substance or object in the categories set out in Annex 1, which the holder discards or intends or is required to discard.”*

(Council of European Communities, 1991)

The Directive also provides a definition for C&D W as follows:

*“Any substance or object which the holder disposes or is required to dispose, which arises from construction, renovation and demolition activities.”*

(Council of European Communities, 1991)

This definition was general in nature and was recognised by the European Commission in 1991 as an inappropriate form of classification. This led to the establishment of a list of wastes known as the European Waste Catalogue (EWC) (Council of European Communities, 1993). The aim of the EWC was to provide a common terminology

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to improve the collection and management of data on waste in Europe. Each type of process, industry or sector was assigned a six-digit code made up of four digit sub-codes, e.g. C&D W was assigned 17 00 00 with 17 01 02 representing bricks, 17 02 01 representing wood.

The EWC was published in Ireland as the *Waste Catalogue and Hazardous Waste List* (EPA, 1996b). Only one waste type from 25 materials in the C&D W section (17 06 01 – insulation material containing asbestos) was identified as being hazardous (Appendix A). This was reviewed with the publication of *European Waste Catalogue and Hazardous Waste List, 2002* (EPA, 2002) where C&D W is again listed in Chapter 17 but contains 38 waste types, 16 of which are deemed hazardous (Appendix B). In Ireland, the *Waste Management Act 1996* (DoEHLG, 1996) defines waste as:

*“Any substance or object belonging to a category of waste specified in the First Schedule of the Waste Management Act, 1996 and included in the European Waste Catalogue, which the holder discards or intends or is required to discard and anything which is discarded or otherwise dealt with as if it were waste shall be presumed to be waste until the contrary is proven.”*

(DoEHLG, 1996)

The main difficulty with the legal interpretation of waste is the fact that the holder may have a beneficial use for the material but that does not mean it is not a waste or that it ceases to be waste when put to that use. This applies even when the object or substance may be fully functional; have no adverse impact on human health or the environment; and have a monetary value. The consequence of this is that potentially reusable or recyclable materials such as soils, used bricks/blocks and fragmented concrete fall within the definition if they are removed from a construction site and taken elsewhere for recovery and/or recycling. The European Court of Justice reinforces this view by expressly stating that:

*“It is immaterial to the legal definition of waste whether a substance or object may have a commercial value or is capable of economic re-utilisation”*

(European Court of Justice Case C-359/88 (1990) ECR 1-1509)

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The Organisation for Economic Co-operation and Development (OECD) presented a different interpretation of the definition of waste in its publication '*Final guidance document for distinguishing waste from non-waste*' (OECD, 1998) stating that:

*“A waste ceases to be a waste when a recovery or another comparable process eliminates or sufficiently diminishes the threat posed to the environment by the original material (waste) and yields a material of sufficient beneficial use”*

(OECD, 1998)

This interpretation observed that the destination of a material is the decisive factor not the fact that it has to be discarded. Symonds *et al.* (1999) supported this, recommending that:

*“The European Commission should review the definition of waste...with the objective of developing a proposal whereby products and materials destined for reuse and recycling are not identified as waste.”*

Symonds *et al.* (1999)

This approach merely transfers the focus from defining the key terms, '*holder*' and '*discard*', under the legal definition to defining the '*recovery or comparable process*' and '*a material of sufficient beneficial use*', which are equally difficult to define. It does highlight however an opportunity to identify special cases within the legal definition where the waste management controls may not apply e.g. recovery processes of low environmental impact.

Symonds *et al.* (1999) also defined C&D W into a 'core' element, which excluded road planings, excavated soil (whether clean or contaminated), external utility and service connections (drainage pipes, water, gas and electricity) and surface vegetation.

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In Ireland, a definition was provided in the *National Waste Database Report 1998* (EPA, 2000), which defined C&D W:

*“..to include all waste that arises from construction, renovation, and demolition activities and all waste mentioned in Chapter 17 of the European Waste Catalogue. This includes surplus and damaged products and materials arising at construction works or used temporarily during on-site activities and dredge spoil<sup>1</sup>”.*

For the purposes of this study the above definition is to be used excluding dredge spoil and excavated materials as they do not result directly from the construction and demolition sites audited. The definition of ‘inert waste’ will be divided into two categories throughout the study; inert waste including excavated materials (17 05 04) and inert waste excluding excavated materials identified by the EWC code category 1701. This includes: concrete (17 01 01); brick (17 01 02); tiles and ceramics (17 01 03); mixture of concrete, bricks, tiles and ceramics other than those mentioned in 17 01 06 (170107).

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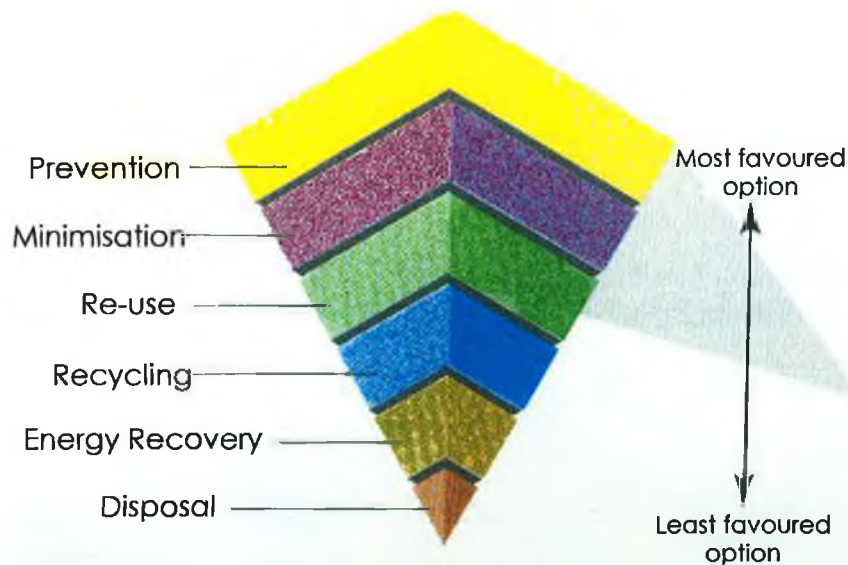
<sup>1</sup> Dredge spoil was described as being made up of two primary types of dredging materials: maintenance and capital dredging. Maintenance dredging is conducted regularly in Irish ports for navigation purposes and this activity gives rise to predominantly erodible materials such as silt and sand. Capital dredging occurs when significant removal of seabed material is required during major engineering operations. Capital dredgings are generally bulky non-erodible materials such as rock and gravel.

## 2.3 Legislation and Policy Actions

### 2.3.1 Waste management framework in Europe

The *European Community Strategy for Waste Management of 1989* (SEC (89) 934 Final 1989) (Commission of the European Communities, 1989) set out the European Commission community-wide waste policy. The strategy contained the following points:

- ❑ The establishment of a hierarchy of waste management (Figure 2.1) prioritising the prevention and minimisation of waste followed by its reuse and recycling and lastly the optimisation of its final disposal through, for example energy recovery.
- ❑ Confirmed the 'proximity principle' requiring waste to be dealt with as near as possible to its source.
- ❑ Emphasised the goal of waste disposal self-sufficiency.



**Figure 2.1 Waste management hierarchy**

This strategy was complemented by the objectives set out in *Council Directive 91/156/EEC* (Council of European Communities, 1991) promoting:

- ❑ The development of clean technologies to increase prevention and reduction of waste.
- ❑ Recovery and recycling of waste as a secondary raw material.
- ❑ Drawing up of waste management plans by competent authorities.

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- The establishment of an integrated network of disposal installations, taking into account best available technology (BAT) and enabling the Community as a whole to become self-sufficient.

In 1992, the European Commission set up the *Priority Waste Streams Programme* to develop Community policy to address the following priority waste types:

1. Used tyres.
2. End-of-life vehicles.
3. Chlorinated solvents.
4. Health care wastes.
5. Construction and demolition waste (C&D W).
6. Waste from electric and electronic equipment.

As a result, the *Construction and Demolition Waste Project Group* was established in 1992. This group included representatives from all sectors of the industry and produced a report (Symonds Travers Morgan/ARGUS, 1995), which outlined a number of recommendations embracing waste prevention, clean technologies, market creation, cost effectiveness and protection of the environment.

In July 1996, a review of the *European Community Strategy for Waste Management* (Commission of European Communities, 1996) was carried out, adding the following relevant points:

- The introduction of targets to substantially reduce the amount of waste generated and to achieve high waste recovery objectives.
- The principle of producer responsibility (where waste producers are actively involved in the waste management of their products) was to be incorporated in all future measures.
- Suggestions for guidelines on the use of economic instruments for waste management including the harmonisation of waste statistics and a common methodology for life-cycle analysis (LCA).

The review reported that the *Priority Waste Streams* initiative had been abandoned due to slow progress, although some follow up work on the original five waste streams was to continue in the short term.



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On the 31<sup>st</sup> of May 1999, representatives of the construction industry, European Commission and the Member States drew up a list of priority actions for improving the competitiveness of the construction industry. One of these actions was to develop a strategy for the use and promotion of:

- Environmentally friendly construction materials.
- Energy efficiency in buildings.
- Construction and demolition waste management.

A task group (TG3) was established for C&D W producing a report in September 2000 containing the following recommendations (EU Sustainable Working Group for Sustainable Construction, 2001):

- Member States were encouraged to draw up national waste management plans to enable reliable statistics on C&D W to be collected and examined.
- The European Community should aim to provide a common methodology for C&D W statistics. This would involve the use of the EWC classification, data collection and accounting methods.
- All parties involved in the construction process should encourage the use of recyclable primary materials. Environmental assessments, codes of practice, specifications and product standards would all aid the promotion in the use of secondary materials.

In May 2001, the European Construction Industry Federation (FIEC) adopted its '*Charter for the Environment*'. One of the objectives of this charter was to encourage construction firms and their clients to use recyclable and/or reusable materials.

There has been no significant development in policy in recent years. This is reflected in the fact that only a few of EU Member States have reliable data on quantities and treatment of C&D W (Jacobsen *et al.*, 2004). To combat this, the EU produced the *Waste Statistics Regulation* (EC No 2150/2002) (Council of European Communities, 2002), which established a framework for the production of Community statistics on waste management.

The regulation requires the Member States to produce statistics on: waste production; recovery and disposal of waste and the import and export of waste. Five years after the

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regulation comes into force, and every three years thereafter, the Commission aims to present a report to the European Council and the European Parliament on the quality of the statistics prepared.

### **2.3.2 Waste management framework in Ireland**

Prior to 1990, landfill was the predominant waste management option due to the traditionally low cost, favourable geological conditions and settlement patterns. Unfortunately, these landfills were generally small in size and scale and very badly operated and managed. Waste was the last significant area of environmental management to be subject to legislative action. Principal legislation for solid waste related primarily to the public health functions of the local authorities.

A modern waste management framework was urgently needed and development during a six-year period (1990 – 1996) enabled the establishment of a comprehensive legislative structure. The establishment of the Environmental Protection Agency (EPA) under the *Environmental Protection Agency Act, 1992* (DoEHLG, 1992) was a significant step with the following effects:

- ❑ Enabled the establishment by the EPA of a national waste database.
- ❑ Required the specification and publication of criteria and procedures for the selection, management, operation and termination of use of landfill sites.
- ❑ Provided for a system of integrated pollution control (IPC), which addressed generation, recovery and disposal of wastes by relevant activities (including hazardous and non-hazardous waste incineration) and emphasised progressive waste minimisation.

In 1994, a national recycling strategy entitled '*Recycling for Ireland*' was published (DoEHLG, 1994). This document focused on packaging waste, newsprint and organic waste, setting a target of diverting 20 per cent of municipal waste from landfill by 1999.

The 'polluter pays' principle was introduced to encourage producers to take responsibility for the waste produced by their products. The C&D W stream was not addressed in this strategy document.

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The *Waste Management Act, 1996* (DoEHLG, 1996) was a pivotal milestone in the reformation of Ireland's waste legislation. The principle objective of the Act was to provide a legal framework that ensured that the holding, transportation, recovery and disposal of waste does not cause environmental pollution. To date, its primary focus has been to:

- ❑ Improve waste management practice and infrastructure by developing and improving the waste management planning system.
- ❑ Improve waste recovery performance by developing producer responsibility initiatives.
- ❑ Ensure a high standard of environmental protection by implementing a comprehensive and effective waste licensing and permitting system.
- ❑ Introduce secondary legislation in response to EU legislation and national requirements.

The Act also recognised and further expanded the role assigned to the EPA under the *Environmental Protection Agency Act, 1992* (DoEHLG, 1992). This new regulatory regime imposed an obligation on local authorities to prepare and implement detailed waste management plans. The content and structure of the plans was outlined in the *Waste Management (Planning) Regulations 1997* (DoEHLG, 1997a).

This work has been underpinned by clear policy direction in particular, the *National Sustainable Development Strategy* (DoEHLG, 1997b) and the 1998 policy statement *Waste Management: Changing Our Ways* (DoEHLG, 1998a). This document provided a national policy framework for the adoption and implementation by local authorities of strategic waste management plans. It was in response to the findings in the *State of the Environment in Ireland* report (EPA, 1996c) and *Europe's Environment: a Second Assessment* (EEA, 1998), which highlighted the annual growth in waste production and a heavy reliance on landfill. The policy statement set specific targets over a fifteen-year timetable to address the unsustainable trend in waste production (Box 2.1)

**Box 2:1 Targets set out in *Changing Our Ways* (DoEHLG, 1998a)**

- ❑ Diversion of 50 per cent of overall household waste away from landfill.
- ❑ A minimum 65 per cent reduction in biodegradable waste going to landfill.
- ❑ The development of waste recovery facilities employing environmentally sound technologies.
- ❑ Recycling of 35 per cent of municipal waste.
- ❑ **Recycling of at least 50 per cent of construction and demolition waste within a five-year period with a progressive increase to at least 85 per cent by 2013.**
- ❑ Reduction in the number of landfills.
- ❑ An 80 per cent reduction in emissions from landfill.

The policy document specifically addressed the construction and demolition waste stream stating that:

*“Local authorities have an opportunity in the relatively short term; to divert significant volumes of construction and demolition waste from landfill....Very large quantities of this waste are being landfilled, despite its potential resource value. The technology for the segregation and recovery of stone and concrete is well established, readily accessible and inexpensive, and there is a ready use market for aggregates, for fill in roads, drainage and other construction projects.”*

(DoEHLG, 1998a)

It also highlighted the need for accurate data gathering on the origin, quantity and composition of waste stating:

*“Ireland must address significant deficiencies in the quality and scope of data on waste.”*

(DoEHLG, 1998a)

The deficiencies in the quality of data required improved regulation of the waste management practices of the construction industry.

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The *Waste Management (Movement of Hazardous Waste) Regulations, 1998* (DoEHLG, 1998b) initiated better regulation by stating that the producers of hazardous waste should retain records relating to the quantity, nature and origin of waste, treatment and transferral.

The *Waste Management (Permit) Regulations, 1998* (DoEHLG, 1998c) addressed the lack of C&D W processing infrastructure available at the time by providing the following options:

- ❑ All persons wishing to recover or dispose of waste under a certain quantity (5 000 tonnes per annum) needed to obtain a permit from the relevant local authority (no upper tonnage limit provided 100 per cent recovery is achieved).
- ❑ Individuals wishing to recover/dispose of larger quantities of waste were to apply to the EPA for a waste licence.

The specification of waste permits provided an alternative outlet (other than landfill) for the inert waste fraction and was widely adopted by the construction industry. Applying for a waste license would be a far rarer occurrence due to the cost and time involved in the process.

The *Waste Management (Licensing) Regulations, 2000* (DoEHLG, 2000a) introduced further options by:

- ❑ Providing for the licensing of mobile plant used for the recovery and disposal of waste at more than one site.
- ❑ Identifying that all persons involved in waste recovery and disposal activities under Part V of the *Waste Management Act 1996* needed to obtain a licence from the EPA.

Waste management planning was encouraged in the *Planning and Development Act, 2000* (DoEHLG, 2000b). Section 34 (4) (1) of the Act permitted the attachment of conditions relating to C&D W management by presenting thresholds for the application of waste management plans during the planning phase as follows:

- ❑ New residential developments of 10 houses or more.
- ❑ New developments, other than above, including institutional, educational, health and other public facilities, with an aggregate floor area exceeding 1 250 m<sup>2</sup>.

- Demolition/renovation/refurbishment projects generating in excess of 100m<sup>3</sup> in volume of C&D W.
- Civil engineering projects producing in excess of 500m<sup>3</sup> of waste (equivalent to 1 000 tonnes) excluding waste materials used for development works on the site.

To date, only a few local authorities have exercised these conditions on a limited number of projects.

The *Waste Management (Collection Permits) Regulations 2001* (DoEHLG, 2001a) outlined controls for the operation of a permitting system for waste collection activities. A building contractor must apply to the nominated local authority (Table 2.1) for a collection permit to transport waste for disposal or recovery unless:

- The activity involves gathering/sorting/mixing on site.
- The waste quantity is such that it is transported in a small, non-skip vehicle of less than one tonne gross axle weight.
- If the contractor does not hold a permit then a licensed waste collector must be employed to remove any waste from site.

**Table 2.1 Waste collection permits – nominated local authorities**

Area of Ireland	Nominated Authority
South East (Carlow, Wexford, Kilkenny, Waterford City & County, Tipperary SR)	Kilkenny
Cork (Cork City & County)	Cork
North East (Cavan, Louth, Monaghan, Meath)	Meath
South West (Clare, Limerick City & County, Kerry)	Limerick
Connaught (Galway City & County, Mayo, Roscommon, Sligo, Leitrim)	Mayo
Midlands (Offaly, Tipperary NR, Laois, Longford, Westmeath)	Offaly
Dublin Region (Dublin City, Fingal, South Dublin, Dun-Laoghaire Rathdown)	Dublin
Wicklow	Wicklow
Donegal	Donegal
Kildare	Kildare

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In 2002, a comprehensive policy statement specifically focused on waste prevention and recycling entitled *Preventing and Recycling Waste: Delivering Change* (DoEHLG, 2002a) was published. Initiatives such as the introduction of a landfill levy and producer responsibility were encouraged.

The *Waste Management (Landfill Levy) Regulations 2002* (DoEHLG, 2002b) introduced an additional charge on materials brought to landfills after June 1<sup>st</sup> 2002. The levy is currently set at €15 per tonne with provision for it to be increased by a maximum of €5 per annum. There is some disposal activities that are exempt from the landfill levy charge provided the material is used for landfill site engineering, restoration or remediation purposes, for example:

- Non-hazardous wastes from construction and demolition activities comprising concrete, bricks, tiles, road planings etc, with a particle size of 150mm or less.
- Excavation spoils comprising clay, sand, gravel or stone.
- Dredge spoils from inland waterways and harbours.

A local authority gate fee will still apply to these waste types.

The *Protection of the Environment Act 2003* (DoEHLG, 2003a) updated the regulatory regime in relation to waste management planning and waste licensing/permitting. The *Waste Management (Packaging) Regulations* (DoEHLG, 2003b) came into operation on the 1<sup>st</sup> of March 2003, imposing obligations on persons who supply packaging e.g. retailers, packers/fillers and manufacturers.

This was followed by another government strategy, *Waste Management: Taking Stock and Moving Forward* (DoEHLG, 2004a). This policy document examined the growth of the private sector's role in waste activities while encouraging a more intensified and consistent application of the law in relation to waste. Two initiatives, the *National Waste Prevention Programme* and the *Market Development Group* were introduced. It also promoted the development of local authority waste-related performance indicators as outlined in '*Delivering Value for People – Services Indicators in Local Authorities*' (DoEHLG, 2004b).

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The *Waste Management (Licensing) (Amendment) Regulations 2004* (DoEHLG, 2004c) followed allowing waste licenses to be issued on the basis of best available techniques (BAT). This aimed to further improve the environmental performance of future waste facilities.

Currently, two draft statutory instruments are available for consultation; the *Waste Management (Facility Permit and Registration) Regulations 2005* (DoEHLG, 2005a) and the *Waste Management (Collection Permits) Regulations 2005* (DoEHLG, 2005b). When approved, they will revoke the *Waste Management (Permit) Regulations 1998* (DoEHLG, 1998c); the *Waste Management (Collection Permit) Regulations 2001* (DoEHLG, 2001a) and the *Waste Management (Collection Permit) (Amendment) Regulations 2001* (DoEHLG, 2001b) respectively.

Under the draft *Waste Management (Facility Permit and Registration) Regulations 2005* (DoEHLG, 2005a), the following activities are subject to a waste facility permit application to the relevant local authority:

- Recovery of inert waste, for the purpose of land reclamation, where the total capacity of waste recovered at the site shall not exceed 100 000 tonnes over the period for which the permit is granted.
- Recovery of inert waste arising from construction and demolition activity, including concrete, bricks, tiles, road planings or other such similar material, at a facility (excluding land reclamation) where the annual intake shall not exceed 100 000 tonnes per annum.
- Recovery of excavation or dredge spoil, comprising natural materials of clay, sand, gravel, or stone and which comes within the meaning of inert waste. The total capacity of waste recovered at the site shall not exceed 100 000 tonnes over the period for which the permit is granted.

Again under the draft *Waste Management (Facility Permit and Registration) Regulations 2005* (DoEHLG, 2005a), the following construction-related activities are subject to registration with a relevant local authority or the EPA:

- Recovery of inert waste, for the purpose of land reclamation where the total capacity of waste recovery at the site shall not exceed 25 000 tonnes over the period for which the certificate has been granted.



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- ❑ Recovery of inert waste arising from construction and demolition activity, including concrete, bricks, tiles, road planings or other such material, at a facility (excluding land reclamation) where the annual intake shall not exceed 20 000 tonnes per annum.
  - ❑ Recovery of excavation or dredge spoil, comprising natural materials of clay, sand, gravel, or stone and which comes within the meaning of inert waste. The total capacity of waste recovered at the site shall not exceed 25 000 tonnes over the period for which the permit is granted.

The provision of facility permits and local authority registrations will simplify the permitting process and reduce the time period required for the determination of applications.

In both regulations the provision of accurate records will be essential to regulate the activities:

- ❑ The draft *Waste Management (Collection Permits) Regulations 2005* (DoEHLG, 2005b), requires the compilation and maintenance of records containing the types and quantities of waste dealt with in the course of business detailing: the origin and destination of such waste; the treatment, recovery or disposal activities to which the waste is subject and, where appropriate, the persons by whom such waste is collected.
- ❑ The draft *Waste Management (Facility Permit and Registration) Regulations 2005* (DoEHLG, 2005a) requires that a summary report is sent to relevant local authority not later than the 28<sup>th</sup> of February of each year relating to activities to which the waste facility permit relates.

The publication of the '*Best Practice Guidelines on the Preparation of Waste Management Plans for Construction and Demolition Projects*' (DoEHLG, 2006) provides the construction industry with an agreed basis on the format of C&D W management plans (Appendix C). While the guidelines will operate generally on a voluntary basis, planning authorities are empowered under Section 34 (4) (1) of the *Planning and Development Act 2000* (DoEHLG, 2000b) to attach conditions relating to C&D W management.

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The *Best Practice Guidelines on the Preparation of Waste Management Plans for Construction and Demolition Projects* (DoEHLG, 2006) recommends the following wording:

*“Prior to the commencement of development, the developer shall submit a formal Project Construction and Demolition Waste Management Plan to the Local Authority for agreement prior to Commencement Notice stage”.*

(DoEHLG, 2006)

The implementation of legislation, regulation and policy direction over the past decade has compelled the Irish construction industry to consider and accept their role in the overall management of waste in the country. The response of industry to date has been encouraging.

#### **2.4 Response of the Irish Construction Industry**

The Irish Construction Industry responded to the recommendations of the *Priority Waste Streams Programme Report* (Symonds, Travers Morgan/ARGUS, 1995) by applying for funding to the Department of Trade, Enterprise and Employment under the ADAPT Programme<sup>2</sup>. The application was successful and the *Construction Aims 2000 Project* aimed to assist construction enterprises, especially small-to-medium sized companies to adapt successfully to the challenges of industrial change. The project contained four strands:

- ❑ Strand 1 – Registration of Construction Companies.
- ❑ Strand 2 – Information Technology in Business Administration.
- ❑ Strand 3 – Enterprise Development and Marketing.
- ❑ Strand 4 – Construction Waste Management.

In response to the targets set out in the *Changing Our Ways* policy document (DoEHLG, 1998a), the Forum for the Construction Industry set up a Task Force, in October 1999, with the following terms of reference:

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<sup>2</sup> The ADAPT Programme was a European social policy instrument that was aimed at increasing competitiveness by helping companies and employees adapt to and cope with the challenges and opportunities posed by global industrial change.

*“To co-ordinate the development and implementation of a voluntary construction industry programme to meet the Government’s objectives for the recovery of construction and demolition waste as set out in the Policy Statement on Waste Management ‘Changing Our Ways’ and to present this programme with an implementation timetable to the Minister for the Environment and Local Government by 1<sup>st</sup> July 2000”*

(DoEHLG, 1998a)

The Task Force missed the deadline of July 1<sup>st</sup> 2000 but did submit their report to the Minister for consideration in February 2001. Two of the more important recommendations were:

- ❑ The formation of a National Construction and Demolition Waste Council (NCDWC) for the construction industry. This Council would fully implement the recommendations set out in the Task Force Report.
- ❑ The implementation of a voluntary documented waste management system by industry to effectively manage and control the flow of materials arising from each construction project.

The Minister approved the recommendations of the Task Force in December 2001 and the NCDWC was established on June 20<sup>th</sup> 2002. The NCDWC was set up as a voluntary construction industry initiative to provide a framework to achieve compliance with government targets. Sub-committees were established to research the change options available to the industry as follows:

- ❑ Infrastructure and Facilities.
- ❑ Markets for Recycled Products.
- ❑ Project Practice and Waste Management Plans.
- ❑ The Regulatory Framework.
- ❑ Information and Public Awareness.



Following on from this, the Construction Industry Federation (CIF) and FAS organised a number of seminars during 2002 complementing the publication of ‘*Construction and Demolition Waste Management – A Handbook for Constructors and Site Managers*’ (CIF/ FAS, 2002) to raise awareness of this issue in the industry.

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During 2004, a road show was organised by the NCDWC to raise awareness of C&D W management in the industry. Guest speakers (including the author) addressed approximately 250 industry members at workshops in Kilkenny, Limerick, Athlone, Galway, Sligo and Dublin. The NCDWC also collaborated with the DoEHLG, CIF and RPS MCOS Consultants to publish '*MBCA Guide to Construction and Demolition Waste Legislation*' (MCOS/NCDWC/CIF, 2003), a useful reference for the construction industry with regard to their legal obligations. The DoEHLG subsequently published '*Draft Best Practice Guidelines for the Preparation of Waste Management Plans for Construction and Demolition Projects*' in 2004 (DoEHLG, 2004d) for consultation with the final document published in 2006 (DoEHLG, 2006).

In April 2006, a C&D W management module was included as an approved module under the Chartered Institute of Building (CIOB) Certificate/Diploma in Site Management organised by the Construction Industry Federation (CIF) in co-operation with FAS (Appendix D).

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## ***Conclusions***

The main aims of this chapter were to:

- Provide a definition for C&D W.
  
- Describe the implementation of legislation, regulations and policy actions over the past decade to determine the current legal obligations being imposed on the Irish construction industry with respect to C&D W management.

The main conclusions are as follows:

- The following definition for C&D W is to be used in the study as adapted from the *National Waste Database Report 2001* (EPA, 2003):

*“..to include all waste that arises from construction, renovation, and demolition activities and all waste mentioned in Chapter 17 of the European Waste Catalogue. This includes surplus and damaged products and materials arising at construction works or used temporarily during on-site activities”.*

(EPA, 2003)

This excluded excavated materials (17 05 04) as they did not result directly from the construction and demolition sites audited.

- The approach provided by the OECD (1998) transfers the focus from defining the key terms of ‘holder’ and ‘discard’ under the legal definition to the equally difficult task of defining the ‘recovery process’ and ‘a material of sufficient beneficial use’. This does not facilitate an improvement in understanding but may identify special cases within the legal definition where the waste management controls may not apply e.g. recovery processes of low environmental impact. It does, indirectly raise an interesting question as to how the classification of a waste stream can contribute to its marketability. The potentially reusable and recyclable materials arising from construction activities are labelled as waste even if they are a resource with a beneficial use. This may potentially discourage the use of ‘secondary materials’ as the term waste symbolises unwanted or substandard objects.

- 
- The implementation of the various legislation and regulation has recognised the needs of the industry by providing alternative options for C&D W processing while the infrastructure is still deficient. This is especially true in the provision of waste permits although this process is unsustainable in the long term.
  - Current draft legislation has recognised the need for accurate reporting of waste activities while providing further processing alternatives for the industry.
  - The Irish government has set out ambitious targets in the *Changing Our Ways* document (DoEHLG, 1998a) but has allowed the industry to establish a voluntary framework to meet these targets.
  - The response of the Irish construction industry has been positive. The establishment of the NCDWC and the publication of the various documents have raised awareness of the responsibilities of the industry.

This chapter has clearly outlined the legal obligations of the construction industry in regard to C&D W management. The next chapter will examine the characteristics of the waste stream focusing on its nature and source while presenting some waste production and composition studies.

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## **Chapter 3 Characteristics of Construction and Demolition Waste**

### **3.1 Introduction**

This chapter will explore the main characteristics that constitute the C&D W stream by focusing on the source, composition and quantity.

The main aims of this chapter are to:

- ❑ Classify the C&D W stream in terms of its origin.
- ❑ Establish an overview of the composition of the C&D W stream in different countries.
- ❑ Identify international, European and Irish C&D W production estimates.

### **3.2 Classification of Construction and Demolition Waste**

Accurate classification of C&D W can be a difficult task due to the lack of reliable and accurate statistical data available (Gavilan and Bernold, 1994). The categorisation of the waste stream needs to consider three aspects:

1. The nature and source of C&D W.
2. The composition of C&D W.
3. The quantification of C&D W.

#### **3.2.1 Nature and source of construction and demolition waste**

The nature and source can be defined from the causes of C&D W arising from the wide range of construction and demolition activities, site types and management approaches. The most comprehensive analysis of the principal causes of waste was carried out by E.R. Skolyes over a twenty-year period (1963 to 1983) in the U.K. This research was based on measurements taken at 280 building sites of varying size. Skolyes (1976a, b, c) attempted to determine the source of C&D W by defining the exact nature of the waste stream as follows:

- ❑ Direct waste: represented the complete loss of a material (waste that can be prevented and involves the actual loss or necessary removal and replacement of a material).
- ❑ Indirect waste: represented a loss of the material's value, usually to the contractor. It was divided into three broad classes:

- 
- Substitution waste was when materials were used for purposes other than those for which they were intended in the specification.
  - Production waste represented materials used in excess of those indicated in the bill of quantities, due to the production process.
  - Negligence waste was when some materials were used extra to the amount required by the contract due to the contractor's own negligence.

Gavilan and Bernold (1994) identified the following main causes of waste from a management perspective by examining the general flow pattern of construction materials on site:

- Design including design errors and design changes.
- Procurement including transport and ordering errors.
- Handling of materials including improper storage and handling on and off-site.
- Operation including human error, equipment malfunctions and Acts of God (catastrophes and weather).
- Residual such as leftover scrap and irreclaimable non-consumables.

In Europe, Symonds Travers Morgan/ARGUS (1995) indicated that C&D W originated from a wide range of activities:

- Civil engineering infrastructure works including: power generation stations; substations; electricity distribution networks; gas production works; dams; reservoirs; water supply treatment works and sewage treatment works.
- Building and development works including: residential; commercial and industrial development.
- Transport infrastructure works including: road construction and ancillary structures; rail construction and ancillary structures; airports and associated developments; and waterways, canal construction with ancillary structures.
- Renovation, rehabilitation and maintenance aimed at prolonging the lifespan of above works.
- Demolition.



This is in comparison with the U.S. EPA who adopted a simple classification system (Franklin Associates, 1998):

- Residential construction.
- Residential demolition.
- Residential renovation.
- Non-residential construction.
- Non-residential demolition.
- Non-residential renovation.

Subsequently, Symonds *et al.* (1999) recognised that the type of construction and/or demolition activity will affect the origin and nature of C&D W (Table 3.1).

**Table 3.1: The different types of site that generate C&D W in Europe (Symonds *et al.*, 1999)**

Site Type	Definition
'Demolish and clear' sites	Site with structures or infrastructure to be demolished, but on which no new construction is planned in the short term.
'Demolish, clear and build' sites	Site with structures or infrastructure to be demolished prior to the erection of new ones.
'Renovation' sites	Site where the interior fittings (and possibly some structural elements as well) are to be removed and replaced.
'Greenfield' building sites	Undeveloped sites on which new structures or infrastructure are to be erected.
'Road build' sites	Sites where a new road (or similar) is to be constructed on a green field or rubble free base.
'Road refurbishment' sites	Sites where an existing road (or similar) is to be resurfaced or substantially rebuilt.

Ekanayake and Ofori (2000) examined the management processes outlined by Gavilan and Bernold (1994) and prioritised design, operation, material handling and procurement as the main causes of construction waste (Table 3.2).

**Table 3.2 Sources and causes of construction waste (Ekanayake and Ofori, 2000)**

Process	Description of Waste
<b>Design</b>	<ul style="list-style-type: none"> <li><input type="checkbox"/> Lack of dimensional coordination of products.</li> <li><input type="checkbox"/> Changes made to the design during construction process.</li> <li><input type="checkbox"/> Designer's inexperience in method and sequence of construction.</li> <li><input type="checkbox"/> Lack of standard sizes available on the market.</li> <li><input type="checkbox"/> Designer's unfamiliarity with alternative products.</li> <li><input type="checkbox"/> Complexity of detailing in the drawings.</li> <li><input type="checkbox"/> Lack of information in the drawings.</li> <li><input type="checkbox"/> Error in the contract documents.</li> <li><input type="checkbox"/> Incomplete contract documents at commencement of project.</li> <li><input type="checkbox"/> Selection of low quality products.</li> </ul>
<b>Operational</b>	<ul style="list-style-type: none"> <li><input type="checkbox"/> Errors by tradespersons or labourers.</li> <li><input type="checkbox"/> Accidents due to negligence.</li> <li><input type="checkbox"/> Damage to work done by subsequent trades.</li> <li><input type="checkbox"/> Use of incorrect material thus requiring replacement.</li> <li><input type="checkbox"/> Required quantity unclear due to improper planning.</li> <li><input type="checkbox"/> Delays in passing information to the contractor on types and sizes of products to be used.</li> <li><input type="checkbox"/> Equipment malfunctioning.</li> <li><input type="checkbox"/> Inclement weather.</li> </ul>
<b>Material Handling</b>	<ul style="list-style-type: none"> <li><input type="checkbox"/> Damaged during transportation.</li> <li><input type="checkbox"/> Inappropriate storage leading to damage or deterioration.</li> <li><input type="checkbox"/> Materials supplied in loose form.</li> <li><input type="checkbox"/> Use of whatever material is close to working place.</li> <li><input type="checkbox"/> Unfriendly attitudes of project team and labourers.</li> <li><input type="checkbox"/> Theft.</li> </ul>
<b>Procurement</b>	<ul style="list-style-type: none"> <li><input type="checkbox"/> Ordering errors e.g. ordering significantly more or less.</li> <li><input type="checkbox"/> Lack of possibilities to order small quantities.</li> <li><input type="checkbox"/> Purchased products that do not comply with specification.</li> </ul>

The EPA in Ireland introduced the following categories of building construction, repair and maintenance in the *National Waste Database Report 2001* (EPA, 2003):

- Residential (new private and public housing).
- Private non-residential (private and semi-state industry, commercial, agricultural, tourism and worship).

- 
- ❑ Productive infrastructure (water and sanitary services, airports, harbours, energy and telecommunications).
  - ❑ Social infrastructure (education, health, public buildings, local authority services and the Gaeltacht).

Dividing the waste stream into categories only determines the general characteristics. It was essential to examine the composition to identify the priority materials of the C&D W stream.

### **3.2.2 Composition of C&D W**

#### *International composition studies*

Spivey (1974a) documented one of the earliest efforts to categorise construction waste. He classified the most common components of work-site waste as follows: demolition materials including concrete, brick, wallboard, plaster and used timber; packaging materials including paper, cardboard, plastic and metal retaining bands; wood including trees; waste concrete and asphalt; garbage and sanitary waste; scrap metal products; rubber, plastic and glass; and pesticides including pesticide containers.

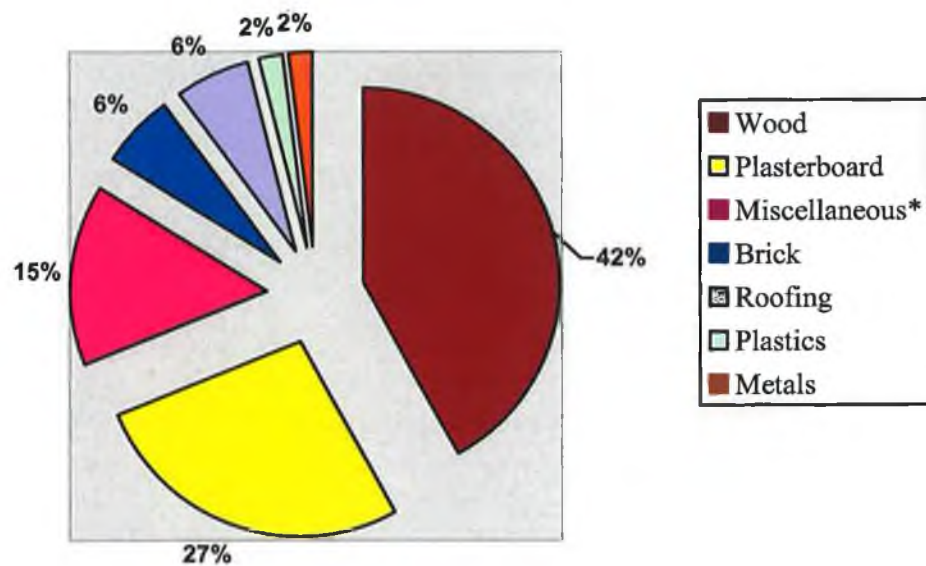
Wilson *et al.* (1976) followed this by attempting to identify the components of C&D W by comparing:

- ❑ The quantities of various materials that have gone into the construction of buildings presently standing i.e. potential candidates for demolition.
- ❑ The total number of buildings (when new) represented by these quantities of materials.
- ❑ The characteristics of the buildings that have been or will be demolished.

Nine significant materials were identified including ferrous metals, copper, aluminium, lead, concrete, wood, brick, glass and plastics.

Apotheker (1990) identified that the composition of C&D W was highly variable depending on the type of construction/demolition activity. C&D W was generally considered to be a single waste stream for management purposes, but was typically generated in two distinct categories: construction waste and demolition waste (Schlauder and Brickner, 1993).

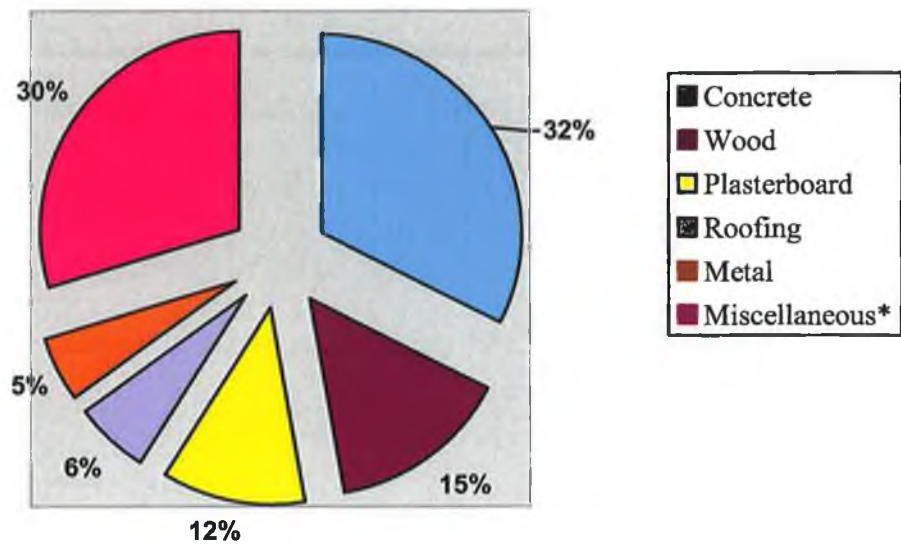
Franklin Associates (1998) carried out a number of sampling studies for their report, *Characterisation of Building-related Construction and Demolition Debris in the United States*, but did not attempt to average all the composition due to the high variability in building types and construction practices sampled. The data collection was done under many different conditions to different levels of detail. Figure 3.1 illustrates a sample composition of residential new construction taken from an average of four assessments, which was based on timber-frame construction.



\*Miscellaneous includes refuse, dirt, sweepings and aggregates.

**Figure 3.1 Sample composition of US new residential construction debris (Franklin Associates, 1998)**

A comparison can be made with analysis of C&D W composition from concrete-frame buildings accepted at Florida landfill and recycling facilities (Figure 3.2) (Reinhart *et al.*, 2002).

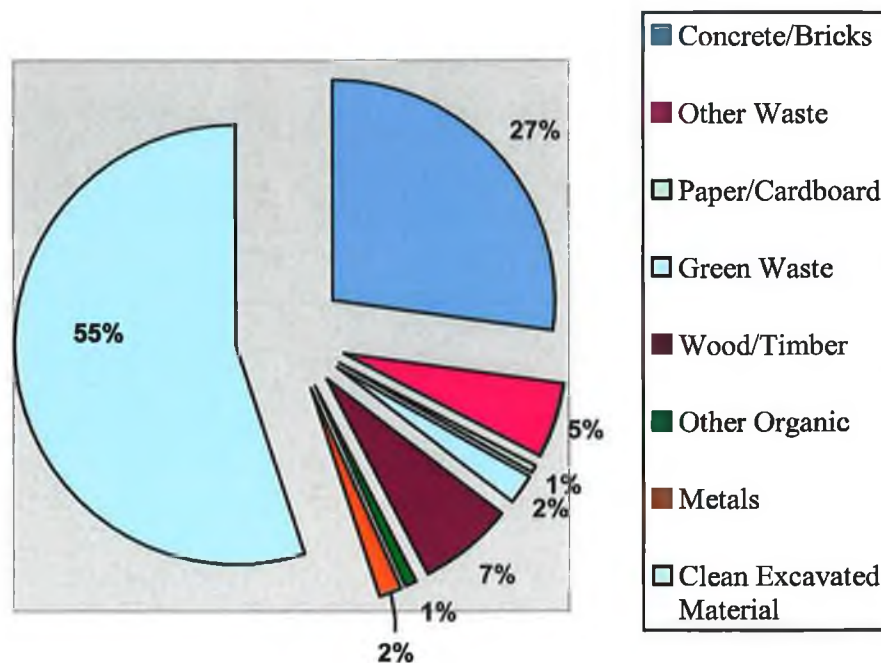


\*Miscellaneous includes refuse, dirt, sweepings and aggregates.

**Figure 3.2 Composition of C&D W in Florida (Reinhart *et al.*, 2002)**

Although two different assessment methods were used, it is evident that in both compositional studies wood, plasterboard and miscellaneous waste were the major components. The difference in the construction methods used was highlighted by the absence of concrete waste in the timber frame construction composition analysis.

In Australia, a composition survey carried out at ten landfills in the State of Victoria (Golder Associates Pty Ltd., 1999) produced the following results (Figure 3.3):



**Figure 3.3: Australian EPA waste profile study of Victorian landfills – C&D W percentage by tonnage (Golder Associates Pty Ltd., 1999)**

In this study, the major contributors were concrete and timber waste but over half of the waste assessed was clean excavated material. This was due to the fact that this waste fraction was primarily used for remediation purposes in the landfills surveyed.

The most recent data from the United States produced by Sandler (2003) estimated that concrete and mixed rubble, wood and drywall accounted for between 65 and 95 per cent of the material composition of total building related C&D W generated annually (Table 3.3). The estimates were based on a number of US EPA and industry reports (Franklin Associates, 1998; McKeever, 1999; Barnes, 2002; and Reinhart *et al.*, 2002).

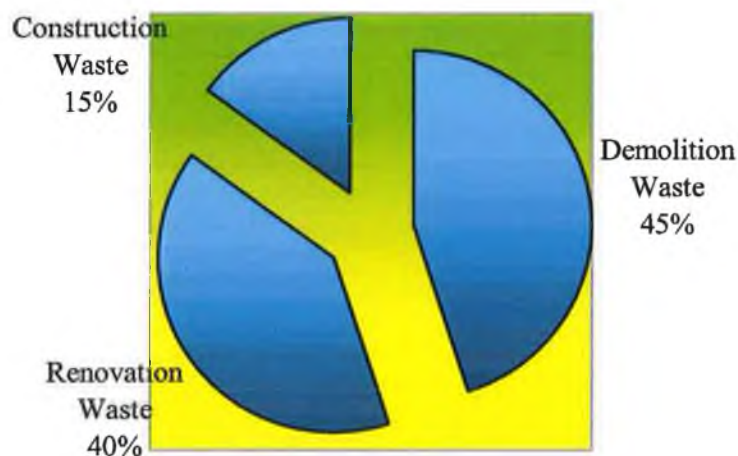


**Table 3.3 US building related C&D W generation: estimated material percentages by tonnage (Sandler, 2003)**

Material	Estimated % Generated Annually
Concrete and mixed rubble	40 - 50
Wood	20 - 30
Drywall	5 - 15
Asphalt roofing	1 - 10
Metals	1 - 5
Bricks	1 - 5
Plastics	1 - 5

*European composition studies*

Symonds *et al.* (1999) provided an overview of the composition of C&D W in Europe, dividing it into three types of waste originating from: new construction; renovation and demolition (Figure 3.4). Renovation waste and demolition waste were found to be very similar in composition.



**Figure 3.4 Division of the European C&D W stream (adapted from Symonds *et al.*, 1999).**

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The most important fraction of the C&D W stream is the inert fraction (including excavated materials) due to its quantity and potential for reuse and/or recycling. Hendricks (1987) estimated that 80 per cent of C&D W consisted of stony materials like concrete and masonry while the rest consisted of glass, rubber, plastics, timber, metals and asphalt. This figure has been estimated as even higher, accounting for 90 per cent of the waste stream in some EU Member States (Symonds *et al.*, 1999).

It has to be taken into account that different construction methods and building techniques will lead to varying components of the C&D W stream e.g. wood is much more widely used in Scandinavia than elsewhere in the EU, resulting in a higher percentage of wood waste. In the last 35 years, an increasing number of non-inert materials, such as plastics and metals have been used. This has led to an increase in the percentage of non-inert fractions in the C&D W stream. Due to this variety, it is difficult to provide a definite list of each component. It is possible however, to identify a number of key components, which can be expected to occur to some extent in the waste arisings (Symonds Travers Morgan/ARGUS, 1995). These are:

- Soils and subsoil.
- Excavated fill and made ground.
- Concrete.
- Asphalt and bituminous materials.
- Bricks and tiles.
- Timber (treated and untreated).
- Plaster, plasterboard and other internal finishes.
- Plastics.
- Metals.
- Architectural features.
- Mixed debris.

In the UK, APT Environmental (2002) carried out a study over a two-year period (1999 – 2001) of C&D W accepted at landfill sites and waste transfer stations in the Greater Nottingham area to investigate the potential of using recycled resources in construction. The analysis was divided up into ‘small load’ surveys (skips with less than 4 tonnes of waste) and ‘large load’ surveys (skips greater than 4 tonnes of waste).



The 'small load' surveys consisted of a hand picked analysis with each component individually weighed, while the 'large load' survey was based on weighbridge receipts (Table 3.4).

**Table 3.4 Summary of hand picked and bulk survey results (1999-2001) for the Greater Nottingham area, UK (adapted from APT Environmental, 2002)**

<b>Material</b>	<b>% of Total</b>
Concrete and concrete blocks	13.92
Bricks – commons, facing and engineering	8.84
Cement	0.06
Ceramic tiles	1.28
Plaster	0.07
Roof tiles	1.69
Rubble/hardcore	30.06
Sand and stone	1.97
<b>Inert sub total</b>	<b>57.89</b>
Brick banding	0.02
Cabling	0.31
Carpet	0.55
Fibreglass	0.27
Glass	0.53
Metals – ferrous and non-ferrous	5.83
Miscellaneous	9.42
Paper/cardboard	1.42
Plasterboard	1.80
Plastic and Polystyrene	1.33
PVC piping	0.57
Roofing felt	0.81
Tarmac/asphalt	1.35
Timber	12.64
Vegetation	5.26
<b>Non-inert sub-total</b>	<b>42.11</b>
<b>Total</b>	<b>100.00</b>

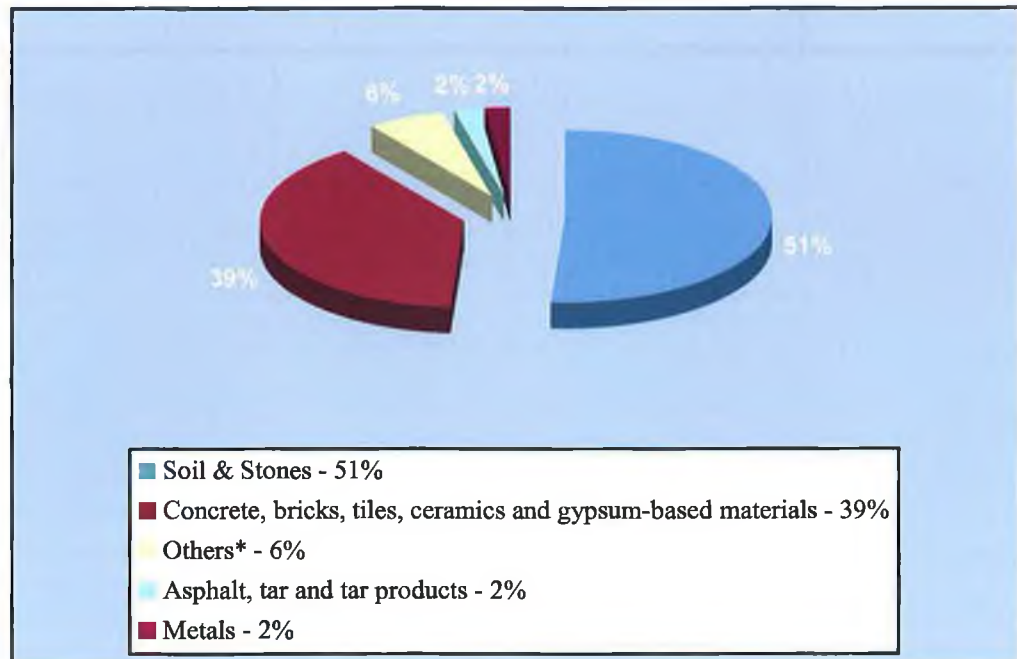
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The inert fraction accounted for 58 per cent of the waste stream composition with timber waste and metals (ferrous and non-ferrous) being the largest non-inert contributors representing 13 and 6 per cent respectively.

#### *Irish composition studies*

There was no single body responsible for the generation of waste statistics in Ireland, until the formation of the EPA under the *Environment Protection Act 1992* (DoEHLG, 1992). A number of studies (O'Boyle, 1987; Environmental Resources Ltd. (ERL), 1993; Environmental Research Unit (ERU), 1993 and M.C. O'Sullivan Consulting Engineers (MCOS), 1994) examined the production of household, commercial and industrial waste. It was not until the publication of the *National Waste Database Report, 1995* (EPA, 1996a) that any statistics on the C&D W stream were available. The composition of C&D W was not addressed fully but the report did state that it estimated that approximately 36 per cent of the total estimated C&D W stream comprised of soil and stones. This fraction was estimated to account for 97 per cent of the total material recovered in 1995.

The *National Waste Database Report, 1998* (EPA, 2000) estimated the composition based on a single survey conducted in 1996 (Figure 3.5) with the inert fraction accounting for 90 per cent of the waste stream. The report stressed the need for further compositional surveys to provide a more comprehensive analysis of the components of the C&D W stream.



**Figure 3.5 Estimated composition of C&D W in Ireland in 1998 (EPA, 2000)**

The *National Waste Database Report 2001* (EPA, 2003) and the *National Waste Report 2004* (EPA, 2005a) do not provide any further compositional studies of the C&D W stream. The latter report did state that the soil and stone fraction comprised 76 per cent of the total C&D W collected at licensed and permitted facilities and had a recovery rate of 90 per cent while the other fractions i.e. concrete and rubble, wood, glass, metal and plastics had a recovery rate of 69 per cent.

In all the compositional surveys outlined, it can be seen that the inert (including excavated materials) and wood fractions were the primary contributors to waste production from construction and demolition activities. Clear compositional analysis is critical to provide a more reliable and accurate quantification of the C&D W stream and is one of the main aims of this study.

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### 3.2.3 Quantification of C&D W

A lack of reliable statistics for C&D W production has limited the accuracy of national estimates generated throughout the world. For example, attempts at estimating production in the USA, led Donovan (1990) to state that:

*“The more we looked into it, the more we concluded that there are, in our opinion, no dependable figures or accurate information regarding generation rates or disposal practices at a national level.”*

(Donovan, 1990)

C&D W production will vary considerably from country to country due to: economic and cultural differences; different reporting procedures (if any) and different building practices and technologies. Research carried out has tended to express C&D W production in overall estimates or as a percentage of the municipal waste stream going to landfill or as a percentage of materials purchased/delivered to site.

#### *International waste production estimates*

It is estimated based on a ‘best wild guess’, that 2 to 3 billion tonnes of building waste is produced each year throughout the world (Lauritzen, 1994). The production of C&D W is directly proportional to the level of building activity, which means the largest economies are contributing the largest volumes of C&D W. For example, the most definitive study carried out in the U.S. on C&D W production (Franklin Associates, 1998) estimated that the annual production for building related activities (excluding wastes from roadways, bridges, land clearing and excavation) was 136 million tons in 1996. This represented 24 per cent of the municipal waste stream (MSW) and compared to other US estimates of 23 per cent (Apotheker, 1990), 29 per cent (Rogoff and Williams, 1994) and 25 per cent (Mincks, 1996).

The US estimates correlates to research carried out in Australia, where various studies estimated C&D W to account for between 20 and 33 per cent of all waste entering Australia’s landfills (Craven *et al.*, 1994). This is in comparison to a best estimate of 19 per cent for New Zealand (Patterson, 1997).

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Recent research carried out in Asia and the Middle East has also highlighted the vast quantities of C&D W being produced. Poon *et al.* (2004a, b) estimated that 37 690 tonnes of C&D W was generated daily in Hong Kong. Of this amount, 80 per cent was inert materials reused/disposed of at public filling areas and 20 per cent was mixed materials sent to landfill. The latter figure represented 44 per cent of all solid waste going to landfills. In Kuwait the estimated annual production was 3 million tonnes, representing 15 to 30 per cent of all solid waste by weight (Kartam *et al.*, 2004) with 90 per cent of this waste being landfilled. Enhassi (1996) studied waste production in Palestine and found that 5 to 11 per cent of purchased materials ended up as waste. This is in comparison with findings in Brazil that 20 per cent of all materials delivered to site by weight ends up as waste (Formoso *et al.*, 1993).

#### *European waste production estimates*

In a report to the European Commission, Symonds *et al.* (1999) estimated that 'core' C&D W production was in the region of 180 million tonnes per annum. This equated to approximately 480 kg per person per year. Only 28 per cent of this estimate was reused or recycled across the EU. The addition of the 'non-core' construction waste fractions i.e. road planings, excavated soil and rock, more than doubled the estimate for the total weight and volume of C& D W produced.

A report from the European Environment Agency (EEA) (Broderson *et al.*, 2002) reviewed selected waste streams in the EU. Seventeen countries were asked to submit information on five waste types including C&D W. There were seven replies for C&D W, where additional information was available (national reports, extracts or corrections to previously submitted information) which was not previously submitted to the OECD/Eurostat or Environment DG. Data availability was limited for some waste fractions especially glass, plastics, insulation and mixed waste. As a consequence, data for these fractions were excluded from the report's findings. The total estimated waste production was 385 million tonnes.

The inclusion of more recent estimates for Greece (Fatta *et al.*, 2003) Ireland (EPA, 2005a), Italy (Sara *et al.*,c. 1999), and UK (Smith *et al.*, 2002) increased the estimate for total waste production to 495 million tonnes (Table 3.5). This increase in waste production would correlate with estimates of C&D W accounting for between 40 to 50

per cent of the total waste production in the EU (EU Sustainable Working Group, 2001).

**Table 3.5 Total C&D W production per country based on most recent estimates available (adapted from Brodersen *et al.*, 2002)**

Country	Year	Quantity (tonnes)
Austria	1999	7 500 000
Denmark	1997	3 427 000
France	1992	25 000 000
Germany	1996	219 921 000
Greece*	2003	3 900 000
Ireland**	2004	11 200 000
Italy***	c. 1999	40 000 000
Netherlands	1996	13 650 000
Spain	1999	20 628 000
UK****	2002	150 000 000
<b>Total</b>		<b>495 226 000</b>

\* Fatta *et al.* (2003) estimated C&D W production in Greece to be 3.9 million tonnes per annum.

\*\* EPA (2005a) estimated that C&D W production in Ireland in 2004 was 11.2 million tonnes.

\*\*\* Sara *et al.* (c. 1999) estimated that construction and demolition activities produce over 40 million tonnes of waste a year in Italy.

\*\*\*\* Smith *et al.* (2002) estimated that the total mass of all solid waste from the U.K. construction industry in 1998 was 150 million tonnes.

Brodersen *et al.* (2002) identified that the waste amounts per capita varied considerably from one country to another. This was partly attributed to the cultural and economic diversity as well as the differences in the definitions used:

*“There are also differences in definitions used, for instance, the reason for the high level in Austria and Germany can be explained by the fact that these countries include excavated soil and stones in the waste data.”*

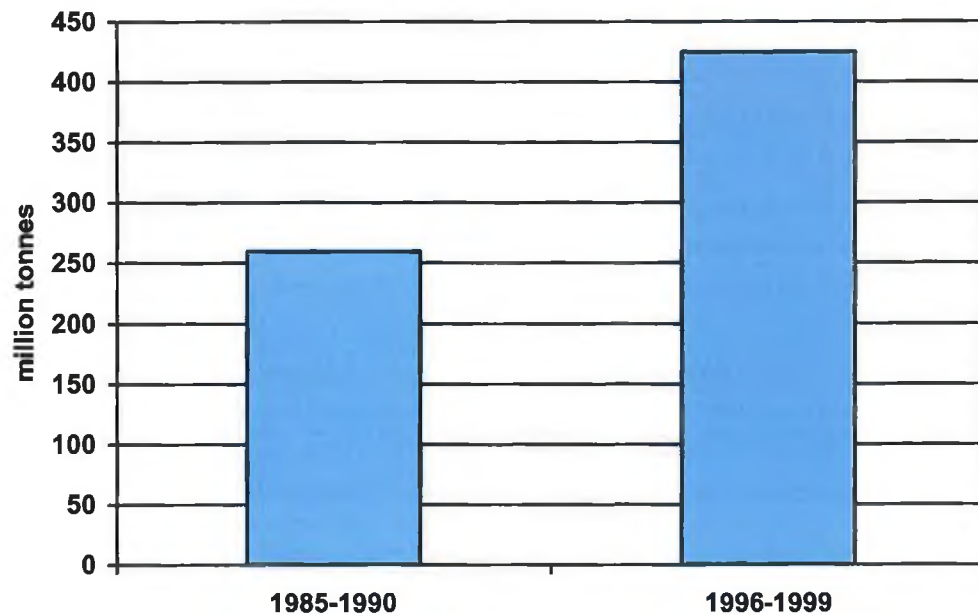
(Brodersen *et al.*, 2002)

Jacobsen *et al.* (2004) followed with an inventory of existing information on recycling of selected waste materials including plastic, paper, aluminium, steel, glass, rubber, textiles and inert waste. The report stated that:

*“Inert waste in the form of construction and demolition waste is probably the largest waste stream among the eight materials in kg per capita. However, due to lack of harmonised data it is not possible to prepare good indicators on the EU waste generation.”*

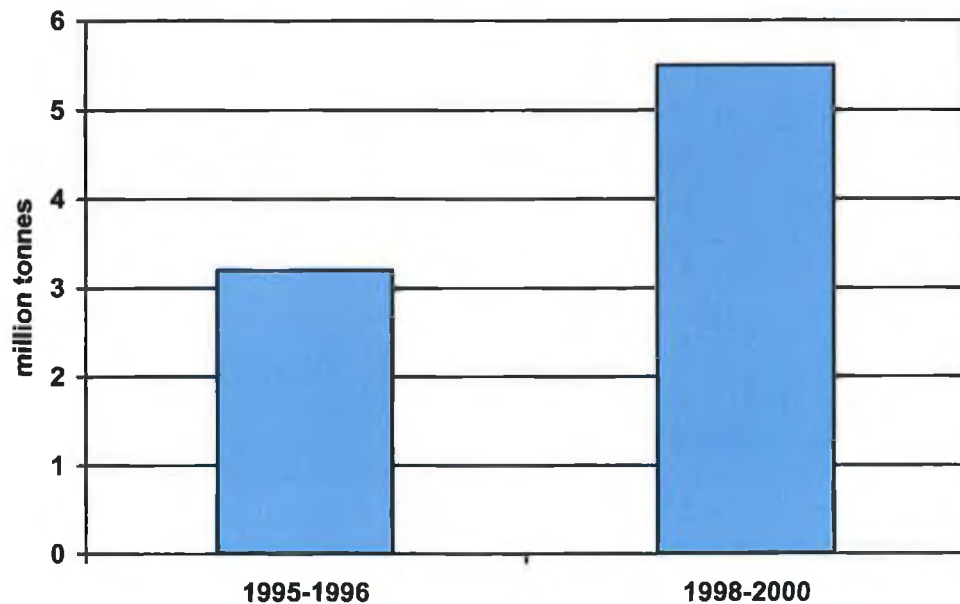
(Jacobsen *et al.*, 2004)

The report did provide data on C&D W production in eight Western European countries and seven Eastern European Countries (Figures 3.6 and 3.7).



**Figure 3.6 C&D W production in eight\* Western European countries in 1985-1990 and 1996-1999 (Jacobsen *et al.*, 2004)**

*\*Austria, Denmark, Germany, Finland, the Netherlands, Spain, Switzerland, and the UK.*



**Figure 3.7 C&D W production in seven\* Eastern European countries in 1995-1996 and 1998-2000 (Jacobsen *et al.*, 2004)**

*\*Croatia, Hungary, Malta, Poland, Romania, Slovakia and Slovenia*

The interpretation of this data was limited due to the fact that definitions were not harmonised throughout Europe preventing direct comparison between Members. The differences in the quantities produced in Western Europe and Eastern Europe were attributed to the fact that more regulatory reporting mechanisms existed in Western Europe providing more reliable statistics.

#### *Irish waste production estimates*

The EPA has the responsibility under the *Environmental Protection Act, 1992* (DoEHLG, 1992) for collating data to determine accurate and reliable figures for waste production in Ireland. The EPA is committed to publishing national surveys every two years under the *Waste Statistics Regulations 2002* (Council of European Communities, 2002), to establish key trends on waste flows. The *National Waste Database Reports* (EPA, 1996a, 2000, 2003, 2005a) have attempted to provide estimates for C&D W production in Ireland (Table 3.6).



**Table 3.6 National waste database C&D W estimates 1995, 1998, 2001 and 2004  
(adapted from EPA, 2003)**

Report	Published	Quantity (tonnes)	% of Total Waste
National Waste Database Report, 1995	EPA, 1996	*1 318 908	3.1
National Waste Database Report, 1998	EPA, 2000	2 704 958	3.4
National Waste Database Report, 2001	EPA, 2003	3 651 411	4.9
National Waste Report, 2004	EPA, 2005	11 167 599	13.1

*\* In the National Waste Database Report 1995 (EPA, 1996a), the estimated figure for C&D W production was 1 520 000 tonnes. Table 3.6 was adapted from the National Waste Database Report 2001 (EPA, 2003) where the 1995 estimate was recorded as 1 318 908 tonnes.*

The national estimates indicate nearly a ten-fold increase in C&D W production over a nine-year period from 1995 to 2004 and more recently over a 200 per cent increase in a three-year period from 2001 to 2004. The improvement of regulatory control with the implementation of the *Waste Management Act 1996* (DoEHLG, 1996) demanding improved reporting procedures coupled with the phenomenal economic activity in the country over the past decade can go some way to accounting for this massive increase in waste production. The EPA has also employed different audit methodologies in each report and this inconsistency has contributed to the significant difference in the estimated quantities.

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## ***Conclusions***

The main aims of this chapter were to:

- Reveal the nature and source of the C&D W stream.
- Establish an overview of the composition of the C&D W stream in different countries.
- Identify international, European and Irish waste production estimates.

The main conclusions are as follows:

- The nature and source of C&D W is highly dependent on the construction/demolition activity.
- The inert and wood fractions contribute the largest percentage of all the compositional studies examined.
- There is a lack of reliable composition studies from construction and demolition activity in Ireland. The *National Waste Database Report 1998* (EPA, 2000) identifies the need for compositional surveys to provide more comprehensive information.
- The *National Waste Report 2004* (EPA, 2005a) estimated that the soil and stones accounted for 76 per cent of the waste stream with a recovery rate of 90 per cent. Other fractions of C&D W were reported to have a recovery rate of 69 per cent. These compositional estimates are based on data from waste collection permits.
- There is a lack of reliable and accurate data on C&D W production throughout the world. One of the main reasons for this is the lack of a harmonised reporting framework that would provide consistent data (Jacobsen *et al.*, 2004).
- In Ireland, there has been a dramatic increase in C&D W production over the past decade, from 1.52 million tonnes in 1995 to 11.2 million tonnes in 2004 based on estimates produced by the EPA.

This dramatic increase in C&D W production in Ireland has been estimated using a number of assessment techniques. The next chapter will examine the methodologies used by the EPA to produce C&D W estimates to establish a comparative benchmark from which to work.

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## **Chapter 4 Examination of Methodologies used to Generate Construction and Demolition Waste Production Estimates in Ireland**

### **4.1 Introduction**

This chapter will examine the methodologies used in Ireland to generate C&D W production estimates. Prior to the implementation of the *Environmental Protection Agency Act, 1992* (DoEHLG, 1992), there were no national estimates for construction and demolition waste production in Ireland. The *National Waste Database Report 1995* (EPA, 1996a) was the first attempt to establish national figures for C&D W production in Ireland. The EPA has produced reports every three years since using a combination of methodologies.

The main aim of this chapter is to:

- Examine each of EPA national waste database reports to identify methodologies used, the results and any limitations associated with them.

### **4.2 C&D W production estimate methodologies used in Ireland**

The methodologies employed by the EPA over the past decade to estimate C&D W production have consisted of:

- Questionnaires, either paper-based and/or electronically-based, sent out to relevant parties in the construction, demolition, waste management industries and local authorities.
- Data collected from all facilities or sites licensed or permitted to accept C&D W through questionnaires and environmental reports.
- Conversion of US unit waste factors (Franklin Associates, 1998) applied to construction output to produce national estimates.

Each of these methodologies has been used in the production of the *National Waste Database Reports* (EPA, 1996a, 2000, 2003, 2005a), which are the definitive resource for waste statistics in Ireland.

#### 4.2.1 National waste database report 1995 (EPA, 1996a)

##### Methodology

A paper-based questionnaire survey of the construction and demolition industry was undertaken to establish statistics for C&D W production. The response rate to the questionnaire was 11 per cent. This moderate response rate was only achieved after subsequent telephone calls were made to contractors who employed more than 40 people. Numerical and statistical methods were employed to extrapolate the data obtained from the questionnaires to project national waste quantities. This involved calculating waste per employee figures for the construction and demolition sector based on returned questionnaires. A scale-up factor was then calculated to enable the projection of the total C&D W generation (Box 4.1)

##### Box 4.1 Scale up factors used to project total C&D W generation (EPA, 1996a)

$$\frac{\text{Total number of employees in the construction/demolition industry}}{\text{Total number of employees in the construction/demolition industry who completed questionnaires}}$$

Questionnaires were also sent out to waste contractors. The response rate from this sector of the industry was so low as to be not representative of what was being handled by such operators at that time.

##### Results

The *National Waste Database Report 1995* (EPA, 1996a) estimated that 1.52 million tonnes of C&D W was produced in Ireland in 1995. The actual reported quantity was 0.56 million tonnes per annum, which when projected using a scale-up methodology resulted in the estimated figure of 1.52 million tonnes. Of this, 0.87 million tonnes per annum was estimated to have been disposed to landfill, with soil and stones accounting for 36 per cent (0.31 million tonnes). The estimated recovery rate was 0.53 million tonnes (35 per cent of total) with 97 per cent of this comprising soil and stones.

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### *Limitations*

There were a number of limitations in the generation of the 1995 estimates as follows:

- ❑ In general, the operators dealing with C&D W kept no records of quantities and types arising.
- ❑ The majority of local authority-run landfill sites allowed the disposal of C&D W without a record being kept.
- ❑ Most construction and demolition contractors removed the waste to the cheapest available location.
- ❑ The general response to questionnaires was that waste quantity records were not available, as they were not kept.
- ❑ Construction and demolition contractors using skips indicated a general lack of knowledge as to the composition of the contents.
- ❑ The waste contractors that responded to the survey mainly classified the waste as mixed C&D W.
- ❑ None of the estimates were based on site waste measurements.

#### **4.2.2 National waste database report 1998 (EPA, 2000)**

##### *Methodology*

Considerable modifications were made in the reporting procedures with each local authority issued with its own digital national waste database module, which contained:

- ❑ The information reported by the local authority in 1995.
- ❑ A digital questionnaire for completion in 1998.

The local authorities were required to submit information on waste arisings and flow under three headings:

- ❑ Form A: Summary of wastes arising in functional area.
- ❑ Form B: Summary of waste disposal/recovery route in functional area.
- ❑ Form C: Summary of hazardous waste management in functional area.

Digital questionnaires were also made available to industries, waste contractors and recycling organisations although the majority of the responses from those surveyed, other than the local authorities, were in paper form.

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### *Results*

The *National Waste Database Report 1998* (EPA, 2000) estimated that 2.71 million tonnes of C&D W was produced in 1998. This represented 3.4% of the total waste and 17.5 per cent of all non-agricultural waste produced in Ireland in 1998. Of this, it was estimated that 1.53 million tonnes (56.7 per cent) was disposed of with 1.17 million tonnes (43.3 per cent) recovered.

### *Limitations*

A number of limitations were identified as follows:

- ❑ The report recognised that the amount of C&D W arising in 1998 was likely to be significantly higher than the 2.7 million tonnes reported. However, it stated that waste flow data did not permit a comprehensive analysis of C&D W flows in Ireland.
- ❑ It was identified that considerable movement of C&D W was taking place between local authority areas and that there were significant gaps in information at local level.
- ❑ The recovery estimate of 1.17 million tonnes was based on only two sources, Dunsink Landfill in Dublin (0.93 million tonnes) and Kinsale Landfill in Cork (0.24 million tonnes).
- ❑ None of the estimates were based on site waste measurements.

The report did recommend that a national study should take place to establish accurate and reliable statistics to bring about a significant improvement in the quality of information on C&DW production.

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### **4.2.3 National waste database report 2001 (EPA, 2003)**

#### *Methodology*

The *National Waste Database Report 2001* (EPA, 2003) used two methodologies to calculate construction and demolition waste production in 2001:

- ❑ Methodology 1 – the application of US EPA waste factors to construction industry outputs for 2001.
- ❑ Methodology 2 – based on records of C&D W accepted for recovery and disposal at all EPA-licensed and local authority-permitted facilities.

#### *Methodology 1*

The construction, repair and maintenance industry was divided into the following categories:

- ❑ Residential (new private and public housing).
- ❑ Private non-residential (private and semi-state industry, commercial, agricultural, tourism and worship).
- ❑ Productive infrastructure (water and sanitary services, airports, ports, harbours, energy and telecommunications).
- ❑ Social infrastructure (education, health, public buildings, local authority services and the Gaeltacht).

Information on the value of output in 2001 for each category was applied to unit waste generation factors taken from the USA (Franklin Associates, 1998) to estimate the quantity of waste arising from each activity. The methodology used to estimate the amount of building-related C&D debris produced nationally combined:

- ❑ National Census data on construction industry activities.
- ❑ Point source assessment (PSA) data i.e. sampling and weighing at a variety of construction and demolition sites.

It is important to establish the origins of the unit waste factors based on US construction and demolition activities to outline the methodology used.

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*USA waste generation factors (Franklin Associates, 1998)*

This methodology<sup>3</sup> was development from previous research (USA Public Health Service, 1969; Wilson, 1975; Franklin Associates, 1994), which attempted to quantify C&D W production in the US. The waste stream was divided into the following categories:

- New residential.
- Residential demolition.
- Residential renovation.
- Non-residential build.
- Non-residential demolition.
- Non-residential renovation.

The US National Census data required varied according to the category e.g. to estimate the new residential construction the following was required:

- Value of new residential construction output.
- Total square feet of new residential construction.
- Average cost of new residential construction.

To estimate residential demolition, the following data was required:

- The number of residential demolitions per year.
- The average size of residential units demolished.

Empirical data for new residential construction was identified from five sources (Table 4.1):

1. The National Association of Homebuilders (NAHB) Research Centre assessed four single-family residential units and a 36-unit condominium project.
2. The Metropolitan Service District in Portland, Oregon (METRO) conducted a series of sampling projects at a large number of residential construction sites in the period 1990 to 1998.
3. Wake County, North Carolina and the North Carolina Division of Pollution Prevention and Environmental Assistance conducted five residential waste assessments.

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<sup>3</sup> The original units of measurement i.e. lbs/ft<sup>2</sup> and tons are used to explain the methodologies used.



**Table 4.1 Estimated generation of US residential construction debris in 1996  
(Franklin Associates, 1998)**

Date	Research Group	No. of Units	Building size (sq. ft.)	Total waste (lbs)	Generation rate (lb/sq. ft.)	Average generation (lb/sq. ft.)
1992	NAHB	1 Single-family	3 000	13 684	4.56	
1994	NAHB	1 Single-family	2 600	12 182	4.69	
1994	NAHB	1 Single-family	2 200	10 210	4.64	
1995	NAHB	1 Single-family	2 450	9 436	3.85	
		<b>Totals</b>	<b>10 250</b>	<b>45 512</b>		<b>4.44</b>
1993	METRO	1 Single-family	2 800	13 800	4.93	
1994	METRO	1 Single-family	1 290	8 600	6.67	
1994	METRO	1 Single-family	1 290	10 600	8.22	
		<b>Totals</b>	<b>5 380</b>	<b>33 000</b>		<b>6.13</b>
<1994	METRO	37 sites average	<b>76 960</b>	<b>285 640</b>	3.71	<b>3.71</b>
1996/97	Woodbin	1 Single-family	3 250	19 382	5.96	
1996/97	Woodbin	1 Single-family	3 250	36 722	11.30	
1996/97	Woodbin	1 Single-family	3 250	25 296	7.78	
1996/97	Woodbin	1 Single-family	3 250	28 805	8.86	
1996/97	Woodbin	1 Single-family	3 250	23 122	7.11	
		<b>Totals</b>	<b>16 250</b>	<b>133 327</b>		<b>8.20</b>
1993	McHenry	1 Single-family	<b>2 000</b>	<b>14 880</b>	7.44	<b>7.44</b>
1993	Cornell	1 Single-family	<b>1 890</b>	<b>4 556</b>	2.41	<b>2.41</b>
1996	NAHB	36-unit condominium	50 400	204 000	4.05	
1993	County	6-unit apartment	9 000	33 580	3.73	
		<b>Totals</b>	<b>59 400</b>	<b>237 580</b>		<b>4.00</b>
<b>Total</b>		<b>57 projects</b>	<b>172 130</b>	<b>754 495</b>		
<b>Total waste (lbs) / Building size (sq. ft.) = 754 494/172 130 =</b>						<b>4.38</b>

4. McHenry, Illinois conducted audits at a single-family unit and a 6-unit apartment building.
5. Cornell University conducted a waste audit at a single-family unit in New York

Empirical data for non-residential construction (Table 4.2) was identified from five projects including:

- A retail store.
- A restaurant.
- An institutional building.
- Two office buildings.

**Table 4.2 Estimated generation of US non-residential construction debris in 1996 (Franklin Associates, 1998)**

Date	Research Group	Project Description	Building Size (sq. ft.)	Total Waste (lbs)	Generation Rate (lb/sq. ft.)
1995	Turner Construction	Retail Store	37 000	148 000	4.00
1995	METRO	County Justice Centre	41 850	176 000	4.21
1992	METRO	Restaurant	5 000	10 940	2.19
1994	METRO	Two office buildings	7 452	12 000	1.61
1997	Sellen Const.	Office building	297 115	1 163 560	3.92
	<b>Totals</b>	<b>6 projects</b>	<b>388 417</b>	<b>1 510 500</b>	
<b>Total waste (lbs) / Building size (sq. ft.) = 1 510 500/388 417 =</b>					<b>3.89</b>

Empirical data for residential demolition debris (Table 4.3) was identified from four projects including:

- Three single-family (SF) units.
- One 4-unit multi-family (MF) unit.

**Table 4.3 Estimated generation of US residential demolition debris in 1996 (Franklin Associates, 1998)**

Date	Research Group	Project Description	Building Size (sq.ft.)	Total Waste (lbs)	Generation Rate (lb/sq. ft.)
1992	METRO	SF Demolition	1 280	66 000	51.56
1994	METRO	SF Demolition	1 200	63 000	52.50
1994	METRO	SF Demolition	750	31 000	41.33
		<b>Sub total</b>	<b>3 230</b>	<b>160 000</b>	<b>49.54</b>
		Adjustment for concrete		197 000	
		<b>Sub total</b>	<b>3 230</b>	<b>357 000</b>	<b>110.53</b>
1997	NAHB	4-unit MF Deconstruction	2 000	254 400	127.00
	<b>Totals</b>	<b>4 projects</b>	<b>5 230</b>	<b>611 400</b>	
<b>Total waste (lbs) / Building size (sq. ft.) = 611 400/5 230 =</b>					<b>116.90</b>

Empirical data for non-residential demolition debris (Table 4.4) was identified from seven surveys including:

- A prison shop.
- A warehouse.
- A department store.
- An institutional building.
- An office building.
- A cold storage building.
- Seventeen industrial buildings.

**Table 4.4 Estimated generation of US non-residential demolition debris in 1996 (Franklin Associates, 1998)**

Date	Research Group	Project Description	Building Size (sq. ft.)	Total Waste (tons)	Generation Rate (lb/sq. ft.)
1991	NAHB	Prison shop	12 000	1 301	216.83
1994-1995	METRO	Warehouse	86 400	1 566	36.25
1992	METRO	Department store	44 000	3 639	165.41
1994	METRO	Institutional building	60 000	5 454	181.80
1997	Argonne	Office building	5 700	289	101.40
1997	W. County	Cold storage building	73 600	13 163	357.69
1995-1996	R. Rhine	17 Industrial buildings	2 204 000	167 200	151.72
	<b>Totals</b>	<b>23 projects</b>	<b>2 485 700</b>	<b>192 612</b>	
<b>Total waste (tons) / Building size (sq. ft.) = 192 612/2 485 700 =</b>					<b>154.98</b>

Franklin Associates (1998) provided an average generation rate of 15.56 lb/ft<sup>2</sup> (based on five assessments) for residential renovation and 17.67 lb/ft<sup>2</sup> (based on three assessments) for non-residential renovation. It was concluded that these unit waste factors were not useful for estimating total generation due to the variability of the projects.

The figure for residential renovation was calculated instead by reviewing the number of major home improvements e.g. kitchen additions, bathroom remodelling, roof replacement, and estimating the amount of material produced by each type of improvement. This data produced an estimate for total residential renovation generation, from the improvement or replacement projects listed above to be 31.9 million tons per year. A comparison of total dollars spent on non-residential and residential renovation was carried out and based on the assumption that the amount of waste generated is proportional to dollars spent in these two sectors, produced an estimate of 28.04 million tons per year for non-residential renovation.

In each category, data was collated from different sources providing the total waste (lbs) and the total floor area (ft<sup>2</sup>) for each project. The total figures were produced by combining one-off projects and averages from a number of sites i.e. in new residential



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construction, there was an average figure for 37 sites. It was assumed from these data that each project was audited from commencement to completion as there was no mention of project phase in the report (Franklin, 1998). In each category the total waste produced on the audited projects was divided by the total completed floor area (Table 4.1 – 4.4) producing a unit waste factor (lbs/ft<sup>2</sup>).

This data was utilised in the *National Waste Database Report 2001* (EPA, 2003) by converting the waste factor in lbs/ft<sup>2</sup> used in the USA directly to kg/m<sup>2</sup> to be used in an Irish context<sup>4</sup> (Table 4.5). The following categories were converted:

- The US *residential construction* unit waste factor was used in the Irish *residential construction* category.
- The US *non residential construction* unit waste factor was used in the Irish *new private non residential construction, new productive infrastructure and new social infrastructure* categories.
- The unit waste factors from the US *residential demolition* and *residential renovation* categories were combined to provide the unit waste factor for the Irish *residential repair and maintenance* category.
- The unit waste factors from the US *non residential demolition* and *non residential renovation* categories were combined to provide the unit waste factor for the Irish *non residential repair and maintenance* category.

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<sup>4</sup> The average US waste factors in lbs/ft<sup>2</sup> were converted directly into kg/m<sup>2</sup> for use in the *National Waste Database Report 2001* (EPA, 2003). The primary data of US floor areas in ft<sup>2</sup> and waste production in lbs was not converted.

**Table 4.5 Conversion of US EPA unit waste factors by category (EPA, 2003)**

<b>U.S. C&amp;D W Category (Franklin Associates, 1998)</b>	<b>Waste Factors (lbs/ft<sup>2</sup>)</b>	<b>Irish C&amp;D W Category (EPA, 2001)</b>	<b>Waste Factors (kg/m<sup>2</sup>)</b>
Residential Construction	4.38	Residential construction	21.34
Non-Residential Construction	3.89	New private non residential construction	19.00
		New productive infrastructure	19.00
		New social infrastructure	19.00
Residential Demolition	*115.00	Residential repair & maintenance	322.00
Non-Residential Demolition	155.00	Private non residential repair & maintenance	422.00
Residential Renovation	**15.56	Productive infrastructure repair & maintenance	422.00
Non-Residential Renovation	**17.67	Social infrastructure repair & maintenance	422.00

\* There were slight inaccuracies in the conversion as the US residential demolition factor should be 117 lbs/ft<sup>2</sup>.

\*\*These factors were used even though they were recognised as unreliable in the US report (Franklin Associates, 1998).

### *Methodology 2*

This methodology produced an estimate based on records of C&D W accepted for recovery and disposal at EPA-licensed and local authority-permitted facilities considering the following assumptions:

- Soil and C&D W accepted at local authority permitted sites were recovered.
- A deposit of 500 000 tonnes of soil at in one local authority area (as reported by that local authority) was classified as disposal.

This model was also used to estimate general waste from excavation, road building and land clearing works by examining the acceptance of soil at local authority authorised sites in 2001.

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Demolition waste was quantified by distributing questionnaires (Appendix E) to eleven members of the Demolition Contractors Association of Ireland. Four responses were received. It was assumed that the relative market share of the companies correlated with the quantity of demolition waste generated. From this, a scale-up for the remaining companies was carried out based on their relative market share as compared to the largest reporting company.

### *Results*

The *National Waste Database Report 2001* (EPA, 2003) estimated that 3 651 412 tonnes of C&D W was produced in 2001. This represented 4.9% of the total waste produced and 21 per cent of all non-agricultural waste produced. It marked a 35 per cent increase in the production of C&D W from 1998.

The figure of 3 651 412 tonnes used a combination of methodologies with the addition of three categories:

- Total new construction, repair and maintenance waste (2 051 950 tonnes) (Table 4.6).
- General excavations waste (1 396 516 tonnes) (Table 4.7)
  - In this case the estimates for C&D W accepted at local authority permitted facilities (661 317 tonnes) and cover material accepted at EPA-licensed landfills were excluded to avoid double-counting of wastes that may have been included in the estimate for the *new construction, repair and maintenance* category.
- Demolition Waste (202 946 tonnes) (Table 4.8).

**Table 4.6 Total new construction, repair and maintenance waste generated in Ireland in 2001 (EPA, 2003)**

Category	Construction Output in Floor area (m <sup>2</sup> )	Unit Waste Arisings (kg/m <sup>2</sup> )	Waste Arisings (tonnes)
Residential construction	7 306 418	21.34	155 919
New private non-residential construction	3 610 557	19.00	68 601
New productive infrastructure	2 163 864	19.00	41 113
New social infrastructure	1 276 278	19.00	24 249
Residential repair and maintenance	3 458 670	322.00	1 113 692
Private non residential repair and maintenance	696 327	422.00	293 850
Productive infrastructure repair and maintenance	373 832	422.00	157 757
Social infrastructure repair and maintenance	466 277	422.00	196 769
<b>Total new construction, repair and maintenance waste</b>	<b>19 352 223</b>		<b>2 051 950</b>

**Table 4.7 General excavations waste production in Ireland in 2001 (EPA, 2003)**

Soil accepted at local authority permitted facilities and estimated to have been accepted at unauthorised sites	Construction and demolition waste accepted at local authority permitted facilities	Cover material accepted at EPA-licensed landfills
1 396 516 tonnes	661 317 tonnes	459 692 tonnes



**Table 4.8 Demolition waste production in Ireland in 2001 (EPA, 2003)**

	<b>Demolition waste (tonnes)</b>	<b>Re-used on site (tonnes)</b>	<b>Recycled off-site (tonnes)</b>	<b>Disposed of to landfill (tonnes)</b>	<b>Recovered at landfill (tonnes)</b>
<b>Reported Quantity</b>	77 038	8 264	8 408	13 750	46 616
<b>Projected Quantity</b>	125 908	13 506	13 742	22 472	76 187
<b>Total</b>	<b>202 946</b>	<b>21 770</b>	<b>22 150</b>	<b>36 222</b>	<b>122 803</b>

A second estimate based specifically on methodology 2 gave a figure of 3 615 163 tonnes produced in 2001 with 2 364 163 tonnes (65.4 per cent) recovered and 1 250 297 tonnes (34.6 per cent) disposed (Table 4.9)

**Table 4.9 Recovery and disposal of C&D W in Ireland in 2001 (EPA, 2003)**

<b>Category of C&amp;D W</b>	<b>Disposal (tonnes)</b>	<b>Recovery (tonnes)</b>
Cover material accepted at EPA-licensed landfills		459 692
C&D W accepted for recovery at EPA-licensed landfills		347 341
C&D W accepted for disposal at EPA-licensed landfills	750 297	
C&D W accepted at local authority-permitted facilities		661 317
Soil accepted at local authority-permitted facilities		896 516
Soil estimated to have been accepted at unauthorised sites	500 000	
<b>Total</b>	<b>1 250 297</b>	<b>2 364 866</b>
<b>Total recovery and disposal</b>	<b>3 615 163 tonnes</b>	
<b>Recovery rate</b>	<b>65.4%</b>	
<b>Disposal rate</b>	<b>34.6%</b>	

The two adopted methodologies produced estimates of 3 651 412 and 3 615 163 tonnes respectively, demonstrating no significant difference but limitations did apply.

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### *Limitations*

A number of limitations were identified as follows:

- The unit waste generation factors used in methodology 1 were derived in the USA and the report identifies that their applicability to Ireland needs to be tested through waste characterisation studies on Irish construction sites. For example, the US EPA waste factors developed for residential construction were based on timber-frame construction.
  
- The estimate for total new construction, repair and maintenance waste (Table 4.1) does not include an estimate for DIY waste or waste that is re-used or buried on construction or demolition sites.
  
- A significant amount of the total for repair and maintenance waste could be more correctly classified as demolition waste if reliable data was available.
  
- The estimate for demolition waste (Table 4.8) was based on four responses to a questionnaire survey.
  
- There were no unit waste factors generated from Irish construction sites.

#### 4.2.4 National waste report 2004 (EPA, 2005a)

##### *Methodology*

The C&D W estimate for 2004 was based on information provided by the local authorities, based on reports from waste collection permit holders. The EPA carried out six audits of the data, as compiled by the local authorities. The top six local authorities in terms of collected C&D W reported were audited by visiting each one and checking the annual environmental report (AER) returns from waste permit and collection permit holders. In total the audits covered 42 per cent of the total C&D W reported to be collected. It was found that the information management systems used by the local authorities were, though varied, mostly satisfactory.

##### *Results*

The total quantity of C&D W collected in 2004, as reported by local authorities was estimated at 11 167 599 tonnes (Table 4.10) or 13.1 per cent of all waste produced in Ireland. The provisional recovery rate was 85.2 per cent (9 513 962 tonnes) with 13 262 tonnes sent for disposal. The resulting discrepancy of 1 640 375 tonnes highlighted the need for further auditing. Soil and stones accounted for 76 per cent (8 491 994 tonnes) of C&D W collected and managed with other fractions (rubble/concrete, stone and brick, wood, plastic, glass and metals) accounting for 24 per cent (2 675 605 tonnes).

**Table 4.10 Collection and management of C&D W in Ireland for 2004 (EPA, 2005a)**

<b>Collection (tonnes)</b>		<b>11 167 599</b>
<b>Management (tonnes)</b>	<b>Recovery</b>	<b>Disposal</b>
Recovery at EPA licensed landfills (cover landscaping and engineering purposes)	1 839 990	
Recovery at local authority-permitted sites	7 673 972	
Disposal at EPA licensed landfills		13 262
<b>Total</b>	<b>9 513 962</b>	<b>13 262</b>
<b>Recovery rate (provisional)</b>		<b>85.2%</b>

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The increased quantities reported (in comparison with the 2001 estimates) may be a result of the ongoing improvements in compliance and reporting under the *Waste Management (Collection Permit) Regulations* (DoEHLG, 2001a), which came into effect in November 2001.

### *Limitations*

The limitations of the 2004 report were:

- There was a significant lack of data received by the local authorities from the permitted facility operators.
- Many of the local authorities used collector figures for the tonnages recovered when they should have been using facility permit data.
- A percentage of the compiled collection permit data was on a paper-based system, making it difficult to audit and more likely that errors would occur.
- Some local authorities used the maximum permitted amount specified in collection permits and facility permits in their compilations, as no reports were available from the operators.
- The methodology used gives a broad indication of waste accepted at permitted facilities, which is not a reliable dataset.
- Local authorities carried out limited verification checks on the data reported by authorised collectors.
- There were no unit waste factors generated from Irish construction projects.

The report did outline some recommendations to address these limitations as follows:

- Local authorities should utilise collection permit reports both as an enforcement and statistical tool to accurately monitor and track the movement of C&D W.
- The C&D industry should maintain accurate records so that progress towards the national targets can be assessed.

In early 2006, the EPA carried out a study at permit holder level (O. Bolloch, email to author, June 14, 2006). Twenty-three permit holders were audited from within the previously audited local authority areas: 12 were collection permit holders; 9 were facility permit holders and 2 were both facility and collection permit holders.

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This represented 13 per cent of the total national tonnage reported to be collected and 19 per cent of the total reported to be recovered (EPA, 2005a).

In addition, a desk review of submitted annual environmental reports (AER's) from 13 local authorities (all were contacted but only 13 responded) was carried out. A number of discrepancies were discovered especially in the 'recovered' figure. This study further highlighted the uncertainty associated with local authority data and did not produce the revised figures the EPA had hoped for.

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## ***Conclusions***

The main aim of this chapter was to:

- ❑ Examine the national waste database reports produced by the EPA to chart the development of the methodologies used for generating C&D W national estimates.

The main conclusions are:

- ❑ There has been a clear attempt at improving the reporting procedures used to collect waste production data since the 1995 report (EPA, 1996). This is one of the reasons for the dramatic increase in the estimates produced e.g. from 1.52 million tonnes in 1995 to 11.2 million tonnes in 2004.
- ❑ The use of different methodologies by the EPA during this period has led to inconsistent waste production estimates.
- ❑ It can be assumed that the estimates for 1995, 1998 and 2001 underestimated the production of C&D W in Ireland.
- ❑ The limitations found in the 1995 report are repeated in the 2004 report. The data collected from the local authorities still does not provide a reliable dataset for C&D W production in Ireland.
- ❑ The use of the US EPA unit waste factors provided a novel methodology which attempted to utilise actual waste production measurements on construction projects to estimates national production. However, the accuracy of the US factors in an Irish context is questionable.
- ❑ There were no unit waste factors based on Irish construction projects available to generate C&D W production estimates.

The absence of Irish unit waste factors is a significant limitation in the production of national estimates. An audit methodology is required to generate unit waste factors for the Irish construction industry.

The next chapter will examine four site-based methodologies that have being used on construction and demolition projects in the U.K to assess their suitability for use on Irish construction projects.

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## **Chapter 5 Assessment of UK Construction and Demolition Waste Audit Tools**

### **5.1 Introduction**

This chapter will focus on work carried out by E.R. Skoyles and J.R. Skoyles; the Building Research Establishment (BRE) and the Construction Industry Research and Information Association (CIRIA) who developed different waste audit tools in the UK.

The main aim of this chapter is to:

- Examine the use of the UK audit tools to develop guidelines for the production of a new audit model for use on Irish construction projects within the scope of this study.

### **5.2 C&D W Audit Methodologies used in the UK**

A waste audit can be defined as:

*“A tool for measuring the composition and quantity of wastes arising from construction activities.”*

(Patterson, 1999)

The development of an audit methodology for use on Irish projects required an investigation into similar formats that have already been tested in a comparative industry. Three systems were developed in the U.K:

- Waste accounting system developed by Skoyles (1978).
- SMARTWaste system developed by the BRE (undated).
- Skip volume analysis form developed by CIRIA (Coventry *et al.*, 2001).

Each of these systems was examined in detail outlining the methodology, any results and the limitations.

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### 5.2.1 Waste accounting system (Skoyles, 1978)

#### *Methodology*

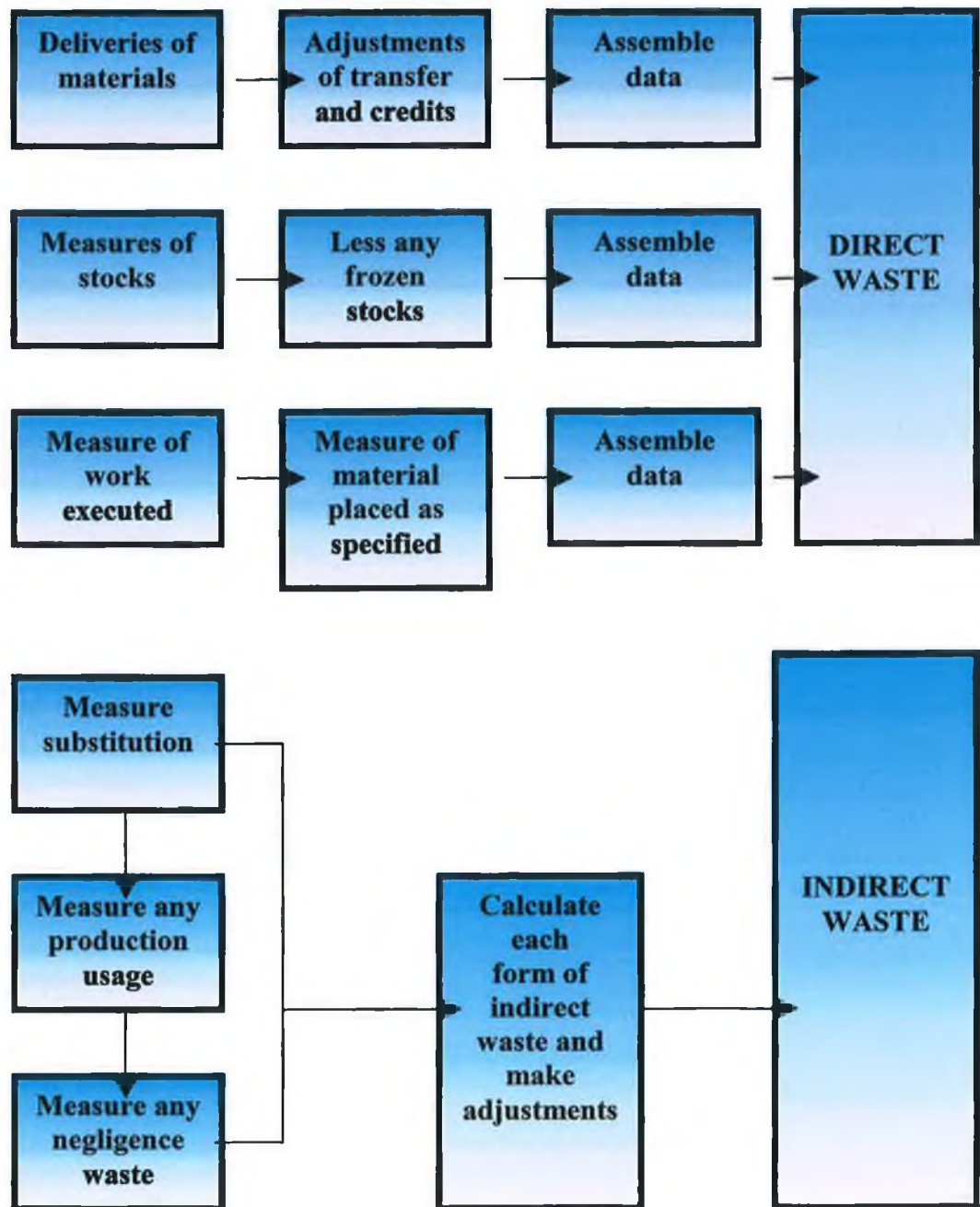
E.R. Skoyles' study of waste production on site was carried out over a 20-year period from 1963 to 1983 on approximately 280 sites. During this period (1978), he developed a system of waste accounting that required three inputs of data, which are to be found when using all conventional forms of building contract. The three types of data required are:

- A statement of the total delivery of materials to site at a given point in the progress of work, less any materials transferred or credited.
- A statement of the stock of the material, which is held on the site (or elsewhere for the site if it has been recorded in the deliveries), together with any adjustments for materials stored on site pending their use later in the contract.
- A measure of the work completed giving the materials, which have been placed in position, suitably adjusted for any materials classified as indirect waste.

The process (Figure 5.1) involved the site observer monitoring wastes for the full duration of some projects, and at particular times on other sites to monitor specific materials or operations (Skoyles and Skoyles, 1987). During the course of the studies a number of key observations were made:

- The statement of the total delivery of materials to site must provide a complete listing of all items delivered categorised by quantity, size, specification, return of unspecified or damaged materials and transfer of materials to other sites.
- It is essential that the statement of the stock included quantities accurate to approximately 1% of the likely error. One of the difficulties in this assessment was the definition of stock and measured work. Generally the materials at the workplace not being used (operations not in progress) were regarded as stock. Materials at the workplace that were being used were considered as measured work.
- The introduction of the term 'frozen stock' was used to classify materials that were bought early in the work but not used for some time.
- The guiding rule for the measurement of work in progress was that if there was no possibility of substitution on the site and there was an absence of a 'pick-up policy', all dropped materials, which were damaged, were regarded as waste.





**Figure 5.1 Procedures for measuring direct waste (Skoyles, 1978)**

The use of the paper-based system developed by Skoyles (1978) (Figure 5.2) provided a comprehensive examination of waste production on site but required an auditor to be present for the full duration of the construction process.

**DIRECT WASTE CALCULATION RECORD**

**SITE:** \_\_\_\_\_ **DATE:** \_\_\_\_\_

**MATERIAL:** \_\_\_\_\_ **RECONCILIATION NO:** \_\_\_\_\_

		<b>No./m<sup>2</sup>/m<sup>3</sup></b>	
<b>A</b>	<b>Total delivered</b>	_____	_____
<b>B</b>	<b>Total transferred (from site)</b>	_____	_____
<b>C</b>	<b>Total available</b>	_____	_____
<b>D</b>	<b>Total measured (as specified)</b>	_____	_____
<b>E</b>	<b>Allowances for Indirect Waste</b>		
		<b>%</b>	<b>No/m<sup>2</sup> No/m<sup>2</sup>/m<sup>3</sup></b>
<b>i.</b>	<b>Substitution</b>	_____	_____
<b>ii.</b>	<b>Negligence Waste</b>	_____	_____
<b>iii.</b>	<b>Production usage</b>	_____	_____
	<b>Adjustment of Indirect waste</b>	_____	_____
<b>F</b>	<b>Total in stock on site</b>	_____	⎓
<b>i.</b>	less frozen stock (if any)	_____	_____
<b>ii.</b>	stock available for use		
<b>G</b>	<b>Materials accountable for on site</b>		⎓
<b>H</b>	_____ % Waste (H) = C - G as % of C		

**Figure 5.2 Direct waste calculation record (Skoyles, 1978)**

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### *Testing*

The direct waste calculation record was developed from initial studies that focused on residential developments but later expanded to examining projects of varying types and sizes. Bricks, blocks, timber and plumbing materials were identified as the materials that produced the most consistent waste volumes and subsequent financial losses. The studies established that the production of C&D W was primarily a direct consequence of poor site management systems accounting for approximately 10 per cent of all material delivered to site in a typical year (1985) (Skoyles and Skoyles, 1987).

### *Limitations*

Some of the limitations of this methodology were:

- ❑ A full time auditor was required on site with access to all material documentation.
- ❑ It was difficult to calculate what percentage of the total volume of wasted materials was attributed to a particular cause.
- ❑ It consisted of a number of different records, which led to errors in calculations and excessive paper work.
- ❑ One of the difficulties in the assessment was the definition of stock and measured work.
- ❑ The methodology focused on the comparison of materials delivered (less stock) and measured work rather than a skip analysis. This measured C&D W (including excavated materials) as part of a materials management system.

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### 5.2.2 Building research establishment (BRE) SMARTWaste system

The SMARTWaste system was developed by the BRE in the UK denoting 'Site Methodology to Audit, Reduce and Target Waste'. The system provided a step-by-step evaluation of waste generation on a specific project or over a range of projects. It consists of four core tools (BRE, 2005a, b):

1. SMARTAudit is a detailed software tool that enables the user to benchmark and accurately categorise waste by source, type, amount, cause and cost. It provides the facility to analyse the data providing instant reports, setting targets, and creating action plans.
2. SMARTStart is a simple software tool that enables the user to define their environmental performance using indicators for waste generation on a site-by-site and/or organisational basis.
3. SMARTStart LG is specifically developed to provide data that could be used to maximise the reuse and recycling of C&D W leaving Local Government controlled contracts and entering landfill sites.
4. BREMAP is a geographical information system (GIS) that allows companies to reduce their transport output by locating the nearest and most suitable waste management site. It details recycled products, landfill sites, transfer stations, incinerators, recycling sites, reclamation companies, composting facilities and manufacturer take-back schemes in a consistent and accessible format freely available at [www.smartwaste.co.uk](http://www.smartwaste.co.uk)

SMARTAudit and SMARTStart are essentially skip analysis tools and were assessed and tested on a residential development in the Galway region to determine their applicability within the scope of this study (Grimes, 2005)<sup>5</sup>. The audit procedures are outlined and limitations discussed.

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<sup>5</sup> As part of the ERDTI project, David Grimes carried out point source assessments on four selected case studies in the Galway region as the basis of his M.Sc. (Research) in Construction Management.

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## *SMARTAudit methodology*

### *Testing*

The data was collected on site electronically with the use of a suitable pocket PC (Photograph 5.1) and the information was downloaded onto the web-based SMARTAudit database via the company homepage. Figures 5.3 to 5.13 illustrate general examples of the SMARTAudit interface.



**Photograph 5.1 Pocket PC**

The site observer monitored the skips/containers at least daily depending on the waste generation rate and the number of containers on site. It was estimated that the collection of waste data on site took three hours per day for a development of 80 houses (BRE, 2005a). The SMARTWaste system was downloaded to the pocket PC from the web-based database. This system was then be used on site requiring the following data:

- Location and container/skip number. The skips were numbered numerically i.e. 1, 2, 3 etc. and the location numbered alphabetically i.e. A, B, C etc.
- Product group and sub-group from the scroll down lists (Appendix F).



- ❑ Product dimension in terms of height, width, depth (in cm) and the number of units. Dimensions were estimated through visualisation of the waste product in compacted form to exclude air voids.
- ❑ Feedback code to identify which operation(s) was creating the waste from the scroll down list (Appendix G).
- ❑ Work packages selected from scroll down list (Appendix H).
- ❑ A save window would then pop up, and ok was tapped to save the data.

This whole process was repeated with every new item found in the skip.

This data was then transferred from the pocket PC to the web-based database. SMARTAudit was accessed through the SMARTWaste System, which was found at [www.smartwaste.co.uk](http://www.smartwaste.co.uk) (Figure 5.3).



**Figure 5.3 SMARTWaste system homepage**

The auditor had a company homepage (Figure 5.4), which required a username and password to access it. The homepage contained the following information:

- ❑ Company details including the address, telephone, fax number and website.
- ❑ User details listing the current users of the tool in the company.

- Project section listing all the projects the company has registered to use SMARTAudit.

Each of these sections could have been edited at any time to add or change company details, user details and project lists.

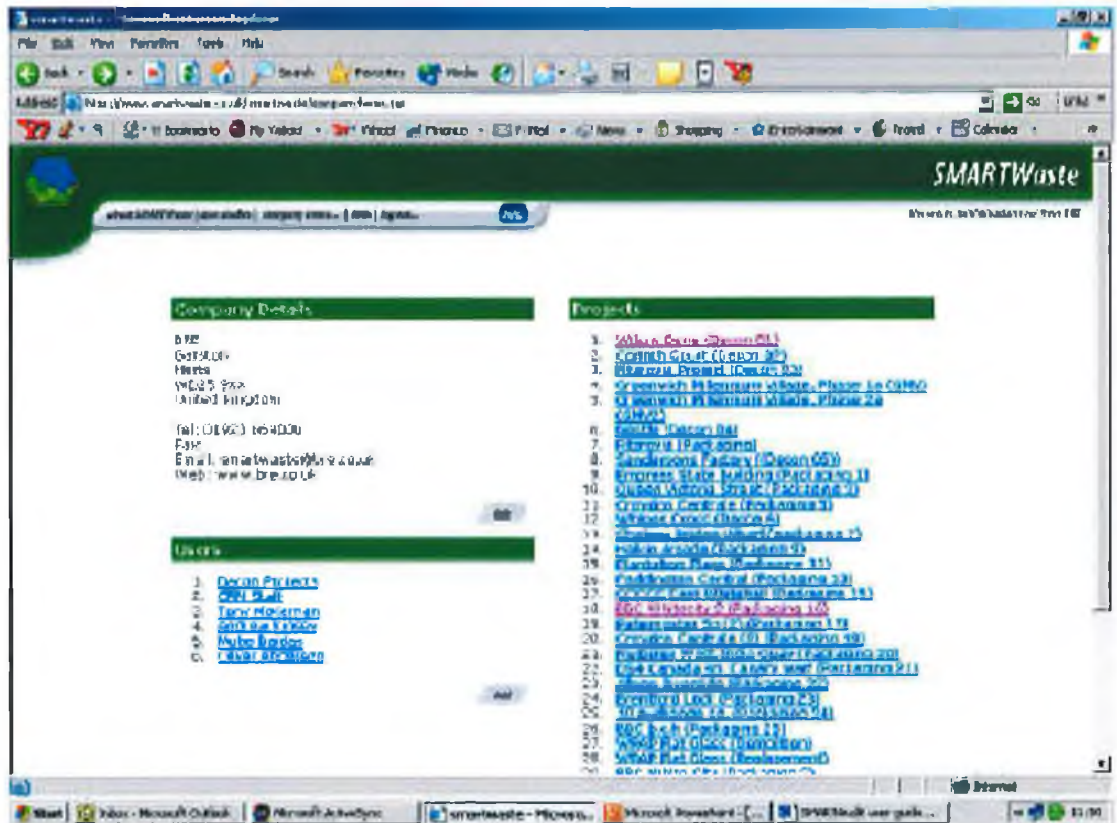


Figure 5.4 SMARTAudit company homepage

The SMARTAudit database required the following data for each project (Figure 5.5):

- Project reference.
- Project name.
- Project start and end dates.
- Project value.
- Floor area (m<sup>2</sup>).
- Location.
- Classification/construction type.
- Client type.
- Contractual agreement.

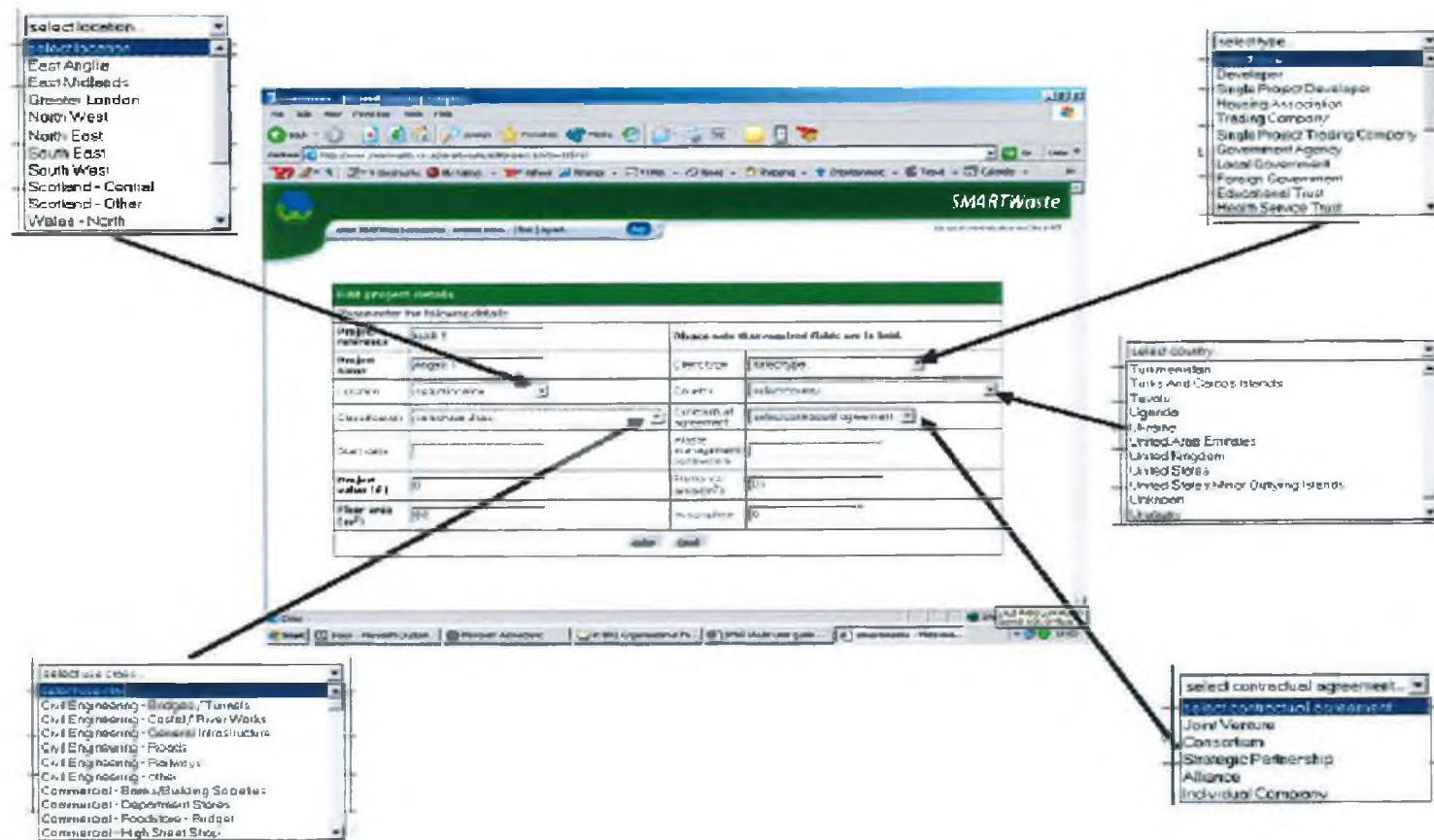
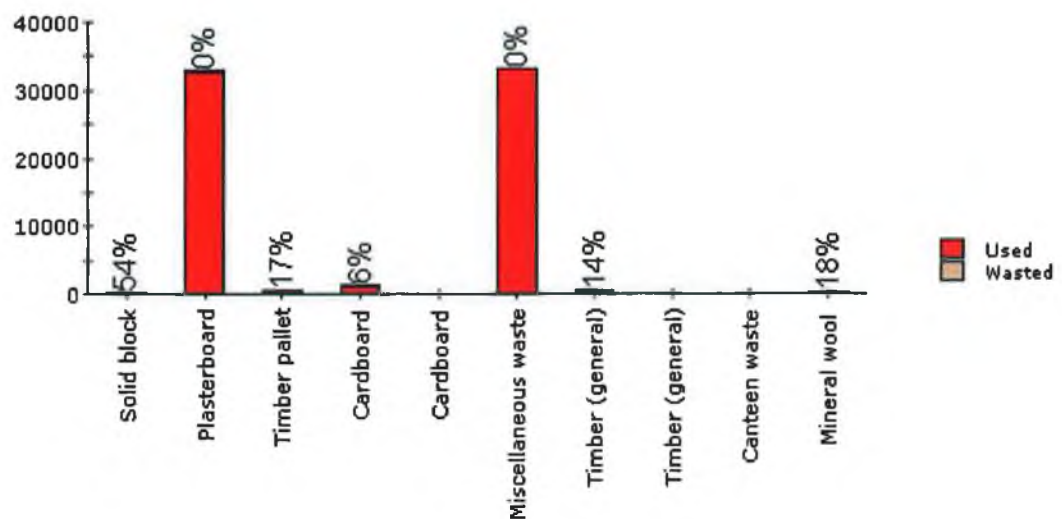


Figure 5.5 SMARTAudit project details



Once the data was transferred to the database, the following was produced:

- 'Waste to date by product group' graph outlining the composition and volume of the waste that had left the site to date broken down into ten key waste products.
- Project environmental performance indicators (EPI) were displayed along with the company EPI to benchmark the site's waste performance against the rest of the company.
- Reports on the following were all be produced by the click of a button:
  - Wastage rates (Figure 5.6).
  - Key waste products (Figure 5.7).
  - Causes (Figure 5.8).
  - Quantities (Figure 5.9).
  - Trends (Figure 5.10).
  - Waste skips/containers (Figure 5.11).
  - Actions plans (Figure 5.12).



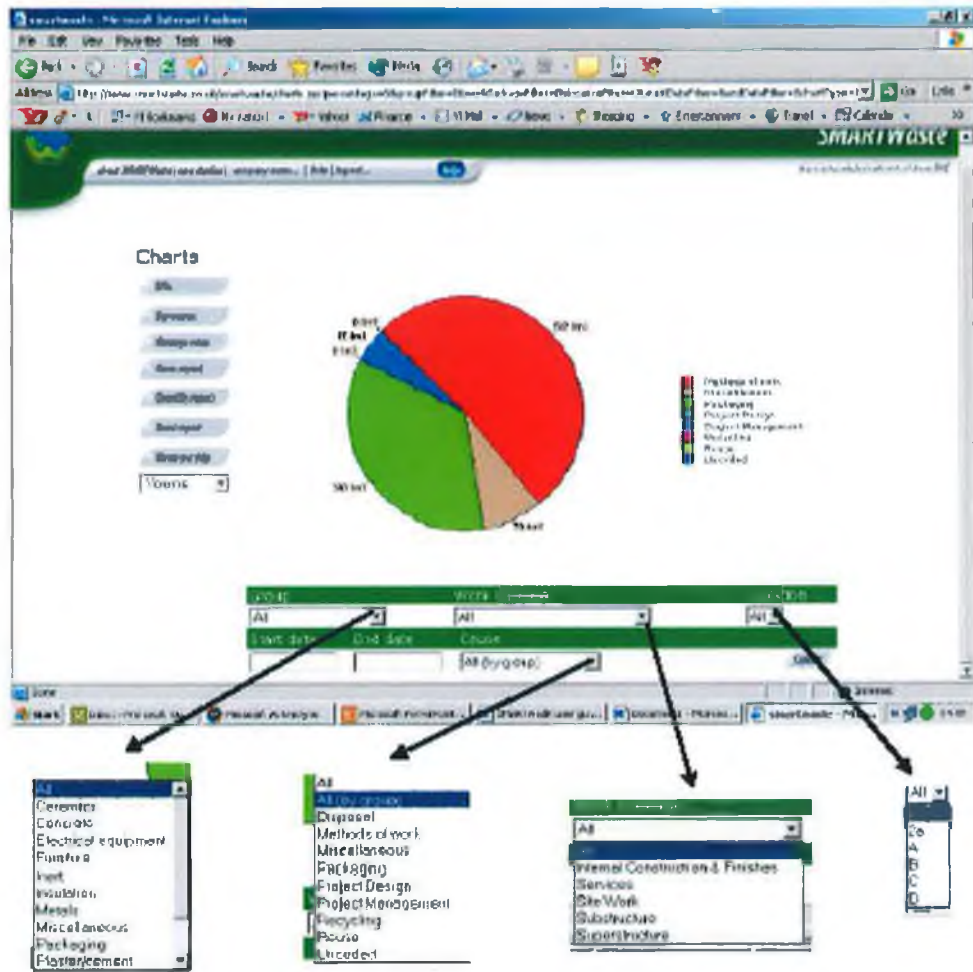
**Figure 5.6 SMARTAudit wastage rates graph**

The wastage rates section illustrated the 10 key waste products in graphical format.

Product	Quantity wasted	Amount delivered	Wastage rate	Cost	Delivered	Cost
Solid block	150.0 m <sup>3</sup>	280.0 m <sup>3</sup>	53.6%	£23.00		
Plasterboard	101.6 m <sup>3</sup>	32854.0 m <sup>3</sup>	0.3%	£28286.00		
Timber pallet	98.9 m <sup>3</sup>	567.0 m <sup>3</sup>	17.4%	£12.00		
Cardboard	75.4 m <sup>3</sup>	1275.0 m <sup>3</sup>	5.9%	£75.00		
Cardboard	75.4 m <sup>3</sup>	0.0 m <sup>3</sup>	0.0%	£0.00		
Miscellaneous waste	65.4 m <sup>3</sup>	33333.0 m <sup>3</sup>	0.2%	£0.00		
Timber (general)	62.1 m <sup>3</sup>	450.0 m <sup>3</sup>	13.8%	£0.00		
Timber (general)	62.1 m <sup>3</sup>	0.0 m <sup>3</sup>	0.0%	£0.00		
Canteen waste	58.1 m <sup>3</sup>	0.0 m <sup>3</sup>	0.0%	£0.00		
Mineral wool	57.8 m <sup>3</sup>	320.0 m <sup>3</sup>	18.1%	£0.00		

**Figure 5.7 SMARTAudit ‘key waste products’ table**

This report identified the 10 key waste products based on the collected data. By entering the amount delivered and the costs of the products delivered, it calculated how much of the delivered product was wasted and the cost to the company.



**Figure 5.8 SMARTAudit cause reports**

The cause report identified the causes of the waste produced in a pie chart format. The report was viewed in volumes or percentages and was filtered by waste group, work package, location, specific causes and work periods.

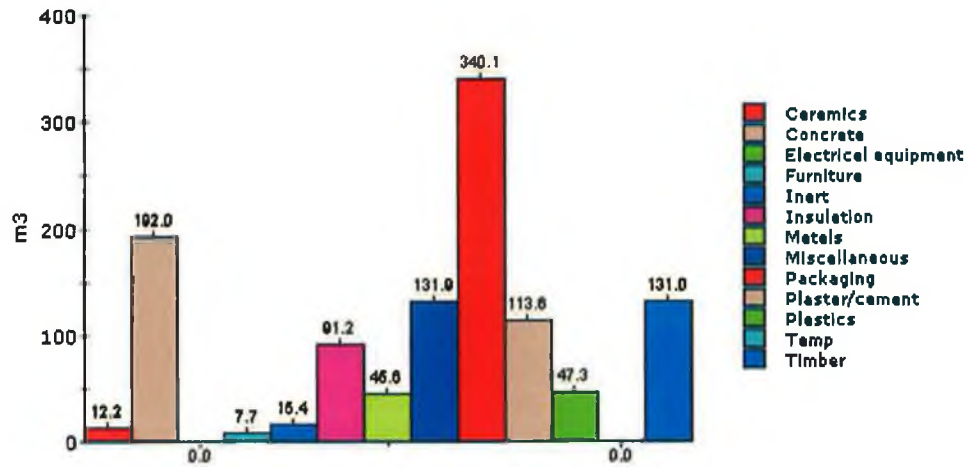


Figure 5.9 SMARTAudit quantities graph

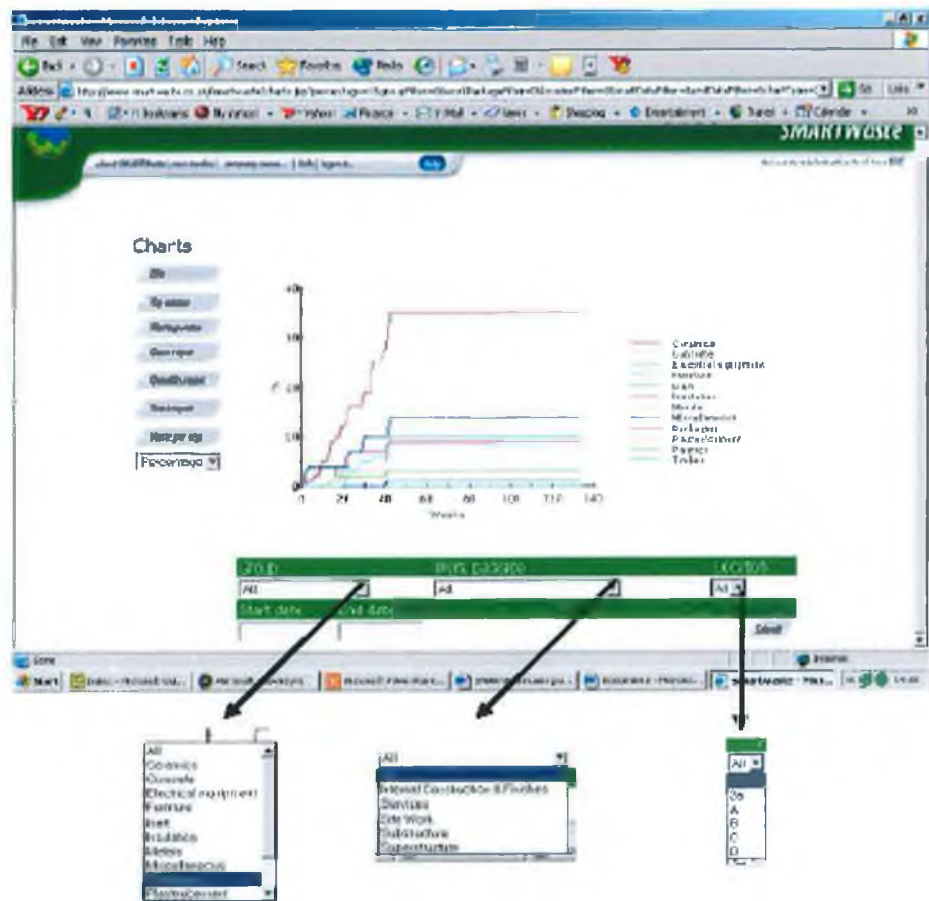
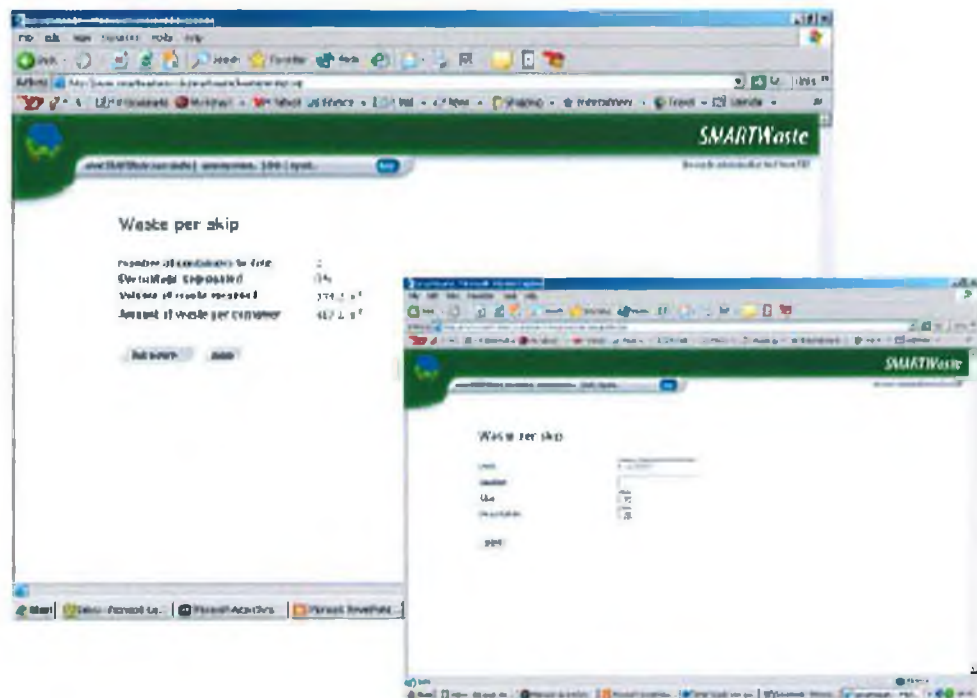


Figure 5.10 SMARTAudit trend report

The trend report produced the trends associated with the different product groups in accordance with the number of weeks of inputting data. Again this report was viewed in

percentages or volumes and filtered by waste group, work package, location and work period.



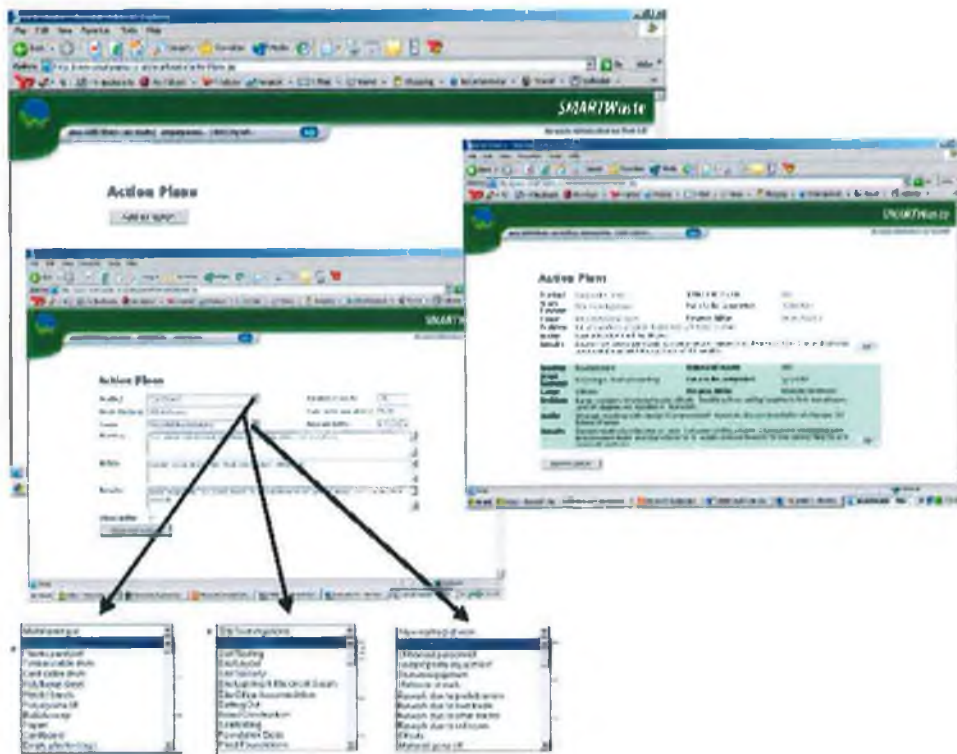
**Figure 5.11 SMARTAudit waste skip/container report**

The waste skip/container report included: the number of containers to date; percentage of segregated containers; volume of waste recorded and the amount of waste per skip.

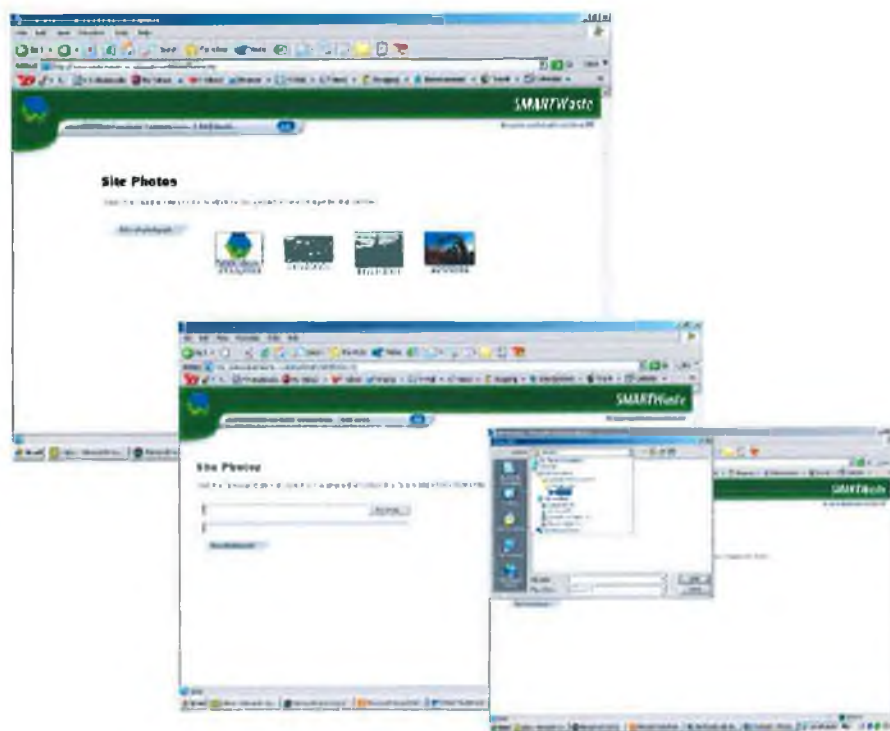
The action plans (Figure 5.12) allowed a log to be kept of the planned and achieved actions to improve waste management practices on site.

Another feature was that a digital camera was used to demonstrate good and bad practices on site. The photographs were integrated when generating reports (Figure 5.13).





**Figure 5.12 SMARTAudit action plans**



**Figure 5.13 Site photographs integrated into SMARTAudit**

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### *Limitations*

Grimes (2005) identified the following limitations:

- The use of SMARTAudit required an internet connection, which was not available at the site office. The collected data had to be transferred from the pocket PC onto the SMARTAudit database back in the office at the Centre for Natural Resources and the Built Environment in the Galway-Mayo Institute of Technology. This prolonged the audit time. It must also be noted that not all site offices will have an internet connection or a hand-held computer.
- The audit tool was designed to enter all waste quantities in centimetres with accurate length, width and height measurements. This was not feasible on the case study selected due to the lack of facilities to segregate and sort the waste on site and the health and safety concerns with handling mixed C&D W. Instead the waste fractions were visually assessed.
- When a mistake was made during the audit and data was not to be saved, the auditor had to go back to the original page where the process started again.
- The data collected was not saved unless the auditor had been through the whole process i.e. it was not possible to save data mid-process.
- The whole process had to be repeated with every new item found in the skip. This would require a full-time auditor in most cases depending on the project size and type.
- The methodology was a waste skip analysis tool, which did not measure any waste that did not go into a waste container on site.
- The software was expensive (Appendix J) and once registered, training was mandatory, which had an additional cost.

The BRE SMARTAudit system was used on the Greenwich Millennium Village project in the UK over a three-year period (2000 – 2003). The key theme of the development was the promotion of sustainable urban development and was completed in two main phases:

- Phase 1a consisted of two buildings of 100 apartments constructed of a concrete structural frame with lightweight dry lined timber studding and wet applied render cladding. The overall area was 10 226m<sup>2</sup>.
- Phase 2a consisted of a mixture of low and high-rise building forms. The 88 high-rise units are in situ concrete frame with rainscreen cladding. The 98 low-

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rise units are two to four storey timber framed buildings with rainscreen cladding and timber windows. The total floor area was 15 256m<sup>2</sup>.

The results for the study (Hobbs *et al.*, undated) were as follows:

- Phase 1a had a unit waste factor of 23.4m<sup>3</sup> of waste per unit excluding segregated waste. This equated to an average of 6 skips of 4.5m<sup>3</sup> capacity per building.
- Phase 2a had a unit waste factor of 20.5m<sup>3</sup> of waste per unit excluding segregated waste. This equated to an average of 5 skips of 4.5m<sup>3</sup> capacity per building.

The key waste products identified in both phases were packaging, plasterboard, insulation, timber and concrete.

#### *SMARTStart System*

##### *Methodology*

SMARTStart is a simplified version of SMARTAudit and can be applied across a number of sites, allowing easy evaluation of waste management practices. The data collected is based on waste transfer notes of containers leaving site. This records the date, reference, number of containers, container size and brief description of contents. SMARTStart also requires an estimate of key product groups within the container. The information is used to generate an environmental performance indicator (EPI) and key performance indicator (KPI) for waste on individual sites and on a company-wide basis.

##### *Testing*

The SMARTStart audit tool is part paper-based and part electronically based. The paper-based section (Figure 5.14) was based on a site assessment of waste. The auditor visually assessed the percentage of fourteen key product groups within the container (Table 5.1).



Date:	Container size:		
Reference No:	Has waste been compacted? (circle one):		
	Uncompacted	Slight compaction	Machine compactor
Container segregated for reuse, recycling or recovery (tick here)			

Enter percentage composition of wastes below:

Ceramics	<input type="text"/>	Concrete	<input type="text"/>
Electrical Equipment	<input type="text"/>	Furniture	<input type="text"/>
Inert	<input type="text"/>	Insulation	<input type="text"/>
Metals	<input type="text"/>	Miscellaneous	<input type="text"/>
Packaging	<input type="text"/>	Plaster/Cement	<input type="text"/>
Plastics	<input type="text"/>	Timber	<input type="text"/>
Liquids and Oils	<input type="text"/>	Hazardous Materials	<input type="text"/>

**Figure 5.14 SMARTStart paper-based data collection form**

Ceramics	Bricks, ceramic tiles, clay roof tiles, ceramic toilets and sinks
Electrical equipment	TVs, fridges, air conditioning units, lamps
Inert	Soils, clays, sand, gravel, natural stone
Metals	Radiators, metal formwork, acroSs, metal sinks, cables and wires, metal bar
Packaging	Paint pots, pallets, cardboard, bubble wrap, cable drums, wrapping bands
Plastic	Gutters & downpipes, DPC, upvc windows and doors, socket boxes
Concrete	Concrete pipes, kerb stones, paving slabs, concrete, rubble, solid blocks
Furniture	Tables, chairs, desks, sofas, blinds, carpets
Insulation	Glass fibre, mineral wool, purlboard, breather paper
Miscellaneous	Office and canteen waste, vegetation, ad-hoc materials
Plaster/cement	Plasterboard, render, plaster, cement, fibre cement sheets, mortar
Timber	Plywood, chipboard, noggins, battens, doors and windows, mdf
Liquids and Oils	Hydraulic oil, engine oil, lubricating oil, transmission oil, liquid fuel, cleaning agents, mould oil
Hazardous Materials	Creosoted timber, asbestos, radioactive waste, bituminous mixtures with coal tar, tarred products, PCB or Mercury coated products

**Table 5.1 SMARTStart waste categories**

The required information for each skip included the:

- Date.
- Container reference.
- Container size (Table 5.2).
- Degree of compaction.
- Container compaction (Table 5.3).

Container size
240 litre wheelle bin
760 litre wheelle bin
1 cu metre bag
1100 litre wheelle bin
3 cu metre skip (4 cu yd)
3000 litre tanker (3 cu metre)
4.6 cu metre skip (6 cu yd)
6.12 cu metre skip (8 cu yd)
9.17 cu metre skip (12 cu yd)
10 cu metre truck
10.7 cu metre compactor (14 cu yd)
11.5 cu metre skip (15 cu yd)
15 cu metre skip (20 cu yd)
23 cu metre skip (30 cu yd)
30.5 cu metre skip (40 cu yd)

**Table 5.2 SMARTStart container sizes**

Compaction	Definition
Normal	Uncompacted waste
Slightly compacted	Crushed with a forklift or heavy object
Machine compactor	Waste compacted with a dedicated compactor

**Table 5.3 SMARTStart definitions of different types of compaction**

- If the container had been segregated for reuse, recycling or recovery, the appropriate box was ticked.
- The percentage estimates of the fourteen key product groups were in 10 per cent increments, ensuring the total did not exceed 100 per cent. The total percentage was sometimes less than 100 per cent as partially full containers were removed from site.

The data was then logged into the SMARTStart electronic database ([www.smartwaste.co.uk](http://www.smartwaste.co.uk)). The internet-based information processing software generated:

- 
- Environmental performance indicators (EPI) of m<sup>3</sup> of waste per 100m<sup>2</sup> floor area.
  - Key performance indicators (KPI) of m<sup>3</sup> of waste per £100 000 worth of project (this was converted to €).

These indicators can be compared against BRE national averages to allow individual companies to benchmark their performance against the rest of the construction industry. It must be noted that there are currently no national indicator averages for Ireland.

The following procedures were then carried out:

- The auditor logged on to the SMARTWaste System Homepage and clicked on the 'SMARTStart' symbol (Figure 5.15).
- The auditor's username and password was entered to log on.
- This directed the auditor to the company's homepage with a 'summary information section' (Figure 5.16) for a particular project, which detailed the current waste information for the project including:
  - Total volume of waste generated to date.
  - The number of containers to date on all projects.
  - Percentage segregated (containers).
  - Percentage segregated (volume).
  - Company EPI (m<sup>3</sup>/100m<sup>2</sup>).
  - National average EPI (m<sup>3</sup>/100m<sup>2</sup>).
  - Company KPI (m<sup>3</sup>/£100 000 worth of project).

Figures 5.15 to 5.21 illustrate general examples of the SMARTStart interface.



Figure 5.15 SMARTWaste system homepage

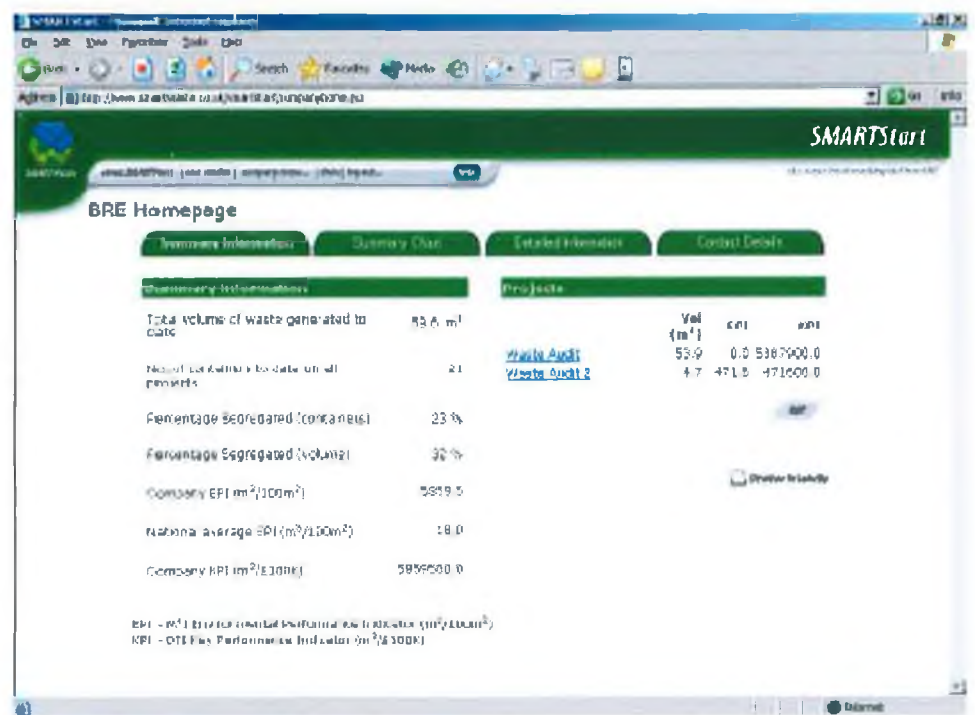
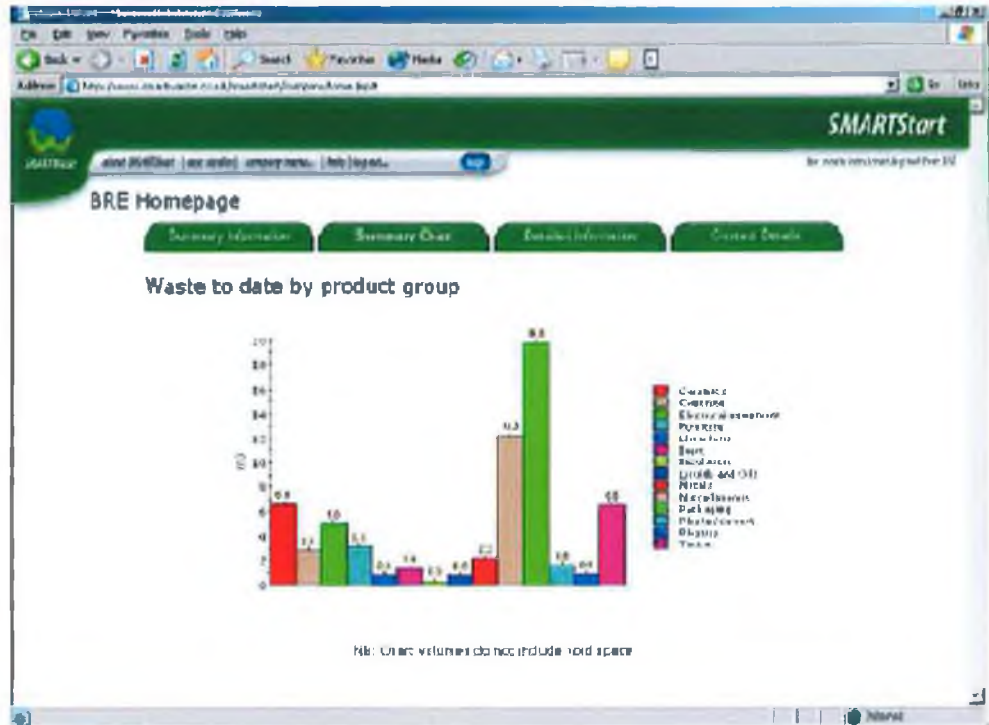


Figure 5.16 SMARTStart company homepage 'summary information' tab

- The project's homepage 'summary chart' produced a 'waste to date by product group' graph (Figure 5.17). This automatically updated as new information was submitted into the system. The chart showed the composition and amount (volume) that had left the site to date, categorised into the fourteen key product

groups. An important feature of this graph was that the quantities shown were not container space but material volume. The programme removed the void space inherent in the containers based on the compaction level entered<sup>6</sup>.



**Figure 5.17 SMARTStart ‘waste to date by product group’ graph**

- The ‘detailed information’ tab pages showed the overall performance of the project in detail (Figure 5.18), listing the:
  - Total waste (m<sup>3</sup>).
  - Tonnages (upper and lower ranges).
  - Percentage landfilled.
  - Percentage segregated on site.
  - EPI and KPI for the fourteen key product groups.

<sup>6</sup> The compaction level entered is based on the original visual assessment.

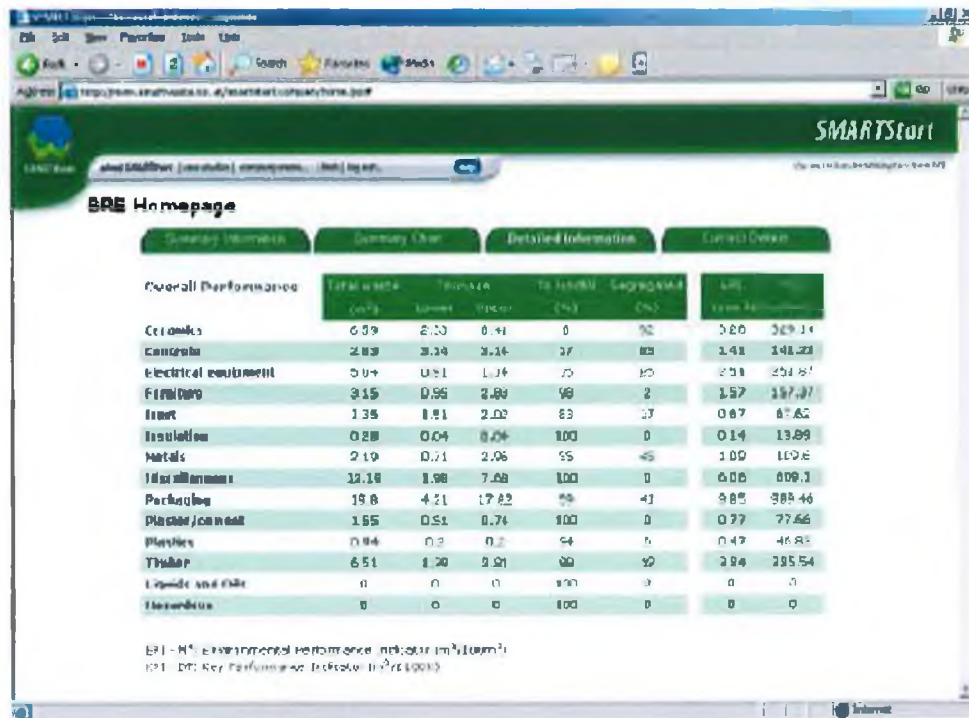


Figure 5.18 SMARTStart ‘detailed information’ tab

SMARTStart calculated the waste generated in volume ( $m^3$ ) and converted it to tonnes with using upper and lower conversion factors depending on material type.

The summary report (Figure 5.19) summarised the information for the project, by detailing:

- The total volume of waste generated to date.
- Number of containers that have left the site to date.
- Percentage segregated (containers).
- Percentage segregated (volume).
- Project EPI ( $m^3/100m^2$ ).
- Company EPI ( $m^3/100m^2$ ).
- National average EPI ( $m^3/100m^2$ ).
- Project KPI ( $m^3/£100\ 000$  worth of project).

The summary report was broken down and presented as a ‘waste to date by product group’ report (Figure 5.17) and a project ‘trend chart’ (Figure 5.20).



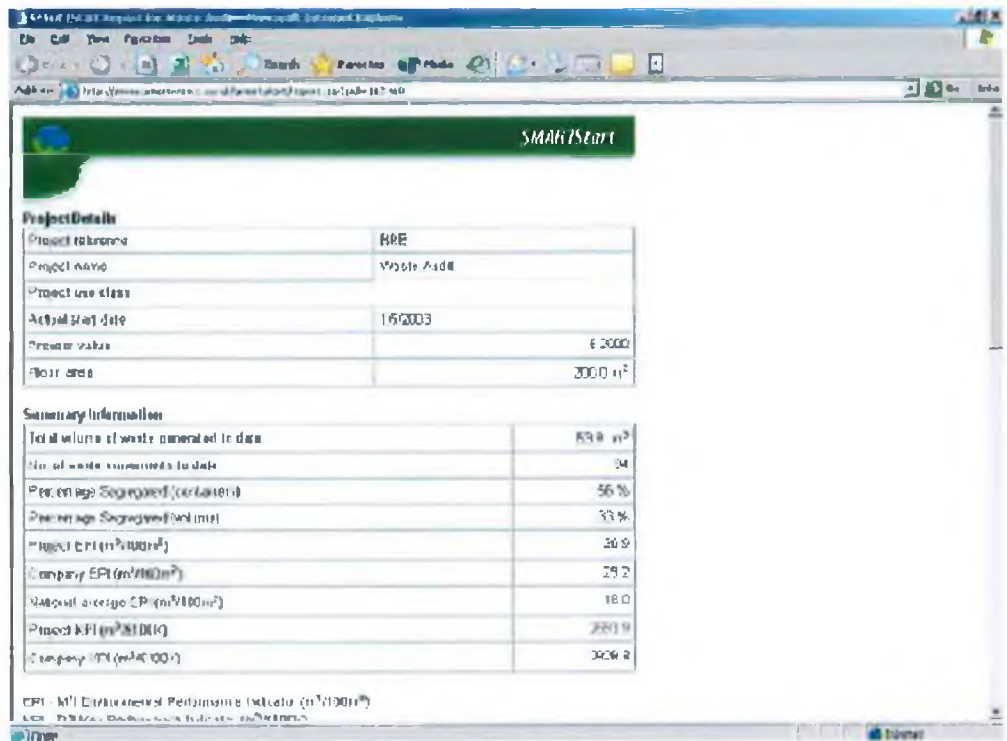


Figure 5.19 SMARTStart summary report

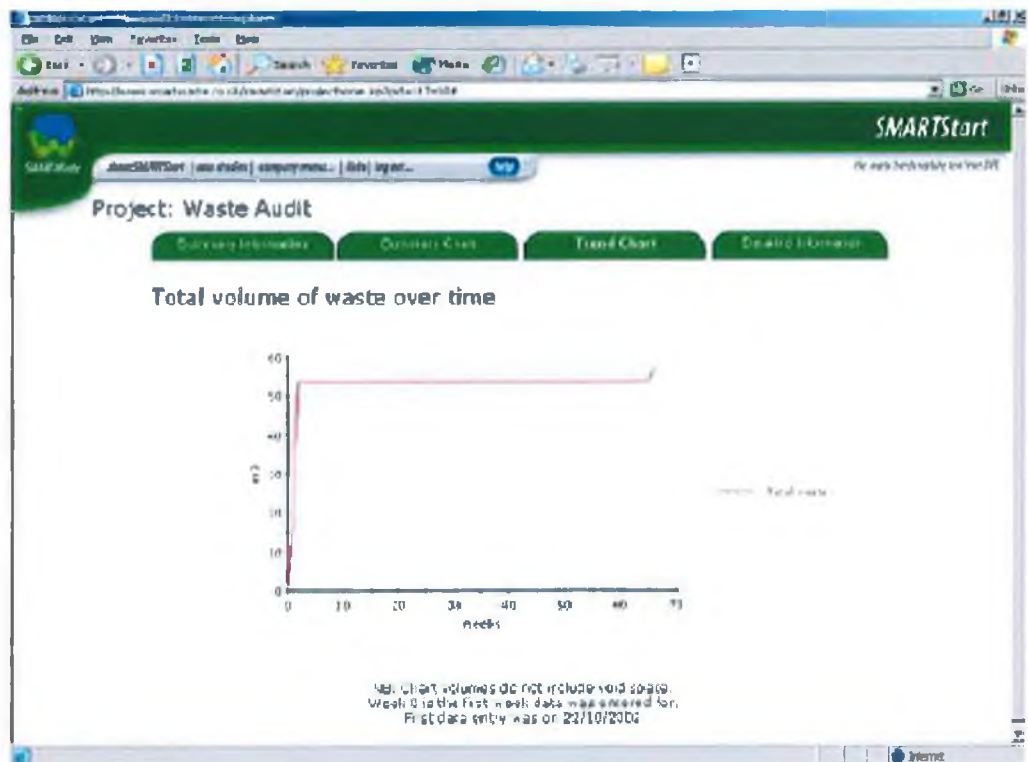


Figure 5.20 SMARTStart trend report

- The 'log' record (Figure 5.21) showed the following information for containers that had left the individual project site:
  - Date.
  - Reference Number.
  - Size of the container.
  - Number of containers.
  - Whether the material was segregated (green tick) or not (red cross). Any container holding 100 per cent of a key product group was displayed as segregated and indicated with a tick.
  - The key product groups present in the container.
  - The percentage of those key product groups.

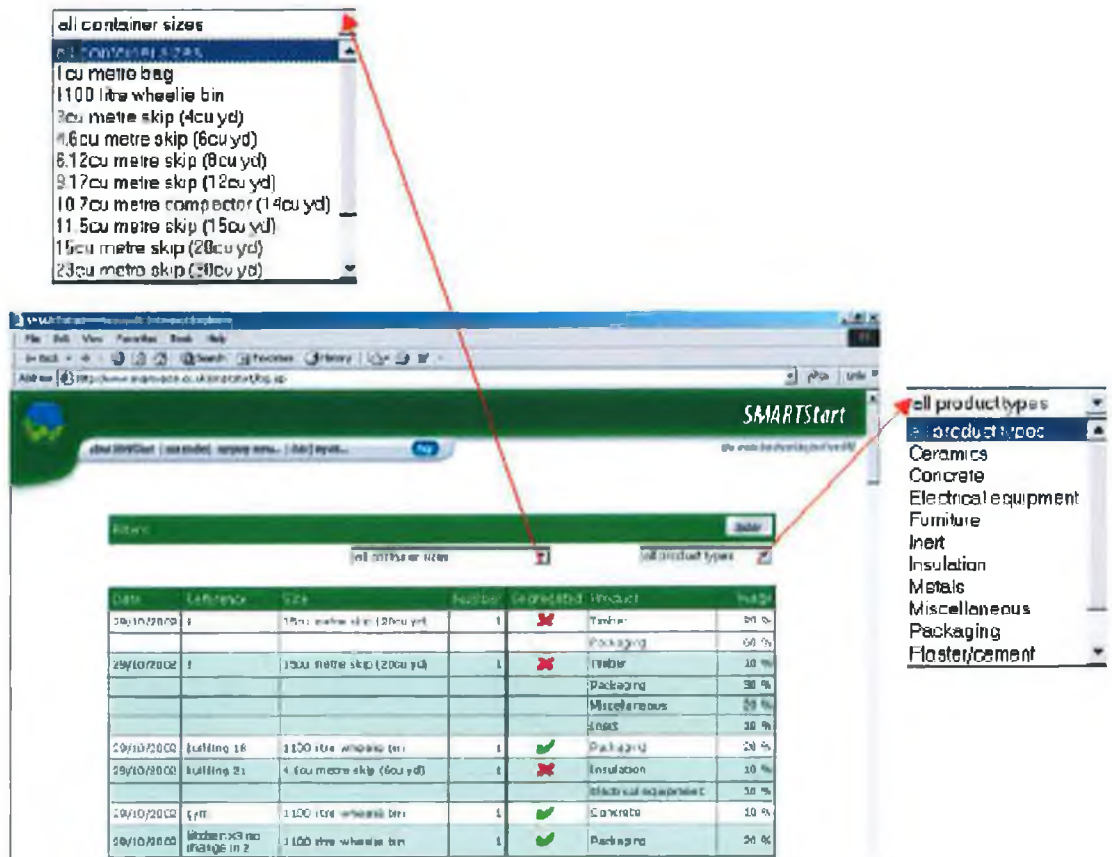


Figure 5.21 SMARTStart 'log' record

This information was filtered for a particular container size, an individual key product group or both.



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### *Limitations*

The following limitations were identified by Grimes (2005):

- It did not identify the cause(s) of the waste production.
- The paper-based form allowed waste information to be recorded for one date only. This meant that a separate sheet was required for each day of the skip analysis. This substantially increased the volume of paperwork.
- The use of SMARTStart required an internet connection, which was not available at the particular site office. Without this connection, the various reports, graphs and charts would have to be produced independently. It must also be noted that not all site offices will have an internet connection or a computer.
- The methodology was a waste skip analysis tool, which did not measure any waste that did not go into a waste container on site.
- The software was expensive (Appendix M) and once registered, training was mandatory, which incurred an additional cost.

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#### **5.2.4 Construction Industry Research and Information Association (CIRIA) skip volume analysis form (Coventry *et al.*, 2001)**

##### *Methodology*

Coventry *et al.* (2001) reported on the use of a skip volume analysis form (Figure 5.22) to audit C&D W on ten demonstration projects highlighting the benefits of waste minimisation. It was recommended that this form should be part of an overall auditing procedure requiring the following data:

- Delivery recording arrangements.
- Materials storage.
- Materials handling on site.
- Use of materials.
- Use of surplus materials or offcuts.
- Management of waste.
- Site staff awareness of materials and waste management.

The categories used in the skip volume analysis form followed the classifications set out in the UK's Environment Agency waste classification. Interestingly, on one of the case studies, a comparison was carried out comparing visual assessment of the skip contents and the weighing of the actual contents. A close correlation was found, demonstrating that an experienced auditor can make accurate measurements of contents.

##### *Testing*

The skip waste volume analysis form was used on ten case studies (Coventry *et al.*, 2001) in the UK over a two-year period (1999 – 2000). The audited projects consisted of:

- Two housing developments.
- Four predominantly office developments.
- One waste water treatment works refurbishment.
- One highway maintenance contract.
- An experimental highway pavement using recycled materials.
- The design stages of an office refurbishment.

CIRIA Skip Volume Analysis Form			
Date		Skip on site Date	
Time		Time	
Skip no.		Skip off site Date	
Size (m <sup>3</sup> ) <sup>1</sup>		Time	
Skip assigned to which trade(s)			
Proportion of skip full (% of volume of skip) <sup>2</sup>			

A UK Waste Classification <sup>3</sup>	Materials	Proportion of skip (% of filled volume)
21.01.01/02	Rock and soil	
21.02.02/03	Blocks, bricks etc.	
22.04.07/08	Reusable timber	
22.04.07/08	Damaged scrap timber	
23.01.01	Metal including metallic packaging waste	
22.04.02	Plastic packaging	
22.03.04	Dry lining/plasterboard/partitioning	
22.04.01	Cardboard packaging	
22.07.03	Food and welfare waste	
22.04.01	Office (paper and card) waste	
23.04.05	Cabling and wire	
22.02.01	Architectural and interior fittings	
22.02.01	Suspended ceiling and trunking waste	
24/25/26/27/28/29/30 /31/32.00.00	Special or hazardous waste e.g. oils, paints, chemicals	
22.02.01	Other construction waste	
Air content <sup>4</sup>	Air trapped between skip contents	
	<b>Total % compared to level skip</b>	

Notes for use: Fill in the proportion of each material type as a percentage of the volume of the level skip. For example, if the skip is half full and contains only "scrap timber", then you should enter 50% in the "Scrap timber" box.

Notes:

<sup>1</sup>It is important to get the skip size correct.

<sup>2</sup>This should be the same as the total at the bottom of the table.

<sup>3</sup>For a more detailed list of Environment Agency Waste Classifications, refer to the latest version of the EA Waste Classification.

<sup>4</sup>Estimate the proportion of the skip that is filled with air and not waste.

**Figure 5.22 CIRIA skip volume analysis form (Coventry *et al.*, 2001)**

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### *Limitations*

The main limitations identified on the ten case studies were:

- It was a paper-based system, which involved a lot of documentation depending on the number of skips e.g. a sheet had to be filled out each day for a skip resulting in having a number of sheets for each skip.
- Production of graphs and charts to illustrate results was time-consuming, as it was not done automatically.
- The audits were based on visual assessments whose accuracy was dependent on the diligence and expertise of the auditor.

### **5.3 Comparison of Selected Audit Methodologies**

A waste audit needs to be planned (Patterson, 1999) in order to generate reliable estimates of waste production on site. A comparative analysis of the four types of audit methodologies was carried out (Table 5.4) taking the following general guidelines into consideration:

- Determine a project framework. The options were:
  - Waste audit from inception to completion of a project to examine the waste production over the whole construction life cycle.
  - A 'snapshot' audit of a timeframe or phase of a project. Where possible, audit a complete phase or representative section e.g. one floor of a high rise development or the construction of one apartment out of a block of apartments.
- Identify the working definition of C&D W. This may include:
  - All C&D W including all excavated materials arising from site activities.
  - C&D W excluding excavated materials but including waste materials left around the site.
  - C&D W fractions that were disposed of in waste containers on site.
- Select the method for measuring the waste. The options were:
  - Sort and weigh the entire components of each skip. This time consuming option provides a very accurate breakdown of the contents both by volume and weight.

- 
- Sort and weigh a sample from the skip. This method reduces the workload but the sample needs to be representative of the skip total to establish the total weight of the contents.
  - Visual assessment of the composition of the contents. Reduces the workload even further but the auditor must estimate the contents as a percentage of the skip size and assign conversion factors to each one to produce material weights.
  - Select the audit format. The options were:
    - Paper based system, where the auditor entered the measurements into an audit sheet/book.
    - Electronically based system, where the auditor used an electronic hand-held device with appropriate software to enter waste measurements. This can be downloaded onto a computer to produce reports, charts and graphs.
    - Combination of paper and electronically based, where the initial audit is entered in a paper based audit sheet then transferred into an 'intelligent' electronic format to produce reports, charts and graphs.
  - Identify the waste streams to be audited.
    - Select appropriate codes or categories for individual waste streams.
    - Priorities should be given to: major waste streams by weight or volume; waste streams with potential for waste reduction and waste streams where the cost of disposal is high e.g. hazardous waste.
  - On-site arrangements for audit
    - The project size and type will dictate whether the auditor needs to be present on site full time or part time. The audit format must be selected based on the auditing time constraints.
    - The sorting and weighing of construction waste, if undertaken, is a significant logistical exercise that needs careful planning. The basic requirements are: a sorting area large enough to accommodate the skip

being sorted, containers for the sorted waste, a tipping area for the waste and a space for weighing and recording.

- Audit Cost
  - This included the cost of the audit methodology and the auditor on site. For the purposes of this study the cost was to include only the cost of the audit and not the cost of a full-time or part-time auditor.

**Table 5.4 Comparison of selected on-site audit methodologies using general guidelines adapted from Patterson (1999)**

<b>Guidelines</b>	<b>Skoyles Waste Accounting System</b>	<b>BRE SMARTAudit</b>	<b>BRE SMARTStart</b>	<b>CIRIA Skip Volume Analysis</b>
<b>Project Framework</b>	Inception to completion / 'snapshot'	Inception to completion / 'snapshot'	Inception to completion / 'snapshot'	Inception to completion / 'snapshot'
<b>Waste Measurement</b>	Visual assessment/sort and weigh /sample sort and weigh	Electronically based visual assessment/sort and weigh /sample sort and weigh	Visual assessment/sort and weigh /sample sort and weigh	Visual assessment/sort and weigh /sample sort and weigh
<b>Audit Format</b>	Paper based	Electronically based	Paper and electronically based	Paper based
<b>Waste Categories</b>	Material description	11 main categories with 400 sub-categories	14 main categories with 76 sub-categories	15 categories
<b>On-Site Arrangements</b>	Full time auditor	Full time auditor	Part time auditor	Part time auditor
<b>Data Analysis</b>	No intelligent reporting system	Intelligent reporting system provides	Intelligent reporting system provides	No intelligent reporting system
<b>Audit Cost</b>	No cost	Rates dependent on project size and number*	Rates dependent on project size and number*	No cost
<b>Working Definition of C&amp;D W</b>	All C&D W including excavated materials	Skip specific C&D W	Skip specific C&D W	Skip specific C&D W

\*Cost for SMARTAudit and SMARTStart are detailed in Appendix J.

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As can be seen in Table 5.4, each methodology had its advantages and disadvantages depending on project type and size. As each guideline was so interdependent on each other, it was difficult to provide a best practice or rating system for each audit methodology e.g. having 400 sub-categories as in the BRE SMARTAudit methodology may not be suitable for a project that produces only four or five waste materials on site.

It was decided that the best strategy was to develop and test an original audit tool using the design guidelines discussed.

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## ***Conclusions***

The main aim of this chapter was to:

- Examine the use of U.K C&D W audits to develop guidelines for the production of an audit for use on Irish construction projects within the scope of this study.

The main conclusions were:

- To provide the most complete audit of a construction/demolition project the following conditions must apply:
  - The project framework is from inception to completion.
  - The sort and weigh measurement method is used to provide the most accurate quantification and compositional data.
  - All C&D W arising from site activities to be audited.
  - An electronically or paper based audit format is used incorporating an intelligent reporting interface.
  - A materials description is provided with associated EWC codes.
  - The auditor is on site full time with the sole responsibility for waste measurement.
  - The use of the audit methodology is free.

The conditions outlined are for the best case scenario. This was not feasible within the scope of the study so a new audit tool needed to be developed.

- The general guidelines as outlined in Table 5.4 are used to develop an audit format for use on Irish construction projects.

The next chapter will consider these guidelines to develop an audit methodology for use on Irish construction projects.



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## **Chapter 6 The Development and Testing of an Original Waste Audit Tool on Selected 'Snapshot' Construction Projects in Ireland**

### **6.1 Introduction**

This chapter will outline the considerations taken in the development of an original site-based waste audit methodology for use within the scope of the study. The audit guidelines adapted from Patterson (1999) are used to detail the design of the audit. The on-site procedures used to collect the data are summarised to demonstrate the testing of the audit.

The main aims of this chapter are to:

- Discuss the design guidelines considered in the development of the site-based C&D W audit.
- Outline the auditing procedures used as testing parameters.

### **6.2 Considerations in the Development of a Site-Based Waste Audit Methodology for use on Irish construction projects**

The first step in the development of a site-based waste audit methodology was to apply the guidelines adapted from Patterson (1999) to determine the scope of the proposed study. Each guideline was considered individually first before being integrated into an overall design.

#### **6.2.1 Project framework**

It was decided that the primary resource of the study would be the students of the Department of Building and Civil Engineering at the Galway-Mayo Institute of Technology. The B.Sc. (Honours) Degree in Construction Management consists of a mandatory module of work placement during the third year. The placement ran from February to August each year and formed the basis of the data collection providing a 'snapshot' of each project. Each student was responsible for obtaining his or her own site placements. This meant that there was a wide range of project types, at different stages, throughout the country displaying a wide variety of waste management practices. Four case studies were also examined, where a more in-depth analysis was produced over a longer time period (Grimes, 2005).

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## 6.2.2 Waste measurement

The three methods of measurement considered for use were as follows:

- Visual assessment or characterisation where the skip contents were visually observed and assigned an estimated percentage volume distribution.
- Mass or physical sorting where the composition of the C&D W was measured by physically sorting each component of the total skip contents or by sorting and measuring a representative sample.
- Photogrammetry, which is the art, science and technology of obtaining reliable information about physical objects and the environment through a process of recording, measuring and interpreting photographic images (Slama *et al.*, 1980). This involved a combination of metric photogrammetry (quantitative measurements obtained from a photograph) and photo interpretation (qualitative analysis focusing on interpretation and identification of images).

Each of these options was considered within the scope of the project. Every student on placement had a number of duties dictated by the supervising foreman. The measurement of waste formed only one of these responsibilities, which meant that time was a limiting factor. If the project incorporated a number of phases or building types, then the student was advised to audit a phase or a selected building. Reinhart *et al.* (2002) compared these options and concluded that the:

- Visual characterisation method required approximately 0.5 man-hours per waste load and can be done by one person.
- The physical sort method required approximately 25 man-hours per waste load and usually involved 5 to 6 people.
- The photogrammetric method required approximately 5 man-hours per waste load and can be done by one person.

The physical sort method provided the most accurate and reliable results but was not applicable due to the number of auditors required, the time needed and health and safety concerns in relation to the handling of waste.

The photogrammetric method allowed a permanent record of the waste skip analysis to be kept and had the least worker exposure to the waste material but was a time

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consuming process. Each auditor would also require a digital camera with appropriate software resulting in extra training and expense<sup>7</sup>.

The visual characterisation method was selected as it was the most cost effective and efficient process with minimal exposure to the waste materials. Studies have shown that experienced auditor can produce estimates comparable with physical sorting on site (Coventry *et al.*, 2001). Reinhart *et al.* (2002) also concluded that the visual characterisation method will analyse approximately ten and fifty times as many waste loads compared to photogrammetric and mass sort techniques respectively for the same analysis cost.

The use of visual characterisation highlighted three important considerations:

- The classification of the skips contents.
- The bulking of wastes.
- The use of conversion factors to convert estimated volumes (m<sup>3</sup>) to estimated weights (kg).

#### *Classification*

The identification of the components of the waste stream required a general material description and appropriate EWC code for each one.

#### *Bulking of wastes*

Waste bulking is where the consistency of a skip's total contents varied due to:

- The degree of compaction the waste has undergone (if any).
- The poor placement of waste materials creating air voids.
- The irregular consistency of some waste types.
- The irregular shape of some waste containers.

The estimation of the percentage air voids contained in a waste skip using the visual characterisation method was a limiting factor in the accuracy of the measurement especially where the skip's contents were not compacted.

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<sup>7</sup>The use of a photogrammetry to visually assess C&D W production is currently the subject of a M.Sc. Research Thesis in the Department of Building and Civil Engineering at the Galway-Mayo Institute of Technology.

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### *Conversion factors*

The conversion factors outlined in the *Waste Management (Landfill Levy) Regulations 2002* (DoEHLG, 2002b) were used in the study to convert volumes of waste (m<sup>3</sup>) to weights (tonnes). The factors were originally used to calculate the amount of landfill levy payable for certain materials. They are not specific to the C&D W stream, although they do provide factors for ten potential C&D W fractions. A comparison was made with two studies (Nolan ITU Pty., 1998 and Golder Associates Pty. Ltd., 1999) carried out in Australia (Table 6.1).

Nolan ITU Pty (1998) carried out a C&D W landfill traffic and compositional study surveying ten landfills in Melbourne, Australia and derived conversion factors from weighbridge data for truck loads and references such as Wilbertz (1985), Tchobanoglous et al. (1993) and Steiner (1998). The aggregated weights of all surveyed vehicles, based on the derived densities were compared with weighbridge measurements at six landfills. The density based estimates were found to be within 20 per cent of the weighbridge figures.

Golder Associates Pty. Ltd. (1999) produced a waste profile study of Victoria's landfills in Australia. Physical sorting of incoming waste was undertaken at seven landfills, resulting in a total of 37 vehicles being sampled and sorted to establish the characteristics of the various waste streams. In addition, visual assessments were undertaken at 35 landfills, resulting in a total of 1 665 audited vehicles. This established the proportion of selected waste categories.

Table 6.1 illustrates that the inert fractions of the C&D W stream had similar conversion factors e.g. approximately between 1.43 and 1.50 in all cases. The wood fraction varied from 0.30 to 0.60 while the metal fraction also varied from 0.23 to 1.00. These variations are an important consideration when converting volumes to weights.

**Table 6.1 Comparison of waste conversion factors to convert m<sup>3</sup> to tonnes**

<b>Material</b>	<b>Tchobanoglous et al. (1993)*</b>	<b>Nolan ITU Pty. (1998)</b>	<b>Golder Pty. Ltd. (1999)</b>	<b>Landfill Levy Regs. (2002)</b>
Paper/cardboard	0.07	0.10	0.09	0.15
Food waste	n/a	n/a	0.28	0.40
Green waste	0.15	0.15	0.24	n/a
Other organic	0.16	n/a	0.26	n/a
Wood/timber	0.50	0.30	0.30	0.60
Textiles	0.18	0.30	0.12	0.40
Rubber	0.13	0.30	0.26	n/a
Glass	0.20	0.70	0.42	n/a
Plastic	0.07	0.20	0.07	0.15
Other plastic	0.07	n/a	0.07	n/a
Ferrous metals	0.91	0.90	0.32	n/a
Non ferrous	0.91	0.90	0.23	n/a
Ceramics	n/a	1.00	0.57	n/a
Hazardous	n/a	0.20	0.58	n/a
Clean soil	1.43	1.43	1.50	1.50
Concrete/bricks	1.54	1.50	1.49	1.50
Plasterboard	n/a	0.20	0.30	0.40
Asphalt/bitumen	n/a	0.80	n/a	n/a
Insulation	n/a	0.05	n/a	n/a
B&C Waste**	n/a	n/a	n/a	0.60
Others	n/a	n/a	1.00	1.00

*\*cited in Golder Pty Ltd., 1999*

*\*\*Building and construction waste*

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### 6.2.3 Working definition of C&D W

The C&D W definition used was all waste fractions deposited in waste skips on the audited sites. This did not include excavated materials or materials left around site.

### 6.2.4 Audit format

The audit format developed for use on site had to provide basic criteria for interpreting the data collected and be user-friendly. A paper-based audit sheet (Figure 6.1) was developed to include the following information:

- ❑ Site location including exact postal address.
- ❑ Job description including the project category and method of construction.
- ❑ Skip size reference. This was used to track the skips on site. Each skip was given a unique reference number consisting of the skip number i.e. **03**; the suppliers initials i.e. Kelly Waste would be **KW**; and skip size i.e. **12 yd<sup>3</sup>** giving a reference number of **03KW12**. The skip number correlated with the audit sheet number.
- ❑ Area code. The site layout was divided into areas code e.g. A1, A2, B3 etc. to determine the exact location of the skips.
- ❑ Compaction or non-compaction of skip contents.
- ❑ Auditor name.
- ❑ Date.
- ❑ Material description as accurately as possible.
- ❑ Appropriate EWC code (if available).
- ❑ Percentage full by visual assessment in 5% intervals.
- ❑ Conversion to volume (m<sup>3</sup>).
- ❑ Conversion to weights (tonnes).
- ❑ Notes/comments identifying any waste management practices.

Please complete fully as per instructions

SITE LOCATION:

JOB DESCRIPTION:

SKIP SIZE REFERENCE:

AREA CODE:

COMPACTED/NON-COMPACTED

AUDITOR: 0941

Date	Material	EWC Code	% Full	Quantity (m <sup>3</sup> )	Weight (tonnes)	Notes/Comments

Figure 6.1 Audit sheet example

The audit sheets were individually numbered and provided in triplicate format, each one a different colour (Appendix K) e.g. the white audit sheet was sent to the author, the pink audit sheet was given to the participating contractor (if requested) and the blue audit sheet was retained by the student until the placement was completed. A set of fifty audit sheets in triplicate format were integrated into a waterproof covered hardback A4 audit book (Photograph 6.1).



**Photograph 6.1 Hardback A4 audit book**

The audit book provided the student with all the information required to carry out the point source assessments on site and simplified the data collection process. Each audit book contained the following information:

- Useful contact numbers of the research team, EPA, waste contractors and local authorities.
- The EWC and hazardous waste list for C&D W.



- 
- Project categories as used in the *National Waste Database Report 2001* (EPA, 2003).
  - A set of conversion factors for the different skip/container sizes i.e. volume percentages to m<sup>3</sup> (Appendix L).
  - A set of conversion factors based from the *Waste Management (Landfill Levy) Regulations 2002* (DoEHLG, 2002b) to convert volumes (m<sup>3</sup>) to weights (tonnes) (Table 6.1).
  - Procedures for carrying out an audit on site and the submission of the collected data.

### **6.2.5 Waste categories**

The auditor on site provided a detailed description of the components of the skip and their appropriate EWC code (if applicable).

### **6.2.6 On-site arrangements**

Prior to the commencement of the students' site placements, a letter was sent out to the relevant companies to inform them that all data collected on site was confidential. Each student was advised to carry out the point source assessments at an appropriate time so as not to interfere with their general duties. Most students collected the audit data either early in the morning, at lunchtime or late in the evening. The average time taken to carry out the audit depending on project type and size was 30 to 45 minutes.

### **6.2.7 Data analysis**

There was no intelligent reporting system providing easy transfer of data. Instead the student collated the data to prepare a monthly audit report. A simple pie chart drawn in Microsoft Word, expressing the composition of the monthly waste production in percentages was also included. The building contractor was provided with a copy of this report each month to raise awareness on site (Figure 6.2).

### **6.2.8 Audit cost**

There was no cost associated with carrying out the point source assessments on site except for the time it took to carry out the audit.

<b>Project Description:</b>	Residential development of 125 units		
<b>Completed Floor Area:</b>	2 850	<b>Project Stage:</b>	35%
<b>Total Waste (m<sup>3</sup>)</b>	109.656	<b>Total Waste (tonnes):</b>	32.605
<b>Unit Waste Factor (m<sup>3</sup>/m<sup>2</sup>)</b>	0.039	<b>Unit Waste Factor (kg/m<sup>2</sup>):</b>	11.44
<b>Date:</b>	01/04/05	<b>Auditor:</b>	

Materials	EWC Code	Volume (m <sup>3</sup> )	Conversion Factor	Weight (tonnes)
Inactive or inert waste	170100	0	1.50	0
Paper and Plastics	170203	68.200	0.15	10.230
Plasterboard	170802	7.164	0.40	2.866
Canteen Waste		5.500	0.40	2.200
Timber/Wood	170201	4.100	0.60	2.460
Building & Const.Waste	170904	19.458	0.60	11.675
Glass	170202	0	0.60	0
Bituminous mixtures	170302	0	1.00	0
Metals	170400	1.800	1.00	1.800
Insulation materials	170604	3.434	0.40	1.374
<b>Total</b>		<b>109.656</b>		<b>32.605</b>

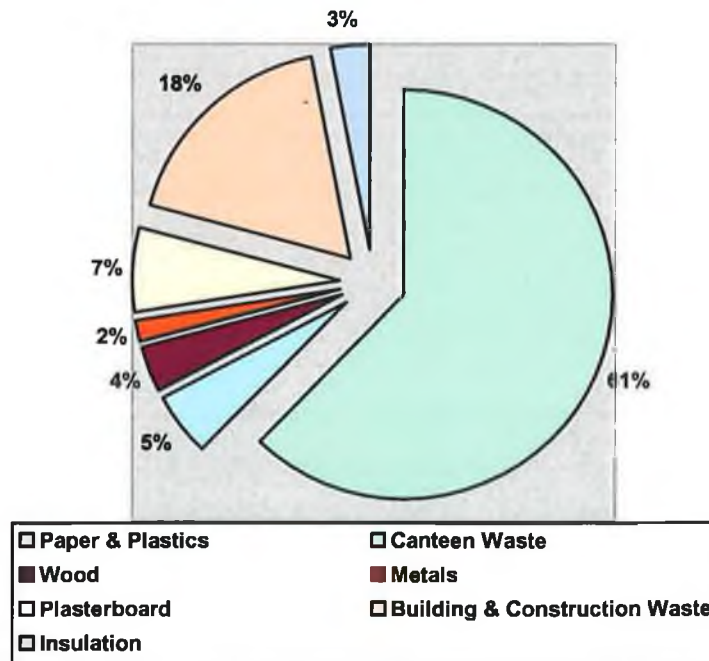


Figure 6.2 Example of monthly report submitted to participating contractors

Table 6.2 summaries the development of the new audit tool using the guidelines adapted from Patterson (1999).

**Table 6.2 GMIT audit guideline development (adapted from Patterson, 1999).**

Guidelines	GMIT Audit
<b>Project Framework</b>	All the point source assessments were 'snapshot' audits over a 6-month period.
<b>Waste Measurement</b>	Visual assessment in intervals of 5% using <i>Landfill Levy</i> conversion factors and a general material description.
<b>Audit Format</b>	Paper based audit book
<b>Waste Categories</b>	Detailed material description with relevant EWC code if applicable.
<b>On-Site Arrangements</b>	Part-time auditor.
<b>Data Analysis</b>	Simple monthly report format produced from Microsoft Word.
<b>Audit Cost</b>	No cost.
<b>Definition</b>	C&D W defined as all materials deposited to waste skips on site.

### 6.3 Methodology to Test the Audit Tool

The methodology was a basic waste skip analysis (Figure 6.3) having two main objectives:

- To identify the composition of the C&D W stream on site.
- Quantify all the materials being taken off site in containers/skips.

Each numbered audit sheet represented one skip i.e. there was never to be more than one skip entered on any one audit sheet. This enabled the accurate recording of the number of skips used throughout the project.

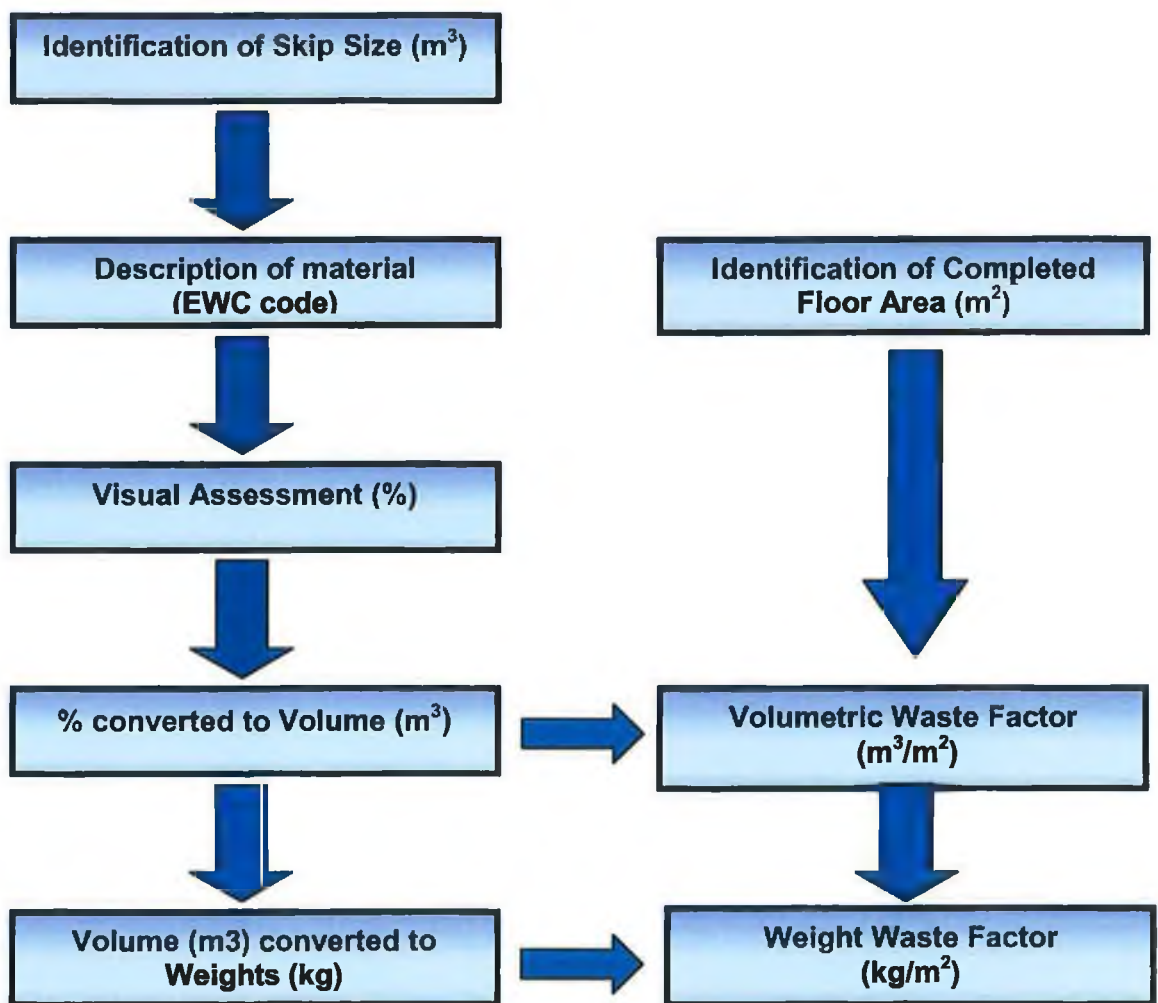


Figure 6.3 Site skip analysis procedure

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There were three phases in carrying out the point source assessments on site:

1. Pre-audit information.
2. Audit data collection.
3. Post audit data analysis.

### **6.3.1 Pre-audit information**

The data collection preparation began with a systematic organisation of the site placements consisting of:

- An accurate description of the site location i.e. full postal address to facilitate site visits.
- A detailed job description including project category and method of construction. The category options were:
  - Residential (new private and public housing).
  - Private non-residential (private and semi-state industry, commercial, agricultural, tourism and worship).
  - Productive infrastructure (water and sanitary services, airports, ports, harbours, energy and telecommunications).
  - Social infrastructure (education, health, public buildings, local authority services and the Gaeltacht).

The method of construction was especially important in residential construction to identify any differences in waste production from concrete and timber frame construction.

- Identification of skip size and reference. Each skip size was obtained from the delivery docket (usually in  $\text{yd}^3$ ) and converted to  $\text{m}^3$ . Random checks were carried out on the skips by physically measuring the skip volume when delivered to ensure correlation with the documentation. Each skip was referenced as outlined previously to ensure accurate tracking of the skips on site or alternatively the site layout was divided into area codes to identify the position of the skips on site. This was suitable when there was no movement of skips around the site i.e. central skip area arrangement.





**Photograph 6.3 Mixed waste skip audit – photographic record of day 1**



**Photograph 6.4 Mixed waste skip audit – photographic record of day 2**





**Photograph 6.5 Mixed waste skip audit – photographic record of day 3**



**Photograph 6.6 Mixed waste skip audit – photographic record of day 4**

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The following steps could have been completed during the audit but were usually carried out in the site office:

- A EWC code was applied to the material description. If a suitable code was included in the EWC list, then it was entered e.g. concrete would have a EWC code of 17 01 01. Alternatively, if no obvious suitable EWC code was applicable, then the auditor provided an accurate material description.
- The percentage volume estimates were converted into m<sup>3</sup> using the skip size conversion factors provided (Appendix L).
- The volume estimate (m<sup>3</sup>) was converted into a weight estimate (tonnes) using the *Waste Management (Landfill Levy) Regulations 2002* (DoEHLG, 2002b) conversion factors provided.
- Notes/comments on the causes of the waste were identified by the work package.

After the first monthly submissions in 2004, the author notified the auditors that he would apply the EWC codes and convert the volume estimates to weight estimates to the data collected and submitted. This continued for the remainder of the auditing period in 2004 and for the complete auditing period in 2005.

The percentage estimates were expressed individually on a daily basis not cumulatively. For example in Figure 6.4, for each material entry, a percentage full estimation was based on the visual assessment on that date so the total estimate for *packaging* was 25 per cent and not 10 per cent.



Please complete fully as per instructions

ITE LOCATION: DUBLIN ROAD, GALLAGHY

OB DESCRIPTION: NEW RESIDENTIAL DEVELOPMENT, 120-UNIT DEVELOPMENT OF CONCRETE FRAME CONSTRUCTION

KIP SIZE REFERENCE: 24BW12 (9.175m<sup>2</sup>) AREA CODE: N/A

COMPACTED/NON-COMPACTED

AUDITOR: 0024

Date	Material	EWC Code	% Full	Quantity (m <sup>3</sup> )	Weight (tonnes)	Notes/Comments
20/07/05	TIMBER OFFCUTS		10%	0.918	0.551	FRY 1 <sup>ST</sup> FIX
20/07/05	PACKAGING		5%	0.459	0.269	Blockwork Packaging
20/07/05	METALS		10%	0.918	0.918	
21/07/05	PACKAGING		10%	0.918	0.138	Blockwork Packaging
22/07/05	TIMBER		20%	1.835	1.101	Damaged Timberwork
22/07/05	METALS		5%	0.459	0.459	
23/07/05	CONCRETE BLOCKS		10%	0.918	1.377	Damaged Block
23/07/05	TIMBER PALLETS		10%	0.918	0.551	Damaged Pallets
24/07/05	PACKAGING		10%	0.918	0.138	
24/07/05	CONTEN WASTE		10%	0.918	0.551	
	TOTAL		100%	9.175m <sup>2</sup>	7.529	

Figure 6.4 Example of a completed audit sheet for skip no. 24

### 6.3.3 Post-audit analysis

At the end of each month, the auditor produced a monthly report based on the skip analysis. The data collected for each skip was analysed to produce monthly totals for each material identified. The monthly report consisted of the following:

- ❑ Project description included the project category and method of construction as described previously.
- ❑ Total floor area expressed in  $m^2$  of the overall project.
- ❑ The project stage expressed in percentages i.e. 0% denoted the commencement with 100 per cent implying completion.
- ❑ The completed floor area expressed in  $m^2$  for relevant month. This was extrapolated from the percentage work done in any month multiplied by the overall project floor area e.g. if 10 per cent of the work was completed in the month of April and the total floor area was  $15\,000\ m^2$ , then the completed floor area for the month of April is  $1\,500\ m^2$ .
- ❑ The monthly skip analysis totals consisted of: material description; EWC codes; volume ( $m^3$ ) and weight (tonnes).
- ❑ Total number of skips identifying skip volumes. This was easily calculated by counting the number of audit sheets that were used in the month.
- ❑ Total waste expressed in  $m^3$  and tonnes.
- ❑ Unit waste factors calculated by:

$$WF^V = V / FA^C$$

(6.1)

where:  $WF^V$  = Volume waste skip factor expressed in  $m^3/m^2$   
 $V$  = Volume of waste in  $m^3$  and  
 $FA^C$  = Completed floor area in  $m^2$

**Eq. (6.1) shows the calculation of volume unit waste skip factors ( $m^3/m^2$ )**

and

$$WF^M = M / FA^C$$

(6.2)

where:  $WF^M$  = mass unit waste skip factor expressed in  $kg/m^2$   
 $M$  = mass of waste in kg and  
 $FA^C$  = Completed floor area in  $m^2$

**Eq. (6.2) shows the calculation of mass unit waste skip factors ( $kg/m^2$ )**

#### **6.4 Data Validation**

The quality of data collected and analysed was paramount in providing reliable and accurate benchmarks for the construction industry. The audit methodology included three levels of data validation as follows:

- Pre audit preparation.
- On site audit quality control.
- Data analysis validation.

##### **6.4.1 Data collection preparation**

To ensure reliable data collection on site, a C&D W module was developed and integrated into the third-year syllabus of the B.Sc. (Honours) in Construction Management. This consisted of:

- A series of lectures on C&D W management discussing areas such as: legislation and policy actions; characteristics of C&D W; waste prevention and minimisation; recycling and reuse of secondary materials and the benchmarking of waste production on site.
- Site visits to different projects to provide the potential auditors with an opportunity to carry out 'trial audits' to familiarise themselves with the audit format and procedures.
- A workshop immediately prior to the commencement of the site placement to discuss the objectives of the project and reiterate the student's responsibilities on site.

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To provide a further incentive for the students, the submission of the waste audit monthly reports accounted for a percentage of the overall project placement mark. If any of the site placements were not suitable for auditing i.e. no skips on site, the student was given an alternative project to complete by the end of the placement.

#### **6.4.2 On-site audit quality control**

By the time the student commenced their site placements, they already had a number of trial waste audits carried out in the preparation phase and this needed to be applied to their specific project placement. The author acted as the data quality controller by:

- Being in constant communication with the students by phone, fax and email.
- Visiting each student at least twice on site (the first visits were within four weeks of the students commencing their site placement) to discuss any problems and identify waste management practices. During these visits the author carried out a waste audit with the student to compare the results. This provided a checking mechanism (quality assurance) for the visual assessment process to maximise consistency and extend the auditors understanding.

#### **6.4.3 Data analysis validation**

The data collected on site was submitted to the author on a monthly basis and the following checks were carried out to validate the figures:

- At the end of each month every student had to submit a monthly report with the relevant audit sheets. The author would analyse the data submitted and compared the data from the audit sheets and the monthly report to ensure the figures correlated. If any mistakes or discrepancies were identified then the student was immediately contacted. Each report was stored in an easily referenced format for future analysis.
- At the end of the auditing period, the student had to submit a final report and again this was compared to the data previously submitted in the monthly reports.

During the auditing period the research design was continuously being revised following feedback from the students and participating contractors.

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## 6.5 Limitations

During the analysis of the submitted data from the 2004 audits, some limitations were identified in the auditing procedures as follows:

- The use of the area code option on the audit sheet was unreliable due to the movement of skips around the site. The students/auditors were instructed to mark the skips with a permanent marker to enable them to track the skips around the site.
- The use of appropriate EWC codes was proving difficult (as expected) as a number of on-site wastes was categorised as 'mixed waste', which did not provide an accurate reflection of waste composition. The students/auditors were instructed to concentrate on the material description and were not to apply EWC codes if they were uncertain of the accuracy. This reduced the tendency of auditors to quantify the fractions as 'mixed waste'. The author then applied the EWC codes to each of the material descriptions.
- The incorrect application of the conversion factors provided in the *Waste Management (Landfill Levy) Regulations 2002* (DoEHLG, 2002b). The students/auditors were instructed not to convert the volumes to weights and to submit their data in m<sup>3</sup>. The author converted the data from m<sup>3</sup> to tonnages to develop the comparable waste factors from the submitted monthly reports.
- Students were originally instructed to submit their reports on a weekly basis. This was changed to monthly reports following feedback from auditors on site.

Each of these limitations was addressed prior to the commencement of the 2005 audits.

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## ***Conclusions***

The aims of this chapter were to:

- Discuss the design framework used in the development of an original audit methodology for use on Irish construction projects.
- Summarise the on site procedures and protocols for the collection and submission of the audit data.

The main conclusions were that:

- The design guidelines recommended by Patterson (1999) provided a basic standard from which to develop a novel audit methodology for use on Irish construction sites.
- The use of the visual characterisation method highlighted some limitations in the process especially the difficulty in assessing air voids and the total reliance on the auditor's skill and diligence in collecting reliable data.
- The use of the *Landfill Levy* conversion factors (DoEHLG, 2002b) was also an area for concern as they were not specific to the C&D W stream.
- The audit format provided a practical tool for use on Irish construction sites. The students/auditors had no difficulty using the audit tool and submitted data from 54 construction projects throughout the country.
- Clear procedures were a prerequisite to reliable data collection on site.
- The analysis of the collected data entailed the use of simple equations to generate the unit waste skip factors.
- Data validation was of paramount importance and the development of a training module on C&D W management for the potential auditors was a key factor in preparing them for the data collection phase. The active participation of the author was essential in this phase to ensure the quality of the data submitted.
- The development of the audit methodology was a dynamic process involving constant revision following feedback from the users on site.

The next chapter will outline the results from the 54 audited 'snapshot' project and four case studies.

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## **Chapter 7 The Generation of Waste Production Indicators from 'Snapshot' Point Source Assessments on Irish Construction Projects**

### **7.1 Introduction**

This chapter will outline the waste factors generated from 54 point source assessments carried out throughout the country over a two-year period (2004 – 2005). The results of four case study assessments undertaken in 2003 and 2004 (Grimes, 2005) will also be presented.

The main aims of the chapter are to:

- ❑ Outline the unit waste factors generated for each category combining 2004 and 2005 data.
- ❑ Outline the material composition for each category combining 2004 and 2005 data.

### **7.2 Project Categories**

Each project audited in 2004 and 2005 was divided into project categories as used by the EPA in the *National Waste Database Report 2001* (EPA, 2003):

- ❑ Residential (new private and public housing).
- ❑ Private non-residential (private and semi-state industry, commercial, agricultural, tourism and worship).
- ❑ Productive infrastructure (water and sanitary services, airports, harbours, energy and telecommunications).
- ❑ Social infrastructure (education, health, public buildings, local authority services and the Gaeltacht).

A number of developments audited consisted of residential units and commercial units e.g. housing schemes with retail units, supermarkets etc. They were originally categorised as new mixed residential construction (2004 audits), but were re-categorised as new residential construction as in each case the primary construction was residential development. The number of projects per category is outlined in Table 7.1.

**Table 7.1 Number of audited projects per category**

<b>Project Category</b>	<b>2004</b>	<b>2005</b>	<b>Total</b>
Residential construction	11	8	<b>19</b>
Productive infrastructure construction	0	3	<b>3</b>
Social infrastructure construction	5	4	<b>9</b>
Private non-residential construction	12	10	<b>22</b>
Residential demolition	0	1	<b>1</b>
<b>Total</b>			<b>54</b>

It must be noted that due to the confidential nature of the collected data (as requested by participating companies); no specific geographical distribution of projects is provided. The study did provide a wide geographical spread with sites in Carlow, Dublin, Donegal, Galway, Longford, Louth, Mayo, Roscommon, Meath, Westmeath, Offaly, Monaghan, Cork, Sligo, Leitrim, Limerick, Laois, Tipperary and Kerry

### **7.3 Generation of Waste Factors**

Each project 'snapshot' audited was termed a point source assessment (PSA). The waste factors were derived from the following data (Appendix M):

- Project reference.
- Total skip waste (m<sup>3</sup>)
- Total skip waste (kg).
- Completed floor areas (m<sup>2</sup>).
- Waste skip factor (m<sup>3</sup>/m<sup>2</sup>).
- Waste skip factor (kg/m<sup>2</sup>).

The unit waste factors were calculated by applying equations 7.1 and 7.2.

$$WF^V = V / FA^C$$

(7.1)

Where,  $WF^V$  = Volume unit waste skip factor expressed in m<sup>3</sup>/m<sup>2</sup>

V = Volume of waste in m<sup>3</sup> and

$FA^C$  = Completed floor area in m<sup>2</sup>

**Eq. (7.1) shows the calculation of volume unit waste skip factors (m<sup>3</sup>/m<sup>2</sup>)**



---

and

$$WF^M = M / FA^C$$

(7.2)

Where,  $WF^M$  = mass unit waste skip factor expressed in  $kg/m^2$

M = mass of waste in kg and

$FA^C$  = Completed floor area in  $m^2$

**Eq. (7.2) shows the calculation of mass unit waste factors ( $kg/m^2$ )**

The sample mean was calculated for each category by adding up the individual unit waste skip factors and dividing by the number of projects. The sample mean unit waste factor is displayed both in volumetric ( $m^3/m^2$ ) and mass ( $kg/m^2$ ) terms.

All the results exclude excavated materials and represent the auditing of waste fractions deposited in waste skips/containers on site.

## 7.4 Results of Audited 'Snapshot' Projects

### 7.4.1 New residential construction

The residential construction category consisted of all forms of residential construction e.g. detached units, semi-detached units, apartments, townhouses, duplexes and mixed facilities. Residential construction waste factors were generated from nineteen 'snapshot' projects (Table 7.2) producing sample mean indicators.

**Table 7.2 New residential construction results (2004 and 2005)**

Reference	Total Waste (m <sup>3</sup> )	Total Waste (tonnes)	Completed Floor Areas (m <sup>2</sup> )	Waste Factor (m <sup>3</sup> /m <sup>2</sup> )	Waste Factor (kg/m <sup>2</sup> )
PSA 1	109.656	32.605	2 850	0.039	11.440
PSA 2	390.920	140.703	13 104	0.030	10.737
PSA 3	200.164	135.197	9 000	0.022	15.022
PSA 4	86.290	55.572	2 800	0.031	19.847
PSA 5	21.910	9.155	234	0.094	39.124
PSA6	281.010	143.720	4 158	0.068	34.565
PSA 7	197.977	81.848	2 295	0.086	35.664
PSA 8	98.426	83.114	5 400	0.018	15.391
PSA 9	376.850	312.570	7 290	0.052	42.877
PSA 10	210.270	144.281	454	0.463	317.800
PSA 11	755.270	577.124	2 000	0.378	288.562
PSA 12	102.542	63.276	960	0.107	65.913
PSA 13	164.267	63.369	1 375	0.119	46.087
PSA 14	37.612	25.515	1 375	0.027	18.556
PSA 15	297.569	210.958	2 057	0.145	102.556
PSA 16	89.799	65.240	486	0.185	134.239
PSA 17	504.467	435.579	6 942	0.073	62.745
PSA 18	117.630	59.335	1 688	0.070	35.151
PSA 19	736.530	832.588	21 400	0.034	38.906
<b>Totals</b>	<b>4 799.159</b>	<b>3 471.749</b>	<b>85 868</b>	<b>2.041</b>	<b>1 335.182</b>
<b>Total weight waste factors (kg/m<sup>2</sup>)/no. of sites = 1 335.180/19 =</b>					<b>70.27 kg/m<sup>2</sup></b>
<b>Total volume waste factor (m<sup>3</sup>/m<sup>2</sup>)/no. of sites = 2.041/19 =</b>					<b>0.107 m<sup>3</sup>/m<sup>2</sup></b>

#### 7.4.2 New private non-residential construction

Private non-residential construction waste factors were generated from twenty-two 'snapshot' projects (Table 7.3) producing sample mean indicators.

**Table 7.3 New private non-residential construction results (2004 and 2005)**

Reference	Total Waste (m <sup>3</sup> )	Total Waste (tonnes)	Completed Floor Areas (m <sup>2</sup> )	Waste Factor (m <sup>3</sup> /m <sup>2</sup> )	Waste Factor (kg/m <sup>2</sup> )
PSA 1	221.000	86.060	4 391	0.050	19.599
PSA 2	663.500	442.065	14 300	0.046	30.914
PSA 3	1 163.040	689.597	16 920	0.069	40.756
PSA 4	415.600	272.820	5 227	0.080	52.194
PSA 5	80.650	45.453	576	0.140	78.911
PSA 6	137.800	87.665	880	0.157	99.619
PSA 7	320.000	218.190	2 000	0.160	109.095
PSA 8	351.800	239.720	1 814	0.194	132.145
PSA 9	980.300	837.595	5 670	0.173	147.724
PSA 10	276.300	369.505	2 200	0.126	167.957
PSA 11	455.150	266.206	900	0.506	295.784
PSA 12	282.910	201.362	700	0.404	287.660
PSA 13	480.015	230.383	7 820	0.061	29.461
PSA 14	59.346	48.730	1 725	0.034	28.249
PSA 15	71.223	37.301	400	0.178	93.253
PSA 16	414.758	233.749	5 090	0.082	45.923
PSA 17	139.560	132.490	5 456	0.026	24.283
PSA 18	20.873	11.237	900	0.023	12.486
PSA 19	34.563	18.959	867	0.040	21.867
PSA 20	344.276	239.842	2 256	0.153	106.313
PSA 21	26.618	9.270	285	0.093	32.526
PSA 22	300.856	182.430	3 425	0.088	53.264
<b>Totals</b>	<b>7 240.138</b>	<b>4 900.629</b>	<b>83 802</b>	<b>2.883</b>	<b>1 909.983</b>
<b>Total weight waste factors (kg/m<sup>3</sup>)/no. of sites = 1 909.983/22 =</b>					<b>86.82 kg/m<sup>2</sup></b>
<b>Total volume waste factors (kg/m<sup>2</sup>)/no. of sites = 2.883/22 =</b>					<b>0.131 m<sup>3</sup>/m<sup>2</sup></b>

### 7.4.3 New social infrastructure construction

Social infrastructure construction waste factors were generated from nine 'snapshot' projects (Table 7.4) producing sample mean indicators.

**Table 7.4 New social infrastructure construction results (2004 and 2005)**

Reference	Total Waste (m <sup>3</sup> )	Total Waste (tonnes)	Completed Floor Areas (m <sup>2</sup> )	Waste Factor (m <sup>3</sup> /m <sup>2</sup> )	Waste Factor (kg/m <sup>2</sup> )
PSA 1	53.500	34.650	2 080	0.026	16.659
PSA 2	120.169	97.965	5 780	0.021	16.949
PSA 3	356.750	271.415	6 853	0.052	39.605
PSA 4	289.620	119.538	1 817	0.159	65.789
PSA 5	164.000	144.640	404	0.406	358.020
PSA6	124.413	86.947	328	0.379	265.082
PSA 7	150.531	88.543	2 584	0.058	34.266
PSA 8	468.500	351.216	1 344	0.349	261.321
PSA 9	613.080	399.288	2 071	0.296	192.800
<b>Totals</b>	<b>2 340.563</b>	<b>1 594.202</b>	<b>23 261</b>	<b>1.746</b>	<b>1 250.491</b>
<b>Total weight waste factors (kg/m<sup>2</sup>)/no. of sites = 1 250.491/9 =</b>					<b>138.94 kg/m<sup>2</sup></b>
<b>Total volume waste factors (m<sup>3</sup>/m<sup>2</sup>)/no. of sites = 1.746/9 =</b>					<b>0.194m<sup>3</sup>/m<sup>2</sup></b>



#### 7.4.4 New Productive infrastructure construction

Productive infrastructure construction waste factors were produced from three 'snapshot' projects (Table 7.5) producing sample mean indicators.

**Table 7.5 New productive infrastructure construction results (2004 and 2005)**

Reference	Total Waste (m <sup>3</sup> )	Total Waste (tonnes)	Completed Floor Areas (m <sup>2</sup> )	Waste Factor (m <sup>3</sup> /m <sup>2</sup> )	Waste Factor (kg/m <sup>2</sup> )
PSA 1	54.133	23.222	295	0.184	78.719
PSA 2	84.413	54.387	975	0.087	55.782
PSA 3	51.768	25.673	2 349	0.022	10.929
<b>Totals</b>	<b>190.314</b>	<b>103.282</b>	<b>3 619</b>	<b>0.293</b>	<b>145.430</b>
<b>Total weight waste factors (kg/m<sup>2</sup>)/no. of sites = 145.430/3 =</b>					<b>48.48 kg/m<sup>2</sup></b>
<b>Total volume waste factors (m<sup>3</sup>/m<sup>2</sup>)/no. of sites = 0.292/3 =</b>					<b>0.098 m<sup>3</sup>/m<sup>2</sup></b>

#### 7.4.5 New residential demolition

Only one of the point source assessments was categorised as new residential demolition (Table 7.6).

**Table 7.6 New residential demolition results 2004 and 2005**

Reference	Total Waste (m <sup>3</sup> )	Total Waste (tonnes)	Completed Floor Areas (m <sup>2</sup> )	Waste Factor (m <sup>3</sup> /m <sup>2</sup> )	Waste Factor (kg/m <sup>2</sup> )
PSA 1	1 686.903	2 278.605	2 800	0.603	813.788

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## **7.5 Statistical Confidence of the ‘Snapshot’ Projects Results**

These data are reported as sample means for each category incorporating a standard deviation (Appendix N). The standard deviation about the mean is more sensitive to a few extreme observations than is the mean and may produce a skewed distribution with a large standard deviation. The 95 per cent confidence limits also indicate the statistical accuracy of the values but without skew. These limits will express confidence that the actual values are within the ranges provided.

### **7.5.1 New residential construction**

The sample size for this category was 19 ‘snapshot’ projects. The sample mean was 70.27 kg/m<sup>2</sup> with a standard deviation of 88.01 kg/m<sup>2</sup> and a 95 per cent confidence interval of between 27.86 kg/m<sup>2</sup> and 112.69 kg/m<sup>2</sup> (Appendix N, Table N.1)

### **7.5.2 New private non residential construction**

The sample size for this category was 22 ‘snapshot’ projects. The sample mean was 86.82 kg/m<sup>2</sup> with a standard deviation of 80.05 kg/m<sup>2</sup> and a 95 per cent confidence interval of between 51.32 kg/m<sup>2</sup> and 122.31 kg/m<sup>2</sup> (Appendix N, Table N.2).

### **7.5.3 New productive infrastructure construction**

The sample size for this category was 3 ‘snapshot’ projects. The sample mean was 48.48 kg/m<sup>2</sup> with a standard deviation of 34.48 kg/m<sup>2</sup> and a 95 per cent confidence interval of between -37.18<sup>8</sup> kg/m<sup>2</sup> and 134.13 kg/m<sup>2</sup> (Appendix N, Table N.3).

### **7.5.4 New social infrastructure construction**

The sample size for this category was 9 ‘snapshot’ projects. The sample mean was 138.94 kg/m<sup>2</sup> with a standard deviation of 131.24 kg/m<sup>2</sup> and a 95 per cent confidence interval of between 38.064 kg/m<sup>2</sup> and 239.83 kg/m<sup>2</sup> (Appendix N, Table N.4).

### **7.5.5 Total project categories**

The sample size for this category was 54 ‘snapshot’ projects. The sample mean was 87.57 kg/m<sup>2</sup> with a standard deviation of 92.84 kg/m<sup>2</sup> and a 95 per cent confidence interval of between 62.58 kg/m<sup>2</sup> and 112.55 kg/m<sup>2</sup> (Appendix N, Table N.5).

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<sup>8</sup> The minus figure for productive infrastructure indicated an insufficient sample size.

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As can be seen there is a wide confidence interval for each of the categories with *new productive infrastructure* having an insufficient number of samples. Statistically, there were a number of limitations in the collected data as follows:

- Each audited project represented only a 6-month 'snapshot'.
- The different stages of each audited project were not accurately identified.
- None of the projects were classified as small, medium or large scale by cost and/or floor area, which would enable comparison with data collected by the Central Statistics Office (CSO) on construction output.
- The presence of extreme values in some categories affected the sample mean produced. It was decided to include these 'outliers' as the audit methodology aimed to provide a true reflection of both good and poor waste management practices on site. The exclusion of these 'outliers' would have considerably reduced the calculated average means for each category but would not have provided a complete picture of what was audited. This limitation will be addressed by the continued collection of data providing a more robust statistical foundation.

### **7.6 Comparison with Other Generated Unit Waste Factors**

A direct comparison cannot be made with the unit waste factors produced in the US (Franklin Associates, 1998). The methodologies used to collect the data, although similar are not directly comparable. The US unit waste factors used a combination of one-off projects and averages from a number of projects to produce total waste production and floor area figures. These totals were divided into each other to produce a unit waste factor.

This study produced unit waste skip factors from 6-month 'snapshot' projects. Each individual site provided a waste factor and these were all added up and divided by the number of sites in each category to produce a sample mean unit waste skip factor.

Other C&D W indicators generated by Peng *et al.* (1997), Fatta *et al.* (2003), Poon *et al.* (2004a, b) and most notably Reinhart *et al.* (2002) (Appendix O, Table O.1) are also not directly comparable with the study's results due to the lack of source data i.e. total floor areas and total waste produced and information on the methodologies used.

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## 7.7 Demolition Survey

Only one project involved major demolition work generating a unit waste skip factor of 813.79 kg/m<sup>2</sup>. This limitation was identified in March 2005, when the students had submitted their first monthly report from the 2005 placements. Contact was made with the NCDWC and a meeting was arranged with the Demolition Contractors Association in May 2005. The author gave a presentation at this meeting outlining the main objectives of the study and highlighted the lack of data available on demolition waste. The demolition contractors present recommended that the author source data submitted by them to their relevant local authorities. Preliminary enquiries were made to a selection of the local authorities and it was identified that there was a significant lack of data available.

It was decided to apply the methodology used by the EPA in the *National Waste Database Report 2001* (EPA, 2003) by sending out questionnaires (Appendix P) to the members of the Demolition Contractors Association. With the co-operation of Stephen Molloy of the Construction Industry Federation (CIF), questionnaires were circulated to the members in March 2006. Unfortunately, no replies were received by the end of April 2006. The author then sent the questionnaires out to the members again, this time to their individual office headquarters. A follow up telephone call was put through to each office but again unfortunately no replies were received. During the follow-up telephone calls, the author was advised informally to again contact the local authorities to seek the data required<sup>9</sup>.

Although only generated from one project, the unit waste factor of 813.79 kg/m<sup>2</sup> does reflect findings from other research around the world. Lauritzen (1994) estimated that the demolition of a building produces 1 000 to 2 000 kg/m<sup>2</sup>. Fatta *et al.* (2003) agreed with this estimate concluding that the demolition of a 60m<sup>2</sup> building resulted in 114 m<sup>3</sup> of C&D W producing an average waste factor of 1 500 kg/m<sup>2</sup>. Research carried out by the Artic Technology Centre at the University of Oulu in Finland (2001) found that on average that demolition work produced 200 to 500 kg/m<sup>2</sup>.

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<sup>9</sup> This is one of the main aims of a collaborative project involving the GMIT, Galway County Council and Galway Corporation funded by the EPA under the LAPD Programme, which is due to commence in September 2006.



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## 7.8 Case Studies

Grimes (2005) examined four case studies in the Galway region focusing on the management of waste on site. Each project selected was in the early stages of construction allowing a more complete audit of the waste production than the 'snapshot' point source assessments. In each case the unit mass skip waste factor was compared with the results from the 'snapshot' point source assessments.

### 7.8.1 Case study 1

Case study 1 was a residential development consisting of 225 units. The project duration was thirty months. The audit duration lasted nineteen months. Table 7.7 outlines the audit results.

The following waste management practices were recorded on case study 1:

- The volume of excavated materials reused on or off site was 1 760 m<sup>3</sup>.
- The volume of C&D W segregated for recycling was 611 m<sup>3</sup> (19.5 per cent of total waste) consisting of 598 m<sup>3</sup> of timber waste and 13 m<sup>3</sup> of metal waste. This resulted in a total saving of €7 234.
- The volume of C&D W disposed of by waste skip was 2 529 m<sup>3</sup> (80.5 per cent). The number of skips used during the audit period was 394, resulting in a total skip cost of €78 083 (including the total saved from the segregated skips).

There was no formalised waste management strategy implemented on case study 1. As the work progressed, a waste manager was appointed but the implementation of the segregation policy provided difficult.

The unit mass waste skip factor of 66.07 kg/m<sup>2</sup> calculated for case study 1 is comparable to the 'snapshot' sample mean of 70.27 kg/m<sup>2</sup> for new residential construction.

**Table 7.7 Audit results for case study 1**

<b>Site Location:</b>	Galway City	<b>Building Contractor:</b>	n/a
<b>Project Description:</b>	The development consisted of the construction of a total of 225 units including 4-bed semi-detached houses, 3 and 4-bed terraced houses, 2-bed apartments, a crèche and a shop. The main structure of the houses and apartments consisted of raft foundations, concrete block and brick external and party walls, internal timber stud partition walls, trussed rafters, concrete roof tiles, PVC double glazed windows, hardwood front and rear doors, and all site landscaping and services.		
<b>Total Floor Area:</b>	24 679 m <sup>2</sup>		
<b>Estimated Completed Floor Area:</b>	24 060 m <sup>2</sup>		
<b>Project Commencement Date:</b>	Jan. 03	<b>Project Completion Date:</b>	July 05
<b>Audit Commencement Date:</b>	Aug 03	<b>Audit Completion Date:</b>	Mar 05
<b>Waste Material</b>	<b>EWU Code</b>	<b>Quantity (m<sup>3</sup>)</b>	<b>Quantity (tonnes)</b>
Building and Construction Waste	170904	1 405	843.00
Timber/Wood	170201	598	358.80
Insulation	170604	259	103.60
Plasterboard	170802	203	81.20
Paper, Plastics and Packaging	170904	438	65.70
Canteen waste	170904	113	45.20
Miscellaneous waste	170904	97	58.20
Inert waste	170103	14	21.00
Metals (including their alloys)	170405	13	13.00
<b>Totals</b>		<b>3 140</b>	<b>1 589.70</b>
<b>Waste Factor (Volume):</b>	<b>0.131m<sup>3</sup>/m<sup>2</sup></b>		
<b>Waste Factor (Weight):</b>	<b>0.066 tonnes/m<sup>2</sup> or 66.07 kg/m<sup>2</sup></b>		

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### 7.8.2 Case study 2

Case study 2 was a residential development consisting of 148 units. The project duration was twenty-four months. The audit duration lasted fifteen months. Table 7.8 outlines the audit results.

The following waste management practices were recorded on case study 2:

- The volume of excavated materials reused on or off site was 6 101 m<sup>3</sup>.
- The volume of C&D W segregated for recycling was 640 m<sup>3</sup> (37 per cent of total waste) consisting of 423 m<sup>3</sup> of timber waste, 196 m<sup>3</sup> of insulation waste and 13 m<sup>3</sup> of metal waste. This resulted in a total saving of €11 255.
- The volume of C&D W disposed of by waste skip was 1 087 m<sup>3</sup> (63 per cent). The number of skips used during the audit period was 211, resulting in a total skip cost of €41 290 (including the total saved from the segregated skips).

A waste management strategy was adopted on case study 2 with the appointment of a waste manager and the implementation of a source segregation policy. A waste management operative was employed to collect and segregate all of the site wastes. This involved the use of a 6 tonne dumper to transport the waste from various parts of the site to the central skip area. This incurred a cost of €55 895 for plant and labour over the audit period.

The mass unit waste skip factor of 64.35 kg/m<sup>2</sup> calculated for case study 2 is comparable to the 'snapshot' sample mean of 70.27 kg/m<sup>2</sup> for new residential construction. Interestingly, the new residential case studies have very similar volume and mass waste factors.

**Table 7.8 Audit results for case study 2**

<b>Site Location:</b>	Galway City	<b>Building Contractor:</b>	n/a	
<b>Project Description:</b>	The development consisted of the construction of a total of 148 units including detached houses, terraced houses, apartments, retail units and crèche facilities. The main structure of the various houses and apartments consisted of raft foundations, concrete block external and party walls, internal timber stud partitions, trussed rafters including cut timber roofs, natural roof slates, PVC double glazed windows and hardwood front and rear doors. Some steel columns and beams were also used in the construction of the retail units towards the front of the site. The work included all landscaping and services.			
<b>Total Floor Area:</b>	19 518 m <sup>2</sup>			
<b>Estimated Completed Floor Area:</b>	13 663 m <sup>2</sup>			
<b>Project Commencement Date:</b>	Oct 03	<b>Project Completion Date:</b>	Oct 05	
<b>Audit Commencement Date:</b>	Dec 03	<b>Audit Completion Date:</b>	Mar 05	
<b>Waste Material</b>	<b>EWC Code</b>	<b>Quantity (m<sup>3</sup>)</b>	<b>Quantity (tonnes)</b>	
Building and Construction Waste	170904	682	409.20	
Timber/Wood	170201	423	253.80	
Insulation	170604	196	78.40	
Plasterboard	170802	100	40.00	
Paper, Plastics and Packaging	170904	199	29.85	
Canteen waste	170904	70	28.00	
Miscellaneous waste	170904	19	11.40	
Inert waste	170103	5	7.50	
Metals (including their alloys)	170405	21	21.00	
<b>Totals</b>		<b>1 715</b>	<b>879.15</b>	
<b>Waste Factor (Volume):</b>	<b>0.126 m<sup>3</sup>/m<sup>2</sup></b>			
<b>Waste Factor (Weight):</b>	<b>0.064 tonnes/m<sup>2</sup> or 64.35 kg/m<sup>2</sup></b>			

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### 7.8.3 Case study 3

Case study 3 was a private non-residential development consisting of a petrol filling station, retail units, offices and a hotel. The project duration was twenty-one months. The audit duration lasted fifteen months. Table 7.9 outlines the audit results.

The following waste management practices were recorded on case study 3:

- The volume of excavated materials reused on or off site was 25 950 m<sup>3</sup>.
- The volume of C&D W segregated for recycling was 510 m<sup>3</sup> (37 per cent of total waste) consisting of 396 m<sup>3</sup> of timber waste and 114 m<sup>3</sup> of metal waste. This resulted in a total saving of €5 257.
- The volume of C&D W disposed of by waste skip was 865 m<sup>3</sup> (63 per cent). The number of skips used during the audit period was 137, resulting in a total skip cost of €31 250 (including the total saved from the segregated skips).

There was no formal C&D W strategy employed on case study 3. It was, however, the policy of the company to position smaller skips (2 yd<sup>3</sup>) around the site, the contents of which would be disposed of in the larger skips (12 yd<sup>3</sup>) positioned centrally. In addition, the main subcontractors provided their own skips to collect any wastes arising from their work packages. This resulted in some source segregation.

The unit mass waste skip factor of 38.04 kg/m<sup>2</sup> calculated for case study 3 contrasts with the 'snapshot' sample mean of 86.82 kg/m<sup>2</sup> for new private non residential construction.

**Table 7.9 Audit results for case study 3**

<b>Site Location:</b>	Galway City	<b>Building Contractor:</b>	n/a
<b>Project Description:</b>	The project was constructed on a site previously used as a petrol station and car sales dealership. The development consisted of the demolition/deconstruction of all existing buildings on site, the construction of a double basement car park, a petrol filling station, retail units, office and a hotel. The main building structure was a combination of cast in-situ concrete and prefabricated steel. The basement construction consisted of bored pile retaining walls with an internal basement wall. The structure above ground level consisted of a steel frame, incorporating cast in-situ concrete floors, external glazing and stone cladding. The installation of all services were included as part of the construction works.		
<b>Total Floor Area:</b>	24 000 m <sup>2</sup>		
<b>Estimated Completed Floor Area:</b>	21 600 m <sup>2</sup>		
<b>Project Commencement Date:</b>	Oct 03	<b>Project Completion Date:</b>	July 05
<b>Audit Commencement Date:</b>	Dec 03	<b>Audit Completion Date:</b>	Mar 05
<b>Waste Material</b>	<b>EWT Code</b>	<b>Quantity (m<sup>3</sup>)</b>	<b>Weight (tonnes)</b>
Building and Construction Waste	170904	634	380.40
Timber/Wood	170201	396	237.60
Insulation	170604	34	13.60
Plasterboard	170802	130	52.00
Paper, Plastics and Packaging	170904	22	3.30
Canteen waste	170904	40	16.00
Miscellaneous waste	170904	3	1.80
Inert waste	170103	2	3.00
Metals (including their alloys)	170405	114	114.00
<b>Totals</b>		<b>1 375</b>	<b>821.70</b>
<b>Waste Factor (Volume):</b>	<b>0.064 m<sup>3</sup>/m<sup>2</sup></b>		
<b>Waste Factor (Weight):</b>	<b>0.038 tonnes/m<sup>2</sup> or 38.04 kg/m<sup>2</sup></b>		

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#### 7.8.4 Case study 4

Case study 4 was a social infrastructure development consisting of an educational building. The project duration was twenty-two months. The audit duration lasted nineteen months. Table 7.10 outlines the audit results.

The following waste management practices were recorded on case study 4:

- ❑ The volume of excavated materials reused on or off site was 694 m<sup>3</sup>.
- ❑ The volume of C&D W segregated for recycling was 111 m<sup>3</sup> (28 per cent of total waste) consisting of 100 m<sup>3</sup> of timber waste and 11 m<sup>3</sup> of metal waste. This resulted in a total saving of €250.
- ❑ The volume of C&D W disposed of by waste skip was 289 m<sup>3</sup> (72 per cent). The number of skips used during the audit period was 46, resulting in a total skip cost of €11 273 (including the total saved from the segregated skips).

There was no formal waste management strategy employed on case study 4. One major difference from the other three case studies is that the contractor was charged for waste disposal by weight and not by skip size (volume). There was some segregation of waste timber and metals resulting in minimal cost savings.

The unit mass waste skip factor of 204.76 kg/m<sup>2</sup> calculated for case study 4 contrasts with the 'snapshot' sample mean of 138.94 kg/m<sup>2</sup> for new social infrastructure construction.



**Table 7.10 Audit results for case study 4**

<b>Site Location:</b>	Galway City	<b>Building Contractor:</b>	n/a	
<b>Project Description:</b>	The construction of an educational development consisting of an office building and all associated facilities e.g. canteen, reception area, toilets etc. The main structure of the building was cast in-situ concrete with concrete block internal and external walls. The exterior of the building was rendered and has a painted finish. The construction also included all service installations, groundwork and landscaping.			
<b>Total Floor Area:</b>	1 125 m <sup>2</sup>			
<b>Estimated Completed Floor Area:</b>	1 125 m <sup>2</sup>			
<b>Project Commencement Date:</b>	Sept 03	<b>Project Completion Date:</b>	July 04	
<b>Audit Commencement Date:</b>	Dec 03	<b>Audit Completion Date:</b>	July 04	
<b>Waste Material</b>	<b>EWC Code</b>	<b>Quantity (m<sup>3</sup>)</b>	<b>Quantity (tonnes)</b>	
Building and construction waste	170904	240	144.00	
Timber/Wood	170201	100	60.00	
Insulation	170604	8	3.20	
Plasterboard	170802	6	2.40	
Paper, Plastics and Packaging	170904	21	3.15	
Canteen waste	170904	9	3.60	
Miscellaneous waste	170904	5	3.00	
Inert waste	170103	--	--	
Metals (including their alloys)	170405	11	11.00	
Totals		400	230.35	
<b>Waste Factor (Volume):</b>	<b>0.356 m<sup>3</sup>/m<sup>2</sup></b>			
<b>Waste Factor (Weight):</b>	<b>0.205 tonnes/m<sup>2</sup> or 204.76 kg/m<sup>2</sup></b>			

There is a correlation between the social infrastructure results for case study 4 and the ‘snapshot’ sample mean in that they are higher than the residential and private non-residential case studies and ‘snapshots’ factors.



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## 7.9 Composition

### 7.9.1 Classification of 'snapshot' projects

The composition of the C&D W stream does vary according to project type/activity. The identification of the individual components is essential in establishing waste prevention and minimisation targets. The methodology developed aimed to identify the composition by utilising a general material description and the appropriate EWC code for each material. In 2004, the point source assessment data provided the following categories:

- Inactive or inert waste.
- Mixed C&D W.
- Wood/Timber.
- Plastics & Packaging.
- Plasterboard.
- Canteen/Office Waste.
- Metals.
- Insulation.
- Miscellaneous waste<sup>10</sup>.
- Off-site waste<sup>11</sup>.
- Hazardous waste.

Following analysis of the 2004 data, it was decided to further breakdown the listed categories with addition of the following new categories:

- Cardboard.
- Timber Pallets.
- Building & Construction Waste<sup>12</sup>.
- Sweepings.
- Glass.
- Bituminous mixtures.
- Contaminated packaging.
- Electrical waste.

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<sup>10</sup> Miscellaneous waste consists of materials such as carpet, drainage piping and waste that was not directly audited e.g. if a skip was removed from site before it was final audited, the remained percentage was categorised as miscellaneous waste.

<sup>11</sup> Off-site waste is waste that was deposited into skips that did not arise from site activities e.g. members of the public dumping domestic waste.

<sup>12</sup> Building & Construction Waste replaced the category Mixed Waste used in 2004.

- 
- ❑ Drainage piping.

However in the presentation of the results in the following sections, a number of categories were integrated to provide consistent results for 2004 and 2005 as follows:

- ❑ Cardboard, contaminated packaging and plastics and packaging were integrated into the *Paper, Plastics and Packaging* category.
- ❑ Timber pallets were integrated into the *Timber/Wood* category.
- ❑ Electrical waste was integrated into the *Metals (including their alloys)* category.
- ❑ Drainage piping was integrated into the *Miscellaneous Waste* category.
- ❑ Building and construction waste reverted back to the *Mixed C&D W* category.

This means that the composition results of the 54 audited sites was divided into the following nine categories:

- ❑ Inert waste (excluding excavated materials).
- ❑ Paper, plastics and packaging.
- ❑ Timber/wood.
- ❑ Plasterboard.
- ❑ Canteen/office waste.
- ❑ Mixed C&D W.
- ❑ Metals (including their alloys).
- ❑ Insulation materials.
- ❑ Miscellaneous waste.

It must be noted that no excavated material was included in the audits as none was deposited in the waste skips. All of the excavated material was either reused on site or sent to permitted sites.

### 7.9.2 All project category composition

The overall composition of all the audited new construction projects in 2004 and 2005 is illustrated in percentages by volume (Figure 7.1) and by weight (Figure 7.2) (Appendix Q, Table Q.1).

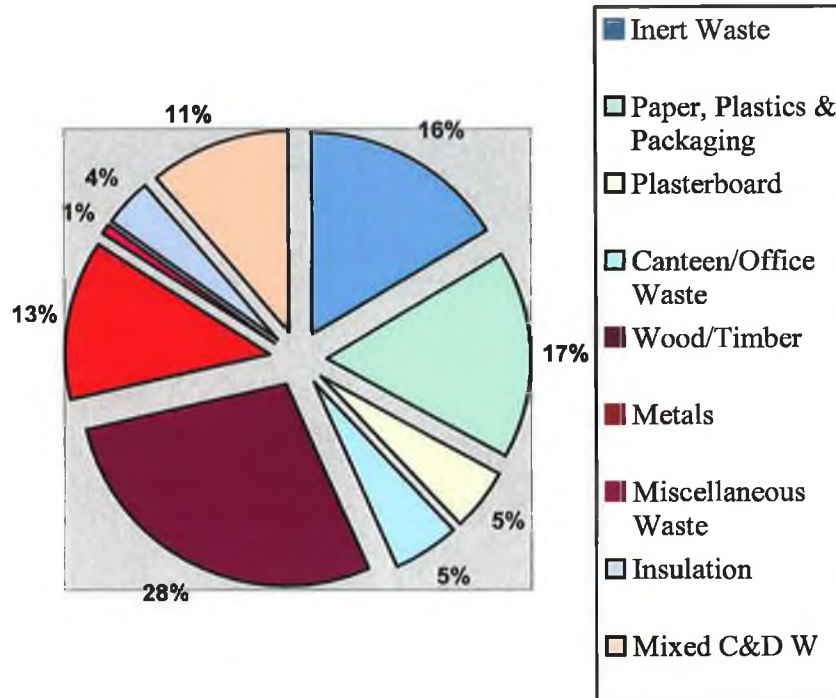


Figure 7.1 Total project category composition by volume (m<sup>3</sup>)

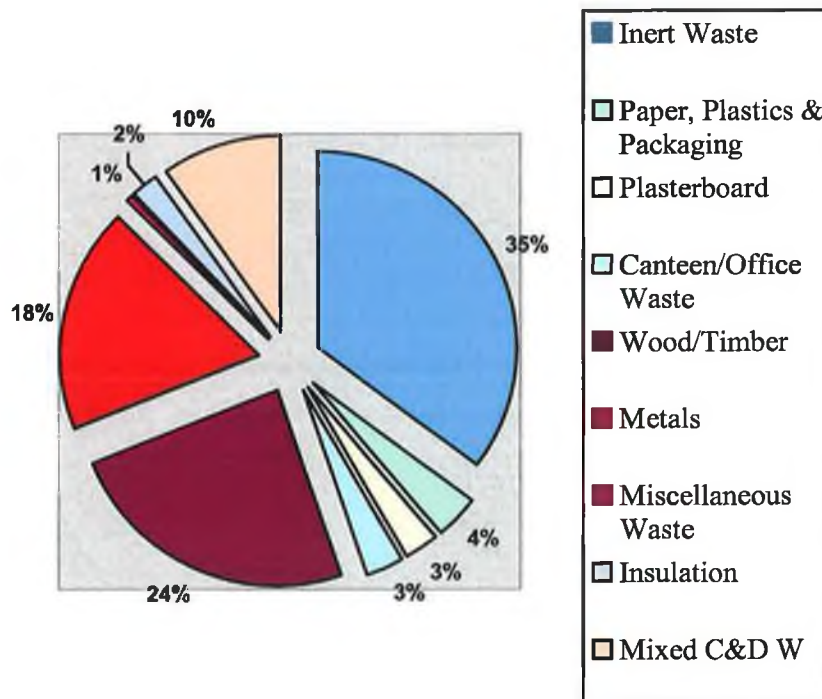


Figure 7.2 Total project category composition by weight (tonnes)

The following sections illustrate the composition per project category (Appendix Q, Tables Q.2 – Q.5).

### 7.9.3 New residential construction composition

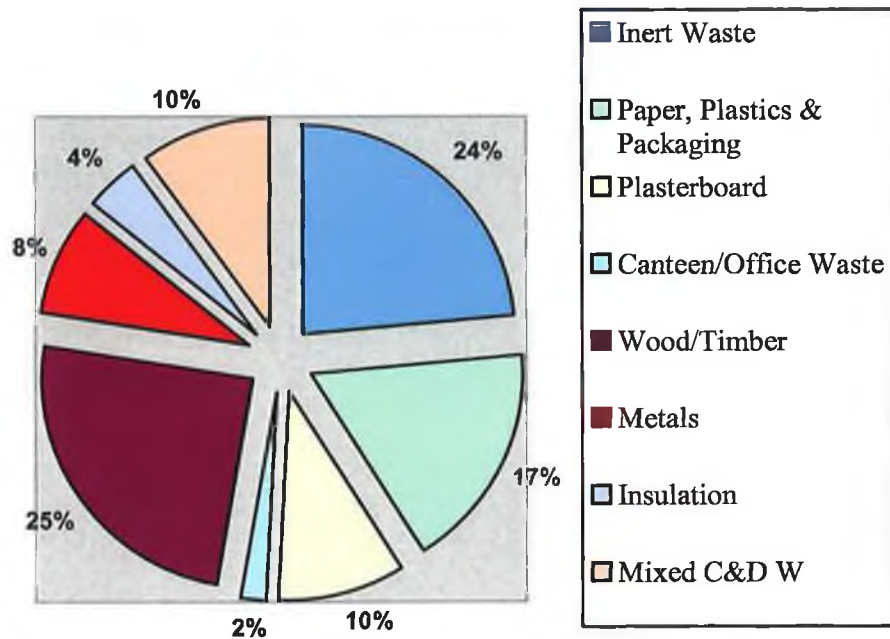


Figure 7.3 Residential construction waste composition by volume (m<sup>3</sup>)

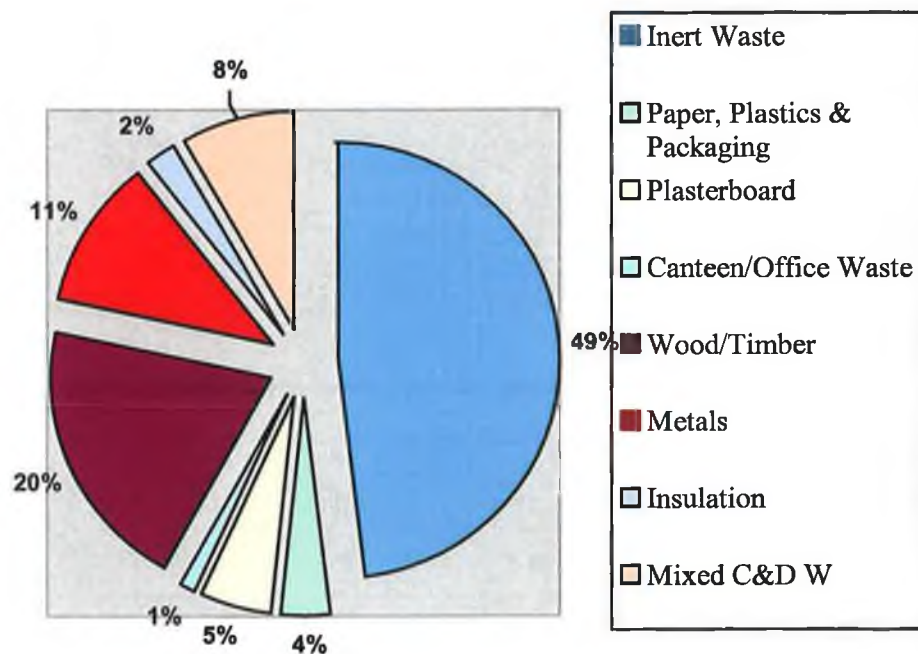


Figure 7.4 Residential construction waste composition by weight (tonnes)

### 7.9.4 New private non-residential construction composition

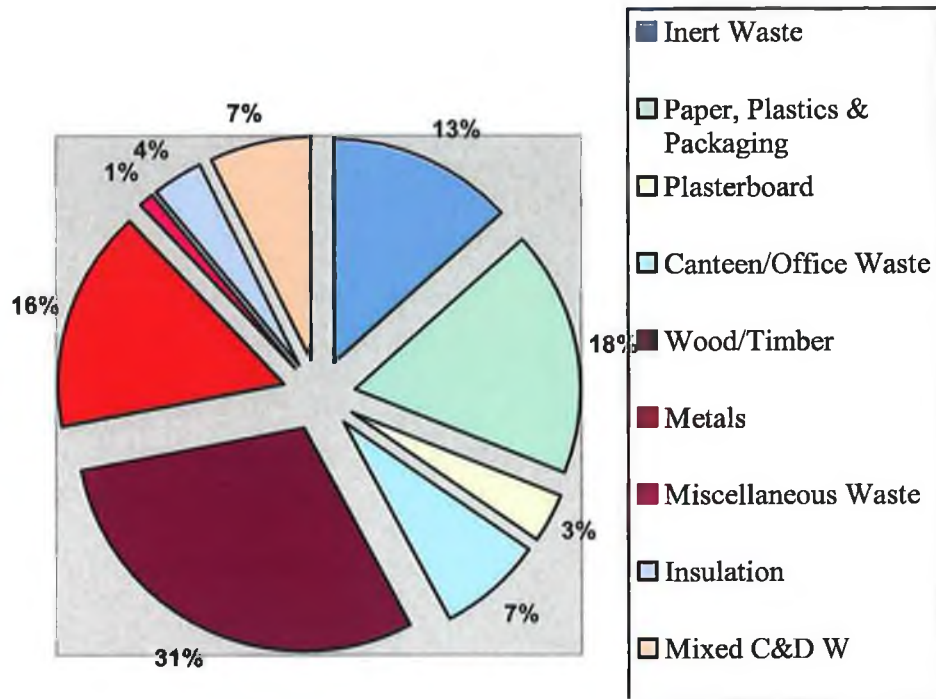


Figure 7.5 Private non-residential construction composition by volume (m<sup>3</sup>)

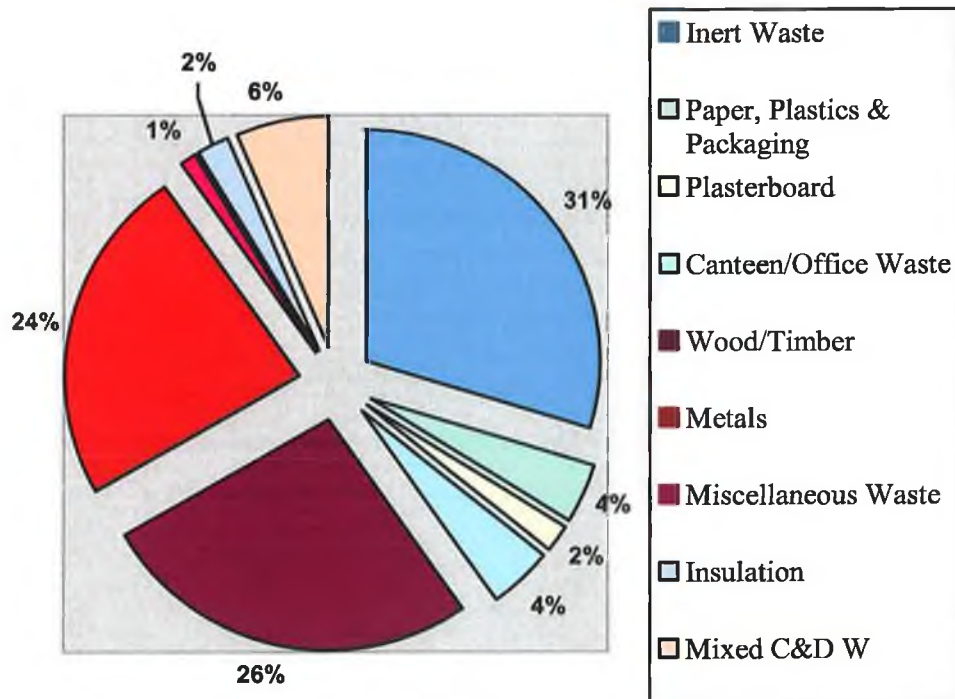
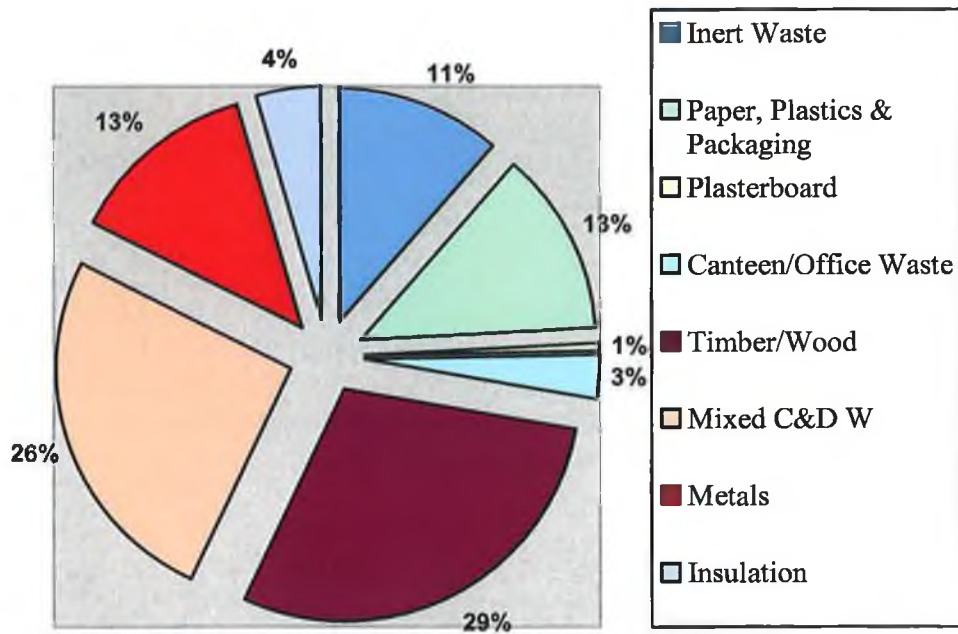
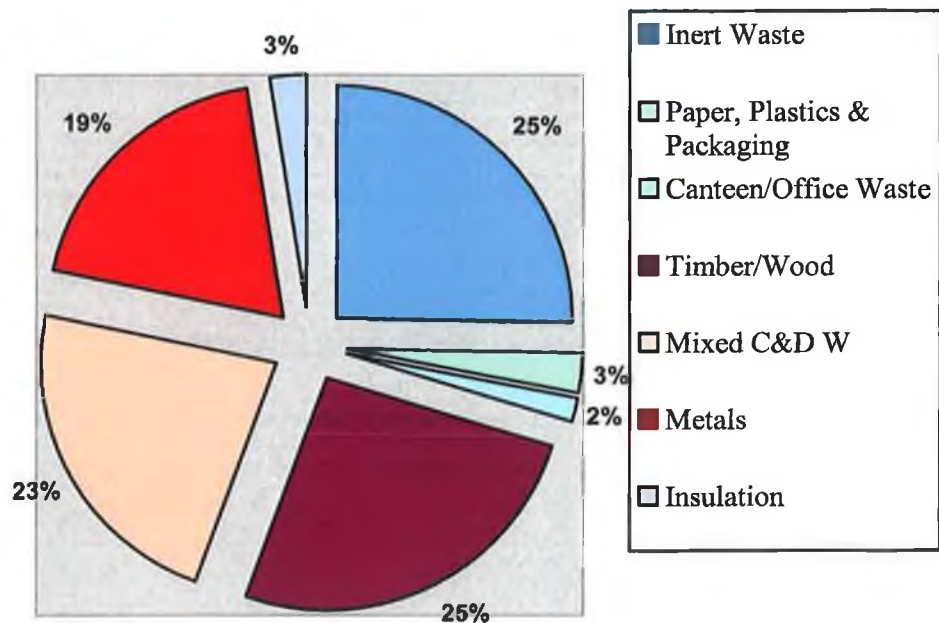


Figure 7.6 Private non-residential construction composition by weight (tonnes)

**7.9.5 New social infrastructure construction composition**



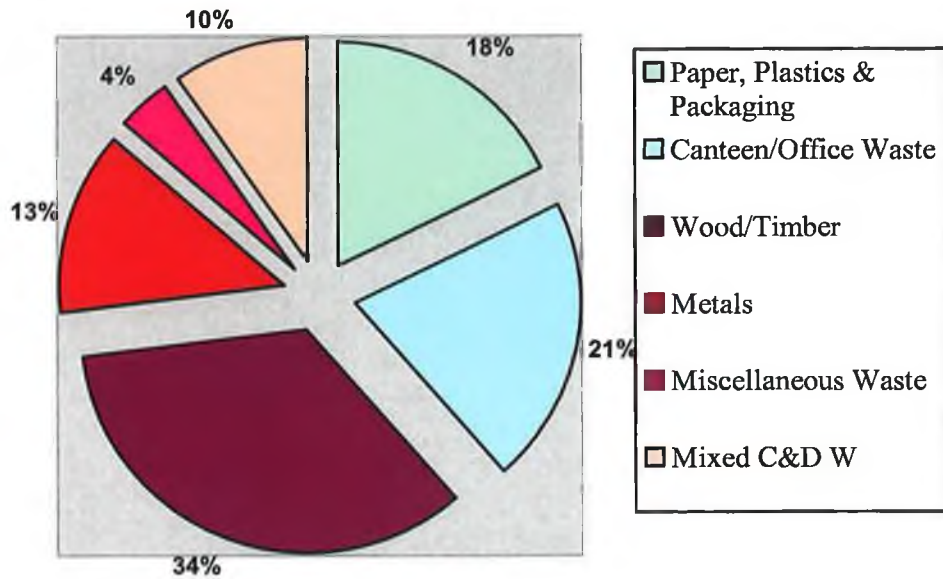
**Figure 7.7 Social infrastructure construction composition by volume (m<sup>3</sup>)**



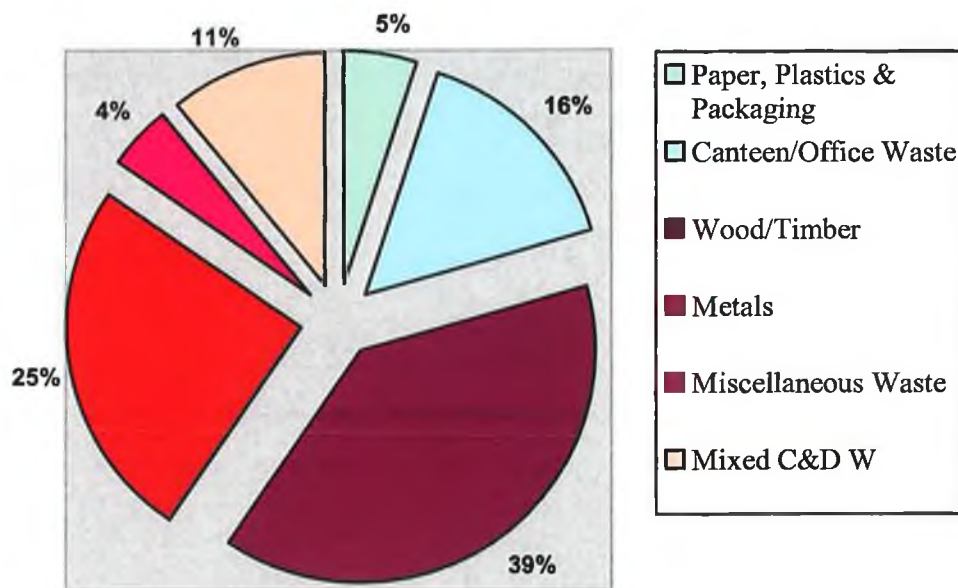
**Figure 7.8 Social infrastructure construction composition by weight (tonnes)**



**7.9.6 New productive infrastructure construction composition**



**Figure 7.9 Productive infrastructure construction composition by volume (m<sup>3</sup>)**



**Figure 7.10 Productive infrastructure construction composition by weight (tonnes)**

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The total project category composition results identified that the main waste fractions in volume terms were:

- Wood/timber (28 per cent).
- Paper, plastics and packaging (17 per cent).
- Inert waste (16 per cent).
- Metals (13 per cent).
- Mixed C&D W (11 per cent).

The main fractions by weight were:

- Inert waste (35 per cent).
- Wood/timber (24 per cent).
- Metals (18 per cent).
- Mixed C&D W (10 per cent).

In the *new residential construction* category the main waste fractions were:

- Inert waste (24 per cent by volume and 49 per cent by weight).
- Wood/timber (25 per cent by volume and 20 per cent by weight).
- Paper, plastics and packaging (17 per cent by volume and 4 per cent by weight).

In the *new private non residential construction* category the main waste fractions were:

- Timber/wood (31 per cent by volume and 26 per cent by weight).
- Paper, plastics and packaging (18 per cent by volume and 4 per cent by weight).
- Metals (16 per cent by volume and 24 per cent by weight).
- Inert waste (13 per cent by volume and 31 per cent by weight).

In the *new social infrastructure construction* category the main waste fractions were:

- Timber/wood (29 per cent by volume and 25 per cent by weight).
- Mixed C&D W (26 per cent by volume and 23 per cent by weight).
- Metals (13 per cent by volume and 19 per cent by weight).
- Inert waste (11 per cent by volume and 25 per cent by weight).

In the *new productive infrastructure construction* category the main waste fractions were:

- Timber/wood (34 per cent by volume and 39 per cent by weight).



- Canteen waste (21 per cent by volume and 16 per cent by weight).
- Paper, plastics and packaging (18 per cent by volume and 5 per cent by weight).
- Metals (13 per cent by volume and 25 per cent by weight).

### 7.9.7 Composition of selected case studies

The same classification was used for the four selected case studies producing the following results.

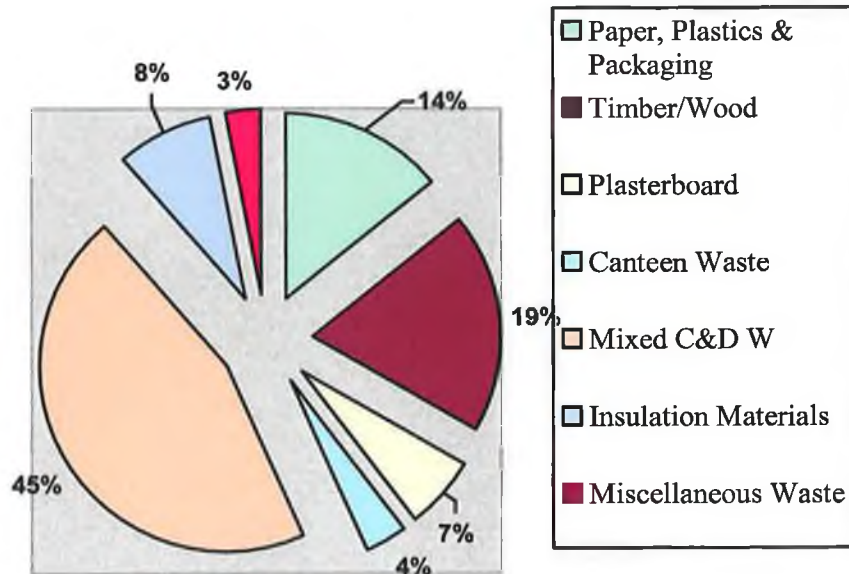


Figure 7.11 Case study 1 - composition by volume (m<sup>3</sup>)

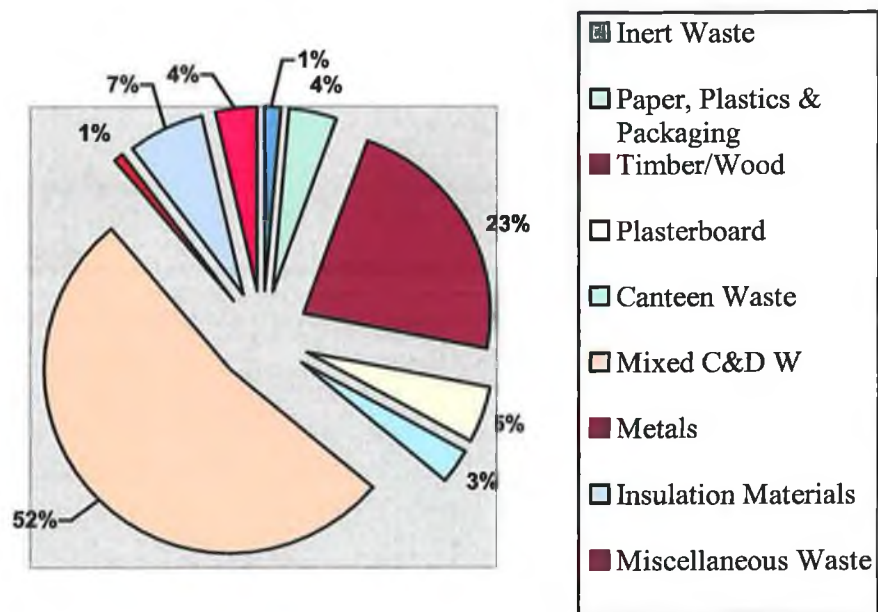


Figure 7.12 Case study 1 - composition by weight (tonnes)

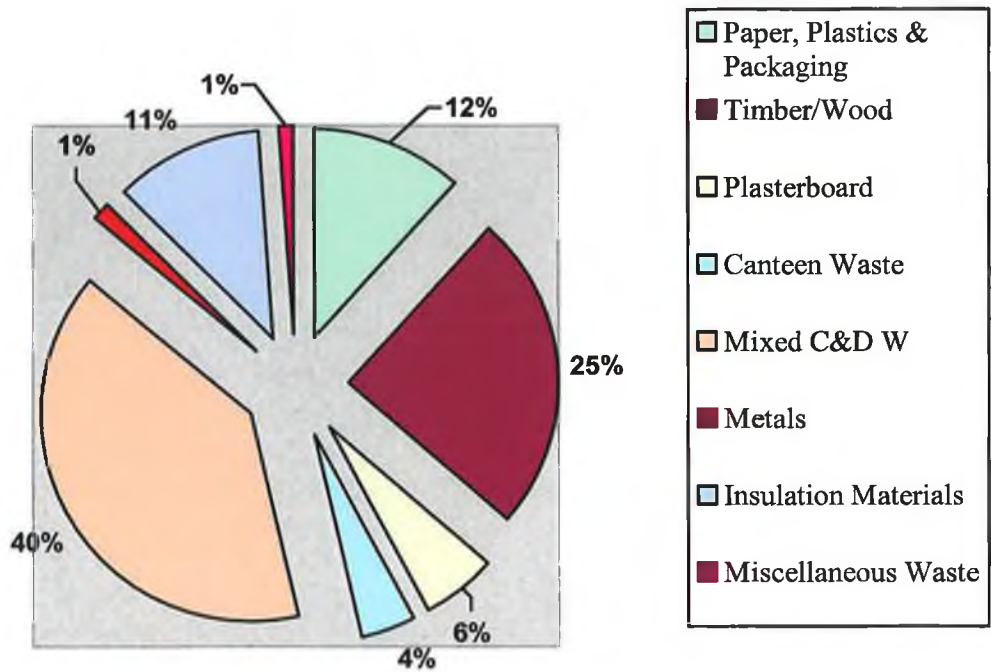


Figure 7.13 Case study 2 - composition by volume (m<sup>3</sup>)

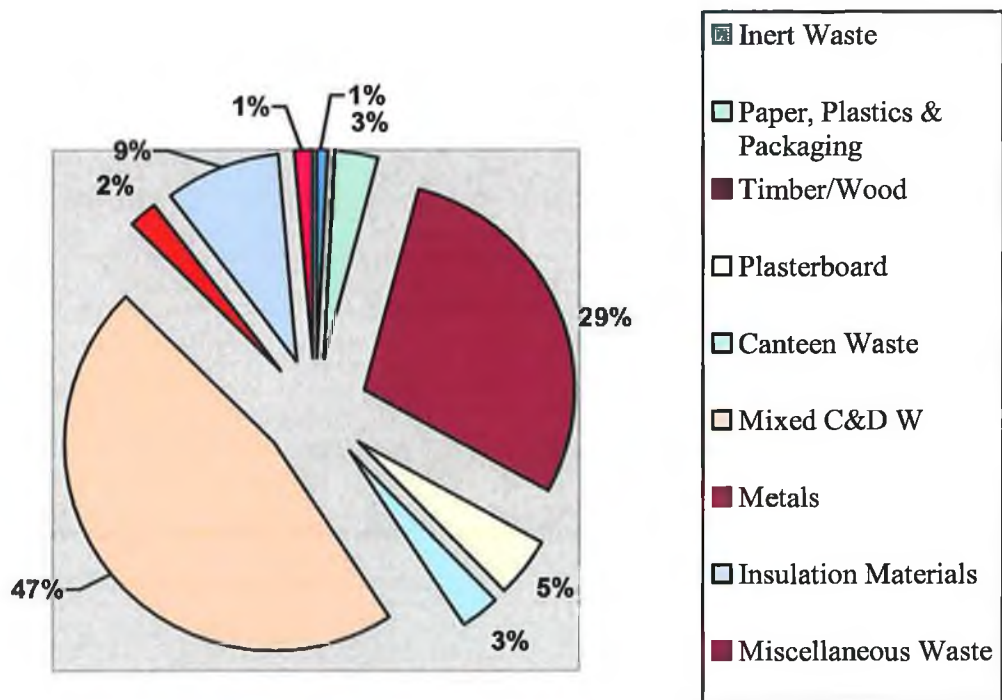


Figure 7.14 Case study 2 - composition by weight (tonnes)

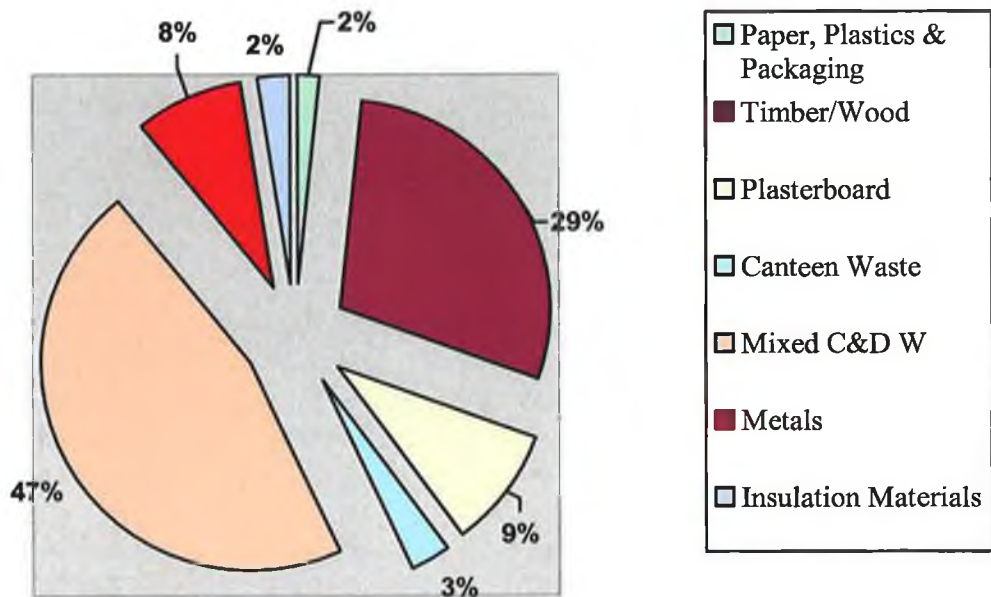


Figure 7.15 Case study 3 - composition by volume (m<sup>3</sup>)

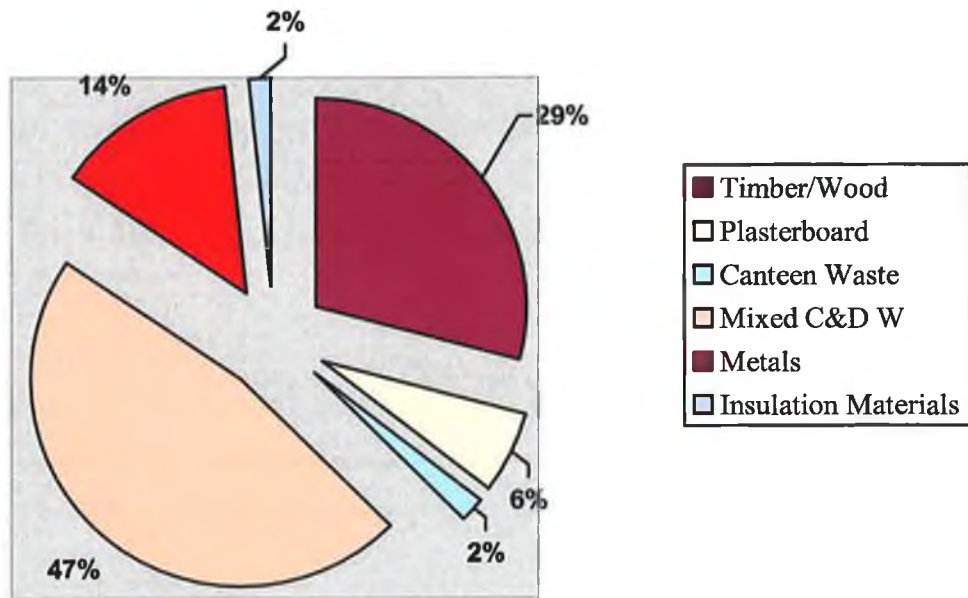


Figure 7.16 Case study 3 - composition by weight (tonnes)

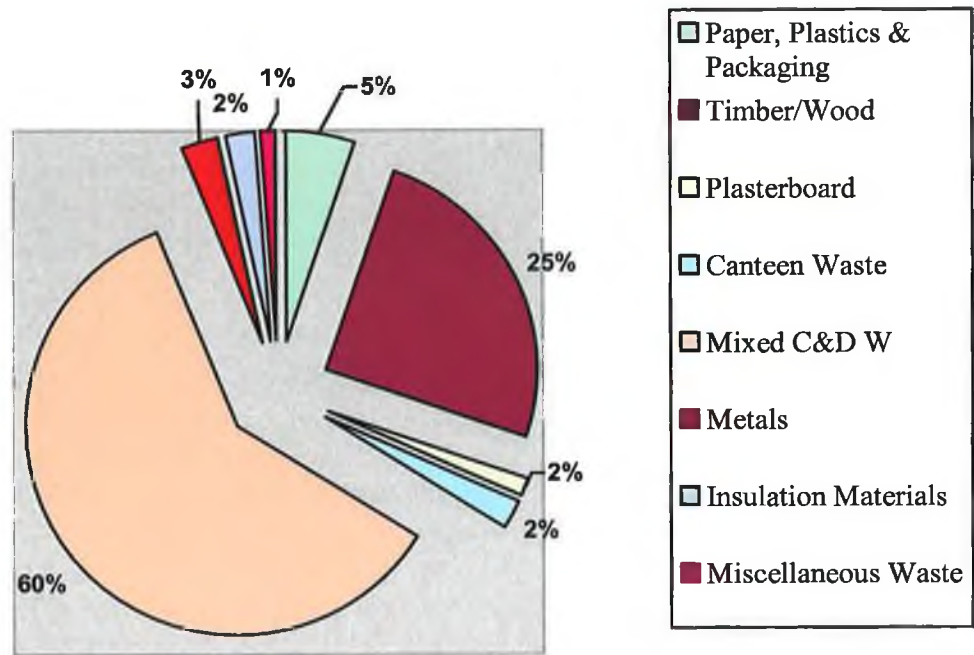


Figure 7.17 Case study 4 - composition by volume (m<sup>3</sup>)

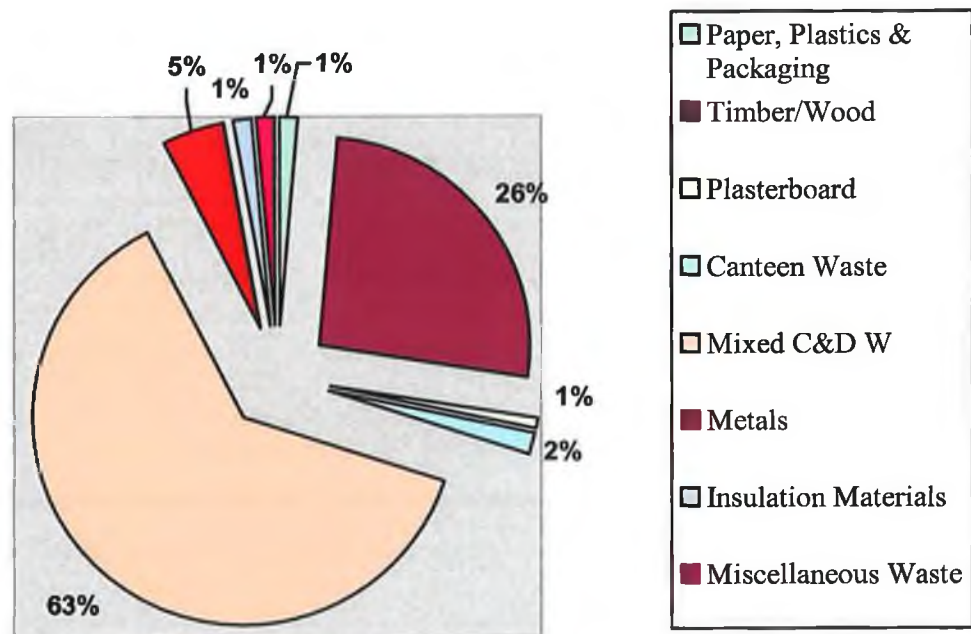


Figure 7.18 Case study 4 - composition by weight (tonnes)

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The case studies composition contrasts with the 'snapshot' projects in that there is a high degree of mixed C&D W in each one. This category was used when it was impossible to separate the waste into separate fractions by visual assessment. A common practice on site was to 'store' the waste in a pile or collect the waste around the site at the end of the week and then dispose of it into the skips. In this case the auditor found it impossible to identify the separate fractions as the waste was placed in the skip in one go.

#### **7.10 Limitations of Results**

The following are some limitations associated with the results outlined:

- ❑ Each of the audited projects provided 'snapshots' of the overall project waste production and composition over a 6-month period producing a variety of unit waste skip factors dependent on the project parameters.
- ❑ The skip analysis did not include any materials left around the site. Only materials disposed of in the skips were audited.
- ❑ The audits did not include any data on excavated soil/stones as none of this waste fraction was found to be deposited in skips. Nearly 100 per cent of this fraction was reused on/off site or sent to permitted sites.
- ❑ There was a lack of data on demolition waste production.
- ❑ The sample mean unit waste skip factor for *productive infrastructure construction* was based on a sampling size of only three projects.
- ❑ The accuracy of the conversion factors from the *Waste Management (Landfill Levy) Regulations 2002* (DoEHLG, 2002b) was an area of concern. Table 7.11 provides a comparison of the *Landfill Levy* conversion factors (CF 1) and factors (CF 2) obtained from Golder Pty Ltd. (1999) applied to the total composition figures for the audited projects.



**Table 7.11 Comparison in the use of conversion factors from the *Waste Management (Landfill Levy) Regulations 2002 (CF 1) (DoEHLG, 2002b)* and from *Golder Pty. Ltd. (1999) (CF 2)* applied to total composition volumes**

<b>Materials</b>	<b>Volume (m<sup>3</sup>)</b>	<b>CF 1</b>	<b>Weight (tonnes)</b>	<b>CF 2</b>	<b>Weight (tonnes)</b>
Inactive or inert waste	2 396.430	<b>1.50</b>	3 594.645	<b>1.50</b>	3 594.645
Paper, plastics & packaging	2 462.211	<b>0.15</b>	369.332	<b>*0.08</b>	196.977
Plasterboard	745.325	<b>0.40</b>	298.130	<b>0.30</b>	223.598
Canteen/office waste	748.990	<b>0.40</b>	299.596	<b>*0.26</b>	194.737
Timber/wood	4 124.525	<b>0.60</b>	2 474.715	<b>0.30</b>	1 237.358
Mixed C&D W	1 637.675	<b>0.60</b>	982.605	<b>1.00</b>	1 637.675
Metals (including their alloys)	1 887.458	<b>1.00</b>	1 887.458	<b>0.28</b>	528.488
Insulation materials	564.555	<b>0.40</b>	225.822	<b>**1.00</b>	564.555
Miscellaneous Waste	122.820	<b>0.60</b>	73.692	<b>**1.00</b>	122.820
<b>Totals</b>			<b>10 205.995</b>		<b>8 300.853</b>

\*These conversion factors were averaged.

\*\* There was no factors available for these categories so the factor for 'others' was used.

The application of the different sets of conversion factors produces a difference of 1 905.142 tonnes. This highlights the need for an accurate set of conversion factors specifically for the C&D W stream.

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## **Conclusions**

The main aims of this chapter were to:

- Outline the results produced from 54 audited projects and four case studies over a two-year period.
- Determine the statistical confidence of the results by calculating the sample mean, standard deviation and 95 percent confidence interval for each category.
- Identify any limitations associated with results.

The main conclusions are:

- The 54 audited 'snapshot' projects and four case studies provided a representative sample of waste production from new construction in 2004 and 2005.
- The use of the multiple 'snapshot' case studies and the simplicity of interpreting the data allowed the author to provide statistical generalisations in producing mean sample indicators for each category of new construction.
- The units of analysis used ( $\text{m}^3/\text{m}^2$  or  $\text{kg}/\text{m}^2$ ) provided a direct link between the methodology used and the results.
- The variety in the individual 'snapshot' results was primarily due to the project parameters i.e. project type, size and stage. The presence of some extreme values affected the statistical confidence of the results producing a skewed distribution with a large standard deviation. These 'outliers' were included in the analysis as they provide a true reflection of waste management practices on site.
- The major components of the C&D W stream were identified as: inert waste (excluding excavated materials); timber/wood; paper, plastics and packaging; and metals, all of which would be potentially reusable and/or recyclable.
- The results provide the industry with a set of indicators that can be used to benchmark waste production in new construction as follows:
  - Mean sample unit waste skip factor of  $70.27 \text{ kg}/\text{m}^2$  for *new residential construction*.
  - Mean sample unit waste skip factor of  $86.82 \text{ kg}/\text{m}^2$  for *new private non-residential construction*.
  - Mean sample unit waste skip factor of  $48.48 \text{ kg}/\text{m}^2$  for *new productive infrastructure construction*.

- 
- Mean sample unit waste skip factor of 138.94 kg/m<sup>2</sup> for *new social infrastructure construction*.

The application of the generated waste production indicators provides a benchmarking tool to estimate national C&D W production and assess the current infrastructural capacity available.

The next chapter will apply these indicators to construction output to generate national estimates for C&D W production in 2005. This will then be compared to data collected from permitted and licensed facilities.



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## **Chapter 8 The Application of Waste Production Indicators to Benchmark Construction and Demolition Waste Production and Management in 2005**

### **8.1 Introduction**

This chapter will detail the application of the generated unit waste factors to construction output producing a national C&D W estimate for 2005 and assess the infrastructural capacity available to process the waste stream.

The main aims of the chapter are to:

- Apply the generated unit waste skip factors to construction output to produce a national estimate for 2005.
- Compare the 2005 national estimate with the amount of C&D W collected and managed at licensed and permitted facilities.

### **8.2 National C&D W Production in 2005**

Two important factors were considered for the generation of national estimates based on the methodology used in the *National Waste Database Report 2001* (EPA, 2003):

- Construction output measured in floor area (m<sup>2</sup>).
- C&D W factors measured in weight per floor area (kg/m<sup>2</sup>).

#### **8.2.1 Construction output**

The *National Waste Database Report 2001* (EPA, 2003) calculated the construction output for 2001 from the Department of Environment, Heritage and Local Government publication *Construction Industry Review 2001, Outlook 2002-2004* (DoEHLG, 2002c). The construction output was presented as value of construction output (million €) and buildings area (m<sup>2</sup>) (Table 8.1). This methodology provided a direct correlation between the value of construction output and the total buildings area e.g. for *new residential construction*, the value of construction output was €3 785.8 million, which represented 38 per cent of the total value of construction output; while the buildings area for the same category (7 306 418 m<sup>2</sup>) also accounted for 38 per cent of the total buildings area. This was the same for each category.

**Table 8.1 Construction output in 2001 (EPA, 2003)**

Category	Value of construction output (million €)	Buildings area (m <sup>2</sup> )
Residential construction	3 785.8	7 306 418
New private non-residential construction	1 870.8	3 610 557
New productive infrastructure	1 121.2	2 163 864
New social infrastructure	661.3	1 276 278
Residential repair and maintenance	1 792.1	3 458 670
Private non residential repair and maintenance	360.8	696 327
Productive infrastructure repair and maintenance	193.7	373 832
Social infrastructure repair and maintenance	241.6	466 277
<b>Total new construction, repair and maintenance waste</b>	<b>10 027</b>	<b>19 352 223</b>

This methodology was not used to calculate construction output in 2005 as the *Construction Industry Review 2005* had not yet been published by the Department of Environment, Heritage and Local Government. The *Review of the Construction Industry 2004 and Outlook 2005-2007* (DoEHLG, 2005c) did provide some estimates for the value of construction output in 2005 (Table 8.2), but each of these categories included both construction and repair and maintenance.

**Table 8.2 Value of estimated construction output in 2005 (DoEHLG, 2005c)**

Category	Estimated value of construction output (million €)
Residential construction	19 056.0
Private non-residential construction	3 421.4
Productive infrastructure construction	5 233.6
Social infrastructure construction	2 027.3
<b>Total</b>	<b>29 738.3</b>

The calculation of construction output for 2005 in this study was based on data produced by the Central Statistics Office (CSO). The CSO produced quarterly reports on the number of planning permission or approvals granted in 2005 (CSO, 2005a, b, c, 2006a). Planning permissions were classified by type of development, local authority district and by regional authority providing total floor areas approved. Only final grants of permission or approvals were covered i.e. only works that involved construction. The categories used for the type of developments were:

- Dwellings.
- Commercial buildings.
- Buildings for agriculture.
- Industrial buildings.
- Buildings for Government, health and education.
- Other buildings for social use.

Table 8.3 outlines the total floor areas for these categories for 2005 taken from the data provided in the quarterly reports (Appendix R).

**Table 8.3 Total floor areas (m<sup>2</sup>) for 2005 using CSO categories (CSO, 2005a, b, c, 2006a)**

Category	Total floor area (m <sup>2</sup> )
Dwellings	13 958 000
Commercial buildings	3 525 000
Buildings for agriculture	690 000
Industrial buildings	938 000
Government, health and education	523 000
Other buildings for social use	362 000
<b>Total New Construction</b>	<b>19 996 000</b>

To facilitate the application of the generated unit waste factors for new construction, the CSO categories had to be transformed into the categories used in the study, i.e. new residential construction, new private non-residential construction, social infrastructure construction and productive infrastructure construction (Table 8.4) as follows:

- The CSO category of *dwellings* provided the total floor area for *new residential construction*.

- The CSO categories *commercial buildings, buildings for agricultural and industrial buildings* were combined to give a total floor area for new private non-residential construction.
- The CSO categories *Government, health and education and other buildings for social use* were combined to give a total floor area for *social infrastructure construction*.

**Table 8.4 Total floor areas (m<sup>2</sup>) for 2005 (adapted from CSO, 2005a, b, c, 2006a)**

Category	Construction Output (m <sup>2</sup> )
Residential construction	13 958 000
New private non-residential construction	5 153 000
New social infrastructure construction	885 000
New productive infrastructure construction	n/a
<b>Total New Construction</b>	

As can be seen from Table 8.4, there were no figures available for productive infrastructure as no floor areas were provided for this category in the quarterly reports. The *Planning Permissions Supplementary Tables 2001-2005* (CSO, 2006b) provided total floor areas for *buildings for transport* (171 000 m<sup>2</sup>) and *buildings for mining, energy and water* (14 000 m<sup>2</sup>) giving a total of 185 000 m<sup>2</sup>. It was assumed that this figure underestimated the total output in floor areas for this category as it did not include civil engineering works.

An estimate for *new productive infrastructure construction* was calculated by taking the value of construction output estimate (€5 233.6 million) provided in the *Review of the Construction Industry 2004 and Outlook 2005-2007* (DoEHLG, 2005c) and applying the methodology used in the *National Waste Database Report 2001* (EPA, 2003). The estimated figure of €5 233.6 million accounted for 18 per cent of the total estimated value of construction output in 2005, and so was assumed to account for 18 per cent of the total buildings area as well. This gave a total floor area estimate of 4 389 366 m<sup>2</sup>. The ratio of new productive infrastructure construction to productive infrastructure repair and maintenance was approximately 6:1 (EPA, 2003), which implied that the equivalent floor area for new productive construction was **3 762 314 m<sup>2</sup>**.

## 8.2.2 Application of generated waste factors

The generated sample mean unit waste skip factors ( $\text{kg/m}^2$ ) were applied to the construction output in each category to give a total estimated figure (Table 8.5).

**Table 8.5 New construction C&D W production in 2005**

Category	Construction Output in Floor area ( $\text{m}^2$ )	Unit Sample Mean WSF* ( $\text{kg/m}^2$ )	Waste Arisings (tonnes)
Residential construction	13 958 000	70.27	980 829
New private non-residential construction	5 153 000	86.82	447 383
New social infrastructure	885 000	138.94	122 962
New productive infrastructure	3 762 314	48.48	182 397
<b>Total new construction</b>	<b>23 758 314</b>		<b>1 733 571</b>

\*WSF denotes waste skip factor.

The total estimated C&D W production from new construction in 2005 was **1 733 571 tonnes**. To provide a total estimate for all construction activity, we needed to determine what percentage of the total output does the *new construction* category account for?

Again, referring to the *National Waste Database Report 2001* (EPA, 2003), the *new construction* categories accounted for 74 per cent of output ( $\text{m}^2$  of floor area) but only 14 per cent of total waste production. The *repair and maintenance* categories (demolition) accounted for 26 per cent of output ( $\text{m}^2$  of floor area) and 86 per cent of total waste production (excluding soils/stones). If we assume that the estimated figure of **1 733 571 tonnes** represented 14 per cent<sup>13</sup> of total waste production in 2005, then the total figure including *repair and maintenance* (demolition) was **12 382 650 tonnes** (excluding soils/stones).

The *National Waste Report 2004* (EPA, 2005a) provided an estimate of **8 491 994 tonnes** for collection and management of soil and stones. This was added to the 2005

<sup>13</sup> This figure of 14 per cent is supported by Symonds *et al.* (1999) who estimated that construction waste accounted for 15 per cent of the total C&D W produced in Europe.

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estimate of 12 382 650 tonnes to produce an overall C&D W figure of **20 874 644** tonnes.

This national estimate was then used to calculate C&D W waste production per capita. The most recent census report (CSO, 2006c) estimated the population of Ireland at 4 234 925 people; an increase of 317 722 over four years. This resulted in a C&D W (including excavated materials) production per capita figure of 4.9 tonnes per person or 2.9 tonnes per person excluding excavated materials. Previous research of 0.5 to 1.0 tonnes per capita for the developed world (Lauritzen & Hahn, 1992); 0.5 tonnes per capita for the USA (Peng *et al.*, 1997) 0.48 tonnes per capita in Europe (Symonds *et al.*, 1999) and 3.0 tonnes capita for the UK (Smith *et al.*, 2002) do not provide a reliable dataset to compare to due to the variability in the methodologies and the different definitions used.

### **8.2.3 Limitations**

The extrapolated national estimates had the following limitations:

- The construction output was based on the number of planning approvals granted in 2005 expressed in floor areas (m<sup>2</sup>). This did not equal the total floor area actually constructed in that year.
- The lack of a construction output figure for *new productive infrastructure construction* necessitated the use of an estimated figure based on the potential construction output by value (DoEHLG, 2005c) and the methodology applied in the *National Waste Database Report 2001* (EPA, 2003).
- The lack of generated unit waste skip factors for *residential repair and maintenance, new private non residential repair and maintenance, new productive repair and maintenance* and *new social infrastructure repair and maintenance* limited the reliability of the extrapolation to national estimates. This necessitated the use of an estimate of 8 491 994 tonnes based on the collection and management of soil and stones used in the *National Waste Report 2004* (EPA, 2005a)



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- The direct correlation between the value of construction output and total buildings area is questionable and requires further investigation.

The national estimate combined the use of the generated indicators with figures derived from methodologies used by the EPA (2001, 2005a). As already discussed these methodologies do not provide reliable datasets from which to work. However, it was important within the context of the study to progress from a micro to a macro analysis to give the study an environmental policy dimension. The generated national estimate although having clear limitations, does provide the industry with a benchmark from which to assess their performance in regard to the recycling/recovery targets outlined in *Changing Our Ways* (DoEHLG, 1998a).

A licensed and permitted facilities survey was carried out to address one of the identified limitations i.e. the use of the 2004 figure of 8 491 994 tonnes for the amount of soil and stones collected.

### **8.3 Licensed and Permitted C&D W Facilities Survey 2005**

To establish the amount of inert waste including excavated materials collected and managed in 2005, it was necessary to identify the number of waste licensed and permitted facilities available to handle the waste stream. Each licensed facility and permitted site has *acceptance criteria* outlining the waste types and annual tonnages allowable. By reviewing each license and permit, an overall capacity was established.

In addition, each facility or site is required by their license or permit, to submit an annual environmental report (AER) each year, which includes annual tonnages accepted. Two surveys were carried out to collect these data for 2005:

- C&D W licensed facilities survey.
- C&D W permitted sites survey.

In both surveys, the term 'inert waste' is taken to include excavated materials such as soil and stones as opposed to the working definition used in the point source assessments, which excluded excavated materials.

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### 8.3.1 Licensed facilities survey 2005

#### *Methodology*

The survey was divided into two stages:

1. Each waste license was examined on the EPA's database available at:

- <http://www.epa.ie/terminalfour/waste/index.jsp>

A list of facilities licensed to accept C&D W was established. The *acceptance criteria* of each license outlined the waste types and maximum annual tonnages to be accepted at the facility. This established the maximum annual C&D W licensed processing capacity.

2. A list of C&D W licensed facilities was drawn up and compared to the public files list (Appendix S) available at:

- <http://www.epa.ie/OfficeofEnvironmentalEnforcement/LicenceEnforcement/AccessToInformation/>

Contact was made with the regional environmental enforcement officers in Mayo, Cork, Dublin and Wexford (covering all submissions) to discuss submitted data and arrange site visits. Each site visit (July 2006) involved the examination of all the relevant public files and the collection of submitted AER 2005 data, specifically the annual tonnages and types of waste accepted for each facility.

#### *Regional results*

The following tables (Table 8.6 to 8.15) outline the results of the survey in a regional context. In each of the tables the following acronyms apply:

- TBA denotes 'to be agreed with the EPA'.
- WTS denotes waste transfer station.
- IWMF denotes integrated waste management facility.
- HWF denotes hazardous waste facility.



**Table 8.6 Licensed facilities in the Clare/Kerry/Limerick region**

County	License No.	Facility Type	Licensed Tonnage		AER 2005 Tonnages	
Clare	31-1	Landfill	Inert	TBA		
Clare	109-1	IWMF	C& W	2 000		
<b>Sub total</b>				<b>2 000</b>		
Kerry	1-3	Landfill	C&D W	2 500	C&DW	380
					Inert	6466
Kerry	69-1	WTS	C&D W	12 500		
			Inert	TBA		
Kerry	72-1	WTS	C&D W	1 000		
			Inert	TBA		
Kerry	86-1	WTS	C&DW	4 000		
			Inert	TBA		
Kerry	87-1	WTS	C&DW	5 000		
			Inert	TBA		
<b>Sub total</b>				<b>25 000</b>		
Limerick	17-2	Landfill	Inert	50 000		
Limerick	61-2	WTS	C&D W	2 500		
Limerick	76-1	IWMF	Inert	TBA		
Limerick	82-2	WTS	C&D W	4 500		1 000
<b>Sub total</b>				<b>57 000</b>		
<b>Total</b>				<b>84 000</b>		<b>7 846</b>
<b>Inert Waste Tonnage Capacity</b>				<b>50 000</b>		
<b>C&amp;D W Tonnage Capacity</b>				<b>34 000</b>		

The total C&D W processing capacity (excluding tonnages to be agreed with the EPA) for the Clare/Kerry/Limerick region was **84 000 tonnes** from 11 facilities. Of this, 60 per cent (50 000 tonnes) was specifically for inert waste leaving 40 per cent (34 000 tonnes) for C&D W. Two facilities submitted their AER's for 2005, accepting 7 846 tonnes in total, consisting of inert waste (6 466 tonnes) and C&D W (1 380 tonnes).

**Table 8.7 Licensed facilities in the Connaught region**

County	License No.	Facility Type	Licensed Tonnage		AER 2005 Tonnages	
Galway	13-1	Landfill	Inert	TBA		
Galway	27-2	Landfill	Inert	TBA	65 379	
Galway	178-1	Landfill	Inert	27 230		
Galway	106-2	WTS	C&DW	50 000	9 867	
Galway	148-1	WTS	C&DW	80 000	419	
Galway	166-1	WTS	C&DW	2 000		
<b>Sub total</b>				<b>159 230</b>		
Leitrim	64-1	Landfill	Inert	10 000		
Leitrim	65-1	Landfill	Inert	70 000		
Leitrim	216-1	WTS	C&D W	2 000		
<b>Sub total</b>				<b>82 000</b>		
Mayo	21-1	Landfill	Inert	40 000		
Mayo	67-1	Landfill	C&D W	950		
<b>Sub total</b>				<b>40 950</b>		
Roscommon	59-2	Landfill	C&D W	4 000	1 488	
			Inert	20 000	6 407	
Roscommon	73-1	Landfill	C&D W	1 000	Soil	1000
					Haz.	100
<b>Sub total</b>				<b>25 000</b>		
Sligo	58-1	WTS	C&D W	9 000	3 500	
<b>Sub total</b>				<b>9 000</b>		
<b>Total</b>				<b>316 180</b>	<b>88 160</b>	
<b>Inert Waste Tonnage Capacity</b>				<b>167 230</b>		
<b>C&amp;D W Tonnage Capacity</b>				<b>148 950</b>		

The total C&D W processing capacity (excluding tonnages to be agreed with the EPA) for the Connaught region was **316 180 tonnes** from 14 facilities. Of this, 53 per cent (167 230 tonnes) was specifically for inert waste leaving 47 per cent (148 950 tonnes) for C&D W. Seven facilities submitted their AER's for 2005, accepting 88 160 tonnes in total consisting of inert waste (72 786 tonnes), C&D W (15 274) and hazardous waste (100 tonnes).

**Table 8.8 Licensed facilities in the Cork region**

County	License No.	Facility Type	Licensed Tonnage		AER 2005 Tonnages
Cork	2-2	Landfill	Inert	TBA	
Cork	12-2	Landfill	C&D W	200 000	
			Hazardous	500	
Cork	22-1	Landfill	C&D W	13 800	75 902
Cork	23-1	Landfill	Inert	40 000	
Cork	68-2	Landfill	C&D W	5 300	14 657
			Inert	TBA	
Cork	89-1	Landfill	C&D W	2 000	1 089
Cork	107-1	WTS	C&D W	1 800	
Cork	132-1	Landfill	Inert	14 000	
Cork	136-2	WTS	C&D W	4 758	
Cork	141-1	Landfill	Inert	125 000	
Cork	142-1	WTS	DIY	5 000	
Cork	147-1	WTS	C&D W	25 000	14 454
Cork	161-1	Landfill	Inert	*262 500	
Cork	173-1	WTS	C&D W	4 000	
Cork	214-1	WTS	C&D W	7 514	
<b>Total</b>				<b>711 172</b>	<b>106 102</b>
<b>Inert Tonnage Capacity</b>				<b>441 500</b>	
<b>C&amp;D W Tonnage Capacity</b>				<b>264 172</b>	
<b>Hazardous Waste Tonnage Capacity</b>				<b>500</b>	
<b>DIY Waste Tonnage Capacity</b>				<b>5 000</b>	

\* This tonnage was calculated by multiplying 175 000m<sup>3</sup> (as in licence) by 1.5 (using the landfill levy conversion factor).

The total C&D W processing capacity (excluding tonnages to be agreed with the EPA) for the Cork region was **711 172 tonnes** from 15 facilities. Of this, 62 per cent (441 500 tonnes) was specifically for inert waste leaving 37 per cent (264 172 tonnes) for C&D W and one per cent for hazardous and DIY waste. Four facilities submitted their AER's for 2005, accepting 106 102 tonnes in total consisting of inert waste (14 657 tonnes) and C&D W (91 445 tonnes).

**Table 8.9 Licensed facilities in the Donegal region**

County	License No.	Facility Type	Licensed Tonnage		AER 2005
			C&D W	Inert	
Donegal	24-2	Landfill	C&D W	500	6
			Inert	TBA	361
Donegal	62-1	Landfill	Inert	11 000	4 423
Donegal	63-1	Landfill	Inert	40 000	
Donegal	90-1	Landfill	Inert	70 000	
Donegal	125-1	Landfill	Inert	46 000	34 474
Donegal	126-1	Landfill	Inert	40 000	
<b>Total</b>				<b>207 500</b>	<b>39 264</b>
<b>Inert waste tonnage capacity</b>				<b>207 000</b>	
<b>C&amp;D W tonnage capacity</b>				<b>500</b>	

The total C&D W processing capacity (excluding tonnages to be agreed with the EPA) for the Donegal region was **207 500 tonnes** from 6 facilities. Of this, nearly 100 per cent (207 000 tonnes) was specifically for inert waste. Four facilities submitted their AER's for 2005, accepting 39 264 tonnes in total consisting of inert waste (39 258 tonnes) and C&D W (6 tonnes).

**Table 8.10 Licensed facilities in the Kildare region**

County	License No.	Facility Type	Licensed Tonnage		AER 2005
			C&DW	Inert	
Kildare	47-2	Landfill	C&DW	*565000	234 225
Kildare	81-3	Landfill	C&D W	7 750	
Kildare	114-1	WTS	C&D W	10 000	
Kildare	156-1	Landfill	Inert	242 000	241 965
Kildare	162-1	WTS	C&D W	47 400	
Kildare	168-1	Landfill	C&D W	20 000	
Kildare	179-1	IWMF	C&D W	26 500	
<b>Total</b>				<b>918 650</b>	<b>476 190</b>
<b>Inert waste tonnage capacity</b>				<b>242 000</b>	
<b>C&amp;D W tonnage capacity</b>				<b>676 650</b>	

\* The annual tonnage of 565 000 includes C&D W as well as commercial, industrial and dry household recyclables.

The total C&D W processing capacity (excluding tonnages to be agreed with the EPA) for the Kildare region was **918 650 tonnes** from 7 facilities. Of this, 26 per cent (242 000 tonnes) was specifically for inert waste leaving 74 per cent (676 650 tonnes) for C&D W. Two facilities submitted their AER's for 2005, accepting 476 190 tonnes in total consisting of inert waste (241 965 tonnes) and C&D W (234 225 tonnes).



**Table 8.11 Licensed facilities in the Dublin region**

County	License No.	Facility Type	Licensed Tonnage		AER 2005
Dublin	9-2	Landfill	Inert	63 000	
Dublin	42-1	WTS	C&DW	105 000	
Dublin	44-1	WTS	C&D W	30 000	58 393
Dublin	45-1	WTS	C&D W	200 000	114 191
Dublin	79-1	WTS	C&D W	101 500	
Dublin	84-1	Landfill	C&D W	200 000	
Dublin	88-1	Landfill	C&D W	100 000	
Dublin	95-2	WTS	C&D W	3 000	1 489
Dublin	97-1	WTS	C&D W	25 000	
Dublin	127-1	Landfill	Inert	186 000	
Dublin	129-1	Landfill	Inert	340 000	296 462
Dublin	134-1	WTS	C&D W	35 000	30 920
Dublin	152-1	WTS	C&D W	10 200	
Dublin	164-1	Soil remediation	Soil	60 000	
Dublin	183-1	WTS	C&D W	30 000	
Dublin	185-1	HWF	C&D W	1 000	
Dublin	188-1	WTS	C&D W	5 000	
Dublin	192-1	HWF	C&D W	500	
Dublin	208-1	IWMF	C&D W	80 000	
Dublin	221-1	WTS	C&D W	6 000	
<b>Total</b>				<b>1 581 200</b>	<b>501 455</b>
<b>Inert waste tonnage capacity</b>				<b>649 000</b>	
<b>C&amp;D W tonnage capacity</b>				<b>932 200</b>	

The total C&D W processing capacity (excluding tonnages to be agreed with the EPA) for the Dublin region was **1 581 200 tonnes** from 20 facilities. Of this, 41 per cent (649 000 tonnes) was specifically for inert waste leaving 59 per cent (932 200 tonnes) for C&D W. Five facilities submitted their AER's for 2005, accepting 501 455 tonnes in total consisting of inert waste (296 462 tonnes) and C&D W (204 993 tonnes).

**Table 8.12 Licensed facilities in the Midlands region**

County	License No.	Facility Type	Licensed Tonnage		AER 2005
Laois	26-2	Landfill	Inert	TBA	26 011
Laois	46-1	Landfill	Hazard.	300	
Laois	158-1	WTS	C&D W	4 620	
Laois	184-1	HWF	Soils	40 000	45 462
Laois	194-1	WTS	C&DW	38 990	
<b>Sub total</b>				<b>83 910</b>	<b>71 473</b>
Longford	169-1	WTS	C&D W	17 280	
<b>Sub total</b>				<b>17 280</b>	
Meath	103-1	Landfill	Inert	13 500	
Meath	131-2	WTS	C&D W	23 750	
Meath	140-2	WTS	C&D W	85 000	
Meath	146-1	Landfill	Inert	25 000	767
Meath	151-1	Landfill	Inert	750 000	
<b>Sub total</b>				<b>897 250</b>	<b>767</b>
North Tipperary	78-1	Landfill	C&D W	1 500	
<b>Sub total</b>				<b>1 500</b>	
Offaly	29-2	Landfill	C&D W	2 000	
Offaly	104-1	WTS	C&D W	3 300	1 775
Offaly	110-1	Landfill	Inert	TBA	
<b>Sub total</b>				<b>5 300</b>	<b>1 775</b>
Westmeath	28-2	Landfill	Inert	TBA	
Westmeath	71-2	Landfill	Inert	97 300	
Westmeath	153-1	Landfill	C&D W	TBA	
			Inert	TBA	
Westmeath	197-1	WTS	C&D W	10 000	
<b>Sub total</b>				<b>107 300</b>	
<b>Total</b>				<b>1 112 540</b>	<b>74 015</b>
<b>Inert Waste Tonnage Capacity</b>				<b>925 800</b>	
<b>C&amp;D W Tonnage Capacity</b>				<b>186 440</b>	
<b>Hazardous Waste Tonnage Capacity</b>				<b>300</b>	

The total C&D W processing capacity (excluding tonnages to be agreed with the EPA) for the Midlands region was **1 112 540 tonnes** from 19 facilities. Of this, 83 per cent (925 800 tonnes) was specifically for inert waste leaving 17 per cent (186 440 tonnes) for C&D W. Four facilities submitted their AER's for 2005, accepting 74 015 tonnes in total consisting of inert waste (72 240 tonnes) and C&D W (1 775 tonnes).

**Table 8.13 Licensed facilities in the North East region**

County	License No.	Facility Type	Licensed Tonnage	AER 2005 Tonnages
Cavan	77-2	Landfill	C&D W 5 000	
Cavan	91-1	Landfill	Inert 80 000	
Cavan	92-1	Landfill	Inert 45 000	
Cavan	93-1	Landfill	Inert 50 000	
Cavan	207-1	WTS	C&DW 7 000	9 940
<b>Sub total</b>			<b>187 000</b>	
Louth	33-1	Landfill	Inert TBA	
Louth	34-2	IWMF	C&D W 1 000	1 198
			Inert TBA	
Louth	60-2	Landfill	C&D W 5 000	
Louth	144-1	WTS	C&D W 20 000	11 858
<b>Sub total</b>			<b>26 000</b>	
Meath	103-1	Landfill	Inert 13 500	
Meath	131-2	WTS	C&D W 23 750	
Meath	140-2	WTS	C&D W 85 000	
Meath	146-1	Landfill	Inert 25 000	769
Meath	151-1	Landfill	Inert 750 000	
<b>Sub total</b>			<b>897 250</b>	
Monaghan	20-1	Landfill	C&D W 2 800	214
<b>Sub total</b>			<b>2 800</b>	
<b>Total</b>			<b>1 113 050</b>	<b>23 979</b>
<b>Inert Tonnage Capacity</b>			<b>963 500</b>	
<b>C&amp;D W Tonnage Capacity</b>			<b>149 550</b>	

The total C&D W processing capacity (excluding tonnages to be agreed with the EPA) for the North East region was 1 113 050 tonnes from 15 facilities. Of this, 87 per cent (963 500 tonnes) was specifically for inert waste leaving 13 per cent (149 550 tonnes) for all other types of C&D W. Five facilities submitted their AER's for 2005, accepting 23 979 tonnes in total consisting of inert waste (769 tonnes) and C&D W (23 210).



**Table 8.14 Licensed facilities in the South East region**

County	License No.	Facility Type	Licensed Tonnage		AER 2005 Tonnages
Carlow	25-2	Landfill	C&D W	1 000	
<b>Sub total</b>				<b>1 000</b>	
Kilkenny	30-2	Landfill	Inert	1 000	
<b>Sub total</b>				<b>1 000</b>	
South Tipperary	19-1	Landfill	C&D W	2 000	
			Inert	TBA	
South Tipperary	74-2	Landfill	C&D W	1 000	
			Inert	TBA	
<b>Sub total</b>				<b>3 000</b>	
Waterford	18-1	Landfill	C&D W	2 000	
Waterford	32-2	WTS	Inert	TBA	
Waterford	75-1	IWMF	C&D W	3 000	
Waterford	116-1	WTS	C&D W	4 000	6 461
Waterford	177-2	WTS	C&D W	800	
Waterford	190-1	Soil Remediation	Soil	10 000	
			Inert	18 000	
<b>Sub total</b>				<b>37 800</b>	
Wexford	16-2	Landfill	Inert	22 000	60 251
Wexford	111-1	WTS	C&D W	5 000	1 961
Wexford	191-1	IWMF	Inert	8 000	
Wexford	220-1	WTS	C&D W	12 000	
<b>Sub total</b>				<b>47 000</b>	
<b>Total</b>				<b>89 800</b>	<b>68 673</b>
<b>Inert Tonnage Capacity</b>				<b>59 000</b>	
<b>C&amp;D W Tonnage Capacity</b>				<b>30 800</b>	

The total C&D W processing capacity (excluding tonnages to be agreed with the EPA) for the South East region was **89 800 tonnes** from 14 facilities. Of this, 66 per cent (59 000 tonnes) was specifically for inert waste leaving 34 per cent (30 800 tonnes) for C&D W. Three facilities submitted their AER's for 2005, accepting 68 673 tonnes in total consisting of inert waste (60 251 tonnes) and C&D W (8 422 tonnes).



**Table 8.15 Licensed facilities in the Wicklow Region**

County	License No.	Facility Type	Licensed Tonnage		AER 2005
Wicklow	53-2	IWMF	Inert	3 500	60 504
Wicklow	80-1	Landfill	Inert	150 000	
Wicklow	165-1	Landfill	Inert	28 000	
Wicklow	181-1	Landfill	Soil	6 000	
Wicklow	213-1	Landfill	Inert	TBA	
<b>Total</b>				<b>187 500</b>	<b>60 504</b>
<b>Inert Waste Tonnage Capacity</b>				<b>187 500</b>	

The total C&D W processing capacity (excluding tonnages to be agreed with the EPA) for the Wicklow region was **187 500 tonnes** from five facilities. Of this, 100 per cent was specifically for inert waste. One facility submitted their AER for 2005, accepting 60 504 tonnes of inert waste.

*Total licensed capacity in Ireland in 2005*

Table 8.16 summaries the total tonnages for all the regions producing an overall estimate of **6 321 592 tonnes** from 126 facilities (21 of which had yet to agree tonnages with the EPA). When the study was undertaken (July 2006), 37 of these facilities had submitted accepted tonnages for 2005 as part of their AER producing a figure of 1 446 188 tonnes.

This did not provide enough data to produce an estimated figure of how much inert waste was collected and managed at these facilities in 2005 to compare with the estimate produced in the *National Waste Report 2004* (EPA, 2005a).

**Table 8.16 Total tonnages from licensed facilities survey 2005**

Region	No. of Facilities	Licensed Tonnage	
Clare/Kerry/Limerick	3 landfills, 2 IWMF and 6 WTS	Inert	50 000
		C&D W	34 000
<b>Sub total</b>			<b>84 000</b>
Connaught	9 landfills and 5 WTS	Inert	167 230
		C&D W	148 950
<b>Sub total</b>			<b>316 180</b>
Cork	9 landfills and 6 WTS	Inert	441 500
		C&D W	264 172
		Other*	5 500
<b>Sub total</b>			<b>711 172</b>
Donegal	6 landfills	Inert	207 000
		C&D W	500
<b>Sub total</b>			<b>207 500</b>
Kildare	4 landfills, 2 WTS and 1 IWMF	Inert	242 000
		C&D W	676 650
<b>Sub total</b>			<b>918 650</b>
Dublin	5 landfills, 11 WTS, 1 IWMF, 2 HWF and 1 soil remediation site	Inert	649 000
		C&D W	932 200
<b>Sub total</b>			<b>1 581 200</b>
Midlands	11 landfills, 7 WTS and 1 HWF	Inert	925 800
		C&D W	186 440
		Other*	300
<b>Sub total</b>			<b>1 112 540</b>
North East	10 landfills, 4 WTS and 1 IWMF	Inert	963 500
		C&D W	149 550
<b>Sub total</b>			<b>1 113 050</b>
South East	6 landfills, 5 WTS, 2 IWMF and 1 soil remediation site	Inert	59 000
		C&D W	30 800
<b>Sub total</b>			<b>89 800</b>
Wicklow	4 landfills and 1 IWMF	Inert	187 500
<b>Sub total</b>			<b>187 500</b>
<b>Licensed Inert Waste Tonnage</b>			<b>3 892 530</b>
<b>Licensed C&amp;D W Tonnage</b>			<b>2 423 262</b>
<b>Licensed 'Other' Tonnage</b>			<b>5 800</b>
<b>Total Tonnage</b>			<b>6 321 592</b>

\*Other includes hazardous waste and DIY waste.

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### *Limitations*

- The survey is based on data collected from:
  - The acceptance criteria outlined in the respective waste licences.
  - The submitted AER data.

The limitation of these waste license data is demonstrated by the fact that 21 out of the 126 facilities had not agreed acceptance tonnages with the EPA at the time of writing. Only 37 facilities (29 per cent) submitted accepted tonnages in their AER's. There is no consistent record of the amount of inert (including excavated materials) waste acceptable for facility remediation and development either in the initial waste licenses or the submitted AER's.

- There is no distinction made in the data collected of any facilities becoming inactive and only accepting inert waste for remediation purposes.
- There is no recommendation provided in the waste licenses on the classification of accepted tonnages e.g. the general classification of C&D W was used in almost all of the AER's examined for 2005. This would lead to the assumption that all the C&D W delivered to the licensed facilities was mixed, which provided no indication as to what the major components of the waste stream were.

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### 8.3.2 Waste permit survey 2005

#### *Methodology*

The waste permit survey was divided into four stages:

- The EPA waste permit register was accessed (Appendix T), which was available at:
  - <http://www.epa.ie/OfficeofEnvironmentalEnforcement/PublicAuthorityEnforcement/WasteandCollectorsPermits/FileUpload,7611,en.xls>
- The EPA permit list was cross-referenced with the NCDWC waste permit survey 2003 (Appendix U), which was available at:
  - <http://www.ncdwc.ie/html/documents/NationalWastePermitRegister.xls>
- All local authority websites were examined for waste permit data (Appendix V).
- A letter was sent out (Appendix W) to all local authorities requesting a list of all the permitted C&D W sites within their functional area providing the following details:
  - Permit number.
  - Expiration date.
  - Class of waste accepted.
  - Maximum tonnage permitted for acceptance.
  - Actual tonnage and composition accepted at each site.

#### *Regional results*

17 local authorities<sup>14</sup> responded to the letter providing up to date information on permitted sites. This was integrated into the data collected from the individual local authority and EPA permit registers. The results of the survey (Tables 8.17 to 8.26) were again provided in a regional context.

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<sup>14</sup> A condition of the responses was that the identification of the local authorities was to remain confidential.

**Table 8.17 Waste permit survey of the Clare/Kerry/Limerick region 2005**

Local Authority	No. of Permits	No. of permits with accepted limits provided	Tonnages
Clare County Council	25	11	280 667
Kerry County Council	21	21	362 667
Limerick County Council	19	13	369 000
<b>Total</b>	<b>65</b>	<b>45</b>	<b>1 012 334</b>

From Table 8.17, it can be seen that there were a total of 65 sites in the Clare/Kerry/Limerick region that were permitted to accept C&D W. Forty-five of these provided their permitted tonnages giving an estimate of 1 012 334 tonnes.

**Table 8.18 Waste permit survey of the Connaught region 2005**

County	No. of Permits	No. of permits with accepted limits provided	Tonnages
Galway County Council	19	4	40 000
Galway City Council	1	0	0
Leitrim County Council	14	8	180 550
Mayo County Council	18	0	0
Roscommon County Council	22	20	966 369
Sligo County Council	30	25	611 220
<b>Total</b>	<b>104</b>	<b>57</b>	<b>1 798 139</b>

From Table 8.18, it can be seen that there were a total of 104 sites in the Connaught region that were permitted to accept C&D W. Fifty-seven of these provided their permitted tonnages giving an estimate of 1 798 139 tonnes.

**Table 8.19 Waste permit survey of the Cork region 2005**

Local Authority	No. of Permits	No. of permits with accepted limits provided	Tonnages
Cork County Council	69	53	1 738 520
<b>Total</b>	<b>69</b>	<b>53</b>	<b>1 738 520</b>

From Table 8.19, it can be seen that there were a total of 69 sites in the Cork region that were permitted to accept C&D W. Fifty-three of these provided their permitted tonnages giving an estimate of 1 738 520 tonnes.



**Table 8.20 Waste permit survey of the Donegal region 2005**

<b>Local Authority</b>	<b>No. of Permits</b>	<b>No. of permits with accepted limits provided</b>	<b>Tonnages</b>
Donegal County Council	16	0	0
<b>Total</b>	<b>16</b>	<b>0</b>	<b>0</b>

From Table 8.20, it can be seen that there were a total of 16 sites in the Donegal region that were permitted to accept C&D W. None of these provided their permitted tonnages.

**Table 8.21 Waste permit survey of the Kildare region 2005**

<b>Local Authority</b>	<b>No. of Permits</b>	<b>No. of permits with accepted limits provided</b>	<b>Tonnages</b>
Kildare County Council	45	37	4 417 500
<b>Total</b>	<b>45</b>	<b>37</b>	<b>4 417 500</b>

From Table 8.21, it can be seen that there were a total of 45 sites in the Kildare region that were permitted to accept C&D W. Thirty-seven of these provided their permitted tonnages giving an estimate of 4 417 500 tonnes.

**Table 8.22 Waste permit survey of the Dublin region 2005**

<b>Local Authority</b>	<b>No. of Permits</b>	<b>No. of permits with accepted limits provided</b>	<b>Tonnages</b>
Fingal County Council	19	0	
Dublin City Council	1	0	
Dun Laoighaire-Rathdown County Council	3	3	71 000
<b>Total</b>	<b>23</b>	<b>3</b>	<b>71 000</b>

From Table 8.22, it can be seen that there were a total of 23 sites in the Dublin region that were permitted to accept C&D W. Three of these provided their permitted tonnages giving an estimate of 71 000 tonnes.

**Table 8.23 Waste permit survey of the Midlands region 2005**

Local Authority	No. of Permits	No. of permits with accepted limits provided	Tonnages
Laois County Council	4	3	130 000
Longford County Council	4	1	1 500
North Tipperary County Council	29	29	253 087
Offaly County Council	47	10	175 000
Westmeath County Council	64	42	1 322 139
<b>Total</b>	<b>148</b>	<b>85</b>	<b>1 881 726</b>

From Table 8.23, it can be seen that there were a total of 148 sites in the Midlands region that were permitted to accept C&D W. Eighty-five of these provided their permitted tonnages giving an estimate of 1 881 726 tonnes.

**Table 8.24 Waste permit survey of the North East region 2005**

Local Authority	No. of Permits	No. of permits with accepted limits provided	Tonnages
Cavan County Council	62	0	0
Louth County Council	18	15	366 233
Meath County Council	92	42	3 605 292
Monaghan County Council	27	25	282 750
<b>Total</b>	<b>199</b>	<b>82</b>	<b>4 254 275</b>

From Table 8.24, it can be seen that there were a total of 199 sites in the North East region that were permitted to accept C&D W. Eighty-two of these provided their permitted tonnages giving an estimate of 4 254 275 tonnes.

**Table 8.25 Waste permit survey of the South East region 2005**

Local Authority	No. of Permits	No. of permits with accepted limits provided	Tonnages
Carlow County Council	11	1	5 000
Kilkenny County Council	57	47	598 364
South Tipperary County Council	1	1	4 000
Waterford County Council	28	28	149 500
<b>Total</b>	<b>97</b>	<b>77</b>	<b>756 864</b>



From Table 8.25, it can be seen that there were a total of 97 sites in the South East region that were permitted to accept C&D W. Seventy-seven of these provided their permitted tonnages giving an estimate of 756 864 tonnes.

**Table 8.26 Waste permit survey of the Wicklow region 2005**

Local Authority	No. of Permits	No. of permits with accepted limits provided	Tonnages
Wicklow County Council	103	100	3 779 000
<b>Total</b>	<b>103</b>	<b>100</b>	<b>3 779 000</b>

From Table 8.26, it can be seen that there were a total of 103 sites in the Wicklow region that were permitted to accept C&D W. One hundred of these provided their permitted tonnages giving an estimate of 3 779 000 tonnes.

*Total permitted capacity in Ireland in 2005*

The total number of permitted sites in 2005 was 870 as opposed to 370 identified in 2003 (NCDWC, 2004) (Table 8.27). Five hundred and thirty-eight permitted sites, representing 62 per cent of the total, had tonnage limits assigned to them by the relevant local authority producing a figure of **19 709 358 tonnes** of inert waste.

**Table 8.27 Summary of Waste Permit Survey 2005**

Region	No. of Permits	No. of permits with accepted limits	Tonnages
Clare/Kerry/Limerick	65	45	1 012 334
Connaught	104	57	1 798 139
Cork	69	53	1 738 520
Donegal	16	0	0
Dublin	23	3	71 000
Kildare	45	37	4 417 500
Midlands	148	85	1 881 726
North East	199	82	4 254 275
South East	97	77	756 864
Wicklow	103	100	3 779 000
<b>Total</b>	<b>869</b>	<b>539</b>	<b>19 709 358</b>

Many of the remaining permits may have had unlimited tonnages depending on type of land reclamation. If the 539 sites are taken as representative of the total, then a

conservative estimate of **31 776 311 tonnes** of inert waste would denote 100 per cent of the sites.

*Limitations*

- ❑ The main difficulty in calculating the total permitted capacity by tonnages was when the local authorities imposed an unlimited tonnage on a permit application.
- ❑ There was also a lack of data available on what tonnages are actually being disposed of at the permitted sites. Of the 17 respondents, only five local authorities submitted data on accepted tonnages in 2005<sup>15</sup>.

This limitation will be addressed with the impending implementation of the *Waste Management (Facility Permit and Registration) Regulations 2005* (DoEHLG, 2005a) and the *Waste Management (Collection Permits) Regulations 2005* (DoEHLG, 2005b) where stringent reporting mechanisms will be enforced on permit applicants.

**8.3.3 Total C&D W collected and managed in Ireland in 2005**

The aim of carrying out a licensed facilities survey and the waste permit sites survey was to calculate the total inert waste tonnage collected and managed in 2005. Table 8.28 outlines the total estimated licensed/permitted capacity obtained from the surveys. It must be recognised that the majority of inert waste accepted at C&D W licensed facilities will pass to permitted sites. To avoid this double-counting, the inert waste tonnage from licensed facilities is not considered when trying to produce an estimate.

**Table 8.28 Total licensed and permitted tonnage capacity in Ireland in 2005**

Category	Waste Type	Tonnage
C&D W licensed facilities	Inert waste	3 892 530
	C&D W	2 429 062
C&D W permitted sites	Inert waste	31 776 311

<sup>15</sup> The majority of the local authorities are now requiring permit holders to submit annual reports on the type and quantity of waste disposed/recovered at the permitted sites.

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The main limitation in generating an estimate is the lack of submitted data by the licensed facilities and especially the permit holders. If we exclude the inert waste from licensed facilities, that leaves a total estimated capacity of 34 205 373 tonnes. Again a substantial amount of the C&D W stream will be inert and may pass to permitted sites following intermediate processing at the licensed facilities. So if we take the estimate of 31 776 311 tonnes from the permit survey as our estimate and compare this with the figure of 8 491 994 tonnages used in the *National Waste Report* (EPA, 2005a), we can provide the following hypothesis:

- The estimate of 8 491 994 tonnes used in the *National Waste Report* (EPA, 2005a) underestimated the amount of inert waste being collected and managed in 2004.
  
- There is a considerable over-capacity available for the inert waste stream, consisting of primarily excavated materials such as soil and stones.

The figure of 31 776 311 tonnes does not represent the amount of inert waste (including excavated materials) collected and managed but rather the capacity available. The significant lack of data available on actual tonnages accepted at permitted sites prevents the author from providing a tonnage for inert waste (including excavated materials) for 2005.

Another factor not identified in the collected data, but nevertheless extremely important when considering waste production tonnages is the nature and extent of unauthorised disposal of C&D W in Ireland. A report produced by the Office of Environmental Enforcement in the EPA (Laurence *et al.*, 2005) highlighted the C&D W stream as follows:

*“The waste stream that has resulted in the greatest level of illegal activity has been C&D W, which is a major component of the larger illegal landfills discovered since the introduction of the Waste Management Act 1996, particularly those discovered in the greater Dublin area”*

(Laurence *et al.*, 2005)

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Some enforcement issues identified by the report were as follows:

- ❑ The operation of C&D W and/or soil and stone recovery sites without proper authorisation.
- ❑ The acceptance of builder's rubble (concrete, bricks, tiles etc.) at sites permitted for the acceptance of topsoil only for land restoration.
- ❑ C&D W quantities accepted at facilities in excess of permitted quantities allowed in their waste permits.
- ❑ The use of soil and stone for land reclamation adjacent to wetlands and foreshores without proper authorisation.

The lack of a consistent reporting mechanism is recognised in the report when it states that:

*“It is a matter of particular concern that the industrial sector that produces the highest volume of waste is the poorest in tracking its waste.”*

(Laurence *et al.*, 2005)

The report's recommendations repeat the limitations outlined the *National Waste Database Reports* (EPA, 1996a, 2000, 2003, 2005a) as follows:

- ❑ Local authorities need to ensure that they have up-to-date and reliable information on the quantities and fate of C&D W in their functional area.
- ❑ The C&D W sector needs to provide much better and more reliable information on the quantities and fate of waste produced.
- ❑ Sufficient outlets for the recovery and disposal of C&D W are required and should be planned for by local authorities and the construction and demolition sector through the waste management process.

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## *Conclusions*

This chapter detailed the application of the generated unit waste factors in estimating C&D W production for new construction in 2005.

The main aims of the chapter were to:

- Apply the generated waste unit waste skip factors to construction output to produce a national estimate for 2005.
- Identify the amount of inert C&D W collected and managed at licensed and permitted facilities in 2005.

The main conclusions are:

- The construction output calculated for 2005 is reliant on a number of postulations. The construction output in floor areas (m<sup>2</sup>) for *new residential construction*, *new private non residential construction* and *social infrastructure construction* categories was based on the number of planning applications approved in 2005 (CSO, 2005a, b, c, 2006a). The output for *new productive construction* relied on the interpretation of the correlation between the value of construction output and total floor area constructed.

It would be preferable to base the construction output on the floor areas actually constructed in 2005 if this data was available.

- The audit results were employed beyond the immediate use of the ‘snapshot’ case studies when applied to the construction output to produce national estimates.
- The 2005 national estimate of **20 874 644 tonnes** was based on the following two key assumptions:
  - The *new construction* estimate of 1 733 571 tonnes represented only 14 per cent of the total C&D W production in 2005 based on figures provided in the *National Waste Database Report 2001* (EPA, 2003).
  - The 2004 estimate for *soil and stones* (EPA, 2005a) was representative of this category in 2005.

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- The licensed facilities survey 2005 identified that 126 facilities provided a capacity of **6 321 592 tonnes** for C&D W. This was an underestimated quantity as 21 of these facilities had yet to agree with the EPA on licensed tonnages.
  
  - A significant gap in data submitted by licensed facilities was identified. Only 37 facilities (29 per cent) had submitted AER's for 2005 at the time of the study (July 2006). Due to this, it was impossible to produce a reliable figure on the amount of inert waste collected and managed at these facilities in 2005.
  
  - The waste permit survey 2005 identified that the total number of permitted sites was 859. Five hundred and thirty-nine permitted sites, representing 62 per cent of the total, had tonnage limits assigned to them by the relevant local authority producing a figure of **19 709 358 tonnes** of inert waste. Many of the remaining permits may have unlimited tonnages depending on type of land reclamation. If the 539 sites are taken as representative of the total, then a conservative estimate of **31 776 311 tonnes** of inert waste would denote 100 per cent of the sites.
  
  - A significant gap in the data submitted by permit holders was identified. Only five out of the 17 local authority respondents had data on actual tonnages deposited at permitted sites.
  
  - The waste license and waste permit survey's results can be assumed to contain significant double-counting of the inert waste stream. To resolve this, the capacity figure of 31 776 311 tonnes from the permit survey is taken for comparative purposes. When this figure is related to the estimate of 8 491 994 tonnes from *National Waste Report* (EPA, 2005a), the following suppositions arise:
    - The estimate of 8 491 994 tonnes used in the *National Waste Report* (EPA, 2005a) underestimated the amount of inert waste being collected and managed in 2004.

- 
- There is a considerable over-capacity available for the inert waste stream, consisting of primarily excavated materials such as soil and stones.
  
  - The significant lack of data available on actual tonnages accepted at permitted sites coupled with the significant level of unauthorised disposal (Laurence, 2004) prevents the author from providing a reliable tonnage for inert waste (including excavated materials) for 2005.



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## **Chapter 9: Conclusions and Recommendations**

### **9.1 Introduction**

Each of the main objectives will be addressed individually to clearly set out the conclusions, limitations and recommendations. The main aims of the study were to:

- Design and test an original waste audit methodology on Irish construction projects.
- Generate waste production indicators ( $\text{kg/m}^2$ ) for new construction projects in Ireland.

### **9.2 Objectives**

To achieve this aim, a number of objectives had to be met including the:

- Define C&D W and determine the legal responsibilities associated with its management.
- Characterise the waste stream by its origin, composition and quantities produced.
- Investigate the methodologies previously used to estimate C&D W production in Ireland.
- Explore the use of different audit tools which have been used in the UK construction industry.
- Identify a design framework to develop a new audit tool for use on Irish construction projects.
- Develop a testing structure to examine the application of a new audit tool on Irish construction projects.
- Demonstrate the use of generated indicators in estimating national C&D W production.

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- Carry out a survey of licensed and permitted facilities to produce a national estimate of inert C&D W collected and managed in Ireland. This figure can be compared with the national estimate produced from the generated indicators.

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## 9.3 Conclusions

### 9.3.1 Objective no. 1

- Define C&D W and determine the legal responsibilities associated with its management.

This was achieved by examining the development of definitions, regulation, legislation and policy actions from an international, European and national perspective.

#### *Conclusions*

- The following definition for C&D W was provided in the *National Waste Database Report 2001* (EPA, 2003):

*“..to include all waste that arises from construction, renovation, and demolition activities and all waste mentioned in Chapter 17 of the European Waste Catalogue. This includes surplus and damaged products and materials arising at construction works or used temporarily during on-site activities”.*

(EPA, 2003)

For the purposes of this study the above definition was used excluding dredge spoil and excavated materials as they did not result directly from the construction and demolition sites audited. The definition of ‘inert waste’ was divided into two categories throughout the study; inert waste including excavated materials (17 05 04) and inert waste excluding excavated materials identified by the EWC code category 1701. This included: concrete (17 01 01); brick (17 01 02); tiles and ceramics (17 01 03); mixture of concrete, bricks, tiles and ceramics other than those mentioned in 17 01 06 (170107). This definition of inert waste including excavated materials was used in the initial chapters (chapter 2 to 5) with the alternative, inert waste excluding excavated materials used in the latter chapters (chapter 6 to 9).

- The OECD (1998) definition offers a different interpretation on the definition with the destination of the waste being the decisive factor. The advantage of this interpretation is that materials with a beneficial use will be defined as a resource improving their marketability. The difficulty is, of course is that this approach

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merely transfers the focus from defining the key terms, '*holder*' and '*discard*', under the legal definition to defining the '*recovery or comparable process*' and '*a material of sufficient beneficial use*', which are equally difficult to define. It does highlight however an opportunity to identify special cases within the legal definition where the waste management controls may not apply e.g. recovery processes of low environmental impact.

- The influx of waste legislation over the past decade has required the construction industry to recognise their responsibilities in regard to the waste management. The ambitious target of 85 per cent recycling by 2013 (DoEHLG, 1998a) has provided the industry with a benchmark for which to strive.
  
- The initial response of the Irish construction industry has been positive. The establishment of the NCDWC in 2002 brought a central focus to raise awareness of the waste management issue. The industry now needs to transfer this awareness to improve waste management practices on site.

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### 9.3.2 Objective no. 2

- Characterise the waste stream by its origin, composition and quantities produced.

This was achieved by classifying the waste stream in terms of its origin and focusing on international, European and Irish studies producing composition and waste production estimates.

#### *Conclusions*

- The nature and source of C&D W is varied and highly dependent on the construction/demolition activity.
- The inert (including excavated materials) and wood fractions contribute the largest percentage of all the compositional studies examined.
- There is a lack of reliable composition studies from construction and demolition activity in Ireland. The most recent estimate from data submitted by licensed and permitted facilities (EPA, 2005a) is that soil and stones account for 76 per cent of the total C&D W collected and managed in 2004 with a recovery rate of 90 per cent. The other 14 per cent of the waste stream consisted of: concrete; rubble; wood; glass; metals and plastics and had a recovery rate of 69 per cent. There were no compositional studies of C&D W on construction projects.

In response to this, the study identified that the major components of the C&D W stream were: inert waste (including concrete, blocks, bricks, ceramics and tiles); timber/wood; paper, plastics and packaging; and metals, all of which would be potentially reusable and/or recyclable.

- Recent estimates have suggested that C&D W production in Europe is approximately 495 million tonnes per annum (adapted from Brodersen *et al.*, 2002) illustrating the extent of the problem. This figure is unreliable due to the lack of a harmonised reporting framework that would provide consistent data. (Jacobsen *et al.*, 2004).

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- In Ireland, there has been a dramatic increase in C&D W production over the past decade, from 1.52 million tonnes in 1995 to 11.2 million tonnes in 2004 based on estimates produced by the EPA.

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### 9.3.3 Objective no. 3

- Investigate the methodologies previously used to estimate C&D W production in Ireland.

This was achieved by examining all the national waste database reports produced by the EPA (1996a, 2000, 2003, 2005a).

#### *Conclusions*

- There has been a clear attempt to improve the reporting procedures used to collect waste production data since the 1995 report. This is one of the reasons for the dramatic increase in the estimates produced e.g. from 1.52 million tonnes in 1995 (EPA, 1996) to 11.2 million tonnes in 2004 (EPA, 2005a).
- It can be assumed that the estimates for 1995, 1998 and 2001 underestimated the production of C&D W in Ireland.
- The reliability of the data being collected from the local authorities is still unsatisfactory and many of the limitations outlined in assessing the *National Waste Database Report 1995* (EPA, 1996) still apply today.
- The direct conversion of the US unit waste factors from lbs/ft<sup>2</sup> to kg/m<sup>2</sup> used in the *2001 National Waste Database Report* (EPA, 2003) provided an alternative method of generating national estimates.
- There were no unit waste factors based on Irish construction projects available to generate C&D W production estimates.



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#### 9.3.4 Objective no. 4

- Explore the use of different audit tools which have been used in the UK construction industry.

This was achieved by analysing audit tools developed by Skoyles (1978), CIRIA (Coventry *et al.*, 2001) and the BRE (2005a, b). The methodologies, testing and limitations of each audit tool were outlined to determine their applicability within the scope of the study.

#### **Conclusions**

- To provide the most complete audit of a construction/demolition project the following conditions must apply:
  - The project framework is from inception to completion.
  - The sort and weigh measurement method is used to provide the most accurate quantification and compositional data.
  - The working definition includes all of the C&D W stream including excavated materials.
  - An electronically or paper based audit format is used incorporating an intelligent reporting interface.
  - A materials description is provided with associated EWC codes.
  - The auditor is on site full time with the sole responsibility for waste measurement.
  - The use of the audit methodology is free.
  
- None of the assessed audit tools specifically applied within the scope of this study but provided basic guidelines on how to develop a new audit tool for use on Irish construction projects.
  
- The general guidelines outlined by Patterson (1999) supplemented the audit analysis to provide a set of best practice design criteria for development of an audit tool as follows:
  - Project framework.
  - Waste measurement.
  - Working definition.

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- Audit format.
  - Waste categories.
  - On-site arrangements.
  - Data analysis.
  - Audit cost.

### 9.3.5 Objective no. 5

- Identify a design framework to develop a new audit tool for use on Irish construction projects.

This was achieved by using the general design guidelines identified in the previous chapter to develop an audit model for use on Irish construction projects. The model was tested by trained auditors on 54 construction projects throughout the country.

### *Conclusions*

- The use of the visual characterisation method highlighted some limitations in the process especially the difficulty in assessing air voids and the total reliance on the auditor's skill and diligence in collecting reliable data.
- The use of the *Landfill Levy* conversion factors (DoEHLG, 2002b) was also an area for concern as they were not specific to the C&D W stream.
- The audit format provided a practical tool for use on Irish construction sites. The auditors had no difficulty using the audit tool and submitted data from 54 construction projects throughout the country.
- Clear procedures were a prerequisite to reliable data collection on site.
- The analysis of the collected data entailed the use of the following simple equations to generate the unit waste skip factors:

$$WF^V = V / FA^C$$

where:  $WF^V$  = Volume waste skip factor expressed in  $m^3/m^2$   
 $V$  = Volume of waste in  $m^3$  and  
 $FA^C$  = Completed floor area in  $m^2$

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and

$$WF^M = M / FA^C$$

where:  $WF^M$  = mass unit waste skip factor expressed in  $kg/m^2$

$M$  = mass of waste in kg and

$FA^C$  = Completed floor area in  $m^2$

- Data validation was of paramount importance and the development of a training module on C&D W management for the potential auditors was a key factor in preparing them for the data collection phase. The active participation of the author was essential in this phase to ensure the quality of the data submitted.
  
- The development of the audit methodology was a dynamic process involving constant review following feedback from the users on site.

### 9.3.6 Objective no. 6

- Develop a testing structure to examine the application of a new audit tool on Irish construction projects.

This was achieved by categorising the point source assessments as *new residential construction*, *new private non-residential construction*, *new social infrastructure construction* or *new productive infrastructure construction* depending on the project type. The individual unit waste factors ( $\text{kg}/\text{m}^2$ ) for each point source assessment was calculated by dividing the total waste produced by the total floor area completed during the audit period. A sample mean of the unit waste factors was then calculated for each category. In addition the C&D W composition of each project category was analysed.

### Conclusions

- The 54 audited ‘snapshot’ projects and four case studies provided a representative sample of waste production from new construction in 2004 and 2005.
- The use of the multiple ‘snapshot’ case studies and the simplicity of interpreting the data allowed the author to provide statistical generalisations in producing sample mean indicators for each category of new construction.
- The units of analysis used ( $\text{m}^3/\text{m}^2$  or  $\text{kg}/\text{m}^2$ ) provided a direct link between the methodology used and the results.
- The variety in the individual ‘snapshot’ results was primarily due to the project parameters i.e. project type, size and stage. The presence of some extreme values affected the statistical confidence of the results producing a skewed distribution with a large standard deviation.
- The results provide industry with a set of indicators that can be used to benchmark waste production in new construction as follows:
  - Average unit waste factor of  $70.27 \text{ kg}/\text{m}^2$  for *new residential construction*.

- 
- Average unit waste factor of 86.82 kg/m<sup>2</sup> for *new private non-residential construction*.
  - Average unit waste factor of 48.48 kg/m<sup>2</sup> for *new productive infrastructure construction*.
  - Average unit waste factor of 138.94 kg/m<sup>2</sup> for *new social infrastructure construction*.

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### 9.3.7 Objective no. 7

- Application of the new waste production indicators ( $\text{kg/m}^2$ ) to benchmark national C&D W production in 2005.

This was achieved by applying the generated new waste production indicators to an estimated construction output for 2005.

### *Conclusions*

- The construction output calculated for 2005 is reliant on a number of postulations. The construction output in floor areas ( $\text{m}^2$ ) for *new residential construction, new private non residential construction and social infrastructure construction* categories was based on the number of planning applications approved in 2005 (CSO, 2005a, b, c, 2006a). The output for *new productive construction* relied on the interpretation of the correlation between the estimated value of construction output and total floor area to be constructed (EPA, 2003).

It would be preferable to base the construction output on the floor areas actually constructed in 2005 if this information was available.

- The 2005 national estimate of **20 874 644 tonnes** was based on the following two key assumptions:
  - The *new construction* estimate of 1 733 571 tonnes represented only 14 per cent of the total C&D W production in 2005 based on figures provided in the *National Waste Database Report 2001* (EPA, 2003).
  - The 2004 estimate for *soil and stones* (EPA, 2005a) was representative of this category in 2005.

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### 9.3.8 Objective no. 8

- Identify the amount of inert waste collected and managed at licensed and permitted facilities in 2005.

This was achieved by carrying out surveys of licensed facilities and permitted sites. Each survey provided tonnage capacities according to the regions outlined in the implementation of the regional waste management plans.

#### *Conclusions*

- The licensed facilities survey 2005 identified that 126 facilities provided a capacity of **6 321 592 tonnes** for C&D W. This was an underestimated quantity as 21 of these facilities had yet to agree with the EPA on licensed tonnages.
- A significant gap in data submitted by licensed facilities was identified. Only 37 facilities (29 per cent) had submitted AER's for 2005 at the time of the study (July 2006). Due to this, it was impossible to produce a reliable figure on the amount of inert waste collected and managed at these facilities in 2005.
- The waste permit survey 2005 identified that the total number of permitted sites was 859. Five hundred and thirty-nine permitted sites, representing 62 per cent of the total, had tonnage limits assigned to them by the relevant local authority producing a figure of **19 709 358 tonnes** of inert waste. Many of the remaining permits may have unlimited tonnages depending on type of land reclamation. If the 539 sites are taken as representative of the total, then a conservative estimate of **31 776 311 tonnes** of inert waste would denote 100 per cent of the sites.
- A significant gap in the data submitted by permit holders was identified. Only five out of the 17 local authority respondents had data on actual tonnages deposited at permitted sites.
- The waste license and waste permit survey's results can be assumed to contain significant double-counting of the inert waste stream. To resolve this, the capacity figure of 31 776 311 tonnes from the permit survey is taken for



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comparative purposes. When this figure is related to the estimate of 8 491 994 tonnes from *National Waste Report* (EPA, 2005a), the following suppositions arise:

- The estimate of 8 491 994 tonnes used in the *National Waste Report* (EPA, 2005a) underestimated the amount of inert waste being collected and managed in 2004.
  - There is a considerable over-capacity available for the inert waste stream, consisting of primarily excavated materials such as soil and stones.
- The significant lack of data available on actual tonnages accepted at permitted sites coupled with the significant level of unauthorised disposal (Laurence, 2004) prevents the author from providing a reliable tonnage for inert waste (including excavated materials) for 2005. This lack of data would challenge the 65 per cent recycling/recovery rates currently being publicised by the construction industry. If you cannot measure how much waste is being produced, how can you determine the recycling/recovery rates?

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#### 9.4 Limitations

Each of the conclusions must be evaluated considering the limitations of the research.

The following limitations apply:

- ❑ The new audit tool developed is based on a skip analysis using visual characterisation of the container's contents. The accuracy of the results is dependent on the auditor's skill and diligence. The presence of void space or waste bulking in a skip can impair the accuracy of the measurements.
- ❑ The use of the conversion factors contained in the *Waste Management (Landfill Levy) Regulations 2002* (DoEHLG, 2002b) was a limiting factor as they are not based on specific C&D W compositional analysis.
- ❑ The waste production indicators generated are based on point source assessments on 54 'snapshot' case studies producing a range of results dependent on the specific project parameters. The methodology would have benefited from the analysis of the whole life cycle of projects from inception to completion and increased sample sizes per category.
- ❑ The audit data did not include any indirect waste, i.e. materials left around the sites or any excavated materials.
- ❑ The 'snapshot' audits did not collect data information on the project phases and costs, which would have categorised each project in terms of scale providing a more reliable representative sample of the industry.
- ❑ The construction output calculated for 2005 was based on the number of planning approvals granted in 2005 expressed as total floor areas (m<sup>2</sup>). This does not equal the total floor area constructed in 2005.
- ❑ The output for *new productive construction* in 2005 relied on the interpretation of the correlation between the value of construction output and total floor area constructed as outlined in the *National Waste Database Report 2001* (EPA, 2003). This correlation is questionable and requires further analysis.

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- The 2005 national estimate of 20 874 644 tonnes was based on the following two key assumptions:
    - The *new construction* estimate of 1 733 571 tonnes represented only 14 per cent of the total C&D W production in 2005 based on figures provided in the *National Waste Database Report 2001* (EPA, 2003).
    - The 2004 estimate for *soil and stones* (EPA, 2005a) was representative of this category in 2005.

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## 9.5 Recommendations

- ❑ The approach to C&D W management should be reviewed to consider the materials as a resource rather than as waste. The idea of labelling the materials before construction into categories such as; recyclable/reusable; potentially recyclable/reusable and waste should be considered. This would highlight the marketability of the materials and reduce the unnecessary/incorrect disposal of materials with beneficial uses.
  
- ❑ The submission of construction and demolition waste management plans must become a mandatory part of the planning application process. The local authorities should activate their powers under Section 34 (4) (1) of the *Planning and Development Act, 2000* (DoEHLG, 2000b) and enforce the thresholds provided. As the industry becomes more familiar with the preparation of waste management plans, the thresholds can be reduced to apply to all forms of construction and demolition activity.
  
- ❑ The current draft *Waste Management (Facility Permits and Registrations) Regulations 2005* (DoEHLG, 2005a) will provide increased tonnage capacity for the inert fraction of the C&D W stream. The local authorities must assess their regional capacities before granting any permits or registrations under this impending legislation.
  
- ❑ The initial response of the construction industry although positive needs to be transferred to waste management practices on site. The NCDWC road show in 2005 proved a success in raising awareness among industry professionals. A variation of this road show could be brought to selected sites throughout the country to provide training on the preparation of waste management plans, the auditing of C&D W on site, skip management etc. This would raise the awareness of the site operatives and provide a starting point for individual projects to benchmark their waste production. A series of demonstration projects employing sustainable waste management practices on site could be identified from this with the results disseminated to industry.

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- The paper-based audit tool developed in this study provides the industry with a basic methodology to audit their waste performance on site. The tool should be developed into an electronic model to provide the industry with alternative auditing options. The Department of Building and Civil Engineering at the Galway-Mayo Institute of Technology has recently received funding from the EPA on a collaborative project with Galway City and County Councils to develop and test this electronic model on projects in the Galway region. The project is due to commence in September 2006.
  
  - A set of C&D W specific conversion factors would improve the reliability and accuracy of audited projects. This would involve the sorting and weighing the individual components of a number of skips on different projects to establish accurate conversion factors.
  
  - The use of photogrammetry for skip analysis should be investigated and compared with visual characterisation to identify any possible applications. Currently a postgraduate student, Owen Cahill, in the Department of Building and Civil Engineering, is comparing skip analysis photogrammetry with visual characterisation on two case studies to determine the feasibility of incorporating this technology into an electronic waste audit model. The project is due for completion in June 2007.
  
  - A set of correction factors should be developed for visual characterisation. This would involve a number of auditors measuring waste production on the same projects to identify the differences in the results.
  
  - A comparative analysis of source segregation on site versus the collection of mixed C&D W must be carried out to establish the economic viability of both options.
  
  - A standard reporting system needs to be implemented for the collection and analysis of C&D W data in Ireland. Audit data should be sent to a central waste information 'hub', which will analyse the information and produce indicators for the specific projects and the industry as a whole. The indicators will include data

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on waste composition, quantity, cost and site practices to provide a benchmark from which to measure waste performance on site. Any initiatives introduced by companies can be assessed and improvements implemented.

- ❑ Statistics on construction output should be based on actual floor area constructed in each category if available.
- ❑ Future audited projects by the author will incorporate the project phase and costing to provide a reliable representation of construction activity in Ireland.
- ❑ There needs to be an enforced standard reporting format by the EPA for the data submitted in the annual environmental reports by licensed facilities in Ireland. This must consist of accurate quantities and a definitive compositional classification including EWC codes.
- ❑ The impending *Waste Management (Facility Permits and Registrations) Regulation 2005* (DoEHLG, 2005a) and *Waste Management (Collection Permits) Regulations 2005* (DoEHLG, 2005b) should address the lack of data submitted by permit holders. A standard reporting format needs to be developed by the EPA in co-operation with the local authorities.
- ❑ Investment in infrastructure should focus on the non-inert waste stream. The composition of buildings is changing incorporating new materials. The development of these advanced materials should consider their eventual end use and the existence of any potential future markets.
- ❑ The construction industry should focus on waste prevention and minimisation at the inception stage of a project. The planning authorities have a role to play by encouraging the use innovative design to prevent and minimise waste. A guidance document resulting from a number of demonstration projects involving co-operation between design and construction professionals would provide a useful reference.

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## 9.5 Summary

This study has designed and tested an original audit tool on 54 'snapshot' construction projects and four case studies over a two-year period. New waste production indicators ( $\text{kgm}^2$ ) have been generated for all categories of new construction. The application of these indicators facilitates the benchmarking of waste production on a national scale. It is recommended that the development of this audit tool, incorporated into a voluntary waste management information system, will assist the industry in achieving the target of 85 per cent recycling by 2013 (DoEHLG, 1998a).

The significant contributions to knowledge in this thesis are:

- The design and testing of an original audit tool on construction projects throughout Ireland.
  
- The generation of waste production indicators for new construction.
  
- The production of national C&D W estimates for 2005.

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**The Development of an Audit Methodology to  
Generate Construction Waste Production  
Indicators for the Irish Construction Industry**

**Volume 2 - Appendices**

**Mark Kelly**



This thesis is submitted in satisfaction of the requirements for the degree of Doctor of Philosophy in Construction Management at the Galway-Mayo Institute of Technology

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## **APPENDICES**

## **APPENDIX A**

### **European Waste Catalogue and Hazardous Waste List, 1996**

#### **Section 17 Construction and Demolition Waste**

**17 00 00 Construction and demolition waste (including road construction)**

**17 01 00 Concrete, bricks, tiles, ceramics and gypsum-based materials**

- 17 01 01 Concrete
- 17 01 02 Bricks
- 17 01 03 Tiles and ceramics
- 17 01 04 Gypsum-based construction materials
- 17 01 05 Asbestos-based construction materials

**17 02 00 Wood, glass and plastic**

- 17 02 01 Wood
- 17 02 02 Glass
- 17 02 03 Plastic

**17 03 00 Asphalt, tar and tarred products**

- 17 03 01 Asphalt containing tar
- 17 03 02 Asphalt (not containing tar)
- 17 03 03 Tar and tar products

**17 04 00 Metals (including their alloys)**

- 17 04 01 Copper, bronze, brass
- 17 04 02 Aluminium
- 17 04 03 Lead
- 17 04 04 Zinc
- 17 04 05 Iron and steel
- 17 04 06 Tin
- 17 04 07 Mixed metals
- 17 04 08 Cables

**17 05 00 Soil and dredging spoil**

- 17 05 01 Soil and stones
- 17 05 02 Dredging spoil

**17 06 00**                    **Insulation materials**

17 06 01\*                    Insulation materials containing asbestos

17 06 02                    Other insulation materials

**17 07 00**                    **Mixed construction and demolition waste**

17 07 01                    Mixed construction and demolition waste

\*Indicates hazardous materials.

## **APPENDIX B**

### **European Waste Catalogue and Hazardous Waste List, 2002**

#### **Section 17 Construction and Demolition Waste**

- 17 Construction and Demolition Waste (including excavated soil from contaminated sites)**
- 17 01 concrete, brick, tiles and ceramics**
- 17 01 01 concrete
- 17 01 02 bricks
- 17 01 03 tiles and ceramics
- 17 01 06\* mixtures of, or separate fractions of concrete, bricks, tiles and ceramics containing dangerous substances
- 17 01 07 mixture of concrete, bricks, tiles and ceramics other than those mentioned in 17 01 06
  
- 17 02 wood, glass and plastic**
- 17 02 01 wood
- 17 02 02 glass
- 17 02 03 plastic
- 17 02 04\* glass, plastic and wood containing or contaminated with dangerous substances
  
- 17 03 bituminous mixtures, coal tar and tarred products**
- 17 03 01\* bituminous mixtures containing coal tar
- 17 03 02 bituminous mixtures containing other than those mentioned in 17 03 01
- 17 03 01 coal tar and tarred products
  
- 17 04 metals (including their alloys)**
- 17 04 01 copper, bronze, brass
- 17 04 02 aluminium
- 17 04 03 lead
- 17 04 04 zinc
- 17 04 05 iron and steel
- 17 04 06 tin
- 17 04 07 mixed metals
- 17 04 09\* metal waste contaminated with dangerous substances
- 17 04 10\* cables containing oil, coal tar and other dangerous substances
- 17 04 11 cables other than those mentioned in 17 04 10



**17 05 soil (including excavated soil from contaminated sites), stones and dredging spoil**

- 17 05 03\* soil and stones containing dangerous substances
- 17 05 04 soil and stones other than those mentioned in 17 05 03
- 17 05 05\* dredging spoil containing dangerous substances
- 17 05 06 dredging spoil other than those mentioned in 17 05 05
- 17 05 07\* track ballast containing dangerous substances
- 17 05 08 track ballast other than those mentioned in 17 05 07

**17 06 insulation materials and asbestos-containing construction materials**

- 17 06 01\* insulation materials containing asbestos
- 17 06 03\* other insulation materials consisting of or containing dangerous substances
- 17 06 04 insulation materials other than those mentioned in 17 06 01 and 17 06 03
- 17 06 05\* construction materials containing asbestos

**17 08 gypsum-based construction material**

- 17 08 01\* gypsum-based construction materials contaminated with dangerous substances
- 17 08 02 gypsum-based construction materials other than those mentioned in 17 08 01

**17 09 other construction and demolition waste**

- 17 09 01\* construction and demolition wastes containing mercury
- 17 09 02\* construction and demolition wastes containing pcb (for example pcb-containing sealants, pcb-containing resin-based flooring, pcb-containing sealed glazing units, pcb-containing capacitors)
- 17 09 03\* other construction and demolition wastes (including mixed wastes) containing dangerous substances
- 17 09 04 mixed construction and demolition wastes other than those mentioned in 17 09 01, 17 09 02 and 17 09 03

\* indicates hazardous materials

## APPENDIX C

**Example of an indicative project C&D W management plan for a development/redevelopment project taken from *Best Practice Guidelines on the Preparation of Waste Management Plans for Construction and Demolition Projects* (DoEHLG, 2006)**

**APPENDIX 3 EXAMPLE OF AN INDICATIVE PROJECT  
C&D WASTE MANAGEMENT PLAN FOR A  
DEVELOPMENT/REDEVELOPMENT PROJECT**

**PROJECT C&D WASTE MANAGEMENT PLAN**

Project Name:

[Insert/Add/Delete to Detail as appropriate]

**Description of Project:**

The Project consists of the \_\_\_\_\_ (development/redevelopment etc.) of a \_\_\_\_\_ (housing/commercial/institutional/roads/water/wastewater etc.) scheme on a \_\_\_\_\_ (greenfield/infill/redevelopment/brownfield etc.) site. The project is situated at \_\_\_\_\_, \_\_\_\_\_, Co. \_\_\_\_\_, in the administrative area of \_\_\_\_\_ Council. The site of the works is located approximately \_\_\_\_\_ (metres/kilometres) from \_\_\_\_\_ (town/village/main road etc.) and access will be via the \_\_\_\_\_ (local/regional/national) road. The work will generally consist of the demolition of \_\_\_\_ (m3) of \_\_\_\_\_ and the construction of \_\_\_\_\_ (No./m2) of \_\_\_\_\_ (houses/offices/institutional/roads etc.).

In the course of the Project, it is estimated that the following quantities of C&D wastes/material surpluses will arise:

C&D Waste Material	Quantity (tonnes)
Clay and Stones	
Concrete	
Masonry	
Wood	
Packaging	
Hazardous Materials	
Other Waste Materials	
Total Arisings	

**Table SF1: Estimated C&D Waste Arisings on Site**

**Proposals for Minimisation, Reuse and Recycling of C&D Waste**

C&D waste will arise on the Project mainly from \_\_\_\_\_ (excavation/demolition) and \_\_\_\_\_ (unavoidable construction waste/material surpluses/damaged materials). The \_\_\_\_\_ (Purchasing Manager etc.) shall ensure that materials are ordered so that the quantity delivered, the timing of the delivery and the storage is not conducive to the creation of unnecessary waste.

Excavated clay will be \_\_\_\_\_ (carefully stored in segregated piles on the site for subsequent reuse/removed from site for direct beneficial use elsewhere). Concrete waste will be \_\_\_\_\_ (source segregated/collected in receptacles with mixed C&D waste materials, for subsequent separation and recovery at a remote facility). Masonry and wood will be \_\_\_\_\_ (source segregated/collected in receptacles with mixed C&D waste materials, for subsequent separation and recovery at a remote facility). Packaging will be \_\_\_\_\_ (source segregated for recycling or return to suppliers). Hazardous wastes will be \_\_\_\_\_ (identified, removed and kept separate from other C&D waste materials in order to avoid further contamination). Other C&D waste materials will be \_\_\_\_\_ (collected in receptacles with mixed C&D waste materials, for subsequent separation and disposal at a remote facility).

Excavation clay and C&D waste-derived aggregates are considered suitable for certain on-site construction applications. It is proposed that the following quantities, corresponding to all C&D Waste arisings from the project, will be used within the works:

C&D Waste Type	Clay and Stones (t)	Concrete (t)	Masonry (t)	TOTALS
Proposed Use				
Earthworks				
General Fill/Hardcore				
Pipe Bedding				
Selected Trench Backfill				
Fill to Structures				
Beneath Paths Structure				
Beneath Road Structure				
Other Site Use A				
Other Site Use B				
Off-Site Use				
TOTAL				

*Table SF2: Proposals for Beneficial Use/Management of C&D Material Surpluses/Deficits and Waste Arisings on and off the Project*

It is anticipated that waste materials \_\_\_\_\_ (will/will not) have to be moved off site. It \_\_\_(is/is not) the intention to engage specialist waste service contractors, who will possess the requisite authorisations, for the collection and movement of waste off-site, and to bring the material to a facility which currently (holds/does not hold) a \_\_\_\_\_ (Waste Licence/Waste Permit/Certificate of Registration). Accordingly, it will be necessary to arrange the following waste authorisations specifically for the Project:

Authorisation Type	Specific Need for Project (Yes/No?)	
Waste Licence	Yes	No
Waste Permit	Yes	No
Waste Collection Permit	Yes	No
Transfrontier Shipment Notification	Yes	No
Movement of Hazardous Waste Form	Yes	No

*Table SF3: Specific Waste Authorisations Necessary for the Scheme*

#### Demolition Procedures

The demolition works shall be undertaken in a manner which maximises the potential for recycling, including source segregating waste where appropriate. Activities shall be carried out in the following sequence:

Disconnection of Services/Vermin Control	Shutoff of E.S.B. , Gas etc.
Inventory of Hazardous Wastes	e.g. Asbestos etc.
Removal of Abandoned Furniture/Equipment	e.g. Furniture/White Goods
Removal of Asbestos/Hazardous Materials	e.g. Application of H&S Procedures
Removal of Fixtures	e.g. Fitted Presses etc.
Removal of Timber	e.g. Removal of Floors, Trusses, Rafters
Demolition of Structure Shell	Manual or Mechanical Demolition
Source Segregation of Material Fractions	Separation into Designated Material Fractions
Transport of Material from Site to Treatment Facilities	e.g. C&D Waste Recycling Facility
Transport of Material from Site to Controlled Disposal Sites	e.g. Inertised Hazardous Landfill Site
Site Preparation/Restoration	e.g. Hardstanding, Landscaping

#### Assignment of Responsibilities

A \_\_\_\_\_ (Site Engineer/Manager/Assistant Manager etc.) shall be designated as the C&D Waste Manager and have overall responsibility for the implementation of the Project C&D Waste Management Plan. The C&D Waste Manager will be assigned the authority to instruct all site personnel to comply with the specific provisions of the Plan. At the operational level, a \_\_\_\_\_ (Ganger etc.) from the main contractor and \_\_\_\_\_ (appropriate personnel) from each sub-contractor on the site shall be assigned the direct responsibility to ensure that the discrete operations stated in the Project C&D Waste Management Plan are performed on an on-going basis.

#### Training

Copies of the Project C&D Waste Management Plan will be made available to all relevant personnel on site. All site personnel and sub-contractors will be instructed about the objectives of the Project C&D Waste Management Plan and informed of the responsibilities which fall upon them as a consequence of its provisions. Where source segregation, selective demolition and material reuse techniques apply, each member of staff will be given instructions on how to comply with the Project C&D Waste Management Plan. Posters will be designed to reinforce the key messages within the Project C&D Waste Management Plan and will be displayed prominently for the benefit of site staff.

#### Waste Auditing

The C&D Waste Manager shall arrange for full details of all arisings, movements and treatment of construction and demolition waste discards to be recorded during the construction stage of the Project. Each consignment of C&D waste taken from the site will be subject to documentation, which will conform with Table SF4 and ensure full traceability of the material to its final destination.

Name of Project of Origin	e.g. New Harbour, Motorway
Material being Transported	e.g. Soil, Demolition Concrete, Crushed Asphalt etc.
Quantity of Material	e.g. 20.50 tonnes
Date of Material Movement	e.g. 01/01/2007
Name of Carrier	e.g. Authorised Carriers Ltd.
Destination of Material	e.g. Newtown Residential and Office Development
Proposed Use	e.g. Use as Hardcore in Dwelling Floors

**Table SF4: Details to be Included within Transportation Dockets**

Details of the inputs of materials to the construction site and the outputs of wastage arising from the Project will be investigated and recorded in a Waste Audit, which will identify the amount, nature and composition of the waste generated on the site. The Waste Audit will examine the manner in which the waste is produced and will provide a commentary highlighting how management policies and practices may inherently contribute to the production of construction and demolition waste. The measured waste quantities will be used to quantify the costs of management and disposal in a Waste Audit Report, which will also record lessons learned from these experiences which can be applied to future projects. The total cost of C&D waste management will be measured and will take account of the purchase cost of materials (including imported soil), handling costs, storage costs, transportation costs, revenue from sales, disposal costs etc. Costs will be calculated for the management of a range of C&D waste materials, using the format shown in Table SF5 below:

Material	Quantity (tonnes) & Costs (euros & euro)
SOIL	
Quantity of Waste Soil (tonnes)	
Purchase Cost i.e. Import Costs (€)	
Materials Handling Costs (€)	
Material Storage Costs (€)	
Material Transportation Costs (€)	
Revenue from Material Sales (€)	
Material Disposal Costs (€)	
Material Treatment Costs (€)	
Total Waste Soil Management Costs (€)	
Unit Waste Soil Management Costs (€)	

*Table SF5: Standard Record Form for Costs of C&D Waste Management (Sample relates to Soil - separate record forms should be compiled in respect of each waste material)*

Final details of the quantities and types of C&D Waste arising from the Project will be forwarded to \_\_\_\_\_ (Environmental Protection Agency, local authority, NCDWC etc.).

## **APPENDIX D**

### **Chartered Institute of Building (CIOB) Certificate/Diploma Programme in Site Management – C&D W Management Module**

# **Construction & Demolition Waste Management**

This is a module in the Certificate/Diploma Programme in Site Management

*Outline Syllabus*

- **C&D Waste in Ireland**
- **Policy and legislation**
- **C&D Waste Management**
- **Practical site waste management**
- **Environmental issues on site**
- **Recycling**
- **Materials management on-site**
- **Safety, health and welfare relating to C&D Waste**

**Duration:** This module consists of approximately 30 hours.

**Times:** Modules will be carried out over a period of 5-6 weeks one afternoon/evening per week and one or two Saturday mornings where appropriate.

**Venue:** Southern, Eastern and Western Regions

**Dates:** Please refer to Schedule of Dates Issued on an annual basis.



**Reply to:**

Business and Manpower Development Unit  
CIF, Construction House  
Canal Road, Dublin 6

Tel: (01) 4066000  
Fax: (01) 4966953  
E-mail: busdev@cif.ie





## **APPENDIX E**

**Demolition questionnaire used in the  
*National Waste Database Report, 1998 (EPA, 2001)***

**Environmental Protection Agency  
P.O. Box 3000  
Johnstown Castle Estate  
Wexford**

**Tel:- 053 - 60600  
Fax:- 053 - 60699**



**NATIONAL WASTE  
DATABASE  
2001**

***Demolition Contractors Survey***

25<sup>th</sup> January, 2002

Dear Sir/Madam,

In 1995 and 1998, the Environmental Protection Agency conducted surveys of local authorities, various industries, waste contractors and recycling organisations. Based on these surveys, National Waste Database reports were published describing waste production and management in Ireland in those years. The Agency updates this information every three years by surveying waste producers and waste managers. As part of the survey, questionnaires are now being sent out to various industrial companies throughout Ireland.

The construction and demolition waste stream has been identified as a priority waste stream at European level and has received particular focus in the government in its waste policy statement 'Changing Our Ways'. The Agency is committed to improving information on the generation and management of C&D waste with a particular focus on demolition waste because of an information gap regarding waste production and management in this sector. As a result waste questionnaires are being circulated to all members of the Demolition Contractors Association of Ireland. By completing the attached questionnaire you will be making an important contribution to the compilation of information on demolition waste in Ireland.

**Please complete the attached questionnaire with respect to your company and return it to us, at the above address, by February 28<sup>th</sup> 2002.** We look forward to hearing from you at your earliest convenience, and if you have any problems or queries please do not hesitate to contact John Delaney ([j.delaney@epa.ie](mailto:j.delaney@epa.ie)) or Brian Meaney ([b.meaney@epa.ie](mailto:b.meaney@epa.ie)) at this office.

Yours sincerely

---

Inspector  
Environmental Management & Planning Division

**Contact Information:**

<b>Company Name:</b>	
<b>Address:</b>	
<b>Town:</b>	
<b>County/City</b>	
<b>Contact Name:</b>	
<b>Tel:</b>	
<b>Email:</b>	

<b>Year and Month of Commencement of Company</b>	
<b>No.of Staff</b>	

Note: where part time workers form part of the staff , the number should be the equivalent number of full time staff.

<b>Fax:</b>	
-------------	--

Does your company have an environmental management system?(Yes/No)\_\_\_\_\_

If accredited to any formal environmental management system (e.g., EMAS, ISO 14000) please state which one:\_\_\_\_\_

**Table 1: Summary Waste Information**

*Please provide all details in metric tonnes. If the actual quantity is not known, please provide an estimate and indicate that the figure is an estimate. In the box on the next page, please give a description of how the estimate was calculated (e.g. number and volume of loads).*

<b>ITEM</b>	<b>2000 (Tonnes)</b>	<b>2001 (Tonnes)</b>
<b>Total quantity of Construction and Demolition waste generated (tonnes)</b>		
• <i>total quantity of construction waste generated (weighed/estimate)</i>		
• <i>total quantity of demolition waste generated (weighed/estimate)</i>		
• <b>Total Quantity of <u>Demolition</u> waste generated from different construction and demolition activities (tonnes)</b>		
• <i>quantity of demolition waste generated from residential activity (weighed/estimate)</i>		
• <i>quantity of demolition waste generated from commercial activity (weighed/estimate)</i>		
• <i>quantity of demolition waste generated from industrial activity (weighed/estimate)</i>		

**Table 2: Demolition Waste Composition Information**

Please provide a breakdown of the quantity of demolition waste generated in 2000 and 2001 into the waste description types in the table below.

<b>Waste Description</b>	<b>2000 (Tonnes)</b>	<b>2001 Tonnes</b>
<i>Concrete, bricks, tiles, ceramics and gypsum based materials</i>		
<i>Soil and Stones</i>		
<i>Asphalt, tar and tar products</i>		
<i>Wood</i>		
<i>Metals</i>		
<i>Others (define)</i>		

**Table 3: Recovery and Disposal Information**

Please provide details on the management of demolition waste generated in 2000 and 2001.

<b>Recovery/Disposal Method</b>	<b>2000 (Tonnes)</b>	<b>2001 (Tonnes)</b>
<i>Demolition waste recycled or re-used on-site</i>		
<i>Demolition waste delivered to an off-site recycling plant</i>		
<i>Demolition waste delivered to a landfill for disposal</i>		
<i>Demolition waste delivered to a landfill for recycling or re-use (e.g. as in-fill or cover material)</i>		

**Quantities Calculation Description**

--

## **APPENDIX F**

### **SMARTWaste Waste and Product Categories**

## **SMARTWaste Waste and Product Categories**

### **Products**

#### **Ceramics**

##### **Bricks/blocks**

- Corrugated roof sheet
- Facing brick (single)
- Facing brick (double)
- Engineering brick
- Common brick
- Road blocks

##### **Tiles**

- Roof tiles (clay)
- Ceramic floor tiles
- Floor tiles (clay)
- Wall tiles (ceramic)
- Ridge/hip:valley tiles

##### **Pipes**

- Drainage pipe (clay)

##### **Kitchen:bathroom**

- Ceramic toilet
- Ceramic bath
- Ceramic basin
- Shower unit

##### **Other**

- Chimney pot

#### **Concrete**

##### **Blocks**

- Solid block
- Hollow block
- Cellular block

##### **Structural**

- System panel
- Cladding panel
- Rc spandrel panel
- Precast stairs
- Precast floors
- Precast partitions
- Rc system panel
- Precast columns
- Precast beams

##### **Other**

- Concrete
- Rubble
- Roof tiles
- Concrete lintel
- Concrete coping stone
- Paving slab
- Sewer pipe
- Concrete spacer
- Drainage channel
- Kerb

#### **Electrical equipment**

##### **Audio/visual**

- Lcd projector
- Tv

##### **Multimedia**

##### **White goods**

- Fridge

Dishwasher  
Industrial cooker  
Microwave

Heating/cooling

Other

Ceiling fan  
Air conditioning unit  
Electric fan  
Stand light

Furniture

Cabinets

Double filing (mid)  
Double filing (tall)  
Double filing (small)  
Single filing (mid)  
Single filing (tall)  
Single filing (small)  
4 drawer filing cabinet  
2 drawer filing cabinet  
Kitchen cupboard  
Floor-ceiling cabinet  
Under-desk cabinet

Tables/desks

Oblong timber table  
Metal frame table  
Coffee table  
Corner desk workstation  
Oblong desk workstation  
Purpose built workstation  
Circular table

Chairs

Single comfy chair  
Double comfy chair  
Swivel chair  
Table chairs

Floor coverings

Carpet  
Linoleum

Shelves

Plywood shelf  
Shelf risers  
Shelf brackets  
Desktop partition  
Dexion-style shelf units  
Desk shelf  
Under-desk shelf

Whiteboard (large)
Whiteboard (small)
Pinboard (large)
Pinboard (small)
Venician blind
Mirror
Hat stand

Inert

Soils

Topsoil

Sub-base soil  
Spoil-mixed soil&rubble  
Sand  
Clay

**Bitumen**

Tarmac  
Bitumen  
Asphalt  
Roof felt (plain)  
Roof felt (gravel)

**Aggregates**

Gravel (coarse)  
Gravel (fine)  
Aggregate

**Stone**

Facing stone  
Marble  
Reconstituted stone tiles  
Roof slate  
Paving stone  
Natural stone  
Slate floor tiles  
Portland Stone

**Other**

Terrazo sink frame  
Terrazo window shelf  
Brick & Block Wall

**Insulation**

**Loose fill**

Blown foam

**Sheet materials**

Polystyrene  
Styrofoam board  
Asbestolux  
Fire insulation board  
Polyurethane foam  
Purlboard insulation  
Sound insulation  
Roofmate insulation

**Rolls**

Mineral wool  
Glass fibre  
Wool insulation  
Fibrous plastic insulating membrane

**Breathable membranes**

Breather paper

**Other**

Cavity fire barrier  
Thermal sheathing board  
Pipe insulation tubes  
Insulation strip

**Metals**

**Pipes**

Copper pipe  
Copper angles & collars  
4" iron soil pipe  
Aluminium pipe  
Steel heating pipe

**Windows/doors**

Metal door  
Metal window  
Steel window frame



Metal door casing

Wires/cables

Metal wire  
Electricity cables  
Tv/phone cables  
Computer cables  
Metalic cable

Ironmongery

Bracket  
Joist hanger  
Barrel latch  
Mortice lock  
Metal handle  
Metal letterbox  
Hinge  
Brass couplings  
Metal fasteners  
Rivet cartridge

Sheet materials

Tin sheet  
Aluminium sheet  
Metal cladding  
Zinc roof sheet  
Raised Floor Tiles

Structural metalwork

Reinforcing bar  
Metal lintel  
Wall tie  
Wall tray  
Reinforcing mesh  
Metal fascia  
Metal purlin  
Galv studwork  
False floor panels  
Sunshade louvres  
Reinforcing chairs  
Cladding frame  
Aluminium partition frame  
Threaded rod  
False floor post  
Steel Column  
Steel Beam  
Metal Decking

Kitchen/bathroom

Metal sink  
Metal wc  
Metal bath  
Kitchen sink  
Sink tap  
Towel roll dispenser  
Water boilers  
Water tanks  
Water blowers

Other

Immersion heater  
Steel  
Cast iron  
Aluminium beads  
Lead flashing  
Metal bucket  
Stainless steel  
Acro  
Ventilation duct  
Scaffold bar  
Metal guttering  
Radiator  
Metal formwork  
Truss plate  
Manhole

102892



Metal socket box  
Scaffold bracket  
Strip-light case  
Extension reel  
Cable riser casing  
Metallic lift piece  
Circular saw blade  
Pressure machine  
Ventilation grill  
Security fence  
Wheelbarrow  
Halfen channel  
Metal ceiling tiles  
Ceiling tile frame  
Metal stillage  
Twin power supply  
Single power supply  
Bt twh supply  
Fire extinguisher  
Wall light trunking  
Gate valves  
Heater guard  
Structural beam  
Cable tray  
Metal ladder  
Temporary Site Safety Rail

#### **Miscellaneous**

#### **Packaging**

##### **Metals**

Metal paint pot  
Line spray can  
Metal bands  
Steel cable drum  
Metallic container  
Metal packaging

##### **Plastics**

Plastic paint pot  
Polythene sheet  
Plastic bands  
Polystyrene fill  
Bubble wrap  
Empty sand bag  
Sealant tubes  
Foam sheet  
Polypropylene bag  
Instapack foam  
Plastic container

##### **Timber**

Timber cable drum  
Timber pallet  
Timber packaging

##### **Paper/cardboard**

Card cable drum  
Paper  
Cardboard  
Empty plaster bags  
Empty cement bags

##### **Other**

#### **Plaster/cement**

##### **Plaster**

Plasterboard  
Browning plaster  
Finish plaster  
Plaster bag (full)  
External cladding

**Cement**

Render  
Cement  
Mortar  
Fibre cement sheet  
Asbestos cement  
Cement bag (full)  
Screed  
Asbestos flue pipe

**Other**

**Plastics**

**Pipes**

Plastic pipe  
Plastic pipe joints  
Plastic collars & angles  
Gutter  
Gutter brackets  
Downpipe  
Downpipe brackets  
Compressor hose  
Composite pipe  
Fire hose  
PVC-U Ground pipes  
PVC-U Down pipes  
PVC-U Guttering

**Switches/sockets**

Socket box (single)  
Socket box (double)  
Socket face (single)  
Socket face (double)  
Telephone face  
Light switch face

**Sheet materials**

Perspex sheet  
Plastic cordek sheet  
Polythene sheet

**Windows/doors**

Upvc window  
Upvc door  
PVC-U White windows  
PVC-U Jazz windows  
PVC-U White doors  
PVC-U Jazz doors  
Rubber seals

**Kitchen/bathrooms**

Basin/shower/bath traps  
Plastic sink  
Plastic bath  
Plastic wc  
Soap dispenser  
Tampax dispenser  
Toilet roll holder  
Odouriser  
Plastic water tank

**Light casings**

Tw in strip light  
Single strip light  
Emergency light  
Circular light  
Spot light  
Square light  
Quad strip light  
Wall lights

**Other**

Water tank  
Eaves ventilator

Damp proof membrabe  
Damp proof course  
Bucket  
Bung  
Site temp fencing  
Mat spacers  
Gas membrane  
Polystyrene ventform panels  
Duct tape  
Plastic cable cover  
Plastic cable case  
Nylon rope  
Vacuum pipe  
Nylon netting  
Geotextile membrane  
Geogrid  
Bolt sleeve  
Plastic conduit  
PVC cladding  
Rubber barrier mat  
Fibre Optic Cable  
PVC-U Facia Board  
PVC-U Soffit  
PVC-U Bargeboard

## **Timber**

### **Structural**

Timber joist  
Composite joist  
Studwork  
Rafters  
Slate batten  
Staircase timber  
Floor blocks  
Floorboard  
Truss

### **Sheet materials**

Fascia/berge board  
Soffit board  
Plywood (faced)  
Plywood (shuttering)  
Blockboard  
Chipboard  
Waferboard  
Mdf  
Hardboard

### **Windows/doors**

Door lining/caseing  
Softwood window  
Internal door  
External door  
Office door+frame  
Toilet door+frame  
Fire door+frame  
Twin fire door+frame  
Hardwood door  
Hardwood window

### **Decorative**

Skirting board  
Architrave  
Dado rail  
Cornice  
Timber paneling

### **Other**

Wall plate  
Scaffold plank  
Timber (general)  
Timber formwork  
Wooden ladder  
Timber cladding

Sawdust  
Mezzanine floor

**Temp**

Ceiling tiles (fibrous)  
Miscellaneous waste  
Office waste  
Canteen waste  
Personal safety equipment  
Vegetation  
Gas cylinder  
Tyre  
Composite spacer  
Composite spandrel panels  
Protective paper  
Composite door  
Composite window

72	Temp 1
72	Temp 2
72	Temp 3
72	Temp 4
72	Temp 5
73	Laminated Glass
73	Wire Glass
73	Textured Glass
73	<b>Surface Coated Glass</b>
73	Clear Float Glass
73	Plate Glass
73	Rough Cast Glass
73	Other Flat Glass

## **APPENDIX G**

### **SMARTAudit Feedback Codes**

## **FEEDBACK CODE**

### **Methods of work**

New methods  
Untrained labour  
Wrong tools  
Broken tools  
Methods of work  
Rework-prefab errors  
Rework-own trade  
Rework-other trades  
Rework-unknown  
Offcuts  
Material gone off  
Too much made-up  
Sweepings  
Temp materials  
Clearing Site  
Excavation material  
Demolition material

### **Project Management**

Unavailable storage  
Unsuitable storage  
Too much delivered  
Damaged on delivery  
Incorrect delivery  
Plans unavailable  
Plans inadequate  
Project overrun

### **Project Design**

Info inadequate  
Info late  
Info conflict  
Info changed  
Design overspecified  
Design non-standard  
Slow communication  
Communication breakdown

### **Packaging**

Recyclable-broken  
Recyclable-soiled  
Recyclable packaging  
Reusable-broken  
Reusable-soiled  
Reusable packaging  
Non recyclable/reusable packaging

### **Miscellaneous**

Fly tipping  
Adverse weather  
Vandalism  
Site office waste  
Site canteen waste

### **Uncoded**

Temporary cause code

## **APPENDIX H**

### **SMARTAudit Work Packages**



## **WORK PACKAGE**

### **Site Work**

Site Investigations  
Soil Testing  
Site Layout  
Site Security  
Site Lighting & Electrical Supply  
Site Office Accommodation  
Setting Out  
Road Construction  
Scaffolding

### **Substructure**

Foundation Beds  
Piled Foundations  
Retaining Wall  
Basement Construction  
Excavation  
Underpinning  
Ground Water Control  
Soil Stabilisation & Improvement

### **Superstructure**

Brick & Block Walls  
Arches & Openings  
Formwork  
Cast in-situ Concrete Frames  
Pre-cast Concrete Frames  
Steel Frames  
Timber Frames  
Panel Walls & Curtain Walling  
External Cladding  
Roofing  
Insulation

### **Internal Construction & Finishes**

Internal Walls  
Partitions  
Plasters & Plastering  
Drylining & Plasterboarding  
Wall & Floor Tiling  
Floors & Finishes  
Floor Screed  
Stairs  
Suspended Ceilings  
Paints & Painting  
1st Fix Carpentry  
2nd Fix Carpentry  
1st Fix Electrics  
2nd Fix Electrics  
Windows Glass & Glazing  
Domestic & Industrial Doors  
Kitchen Units  
Sanitary & Bathroom Fittings

### **Services**

Rainwater Installations  
Drainage Systems  
Water Supply  
Cold Water Systems  
Hot Water Systems  
Cisterns & Cylinders  
Gas Supply  
Fireplaces & Flues  
Telecomms Installations  
Electrical Supply  
White Goods  
Heating Systems  
Ductwork – Ventilation

## **APPENDIX J**

### **SMARTWaste Costs**

# The SMARTWaste™ System

## Licence Fee Structure 2006\*



The SMARTWaste system provided by BRE encompasses four tools which provide an integrated and practical approach to more efficient material resource use for the construction sector. All tools are web-based, and the use of each tool is enabled by the purchase of a licence for the tool which lasts for a year.



### SMARTStart™

The licence fees detailed in the tables below enable your company to use BREs SMARTStart tool on the relevant number of projects for a period of one year.

#### Rates for individual projects

Contract Value of Project	Fee (for 1 year)
£10m and above	£350
£5m up to £10m	£300
£1m up to £5m	£250
£500k up to £1m	£200
£250k up to £500k	£150
up to £250k	£100

#### Rates for multiple projects

Number of Projects	Fee (for 1 year)
1-5 projects	£500
6-10 projects	£950
11-15 projects	£1,350
16-20 projects	£1,700
21-25 projects	£2,000
Over 25 projects	£2000 plus £50 for every additional project



### SMARTAudit™

A licence for using the SMARTAudit tool is £1000 per annum. A requirement of use is that each person in charge of inputting data into the system is trained by BRE in order to ensure accurate data entry. Training fees are dependent on the number of people to be trained and start from £500 per person. Lower fees are applicable when a greater number of people are being trained. Training lasts for one day. A Pocket PC is also required to enable collection of waste data using the SMARTAudit software.



### SMARTStart+

A licence for using SMARTStart+ is £1200 per year. A licence must also be purchased for SMARTStart for which the price will be dependant on number of projects the tool is to be used on (see fees in table above).



### BREMAPP™

BREMAPP, a geographical information system (GIS) that enables firms to locate the nearest most suitable waste management sites, is currently free to use and can be accessed via the SMARTWaste website.

Please choose the licence option you require and contact Amanda Conroy at BRE to register.

Tel: 01923 664471

Fax: 01923 664104

Email: [smartwaste@bre.co.uk](mailto:smartwaste@bre.co.uk)

Website: [www.smartwaste.co.uk](http://www.smartwaste.co.uk)



Resource Efficiency  
BRE, Garston, Watford, WD25 9XX

\* All prices exclude VAT

## **APPENDIX K**

### **Example of GMIT audit sheets in triplicate format**







## **APPENDIX L**

**Conversion factors for skip volumes from yds<sup>3</sup> to m<sup>3</sup>  
(contained in the GMIT audit book)**



1.5 yd <sup>3</sup> to 1.147m <sup>3</sup>		3.5 yd <sup>3</sup> to 2.676m <sup>3</sup>		6 yd <sup>3</sup> to 4.588 m <sup>3</sup>		8 yd <sup>3</sup> to 6.117m <sup>3</sup>	
% Full	m <sup>3</sup>	% Full	m <sup>3</sup>	% Full	m <sup>3</sup>	% Full	m <sup>3</sup>
5	0.057	5	0.134	5	0.229	5	0.306
10	0.115	10	0.268	10	0.459	10	0.612
15	0.172	15	0.401	15	0.688	15	0.918
20	0.229	20	0.535	20	0.918	20	1.223
25	0.287	25	0.669	25	1.147	25	1.529
30	0.334	30	0.803	30	1.376	30	1.835
35	0.401	35	0.937	35	1.606	35	2.141
40	0.459	40	1.070	40	1.835	40	2.447
45	0.516	45	1.204	45	2.065	45	2.753
50	0.574	50	1.338	50	2.294	50	3.058
55	0.631	55	1.472	55	2.523	55	3.364
60	0.688	60	1.606	60	2.753	60	3.670
65	0.746	65	1.739	65	2.982	65	3.976
70	0.803	70	1.873	70	3.212	70	4.282
75	0.860	75	2.007	75	3.441	75	4.588
80	0.918	80	2.141	80	3.670	80	4.893
85	0.975	85	2.275	85	3.900	85	5.199
90	1.032	90	2.408	90	4.129	90	5.505
95	1.090	95	2.542	95	4.359	95	5.811
100	1.147	100	2.676	100	4.588	100	6.117
12 yd <sup>3</sup> to 9.175m <sup>3</sup>		14 yd <sup>3</sup> to 10.704m <sup>3</sup>		30 yd <sup>3</sup> to 22.938m <sup>3</sup>		yd <sup>3</sup> to m <sup>3</sup>	
% Full	m <sup>3</sup>	% Full	m <sup>3</sup>	% Full	m <sup>3</sup>	% Full	m <sup>3</sup>
5	0.459	5	0.535	5	1.147	5	
10	0.918	10	1.070	10	2.294	10	
15	1.376	15	1.606	15	3.441	15	
20	1.835	20	2.141	20	4.588	20	
25	2.294	25	2.676	25	5.735	25	
30	2.753	30	3.211	30	6.881	30	
35	3.211	35	3.746	35	8.028	35	
40	3.670	40	4.282	40	9.175	40	
45	4.129	45	4.817	45	10.322	45	
50	4.588	50	5.352	50	11.469	50	
55	5.046	55	5.887	55	12.616	55	
60	5.505	60	6.422	60	13.793	60	
65	5.964	65	6.958	65	14.910	65	
70	6.423	70	7.493	70	16.057	70	
75	6.881	75	8.028	75	17.204	75	
80	7.340	80	8.563	80	18.350	80	
85	7.799	85	9.098	85	19.497	85	
90	8.258	90	9.634	90	20.644	90	
95	8.716	95	10.169	95	21.791	95	
100	9.175	100	10.704	100	22.938	100	

## **APPENDIX M**

### **Individual Point Source Assessments Results (2004 and 2005)**

**Project Description:** New Residential PSA 1 2004

**Completed Floor Area:** 2 850 m<sup>2</sup>

**Project Stage:** 30 %

**Total Waste:** 109.656 m<sup>3</sup>

**Conversion Table:**

Materials	EWC Code	Volume (m <sup>3</sup> )	Conversion Factor	Weight (tonnes)
Inactive or inert waste	170100		1.50	
Paper and Plastics	170203	68.200	0.15	10.230
Cardboard			0.40	
Timber pallets	170201		0.40	
Plasterboard	170802	7.164	0.40	2.866
Canteen Waste		5.500	0.40	2.200
Timber/Wood	170201	4.100	0.60	2.460
Building & Construction Waste	170904	19.458	0.60	11.675
Sweepings			0.60	
Glass	170202		0.60	
Bituminous mixtures	170302		1.00	
Metals	170400	1.800	1.00	1.800
Soil, stones and dredging spoil	170500		1.50	
Insulation materials	170604	3.434	0.40	1.374
Hazardous waste (Packaging)	170903		0.15	
Drainage Piping			0.60	
Electrical Waste			0.60	
Miscellaneous Waste			0.60	
<b>Total</b>		<b>109.656</b>		<b>32.605</b>

**Waste Factor (Volume):** 0.039m<sup>3</sup>/m<sup>2</sup>

**Waste Factor (Weight):** 0.011 tonnes/m<sup>2</sup> or 11 kg/m<sup>2</sup>

**Project Description:** New Residential PSA 2 2004

**Completed Floor Area:** 13 104 m<sup>2</sup>

**Project Stage:** 60 %

**Total Waste:** 390.92 m<sup>3</sup>

**Conversion Table:**

<b>Materials</b>	<b>EWC Code</b>	<b>Volume (m<sup>3</sup>)</b>	<b>Conversion Factor</b>	<b>Weight (tonnes)</b>
Inactive or inert waste	170100		1.50	
Paper and Plastics	170203	146.310	0.15	21.947
Cardboard			0.40	
Timber pallets	170201		0.40	
Plasterboard	170802	151.690	0.40	60.676
Canteen Waste			0.40	
Timber/Wood	170201	34.280	0.60	20.568
Building & Construction Waste	170904	41.810	0.60	25.086
Sweepings			0.60	
Glass	170202		0.60	
Bituminous mixtures	170302		1.00	
Metals	170400	9.490	1.00	9.490
Soil, stones and dredging spoil	170500		1.50	
Insulation materials	170604	7.340	0.40	2.936
Hazardous waste (Packaging)	170903		0.15	
Drainage Piping			0.60	
Electrical Waste			0.60	
Miscellaneous Waste			0.60	
<b>Total</b>		<b>390.920</b>		<b>140.703</b>

**Waste Factor (Volume):** 0.030m<sup>3</sup>/m<sup>2</sup>

**Waste Factor (Weight):** 0.011 tonnes/m<sup>2</sup> or 11 kg/m<sup>2</sup>

**Project Description:** New Residential PSA 3 2004

**Completed Floor Area:** 9 000 m<sup>2</sup>

**Project Stage:** 15 %

**Total Waste:** 200.164 m<sup>3</sup>

**Conversion Table:**

Materials	EWC Code	Volume (m <sup>3</sup> )	Conversion Factor	Weight (tonnes)
Inactive or inert waste	170100	39.218	1.50	58.827
Paper and Plastics	170203	22.698	0.15	3.405
Cardboard			0.40	
Timber pallets	170201		0.40	
Plasterboard	170802	48.695	0.40	19.478
Canteen Waste			0.40	
Timber/Wood	170201	70.634	0.60	42.380
Building & Construction Waste	170904	17.696	0.60	10.618
Sweepings			0.60	
Glass	170202		0.60	
Bituminous mixtures	170302		1.00	
Metals	170400		1.00	
Soil, stones and dredging spoil	170500		1.50	
Insulation materials	170604	1.223	0.40	0.489
Hazardous waste (Packaging)	170903		0.15	
Drainage Piping			0.60	
Electrical Waste			0.60	
Miscellaneous Waste			0.60	
<b>Total</b>		<b>200.164</b>		<b>135.197</b>

**Waste Factor (Volume):** 0.022m<sup>3</sup>/m<sup>2</sup>

**Waste Factor (Weight):** 0.015 tonnes/m<sup>2</sup> or 15 kg/m<sup>2</sup>



**Project Description:** New Residential PSA 4 2004

**Completed Floor Area:** 2 800 m<sup>2</sup>

**Project Stage:** 17 %

**Total Waste:** 86.290 m<sup>3</sup>

**Conversion Table:**

Materials	EWC Code	Volume (m <sup>3</sup> )	Conversion Factor	Weight (tonnes)
Inactive or inert waste	170100	19.725	1.50	29.588
Paper and Plastics	170203	35.540	0.15	5.331
Cardboard			0.40	
Timber pallets	170201		0.40	
Plasterboard	170802	6.881	0.40	2.752
Canteen Waste			0.40	
Timber/Wood	170201	11.851	0.60	7.111
Building & Construction Waste	170904	0.458	0.60	0.275
Sweepings			0.60	
Glass	170202		0.60	
Bituminous mixtures	170302		1.00	
Metals	170400	9.635	1.00	9.635
Soil, stones and dredging spoil	170500		1.50	
Insulation materials	170604	2.200	0.40	0.880
Hazardous waste (Packaging)	170903		0.15	
Drainage Piping			0.60	
Electrical Waste			0.60	
Miscellaneous Waste			0.60	
<b>Total</b>		<b>86.290</b>		<b>55.572</b>

**Waste Factor (Volume):** 0.031m<sup>3</sup>/m<sup>2</sup>

**Waste Factor (Weight):** 0.020 tonnes/m<sup>2</sup> or 20 kg/m<sup>2</sup>

**Project Description:** New Residential PSA 5 2004

**Completed Floor Area:** 234 m<sup>2</sup>

**Project Stage:** 9 %

**Total Waste:** 21.910 m<sup>3</sup>

**Conversion Table:**

Materials	EWC Code	Volume (m <sup>3</sup> )	Conversion Factor	Weight (tonnes)
Inactive or inert waste	170100		1.50	
Paper and Plastics	170203	7.550	0.15	1.133
Cardboard			0.40	
Timber pallets	170201		0.40	
Plasterboard	170802		0.40	
Canteen Waste		2.970	0.40	1.188
Timber/Wood	170201	4.870	0.60	2.922
Building & Construction Waste	170904	6.520	0.60	3.912
Sweepings			0.60	
Glass	170202		0.60	
Bituminous mixtures	170302		1.00	
Metals	170400		1.00	
Soil, stones and dredging spoil	170500		1.50	
Insulation materials	170604		0.40	
Hazardous waste (Packaging)	170903		0.15	
Drainage Piping			0.60	
Electrical Waste			0.60	
Miscellaneous Waste			0.60	
<b>Total</b>		<b>21.910</b>		<b>9.155</b>

**Waste Factor (Volume):** 0.094m<sup>3</sup>/m<sup>2</sup>

**Waste Factor (Weight):** 0.039 tonnes/m<sup>2</sup> or 39 kg/m<sup>2</sup>

**Project Description:** New Residential PSA 6 2004

**Completed Floor Area:** 4 158 m<sup>2</sup>

**Project Stage:** 45 %

**Total Waste:** 281.01 m<sup>3</sup>

**Conversion Table:**

Materials	EWC Code	Volume (m <sup>3</sup> )	Conversion Factor	Weight (tonnes)
Inactive or inert waste	170100		1.50	
Paper and Plastics	170203	38.960	0.15	5.844
Cardboard			0.40	
Timber pallets	170201		0.40	
Plasterboard	170802	69.130	0.40	27.652
Canteen Waste			0.40	
Timber/Wood	170201	34.600	0.60	20.760
Building & Construction Waste	170904	122.140	0.60	73.284
Sweepings			0.60	
Glass	170202		0.60	
Bituminous mixtures	170302		1.00	
Metals	170400	16.180	1.00	16.180
Soil, stones and dredging spoil	170500		1.50	
Insulation materials	170604		0.40	
Hazardous waste (Packaging)	170903		0.15	
Drainage Piping			0.60	
Electrical Waste			0.60	
Miscellaneous Waste			0.60	
<b>Total</b>		<b>281.010</b>		<b>143.720</b>

**Waste Factor (Volume):** 0.068m<sup>3</sup>/m<sup>2</sup>

**Waste Factor (Weight):** 0.035 tonnes/m<sup>2</sup> or 35 kg/m<sup>2</sup>



**Project Description:** New Residential PSA 7 2004

**Completed Floor Area:** 2 295 m<sup>2</sup>

**Project Stage:** 27 %

**Total Waste:** 197.977 m<sup>3</sup>

**Conversion Table:**

Materials	EWC Code	Volume (m <sup>3</sup> )	Conversion Factor	Weight (tonnes)
Inactive or inert waste	170100		1.50	
Paper and Plastics	170203	55.590	0.15	8.339
Cardboard			0.40	
Timber pallets	170201		0.40	
Plasterboard	170802	56.741	0.40	22.696
Canteen Waste			0.40	
Timber/Wood	170201	27.188	0.60	16.313
Building & Construction Waste	170904	55.601	0.60	33.361
Sweepings			0.60	
Glass	170202		0.60	
Bituminous mixtures	170302		1.00	
Metals	170400		1.00	
Soil, stones and dredging spoil	170500		1.50	
Insulation materials	170604	2.857	0.40	1.143
Hazardous waste (Packaging)	170903		0.15	
Drainage Piping			0.60	
Electrical Waste			0.60	
Miscellaneous Waste			0.60	
<b>Total</b>		<b>197.977</b>		<b>81.852</b>

**Waste Factor (Volume):** 0.086m<sup>3</sup>/m<sup>2</sup>

**Waste Factor (Weight):** 0.036 tonnes/m<sup>2</sup> or 36 kg/m<sup>2</sup>

**Project Description:** New Residential PSA 8 2004

**Completed Floor Area:** 5 400 m<sup>2</sup>

**Project Stage:** 30 %

**Total Waste:** 98.426 m<sup>3</sup>

**Conversion Table:**

Materials	EWC Code	Volume (m <sup>3</sup> )	Conversion Factor	Weight (tonnes)
Inactive or inert waste	170100	2.295	1.50	3.443
Paper and Plastics	170203	5.049	0.15	0.757
Cardboard			0.40	
Timber pallets	170201		0.40	
Plasterboard	170802		0.40	
Canteen Waste		4.896	0.40	1.958
Timber/Wood	170201	13.914	0.60	8.348
Building & Construction Waste	170904	9.160	0.60	5.496
Sweepings			0.60	
Glass	170202		0.60	
Bituminous mixtures	170302		1.00	
Metals	170400	63.112	1.00	63.112
Soil, stones and dredging spoil	170500		1.50	
Insulation materials	170604		0.40	
Hazardous waste (Packaging)	170903		0.15	
Drainage Piping			0.60	
Electrical Waste			0.60	
Miscellaneous Waste			0.60	
<b>Total</b>		<b>98.426</b>		<b>83.114</b>

**Waste Factor (Volume):** 0.018m<sup>3</sup>/m<sup>2</sup>

**Waste Factor (Weight):** 0.015 tonnes/m<sup>2</sup> or 15 kg/m<sup>2</sup>

**Project Description:** New Residential PSA 9 2004

**Completed Floor Area:** 15 510 m<sup>2</sup>

**Project Stage:** 47 %

**Total Waste:** 376.850 m<sup>3</sup>

**Conversion Table:**

Materials	EWC Code	Volume (m <sup>3</sup> )	Conversion Factor	Weight (tonnes)
Inactive or inert waste	170100	121.400	1.50	182.100
Paper and Plastics	170203	45.200	0.15	6.780
Cardboard			0.40	
Timber pallets	170201		0.40	
Plasterboard	170802		0.40	
Canteen Waste		4.100	0.40	1.640
Timber/Wood	170201	126.700	0.60	76.020
Building & Construction Waste	170904	61.350	0.60	36.810
Sweepings			0.60	
Glass	170202		0.60	
Bituminous mixtures	170302		1.00	
Metals	170400	3.300	1.00	3.300
Soil, stones and dredging spoil	170500		1.50	
Insulation materials	170604	14.800	0.40	5.920
Hazardous waste (Packaging)	170903		0.15	
Drainage Piping			0.60	
Electrical Waste			0.60	
Miscellaneous Waste			0.60	
<b>Total</b>	<b>376.850</b>			<b>312.570</b>

**Waste Factor (Volume):** 0.024m<sup>3</sup>/m<sup>2</sup>

**Waste Factor (Weight):** 0.020 tonnes/m<sup>2</sup> or 20 kg/m<sup>2</sup>

**Project Description:** New Residential PSA 10 2004

**Completed Floor Area:** 454 m<sup>2</sup>

**Project Stage:** 10 %

**Total Waste:** 210.270 m<sup>3</sup>

**Conversion Table:**

Materials	EWC Code	Volume (m <sup>3</sup> )	Conversion Factor	Weight (tonnes)
Inactive or inert waste	170100	43.359	1.50	65.039
Paper and Plastics	170203	22.026	0.15	3.304
Cardboard			0.40	
Timber pallets	170201		0.40	
Plasterboard	170802	12.387	0.40	4.955
Canteen Waste		17.349	0.40	6.940
Timber/Wood	170201	78.905	0.60	47.343
Building & Construction Waste	170904		0.60	
Sweepings			0.60	
Glass	170202		0.60	
Bituminous mixtures	170302		1.00	
Metals	170400	3.670	1.00	3.670
Soil, stones and dredging spoil	170500		1.50	
Insulation materials	170604	32.574	0.40	13.030
Hazardous waste (Packaging)	170903		0.15	
Drainage Piping			0.60	
Electrical Waste			0.60	
Miscellaneous Waste			0.60	
<b>Total</b>		<b>210.270</b>		<b>144.281</b>

**Waste Factor (Volume):** 0.463m<sup>3</sup>/m<sup>2</sup>

**Waste Factor (Weight):** 0.318 tonnes/m<sup>2</sup> or 318 kg/m<sup>2</sup>

**Project Description:** New Residential PSA 11 2004

**Completed Floor Area:** 2 000 m<sup>2</sup>

**Project Stage:** 20 %

**Total Waste:** 755.270 m<sup>3</sup>

**Conversion Table:**

Materials	EWC Code	Volume (m <sup>3</sup> )	Conversion Factor	Weight (tonnes)
Inactive or inert waste	170100	231.560	1.50	347.340
Paper and Plastics	170203	120.000	0.15	18.000
Cardboard			0.40	
Timber pallets	170201		0.40	
Plasterboard	170802	99.510	0.40	39.804
Canteen Waste			0.40	
Timber/Wood	170201	251.500	0.60	150.900
Building & Construction Waste	170904		0.60	
Sweepings			0.60	
Glass	170202		0.60	
Bituminous mixtures	170302		1.00	
Metals	170400		1.00	
Soil, stones and dredging spoil	170500		1.50	
Insulation materials	170604	52.700	0.40	21.080
Hazardous waste (Packaging)	170903		0.15	
Drainage Piping			0.60	
Electrical Waste			0.60	
Miscellaneous Waste			0.60	
<b>Total</b>		<b>755.270</b>		<b>577.124</b>

**Waste Factor (Volume):** 0.378m<sup>3</sup>/m<sup>2</sup>

**Waste Factor (Weight):** 0.289 tonnes/m<sup>2</sup> or 289 kg/m<sup>2</sup>

**Project Description:** New Residential PSA 12 2005

**Completed Floor Area:** 960 m<sup>2</sup>

**Project Stage:** 12 %

**Total Waste:** 102.542 m<sup>3</sup>

**Conversion Table:**

Materials	EWC Code	Volume (m <sup>3</sup> )	Conversion Factor	Weight (tonnes)
Inactive or inert waste	170100	2.713	1.50	4.070
Paper and Plastics	170203	9.196	0.15	1.379
Cardboard		6.249	0.40	2.500
Timber pallets	170201		0.40	
Plasterboard	170802		0.40	
Canteen Waste		14.826	0.40	5.930
Timber/Wood	170201	31.846	0.60	19.108
Building & Construction Waste	170904		0.60	
Sweepings			0.60	
Glass	170202		0.60	
Bituminous mixtures	170302		1.00	
Metals	170400	28.737	1.00	28.737
Soil, stones and dredging spoil	170500		1.50	
Insulation materials	170604		0.40	
Hazardous waste (Packaging)	170903	8.516	0.15	1.277
Drainage Piping		0.459	0.60	0.275
Electrical Waste			0.60	
Miscellaneous Waste			0.60	
<b>Total</b>		<b>102.542</b>		<b>63.276</b>

**Waste Factor (Volume):** 0.107m<sup>3</sup>/m<sup>2</sup>

**Waste Factor (Weight):** 0.066 tonnes/m<sup>2</sup> or 66 kg/m<sup>2</sup>



**Project Description:** New Residential (Timber Frame) PSA 13 2005

**Completed Floor Area:** 1 375 m<sup>2</sup>

**Project Stage:** 26 %

**Total Waste:** 164.267 m<sup>3</sup>

**Conversion Table:**

Materials	EWC Code	Volume (m <sup>3</sup> )	Conversion Factor	Weight (tonnes)
Inactive or inert waste	170100	1.377	1.50	2.066
Paper and Plastics	170203	33.036	0.15	4.955
Cardboard		4.129	0.40	1.652
Timber pallets	170201	6.424	0.40	2.570
Plasterboard	170802	22.483	0.40	8.993
Canteen Waste		15.603	0.40	6.241
Timber/Wood	170201	22.022	0.60	13.213
Building & Construction Waste	170904		0.60	
Sweepings		10.555	0.60	6.333
Glass	170202		0.60	
Bituminous mixtures	170302		1.00	
Metals	170400	3.672	1.00	3.672
Soil, stones and dredging spoil	170500		1.50	
Insulation materials	170604	4.588	0.40	1.835
Hazardous waste (Packaging)	170903	27.528	0.15	4.129
Drainage Piping		3.671	0.60	2.203
Electrical Waste		7.802	0.60	4.681
Miscellaneous Waste		1.377	0.60	0.826
<b>Total</b>		<b>164.267</b>		<b>63.369</b>

**Waste Factor (Volume):** 0.119m<sup>3</sup>/m<sup>2</sup>

**Waste Factor (Weight):** 0.046 tonnes/m<sup>2</sup> or 46 kg/m<sup>2</sup>

**Project Description:** New Residential PSA 14 2005

**Completed Floor Area:** 1 375 m<sup>2</sup>

**Project Stage:** 55 %

**Total Waste:** 37.612 m<sup>3</sup>

**Conversion Table:**

Materials	EWC Code	Volume (m <sup>3</sup> )	Conversion Factor	Weight (tonnes)
Inactive or inert waste	170100	5.506	1.50	8.259
Paper and Plastics	170203	2.486	0.15	0.373
Cardboard		1.224	0.40	0.490
Timber pallets	170201		0.40	
Plasterboard	170802		0.40	
Canteen Waste		1.865	0.40	0.746
Timber/Wood	170201	16.912	0.60	10.147
Building & Construction Waste	170904		0.60	
Sweepings			0.60	
Glass	170202		0.60	
Bituminous mixtures	170302		1.00	
Metals	170400	2.754	1.00	2.754
Soil, stones and dredging spoil	170500		1.50	
Insulation materials	170604	6.865	0.40	2.746
Hazardous waste (Packaging)	170903		0.15	
Drainage Piping			0.60	
Electrical Waste			0.60	
Miscellaneous Waste			0.60	
<b>Total</b>		<b>37.612</b>		<b>25.515</b>

**Waste Factor (Volume):** 0.027m<sup>3</sup>/m<sup>2</sup>

**Waste Factor (Weight):** 0.019 tonnes/m<sup>2</sup> or 19 kg/m<sup>2</sup>



**Project Description:** New Residential PSA 15 2005

**Completed Floor Area:** 2 057 m<sup>2</sup>

**Project Stage:** 19 %

**Total Waste:** 297.569 m<sup>3</sup>

**Conversion Table:**

Materials	EWC Code	Volume (m <sup>3</sup> )	Conversion Factor	Weight (tonnes)
Inactive or inert waste	170100	52.208	1.50	78.312
Paper and Plastics	170203	31.879	0.15	4.782
Cardboard		12.302	0.40	4.921
Timber pallets	170201	6.687	0.40	2.675
Plasterboard	170802	1.377	0.40	0.551
Canteen Waste		2.018	0.40	0.807
Timber/Wood	170201	152.660	0.60	91.596
Building & Construction Waste	170904	6.420	0.60	3.852
Sweepings			0.60	
Glass	170202		0.60	
Bituminous mixtures	170302		1.00	
Metals	170400	18.656	1.00	18.656
Soil, stones and dredging spoil	170500		1.50	
Insulation materials	170604	6.371	0.40	2.548
Hazardous waste (Packaging)	170903	4.304	0.15	0.646
Drainage Piping		1.587	0.60	0.952
Electrical Waste		0.918	0.60	0.551
Miscellaneous Waste		0.182	0.60	0.109
<b>Total</b>		<b>297.569</b>		<b>210.958</b>

**Waste Factor (Volume):** 0.145m<sup>3</sup>/m<sup>2</sup>

**Waste Factor (Weight):** 0.103 tonnes/m<sup>2</sup> or 103 kg/m<sup>2</sup>

**Project Description:** New Residential 16 2005

**Completed Floor Area:** 486 m<sup>2</sup>

**Project Stage:** 50 %

**Total Waste:** 89.799 m<sup>3</sup>

**Conversion Table:**

Materials	EWC Code	Volume (m <sup>3</sup> )	Conversion Factor	Weight (tonnes)
Inactive or inert waste	170100	15.323	1.50	22.985
Paper and Plastics	170203	1.376	0.15	0.206
Cardboard		2.294	0.40	0.918
Timber pallets	170201	6.055	0.40	2.422
Plasterboard	170802		0.40	
Canteen Waste		4.314	0.40	1.726
Timber/Wood	170201	45.388	0.60	27.233
Building & Construction Waste	170904		0.60	
Sweepings		0.459	0.60	0.275
Glass	170202		0.60	
Bituminous mixtures	170302		1.00	
Metals	170400	4.496	1.00	4.496
Soil, stones and dredging spoil	170500		1.50	
Insulation materials	170604	2.294	0.40	0.918
Hazardous waste (Packaging)	170903	1.377	0.15	0.207
Drainage Piping		5.047	0.60	3.028
Electrical Waste			0.60	
Miscellaneous Waste		1.376	0.60	0.826
<b>Total</b>		<b>89.799</b>		<b>65.240</b>

**Waste Factor (Volume):** 0.185m<sup>3</sup>/m<sup>2</sup>

**Waste Factor (Weight):** 0.134 tonnes/m<sup>2</sup> or 134 kg/m<sup>2</sup>

**Project Description:** New Residential PSA 17 2005

**Completed Floor Area:** 6 942 m<sup>2</sup>

**Project Stage:** 32 %

**Total Waste:** 504.467 m<sup>3</sup>

**Conversion Table:**

Materials	EWC Code	Volume (m <sup>3</sup> )	Conversion Factor	Weight (tonnes)
Inactive or inert waste	170100	145.423	1.50	218.135
Paper and Plastics	170203	33.030	0.15	4.955
Cardboard		11.010	0.40	4.404
Timber pallets	170201		0.40	
Plasterboard	170802		0.40	
Canteen Waste			0.40	
Timber/Wood	170201	165.608	0.60	99.365
Building & Construction Waste	170904	94.349	0.60	56.609
Sweepings			0.60	
Glass	170202		0.60	
Bituminous mixtures	170302		1.00	
Metals	170400	47.707	1.00	47.707
Soil, stones and dredging spoil	170500		1.50	
Insulation materials	170604		0.40	
Hazardous waste (Packaging)	170903		0.15	
Drainage Piping			0.60	
Electrical Waste		6.881	0.60	4.129
Miscellaneous Waste		0.459	0.60	0.275
<b>Total</b>		<b>504.467</b>		<b>435.579</b>

**Waste Factor (Volume):** 0.073m<sup>3</sup>/m<sup>2</sup>

**Waste Factor (Weight):** 0.063 tonnes/m<sup>2</sup> or 63 kg/m<sup>2</sup>

**Project Description:** New Residential PSA 18 2005

**Completed Floor Area:** 1 688 m<sup>2</sup>

**Project Stage:** 40 %

**Total Waste:** 117.630 m<sup>3</sup>

**Conversion Table:**

Materials	EWC Code	Volume (m <sup>3</sup> )	Conversion Factor	Weight (tonnes)
Inactive or inert waste	170100		1.50	
Paper and Plastics	170203	16.350	0.15	2.453
Cardboard		13.210	0.40	5.284
Timber pallets	170201		0.40	
Plasterboard	170802		0.40	
Canteen Waste		1.620	0.40	0.648
Timber/Wood	170201	39.640	0.60	23.784
Building & Construction Waste	170904	17.250	0.60	10.350
Sweepings			0.60	
Glass	170202		0.60	
Bituminous mixtures	170302		1.00	
Metals	170400	8.140	1.00	8.140
Soil, stones and dredging spoil	170500		1.50	
Insulation materials	170604	20.880	0.40	8.352
Hazardous waste (Packaging)	170903		0.15	
Drainage Piping			0.60	
Electrical Waste		0.540	0.60	0.324
Miscellaneous Waste			0.60	
<b>Total</b>		<b>117.630</b>		<b>59.335</b>

**Waste Factor (Volume):** 0.070m<sup>3</sup>/m<sup>2</sup>

**Waste Factor (Weight):** 0.035 tonnes/m<sup>2</sup> or 35 kg/m<sup>2</sup>

**Project Description:** New Residential PSA 19 2005

**Completed Floor Area:** 21 400 m<sup>2</sup>

**Project Stage:** 40 %

**Total Waste:** 736.530 m<sup>3</sup>

**Conversion Table:**

Materials	EWC Code	Volume (m <sup>3</sup> )	Conversion Factor	Weight (tonnes)
Inactive or inert waste	170100	475.790	1.50	713.685
Paper and Plastics	170203	27.100	0.15	4.065
Cardboard		29.490	0.40	11.796
Timber pallets	170201	31.530	0.40	12.612
Plasterboard	170802	1.300	0.40	0.520
Canteen Waste		24.000	0.40	9.600
Timber/Wood	170201	32.100	0.60	19.260
Building & Construction Waste	170904	43.200	0.60	25.920
Sweepings		5.200	0.60	3.120
Glass	170202		0.60	
Bituminous mixtures	170302		1.00	
Metals	170400	13.190	1.00	13.190
Soil, stones and dredging spoil	170500		1.50	
Insulation materials	170604	43.100	0.40	17.240
Hazardous waste (Packaging)	170903	10.530	0.15	1.580
Drainage Piping			0.60	
Electrical Waste			0.60	
Miscellaneous Waste			0.60	
<b>Total</b>		<b>736.530</b>		<b>832.588</b>

**Waste Factor (Volume):** 0.034m<sup>3</sup>/m<sup>2</sup>

**Waste Factor (Weight):** 0.039 tonnes/m<sup>2</sup> or 39 kg/m<sup>2</sup>

**Project Description:** New Private Non Residential PSA 1 2004

**Completed Floor Area:** 4 391 m<sup>2</sup>

**Project Stage:** 30 %

**Total Waste:** 221 m<sup>3</sup>

**Conversion Table:**

Materials	EWC Code	Volume (m <sup>3</sup> )	Conversion Factor	Weight (tonnes)
Inactive or inert waste	170100	16.900	1.50	25.350
Paper and Plastics	170203	124.200	0.15	18.630
Cardboard			0.40	
Timber pallets	170201		0.40	
Plasterboard	170802		0.40	
Canteen Waste		41.400	0.40	16.560
Timber/Wood	170201	7.600	0.60	4.560
Building & Construction Waste	170904	20.500	0.60	12.300
Sweepings			0.60	
Glass	170202		0.60	
Bituminous mixtures	170302		1.00	
Metals	170400	7.500	1.00	7.500
Soil, stones and dredging spoil	170500		1.50	
Insulation materials	170604	2.900	0.40	1.160
Hazardous waste (Packaging)	170903		0.15	
Drainage Piping			0.60	
Electrical Waste			0.60	
Miscellaneous Waste			0.60	
<b>Total</b>		<b>221.000</b>		<b>86.060</b>

**Waste Factor (Volume):** 0.050m<sup>3</sup>/m<sup>2</sup>

**Waste Factor (Weight):** 0.020 tonnes/m<sup>2</sup> or 20 kg/m<sup>2</sup>



**Project Description:** New Private Non Residential PSA 2 2004

**Completed Floor Area:** 14 300 m<sup>2</sup>

**Project Stage:** 55 %

**Total Waste:** 663.50 m<sup>3</sup>

**Conversion Table:**

Materials	EWC Code	Volume (m <sup>3</sup> )	Conversion Factor	Weight (tonnes)
Inactive or inert waste	170100		1.50	
Paper and Plastics	170203	45.900	0.15	6.885
Cardboard			0.40	
Timber pallets	170201		0.40	
Plasterboard	170802		0.40	
Canteen Waste		89.900	0.40	35.960
Timber/Wood	170201	321.200	0.60	192.720
Building & Construction Waste	170904		0.60	
Sweepings			0.60	
Glass	170202		0.60	
Bituminous mixtures	170302		1.00	
Metals	170400	206.500	1.00	206.500
Soil, stones and dredging spoil	170500		1.50	
Insulation materials	170604		0.40	
Hazardous waste (Packaging)	170903		0.15	
Drainage Piping			0.60	
Electrical Waste			0.60	
Miscellaneous Waste			0.60	
<b>Total</b>		<b>663.500</b>		<b>442.065</b>

**Waste Factor (Volume):** 0.046m<sup>3</sup>/m<sup>2</sup>

**Waste Factor (Weight):** 0.031 tonnes/m<sup>2</sup> or 31 kg/m<sup>2</sup>

**Project Description:** New Private Non Residential PSA 3 2004

**Completed Floor Area:** 16 920 m<sup>2</sup>

**Project Stage:** 75 %

**Total Waste:** 1163.04 m<sup>3</sup>

**Conversion Table:**

Materials	EWC Code	Volume (m <sup>3</sup> )	Conversion Factor	Weight (tonnes)
Inactive or inert waste	170100	102.340	1.50	153.510
Paper and Plastics	170203	261.420	0.15	39.213
Cardboard			0.40	
Timber pallets	170201		0.40	
Plasterboard	170802	68.500	0.40	27.400
Canteen Waste		81.300	0.40	32.520
Timber/Wood	170201	376.500	0.60	225.900
Building & Construction Waste	170904	19.800	0.60	11.880
Sweepings			0.60	
Glass	170202		0.60	
Bituminous mixtures	170302		1.00	
Metals	170400	163.170	1.00	163.170
Soil, stones and dredging spoil	170500		1.50	
Insulation materials	170604	90.010	0.40	36.004
Hazardous waste (Packaging)	170903		0.15	
Drainage Piping			0.60	
Electrical Waste			0.60	
Miscellaneous Waste			0.60	
<b>Total</b>		<b>1163.040</b>		<b>689.597</b>

**Waste Factor (Volume):** 0.069m<sup>3</sup>/m<sup>2</sup>

**Waste Factor (Weight):** 0.041 tonnes/m<sup>2</sup> or 41 kg/m<sup>2</sup>



**Project Description:** New Private Non Residential PSA 4 2004

**Completed Floor Area:** 5 227 m<sup>2</sup>

**Project Stage:** 45 %

**Total Waste:** 415.60 m<sup>3</sup>

**Conversion Table:**

<b>Materials</b>	<b>EWC Code</b>	<b>Volume (m<sup>3</sup>)</b>	<b>Conversion Factor</b>	<b>Weight (tonnes)</b>
Inactive or inert waste	170100	46.300	1.50	69.450
Paper and Plastics	170203	76.200	0.15	11.430
Cardboard			0.40	
Timber pallets	170201		0.40	
Plasterboard	170802	24.800	0.40	9.920
Canteen Waste			0.40	
Timber/Wood	170201	62.100	0.60	37.260
Building & Construction Waste	170904	102.000	0.60	61.200
Sweepings			0.60	
Glass	170202		0.60	
Bituminous mixtures	170302		1.00	
Metals	170400	69.800	1.00	69.800
Soil, stones and dredging spoil	170500		1.50	
Insulation materials	170604	34.400	0.40	13.760
Hazardous waste (Packaging)	170903		0.15	
Drainage Piping			0.60	
Electrical Waste			0.60	
Miscellaneous Waste			0.60	
<b>Total</b>		<b>415.600</b>		<b>272.820</b>

**Waste Factor (Volume):** 0.080m<sup>3</sup>/m<sup>2</sup>

**Waste Factor (Weight):** 0.052 tonnes/m<sup>2</sup> or 52 kg/m<sup>2</sup>

**Project Description:** New Private Non Residential PSA 5 2004

**Completed Floor Area:** 576 m<sup>2</sup>

**Project Stage:** 40 %

**Total Waste:** 80.65 m<sup>3</sup>

**Conversion Table:**

Materials	EWC Code	Volume (m <sup>3</sup> )	Conversion Factor	Weight (tonnes)
Inactive or inert waste	170100		1.50	
Paper and Plastics	170203	5.950	0.15	0.893
Cardboard			0.40	
Timber pallets	170201		0.40	
Plasterboard	170802		0.40	
Canteen Waste			0.40	
Timber/Wood	170201	60.000	0.60	36.000
Building & Construction Waste	170904	13.400	0.60	8.040
Sweepings			0.60	
Glass	170202		0.60	
Bituminous mixtures	170302		1.00	
Metals	170400		1.00	
Soil, stones and dredging spoil	170500		1.50	
Insulation materials	170604	1.300	0.40	0.520
Hazardous waste (Packaging)	170903		0.15	
Drainage Piping			0.60	
Electrical Waste			0.60	
Miscellaneous Waste			0.60	
<b>Total</b>		<b>80.650</b>		<b>45.453</b>

**Waste Factor (Volume):** 0.140m<sup>3</sup>/m<sup>2</sup>

**Waste Factor (Weight):** 0.079 tonnes/m<sup>2</sup> or 79 kg/m<sup>2</sup>

**Project Description:** New Private Non Residential PSA 6 2004

**Completed Floor Area:** 880 m<sup>2</sup>

**Project Stage:** 40 %

**Total Waste:** 137.800 m<sup>3</sup>

**Conversion Table:**

Materials	EWC Code	Volume (m <sup>3</sup> )	Conversion Factor	Weight (tonnes)
Inactive or inert waste	170100		1.50	
Paper and Plastics	170203	11.900	0.15	1.785
Cardboard			0.40	
Timber pallets	170201		0.40	
Plasterboard	170802		0.40	
Canteen Waste		10.500	0.40	4.200
Timber/Wood	170201	56.400	0.60	33.840
Building & Construction Waste	170904	14.700	0.60	8.820
Sweepings			0.60	
Glass	170202		0.60	
Bituminous mixtures	170302		1.00	
Metals	170400	33.600	1.00	33.600
Soil, stones and dredging spoil	170500		1.50	
Insulation materials	170604	5.000	0.40	2.000
Hazardous waste (Packaging)	170903	5.700	0.15	3.420
Drainage Piping			0.60	
Electrical Waste			0.60	
Miscellaneous Waste			0.60	
<b>Total</b>		<b>137.800</b>		<b>87.665</b>

**Waste Factor (Volume):** 0.157m<sup>3</sup>/m<sup>2</sup>

**Waste Factor (Weight):** 0.100 tonnes/m<sup>2</sup> or 100 kg/m<sup>2</sup>

**Project Description:** New Private Non Residential PSA 7 2004

**Completed Floor Area:** 2 000 m<sup>2</sup>

**Project Stage:** 20 %

**Total Waste:** 320.000 m<sup>3</sup>

**Conversion Table:**

<b>Materials</b>	<b>EWC Code</b>	<b>Volume (m<sup>3</sup>)</b>	<b>Conversion Factor</b>	<b>Weight (tonnes)</b>
Inactive or inert waste	170100	15.900	1.50	23.850
Paper and Plastics	170203	26.000	0.15	3.900
Cardboard			0.40	
Timber pallets	170201		0.40	
Plasterboard	170802		0.40	
Canteen Waste		24.500	0.40	9.800
Timber/Wood	170201	121.400	0.60	72.840
Building & Construction Waste	170904	61.000	0.60	36.600
Sweepings			0.60	
Glass	170202		0.60	
Bituminous mixtures	170302		1.00	
Metals	170400	71.200	1.00	71.200
Soil, stones and dredging spoil	170500		1.50	
Insulation materials	170604		0.40	
Hazardous waste (Packaging)	170903		0.15	
Drainage Piping			0.60	
Electrical Waste			0.60	
Miscellaneous Waste			0.60	
<b>Total</b>		<b>320.000</b>		<b>218.190</b>

**Waste Factor (Volume):** 0.160m<sup>3</sup>/m<sup>2</sup>

**Waste Factor (Weight):** 0.109 tonnes/m<sup>2</sup> or 109 kg/m<sup>2</sup>

**Project Description:** New Private Non Residential PSA 8 2004

**Completed Floor Area:** 1 814 m<sup>2</sup>

**Project Stage:** 45 %

**Total Waste:** 351.800 m<sup>3</sup>

**Conversion Table:**

<b>Materials</b>	<b>EWC Code</b>	<b>Volume (m<sup>3</sup>)</b>	<b>Conversion Factor</b>	<b>Weight (tonnes)</b>
Inactive or inert waste	170100	12.500	1.50	18.750
Paper and Plastics	170203	64.600	0.15	9.690
Cardboard			0.40	
Timber pallets	170201		0.40	
Plasterboard	170802		0.40	
Canteen Waste		41.500	0.40	16.600
Timber/Wood	170201	96.300	0.60	57.780
Building & Construction Waste	170904		0.60	
Sweepings			0.60	
Glass	170202		0.60	
Bituminous mixtures	170302		1.00	
Metals	170400	136.900	1.00	136.900
Soil, stones and dredging spoil	170500		1.50	
Insulation materials	170604		0.40	
Hazardous waste (Packaging)	170903		0.15	
Drainage Piping			0.60	
Electrical Waste			0.60	
Miscellaneous Waste			0.60	
<b>Total</b>		<b>351.800</b>		<b>239.720</b>

**Waste Factor (Volume):** 0.194m<sup>3</sup>/m<sup>2</sup>

**Waste Factor (Weight):** 0.132 tonnes/m<sup>2</sup> or 132 kg/m<sup>2</sup>

**Project Description:** New Private Non Residential PSA 9 2004

**Completed Floor Area:** 5 670 m<sup>2</sup>

**Project Stage:** 35 %

**Total Waste:** 980.300 m<sup>3</sup>

**Conversion Table:**

Materials	EWC Code	Volume (m <sup>3</sup> )	Conversion Factor	Weight (tonnes)
Inactive or inert waste	170100	347.800	1.50	521.700
Paper and Plastics	170203	179.300	0.15	26.895
Cardboard			0.40	
Timber pallets	170201		0.40	
Plasterboard	170802	12.200	0.40	4.880
Canteen Waste		61.700	0.40	24.680
Timber/Wood	170201	77.700	0.60	46.620
Building & Construction Waste	170904	135.700	0.60	81.420
Sweepings			0.60	
Glass	170202		0.60	
Bituminous mixtures	170302		1.00	
Metals	170400	108.400	1.00	108.400
Soil, stones and dredging spoil	170500		1.50	
Insulation materials	170604	57.500	0.40	23.000
Hazardous waste (Packaging)	170903		0.15	
Drainage Piping			0.60	
Electrical Waste			0.60	
Miscellaneous Waste			0.60	
<b>Total</b>		<b>980.300</b>		<b>837.595</b>

**Waste Factor (Volume):** 0.173m<sup>3</sup>/m<sup>2</sup>

**Waste Factor (Weight):** 0.148 tonnes/m<sup>2</sup> or 148 kg/m<sup>2</sup>



**Project Description:** New Private Non Residential PSA 10 2004

**Completed Floor Area:** 2 200 m<sup>2</sup>

**Project Stage:** 22 %

**Total Waste:** 276.300 m<sup>3</sup>

**Conversion Table:**

Materials	EWC Code	Volume (m <sup>3</sup> )	Conversion Factor	Weight (tonnes)
Inactive or inert waste	170100	230.000	1.50	345.000
Paper and Plastics	170203	7.100	0.15	1.065
Cardboard			0.40	
Timber pallets	170201		0.40	
Plasterboard	170802		0.40	
Canteen Waste		9.400	0.40	3.760
Timber/Wood	170201	17.500	0.60	10.500
Building & Construction Waste	170904	7.800	0.60	4.680
Sweepings			0.60	
Glass	170202		0.60	
Bituminous mixtures	170302		1.00	
Metals	170400	4.500	1.00	4.500
Soil, stones and dredging spoil	170500		1.50	
Insulation materials	170604		0.40	
Hazardous waste (Packaging)	170903		0.15	
Drainage Piping			0.60	
Electrical Waste			0.60	
Miscellaneous Waste			0.60	
<b>Total</b>		<b>276.300</b>		<b>369.505</b>

**Waste Factor (Volume):** 0.126m<sup>3</sup>/m<sup>2</sup>

**Waste Factor (Weight):** 0.168 tonnes/m<sup>2</sup> or 168 kg/m<sup>2</sup>

**Project Description:** New Private Non Residential PSA 11 2004

**Completed Floor Area:** 900 m<sup>2</sup>

**Project Stage:** 20 %

**Total Waste:** 455.150 m<sup>3</sup>

**Conversion Table:**

Materials	EWC Code	Volume (m <sup>3</sup> )	Conversion Factor	Weight (tonnes)
Inactive or inert waste	170100		1.50	
Paper and Plastics	170203	50.730	0.15	7.610
Cardboard			0.40	
Timber pallets	170201		0.40	
Plasterboard	170802	32.760	0.40	13.104
Canteen Waste		44.780	0.40	17.912
Timber/Wood	170201	243.360	0.60	146.016
Building & Construction Waste	170904	4.890	0.60	2.934
Sweepings			0.60	
Glass	170202		0.60	
Bituminous mixtures	170302		1.00	
Metals	170400	78.630	1.00	78.630
Soil, stones and dredging spoil	170500		1.50	
Insulation materials	170604		0.40	
Hazardous waste (Packaging)	170903		0.15	
Drainage Piping			0.60	
Electrical Waste			0.60	
Miscellaneous Waste			0.60	
<b>Total</b>		<b>455.150</b>		<b>266.206</b>

**Waste Factor (Volume):** 0.506m<sup>3</sup>/m<sup>2</sup>

**Waste Factor (Weight):** 0.296 tonnes/m<sup>2</sup> or 296 kg/m<sup>2</sup>



**Project Description:** New Private Non Residential PSA 12 2004

**Completed Floor Area:** 700 m<sup>2</sup>

**Project Stage:** 20 %

**Total Waste:** 282.910 m<sup>3</sup>

**Conversion Table:**

Materials	EWC Code	Volume (m <sup>3</sup> )	Conversion Factor	Weight (tonnes)
Inactive or inert waste	170100	40.110	1.50	60.165
Paper and Plastics	170203	41.500	0.15	6.225
Cardboard			0.40	
Timber pallets	170201		0.40	
Plasterboard	170802		0.40	
Canteen Waste		40.730	0.40	16.292
Timber/Wood	170201	81.380	0.60	48.828
Building & Construction Waste	170904	18.470	0.60	11.082
Sweepings			0.60	
Glass	170202		0.60	
Bituminous mixtures	170302		1.00	
Metals	170400	57.470	1.00	57.470
Soil, stones and dredging spoil	170500		1.50	
Insulation materials	170604	3.250	0.40	1.300
Hazardous waste (Packaging)	170903		0.15	
Drainage Piping			0.60	
Electrical Waste			0.60	
Miscellaneous Waste			0.60	
<b>Total</b>		<b>282.910</b>		<b>201.362</b>

**Waste Factor (Volume):** 0.404m<sup>3</sup>/m<sup>2</sup>

**Waste Factor (Weight):** 0.288 tonnes/m<sup>2</sup> or 288 kg/m<sup>2</sup>

**Project Description:** Private Non Residential PSA 13 2005

**Completed Floor Area:** 7 820 m<sup>2</sup>

**Project Stage:** 68 %

**Total Waste:** 480.015 m<sup>3</sup>

**Conversion Table:**

Materials	EWC Code	Volume (m <sup>3</sup> )	Conversion Factor	Weight (tonnes)
Inactive or inert waste	170100	21.869	1.50	32.804
Paper and Plastics	170203	93.441	0.15	14.016
Cardboard		50.469	0.40	20.188
Timber pallets	170201	131.905	0.40	52.762
Plasterboard	170802	4.588	0.40	1.835
Canteen Waste		68.365	0.40	27.346
Timber/Wood	170201	55.514	0.60	33.308
Building & Construction Waste	170904		0.60	
Sweepings			0.60	
Glass	170202		0.60	
Bituminous mixtures	170302		1.00	
Metals (including their alloys)	170400	44.075	1.00	44.075
Soil, stones and dredging spoil	170500		1.50	
Insulation materials	170604		0.40	
Hazardous waste (Packaging)	170903	4.054	0.15	0.608
Drainage Piping		5.735	0.60	3.441
Electrical Waste			0.60	
Miscellaneous Waste			0.60	
Off Site Waste			0.60	
<b>Total</b>		<b>480.015</b>		<b>230.383</b>

**Waste Factor (Volume):** 0.061m<sup>3</sup>/m<sup>2</sup>

**Waste Factor (Weight):** 0.030 tonnes/m<sup>2</sup> or 30 kg/m<sup>2</sup>

**Project Description:** Private Non Residential PSA 14 2005

**Completed Floor Area:** 1 724.80 m<sup>2</sup>

**Project Stage:** 80 %

**Total Waste:** 59.346 m<sup>3</sup>

**Conversion Table:**

Materials	EWC Code	Volume (m <sup>3</sup> )	Conversion Factor	Weight (tonnes)
Inactive or inert waste	170100	20.495	1.50	30.743
Paper and Plastics	170203	2.754	0.15	0.413
Cardboard			0.40	
Timber pallets	170201	5.964	0.40	2.386
Plasterboard	170802	1.835	0.40	0.734
Canteen Waste		4.896	0.40	1.958
Timber/Wood	170201	14.835	0.60	8.901
Building & Construction Waste	170904		0.60	
Sweepings			0.60	
Glass	170202		0.60	
Bituminous mixtures	170302		1.00	
Metals (including their alloys)	170400	1.836	1.00	1.836
Soil, stones and dredging spoil	170500		1.50	
Insulation materials	170604	3.978	0.40	1.591
Hazardous waste (Packaging)	170903	2.753	0.15	0.413
Drainage Piping			0.60	
Electrical Waste			0.60	
Miscellaneous Waste			0.60	
Off Site Waste			0.60	
<b>Total</b>		<b>59.346</b>		<b>48.975</b>

**Waste Factor (Volume):** 0.034m<sup>3</sup>/m<sup>2</sup>

**Waste Factor (Weight):** 0.028 tonnes/m<sup>2</sup> or 28 kg/m<sup>2</sup>

**Project Description:** Private Non Residential PSA 15 2005

**Completed Floor Area:** 400 m<sup>2</sup>

**Project Stage:** 40 %

**Total Waste:** 86.517 m<sup>3</sup>

**Conversion Table:**

Materials	EWC Code	Volume (m <sup>3</sup> )	Conversion Factor	Weight (tonnes)
Inactive or inert waste	170100	3.763	1.50	5.645
Paper and Plastics	170203	11.439	0.15	1.716
Cardboard		8.169	0.40	3.268
Timber pallets	170201	3.457	0.40	1.383
Plasterboard	170802	0.918	0.40	0.367
Canteen Waste		3.640	0.40	1.456
Timber/Wood	170201	25.544	0.60	15.326
Building & Construction Waste	170904	12.824	0.60	7.694
Sweepings			0.60	
Glass	170202		0.60	
Bituminous mixtures	170302		1.00	
Metals (including their alloys)	170400		1.00	
Insulation materials	170604	0.459	0.40	0.184
Hazardous waste (Packaging)	170903	0.765	0.15	0.115
Drainage Piping		0.153	0.60	0.092
Electrical Waste			0.60	
Miscellaneous Waste		0.092	0.60	0.055
Off Site Waste			0.60	
<b>Total</b>		<b>71.223</b>		<b>37.301</b>

**Waste Factor (Volume):** 0.178m<sup>3</sup>/m<sup>2</sup>

**Waste Factor (Weight):** 0.093 tonnes/m<sup>2</sup> or 93 kg/m<sup>2</sup>

**Project Description:** Private Non Residential PSA 16 2005

**Completed Floor Area:** 5 090 m<sup>2</sup>

**Project Stage:** 50 %

**Total Waste:** 414.758 m<sup>3</sup>

**Conversion Table:**

Materials	EWC Code	Volume (m <sup>3</sup> )	Conversion Factor	Weight (tonnes)
Inactive or inert waste	170100	5.048	1.50	7.572
Paper and Plastics	170203	40.379	0.15	6.057
Cardboard		60.569	0.40	24.228
Timber pallets	170201	22.943	0.40	9.177
Plasterboard	170802	32.578	0.40	13.031
Canteen Waste		4.131	0.40	1.652
Timber/Wood	170201	95.585	0.60	57.351
Building & Construction Waste	170904	11.473	0.60	6.884
Sweepings		4.131	0.60	2.479
Glass	170202		0.60	
Bituminous mixtures	170302		1.00	
Metals (including their alloys)	170400	67.489	1.00	67.489
Soil, stones and dredging spoil	170500		1.50	
Insulation materials	170604	16.059	0.40	6.424
Hazardous waste (Packaging)	170903	2.754	0.15	0.413
Drainage Piping			0.60	
Electrical Waste		9.178	0.60	5.507
Miscellaneous Waste		2.983	0.60	1.790
Off Site Waste			0.60	
Carpet		39.458	0.60	23.675
<b>Total</b>		<b>414.758</b>		<b>233.729</b>

**Waste Factor (Volume):** 0.082m<sup>3</sup>/m<sup>2</sup>

**Waste Factor (Weight):** 0.046 tonnes/m<sup>2</sup> or 46 kg/m<sup>2</sup>

**Project Description:** Private Non Residential PSA 17 2005

**Completed Floor Area:** 5 456 m<sup>2</sup>

**Project Stage:** 68 %

**Total Waste:** 139.560 m<sup>3</sup>

**Conversion Table:**

Materials	EWC Code	Volume (m <sup>3</sup> )	Conversion Factor	Weight (tonnes)
Inactive or inert waste	170100	43.219	1.50	64.829
Paper and Plastics	170203	2.037	0.15	0.306
Cardboard		0.803	0.40	0.321
Timber pallets	170201		0.40	
Plasterboard	170802	0.134	0.40	0.054
Canteen Waste			0.40	
Timber/Wood	170201	48.523	0.60	29.114
Building & Construction Waste	170904		0.60	
Sweepings		13.759	0.60	8.255
Glass	170202		0.60	
Bituminous mixtures	170302		1.00	
Metals (including their alloys)	170400	28.511	1.00	28.511
Soil, stones and dredging spoil	170500		1.50	
Insulation materials	170604	1.796	0.40	0.718
Hazardous waste (Packaging)	170903	0.188	0.15	0.028
Drainage Piping			0.60	
Electrical Waste			0.60	
Miscellaneous Waste		0.590	0.60	0.354
Off Site Waste			0.60	
<b>Total</b>		<b>139.560</b>		<b>132.490</b>

**Waste Factor (Volume):** 0.026m<sup>3</sup>/m<sup>2</sup>

**Waste Factor (Weight):** 0.024 tonnes/m<sup>2</sup> or 24 kg/m<sup>2</sup>



**Project Description:** Private Non Residential PSA 18 2005

**Completed Floor Area:** 900 m<sup>2</sup>

**Project Stage:** 15 %

**Total Waste:** 20.873 m<sup>3</sup>

**Conversion Table:**

Materials	EWC Code	Volume (m <sup>3</sup> )	Conversion Factor	Weight (tonnes)
Inactive or inert waste	170100		1.50	
Paper and Plastics	170203	3.096	0.15	0.464
Cardboard		0.229	0.40	0.092
Timber pallets	170201		0.40	
Plasterboard	170802		0.40	
Canteen Waste		2.179	0.40	0.872
Timber/Wood	170201	4.358	0.60	2.615
Building & Construction Waste	170904	6.791	0.60	4.075
Sweepings		1.606	0.60	0.964
Glass	170202		0.60	
Bituminous mixtures	170302		1.00	
Metals (including their alloys)	170400	1.467	1.00	1.467
Soil, stones and dredging spoil	170500		1.50	
Insulation materials	170604		0.40	
Hazardous waste (Packaging)	170903		0.15	
Drainage Piping			0.60	
Electrical Waste			0.60	
Miscellaneous Waste			0.60	
Off Site Waste		1.147	0.60	0.688
<b>Total</b>		<b>20.873</b>		<b>11.237</b>

**Waste Factor (Volume):** 0.023m<sup>3</sup>/m<sup>2</sup>

**Waste Factor (Weight):** 0.012 tonnes/m<sup>2</sup> or 12 kg/m<sup>2</sup>

**Project Description:** Private Non Residential PSA 19 2005

**Completed Floor Area:** 867 m<sup>2</sup>

**Project Stage:** 95 %

**Total Waste:** 34.563 m<sup>3</sup>

**Conversion Table:**

Materials	EWC Code	Volume (m <sup>3</sup> )	Conversion Factor	Weight (tonnes)
Inactive or inert waste	170100	1.989	1.50	2.984
Paper and Plastics	170203	7.182	0.15	1.077
Cardboard		0.459	0.40	0.184
Timber pallets	170201	8.259	0.40	3.304
Plasterboard	170802		0.40	
Canteen Waste		0.918	0.40	0.367
Timber/Wood	170201	3.137	0.60	1.882
Building & Construction Waste	170904	2.446	0.60	1.468
Sweepings		0.459	0.60	0.275
Glass	170202		0.60	
Bituminous mixtures	170302		1.00	
Metals (including their alloys)	170400	6.501	1.00	6.501
Soil, stones and dredging spoil	170500		1.50	
Insulation materials	170604	0.918	0.40	0.367
Hazardous waste (Packaging)	170903	1.836	0.15	0.275
Drainage Piping			0.60	
Electrical Waste		0.459	0.60	0.275
Miscellaneous Waste			0.60	
Off Site Waste			0.60	
<b>Total</b>		<b>34.563</b>		<b>18.959</b>

**Waste Factor (Volume):** 0.040m<sup>3</sup>/m<sup>2</sup>

**Waste Factor (Weight):** 0.022 tonnes/m<sup>2</sup> or 22 kg/m<sup>2</sup>



**Project Description:** Private Non Residential PSA 20 2005

**Completed Floor Area:** 2 256 m<sup>2</sup>

**Project Stage:** 20 %

**Total Waste:** 344.276 m<sup>3</sup>

**Conversion Table:**

Materials	EWC Code	Volume (m <sup>3</sup> )	Conversion Factor	Weight (tonnes)
Inactive or inert waste	170100	53.070	1.50	79.605
Paper and Plastics	170203	18.861	0.15	2.829
Cardboard		31.303	0.40	12.521
Timber pallets	170201	21.040	0.40	8.416
Plasterboard	170802	61.684	0.40	24.674
Canteen Waste		7.469	0.40	2.988
Timber/Wood	170201	21.924	0.60	13.154
Building & Construction Waste	170904	44.622	0.60	26.773
Sweepings			0.60	
Glass	170202		0.60	
Bituminous mixtures	170302	6.117	1.00	6.117
Metals (including their alloys)	170400	48.708	1.00	48.708
Soil, stones and dredging spoil	170500		1.50	
Insulation materials	170604	13.987	0.40	5.595
Hazardous waste (Packaging)	170903	1.836	0.15	0.275
Drainage Piping		2.677	0.60	1.606
Electrical Waste		4.871	0.60	2.923
Miscellaneous Waste			0.60	
Off Site Waste			0.60	
Hazardous waste (contaminated Wood)		0.918	0.60	0.551
Carpet		5.189	0.60	3.113
<b>Total</b>		<b>344.276</b>		<b>239.848</b>

**Waste Factor (Volume):** 0.153m<sup>3</sup>/m<sup>2</sup>

**Waste Factor (Weight):** 0.106 tonnes/m<sup>2</sup> or 106 kg/m<sup>2</sup>

**Project Description:** Private Non Residential PSA 21 2005

**Completed Floor Area:** 285 m<sup>2</sup>

**Project Stage:** 20 %

**Total Waste:** 26.618 m<sup>3</sup>

**Conversion Table:**

Materials	EWC Code	Volume (m <sup>3</sup> )	Conversion Factor	Weight (tonnes)
Inactive or inert waste	170100		1.50	
Paper and Plastics	170203	5.966	0.15	0.895
Cardboard		10.095	0.40	4.038
Timber pallets	170201		0.40	
Plasterboard	170802	0.918	0.40	0.367
Canteen Waste		4.131	0.40	1.652
Timber/Wood	170201		0.60	
Building & Construction Waste	170904		0.60	
Sweepings			0.60	
Glass	170202		0.60	
Bituminous mixtures	170302		1.00	
Metals (including their alloys)	170400		1.00	
Soil, stones and dredging spoil	170500		1.50	
Insulation materials	170604	1.836	0.40	0.734
Hazardous waste (Packaging)	170903	1.377	0.15	0.207
Drainage Piping			0.60	
Electrical Waste		1.377	0.60	0.826
Miscellaneous Waste		0.918	0.60	0.551
Off Site Waste			0.60	
<b>Total</b>		<b>26.618</b>		<b>9.270</b>

**Waste Factor (Volume):** 0.093m<sup>3</sup>/m<sup>2</sup>

**Waste Factor (Weight):** 0.033 tonnes/m<sup>2</sup> or 33 kg/m<sup>2</sup>

**Project Description:** Private Non Residential PSA 22 2005

**Completed Floor Area:** 3 425 m<sup>2</sup>

**Project Stage:** 50 %

**Total Waste:** 300.856 m<sup>3</sup>

**Conversion Table:**

Materials	EWC Code	Volume (m <sup>3</sup> )	Conversion Factor	Weight (tonnes)
Inactive or inert waste	170100	13.322	1.50	19.983
Paper and Plastics	170203	7.264	0.15	1.090
Cardboard		7.647	0.40	3.059
Timber pallets	170201		0.40	
Plasterboard	170802	11.852	0.40	4.741
Canteen Waste			0.40	
Timber/Wood	170201	175.858	0.60	105.515
Building & Construction Waste	170904	51.117	0.60	30.670
Sweepings			0.60	
Glass	170202		0.60	
Bituminous mixtures	170302		1.00	
Metals (including their alloys)	170400	6.117	1.00	6.117
Soil, stones and dredging spoil	170500		1.50	
Insulation materials	170604	26.761	0.40	10.704
Hazardous waste (Packaging)	170903		0.15	
Drainage Piping			0.60	
Electrical Waste			0.60	
Miscellaneous Waste		0.918	0.60	0.551
Off Site Waste			0.60	
<b>Total</b>		<b>300.856</b>		<b>182.430</b>

**Waste Factor (Volume):** 0.088m<sup>3</sup>/m<sup>2</sup>

**Waste Factor (Weight):** 0.053 tonnes/m<sup>2</sup> or 53 kg/m<sup>2</sup>

**Project Description:** Productive Infrastructure PSA 1 2005

**Completed Floor Area:** 295 m<sup>2</sup>

**Project Stage:** 54 %

**Total Waste:** 54.133 m<sup>3</sup>

**Conversion Table:**

Materials	EWC Code	Volume (m <sup>3</sup> )	Conversion Factor	Weight (tonnes)
Inactive or inert waste	170100		1.50	
Paper and Plastics	170203	3.854	0.15	0.578
Cardboard		5.685	0.40	2.274
Timber pallets	170201	0.917	0.40	0.367
Plasterboard	170802		0.40	
Canteen Waste		31.198	0.40	12.479
Timber/Wood	170201	10.552	0.60	6.331
Building & Construction Waste	170904		0.60	
Sweepings			0.60	
Glass	170202		0.60	
Bituminous mixtures	170302		1.00	
Metals (including their alloys)	170400	0.093	1.00	0.093
Soil, stones and dredging spoil	170500		1.50	
Insulation materials	170604		0.40	
Hazardous waste (Packaging)	170903		0.15	
Drainage Piping			0.60	
Electrical Waste			0.60	
Miscellaneous Waste		1.834	0.60	1.100
<b>Total</b>		<b>54.133</b>		<b>23.222</b>

**Waste Factor (Volume):** 0.183 m<sup>3</sup>/m<sup>2</sup>

**Waste Factor (Weight):** 0.079 tonnes/m<sup>2</sup> or 79 kg/m<sup>2</sup>

**Project Description:** Productive Infrastructure PSA 2 2005

**Completed Floor Area:** 975 m<sup>2</sup>

**Project Stage:** 55 %

**Total Waste:** 84.413 m<sup>3</sup>

**Conversion Table:**

Materials	EWC Code	Volume (m <sup>3</sup> )	Conversion Factor	Weight (tonnes)
Inactive or inert waste	170100		1.50	
Paper and Plastics	170203	9.634	0.15	1.445
Cardboard			0.40	
Timber pallets	170201		0.40	
Plasterboard	170802		0.40	
Canteen Waste			0.40	
Timber/Wood	170201	36.243	0.60	21.746
Building & Construction Waste	170904	18.349	0.60	11.009
Sweepings			0.60	
Glass	170202		0.60	
Bituminous mixtures	170302		1.00	
Metals (including their alloys)	170400	20.187	1.00	20.187
Soil, stones and dredging spoil	170500		1.50	
Insulation materials	170604		0.40	
Hazardous waste (Packaging)	170903		0.15	
Drainage Piping			0.60	
Electrical Waste			0.60	
Miscellaneous Waste			0.60	
<b>Total</b>		<b>84.413</b>		<b>54.387</b>

**Waste Factor (Volume):** 0.087 m<sup>3</sup>/m<sup>2</sup>

**Waste Factor (Weight):** 0.056 tonnes/m<sup>2</sup> or 56 kg/m<sup>2</sup>

**Project Description:** Productive Infrastructure PSA 3 2005

**Completed Floor Area:** 2 349 m<sup>2</sup>

**Project Stage:** 70 %

**Total Waste:** 51.768 m<sup>3</sup>

**Conversion Table:**

Materials	EWC Code	Volume (m <sup>3</sup> )	Conversion Factor	Weight (tonnes)
Inactive or inert waste	170100		1.50	
Paper and Plastics	170203	8.359	0.15	1.254
Cardboard		3.765	0.40	1.506
Timber pallets	170201	0.918	0.40	0.367
Plasterboard	170802		0.40	
Canteen Waste		8.096	0.40	3.238
Timber/Wood	170201	17.039	0.60	10.223
Building & Construction Waste	170904		0.60	
Sweepings			0.60	
Glass	170202		0.60	
Bituminous mixtures	170302		1.00	
Metals (including their alloys)	170400	5.326	1.00	5.326
Soil, stones and dredging spoil	170500		1.50	
Insulation materials	170604		0.40	
Hazardous waste (Packaging)	170903	2.667	0.15	0.400
Drainage Piping			0.60	
Electrical Waste			0.60	
Miscellaneous Waste		1.010	0.60	0.606
Off Site Waste		4.588	0.60	2.753
<b>Total</b>		<b>51.768</b>		<b>25.673</b>

**Waste Factor (Volume):** 0.022 m<sup>3</sup>/m<sup>2</sup>

**Waste Factor (Weight):** 0.011 tonnes/m<sup>2</sup> or 11 kg/m<sup>2</sup>



**Project Description:** Social Infrastructure PSA 1 2004

**Completed Floor Area:** 2 080 m<sup>2</sup>

**Project Stage:** 40 %

**Total Waste:** 53.500m<sup>3</sup>

**Conversion Table:**

Materials	EWC Code	Volume (m <sup>3</sup> )	Conversion Factor	Weight (tonnes)
Inactive or inert waste	170100	7.600	1.50	11.400
Paper and Plastics	170203	7.000	0.15	1.050
Cardboard			0.40	
Timber pallets	170201		0.40	
Plasterboard	170802	5.700	0.40	2.280
Canteen Waste		8.800	0.40	3.520
Timber/Wood	170201	20.000	0.60	12.000
Building & Construction Waste	170904		0.60	
Sweepings			0.60	
Glass	170202		0.60	
Bituminous mixtures	170302		1.00	
Metals	170400	4.400	1.00	4.400
Soil, stones and dredging spoil	170500		1.50	
Insulation materials	170604		0.40	
Hazardous waste (Packaging)	170903		0.15	
Drainage Piping			0.60	
Electrical Waste			0.60	
Miscellaneous Waste			0.60	
<b>Total</b>		<b>53.500</b>		<b>34.650</b>

**Waste Factor (Volume):** 0.026m<sup>3</sup>/m<sup>2</sup>

**Waste Factor (Weight):** 0.017 tonnes/m<sup>2</sup> or 17kg/m<sup>2</sup>

**Project Description:** Social Infrastructure PSA 2 2004

**Completed Floor Area:** 5 780 m<sup>2</sup>

**Project Stage:** 20 %

**Total Waste:** 120.169m<sup>3</sup>

**Conversion Table:**

Materials	EWC Code	Volume (m <sup>3</sup> )	Conversion Factor	Weight (tonnes)
Inactive or inert waste	170100	26.303	1.50	39.455
Paper and Plastics	170203	13.760	0.15	2.064
Cardboard			0.40	
Timber pallets	170201		0.40	
Plasterboard	170802		0.40	
Canteen Waste			0.40	
Timber/Wood	170201	55.256	0.60	33.154
Building & Construction Waste	170904	3.895	0.60	2.337
Sweepings			0.60	
Glass	170202		0.60	
Bituminous mixtures	170302		1.00	
Metals	170400	20.955	1.00	20.955
Soil, stones and dredging spoil	170500		1.50	
Insulation materials	170604		0.40	
Hazardous waste (Packaging)	170903		0.15	
Drainage Piping			0.60	
Electrical Waste			0.60	
Miscellaneous Waste			0.60	
<b>Total</b>		<b>120.169</b>		<b>97.965</b>

**Waste Factor (Volume):** 0.021m<sup>3</sup>/m<sup>2</sup>

**Waste Factor (Weight):** 0.017 tonnes/m<sup>2</sup> or 17 kg/m<sup>2</sup>



**Project Description:** Social Infrastructure PSA 3 2004

**Completed Floor Area:** 6 853 m<sup>2</sup>

**Project Stage:** 77%

**Total Waste:** 3026.75m<sup>3</sup>

**Conversion Table:**

Materials	EWC Code	Volume (m <sup>3</sup> )	Conversion Factor	Weight (tonnes)
Inactive or inert waste	170100	80.800	1.50	121.200
Paper and Plastics	170203	49.100	0.15	7.365
Cardboard			0.40	
Timber pallets	170201		0.40	
Plasterboard	170802		0.40	
Canteen Waste		26.900	0.40	10.760
Timber/Wood	170201	96.730	0.60	58.038
Building & Construction Waste	170904	72.920	0.60	43.752
Sweepings			0.60	
Glass	170202		0.60	
Bituminous mixtures	170302		1.00	
Metals	170400	30.300	1.00	30.300
Soil, stones and dredging spoil	170500		1.50	
Insulation materials	170604		0.40	
Hazardous waste (Packaging)	170903		0.15	
Drainage Piping			0.60	
Electrical Waste			0.60	
Miscellaneous Waste			0.60	
<b>Total</b>		<b>356.750</b>		<b>271.415</b>

**Waste Factor (Volume):** 0.052m<sup>3</sup>/m<sup>2</sup>

**Waste Factor (Weight):** 0.040 tonnes/m<sup>2</sup> or 40 kg/m<sup>2</sup>

**Project Description:** Social Infrastructure PSA 4 2004

**Completed Floor Area:** 1 817m<sup>2</sup>

**Project Stage:** 17%

**Total Waste:** 289.620m<sup>3</sup>

**Conversion Table:**

<b>Materials</b>	<b>EWC Code</b>	<b>Volume (m<sup>3</sup>)</b>	<b>Conversion Factor</b>	<b>Weight (tonnes)</b>
Inactive or inert waste	170100		1.50	
Paper and Plastics	170203	117.704	0.15	17.656
Cardboard			0.40	
Timber pallets	170201		0.40	
Plasterboard	170802	1.500	0.40	0.600
Canteen Waste			0.40	
Timber/Wood	170201	73.510	0.60	44.106
Building & Construction Waste	170904	92.070	0.60	55.242
Sweepings			0.60	
Glass	170202		0.60	
Bituminous mixtures	170302		1.00	
Metals	170400		1.00	
Soil, stones and dredging spoil	170500		1.50	
Insulation materials	170604	4.836	0.40	1.934
Hazardous waste (Packaging)	170903		0.15	
Drainage Piping			0.60	
Electrical Waste			0.60	
Miscellaneous Waste			0.60	
<b>Total</b>		<b>289.620</b>		<b>119.538</b>

**Waste Factor (Volume):** 0.159m<sup>3</sup>/m<sup>2</sup>

**Waste Factor (Weight):** 0.066 tonnes/m<sup>2</sup> or 66 kg/m<sup>2</sup>

**Project Description:** Social Infrastructure PSA 5 2004

**Completed Floor Area:** 404 m<sup>2</sup>

**Project Stage:** 60%

**Total Waste:** 164.00m<sup>3</sup>

**Conversion Table:**

Materials	EWC Code	Volume (m <sup>3</sup> )	Conversion Factor	Weight (tonnes)
Inactive or inert waste	170100	57.600	1.50	86.400
Paper and Plastics	170203		0.15	
Cardboard			0.40	
Timber pallets	170201		0.40	
Plasterboard	170802	8.000	0.40	3.200
Canteen Waste		20.000	0.40	8.000
Timber/Wood	170201	38.400	0.60	23.040
Building & Construction Waste	170904	40.000	0.60	24.000
Sweepings			0.60	
Glass	170202		0.60	
Bituminous mixtures	170302		1.00	
Metals	170400		1.00	
Soil, stones and dredging spoil	170500		1.50	
Insulation materials	170604		0.40	
Hazardous waste (Packaging)	170903		0.15	
Drainage Piping			0.60	
Electrical Waste			0.60	
Miscellaneous Waste			0.60	
<b>Total</b>		<b>164.000</b>		<b>144.640</b>

**Waste Factor (Volume):** 0.406m<sup>3</sup>/m<sup>2</sup>

**Waste Factor (Weight):** 0.358 tonnes/m<sup>2</sup> or 358 kg/m<sup>2</sup>

**Project Description:** Social Infrastructure PSA 6 2005

**Completed Floor Area:** 328.00 m<sup>2</sup>

**Project Stage:** 20 %

**Total Waste:** 124.413 m<sup>3</sup>

**Conversion Table:**

Materials	EWC Code	Volume (m <sup>3</sup> )	Conversion Factor	Weight (tonnes)
Inactive or inert waste	170100		1.50	
Paper and Plastics	170203		0.15	
Cardboard			0.40	
Timber pallets	170201		0.40	
Plasterboard	170802		0.40	
Canteen Waste			0.40	
Timber/Wood	170201	56.831	0.60	34.099
Building & Construction Waste	170904	36.836	0.60	22.102
Sweepings			0.60	
Glass	170202		0.60	
Bituminous mixtures	170302		1.00	
Metals	170400	30.746	1.00	30.746
Insulation materials	170604		0.40	
Hazardous waste (Packaging)	170903		0.15	
Drainage Piping			0.60	
Electrical Waste			0.60	
Miscellaneous Waste			0.60	
<b>Total</b>		<b>124.413</b>		<b>86.947</b>

**Waste Factor (Volume):** 0.379m<sup>3</sup>/m<sup>2</sup>

**Waste Factor (Weight):** 0.265 tonnes/m<sup>2</sup> or 265 kg/m<sup>2</sup>

**Project Description:** Social Infrastructure PSA 7 2005

**Completed Floor Area:** 2 584 m<sup>2</sup>

**Project Stage:** %

**Total Waste:** 150.531 m<sup>3</sup>

**Conversion Table:**

Materials	EWC Code	Volume (m <sup>3</sup> )	Conversion Factor	Weight (tonnes)
Inactive or inert waste	170100	5.505	1.50	8.258
Paper and Plastics	170203	5.965	0.15	0.895
Cardboard		10.095	0.40	
Timber pallets	170201	39.915	0.40	15.966
Plasterboard	170802		0.40	
Canteen Waste		10.096	0.40	4.038
Timber/Wood	170201	20.644	0.60	12.386
Building & Construction Waste	170904		0.60	
Sweepings		3.213	0.60	1.928
Glass	170202	1.377	0.60	0.826
Bituminous mixtures	170302		1.00	
Metals (including their alloys)	170400	36.742	1.00	36.742
Soil, stones and dredging spoil	170500		1.50	
Insulation materials	170604	12.389	0.40	4.956
Hazardous waste (Packaging)	170903	0.459	0.15	0.069
Drainage Piping			0.60	
Electrical Waste			0.60	
Miscellaneous Waste		4.131	0.60	2.479
<b>Total</b>		<b>150.531</b>		<b>88.543</b>

**Waste Factor (Volume):** 0.058m<sup>3</sup>/m<sup>2</sup>

**Waste Factor (Weight):** 0.034 tonnes/m<sup>2</sup> or 34 kg/m<sup>2</sup>

**Project Description:** Social Infrastructure PSA 8 2005

**Completed Floor Area:** 1 344 m<sup>2</sup>

**Project Stage:** 15 %

**Total Waste:** 468.500 m<sup>3</sup>

**Conversion Table:**

Materials	EWC Code	Volume (m <sup>3</sup> )	Conversion Factor	Weight (tonnes)
Inactive or inert waste	170100	88.100	1.50	132.150
Paper and Plastics	170203	42.050	0.15	6.308
Cardboard		46.100	0.40	18.440
Timber pallets	170201	8.300	0.40	3.320
Plasterboard	170802		0.40	
Canteen Waste		3.400	0.40	1.360
Timber/Wood	170201	22.050	0.60	13.230
Building & Construction Waste	170904	67.700	0.60	40.620
Sweepings			0.60	
Glass	170202		0.60	
Bituminous mixtures	170302		1.00	
Metals (including their alloys)	170400	100.800	1.00	100.800
Soil, stones and dredging spoil	170500		1.50	
Insulation materials	170604	85.950	0.40	34.380
Hazardous waste (Packaging)	170903	4.050	0.15	0.608
Drainage Piping			0.60	
Electrical Waste			0.60	
Miscellaneous Waste			0.60	
<b>Total</b>		<b>468.500</b>		<b>351.216</b>

**Waste Factor (Volume):** 0.349m<sup>3</sup>/m<sup>2</sup>

**Waste Factor (Weight):** 0.261 tonnes/m<sup>2</sup> or 261 kg/m<sup>2</sup>



**Project Description:** Social Infrastructure PSA 9 2005

**Completed Floor Area:** 2 071 m<sup>2</sup>

**Project Stage:** 19 %

**Total Waste:** 613.080 m<sup>3</sup>

**Conversion Table:**

Materials	EWC Code	Volume (m <sup>3</sup> )	Conversion Factor	Weight (tonnes)
Inactive or inert waste	170100		1.50	
Paper and Plastics	170203		0.15	
Cardboard			0.40	
Timber pallets	170201		0.40	
Plasterboard	170802		0.40	
Canteen Waste			0.40	
Timber/Wood	170201	251.520	0.60	150.912
Building & Construction Waste	170904	282.960	0.60	169.776
Sweepings			0.60	
Glass	170202		0.60	
Bituminous mixtures	170302		1.00	
Metals (including their alloys)	170400	78.600	1.00	78.600
Soil, stones and dredging spoil	170500		1.50	
Insulation materials	170604		0.40	
Hazardous waste (Packaging)	170903		0.15	
Drainage Piping			0.60	
Electrical Waste			0.60	
Miscellaneous Waste			0.60	
<b>Total</b>		<b>613.080</b>		<b>399.288</b>

**Waste Factor (Volume):** 0.296m<sup>3</sup>/m<sup>2</sup>

**Waste Factor (Weight):** 0.193 tonnes/m<sup>2</sup> or 193 kg/m<sup>2</sup>

**Project Description:** Residential Demolition PSA 1 2004

**Completed Floor Area:** 2 800 m<sup>2</sup>

**Project Stage:** 35 %

**Total Waste:** 1686.903 m<sup>3</sup>

**Conversion Table:**

Materials	EWC Code	Volume (m <sup>3</sup> )	Conversion Factor	Weight (tonnes)
Inactive or inert waste	170100	1340.350	1.50	2010.525
Paper and Plastics	170203		0.15	
Cardboard			0.40	
Timber pallets	170201		0.40	
Plasterboard	170802		0.40	
Canteen Waste			0.40	
Timber/Wood	170201	139.550	0.60	83.730
Building & Construction Waste	170904	56.633	0.60	33.980
Sweepings			0.60	
Glass	170202		0.60	
Bituminous mixtures	170302		1.00	
Metals	170400	150.370	1.00	150.370
Soil, stones and dredging spoil	170500		1.50	
Insulation materials	170604		0.40	
Hazardous waste (Packaging)	170903		0.15	
Drainage Piping			0.60	
Electrical Waste			0.60	
Miscellaneous Waste			0.60	
<b>Total</b>		<b>1686.903</b>		<b>2278.605</b>

**Waste Factor (Volume):** 0.603m<sup>3</sup>/m<sup>2</sup>

**Waste Factor (Weight):** 0.814 tonnes/m<sup>2</sup> or 814 kg/m<sup>2</sup>



**APPENDIX N**  
**Statistical Tables**

- Table N.1 New Residential Construction**
- Table N.2 New Private Non Residential Construction**
- Table N.3 New Productive Infrastructure Construction**
- Table N.4 New Social Infrastructure Construction**
- Table N.5 Total Project Category**

**Table N.1 New Residential Construction – Statistical Calculations**

Reference	x	(x-mean)	(x-mean) <sup>2</sup>
PSA 1	11.44	11.44 – 70.27 = -58.83	3 460.97
PSA 2	10.74	10.74 – 70.27 = -59.53	3 543.82
PSA 3	15.02	15.02 – 70.27 = -55.25	3 052.56
PSA 4	19.85	19.85 – 70.27 = -50.42	2 542.18
PSA 5	39.12	39.12 – 70.27 = -31.15	970.32
PSA6	34.56	34.56 – 70.27 = -35.71	1 275.20
PSA 7	35.66	35.66 – 70.27 = -34.61	1 197.85
PSA 8	15.39	15.39 – 70.27 = -54.88	3 011.81
PSA 9	42.88	42.88 – 70.27 = -27.39	750.21
PSA 10	317.80	317.80 – 70.27 = 2	61 271.10
PSA 11	288.56	288.56 – 70.27 = 218.29	47 650.52
PSA 12	65.91	65.91 – 70.27 = -4.36	19.01
PSA 13	46.09	46.09 – 70.27 = -24.18	584.67
PSA 14	18.56	18.56 – 70.27 = -51.71	2 673.92
PSA 15	102.56	102.56 – 70.27 = 32.29	1 042.64
PSA 16	134.24	134.24 – 70.27 = 63.97	4 092.16
PSA 17	62.75	62.75 – 70.27 = -7.52	56.55
PSA 18	35.15	35.15 – 70.27 = -35.12	1 233.41
PSA 19	38.91	38.91 – 70.27 = -31.36	983.45
<b>Totals</b>		<b>1124.10</b>	<b>139 412.35</b>
<b>Using the t-distribution for sample &lt;30</b>			
		<b>Variance</b>	7 745.131
		<b>Standard Deviation</b>	88.006
		<b>95% Confidence Interval</b>	(27.855, 112.691)

**Table N.2 New Private Non Residential Construction Statistical Calculations**

Reference	x	(x-mean)	(x-mean) <sup>2</sup>
PSA 1	19.60	19.60 – 86.82 = -67.22	4 518.53
PSA 2	30.91	30.91 – 86.82 = -55.91	3 125.93
PSA 3	40.76	40.76 – 86.82 = -46.06	2 121.52
PSA 4	52.19	52.19 – 86.82 = -34.63	1 199.24
PSA 5	78.91	78.91 – 86.82 = -7.91	62.57
PSA6	99.62	99.62 – 86.82 = 12.80	163.84
PSA 7	109.10	109.10 – 86.82 = 22.28	496.40
PSA 8	132.15	132.15 – 86.82 = 45.33	2 054.81
PSA 9	147.72	147.72 – 86.82 = 60.90	3 708.81
PSA 10	167.96	167.96 – 86.82 = 81.14	6 583.70
PSA 11	295.78	295.78 – 86.82 = 208.96	43 664.28
PSA 12	287.66	287.66 – 86.82 = 200.84	40 336.71
PSA 13	29.46	29.46 – 86.82 = -57.36	3 290.17
PSA 14	28.25	28.25 – 86.82 = -58.54	3 426.93
PSA 15	93.25	93.25 – 86.82 = 6.43	41.34
PSA 16	45.92	45.92 – 86.82 = -40.90	1 672.81
PSA 17	24.28	24.28 – 86.82 = -62.54	3 911.25
PSA 18	12.49	12.49 – 86.82 = -74.33	5 524.95
PSA 19	21.87	21.87 – 86.82 = -64.95	4 218.50
PSA 20	106.31	106.31 – 86.82 = 19.49	379.86
PSA 21	32.53	32.53 – 86.82 = -54.29	2 947.40
PSA 22	53.26	53.26 – 86.82 = -33.56	1 126.27
<b>Totals</b>		<b>1 316.37</b>	<b>134 575.82</b>
<b>Using the t-distribution for sample &lt;30</b>			
		<b>Variance</b>	6 408.50
		<b>Standard Deviation</b>	80.0534
		<b>95% Confidence Interval</b>	(51.324, 122.311)

**Table N.3 Productive Infrastructure Construction Statistical Calculations**

Reference	x	(x-mean)	(x-mean) <sup>2</sup>
PSA 1	78.72	78.72 – 48.48 = 30.24	914.46
PSA 2	55.78	55.78 – 48.48 = 7.30	53.29
PSA 3	10.93	10.93 – 48.48 = -37.55	1 410.00
<b>Totals</b>		<b>75.09</b>	<b>2 377.75</b>
<b>Using the t-distribution for sample &lt;30</b>			
		<b>Variance</b>	1 168.875
		<b>Standard Deviation</b>	34.480
		<b>95% Confidence Interval</b>	*(-37.177, 134.130)

*\*The minus number in the confidence interval identifies an insufficient number of samples.*

**Table N.4 New Social Infrastructure Construction Statistical Calculations**

Reference	x	(x-mean)	(x-mean) <sup>2</sup>
PSA 1	16.66	16.66 – 138.94 = -122.28	14 952.40
PSA 2	16.95	16.95 – 138.94 = -121.99	14 881.56
PSA 3	39.61	39.61 – 138.94 = -99.33	9 866.45
PSA 4	65.79	65.79 – 138.94 = -73.15	5 350.92
PSA 5	358.02	358.02 – 138.02 = 219.08	47 996.05
PSA6	265.08	265.08 – 138.02 = 126.14	15 911.30
PSA 7	34.27	34.27 – 138.02 = -104.67	10 955.81
PSA 8	261.32	261.32 – 138.02 = 122.38	14 476.86
PSA 9	192.80	192.80 – 138.02 = 53.86	2 900.90
<b>Totals</b>		<b>1 042.88</b>	<b>137 792.25</b>
<b>Using the t-distribution for sample &lt;30</b>			
		<b>Variance</b>	17 224.031
		<b>Standard Deviation</b>	131.240
		<b>95% Confidence Interval</b>	(38.064, 239.825)

**Table N.5 Total Project Category Statistical Calculations**

<b>Using the z-distribution for sample &gt;30</b>		
	<b>Mean</b>	87.568
	<b>Standard Deviation</b>	92.840
	<b>95% Confidence Interval</b>	(62.584, 112.552)

## APPENDIX O

**Table O.1 Unit waste factors generated by Reinhart *et al.* (2002)**



**Table O.1 Unit waste factors generated by Reinhart *et al.* (2002)**

<b>Building-related C&amp;D activity</b>	<b>Type</b>		<b>Waste Generation Rate</b>
Residential Construction	Wood frame		<b>4.32 lbs/ft<sup>2</sup></b>
	Concrete block frame		<b>8.95 lbs/ft<sup>2</sup></b>
Non residential Construction	Wood frame		<b>4.02 lbs/ft<sup>2</sup></b>
	Concrete block frame		<b>9.40 lbs/ft<sup>2</sup></b>
Residential Demolition	Single family (crawl space)		<b>49.50 lbs/ft<sup>2</sup></b>
	Single family (basement)		<b>158.20 lbs/ft<sup>2</sup></b>
	Single family (concrete slab)		<b>97.90 lbs/ft<sup>2</sup></b>
	Multi family		<b>127.00 lbs/ft<sup>2</sup></b>
Non residential demolition			<b>173.00 lbs/ft<sup>2</sup></b>
Residential Renovation	Kitchen alterations (major)		<b>4.50 tons per job</b>
	Kitchen alterations (minor)		<b>0.75 tons per job</b>
	Bathroom alteration (major)		<b>1.00 tons per job</b>
	Bathroom alteration (minor)		<b>0.25 tons per job</b>
	Additions		<b>0.75 tons per job</b>
	Driveway replacements		<b>9.00 tons per job</b>
	Roof replacements	Asphalt	<b>1.68 tons per job</b>
		Wood	<b>1.40 tons per job</b>

## **APPENDIX P**

**Demolition Survey letter and questionnaire sent out to members of  
the Demolition Contractors Association of Ireland**

*Address of Demolition Contractor*

**Demolition Contractors Survey**

Dear Sir or Madam:

The Research Unit in the Department of Building and Civil Engineering at the Galway-Mayo Institute of Technology have been carrying out research in the area of construction and demolition waste management with the aim of generating construction and demolition waste factors for the Irish construction industry. Over a two-year period (2004 and 2005), 58 construction projects have been audited using a paper-based methodology, which has generated construction waste factors (kg of waste per m<sup>2</sup> of constructed floor area) for the industry. One of the limitations of the audited projects was that they were all new construction with very little demolition works. This gap in the data limits the accuracy of extrapolating this data to produce national estimates.

As a result, waste questionnaires are being circulated to all members of the Demolition Contractors Association of Ireland. By completing the attached questionnaire you will be making an important contribution to the compilation of information on demolition waste in Ireland.

Galway  
Tel: 091 753161  
Fax: 091 751107  
Website: <http://www.gmit.ie>

Galway  
Tel: 091 753161  
Fax: 091 751107  
Website: <http://www.gmit.ie>

Galway  
Tel: 091 753161  
Fax: 091 751107  
Website: <http://www.gmit.ie>





Please complete the attached questionnaire with respect to your company and return it to the above address by May 26<sup>th</sup> 2006. I realise there is a general reluctance to disclose such data, but please realise that any estimates submitted would be **treated in the strictest confidence, and would only appear as general tonnages for the industry as a whole without identifying any individual companies as is the case with the 58 audited projects.** Any information on demolition waste production is useful and will be used to develop unit waste factors for the industry.

We look forward to hearing from you at your earliest convenience, and if you have any queries please do not hesitate to contact me at 091 742161 or [Mark.Kelly@gmit.ie](mailto:Mark.Kelly@gmit.ie)

Thank you for your help,

Yours Sincerely,

---

Mark Kelly

Department of Building and Civil Engineering,

Galway-Mayo Institute of Technology,

Dublin Road, Galway.

## Demolition Waste Survey Questionnaire

### 1. Contact Information

<b>Company Name:</b>	
<b>Address:</b>	
<b>Contact Name:</b>	
<b>Tel:</b>	
<b>Email:</b>	
<b>Year and Month of Commencement of Company:</b>	
<b>No. of Staff<sup>1</sup></b>	

### Guidelines

1. The information can be provided in one of four ways:
  - a. Where the company has individual records on quantities and composition kept for each demolition project, these can be entered in Tables 1.1 to 1.12 for 2004 and 2005.
  - b. Where the company keeps annual records of overall quantities and composition for 2004 and 2005, these can be entered in Tables 3.1 and 3.2.
  - c. Where the company has a copy of the information sent to the local authority as part of the demolition permit application, these may be copied and attached if they do not wish to fill out the tables.
  - d. The company may use a combination of all or some of the previous three methods and any information provided will prove valuable.

**All information submitted to the Research Unit will be confidential and will be extrapolated to generate unit waste factors ( $\text{m}^3/\text{m}^2$ ) and national estimates for the demolition sector.**

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<sup>1</sup> Where part-time workers form part of the staff, the number should be the equivalent number of full time staff.

Please fill out 'no. of staff' in section 1 as this will be used to extrapolate industry representation.

## 2. Individual Project Waste Information

**Table 1.1: Individual Project Waste Information for 2004 & 2005**

Please provide all details in metric tonnes. If the actual quantity is not known, please provide an estimate and indicate that the figure is an estimate.

Project Category and Year e.g. residential, non-residential, productive & social infrastructure.	Demolished Floor Area (m <sup>2</sup> )	Total Material Tonnage	Individual Material Tonnages
<b>Compositional Breakdown:</b> <ul style="list-style-type: none"> <li><input type="checkbox"/> Concrete, bricks, tiles, ceramics and gypsum based materials</li> <li><input type="checkbox"/> Soil and stones</li> <li><input type="checkbox"/> Asphalt, tar and tarred products</li> <li><input type="checkbox"/> Wood</li> <li><input type="checkbox"/> Metals</li> <li><input type="checkbox"/> Others (define)</li> </ul>			

**Table 1.2: Individual Project Waste Information for 2004 & 2005**

Project Category and Year e.g. residential, non-residential, productive & social infrastructure.	Demolished Floor Area (m <sup>2</sup> )	Total Material Tonnage	Individual Material Tonnages
<b>Compositional Breakdown:</b> <ul style="list-style-type: none"> <li><input type="checkbox"/> Concrete, bricks, tiles, ceramics and gypsum based materials</li> <li><input type="checkbox"/> Soil and stones</li> <li><input type="checkbox"/> Asphalt, tar and tarred products</li> <li><input type="checkbox"/> Wood</li> <li><input type="checkbox"/> Metals</li> <li><input type="checkbox"/> Others (define)</li> </ul>			

**Table 1.3: Individual Project Waste Information for 2004 & 2005**

Project Category and Year e.g. residential, non-residential, productive & social infrastructure.	Demolished Floor Area (m <sup>2</sup> )	Total Material Tonnage	Individual Material Tonnes
<b>Compositional Breakdown:</b>			
<input type="checkbox"/> Concrete, bricks, tiles, ceramics and gypsum based materials			
<input type="checkbox"/> Soil and stones			
<input type="checkbox"/> Asphalt, tar and tarred products			
<input type="checkbox"/> Wood			
<input type="checkbox"/> Metals			
<input type="checkbox"/> Others (define)			

**Table 1.4: Individual Project Waste Information for 2004 & 2005**

Project Category and Year e.g. residential, non-residential, productive & social infrastructure.	Demolished Floor Area (m <sup>2</sup> )	Total Material Tonnage	Individual Material Tonnes
<b>Compositional Breakdown:</b>			
<input type="checkbox"/> Concrete, bricks, tiles, ceramics and gypsum based materials			
<input type="checkbox"/> Soil and stones			
<input type="checkbox"/> Asphalt, tar and tarred products			
<input type="checkbox"/> Wood			
<input type="checkbox"/> Metals			
<input type="checkbox"/> Others (define)			





**Table 1.9: Individual Project Waste Information for 2004 & 2005**

Project Category and Year e.g. residential, non-residential, productive & social infrastructure.	Demolished Floor Area (m <sup>2</sup> )	Total Material Tonnage	Individual Material Tonnages
<b>Compositional Breakdown:</b> <ul style="list-style-type: none"> <li><input type="checkbox"/> Concrete, bricks, tiles, ceramics and gypsum based materials</li> <li><input type="checkbox"/> Soil and stones</li> <li><input type="checkbox"/> Asphalt, tar and tarred products</li> <li><input type="checkbox"/> Wood</li> <li><input type="checkbox"/> Metals</li> <li><input type="checkbox"/> Others (define)</li> </ul>			

**Table 1.10: Individual Project Waste Information for 2004 & 2005**

Project Category and Year e.g. residential, non-residential, productive & social infrastructure.	Demolished Floor Area (m <sup>2</sup> )	Total Material Tonnage	Individual Material Tonnages
<b>Compositional Breakdown:</b> <ul style="list-style-type: none"> <li><input type="checkbox"/> Concrete, bricks, tiles, ceramics and gypsum based materials</li> <li><input type="checkbox"/> Soil and stones</li> <li><input type="checkbox"/> Asphalt, tar and tarred products</li> <li><input type="checkbox"/> Wood</li> <li><input type="checkbox"/> Metals</li> <li><input type="checkbox"/> Others (define)</li> </ul>			









## **APPENDIX Q**

### **Composition Tables**

**Table Q.1 Total New Construction Composition**

**Table Q.2 New Residential Construction Composition**

**Table Q.3 New Private Non-Residential Construction Composition**

**Table Q.4 New Social Infrastructure Construction Composition**

**Table Q.5 New Productive Infrastructure Construction Composition**

**Table Q.1 Total New Construction Composition**

Materials	EWC Code	Volume (m <sup>3</sup> )	Conversion Factor	Weight (tonnes)
Inactive or inert waste	170100	2 396.430	1.50	3 594.645
Paper, Plastics & Packaging	170203	2 462.211	0.15	369.332
Plasterboard	170802	745.325	0.40	298.130
Canteen/Office Waste		748.990	0.40	299.596
Timber/Wood	170201	4 124.525	0.60	2 474.715
Mixed C&D W	170904	1 637.675	0.60	982.605
Metals (including their alloys)	170400	1 887.458	1.00	1 887.458
Insulation materials	170604	564.555	0.40	225.822
Miscellaneous Waste		122.820	0.60	73.692
<b>Total</b>		<b>14 689.989</b>		<b>10 205.995</b>

**Table Q.2 New Residential Construction Composition**

Materials	EWC Code	Volume (m <sup>3</sup> )	Conversion Factor	Weight (tonnes)
Inactive or inert waste	170100	1 155.897	1.50	1 733.846
Paper, Plastics & Packaging	170203	853.739	0.15	128.061
Plasterboard	170802	477.358	0.40	190.943
Canteen/Office Waste		99.061	0.40	39.624
Timber/Wood	170201	1 215.414	0.60	729.248
Mixed C&D W	170904	495.412	0.60	297.247
Metals (including their alloys)	170400	401.050	1.00	401.050
Insulation materials	170604	201.226	0.40	80.490
Miscellaneous Waste		19.817	0.60	11.890
<b>Total</b>		<b>4 918.974</b>		<b>3 612 399</b>

**Table Q.3 New Private Non-Residential Construction Composition**

Materials	EWC Code	Volume (m <sup>3</sup> )	Conversion Factor	Weight (tonnes)
Inactive or inert waste	170100	974.625	1.50	1 461.938
Paper, Plastics & Packaging	170203	1 278.225	0.15	191.734
Plasterboard	170802	252.767	0.40	101.107
Canteen/Office Waste		541.439	0.40	216.576
Timber/Wood	170201	2 160.286	0.60	1 296.172
Mixed C&D W	170904	527.533	0.60	316.520
Metals (including their alloys)	170400	1 158.259	1.00	1 158.259
Insulation materials	170604	260.154	0.40	104.062
Miscellaneous Waste		86.85	0.60	52.110
<b>Total</b>		<b>7 240.138</b>		<b>4 898.478</b>

**Table Q.4 New Social Infrastructure Construction Composition**

Materials	EWC Code	Volume (m <sup>3</sup> )	Conversion Factor	Weight (tonnes)
Inactive or inert waste	170100	265.908	1.50	398.862
Paper, Plastics & Packaging	170203	296.283	0.15	44.442
Plasterboard	170802	15.200	0.40	6.080
Canteen/Office Waste		69.196	0.40	27.678
Timber/Wood	170201	683.156	0.60	409.894
Mixed C&D W	170904	596.381	0.60	357.829
Metals (including their alloys)	170400	302.543	1.00	302.543
Insulation materials	170604	103.175	0.40	41.270
Miscellaneous Waste		8.721	0.60	5.233
<b>Total</b>		<b>2 340.563</b>		<b>1 593.831</b>

**Table Q.5 New Productive Infrastructure Construction Composition**

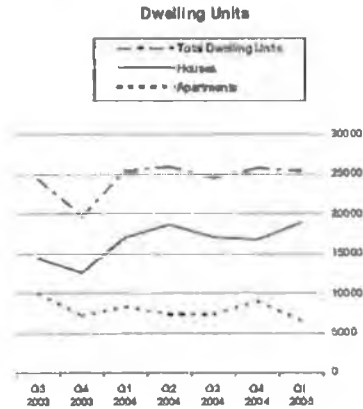
Materials	EWC Code	Volume (m <sup>3</sup> )	Conversion Factor	Weight (tonnes)
Inactive or inert waste	170100		1.50	
Paper, Plastics & Packaging	170203	33.964	0.15	5.095
Plasterboard	170802		0.40	
Canteen/Office Waste		39.294	0.40	15.718
Timber/Wood	170201	65.669	0.60	39.401
Mixed C&D W	170904	18.349	0.60	11.009
Metals (including their alloys)	170400	25.606	1.00	25.606
Insulation materials	170604		0.40	
Miscellaneous Waste		7.432	0.60	4.459
<b>Total</b>		<b>190.314</b>		<b>101.288</b>

## **APPENDIX R**

### **CSO Quarterly Reports used to calculate construction output for 2005**



## Planning Permissions Quarter 1 2005



	Number of Dwelling Units		
	Houses	Apartments	Total
<b>Jan-Mar 2004</b>	17,054	8,347	25,401
<b>Jan-Mar 2005</b>	18,913	6,437	25,350

### New Houses approved up 10.9%

This release shows that for the first quarter of 2005, planning permissions were granted for 18,913 new houses, compared with 17,054 units for the same period in 2004, an increase of 10.9%. *See Table 4.*

The first quarter figures also show that:

- ◆ Planning permissions were granted for 25,350 new dwellings. This is a slight decrease when compared to the same quarter of 2004 when there were 25,401 planning permissions granted. *See Table 4.*
- ◆ Planning permissions were granted for 6,437 new apartments in the first quarter of 2005 and 8,347 in the first quarter of 2004. This is a decrease of 22.9%. *See Table 7.*
- ◆ One-off houses accounted for 27.1% of all new dwelling units granted planning permission in this quarter. This compares with 34.3% for the same period in 2004. *See Table 5.*
- ◆ Total floor area planned was 4,711 thousand sq. metres in the first quarter of 2005. Of this, 70.0% was for new dwellings, 20.9% for other new constructions and 9.1% for extensions. The total floor area planned increased by 5.6% in comparison with the same quarter of 2004. *See Table 1.*

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**Table 1 Summary of Planning Permissions Granted, 1998-2005**

Period	Number of Permissions					Total Floor Area (000 m <sup>2</sup> )				
	New Construction		Extension	Alteration and Conversion	Total	New Construction		Extension	Total	
	Dwellings	Other				Dwellings	Other			
1998	1st Quarter	3,513	1,216	2,491	602	7,822	1,403	618	333	2,354
	2nd "	3,854	1,182	3,087	671	8,794	1,383	621	388	2,292
	3rd "	5,027	1,486	4,060	763	11,336	1,897	804	498	3,198
	4th "	4,325	1,296	2,938	712	9,271	1,415	805	357	2,377
	Year	16,719	5,180	12,876	2,748	37,223	6,098	2,648	1,574	10,221
1999	1st Quarter	5,201	--	--	--	--	--	--	--	--
	2nd "	5,674	--	--	--	--	--	--	--	--
	3rd "	6,517	--	--	--	--	--	--	--	--
	4th "	6,203	--	--	--	--	--	--	--	--
	Year	23,595	--	--	--	--	--	--	--	--
2000	1st Quarter	6,630	--	--	--	--	--	--	--	--
	2nd "	6,597	--	--	--	--	--	--	--	--
	3rd "	6,893	1,449	4,026	762	13,310	3,223	1,159	525	4,906
	4th "	6,212	1,354	3,087	612	11,265	3,019	885	417	4,301
	Year	26,332	--	--	--	--	--	--	--	--
2001 <sup>1</sup>	1st Quarter	6,333	1,455	2,986	674	11,448	2,909	1,084	510	4,503
	2nd "	5,538	1,465	3,030	839	10,672	2,779	921	368	4,067
	3rd "	6,157	1,671	3,715	786	12,329	2,513	998	463	3,984
	4th "	5,585	1,606	3,106	754	11,051	2,262	1,020	391	3,672
	Year	23,613	6,197	12,837	2,863	46,500	10,463	4,023	1,722	16,208
2002	1st Quarter	5,025	1,512	2,643	856	10,238	2,096	972	423	3,491
	2nd "	4,547	1,349	2,863	865	9,444	2,505	873	370	3,748
	3rd "	5,302	1,661	3,704	757	11,654	2,335	1,139	429	3,904
	4th "	4,654	1,374	2,892	646	9,566	1,858	1,020	401	3,277
	Year	19,728	5,926	12,322	2,924	40,900	8,792	4,004	1,623	14,420
2003	1st Quarter	4,846	1,278	2,713	645	9,482	1,797	713	365	2,874
	2nd "	5,110	1,465	3,103	677	10,355	2,509	974	345	3,828
	3rd "	5,583	1,693	3,457	689	11,422	2,892	1,184	411	4,427
	4th "	5,410	1,496	2,868	566	10,368	2,473	1,086	376	3,915
	Year	20,949	5,932	12,159	2,577	41,617	9,611	3,937	1,497	15,044
2004	1st Quarter	6,887	1,545	2,820	587	11,839	3,156	940	384	4,481
	2nd "	7,583	1,660	3,511	652	13,386	3,344	1,156	398	4,898
	3rd "	7,100	1,899	4,076	731	13,806	3,172	1,007	467	4,646
	4th "	5,982	1,613	3,061	605	11,241	3,123	1,155	436	4,714
	Year	27,512	6,717	13,468	2,575	50,272	12,795	4,253	1,665	18,719
2005	1st Quarter	6,170	1,571	3,028	586	11,355	3,299	985	427	4,711

<sup>1</sup> For categories where floor area is a relevant measure

<sup>2</sup> A review of the series for new dwellings was undertaken and resulted in revised data for 1999 and the first half of 2000. Corresponding revised data were not available for floor area or for permissions other than for new dwellings for those periods.



**Table 2 Summary of Planning Permissions granted, first quarter 2005, classified by region, county and type of development.**

Planning Region and County	Number of Permissions					Total Floor Area (000 sq.m)			
	New Construction		Extension	Alteration and Conversion	Total	New Construction		Extension	Total <sup>1</sup>
	Dwellings	Other				Dwellings	Other		
<b>Border, Midland and Western</b>	<b>3,118</b>	<b>532</b>	<b>918</b>	<b>181</b>	<b>4,749</b>	<b>1,490</b>	<b>283</b>	<b>110</b>	<b>1,883</b>
<b>Border</b>	<b>1,433</b>	<b>291</b>	<b>456</b>	<b>86</b>	<b>2,266</b>	<b>673</b>	<b>171</b>	<b>55</b>	<b>899</b>
Cavan	221	37	40	2	300	115	16	5	136
Donegal	487	93	174	31	785	230	51	19	299
Leitrim	256	21	52	2	331	74	8	5	87
Louth	130	61	91	31	313	97	54	9	160
Monaghan	149	46	43	11	249	84	11	8	104
Sligo	190	33	56	9	288	73	32	9	113
<b>Midland</b>	<b>566</b>	<b>90</b>	<b>179</b>	<b>31</b>	<b>866</b>	<b>346</b>	<b>44</b>	<b>21</b>	<b>411</b>
Laois	112	25	45	5	187	88	11	6	105
Longford	249	23	48	4	324	165	15	5	186
Offaly	117	24	40	11	192	48	10	5	63
Westmeath	88	18	46	11	163	45	8	5	57
<b>West</b>	<b>1,119</b>	<b>151</b>	<b>283</b>	<b>64</b>	<b>1,617</b>	<b>471</b>	<b>68</b>	<b>34</b>	<b>573</b>
Galway City	32	3	1	1	37	28	1	0	29
Galway <sup>2</sup>	493	56	137	35	721	167	15	16	198
Mayo	346	56	99	20	521	147	39	12	198
Roscommon	248	36	46	8	338	128	14	5	147
<b>Southern and Eastern</b>	<b>3,052</b>	<b>1,039</b>	<b>2,110</b>	<b>405</b>	<b>6,606</b>	<b>1,809</b>	<b>702</b>	<b>317</b>	<b>2,828</b>
<b>Dublin</b>	<b>350</b>	<b>282</b>	<b>719</b>	<b>165</b>	<b>1,516</b>	<b>307</b>	<b>242</b>	<b>89</b>	<b>638</b>
Dublin City	124	143	322	83	672	140	66	30	236
Dun Laoghaire-Rathdown	89	31	134	25	259	24	6	26	56
Fingal	93	65	149	33	340	93	139	25	257
South Dublin	64	43	114	24	245	49	31	8	88
<b>Mid-East</b>	<b>432</b>	<b>139</b>	<b>295</b>	<b>47</b>	<b>913</b>	<b>369</b>	<b>183</b>	<b>35</b>	<b>587</b>
Kildare	141	39	140	12	332	169	21	16	207
Meath	178	76	132	25	411	127	106	17	250
Wicklow	113	24	23	10	170	72	56	2	130
<b>Mid-West</b>	<b>577</b>	<b>159</b>	<b>273</b>	<b>57</b>	<b>1,066</b>	<b>256</b>	<b>77</b>	<b>80</b>	<b>413</b>
Clare	188	48	86	18	340	92	26	10	128
Limerick City	13	23	35	5	76	14	23	4	41
Limerick <sup>2</sup>	261	55	98	14	428	103	13	58	174
North Tipperary	115	33	54	20	222	46	15	9	70
<b>South-East</b>	<b>730</b>	<b>206</b>	<b>353</b>	<b>73</b>	<b>1,362</b>	<b>329</b>	<b>84</b>	<b>45</b>	<b>458</b>
Carlow	77	28	45	9	159	61	21	8	90
Kilkenny	147	52	70	18	287	89	8	10	107
South Tipperary	102	33	56	8	199	41	8	5	54
Waterford City	6	20	23	9	58	22	16	6	44
Waterford <sup>2</sup>	82	22	54	1	159	25	5	5	34
Wexford	318	51	105	28	500	91	26	12	130
<b>South-West</b>	<b>963</b>	<b>253</b>	<b>470</b>	<b>63</b>	<b>1,749</b>	<b>549</b>	<b>116</b>	<b>68</b>	<b>732</b>
Cork City	34	11	60	3	108	14	6	5	26
Cork <sup>2</sup>	572	171	287	51	1,081	397	80	31	508
Kerry	357	71	123	9	560	137	29	31	198
<b>State</b>	<b>6,170</b>	<b>1,571</b>	<b>3,028</b>	<b>586</b>	<b>11,355</b>	<b>3,299</b>	<b>985</b>	<b>427</b>	<b>4,711</b>

<sup>1</sup> For categories where floor area is a relevant measure

<sup>2</sup> Excluding cities

**Table 3A Number of Planning Permissions granted, first quarter 2005, classified by region, type of development and functional category.**

Type of Development and Planning Region	Functional Category								Total
	Dwellings	Commercial Buildings	Buildings for Agriculture	Industrial Buildings	Govt., Health and Education	Other Buildings for Social Use	Civil Eng	Other	
<b>New Construction</b>									
<b>Border, Midland and Western</b>	<b>3,118</b>	<b>169</b>	<b>65</b>	<b>38</b>	<b>42</b>	<b>22</b>	<b>90</b>	<b>106</b>	<b>3,650</b>
Border	1,433	95	35	16	15	15	49	66	1,724
Midland	566	29	9	14	10	3	12	13	656
West	1,119	45	21	8	17	4	29	27	1,270
<b>Southern and Eastern</b>	<b>3,052</b>	<b>245</b>	<b>143</b>	<b>70</b>	<b>73</b>	<b>51</b>	<b>190</b>	<b>267</b>	<b>4,091</b>
Dublin	350	85	3	17	20	10	35	112	632
Mid-East	432	40	20	7	11	12	14	35	571
Mid-West	577	34	30	6	10	3	42	34	736
South-East	730	37	39	21	15	12	40	42	936
South-West	963	49	51	19	17	14	59	44	1,216
<b>State</b>	<b>6,170</b>	<b>414</b>	<b>208</b>	<b>108</b>	<b>115</b>	<b>73</b>	<b>280</b>	<b>373</b>	<b>7,741</b>
<b>Extension</b>									
<b>Border, Midland and Western</b>	<b>747</b>	<b>102</b>	<b>11</b>	<b>15</b>	<b>30</b>	<b>13</b>	-	-	<b>918</b>
Border	362	59	9	5	15	6	-	-	456
Midland	144	21	2	3	5	4	-	-	179
West	241	22	-	7	10	3	-	-	283
<b>Southern and Eastern</b>	<b>1,761</b>	<b>188</b>	<b>33</b>	<b>27</b>	<b>70</b>	<b>31</b>	-	-	<b>2,110</b>
Dublin	632	54	1	4	21	7	-	-	719
Mid-East	253	22	2	3	8	7	-	-	295
Mid-West	218	32	5	2	11	5	-	-	273
South-East	284	35	13	7	9	5	-	-	353
South-West	374	45	12	11	21	7	-	-	470
<b>State</b>	<b>2,508</b>	<b>290</b>	<b>44</b>	<b>42</b>	<b>100</b>	<b>44</b>	-	-	<b>3,028</b>
<b>Alteration and Conversion</b>									
<b>Border, Midland and Western</b>	<b>45</b>	<b>92</b>	<b>2</b>	<b>11</b>	<b>23</b>	<b>8</b>	-	-	<b>181</b>
Border	20	46	-	6	9	5	-	-	86
Midland	9	13	-	2	7	-	-	-	31
West	16	33	2	3	7	3	-	-	64
<b>Southern and Eastern</b>	<b>138</b>	<b>199</b>	<b>5</b>	<b>12</b>	<b>39</b>	<b>12</b>	-	-	<b>405</b>
Dublin	68	64	-	4	23	6	-	-	165
Mid-East	18	25	2	-	1	1	-	-	47
Mid-West	17	34	-	2	3	1	-	-	57
South-East	16	42	2	4	7	2	-	-	73
South-West	19	34	1	2	5	2	-	-	63
<b>State</b>	<b>183</b>	<b>291</b>	<b>7</b>	<b>23</b>	<b>62</b>	<b>20</b>	-	-	<b>586</b>
<b>All Developments</b>									
<b>Border, Midland and Western</b>	<b>3,910</b>	<b>363</b>	<b>78</b>	<b>64</b>	<b>95</b>	<b>43</b>	<b>90</b>	<b>106</b>	<b>4,749</b>
Border	1,815	200	44	27	39	26	49	66	2,266
Midland	719	63	11	19	22	7	12	13	866
West	1,376	100	23	18	34	10	29	27	1,617
<b>Southern and Eastern</b>	<b>4,951</b>	<b>632</b>	<b>181</b>	<b>109</b>	<b>182</b>	<b>94</b>	<b>190</b>	<b>267</b>	<b>6,606</b>
Dublin	1,050	203	4	25	64	23	35	112	1,516
Mid-East	703	87	24	10	20	20	14	35	913
Mid-West	812	100	35	10	24	9	42	34	1,066
South-East	1,030	114	54	32	31	19	40	42	1,362
South-West	1,356	128	64	32	43	23	59	44	1,749
<b>State</b>	<b>8,861</b>	<b>995</b>	<b>259</b>	<b>173</b>	<b>277</b>	<b>137</b>	<b>280</b>	<b>373</b>	<b>11,355</b>

- No permissions

**Table 3B Total Floor Area planned (000 sq.m) in new construction and extensions, first quarter 2005, classified by region and functional category.**

Type of Development and Planning Region	Functional Category						Total <sup>1</sup>
	Dwellings	Commercial Buildings	Buildings for Agriculture	Industrial Buildings	Govt., Health and Education	Other Buildings for Social Use	
<b>New Construction</b>							
<b>Border, Midland and Western</b>	<b>1,490</b>	<b>174</b>	<b>22</b>	<b>52</b>	<b>23</b>	<b>12</b>	<b>1,773</b>
Border	673	113	14	24	9	9	844
Midland	346	19	1	20	3	1	390
West	471	42	6	7	10	2	539
<b>Southern and Eastern</b>	<b>1,809</b>	<b>419</b>	<b>58</b>	<b>87</b>	<b>67</b>	<b>71</b>	<b>2,511</b>
Dublin	307	193	2	26	11	10	549
Mid-East	369	105	8	15	17	38	552
Mid-West	256	47	16	1	13	0	333
South-East	329	38	11	14	10	12	413
South-West	549	37	22	32	16	10	664
<b>State</b>	<b>3,299</b>	<b>593</b>	<b>80</b>	<b>139</b>	<b>90</b>	<b>83</b>	<b>4,284</b>
<b>Extension</b>							
<b>Border, Midland and Western</b>	<b>52</b>	<b>31</b>	<b>6</b>	<b>11</b>	<b>8</b>	<b>2</b>	<b>110</b>
Border	25	17	5	4	4	1	55
Midland	11	6	1	2	1	1	21
West	17	8	-	5	3	1	34
<b>Southern and Eastern</b>	<b>110</b>	<b>98</b>	<b>12</b>	<b>59</b>	<b>30</b>	<b>8</b>	<b>317</b>
Dublin	33	39	1	1	12	2	89
Mid-East	20	7	1	2	4	1	35
Mid-West	15	16	2	43	3	1	80
South-East	18	13	3	4	5	1	45
South-West	24	23	5	9	5	1	68
<b>State</b>	<b>162</b>	<b>129</b>	<b>19</b>	<b>69</b>	<b>38</b>	<b>10</b>	<b>427</b>
<b>Total New Construction and Extension</b>							
<b>Border, Midland and Western</b>	<b>1,542</b>	<b>205</b>	<b>28</b>	<b>63</b>	<b>30</b>	<b>15</b>	<b>1,883</b>
Border	697	130	19	28	13	10	899
Midland	357	25	2	22	4	2	411
West	487	50	6	13	13	3	573
<b>Southern and Eastern</b>	<b>1,919</b>	<b>517</b>	<b>71</b>	<b>145</b>	<b>98</b>	<b>78</b>	<b>2,828</b>
Dublin	340	232	2	27	23	13	638
Mid-East	389	113	9	16	21	39	587
Mid-West	271	63	19	43	16	2	413
South-East	347	51	14	17	15	13	458
South-West	573	59	27	41	21	11	732
<b>State</b>	<b>3,461</b>	<b>722</b>	<b>99</b>	<b>208</b>	<b>128</b>	<b>93</b>	<b>4,711</b>

<sup>1</sup> For categories where floor area is a relevant measure  
- No permissions  
NOTE: 0 implies less than 500 sq.m

**Table 4 Summary of Planning Permissions Granted for new houses and apartments, 1998-2005**

Period	Houses				Apartments			
	Number of Permissions	Number of Units	Floor Area (000 m)	Average Floor Area per Unit (m)	Number of Permissions	Number of Units	Floor Area (000 m)	Average Floor Area per Unit (m)
1998 1st Quarter	3,304	9,280	1,288	138.5	206	1,600	115	71.6
2nd "	3,632	9,170	1,251	136.4	218	1,980	128	64.7
3rd "	4,782	12,232	1,754	143.4	234	2,035	143	70.5
4th "	4,119	9,276	1,283	138.3	204	1,816	130	71.8
<b>Year</b>	<b>15,847</b>	<b>39,958</b>	<b>5,574</b>	<b>139.5</b>	<b>862</b>	<b>7,431</b>	<b>516</b>	<b>69.5</b>
1999 1st Quarter	-	14,370	-	-	-	3,194	-	-
2nd "	-	14,303	-	-	-	3,410	-	-
3rd "	-	17,231	-	-	-	2,907	-	-
4th "	-	17,891	-	-	-	3,290	-	-
<b>Year</b>	<b>-</b>	<b>63,795</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>12,801</b>	<b>-</b>	<b>-</b>
2000 <sup>1</sup> 1st Quarter	-	17,163	-	-	-	4,203	-	-
2nd "	-	18,985	-	-	-	3,914	-	-
3rd "	6,438	19,574	2,781	142.1	443	5,157	406	76.7
4th "	5,791	18,106	2,664	147.0	405	4,141	297	71.7
<b>Year</b>	<b>-</b>	<b>73,828</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>17,415</b>	<b>-</b>	<b>-</b>
2001 1st Quarter	5,891	16,492	2,427	147.2	435	6,066	475	78.3
2nd "	5,157	16,104	2,402	149.2	373	4,785	370	77.4
3rd "	5,741	14,452	2,223	153.8	411	3,561	283	79.4
4th "	5,220	13,618	1,997	146.8	361	3,368	262	77.9
<b>Year</b>	<b>22,009</b>	<b>60,666</b>	<b>9,049</b>	<b>149.2</b>	<b>1,580</b>	<b>17,780</b>	<b>1,390</b>	<b>78.2</b>
2002 1st Quarter	4,638	12,105	1,751	144.7	370	4,200	336	79.9
2nd "	4,192	15,236	2,103	138.1	350	5,183	391	75.7
3rd "	5,091	13,501	1,951	144.5	401	4,771	368	77.2
4th "	4,303	10,213	1,523	149.1	343	4,125	327	79.2
<b>Year</b>	<b>18,224</b>	<b>51,055</b>	<b>7,328</b>	<b>143.8</b>	<b>1,464</b>	<b>18,299</b>	<b>1,422</b>	<b>77.8</b>
2003 1st Quarter	4,469	9,511	1,464	153.9	370	4,030	325	80.6
2nd "	4,752	13,118	1,893	144.2	348	7,484	605	80.8
3rd "	5,132	14,394	2,035	141.4	439	10,065	789	78.4
4th "	4,970	12,582	1,905	151.4	435	7,170	562	78.3
<b>Year</b>	<b>19,323</b>	<b>49,605</b>	<b>7,297</b>	<b>147.1</b>	<b>1,592</b>	<b>28,749</b>	<b>2,281</b>	<b>79.3</b>
2004 1st Quarter	6,426	17,054	2,509	147.1	457	8,347	646	77.4
2nd "	7,123	18,653	2,770	148.5	425	7,313	543	74.2
3rd "	6,647	17,097	2,580	150.9	446	7,399	579	76.3
4th "	5,555	16,772	2,428	144.8	403	9,018	691	76.6
<b>Year</b>	<b>25,751</b>	<b>69,576</b>	<b>10,287</b>	<b>147.8</b>	<b>1,731</b>	<b>32,077</b>	<b>2,459</b>	<b>76.6</b>
2005 1st Quarter	5,749	18,913	2,810	148.6	416	6,437	487	75.7

<sup>1</sup> A review of the series for new dwellings was undertaken and resulted in revised data for 1999 and the first half of 2000. Corresponding revised data were not available for floor area or for permissions other than for new dwellings for those periods.

**Table 5 Details of Planning Permissions granted for new one-off houses, first quarter 2005, classified by region and county.**

Planning Region and County	Number of Permissions	Number of Units	Floor Area (000 sq.m)	Average Floor Area per Unit (sq.m)
<b>One-Off Houses</b>				
<b>Border, Midland and Western</b>	<b>2,653</b>	<b>2,653</b>	<b>565</b>	<b>213.1</b>
<b>Border</b>	<b>1,199</b>	<b>1,199</b>	<b>269</b>	<b>216.4</b>
Cavan	173	173	41	235.6
Donegal	409	409	85	206.9
Leitrim	233	233	45	192.0
Louth	101	101	25	246.9
Monaghan	121	121	31	256.3
Sligo	162	162	33	206.2
<b>Midland</b>	<b>478</b>	<b>478</b>	<b>102</b>	<b>213.6</b>
Laois	93	93	20	218.4
Longford	204	204	43	210.4
Offaly	106	106	22	205.2
Westmeath	75	75	17	228.0
<b>West</b>	<b>976</b>	<b>976</b>	<b>204</b>	<b>208.8</b>
Galway City	13	13	4	297.9
Galway <sup>2</sup>	455	455	96	211.3
Mayo	305	305	64	210.8
Roscommon	203	203	39	194.4
<b>Southern and Eastern</b>	<b>2,489</b>	<b>2,489</b>	<b>516</b>	<b>208.8</b>
<b>Dublin</b>	<b>205</b>	<b>205</b>	<b>30</b>	<b>147.3</b>
Dublin City	55	55	7	128.6
Dun Laoghaire-Rathdown	49	49	6	157.9
Fingal	63	63	10	164.6
South Dublin	38	38	5	132.0
<b>Mid-East</b>	<b>348</b>	<b>348</b>	<b>81</b>	<b>232.2</b>
Kildare	114	114	28	242.4
Meath	145	145	35	243.4
Wicklow	89	89	18	200.8
<b>Mid-West</b>	<b>497</b>	<b>497</b>	<b>106</b>	<b>213.9</b>
Clare	155	155	33	210.4
Limerick City	3	3	1	276.3
Limerick <sup>2</sup>	236	236	51	214.8
North Tipperary	103	103	22	215.4
<b>South-East</b>	<b>644</b>	<b>644</b>	<b>142</b>	<b>220.6</b>
Carlow	65	65	15	229.1
Kilkenny	125	125	29	232.3
South Tipperary	89	89	20	219.2
Waterford City	1	1	0	185.0
Waterford <sup>2</sup>	76	76	18	231.1
Wexford	288	288	61	211.4
<b>South-West</b>	<b>775</b>	<b>775</b>	<b>166</b>	<b>201.5</b>
Cork City	16	16	2	154.1
Cork <sup>2</sup>	466	466	94	202.3
Kerry	293	293	59	202.7
<b>State</b>	<b>5,122</b>	<b>5,122</b>	<b>1,081</b>	<b>211.0</b>

<sup>2</sup> Excluding cities

**Table 6 Details of Planning Permissions granted for new houses<sup>3</sup>, first quarter 2005, classified by region and county.**

Planning Region and County	Number of Permissions	Number of Units	Floor Area (000 sq.m)	Average Floor Area per Unit (sq.m)
<b>Houses<sup>3</sup></b>				
<b>Border, Midland and Western</b>	<b>315</b>	<b>6,228</b>	<b>785</b>	<b>126.0</b>
<b>Border</b>	<b>165</b>	<b>2,665</b>	<b>345</b>	<b>129.3</b>
Cavan	41	468	68	146.3
Donegal	54	1,041	128	123.0
Leitrim	15	167	26	154.8
Louth	17	502	62	123.0
Monaghan	20	289	37	127.6
Sligo	18	198	24	119.4
<b>Midland</b>	<b>61</b>	<b>1,894</b>	<b>232</b>	<b>122.4</b>
Leois	15	532	65	122.8
Longford	33	920	119	129.8
Offaly	6	220	24	107.8
Westmeath	7	222	23	105.3
<b>West</b>	<b>89</b>	<b>1,669</b>	<b>208</b>	<b>124.7</b>
Galway City	7	91	11	123.1
Galway <sup>2</sup>	21	471	61	129.9
Mayo	27	449	56	125.2
Roscommon	34	658	79	120.8
<b>Southern and Eastern</b>	<b>312</b>	<b>7,563</b>	<b>944</b>	<b>124.8</b>
<b>Dublin</b>	<b>50</b>	<b>706</b>	<b>89</b>	<b>125.7</b>
Dublin City	19	67	7	106.4
Dun Laoghaire-Rathdown	7	24	4	152.6
Fingal	14	420	57	135.3
South Dublin	10	195	21	108.5
<b>Mid-East</b>	<b>43</b>	<b>1,858</b>	<b>246</b>	<b>132.3</b>
Kildare	16	877	119	136.1
Meath	16	558	78	139.3
Wicklow	11	423	49	115.3
<b>Mid-West</b>	<b>48</b>	<b>1,015</b>	<b>120</b>	<b>118.1</b>
Clare	20	426	51	118.6
Limerick City	4	29	3	103.2
Limerick <sup>2</sup>	16	357	43	121.5
North Tipperary	8	203	23	113.1
<b>South-East</b>	<b>55</b>	<b>1,313</b>	<b>172</b>	<b>130.7</b>
Carlow	8	255	42	163.6
Kilkenny	11	392	51	130.4
South Tipperary	9	184	20	111.4
Waterford City	4	203	22	107.4
Waterford <sup>2</sup>	4	54	7	130.3
Wexford	19	225	29	131.0
<b>South-West</b>	<b>116</b>	<b>2,671</b>	<b>316</b>	<b>119.0</b>
Cork City	3	20	2	100.8
Cork <sup>2</sup>	63	2,152	246	114.5
Kerry	50	499	70	139.5
<b>State</b>	<b>627</b>	<b>13,791</b>	<b>1,729</b>	<b>125.4</b>

<sup>2</sup> Excluding cities

<sup>3</sup> Excluding one-off houses

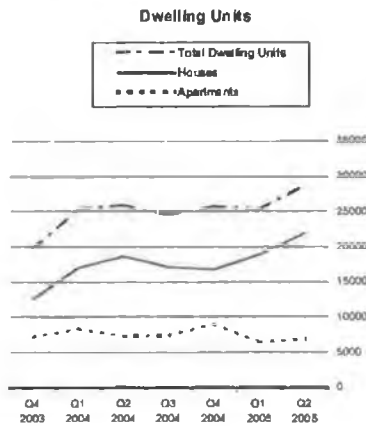
**Table 7 Details of Planning Permissions granted for new apartments, first quarter 2005, classified by region and county.**

Planning Region and County	Number of Permissions	Number of Units	Floor Area (000 sq.m)	Average Floor Area per Unit (sq.m)
<b>Apartments</b>				
<b>Border, Midland and Western</b>	<b>149</b>	<b>1,721</b>	<b>139</b>	<b>81.0</b>
<b>Border</b>	<b>68</b>	<b>849</b>	<b>68</b>	<b>80.4</b>
Cavan	7	64	5	84.8
Donegal	23	207	17	80.6
Leitrim	8	45	4	85.9
Louth	12	148	10	68.5
Monaghan	8	206	17	80.3
Sligo	10	179	16	87.1
<b>Midland</b>	<b>27</b>	<b>164</b>	<b>12</b>	<b>75.0</b>
Laois	4	40	2	58.0
Longford	12	38	3	79.3
Offaly	5	32	3	78.8
Westmeath	6	54	4	82.4
<b>West</b>	<b>54</b>	<b>708</b>	<b>59</b>	<b>83.1</b>
Galway City	12	185	13	72.5
Galway <sup>2</sup>	17	119	10	81.3
Mayo	14	290	26	91.3
Roscommon	11	114	9	81.3
<b>Southern and Eastern</b>	<b>267</b>	<b>4,716</b>	<b>348</b>	<b>73.8</b>
<b>Dublin</b>	<b>94</b>	<b>2,651</b>	<b>188</b>	<b>70.8</b>
Dublin City	49	1,779	126	70.7
Dun Laoghaire-Rathdown	13	142	13	90.5
Fingal	16	395	26	66.0
South Dublin	16	335	23	68.7
<b>Mid-East</b>	<b>40</b>	<b>574</b>	<b>42</b>	<b>73.2</b>
Kildare	11	314	22	71.3
Meath	16	192	14	73.6
Wicklow	13	68	5	80.8
<b>Mid-West</b>	<b>32</b>	<b>362</b>	<b>29</b>	<b>81.1</b>
Clare	13	135	9	69.2
Limerick City	6	94	11	112.2
Limerick <sup>2</sup>	9	125	9	71.3
North Tipperary	4	8	1	71.2
<b>South-East</b>	<b>31</b>	<b>206</b>	<b>15</b>	<b>74.4</b>
Carlow	4	67	5	67.7
Kilkenny	11	111	9	78.7
South Tipperary	4	13	1	75.3
Waterford City	1	1	0	92.0
Waterford <sup>2</sup>	2	2	0	54.0
Wexford	9	12	1	73.1
<b>South-West</b>	<b>70</b>	<b>923</b>	<b>74</b>	<b>79.7</b>
Cork City	14	111	9	85.3
Cork <sup>2</sup>	42	703	56	79.3
Kerry	14	109	6	77.1
<b>State</b>	<b>416</b>	<b>6,437</b>	<b>487</b>	<b>75.7</b>

<sup>2</sup> Excluding cities



## Planning Permissions Quarter 2 2005



### Number of Dwelling Units

	Houses	Apartments	Total
<b>Apr-Jun 2004</b>	18,653	7,313	25,966
<b>Apr-Jun 2005</b>	21,938	6,880	28,818

### New Houses approved up 17.6% in year

This release shows that for the second quarter of 2005, planning permissions were granted for 21,938 new houses, compared with 18,653 units for the same period in 2004, an increase of 17.6%. *See Table 4.*

The second quarter figures also show that:

- ◆ Planning permissions were granted for 28,818 dwelling units in the second quarter of 2005 and 25,966 in the second quarter of 2004. This is an increase of 11.0%. *See Table 4.*
- ◆ Planning permissions were granted for 6,880 new apartments. This compares with 7,313 units in the same quarter of 2004, a decrease of 5.9%. *See Table 7.*
- ◆ One-off houses accounted for 19.0% of all new dwelling units granted planning permission in this quarter. This compares with 25.0% for the same period in 2004. *See Table 5.*
- ◆ Total floor area planned was 5,730 thousand sq. metres in the second quarter of 2005. Of this, 65.7% was for new dwellings, 25.8% for other new constructions and 8.5% for extensions. The total floor area planned increased by 17.0% in comparison with the same quarter of 2004. *See Table 1.*

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**Table 1 Summary of Planning Permissions Granted, 1998-2005**

Period	Number of Permissions					Total Floor Area (000 m)			
	New Construction		Extension	Alteration and Conversion	Total	New Construction		Extension	Total
	Dwellings	Other				Dwellings	Other		
1998 1st Quarter	3,513	1,218	2,491	602	7,822	1,403	618	333	2,354
2nd "	3,654	1,182	3,087	671	8,794	1,383	521	368	2,292
3rd "	5,027	1,488	4,060	763	11,336	1,897	804	496	3,198
4th "	4,325	1,298	2,938	712	9,271	1,415	605	357	2,377
<b>Year</b>	<b>16,719</b>	<b>5,180</b>	<b>12,576</b>	<b>2,748</b>	<b>37,223</b>	<b>6,098</b>	<b>2,548</b>	<b>1,574</b>	<b>10,221</b>
1999 1st Quarter	5,201	-	-	-	-	-	-	-	-
2nd "	5,674	-	-	-	-	-	-	-	-
3rd "	6,517	-	-	-	-	-	-	-	-
4th "	6,203	-	-	-	-	-	-	-	-
<b>Year</b>	<b>23,595</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
2000 <sup>1</sup> 1st Quarter	6,630	-	-	-	-	-	-	-	-
2nd "	6,597	-	-	-	-	-	-	-	-
3rd "	6,893	1,449	4,026	762	13,310	3,223	1,166	525	4,906
4th "	6,212	1,354	3,067	612	11,265	3,019	665	417	4,301
<b>Year</b>	<b>26,332</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
2001 <sup>1</sup> 1st Quarter	6,333	1,455	2,986	674	11,448	2,909	1,084	510	4,503
2nd "	5,538	1,465	3,030	639	10,672	2,779	921	368	4,067
3rd "	6,157	1,671	3,715	786	12,329	2,513	998	453	3,964
4th "	5,585	1,606	3,108	754	11,051	2,262	1,020	391	3,672
<b>Year</b>	<b>23,613</b>	<b>6,197</b>	<b>12,837</b>	<b>2,853</b>	<b>45,500</b>	<b>10,483</b>	<b>4,023</b>	<b>1,722</b>	<b>16,206</b>
2002 1st Quarter	5,026	1,512	2,843	856	10,236	2,096	972	423	3,491
2nd "	4,547	1,349	2,883	665	9,444	2,505	873	370	3,748
3rd "	5,502	1,691	3,704	757	11,654	2,335	1,139	429	3,904
4th "	4,654	1,374	2,692	646	9,566	1,856	1,020	401	3,277
<b>Year</b>	<b>19,728</b>	<b>5,926</b>	<b>12,322</b>	<b>2,924</b>	<b>40,900</b>	<b>8,792</b>	<b>4,004</b>	<b>1,623</b>	<b>14,420</b>
2003 1st Quarter	4,846	1,278	2,713	645	9,482	1,797	713	365	2,874
2nd "	5,110	1,465	3,103	677	10,355	2,509	974	345	3,828
3rd "	5,583	1,693	3,457	689	11,422	2,832	1,184	411	4,427
4th "	5,410	1,496	2,886	566	10,358	2,473	1,066	376	3,915
<b>Year</b>	<b>20,949</b>	<b>5,932</b>	<b>12,159</b>	<b>2,577</b>	<b>41,617</b>	<b>9,611</b>	<b>3,937</b>	<b>1,497</b>	<b>15,044</b>
2004 1st Quarter	6,887	1,545	2,820	587	11,839	3,156	940	364	4,461
2nd "	7,563	1,660	3,511	652	13,386	3,344	1,156	398	4,898
3rd "	7,100	1,899	4,076	731	13,806	3,172	1,007	467	4,646
4th "	5,962	1,613	3,061	605	11,241	3,123	1,155	438	4,714
<b>Year</b>	<b>27,512</b>	<b>6,717</b>	<b>13,468</b>	<b>2,575</b>	<b>50,272</b>	<b>12,795</b>	<b>4,258</b>	<b>1,665</b>	<b>18,719</b>
2005 1st Quarter	6,170	1,571	3,028	588	11,355	3,299	985	427	4,711
2nd "	6,722	2,068	3,845	672	13,307	3,784	1,478	488	5,730

<sup>1</sup> For categories where floor area is a relevant measure

<sup>2</sup> A review of the series for new dwellings was undertaken and resulted in revised data for 1999 and the first half of 2000. Corresponding revised data were not available for floor area or for permissions other than for new dwellings for those periods.

**Table 2 Summary of Planning Permissions granted, second quarter 2005, classified by region, county and type of development.**

Planning Region and County	Number of Permissions					Total Floor Area (000 sq.m)			
	New Construction		Extension	Alteration and Conversion	Total	New Construction		Extension	Total <sup>1</sup>
	Dwellings	Other				Dwellings	Other		
<b>Border, Midland and Western</b>	<b>3,243</b>	<b>684</b>	<b>1,120</b>	<b>232</b>	<b>5,279</b>	<b>1,633</b>	<b>575</b>	<b>149</b>	<b>2,357</b>
<b>Border</b>	<b>1,570</b>	<b>320</b>	<b>501</b>	<b>98</b>	<b>2,489</b>	<b>834</b>	<b>354</b>	<b>58</b>	<b>1,246</b>
Cavan	285	57	93	14	449	132	30	18	180
Donegal	650	72	175	28	925	241	43	14	298
Leitrim	149	30	26	5	210	70	53	3	126
Louth	148	76	110	27	361	148	180	9	337
Monaghan	164	43	48	8	263	106	30	10	146
Sligo	174	42	49	16	281	137	19	4	160
<b>Midland</b>	<b>558</b>	<b>197</b>	<b>241</b>	<b>47</b>	<b>1,043</b>	<b>373</b>	<b>111</b>	<b>43</b>	<b>528</b>
Laois	115	35	50	8	208	124	23	9	157
Longford	191	85	56	10	342	136	56	8	200
Offaly	146	26	58	10	240	44	5	13	62
Westmeath	106	51	77	19	253	69	27	13	109
<b>West</b>	<b>1,115</b>	<b>167</b>	<b>378</b>	<b>87</b>	<b>1,747</b>	<b>426</b>	<b>109</b>	<b>48</b>	<b>583</b>
Galway City	14	10	35	18	77	9	5	5	20
Galway <sup>2</sup>	422	77	170	32	701	156	57	21	234
Mayo	371	38	123	25	557	134	35	17	186
Roscommon	308	42	50	12	412	128	12	5	144
<b>Southern and Eastern</b>	<b>3,479</b>	<b>1,384</b>	<b>2,725</b>	<b>440</b>	<b>8,028</b>	<b>2,130</b>	<b>904</b>	<b>339</b>	<b>3,373</b>
<b>Dublin</b>	<b>421</b>	<b>292</b>	<b>916</b>	<b>181</b>	<b>1,810</b>	<b>335</b>	<b>197</b>	<b>93</b>	<b>626</b>
Dublin City	160	145	345	96	746	82	71	38	192
Dun Laoghaire-Rathdown	100	33	233	26	392	65	34	22	121
Fingal	111	71	177	38	397	179	80	24	283
South Dublin	50	43	161	21	275	9	11	10	30
<b>Mid-East</b>	<b>619</b>	<b>211</b>	<b>427</b>	<b>68</b>	<b>1,325</b>	<b>504</b>	<b>168</b>	<b>55</b>	<b>727</b>
Kildare	193	71	139	15	418	184	36	15	235
Meath	177	68	140	21	406	227	60	21	308
Wicklow	249	72	148	32	501	92	73	19	184
<b>Mid-West</b>	<b>549</b>	<b>210</b>	<b>305</b>	<b>48</b>	<b>1,112</b>	<b>264</b>	<b>120</b>	<b>48</b>	<b>432</b>
Clare	190	62	91	10	353	106	23	8	137
Limerick City	8	32	29	13	82	20	40	4	65
Limerick <sup>2</sup>	227	72	115	10	424	85	35	27	146
North Tipperary	124	44	70	15	253	53	23	9	85
<b>South-East</b>	<b>841</b>	<b>358</b>	<b>493</b>	<b>75</b>	<b>1,767</b>	<b>461</b>	<b>240</b>	<b>61</b>	<b>761</b>
Carlow	87	42	58	3	190	112	41	8	162
Kilkenny	163	86	105	15	369	49	64	16	129
South Tipperary	134	82	80	16	312	123	70	7	200
Waterford City	6	15	35	12	68	1	2	3	6
Waterford <sup>2</sup>	124	33	70	12	239	45	11	7	62
Wexford	327	100	145	17	589	131	53	20	203
<b>South-West</b>	<b>1,049</b>	<b>313</b>	<b>584</b>	<b>68</b>	<b>2,014</b>	<b>566</b>	<b>179</b>	<b>82</b>	<b>827</b>
Cork City	25	15	61	4	105	36	33	4	73
Cork <sup>2</sup>	654	196	380	47	1,277	402	106	59	567
Kerry	370	102	143	17	632	128	39	19	187
<b>State</b>	<b>6,722</b>	<b>2,068</b>	<b>3,845</b>	<b>672</b>	<b>13,307</b>	<b>3,764</b>	<b>1,478</b>	<b>488</b>	<b>5,730</b>

<sup>1</sup> For categories where floor area is a relevant measure

<sup>2</sup> Excluding cities

**Table 3A Number of Planning Permissions granted, second quarter 2006, classified by region, type of development and functional category.**

Type of Development and Planning Region	Functional Category								Total
	Dwellings	Commercial Buildings	Buildings for Agriculture	Industrial Buildings	Govt., Health and Education	Other Buildings for Social Use	Civil Eng.	Other	
<b>New Construction</b>									
<b>Border, Midland and Western</b>	<b>3,243</b>	<b>190</b>	<b>111</b>	<b>73</b>	<b>46</b>	<b>27</b>	<b>118</b>	<b>119</b>	<b>3,927</b>
Border	1,570	90	52	22	20	16	55	65	1,890
Midland	558	60	23	37	19	5	29	24	755
West	1,115	40	36	14	7	6	34	30	1,282
<b>Southern and Eastern</b>	<b>3,479</b>	<b>338</b>	<b>264</b>	<b>81</b>	<b>80</b>	<b>59</b>	<b>227</b>	<b>335</b>	<b>4,863</b>
Dublin	421	83	1	18	23	11	36	120	713
Mid-East	619	53	43	20	19	9	22	45	830
Mid-West	549	52	61	5	8	4	41	39	759
South-East	841	77	80	18	16	23	61	83	1,199
South-West	1,049	73	79	20	14	12	67	48	1,362
<b>State</b>	<b>6,722</b>	<b>528</b>	<b>375</b>	<b>154</b>	<b>126</b>	<b>86</b>	<b>345</b>	<b>454</b>	<b>8,790</b>
<b>Extension</b>									
<b>Border, Midland and Western</b>	<b>920</b>	<b>99</b>	<b>16</b>	<b>26</b>	<b>26</b>	<b>33</b>	-	-	<b>1,120</b>
Border	414	43	9	11	12	12	-	-	501
Midland	184	30	1	9	5	12	-	-	241
West	322	26	6	6	9	9	-	-	378
<b>Southern and Eastern</b>	<b>2,316</b>	<b>192</b>	<b>44</b>	<b>49</b>	<b>89</b>	<b>35</b>	-	-	<b>2,725</b>
Dublin	809	54	2	15	30	6	-	-	916
Mid-East	376	26	4	2	14	5	-	-	427
Mid-West	245	27	12	6	7	8	-	-	305
South-East	401	46	9	7	25	5	-	-	493
South-West	485	39	17	19	13	11	-	-	584
<b>State</b>	<b>3,236</b>	<b>291</b>	<b>60</b>	<b>75</b>	<b>115</b>	<b>68</b>	-	-	<b>3,845</b>
<b>Alteration and Conversion</b>									
<b>Border, Midland and Western</b>	<b>72</b>	<b>130</b>	<b>2</b>	<b>5</b>	<b>17</b>	<b>6</b>	-	-	<b>232</b>
Border	34	53	1	1	7	2	-	-	98
Midland	12	27	1	1	5	1	-	-	47
West	26	50	-	3	5	3	-	-	87
<b>Southern and Eastern</b>	<b>163</b>	<b>199</b>	<b>4</b>	<b>12</b>	<b>44</b>	<b>18</b>	-	-	<b>440</b>
Dublin	81	69	1	5	19	6	-	-	181
Mid-East	24	28	-	2	11	3	-	-	68
Mid-West	13	29	1	2	2	1	-	-	48
South-East	14	46	1	3	7	4	-	-	75
South-West	31	27	1	-	5	4	-	-	68
<b>State</b>	<b>235</b>	<b>329</b>	<b>6</b>	<b>17</b>	<b>61</b>	<b>24</b>	-	-	<b>672</b>
<b>All Developments</b>									
<b>Border, Midland and Western</b>	<b>4,235</b>	<b>419</b>	<b>129</b>	<b>104</b>	<b>89</b>	<b>66</b>	<b>118</b>	<b>119</b>	<b>5,279</b>
Border	2,018	186	62	34	39	30	55	65	2,489
Midland	754	117	25	47	29	18	29	24	1,043
West	1,463	116	42	23	21	18	34	30	1,747
<b>Southern and Eastern</b>	<b>5,958</b>	<b>729</b>	<b>312</b>	<b>142</b>	<b>213</b>	<b>112</b>	<b>227</b>	<b>335</b>	<b>8,028</b>
Dublin	1,311	206	4	38	72	23	36	120	1,810
Mid-East	1,019	107	47	24	44	17	22	45	1,325
Mid-West	807	108	74	13	17	13	41	39	1,112
South-East	1,255	169	90	28	48	32	61	83	1,767
South-West	1,565	139	97	39	32	27	67	48	2,014
<b>State</b>	<b>10,193</b>	<b>1,148</b>	<b>441</b>	<b>246</b>	<b>302</b>	<b>178</b>	<b>345</b>	<b>454</b>	<b>13,307</b>

\* No permissions

**Table 3B Total Floor Area planned (000 sq.m) in new construction and extensions, second quarter 2006, classified by region and functional category.**

Type of Development and Planning Region	Functional Category						Total <sup>1</sup>
	Dwellings	Commercial Buildings	Buildings for Agriculture	Industrial Buildings	Govt., Health and Education	Other Buildings for Social Use	
<b>New Construction</b>							
<b>Border, Midland and Western</b>	<b>1,633</b>	<b>357</b>	<b>37</b>	<b>116</b>	<b>45</b>	<b>20</b>	<b>2,208</b>
Border	834	227	20	73	20	15	1,188
Midland	373	57	7	27	18	2	484
West	426	73	10	16	6	3	536
<b>Southern and Eastern</b>	<b>2,130</b>	<b>594</b>	<b>158</b>	<b>68</b>	<b>37</b>	<b>45</b>	<b>3,034</b>
Dublin	335	170	0	5	9	12	532
Mid-East	504	93	18	39	10	9	672
Mid-West	264	81	28	2	5	3	384
South-East	461	128	78	12	7	14	701
South-West	566	123	35	10	5	6	745
<b>State</b>	<b>3,764</b>	<b>952</b>	<b>196</b>	<b>184</b>	<b>82</b>	<b>65</b>	<b>5,242</b>
<b>Extension</b>							
<b>Border, Midland and Western</b>	<b>64</b>	<b>45</b>	<b>5</b>	<b>21</b>	<b>5</b>	<b>9</b>	<b>149</b>
Border	28	11	3	10	2	3	58
Midland	14	15	0	9	1	4	43
West	22	19	2	2	1	2	48
<b>Southern and Eastern</b>	<b>146</b>	<b>93</b>	<b>32</b>	<b>24</b>	<b>36</b>	<b>8</b>	<b>339</b>
Dublin	40	32	0	12	6	3	93
Mid-East	30	12	4	0	8	1	55
Mid-West	17	15	7	3	4	2	48
South-East	27	9	9	2	14	1	61
South-West	32	24	12	7	4	2	82
<b>State</b>	<b>211</b>	<b>138</b>	<b>37</b>	<b>45</b>	<b>40</b>	<b>17</b>	<b>488</b>
<b>Total New Construction and Extension</b>							
<b>Border, Midland and Western</b>	<b>1,698</b>	<b>403</b>	<b>42</b>	<b>137</b>	<b>49</b>	<b>28</b>	<b>2,357</b>
Border	862	238	23	83	22	17	1,246
Midland	388	72	7	36	19	6	528
West	448	93	12	18	8	5	583
<b>Southern and Eastern</b>	<b>2,277</b>	<b>687</b>	<b>191</b>	<b>92</b>	<b>73</b>	<b>53</b>	<b>3,373</b>
Dublin	376	202	0	17	15	15	626
Mid-East	534	105	21	39	18	10	727
Mid-West	281	97	34	5	10	5	432
South-East	488	137	87	14	20	15	761
South-West	598	147	47	17	10	8	827
<b>State</b>	<b>3,975</b>	<b>1,090</b>	<b>233</b>	<b>229</b>	<b>122</b>	<b>82</b>	<b>5,730</b>

<sup>1</sup> For categories where floor area is a relevant measure  
NOTE: 0 implies less than 500 sq.m

**Table 4 Summary of Planning Permissions Granted for new houses and apartments, 1998-2005**

Period	Houses				Apartments			
	Number of Permissions	Number of Units	Floor Area (000 m)	Average Floor Area per Unit (m)	Number of Permissions	Number of Units	Floor Area (000 m)	Average Floor Area per Unit (m)
1998 1st Quarter	3,304	9,280	1,288	138.5	206	1,600	115	71.6
2nd "	3,632	9,170	1,251	136.4	218	1,960	128	64.7
3rd "	4,782	12,232	1,754	143.4	234	2,035	143	70.5
4th "	4,119	9,276	1,283	138.3	204	1,816	130	71.8
<b>Year</b>	<b>15,847</b>	<b>39,958</b>	<b>5,574</b>	<b>139.5</b>	<b>862</b>	<b>7,431</b>	<b>516</b>	<b>69.5</b>
1999 <sup>1</sup> 1st Quarter	-	14,370	-	-	-	3,194	-	-
2nd "	-	14,303	-	-	-	3,410	-	-
3rd "	-	17,231	-	-	-	2,907	-	-
4th "	-	17,891	-	-	-	3,290	-	-
<b>Year</b>	<b>-</b>	<b>63,795</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>12,801</b>	<b>-</b>	<b>-</b>
2000 <sup>1</sup> 1st Quarter	-	17,163	-	-	-	4,203	-	-
2nd "	-	18,985	-	-	-	3,914	-	-
3rd "	6,436	19,574	2,781	142.1	443	5,157	408	78.7
4th "	5,791	18,106	2,664	147.0	405	4,141	297	71.7
<b>Year</b>	<b>-</b>	<b>73,828</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>17,415</b>	<b>-</b>	<b>-</b>
2001 1st Quarter	5,891	16,492	2,427	147.2	435	6,066	475	78.3
2nd "	5,157	16,104	2,402	149.2	378	4,785	370	77.4
3rd "	5,741	14,452	2,223	153.8	411	3,561	283	79.4
4th "	5,220	13,618	1,897	146.6	361	3,368	262	77.9
<b>Year</b>	<b>22,009</b>	<b>60,666</b>	<b>9,049</b>	<b>149.2</b>	<b>1,580</b>	<b>17,780</b>	<b>1,390</b>	<b>78.2</b>
2002 1st Quarter	4,638	12,105	1,751	144.7	370	4,200	336	79.9
2nd "	4,192	15,236	2,103	138.1	350	5,163	391	75.7
3rd "	5,091	13,501	1,951	144.5	401	4,771	368	77.2
4th "	4,303	10,213	1,523	149.1	343	4,125	327	79.2
<b>Year</b>	<b>18,224</b>	<b>51,055</b>	<b>7,328</b>	<b>143.6</b>	<b>1,464</b>	<b>18,259</b>	<b>1,422</b>	<b>77.9</b>
2003 1st Quarter	4,469	9,511	1,464	153.9	370	4,030	325	80.6
2nd "	4,752	13,118	1,893	144.3	348	7,484	605	80.8
3rd "	5,132	14,394	2,035	141.4	439	10,065	788	78.4
4th "	4,970	12,582	1,905	151.4	435	7,170	562	78.3
<b>Year</b>	<b>19,323</b>	<b>49,605</b>	<b>7,297</b>	<b>147.1</b>	<b>1,592</b>	<b>28,749</b>	<b>2,281</b>	<b>79.3</b>
2004 1st Quarter	6,426	17,054	2,509	147.1	457	8,347	646	77.4
2nd "	7,123	18,653	2,770	148.5	425	7,313	543	74.2
3rd "	6,647	17,097	2,580	150.9	446	7,389	579	78.3
4th "	5,555	16,772	2,428	144.8	403	9,018	691	76.6
<b>Year</b>	<b>25,751</b>	<b>69,576</b>	<b>10,287</b>	<b>147.8</b>	<b>1,731</b>	<b>32,077</b>	<b>2,459</b>	<b>76.6</b>
2005 1st Quarter	5,749	18,913	2,810	148.6	416	6,437	487	75.7
2nd "	6,244	21,938	3,186	145.2	472	8,880	553	80.4

<sup>1</sup> A review of the series for new dwellings was undertaken and resulted in revised data for 1999 and the first half of 2000. Corresponding revised data were not available for floor area or for permissions other than for new dwellings for those periods.

**Table 5 Details of Planning Permissions granted for new one-off houses, second quarter 2005, classified by region and county.**

Planning Region and County	Number of Permissions	Number of Units	Floor Area (000 sq.m)	Average Floor Area per Unit (sq.m)
<b>One-Off Houses</b>				
<b>Border, Midland and Western</b>	<b>2,697</b>	<b>2,697</b>	<b>577</b>	<b>214.1</b>
<b>Border</b>	<b>1,320</b>	<b>1,320</b>	<b>286</b>	<b>217.0</b>
Cavan	221	221	51	228.6
Donegal	575	575	118	205.9
Leitrim	128	128	25	195.3
Louth	131	131	31	233.2
Monaghan	136	136	34	252.4
Sligo	129	129	28	214.1
<b>Midland</b>	<b>427</b>	<b>427</b>	<b>95</b>	<b>223.1</b>
Laois	86	86	21	241.2
Longford	123	123	26	208.0
Offaly	127	127	28	221.9
Westmeath	91	91	21	228.3
<b>West</b>	<b>950</b>	<b>950</b>	<b>196</b>	<b>206.1</b>
Galway City	8	8	2	242.1
Galway <sup>2</sup>	382	382	80	209.4
Mayo	312	312	66	213.1
Roscommon	248	248	47	190.9
<b>Southern and Eastern</b>	<b>2,791</b>	<b>2,791</b>	<b>581</b>	<b>208.3</b>
<b>Dublin</b>	<b>265</b>	<b>265</b>	<b>41</b>	<b>153.2</b>
Dublin City	96	96	11	117.4
Dun Laoghaire-Rathdown	62	62	11	176.0
Fingal	66	66	13	194.2
South Dublin	41	41	6	136.7
<b>Mid-East</b>	<b>487</b>	<b>487</b>	<b>110</b>	<b>225.4</b>
Kildare	153	153	37	242.4
Meath	137	137	32	236.8
Wicklow	197	197	40	204.2
<b>Mid-West</b>	<b>457</b>	<b>457</b>	<b>101</b>	<b>220.4</b>
Clare	152	152	33	215.1
Limerick City	2	2	0	102.0
Limerick <sup>2</sup>	194	194	44	224.3
North Tipperary	109	109	24	222.8
<b>South-East</b>	<b>724</b>	<b>724</b>	<b>155</b>	<b>214.6</b>
Carlow	71	71	16	220.5
Kilkenny	143	143	33	231.6
South Tipperary	100	100	21	209.0
Waterford City	5	5	1	178.2
Waterford <sup>2</sup>	113	113	23	207.9
Wexford	292	292	61	209.9
<b>South-West</b>	<b>858</b>	<b>858</b>	<b>175</b>	<b>203.8</b>
Cork City	7	7	1	191.1
Cork <sup>2</sup>	545	545	113	208.0
Kerry	306	306	60	196.7
<b>State</b>	<b>5,488</b>	<b>5,488</b>	<b>1,159</b>	<b>211.1</b>

<sup>2</sup> Excluding cities

**Table 6 Details of Planning Permissions granted for new houses<sup>3</sup>, second quarter 2005, classified by region and county.**

Planning Region and County	Number of Permissions	Number of Units	Floor Area (000 sq.m)	Average Floor Area per Unit (sq.m)
<b>Houses<sup>3</sup></b>				
<b>Border, Midland and Western</b>	<b>390</b>	<b>6,879</b>	<b>858</b>	<b>124.7</b>
<b>Border</b>	<b>180</b>	<b>3,571</b>	<b>438</b>	<b>122.7</b>
Cavan	46	558	72	128.2
Donegal	60	641	88	137.6
Leitrim	15	270	36	134.5
Louth	10	867	97	112.3
Monaghan	20	577	65	113.4
Sligo	29	658	79	120.4
<b>Midland</b>	<b>88</b>	<b>1,759</b>	<b>224</b>	<b>127.2</b>
Laois	18	737	87	118.4
Longford	54	759	106	139.8
Offaly	10	124	15	119.3
Westmeath	6	139	16	113.0
<b>West</b>	<b>122</b>	<b>1,549</b>	<b>196</b>	<b>126.5</b>
Galway <sup>2</sup>	28	509	61	119.0
Mayo	40	450	56	124.8
Roscommon	54	590	79	134.2
<b>Southern and Eastern</b>	<b>366</b>	<b>9,571</b>	<b>1,169</b>	<b>122.1</b>
<b>Dublin</b>	<b>50</b>	<b>1,117</b>	<b>130</b>	<b>115.9</b>
Dublin City	11	26	4	141.5
Dun Laoghaire-Rathdown	13	37	6	160.7
Fingal	22	1,037	118	113.5
South Dublin	4	17	2	127.5
<b>Mid-East</b>	<b>64</b>	<b>2,415</b>	<b>321</b>	<b>133.0</b>
Kildare	17	935	117	125.5
Meath	23	1,276	179	140.1
Wicklow	24	204	25	123.2
<b>Mid-West</b>	<b>53</b>	<b>957</b>	<b>128</b>	<b>133.8</b>
Clare	21	455	64	141.3
Limerick <sup>2</sup>	24	304	37	121.6
North Tipperary	8	198	27	135.3
<b>South-East</b>	<b>69</b>	<b>2,256</b>	<b>262</b>	<b>116.1</b>
Carlow	10	572	65	113.6
Kilkenny	11	106	14	131.3
South Tipperary	19	924	100	108.2
Waterford City	1	2	0	124.0
Waterford <sup>2</sup>	7	181	20	111.5
Wexford	21	471	63	133.0
<b>South-West</b>	<b>130</b>	<b>2,826</b>	<b>328</b>	<b>116.1</b>
Cork City	7	90	9	101.9
Cork <sup>2</sup>	73	2,282	256	112.1
Kerry	50	454	63	139.2
<b>State</b>	<b>756</b>	<b>16,450</b>	<b>2,027</b>	<b>123.2</b>

<sup>2</sup> Excluding cities

<sup>3</sup> Excluding one-off houses

**Table 7 Details of Planning Permissions granted for new apartments, second quarter 2005, classified by region and county.**

Planning Region and County	Number of Permissions	Number of Units	Floor Area (000 sq.m)	Average Floor Area per Unit (sq.m)
<b>Apartments</b>				
<b>Border, Midland and Western</b>	<b>154</b>	<b>2,244</b>	<b>186</b>	<b>83.0</b>
<b>Border</b>	<b>68</b>	<b>1,153</b>	<b>97</b>	<b>84.5</b>
Cavan	18	135	10	76.6
Donegal	15	271	34	126.6
Leitrim	6	123	9	69.5
Louth	7	294	20	67.4
Monaghan	8	92	6	68.4
Sligo	14	238	18	76.1
<b>Midland</b>	<b>43</b>	<b>638</b>	<b>54</b>	<b>85.0</b>
Laois	11	200	16	81.6
Longford	14	61	5	75.9
Offaly	9	14	1	72.3
Westmeath	9	363	32	88.9
<b>West</b>	<b>43</b>	<b>453</b>	<b>35</b>	<b>76.4</b>
Galway City	6	106	7	66.5
Galway <sup>2</sup>	12	203	15	75.3
Mayo	19	128	11	87.0
Roscommon	6	16	1	71.0
<b>Southern and Eastern</b>	<b>318</b>	<b>4,636</b>	<b>367</b>	<b>79.1</b>
<b>Dublin</b>	<b>103</b>	<b>1,927</b>	<b>155</b>	<b>80.3</b>
Dublin City	51	839	65	77.7
Dun Laoghaire-Rathdown	24	456	40	88.0
Fingal	23	613	48	78.3
South Dublin	5	19	1	68.1
<b>Mid-East</b>	<b>67</b>	<b>902</b>	<b>70</b>	<b>77.2</b>
Kildare	23	414	30	71.5
Meath	17	214	16	75.3
Wicklow	27	274	24	87.4
<b>Mid-West</b>	<b>39</b>	<b>504</b>	<b>35</b>	<b>70.4</b>
Clare	17	134	9	64.1
Limerick City	6	268	20	74.9
Limerick <sup>2</sup>	9	63	4	70.3
North Tipperary	7	39	2	61.6
<b>South-East</b>	<b>48</b>	<b>462</b>	<b>44</b>	<b>95.3</b>
Carlow	6	296	32	107.5
Kilkenny	9	28	2	81.4
South Tipperary	15	42	2	54.0
Waterford <sup>2</sup>	4	15	1	66.3
Wexford	14	81	7	82.6
<b>South-West</b>	<b>61</b>	<b>841</b>	<b>63</b>	<b>74.5</b>
Cork City	11	323	25	78.6
Cork <sup>2</sup>	36	465	33	70.5
Kerry	14	53	5	85.2
<b>State</b>	<b>472</b>	<b>6,880</b>	<b>553</b>	<b>80.4</b>

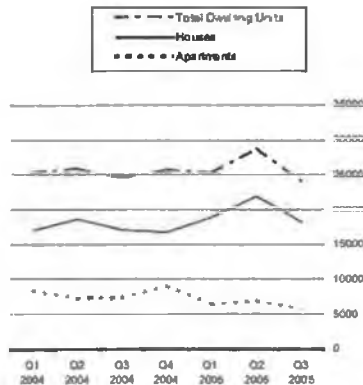
<sup>2</sup> Excluding cities





## Planning Permissions Quarter 3 2005

Dwelling Units



Number of Dwelling Units

	Houses	Apartments	Total
Jul-Sep 2004	17,097	7,399	24,496
Jul-Sep 2005	18,190	5,791	23,981

### New Houses approved up 6.4% in year

This release shows that for the third quarter of 2005, planning permissions were granted for 18,190 new houses, compared with 17,097 units for the same period in 2004, an increase of 6.4%. *See Table 4.*

The third quarter figures also show that:

- ◆ Planning permissions were granted for 23,981 dwelling units in the third quarter of 2005 and 24,496 in the third quarter of 2004. This is a decrease of 2.1%. *See Table 4.*
- ◆ Planning permissions were granted for 5,791 new apartments. This compares with 7,399 units in the same quarter of 2004, a decrease of 21.7%. *See Table 7.*
- ◆ One-off houses accounted for 22.2% of all new dwelling units granted planning permission in this quarter. This compares with 24.7% for the same period in 2004. *See Table 5.*
- ◆ Total floor area planned was 5,076 thousand sq. metres in the third quarter of 2005. Of this, 63.4% was for new dwellings, 26.1% for other new constructions and 10.4% for extensions. The total floor area planned increased by 9.3% in comparison with the same quarter of 2004. *See Table 1.*

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**Table 1 Summary of Planning Permissions Granted, 1998-2005**

Period	Number of Permissions					Total Floor Area (000 m)				
	New Construction		Extension	Alteration and Conversion	Total	New Construction			Total	
	Dwellings	Other				Dwellings	Other	Extension		
1998	1st Quarter	3,513	1,216	2,491	602	7,822	1,403	618	333	2,354
	2nd "	3,854	1,182	3,087	871	8,794	1,383	521	388	2,292
	3rd "	5,027	1,486	4,060	763	11,336	1,867	804	496	3,198
	4th "	4,325	1,286	2,938	712	9,271	1,415	605	357	2,377
	<b>Year</b>	<b>16,719</b>	<b>5,160</b>	<b>12,576</b>	<b>2,748</b>	<b>37,223</b>	<b>6,068</b>	<b>2,548</b>	<b>1,574</b>	<b>10,221</b>
1999	1st Quarter	5,201	-	-	-	-	-	-	-	-
	2nd "	5,874	-	-	-	-	-	-	-	-
	3rd "	6,517	-	-	-	-	-	-	-	-
	4th "	6,203	-	-	-	-	-	-	-	-
	<b>Year</b>	<b>23,595</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
2000 <sup>1</sup>	1st Quarter	6,630	-	-	-	-	-	-	-	-
	2nd "	6,597	-	-	-	-	-	-	-	-
	3rd "	6,893	1,449	4,026	762	13,310	3,223	1,159	525	4,906
	4th "	6,212	1,354	3,087	612	11,265	3,019	865	417	4,301
	<b>Year</b>	<b>26,332</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
2001	1st Quarter	6,333	1,455	2,888	674	11,448	2,909	1,084	510	4,503
	2nd "	5,538	1,465	3,030	639	10,672	2,779	921	368	4,067
	3rd "	6,157	1,671	3,715	788	12,329	2,513	998	453	3,864
	4th "	5,585	1,606	3,106	754	11,051	2,262	1,020	391	3,672
	<b>Year</b>	<b>23,613</b>	<b>6,197</b>	<b>12,837</b>	<b>2,853</b>	<b>45,500</b>	<b>10,463</b>	<b>4,023</b>	<b>1,722</b>	<b>16,206</b>
2002	1st Quarter	5,025	1,512	2,843	858	10,236	2,096	972	423	3,491
	2nd "	4,547	1,349	2,883	685	9,444	2,505	873	370	3,748
	3rd "	5,502	1,691	3,704	757	11,654	2,335	1,139	429	3,904
	4th "	4,654	1,374	2,892	646	9,566	1,856	1,020	401	3,277
	<b>Year</b>	<b>19,728</b>	<b>5,926</b>	<b>12,322</b>	<b>2,924</b>	<b>40,900</b>	<b>8,792</b>	<b>4,004</b>	<b>1,623</b>	<b>14,420</b>
2003	1st Quarter	4,846	1,278	2,713	645	9,482	1,797	713	365	2,874
	2nd "	5,110	1,465	3,103	677	10,355	2,509	974	345	3,828
	3rd "	5,583	1,893	3,457	689	11,422	2,832	1,184	411	4,427
	4th "	5,410	1,496	2,886	566	10,358	2,473	1,066	376	3,915
	<b>Year</b>	<b>20,949</b>	<b>5,932</b>	<b>12,159</b>	<b>2,577</b>	<b>41,617</b>	<b>9,611</b>	<b>3,937</b>	<b>1,497</b>	<b>15,044</b>
2004	1st Quarter	6,887	1,545	2,820	587	11,839	3,156	940	364	4,461
	2nd "	7,583	1,660	3,511	652	13,386	3,344	1,156	398	4,898
	3rd "	7,100	1,899	4,078	731	13,808	3,172	1,007	467	4,646
	4th "	5,982	1,613	3,061	605	11,241	3,123	1,155	438	4,714
	<b>Year</b>	<b>27,512</b>	<b>6,717</b>	<b>13,468</b>	<b>2,575</b>	<b>50,272</b>	<b>12,795</b>	<b>4,258</b>	<b>1,665</b>	<b>18,719</b>
2005	1st Quarter	6,170	1,571	3,028	586	11,355	3,299	985	427	4,711
	2nd "	6,722	2,068	3,845	672	13,307	3,764	1,478	488	5,730
	3rd "	6,485	2,189	4,476	778	13,928	3,219	1,327	530	5,076

<sup>1</sup> For categories where floor area is a relevant measure

<sup>2</sup> A review of the series for new dwellings was undertaken and resulted in revised data for 1999 and the first half of 2000. Corresponding revised data were not available for floor area or for permissions other than for new dwellings for those periods.

**Table 2 Summary of Planning Permissions granted, third quarter 2005, classified by region, county and type of development.**

Planning Region and County	Number of Permissions				Total Floor Area (000 sq.m)				
	New Construction		Extension	Alteration and Conversion	Total	New Construction		Extension	Total <sup>1</sup>
	Dwellings	Other				Dwellings	Other		
<b>Border, Midland and Western</b>	<b>3,010</b>	<b>831</b>	<b>1,318</b>	<b>258</b>	<b>5,417</b>	<b>1,320</b>	<b>488</b>	<b>185</b>	<b>1,993</b>
<b>Border</b>	<b>1,464</b>	<b>393</b>	<b>580</b>	<b>121</b>	<b>2,558</b>	<b>626</b>	<b>188</b>	<b>81</b>	<b>895</b>
Cavan	284	87	93	17	481	119	42	13	174
Donegal	559	105	193	27	884	199	37	25	261
Leitrim	168	37	25	5	235	77	23	4	105
Louth	165	59	145	44	413	66	29	16	112
Monaghan	152	63	67	11	293	76	43	15	135
Sligo	136	42	57	17	252	88	13	8	109
<b>Midland</b>	<b>418</b>	<b>216</b>	<b>268</b>	<b>51</b>	<b>953</b>	<b>324</b>	<b>131</b>	<b>35</b>	<b>490</b>
Laois	132	68	110	18	328	115	23	11	149
Longford	95	68	34	5	202	102	72	4	178
Offaly	91	33	55	17	196	60	19	9	88
Westmeath	100	47	69	11	227	47	17	10	75
<b>West</b>	<b>1,128</b>	<b>222</b>	<b>470</b>	<b>86</b>	<b>1,906</b>	<b>371</b>	<b>169</b>	<b>69</b>	<b>608</b>
Galway City	20	20	45	16	101	10	46	7	63
Galway <sup>2</sup>	461	78	197	25	761	143	38	23	204
Mayo	381	59	156	33	629	105	33	32	170
Roscommon	266	65	72	12	415	112	52	8	172
<b>Southern and Eastern</b>	<b>3,475</b>	<b>1,358</b>	<b>3,158</b>	<b>520</b>	<b>8,511</b>	<b>1,899</b>	<b>839</b>	<b>345</b>	<b>3,083</b>
<b>Dublin</b>	<b>414</b>	<b>303</b>	<b>1,024</b>	<b>185</b>	<b>1,926</b>	<b>390</b>	<b>176</b>	<b>94</b>	<b>660</b>
Dublin City	161	126	416	103	806	109	40	33	182
Dun Laoghaire-Rathdown	99	63	277	28	467	118	38	21	177
Fingal	94	57	181	27	359	68	39	19	126
South Dublin	60	57	150	27	294	96	59	20	174
<b>Mid-East</b>	<b>540</b>	<b>199</b>	<b>522</b>	<b>78</b>	<b>1,339</b>	<b>314</b>	<b>173</b>	<b>62</b>	<b>548</b>
Kildare	174	55	179	15	423	90	20	21	131
Meath	196	83	156	25	460	157	124	23	304
Wicklow	170	61	187	38	456	67	28	18	113
<b>Mid-West</b>	<b>487</b>	<b>187</b>	<b>355</b>	<b>59</b>	<b>1,088</b>	<b>245</b>	<b>90</b>	<b>41</b>	<b>376</b>
Clare	196	72	130	14	412	59	21	11	91
Limerick City	3	20	34	13	70	1	32	4	37
Limerick <sup>2</sup>	196	62	125	17	400	154	30	16	199
North Tipperary	92	33	66	15	206	31	7	10	49
<b>South-East</b>	<b>867</b>	<b>345</b>	<b>543</b>	<b>110</b>	<b>1,865</b>	<b>434</b>	<b>208</b>	<b>74</b>	<b>716</b>
Carlow	72	25	52	14	163	17	12	8	36
Kilkenny	168	80	131	20	399	106	34	16	156
South Tipperary	174	77	75	16	342	112	50	18	179
Waterford City	13	17	47	21	98	11	12	8	31
Waterford <sup>2</sup>	113	24	84	8	229	36	8	9	53
Wexford	327	122	154	31	634	153	93	14	260
<b>South-West</b>	<b>1,167</b>	<b>324</b>	<b>714</b>	<b>88</b>	<b>2,293</b>	<b>516</b>	<b>192</b>	<b>75</b>	<b>783</b>
Cork City	34	18	86	1	139	23	17	11	50
Cork <sup>2</sup>	741	192	455	69	1,457	378	138	46	563
Kerry	392	114	173	18	697	115	37	18	170
<b>State</b>	<b>6,485</b>	<b>2,189</b>	<b>4,476</b>	<b>778</b>	<b>13,928</b>	<b>3,219</b>	<b>1,327</b>	<b>530</b>	<b>5,076</b>

<sup>1</sup> For categories where floor area is a relevant measure  
<sup>2</sup> Excluding cities

**Table 3A Number of Planning Permissions granted, third quarter 2005, classified by region, type of development and functional category.**

Type of Development and Planning Region	Functional Category								Total
	Dwellings	Commercial Buildings	Buildings for Agriculture	Industrial Buildings	Govt., Health and Education	Other Buildings for Social Use	Civil Eng.	Other	
<b>New Construction</b>									
<b>Border, Midland and Western</b>	<b>3,010</b>	<b>237</b>	<b>211</b>	<b>58</b>	<b>50</b>	<b>34</b>	<b>101</b>	<b>140</b>	<b>3,841</b>
Border	1,464	98	101	32	17	15	51	79	1,857
Midland	418	71	48	14	21	7	31	24	634
West	1,128	68	62	12	12	12	19	37	1,350
<b>Southern and Eastern</b>	<b>3,475</b>	<b>314</b>	<b>259</b>	<b>83</b>	<b>95</b>	<b>55</b>	<b>219</b>	<b>333</b>	<b>4,833</b>
Dublin	414	72	5	21	25	8	33	139	717
Mid-East	540	56	42	15	13	7	30	36	739
Mid-West	487	32	57	12	9	8	35	34	674
South-East	867	82	83	21	24	13	51	71	1,212
South-West	1,167	72	72	14	24	19	70	53	1,491
<b>State</b>	<b>6,485</b>	<b>551</b>	<b>470</b>	<b>141</b>	<b>145</b>	<b>89</b>	<b>320</b>	<b>473</b>	<b>8,674</b>
<b>Extension</b>									
<b>Border, Midland and Western</b>	<b>1,058</b>	<b>115</b>	<b>23</b>	<b>25</b>	<b>81</b>	<b>16</b>	<b>-</b>	<b>-</b>	<b>1,318</b>
Border	459	49	10	12	40	10	-	-	580
Midland	218	28	4	4	12	2	-	-	268
West	381	38	9	9	29	4	-	-	470
<b>Southern and Eastern</b>	<b>2,695</b>	<b>198</b>	<b>49</b>	<b>42</b>	<b>149</b>	<b>25</b>	<b>-</b>	<b>-</b>	<b>3,158</b>
Dublin	903	64	-	8	45	4	-	-	1,024
Mid-East	442	27	4	10	33	6	-	-	522
Mid-West	296	25	14	3	13	4	-	-	355
South-East	434	40	17	13	32	7	-	-	543
South-West	620	42	14	8	26	4	-	-	714
<b>State</b>	<b>3,753</b>	<b>313</b>	<b>72</b>	<b>67</b>	<b>230</b>	<b>41</b>	<b>-</b>	<b>-</b>	<b>4,476</b>
<b>Alteration and Conversion</b>									
<b>Border, Midland and Western</b>	<b>75</b>	<b>150</b>	<b>2</b>	<b>3</b>	<b>23</b>	<b>5</b>	<b>-</b>	<b>-</b>	<b>258</b>
Border	34	74	2	-	8	3	-	-	121
Midland	17	28	-	1	5	-	-	-	51
West	24	48	-	2	10	2	-	-	86
<b>Southern and Eastern</b>	<b>171</b>	<b>255</b>	<b>7</b>	<b>8</b>	<b>54</b>	<b>25</b>	<b>-</b>	<b>-</b>	<b>520</b>
Dublin	72	82	-	4	18	9	-	-	185
Mid-East	21	41	2	2	9	3	-	-	78
Mid-West	14	33	3	1	5	3	-	-	59
South-East	27	61	1	-	14	7	-	-	110
South-West	37	36	1	1	8	3	-	-	88
<b>State</b>	<b>246</b>	<b>405</b>	<b>9</b>	<b>11</b>	<b>77</b>	<b>30</b>	<b>-</b>	<b>-</b>	<b>778</b>
<b>All Developments</b>									
<b>Border, Midland and Western</b>	<b>4,143</b>	<b>502</b>	<b>236</b>	<b>86</b>	<b>154</b>	<b>55</b>	<b>101</b>	<b>140</b>	<b>5,417</b>
Border	1,957	221	113	44	65	28	51	79	2,558
Midland	653	127	52	19	38	9	31	24	953
West	1,533	154	71	23	51	18	19	37	1,906
<b>Southern and Eastern</b>	<b>6,341</b>	<b>767</b>	<b>315</b>	<b>133</b>	<b>298</b>	<b>105</b>	<b>219</b>	<b>333</b>	<b>8,511</b>
Dublin	1,389	218	5	33	88	21	33	139	1,926
Mid-East	1,003	124	48	27	55	16	30	36	1,339
Mid-West	797	90	74	16	27	15	35	34	1,088
South-East	1,328	183	101	34	70	27	51	71	1,865
South-West	1,824	152	87	23	58	26	70	53	2,293
<b>State</b>	<b>10,484</b>	<b>1,269</b>	<b>551</b>	<b>219</b>	<b>452</b>	<b>160</b>	<b>320</b>	<b>473</b>	<b>13,928</b>

- No permissions

**Table 3B Total Floor Area planned (000 sq.m) in new construction and extensions, third quarter 2006, classified by region and functional category.**

Type of Development and Planning Region	Functional Category						Total <sup>1</sup>
	Dwellings	Commercial Buildings	Buildings for Agriculture	Industrial Buildings	Govt., Health and Education	Other Buildings for Social Use	
<b>New Construction</b>							
<b>Border, Midland and Western</b>	<b>1,320</b>	<b>297</b>	<b>77</b>	<b>54</b>	<b>34</b>	<b>26</b>	<b>1,808</b>
Border	626	92	44	21	13	18	814
Midland	324	85	16	13	16	2	455
West	371	120	18	20	5	6	539
<b>Southern and Eastern</b>	<b>1,899</b>	<b>477</b>	<b>110</b>	<b>110</b>	<b>67</b>	<b>75</b>	<b>2,738</b>
Dublin	390	99	2	38	22	15	566
Mid-East	314	93	21	29	4	26	487
Mid-West	245	49	18	5	11	7	335
South-East	434	132	36	20	13	7	642
South-West	516	104	32	19	18	20	708
<b>State</b>	<b>3,219</b>	<b>774</b>	<b>187</b>	<b>164</b>	<b>101</b>	<b>101</b>	<b>4,546</b>
<b>Extension</b>							
<b>Border, Midland and Western</b>	<b>74</b>	<b>51</b>	<b>9</b>	<b>27</b>	<b>19</b>	<b>6</b>	<b>185</b>
Border	31	22	3	10	10	4	81
Midland	15	12	1	3	4	0	35
West	28	17	4	14	5	1	69
<b>Southern and Eastern</b>	<b>159</b>	<b>104</b>	<b>15</b>	<b>24</b>	<b>37</b>	<b>6</b>	<b>345</b>
Dublin	41	29	-	3	21	1	94
Mid-East	32	15	3	4	6	2	62
Mid-West	19	13	4	2	3	1	41
South-East	30	23	5	9	5	1	74
South-West	37	24	4	5	3	1	75
<b>State</b>	<b>232</b>	<b>155</b>	<b>24</b>	<b>51</b>	<b>56</b>	<b>12</b>	<b>530</b>
<b>Total New Construction and Extension</b>							
<b>Border, Midland and Western</b>	<b>1,394</b>	<b>348</b>	<b>86</b>	<b>81</b>	<b>53</b>	<b>32</b>	<b>1,993</b>
Border	657	114	47	31	23	23	895
Midland	339	96	17	15	20	3	490
West	398	137	22	34	10	7	608
<b>Southern and Eastern</b>	<b>2,058</b>	<b>581</b>	<b>125</b>	<b>134</b>	<b>105</b>	<b>81</b>	<b>3,083</b>
Dublin	431	128	2	41	43	16	660
Mid-East	346	109	24	33	9	28	548
Mid-West	264	61	22	7	14	8	376
South-East	464	155	41	30	18	8	716
South-West	553	128	36	24	21	21	783
<b>State</b>	<b>3,451</b>	<b>928</b>	<b>212</b>	<b>215</b>	<b>157</b>	<b>113</b>	<b>5,076</b>

<sup>1</sup> For categories where floor area is a relevant measure

- No permissions

NOTE: 0 implies less than 500 sq.m

**Table 4 Summary of Planning Permissions Granted for new houses and apartments, 1998-2005**

Period	Houses				Apartments			
	Number of Permissions	Number of Units	Floor Area (000 m)	Average Floor Area per Unit (m)	Number of Permissions	Number of Units	Floor Area (000 m)	Average Floor Area per Unit (m)
1998 1st Quarter	3,304	9,280	1,286	138.5	206	1,600	115	71.6
2nd "	3,632	9,170	1,251	136.4	218	1,988	128	64.7
3rd "	4,792	12,232	1,754	143.4	234	2,035	143	70.5
4th "	4,119	9,276	1,283	138.3	204	1,816	130	71.8
<b>Year</b>	<b>16,847</b>	<b>39,958</b>	<b>5,574</b>	<b>139.5</b>	<b>882</b>	<b>7,431</b>	<b>516</b>	<b>69.5</b>
1999 1st Quarter	-	14,370	-	-	-	3,194	-	-
2nd "	-	14,303	-	-	-	3,410	-	-
3rd "	-	17,231	-	-	-	2,907	-	-
4th "	-	17,891	-	-	-	3,290	-	-
<b>Year</b>	<b>-</b>	<b>63,795</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>12,801</b>	<b>-</b>	<b>-</b>
2000 <sup>1</sup> 1st Quarter	-	17,163	-	-	-	4,203	-	-
2nd "	-	18,985	-	-	-	3,914	-	-
3rd "	6,438	19,574	2,781	142.1	443	5,157	406	78.7
4th "	5,791	18,106	2,664	147.0	405	4,141	297	71.7
<b>Year</b>	<b>-</b>	<b>73,828</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>17,415</b>	<b>-</b>	<b>-</b>
2001 1st Quarter	5,891	16,482	2,427	147.2	435	6,066	475	78.3
2nd "	5,157	16,104	2,402	149.2	373	4,785	370	77.4
3rd "	5,741	14,452	2,223	153.8	411	3,661	263	79.4
4th "	5,220	13,618	1,997	146.6	381	3,368	262	77.9
<b>Year</b>	<b>22,009</b>	<b>60,656</b>	<b>9,049</b>	<b>149.2</b>	<b>1,580</b>	<b>17,780</b>	<b>1,390</b>	<b>78.2</b>
2002 1st Quarter	4,638	12,105	1,751	144.7	370	4,200	336	79.9
2nd "	4,192	15,236	2,103	138.1	350	5,163	391	75.7
3rd "	5,091	13,501	1,951	144.5	401	4,771	368	77.2
4th "	4,903	10,213	1,523	149.1	343	4,125	327	79.2
<b>Year</b>	<b>18,224</b>	<b>51,055</b>	<b>7,328</b>	<b>143.6</b>	<b>1,464</b>	<b>18,259</b>	<b>1,422</b>	<b>77.9</b>
2003 1st Quarter	4,489	9,511	1,464	153.9	370	4,030	325	80.6
2nd "	4,752	13,118	1,893	144.3	348	7,484	605	80.8
3rd "	5,132	14,394	2,035	141.4	439	10,065	789	78.4
4th "	4,970	12,582	1,905	151.4	435	7,170	562	78.3
<b>Year</b>	<b>19,323</b>	<b>49,605</b>	<b>7,297</b>	<b>147.1</b>	<b>1,592</b>	<b>28,749</b>	<b>2,281</b>	<b>79.3</b>
2004 1st Quarter	6,426	17,054	2,509	147.1	457	8,347	646	77.4
2nd "	7,123	18,653	2,770	146.5	425	7,313	543	74.2
3rd "	6,847	17,097	2,580	150.9	448	7,399	579	78.3
4th "	5,555	16,772	2,428	144.8	403	9,018	691	78.6
<b>Year</b>	<b>25,751</b>	<b>69,576</b>	<b>10,287</b>	<b>147.8</b>	<b>1,731</b>	<b>32,077</b>	<b>2,459</b>	<b>76.6</b>
2005 1st Quarter	5,749	18,913	2,810	148.6	416	6,437	487	75.7
2nd "	6,244	21,938	3,186	145.2	472	8,880	553	80.4
3rd "	6,005	18,190	2,756	151.5	476	5,791	461	79.6

<sup>1</sup> A review of the series for new dwellings was undertaken and resulted in revised data for 1999 and the first half of 2000. Corresponding revised data were not available for floor area or for permissions other than for new dwellings for those periods.

**Table 5 Details of Planning Permissions granted for new one-off houses, third quarter 2005, classified by region and county.**

Planning Region and County	Number of Permissions	Number of Units	Floor Area (000 sq.m)	Average Floor Area per Unit (sq.m)
<b>One-Off Houses</b>				
<b>Border, Midland and Western</b>	<b>2,500</b>	<b>2,508</b>	<b>549</b>	<b>218.9</b>
<b>Border</b>	<b>1,215</b>	<b>1,215</b>	<b>273</b>	<b>224.7</b>
Cavan	236	236	58	245.3
Donegal	474	474	101	213.1
Leitrim	130	130	25	196.0
Louth	138	138	34	243.7
Monaghan	126	126	31	247.0
Sligo	111	111	24	214.8
<b>Midland</b>	<b>321</b>	<b>321</b>	<b>71</b>	<b>222.0</b>
Laois	102	102	24	235.2
Longford	66	66	15	222.1
Offaly	80	80	17	215.0
Westmeath	73	73	15	210.9
<b>West</b>	<b>972</b>	<b>972</b>	<b>205</b>	<b>210.7</b>
Galway City	12	12	3	273.2
Galway <sup>2</sup>	420	420	88	209.8
Mayo	341	341	73	213.4
Roscommon	199	199	41	204.2
<b>Southern and Eastern</b>	<b>2,817</b>	<b>2,817</b>	<b>595</b>	<b>211.1</b>
<b>Dublin</b>	<b>242</b>	<b>242</b>	<b>40</b>	<b>167.1</b>
Dublin City	82	82	10	122.1
Dun Laoghaire-Rathdown	61	61	12	196.1
Fingal	59	59	11	192.8
South Dublin	40	40	7	177.3
<b>Mid-East</b>	<b>451</b>	<b>451</b>	<b>103</b>	<b>229.0</b>
Kildare	146	146	35	237.1
Meath	166	166	41	245.3
Wicklow	139	139	28	201.0
<b>Mid-West</b>	<b>414</b>	<b>414</b>	<b>91</b>	<b>220.0</b>
Clare	171	171	38	220.7
Limerick <sup>2</sup>	165	165	36	217.0
North Tipperary	78	78	18	224.8
<b>South-East</b>	<b>748</b>	<b>748</b>	<b>165</b>	<b>220.8</b>
Carlow	67	67	16	238.2
Kilkenny	152	152	36	237.6
South Tipperary	143	143	31	218.0
Waterford City	8	8	1	169.2
Waterford <sup>2</sup>	100	100	21	211.6
Wexford	278	278	59	213.7
<b>South-West</b>	<b>962</b>	<b>962</b>	<b>195</b>	<b>202.4</b>
Cork City	16	16	2	120.5
Cork <sup>2</sup>	613	613	128	208.4
Kerry	333	333	65	195.2
<b>State</b>	<b>5,325</b>	<b>5,325</b>	<b>1,144</b>	<b>214.8</b>

<sup>2</sup> Excluding cities

**Table 6 Details of Planning Permissions granted for new houses<sup>3</sup>, third quarter 2006, classified by region and county.**

Planning Region and County	Number of Permissions	Number of Units	Floor Area (000 sq.m)	Average Floor Area per Unit (sq.m)
<b>Houses<sup>3</sup></b>				
<b>Border, Midland and Western</b>	<b>317</b>	<b>5,084</b>	<b>666</b>	<b>131.0</b>
<b>Border</b>	<b>164</b>	<b>2,238</b>	<b>303</b>	<b>135.4</b>
Cavan	31	366	49	133.9
Donegal	63	622	90	144.6
Leitrim	28	314	45	143.9
Louth	10	210	26	124.3
Monaghan	15	308	40	131.2
Sligo	17	418	52	125.1
<b>Midland</b>	<b>53</b>	<b>1,873</b>	<b>226</b>	<b>120.5</b>
Laois	15	695	83	119.1
Longford	22	663	81	122.5
Offaly	6	357	39	109.9
Westmeath	10	158	23	142.6
<b>West</b>	<b>100</b>	<b>973</b>	<b>138</b>	<b>141.4</b>
Galway City	2	16	4	231.6
Galway <sup>2</sup>	26	319	43	136.3
Mayo	27	175	25	143.6
Roscommon	45	463	65	140.9
<b>Southern and Eastern</b>	<b>363</b>	<b>7,781</b>	<b>946</b>	<b>121.6</b>
<b>Dublin</b>	<b>67</b>	<b>1,049</b>	<b>122</b>	<b>116.5</b>
Dublin City	26	75	9	116.5
Dun Laoghaire-Rathdown	13	153	23	150.3
Fingal	19	295	31	105.4
South Dublin	9	526	59	113.0
<b>Mid-East</b>	<b>47</b>	<b>1,317</b>	<b>172</b>	<b>130.6</b>
Kildare	16	361	49	134.9
Meath	11	713	88	123.8
Wicklow	20	243	35	144.2
<b>Mid-West</b>	<b>44</b>	<b>1,066</b>	<b>139</b>	<b>130.0</b>
Clare	11	106	15	143.9
Limerick City	2	4	1	138.8
Limerick <sup>2</sup>	21	843	109	129.7
North Tipperary	10	113	13	119.3
<b>South-East</b>	<b>73</b>	<b>1,933</b>	<b>233</b>	<b>120.5</b>
Kilkenny	10	545	55	101.1
South Tipperary	20	620	78	125.9
Waterford City	1	12	1	75.1
Waterford <sup>2</sup>	9	74	12	166.6
Wexford	33	682	86	126.8
<b>South-West</b>	<b>132</b>	<b>2,416</b>	<b>280</b>	<b>116.0</b>
Cork City	7	94	10	106.3
Cork <sup>2</sup>	79	1,969	224	113.9
Kerry	46	353	46	130.7
<b>State</b>	<b>680</b>	<b>12,865</b>	<b>1,612</b>	<b>125.3</b>

<sup>2</sup> Excluding cities

<sup>3</sup> Excluding one-off houses



**Table 7 Details of Planning Permissions granted for new apartments, third quarter 2006, classified by region and county.**

Planning Region and County	Number of Permissions	Number of Units	Floor Area (000 sq.m)	Average Floor Area per Unit (sq.m)
<b>Apartments</b>				
<b>Border, Midland and Western</b>	<b>182</b>	<b>1,301</b>	<b>104</b>	<b>79.7</b>
<b>Border</b>	<b>84</b>	<b>594</b>	<b>49</b>	<b>83.1</b>
Cavan	17	141	12	84.6
Donegal	22	97	8	82.4
Leitrim	10	81	7	83.1
Louth	16	78	6	81.3
Monaghan	11	59	5	79.3
Sligo	8	138	12	84.7
<b>Midland</b>	<b>42</b>	<b>338</b>	<b>26</b>	<b>77.0</b>
Laois	14	94	8	82.4
Longford	7	85	6	74.0
Offaly	4	48	3	57.3
Westmeath	17	111	9	83.2
<b>West</b>	<b>56</b>	<b>369</b>	<b>28</b>	<b>76.9</b>
Galway City	6	38	3	84.3
Galway <sup>2</sup>	15	159	12	74.5
Mayo	13	91	7	76.2
Roscommon	22	81	6	78.9
<b>Southern and Eastern</b>	<b>294</b>	<b>4,490</b>	<b>357</b>	<b>79.6</b>
<b>Dublin</b>	<b>105</b>	<b>2,847</b>	<b>228</b>	<b>80.0</b>
Dublin City	53	1,216	91	74.4
Dun Laoghaire-Rathdown	25	843	83	98.0
Fingal	16	393	25	63.9
South Dublin	11	395	30	74.8
<b>Mid-East</b>	<b>42</b>	<b>561</b>	<b>38</b>	<b>68.6</b>
Kildare	12	86	6	73.7
Meath	19	423	28	66.1
Wicklow	11	52	4	80.7
<b>Mid-West</b>	<b>28</b>	<b>181</b>	<b>14</b>	<b>79.0</b>
Clare	14	71	6	86.1
Limerick City	1	1	0	35.0
Limerick <sup>2</sup>	9	103	8	75.3
North Tipperary	4	6	0	65.7
<b>South-East</b>	<b>46</b>	<b>438</b>	<b>36</b>	<b>82.3</b>
Carlow	5	8	1	73.9
Kilkenny	6	182	15	81.1
South Tipperary	11	30	2	76.9
Waterford City	4	107	9	86.1
Waterford <sup>2</sup>	4	35	3	71.5
Wexford	16	76	7	87.8
<b>South-West</b>	<b>73</b>	<b>463</b>	<b>41</b>	<b>88.1</b>
Cork City	11	115	11	92.8
Cork <sup>2</sup>	49	298	26	87.2
Kerry	13	50	4	82.8
<b>State</b>	<b>476</b>	<b>5,791</b>	<b>461</b>	<b>79.6</b>

<sup>2</sup> Excluding cities

**Table 1 Summary of Planning Permissions Granted, 1998-2005**

Period	Number of Permissions				Total Floor Area (000 m)					
	New Construction		Extension	Alteration and Conversion	Total	New Construction		Extension	Total	
	Dwellings	Other				Dwellings	Other			
1998	1st Quarter	3,513	1,216	2,491	602	7,822	1,403	618	333	2,354
	2nd "	3,854	1,182	3,087	671	8,794	1,383	521	388	2,292
	3rd "	5,027	1,486	4,060	763	11,336	1,897	804	496	3,196
	4th "	4,325	1,296	2,838	712	9,271	1,416	605	357	2,377
	Year	16,719	5,180	12,576	2,748	37,223	6,098	2,548	1,574	10,221
1999	1st Quarter	5,201	-	-	-	-	-	-	-	-
	2nd "	5,674	-	-	-	-	-	-	-	-
	3rd "	6,517	-	-	-	-	-	-	-	-
	4th "	6,203	-	-	-	-	-	-	-	-
	Year	23,595	-	-	-	-	-	-	-	-
2000 <sup>1</sup>	1st Quarter	6,630	-	-	-	-	-	-	-	-
	2nd "	6,597	-	-	-	-	-	-	-	-
	3rd "	4,893	1,449	4,026	782	13,310	3,223	1,159	525	4,906
	4th "	6,212	1,354	3,087	612	11,265	3,019	665	417	4,301
	Year	26,332	-	-	-	-	-	-	-	-
2001 <sup>1</sup>	1st Quarter	6,333	1,455	2,986	674	11,448	2,909	1,084	510	4,503
	2nd "	5,539	1,465	3,030	639	10,672	2,779	921	368	4,067
	3rd "	6,157	1,671	3,715	786	12,329	2,513	998	453	3,964
	4th "	5,685	1,606	3,106	754	11,051	2,282	1,820	391	3,672
	Year	23,613	6,197	12,837	2,853	45,500	10,463	4,023	1,722	16,206
2002	1st Quarter	5,025	1,512	2,843	656	10,236	2,086	972	423	3,491
	2nd "	4,547	1,349	2,853	685	9,444	2,505	873	370	3,748
	3rd "	5,502	1,691	3,704	757	11,654	2,335	1,139	429	3,904
	4th "	4,654	1,374	2,892	646	9,566	1,858	1,020	401	3,277
	Year	19,728	5,926	12,322	2,924	40,900	8,792	4,004	1,623	14,420
2003	1st Quarter	4,846	1,278	2,713	645	9,482	1,797	713	365	2,874
	2nd "	5,110	1,465	3,103	677	10,355	2,509	974	345	3,828
	3rd "	5,683	1,693	3,457	689	11,422	2,832	1,184	411	4,427
	4th "	5,416	1,496	2,886	566	10,358	2,473	1,066	376	3,915
	Year	20,949	5,932	12,159	2,877	41,617	9,611	3,937	1,497	15,044
2004	1st Quarter	6,887	1,545	2,820	587	11,839	3,156	940	364	4,461
	2nd "	7,563	1,660	3,511	652	13,386	3,344	1,158	398	4,898
	3rd "	7,100	1,899	4,076	731	13,806	3,172	1,007	467	4,646
	4th "	5,962	1,613	3,061	605	11,241	3,123	1,155	436	4,714
	Year	27,512	6,717	13,468	2,575	50,272	12,795	4,258	1,665	18,719
2005	1st Quarter	6,170	1,571	3,028	586	11,355	3,299	985	427	4,711
	2nd "	6,722	2,068	3,845	672	13,307	3,764	1,478	488	5,730
	3rd "	6,485	2,189	4,476	778	13,928	3,219	1,327	530	5,076
	4th "	5,957	1,871	3,533	653	12,014	2,883	1,167	427	4,478
	Year	26,334	7,699	14,882	2,689	50,604	13,165	4,957	1,872	19,995

<sup>1</sup> For categories where floor area is a relevant measure

<sup>2</sup> A review of the series for new dwellings was undertaken and resulted in revised data for 1999 and the first half of 2000. Corresponding revised data were not available for floor area or for permissions other than for new dwellings for those periods.

**Table 2 Summary of Planning Permissions granted, fourth quarter 2005, classified by region, county and type of development.**

Planning Region and County	Number of Permissions					Total Floor Area (000 sq.m)			
	New Construction		Extension	Alteration and Conversion	Total	New Construction			Total <sup>1</sup>
	Dwellings	Other				Dwellings	Other	Extension	
<b>Border, Midland and Western</b>	<b>2,830</b>	<b>628</b>	<b>1,027</b>	<b>191</b>	<b>4,676</b>	<b>1,332</b>	<b>407</b>	<b>143</b>	<b>1,882</b>
<b>Border</b>	<b>1,312</b>	<b>299</b>	<b>487</b>	<b>85</b>	<b>2,183</b>	<b>581</b>	<b>177</b>	<b>64</b>	<b>821</b>
Cavan	200	41	57	4	302	127	44	9	180
Donegal	491	74	157	28	750	171	43	15	228
Leitrim	119	25	35	2	181	48	11	4	63
Louth	171	53	133	31	388	65	18	15	99
Monaghan	172	53	48	9	282	78	21	9	108
Sligo	159	53	57	11	280	91	40	11	143
<b>Midland</b>	<b>418</b>	<b>119</b>	<b>197</b>	<b>39</b>	<b>773</b>	<b>341</b>	<b>89</b>	<b>29</b>	<b>459</b>
Laos	105	25	48	11	189	66	10	6	88
Longford	70	35	28	7	140	92	30	4	125
Offaly	107	24	51	10	192	49	15	8	72
Westmeath	136	35	70	11	252	134	28	12	174
<b>West</b>	<b>1,100</b>	<b>210</b>	<b>343</b>	<b>67</b>	<b>1,720</b>	<b>410</b>	<b>142</b>	<b>50</b>	<b>602</b>
Galway City	22	9	35	5	72	21	10	8	39
Galway <sup>2</sup>	522	83	178	27	808	184	76	25	285
Mayo	328	59	98	26	511	102	23	11	136
Roscommon	228	59	34	8	329	103	33	6	142
<b>Southern and Eastern</b>	<b>3,127</b>	<b>1,243</b>	<b>2,506</b>	<b>462</b>	<b>7,338</b>	<b>1,551</b>	<b>760</b>	<b>284</b>	<b>2,595</b>
<b>Dublin</b>	<b>349</b>	<b>280</b>	<b>835</b>	<b>175</b>	<b>1,639</b>	<b>217</b>	<b>184</b>	<b>70</b>	<b>470</b>
Dublin City	135	129	317	97	668	103	20	19	148
Dun Laoghaire-Rathdown	79	32	185	33	339	30	5	12	46
Fingal	72	64	173	35	344	43	124	21	188
South Dublin	63	55	168	20	288	41	28	18	87
<b>Mid-East</b>	<b>540</b>	<b>216</b>	<b>467</b>	<b>82</b>	<b>1,305</b>	<b>257</b>	<b>126</b>	<b>47</b>	<b>430</b>
Kildare	146	72	118	23	357	82	32	11	124
Meath	189	62	138	20	390	86	42	15	144
Wicklow	225	82	212	39	558	89	52	22	162
<b>Mid-West</b>	<b>438</b>	<b>175</b>	<b>253</b>	<b>60</b>	<b>926</b>	<b>239</b>	<b>128</b>	<b>28</b>	<b>395</b>
Clare	105	60	85	17	327	56	27	14	98
Limerick City	7	14	28	10	65	4	3	2	9
Limerick <sup>2</sup>	170	68	91	16	345	126	65	6	219
North Tipperary	96	33	49	11	189	53	12	4	69
<b>South-East</b>	<b>718</b>	<b>258</b>	<b>411</b>	<b>67</b>	<b>1,454</b>	<b>317</b>	<b>154</b>	<b>64</b>	<b>535</b>
Carlow	69	27	48	5	149	45	23	8	76
Kilkenny	133	56	76	10	285	77	34	16	127
South Tipperary	92	41	60	12	204	57	28	11	96
Waterford City	10	9	29	9	57	2	6	5	13
Waterford <sup>1</sup>	128	45	74	11	258	37	11	6	54
Wexford	286	70	125	20	501	100	51	18	170
<b>South-West</b>	<b>1,082</b>	<b>314</b>	<b>540</b>	<b>78</b>	<b>2,014</b>	<b>522</b>	<b>168</b>	<b>75</b>	<b>765</b>
Cork City	27	13	59	4	103	16	10	4	36
Cork <sup>2</sup>	665	205	349	63	1,282	332	123	44	499
Kerry	390	96	132	11	620	173	30	27	229
<b>State</b>	<b>5,957</b>	<b>1,871</b>	<b>3,533</b>	<b>653</b>	<b>12,014</b>	<b>2,683</b>	<b>1,167</b>	<b>427</b>	<b>4,478</b>

<sup>1</sup> For categories where floor area is a relevant measure  
<sup>2</sup> Excluding cities

**Table 3A Number of Planning Permissions granted, fourth quarter 2005, classified by region, type of development and functional category.**

Type of Development and Planning Region	Functional Category								Total
	Dwellings	Commercial Buildings	Buildings for Agriculture	Industrial Buildings	Govt., Health and Education	Other Buildings for Social Use	Civil Eng.	Other	
<b>New Construction</b>									
<b>Border, Midland and Western</b>	<b>2,830</b>	<b>182</b>	<b>115</b>	<b>42</b>	<b>34</b>	<b>28</b>	<b>83</b>	<b>144</b>	<b>3,458</b>
Border	1,312	78	47	21	17	15	42	79	1,811
Midland	418	37	21	13	8	1	19	20	537
West	1,100	67	47	8	9	12	22	45	1,310
<b>Southern and Eastern</b>	<b>3,127</b>	<b>290</b>	<b>216</b>	<b>76</b>	<b>77</b>	<b>39</b>	<b>181</b>	<b>364</b>	<b>4,370</b>
Dublin	349	58	2	16	12	8	26	158	629
Mid-East	640	45	43	18	19	6	34	51	756
Mid-West	438	46	37	11	9	9	20	44	613
South-East	718	58	59	14	20	7	48	52	978
South-West	1,082	83	75	17	18	9	53	59	1,306
<b>State</b>	<b>5,957</b>	<b>472</b>	<b>331</b>	<b>118</b>	<b>111</b>	<b>67</b>	<b>264</b>	<b>508</b>	<b>7,828</b>
<b>Extension</b>									
<b>Border, Midland and Western</b>	<b>816</b>	<b>81</b>	<b>14</b>	<b>21</b>	<b>85</b>	<b>10</b>	-	-	<b>1,027</b>
Border	393	42	0	6	35	5	-	-	487
Midland	158	15	3	5	17	1	-	-	197
West	267	24	5	10	33	4	-	-	343
<b>Southern and Eastern</b>	<b>2,143</b>	<b>174</b>	<b>26</b>	<b>34</b>	<b>115</b>	<b>14</b>	-	-	<b>2,506</b>
Dublin	748	49	1	5	30	2	-	-	835
Mid-East	408	22	1	7	28	3	-	-	487
Mid-West	202	23	5	6	13	4	-	-	253
South-East	334	35	12	9	19	2	-	-	411
South-West	451	45	7	7	27	3	-	-	540
<b>State</b>	<b>2,959</b>	<b>255</b>	<b>40</b>	<b>55</b>	<b>200</b>	<b>24</b>	-	-	<b>3,533</b>
<b>Alteration and Conversion</b>									
<b>Border, Midland and Western</b>	<b>46</b>	<b>114</b>	<b>1</b>	<b>5</b>	<b>15</b>	<b>10</b>	-	-	<b>191</b>
Border	20	49	1	3	8	6	-	-	85
Midland	13	20	-	-	6	-	-	-	39
West	13	45	-	2	3	4	-	-	87
<b>Southern and Eastern</b>	<b>174</b>	<b>198</b>	<b>5</b>	<b>13</b>	<b>58</b>	<b>14</b>	-	-	<b>462</b>
Dublin	88	55	-	2	24	6	-	-	175
Mid-East	28	33	2	1	10	4	-	-	82
Mid-West	15	38	1	3	5	-	-	-	60
South-East	15	37	1	4	7	3	-	-	87
South-West	30	37	1	3	6	1	-	-	78
<b>State</b>	<b>220</b>	<b>312</b>	<b>6</b>	<b>18</b>	<b>73</b>	<b>24</b>	-	-	<b>653</b>
<b>All Developments</b>									
<b>Border, Midland and Western</b>	<b>3,692</b>	<b>377</b>	<b>130</b>	<b>68</b>	<b>134</b>	<b>48</b>	<b>83</b>	<b>144</b>	<b>4,676</b>
Border	1,725	169	54	30	58	28	42	79	2,183
Midland	587	72	24	18	31	2	19	20	773
West	1,380	136	52	20	45	20	22	45	1,720
<b>Southern and Eastern</b>	<b>5,444</b>	<b>662</b>	<b>247</b>	<b>123</b>	<b>250</b>	<b>67</b>	<b>181</b>	<b>364</b>	<b>7,338</b>
Dublin	1,185	182	3	23	88	18	26	158	1,639
Mid-East	974	100	46	26	61	13	34	51	1,305
Mid-West	855	105	43	20	28	13	20	44	1,026
South-East	1,067	130	72	27	48	12	48	52	1,464
South-West	1,563	185	83	27	51	13	53	59	2,014
<b>State</b>	<b>9,136</b>	<b>1,039</b>	<b>377</b>	<b>191</b>	<b>384</b>	<b>115</b>	<b>264</b>	<b>508</b>	<b>12,014</b>

- No permissions

**Table 3B Total Floor Area planned (000 sq.m) in new construction and extensions, fourth quarter 2005, classified by region and functional category.**

Type of Development and Planning Region	Functional Category						Total <sup>1</sup>
	Dwellings	Commercial Buildings	Buildings for Agriculture	Industrial Buildings	Govt., Health and Education	Other Buildings for Social Use	
<b>New Construction</b>							
<b>Border, Midland and Western</b>	<b>1,332</b>	<b>201</b>	<b>42</b>	<b>109</b>	<b>21</b>	<b>35</b>	<b>1,739</b>
Border	581	81	21	51	11	13	757
Midland	341	52	6	19	7	5	430
West	410	68	14	39	3	16	552
<b>Southern and Eastern</b>	<b>1,551</b>	<b>458</b>	<b>91</b>	<b>141</b>	<b>41</b>	<b>30</b>	<b>2,311</b>
Dublin	217	151	3	19	4	6	400
Mid-East	257	57	22	29	11	7	383
Mid-West	239	42	19	58	3	5	367
South-East	317	98	20	17	15	5	471
South-West	522	110	28	17	8	6	690
<b>State</b>	<b>2,883</b>	<b>659</b>	<b>133</b>	<b>250</b>	<b>61</b>	<b>65</b>	<b>4,050</b>
<b>Extension</b>							
<b>Border, Midland and Western</b>	<b>57</b>	<b>38</b>	<b>4</b>	<b>12</b>	<b>26</b>	<b>4</b>	<b>143</b>
Border	27	19	2	5	9	2	64
Midland	12	3	1	2	9	1	29
West	17	16	1	5	10	1	50
<b>Southern and Eastern</b>	<b>131</b>	<b>88</b>	<b>9</b>	<b>24</b>	<b>27</b>	<b>5</b>	<b>284</b>
Dublin	36	21	0	6	6	0	70
Mid-East	30	9	0	1	5	2	47
Mid-West	13	8	2	3	2	1	28
South-East	22	19	4	13	6	1	64
South-West	30	31	3	1	8	1	75
<b>State</b>	<b>188</b>	<b>126</b>	<b>13</b>	<b>36</b>	<b>55</b>	<b>9</b>	<b>427</b>
<b>Total New Construction and Extension</b>							
<b>Border, Midland and Western</b>	<b>1,389</b>	<b>239</b>	<b>46</b>	<b>121</b>	<b>48</b>	<b>39</b>	<b>1,882</b>
Border	608	99	23	56	19	15	821
Midland	353	55	8	21	16	6	459
West	427	85	15	45	13	17	602
<b>Southern and Eastern</b>	<b>1,682</b>	<b>546</b>	<b>100</b>	<b>165</b>	<b>68</b>	<b>35</b>	<b>2,595</b>
Dublin	253	172	3	25	11	6	470
Mid-East	286	66	22	31	16	9	430
Mid-West	252	49	20	61	5	7	395
South-East	339	117	23	29	21	6	535
South-West	552	141	31	18	16	7	765
<b>State</b>	<b>3,071</b>	<b>785</b>	<b>146</b>	<b>286</b>	<b>116</b>	<b>74</b>	<b>4,478</b>

<sup>1</sup> For categories where floor area is a relevant measure  
NOTE: 0 implies less than 500 sq.m

Table 4 Summary of Planning Permissions Granted for new houses and apartments, 2002 - 2005

Period	All Houses				of which Multi-Development Houses				of which One-Off Houses				Apartments			
	Number of Permissions	Number of Units	Floor Area (000 m <sup>2</sup> )	Average Floor Area per Unit (m <sup>2</sup> )	Number of Permissions	Number of Units (000 m <sup>2</sup> )	Floor Area (000 m <sup>2</sup> )	Average Floor Area per Unit (m <sup>2</sup> )	Number of Permissions	Number of Units (000 m <sup>2</sup> )	Floor Area (000 m <sup>2</sup> )	Average Floor Area per Unit (m <sup>2</sup> )	Number of Permissions	Number of Units (000 m <sup>2</sup> )	Floor Area (000 m <sup>2</sup> )	Average Floor Area per Unit (m <sup>2</sup> )
2002 Q 1 <sup>1</sup>	4,696	12,105	1,751	144.7	-	-	-	-	-	-	-	-	370	4,200	336	78.9
Q 2	4,192	15,236	2,193	136.1	411	11,455	1,382	120.7	3,781	3,781	7,21	180.8	360	5,163	391	73.7
Q 3	5,061	13,501	1,951	144.5	414	8,824	1,037	117.6	4,677	4,677	8.54	193.5	401	4,771	388	77.2
Q 4	4,303	10,213	1,523	148.1	358	8,268	754	120.3	3,944	3,944	7.89	194.9	343	4,125	327	78.2
Year <sup>1</sup>	18,224	51,068	7,328	143.8	-	-	-	-	-	-	-	-	1,464	18,288	1,422	77.9
2003 Q 1	4,480	9,511	1,484	153.9	376	5,418	881	122.0	4,083	4,083	8.03	196.1	370	4,030	326	80.6
Q 2	4,752	13,118	1,883	144.3	416	8,782	1,035	117.9	4,338	4,338	8.58	197.9	348	7,464	605	80.8
Q 3	5,132	14,384	2,035	141.4	479	9,741	1,110	114.0	4,653	4,653	9.25	198.8	430	10,066	780	78.4
Q 4	4,970	12,882	1,805	151.4	490	8,102	997	123.1	4,480	4,480	9.08	202.6	438	7,178	562	78.3
Year	19,323	49,898	7,297	147.1	1,761	32,043	3,804	116.7	17,982	17,982	3,494	193.9	1,582	28,748	2,280	78.3
2004 Q 1	6,426	17,054	2,509	147.1	585	11,213	1,331	118.7	5,841	5,841	1,177	201.8	487	6,347	648	77.4
Q 2	7,123	18,853	2,770	148.5	640	12,170	1,443	118.6	6,483	6,483	1,328	204.8	426	7,313	543	74.2
Q 3	6,647	17,097	2,580	150.9	601	11,051	1,336	120.8	6,046	6,046	1,244	203.7	446	7,399	579	78.3
Q 4	5,955	16,772	2,428	144.8	551	11,768	1,362	118.3	5,004	5,004	1,036	207.1	403	9,018	681	78.6
Year	26,151	69,676	10,287	147.5	2,377	46,202	5,862	118.1	23,374	23,374	4,785	204.7	1,731	32,077	2,468	78.7
2005 Q 1	5,748	18,913	2,810	148.8	627	13,791	1,729	125.4	5,122	5,122	1,081	211.0	416	6,437	487	75.7
Q 2	6,244	21,938	3,186	145.2	758	16,450	2,027	123.2	5,486	5,486	1,150	211.1	472	6,880	553	80.4
Q 3	6,005	18,190	2,786	151.5	680	12,866	1,812	126.3	5,325	5,325	1,144	214.8	476	5,791	461	70.6
Q 4	5,516	16,809	2,328	152.1	683	11,878	1,452	124.3	4,939	4,939	1,075	217.8	435	4,894	382	76.7
Year	23,514	75,658	11,278	149.1	2,646	54,783	6,820	124.9	20,886	20,886	4,488	213.6	1,799	23,702	1,864	78.2

<sup>1</sup> Multi-development houses and one-off houses were coded as one category (All Houses) prior to Q2 2002

**Table 5 Details of Planning Permissions granted for new one-off houses, fourth quarter 2005, classified by region and county.**

Planning Region and County	Number of Permissions	Number of Units	Floor Area (000 sq.m)	Average Floor Area per Unit (sq.m)
<b>One-Off Houses</b>				
<b>Border, Midland and Western</b>	<b>2,407</b>	<b>2,407</b>	<b>538</b>	<b>223.5</b>
<b>Border</b>	<b>1,112</b>	<b>1,112</b>	<b>254</b>	<b>228.0</b>
Cavan	173	173	43	250.1
Donegal	415	415	90	215.9
Leitrim	98	98	19	192.3
Louth	149	149	37	246.4
Monaghan	147	147	36	247.2
Sligo	130	130	29	221.8
<b>Midland</b>	<b>339</b>	<b>339</b>	<b>80</b>	<b>234.6</b>
Laois	87	87	21	238.1
Longford	44	44	10	227.3
Offaly	94	94	22	230.2
Westmeath	114	114	27	238.3
<b>West</b>	<b>956</b>	<b>956</b>	<b>205</b>	<b>214.4</b>
Galway City	10	10	2	207.6
Galway <sup>2</sup>	473	473	105	222.8
Mayo	287	287	59	208.6
Roscommon	186	186	38	205.6
<b>Southern and Eastern</b>	<b>2,526</b>	<b>2,526</b>	<b>536</b>	<b>212.4</b>
<b>Dublin</b>	<b>225</b>	<b>225</b>	<b>34</b>	<b>150.6</b>
Dublin City	66	66	9	142.3
Dun Laoghaire-Rathdown	58	58	8	140.0
Fingal	51	51	9	182.9
South Dublin	50	50	7	140.8
<b>Mid-East</b>	<b>436</b>	<b>436</b>	<b>101</b>	<b>231.9</b>
Kildare	115	115	27	238.2
Meath	145	145	37	257.4
Wicklow	176	176	36	208.8
<b>Mid-West</b>	<b>368</b>	<b>368</b>	<b>80</b>	<b>218.5</b>
Clare	142	142	30	210.1
Limerick City	2	2	1	278.5
Limerick <sup>2</sup>	137	137	30	221.8
North Tipperary	87	87	20	225.5
<b>South-East</b>	<b>612</b>	<b>612</b>	<b>142</b>	<b>232.0</b>
Carlow	56	56	13	238.8
Kilkenny	120	120	29	240.2
South Tipperary	65	65	15	232.9
Waterford City	7	7	1	210.9
Waterford <sup>2</sup>	117	117	27	229.0
Wexford	247	247	56	228.2
<b>South-West</b>	<b>885</b>	<b>885</b>	<b>179</b>	<b>202.4</b>
Cork City	15	15	2	138.5
Cork <sup>2</sup>	549	549	114	208.4
Kerry	321	321	63	185.1
<b>State</b>	<b>4,933</b>	<b>4,933</b>	<b>1,075</b>	<b>217.6</b>

<sup>2</sup> Excluding cities

**Table 6 Details of Planning Permissions granted for new houses<sup>1</sup>, fourth quarter 2005, classified by region and county.**

Planning Region and County	Number of Permissions	Number of Units	Floor Area (000 sq.m)	Average Floor Area per Unit (sq.m)
<b>Houses<sup>2</sup></b>				
<b>Border, Midland and Western</b>	<b>272</b>	<b>3,367</b>	<b>695</b>	<b>129.5</b>
<b>Border</b>	<b>142</b>	<b>2,203</b>	<b>288</b>	<b>130.8</b>
Cavan	25	656	83	127.1
Donegal	54	463	64	138.4
Leitrim	18	189	29	151.8
Louth	10	175	22	125.9
Monaghan	16	236	32	133.5
Sligo	10	484	59	121.0
<b>Midland</b>	<b>46</b>	<b>1,817</b>	<b>227</b>	<b>125.1</b>
Laois	7	332	40	120.3
Longford	20	622	76	122.6
Offaly	7	238	26	109.5
Westmeath	12	625	85	136.0
<b>West</b>	<b>84</b>	<b>1,347</b>	<b>179</b>	<b>133.2</b>
Galway City	3	136	15	113.1
Galway <sup>2</sup>	26	542	70	129.6
Mayo	23	211	33	159.7
Roscommon	32	458	61	132.9
<b>Southern and Eastern</b>	<b>311</b>	<b>6,309</b>	<b>757</b>	<b>120.9</b>
<b>Dublin</b>	<b>39</b>	<b>568</b>	<b>68</b>	<b>120.5</b>
Dublin City	17	195	21	108.5
Dun Laoghaire-Rathdown	8	20	5	242.7
Fingal	8	211	27	128.3
South Dublin	6	142	15	109.2
<b>Mid-East</b>	<b>51</b>	<b>943</b>	<b>118</b>	<b>125.6</b>
Kildare	14	333	42	127.5
Meath	11	265	38	134.0
Wicklow	20	325	38	116.3
<b>Mid-West</b>	<b>40</b>	<b>1,180</b>	<b>144</b>	<b>123.7</b>
Clare	15	194	24	131.3
Limerick City	1	15	1	87.5
Limerick <sup>2</sup>	19	714	90	125.4
North Tipperary	5	247	29	116.6
<b>South-East</b>	<b>63</b>	<b>1,207</b>	<b>144</b>	<b>118.9</b>
Carlow	6	148	22	151.3
Kilkenny	10	463	48	103.1
South Tipperary	20	343	39	113.9
Waterford <sup>2</sup>	6	65	9	132.7
Wexford	21	188	26	130.8
<b>South-West</b>	<b>118</b>	<b>2,431</b>	<b>283</b>	<b>116.4</b>
Cork City	6	14	1	104.0
Cork <sup>2</sup>	61	1,658	181	109.3
Kerry	51	759	100	132.1
<b>State</b>	<b>583</b>	<b>11,676</b>	<b>1,452</b>	<b>124.3</b>

<sup>2</sup> Excluding cities

<sup>3</sup> Excluding one-off houses



**Table 7 Details of Planning Permissions granted for new apartments, fourth quarter 2005, classified by region and county.**

Planning Region and County	Number of Permissions	Number of Units	Floor Area (000 sq.m)	Average Floor Area per Unit (sq.m)
<b>Apartments</b>				
<b>Border, Midland and Western</b>	<b>149</b>	<b>1,319</b>	<b>97</b>	<b>73.8</b>
<b>Border</b>	<b>57</b>	<b>464</b>	<b>38</b>	<b>82.2</b>
Cavan	2	9	1	76.1
Donegal	22	208	18	84.3
Leitrim	3	6	1	91.5
Louth	11	67	5	81.3
Monaghan	9	118	10	88.0
Sligo	10	56	4	67.2
<b>Midland</b>	<b>33</b>	<b>520</b>	<b>34</b>	<b>65.6</b>
Laois	11	79	6	73.8
Longford	6	80	5	67.1
Offaly	6	19	1	76.5
Westmeath	10	342	21	62.7
<b>West</b>	<b>59</b>	<b>335</b>	<b>25</b>	<b>74.9</b>
Galway City	9	51	4	75.1
Galway <sup>2</sup>	22	116	8	72.6
Mayo	18	114	9	79.6
Roscommon	10	54	4	69.7
<b>Southern and Eastern</b>	<b>286</b>	<b>3,275</b>	<b>255</b>	<b>77.9</b>
<b>Dublin</b>	<b>83</b>	<b>1,431</b>	<b>113</b>	<b>78.8</b>
Dublin City	50	948	71	74.0
Dun Laoghaire-Rathdown	13	214	17	78.4
Fingal	13	90	7	76.0
South Dublin	7	179	18	103.1
<b>Mid-East</b>	<b>53</b>	<b>473</b>	<b>37</b>	<b>78.2</b>
Kildare	17	163	12	78.3
Meath	13	131	11	83.8
Wicklow	23	179	14	75.7
<b>Mid-West</b>	<b>29</b>	<b>213</b>	<b>15</b>	<b>69.9</b>
Clare	7	30	2	66.3
Limerick City	4	37	2	64.7
Limerick <sup>2</sup>	14	77	6	77.1
North Tipperary	4	69	5	66.1
<b>South-East</b>	<b>43</b>	<b>409</b>	<b>32</b>	<b>77.1</b>
Carlow	7	134	9	68.9
Kilkenny	3	5	0	38.4
South Tipperary	7	39	2	61.5
Waterford City	3	3	0	67.3
Waterford <sup>2</sup>	5	20	1	64.8
Wexford	18	208	18	87.6
<b>South-West</b>	<b>78</b>	<b>749</b>	<b>59</b>	<b>78.7</b>
Cork City	6	165	13	77.0
Cork <sup>2</sup>	54	453	38	79.2
Kerry	18	131	10	76.9
<b>State</b>	<b>435</b>	<b>4,594</b>	<b>332</b>	<b>76.7</b>

<sup>2</sup> Excluding cities

## Background Notes

- Scope and Background** Details of the scope and background of this series were given in the March 1973 *Statistical Bulletin*. Works undertaken by a local authority outside its functional area come within the scope of the Local Government (Planning and Development) Acts, 1963 to 1993 and need planning permission. Planning permission is also needed for development by the State, except where the consultation procedures provided for in the Local Government (Planning and Development) Act, 1993 obtain (e.g. national security, public safety or order, the administration of justice etc.). This series only provides coverage where development is subject to the requirement to obtain planning permission.
- Regions** The Local Government Act 1991 (Regional Authorities) (Establishment) Order, 1993, which came into operation on 1 January 1994, established eight new Regions. The CSO has adopted these in place of the old Planning Regions as the basis for the regional breakdown of planning permissions data.
- Classification** Planning permissions are classified by type of development, local authority district and by regional authority. A distinction is made between residential and non-residential building and civil engineering.
- Coverage** Only final grants of permission or approvals are covered, i.e. only works which involve construction. The following permissions are excluded since they do not entail construction per se:
- Changes of a technical and business nature as distinct from a building or structural nature;
  - Outline permission;
  - Retention of an existing building;
  - Changes to existing plan;
  - Bye-law permission;
  - Refusals - permissions subsequently granted on appeal by An Bord Pleanála are included.
- Rounding** As the figures for floor area have been rounded there may be slight discrepancies between the sum of the constituent items and the totals shown.
- Estimates are included where complete details of floor area size are not available.

## **APPENDIX S**

### **Public Files List of Licensed Facilities available at EPA offices**

**Enforcement Files Available at the Office of Environmental  
Enforcement, John Moore Road, Castlebar, Co. Mayo**

<b>Licence Register No.</b>	<b>Facility Name</b>	<b>IPC or Waste</b>
21	Masonite Ireland	IPC
22	Finsa Forest Products Ltd.	IPC
48	Dawn Country Meats Ltd. t/a Western Proteins	IPC
56	Cold Chon (Galway) Ltd.	IPC
73	Cold Chon (Galway) Ltd. Sligo Depot	IPC
90	Fort Dodge Laboratories Ireland Limited	IPC
104	Penn Racquet Sports Co. (Ireland)	IPC
110	Arran Chemical Company Limited	IPC
124	Taconic International Ltd.	IPC
126	Allergan	IPC
135	Saehan Media (Ireland) Ltd.	IPC
142	Thermo King Ireland Ltd	IPC
168	Kepak Athleague	IPC
169	Liffey Meats (Cavan) Limited	IPC
178	Dawn Country Meats Limited	IPC
182	Glanbia Fresh Pork Limited	IPC
187	Donegal Meat Processors	IPC
209	Lilly Industries (Ireland) Ltd.	IPC
227	Fruit of the Loom International Limited	IPC
235	Unifi Textured Yarns Europe Limited	IPC
264	Ave Galway Limited	IPC
267	MDR Leictreonach Teoranta	IPC
269	Basta Limited	IPC
271	AT Cross	IPC
285	Nellcor Puritan Bennett Ireland Ltd.	IPC
318	McCools Sawmills Limited	IPC
324	Hygeia Chemicals Limited	IPC
327	Glennon Bros. Timber Limited	IPC
333	A. S. Richardson & Company Limited	IPC
335	Pat Regan Newbrook Limited	IPC
339	Heiton Buckley Limited	IPC
342	Heiton Buckley Limited	IPC
351	Gem Manufacturing Company Limited	IPC
352	John English	IPC
353	Supershrone Limited	IPC
355	Earrai Coillte Chonnacht Teoranta	IPC
369	Byrne-Mech Limited	IPC
377	Woodford Timber Products Limited	IPC

**Enforcement Files Available at the Office of Environmental  
Enforcement, John Moore Road, Castlebar, Co. Mayo**

<b>Licence Register No.</b>	<b>Facility Name</b>	<b>IPC or Waste</b>
382	Antone Kiernan	IPC
383	John Murphy	IPC
384	Irish Finishing Technologies Limited	IPC
405	Glanbia Ingredients (Virginia) Limited	IPC
406	Bailieboro Foods Limited	IPC
408	Donal Brady	IPC
416	United Fish Industries Limited	IPC
433	Brian Kiernan	IPC
465	G. Bruss GmbH Dichtungstechnik	IPC
481	Mr. Padraig Kiernan	IPC
504	Bord Na Mona Energy Limited	IPC
505	Bord na Mona Energy Limited	IPC
515	Laragan Farms Limited	IPC
566	ESB Kilalla	IPC
572	Glanbia Farms Limited	IPC
592	Premier Proteins (2000) Limited	IPC
603	Elan Corporation Plc	IPC
609	Devon Lane Limited t/a Taconic	IPC
610	Electricity Supply Board	IPC
619	APW Galway Limited	IPC
624	Maysteel Teoranta	IPC
625	Glenfarne Wood Products Limited	IPC
627	Electricity Supply Board	IPC
629	Electricity Supply Board	IPC
633	Bellacorick Power	IPC
636	Baxter Healthcare	IPC
641	Irish Rubber Components Limited	IPC
643	Abbott Ireland	IPC
644	Austin Cullen	IPC
646	Fort Wayne Metals Ireland Ltd	IPC
658	Sperrin Galvanisers (Ireland) Limited	IPC
666	Eurothane Holdings	IPC
675	Johnson Manufacturing Limited	IPC
699	Essidev T/A Organic Lens Manufacturing	IPC
700	Tynagh Energy Limited	IPC
13-1	Carrowbrowne Landfill Site	Waste
21-1	Derrinumera Landfill	Waste
24-1	Ballynacarrick Landfill Site	Waste
26-2	Kyletalesha Landfill	Waste
27-2	Pollboy Landfill Facility	Waste

**Enforcement Files Available at the Office of Environmental  
Enforcement, John Moore Road, Castlebar, Co. Mayo**

<b>Licence Register No.</b>	<b>Facility Name</b>	<b>IPC or Waste</b>
28-1	Ballydonagh Landfill	Waste
29-2	Derryclure Landfill	Waste
31-1	Doora Landfill Site	Waste
57-1	Carndonagh Civic Amenity	Waste
58-1	Deepwater Quay	Waste
59-2	Ballaghaderreen Landfill	Waste
62-1	Churchtown Landfill	Waste
63-1	Drumabodan Landfill Site	Waste
64-1	Carrick On Shannon Landfill	Waste
65-1	Mohill Landfill	Waste
67-1	Rathroeen Landfill	Waste
71-2	Marlinstown Landfill	Waste
73-1	Roscommon Landfill Facility	Waste
77-1	Corranure Landfill	Waste
78-1	Ballaghveny Landfill	Waste
85-1	Burtonport Dredging Deposition Site	Waste
90-1	Balbane Landfill Site	Waste
91-1	Bailieborough Landfill	Waste
92-1	Belturbet Landfill	Waste
93-1	Ballyjamesduff Landfill	Waste
106-2	Bruscar Bheama Teoranta	Waste
109-1	Central Waste Management Facility	Waste
125-1	Glenalla Landfill Site	Waste
126-1	Muckish Landfill Site	Waste
143-1	McGrath Industrial Waste Ltd	Waste
148-1	Dean Waste Co Ltd	Waste
149-1	Killybegs Harbour	Waste
150-1	Scarriff Civic Amenity Centre	Waste
159-1	Organic Kompost Ltd	Waste
162-1	Westside Waste	Waste
163-1	Ballaghaderreen Industrial Estate	Waste
166-1	Galway City Council	Waste
169-1	Mulleady's Ltd	Waste
172-1	Rossaveel Harbour Development	Waste
178-1	East Galway Residual Landfill	Waste

**Enforcement Files Available at the Office of Environmental Enforcement,  
Inniscarra, Co. Cork**

<b>Licence Register No.</b>	<b>Facility Name</b>	<b>IPC or Waste</b>
5	Schering-Plough (Brinny) Company	IPC
16	Janssen Pharmaceutical Ltd	IPC
17	Cara Partners	IPC
18	Klinge Pharma & Co.	IPC
20	SIFA Ltd	IPC
23	Howmedica International Inc.	IPC
29	Irish Cement Ltd.	IPC
34	Dynea Ireland Limited	IPC
46	Castlemahon Food Products	IPC
52	Cognis Ireland Limited	IPC
53	ADM Ringaskiddy	IPC
59	Fronville Ltd.	IPC
67	Procter & Gamble (Manufacturing) Ireland Limited	IPC
737 / 69	Shannon Aerospace Ltd.	IPC
70	Irish Oxygen Co. Limited	IPC
76	Chemifloc Ltd.	IPC
82	Micro Bio (Ireland) Ltd.	IPC
84	Road Binders Ltd.	IPC
733 / 91	Wexport Ltd	IPC
96	Saint-Gobain Performance Plastics Ireland	IPC
103	Pharmacia and Upjohn Ltd.	IPC
118	Aventis Pharma (Nenagh) Ltd	IPC
127	Glanmire Industries Ltd.	IPC
141	Info-Lab Ltd	IPC
145	Heraeus Metal Processing Limited	IPC
146	Liebherr Container Cranes Limited	IPC
159	Tytex	IPC
161	Henery Denny	IPC
173	Galtee Meats (Charleville) Ltd	IPC
174	Galtee Food Products Limited	IPC
176	Dawn Meats (Midleton) Ltd.	IPC
188	AIBP Limited T/A AIBP Bandon	IPC
191	AIBP Limited t/a AIBP Rathkeale	IPC
196	FLEXcon Company Inc	IPC
218	Dulux Paints Ireland Ltd.	IPC
219	Seafield Technical Textiles Ltd	IPC
223	Irish Sugar plc	IPC
246	Georgia Holding Ltd	IPC
247	Micam Limited	IPC
251	Rothbury Manufacturing Limited	IPC



**Enforcement Files Available at the Office of Environmental Enforcement,  
Inniscarra, Co. Cork**

<b>Licence Register No.</b>	<b>Facility Name</b>	<b>IPC or Waste</b>
254	Sport Socks Co. (Ireland) Limited	IPC
255	Ship Company Limited	IPC
260	Devcon Ltd.	IPC
262	PD Marketing Limited	IPC
265	IMAG Optical Storage Limited	IPC
266	Irish Refining Limited	IPC
272	Ossian Limited	IPC
282	Andersen Ireland Limited	IPC
283	Brewery, Chemical & Dairy Engineering Ltd.	IPC
288	Molex Ireland Limited	IPC
292	Galvotech (International) Limited	IPC
307	Technicolour Home Entertainment Services Ireland Limited	IPC
308	Tom Horan	IPC
315	Messrs. Jack and David Ronan	IPC
316	James O'Brien	IPC
319	Shannonside Building Supplies Limited	IPC
328	Superwarm Homes (Limerick) Limited	IPC
329	James McMahon Limited	IPC
330	James McMahon Limited	IPC
334	Adhmaid Cill Na Martra Teoranta	IPC
338	Palfab Limited	IPC
343	Brooks Houghton Limited	IPC
344	Glennon Bros. Cork Limited	IPC
347	Heiton Buckley Limited	IPC
348	Heaton Buckley	IPC
364	Marrow Meats	IPC
374	Conor O'Brien	IPC
380	Sapphire Engineering Limited	IPC
386	Golden Vale Food Products Limited	IPC
387	Loughquin Ltd.	IPC
389	Mitsui Denman (Ireland) Limited	IPC
391	Galco (Cork) Limited	IPC
393	Kerry Ingredients (Ireland) Limited	IPC
396	Maurice O'Brien	IPC
398	Jack and David Ronan	IPC
399	John A Wood (Burnt Lime) Ltd	IPC
403	Dairygold Co-operative Society Limited	IPC
404	Dairygold Co-Operative Society Limited	IPC
407	Irish Pioneer Works (Fabricators) Ltd.	IPC
409	Rory and Monica O'Brien Pig Enterprises	IPC
413	Patrick O'Keeffe	IPC



**Enforcement Files Available at the Office of Environmental Enforcement,  
Inniscarra, Co. Cork**

<b>Licence Register No.</b>	<b>Facility Name</b>	<b>IPC or Waste</b>
417	Hanrahan Farms Limited	IPC
419	Bantry Terminals Limited	IPC
423	Berg Electronics Ireland B.V	IPC
424	Broderick Manufacturing Limited	IPC
436	Atlas Aluminium Limited	IPC
439	Beamish & Crawford plc	IPC
442	Irish Distillers Limited	IPC
445	Heineken Ireland Limited	IPC
446	Michael Monagle	IPC
452	Adhesives Research Ireland Limited	IPC
457	Pfizer Ireland Pharmaceuticals	IPC
461	Cambrex Profarmaco Cork Ltd	IPC
462	Cascade Biochem Limited	IPC
471	Pfizer Ireland Pharmaceuticals	IPC
473	SmithKline Beecham (Manufacturing) Ltd.	IPC
476	Recordati	IPC
477	Acorn Environmental Limited	IPC
484	James McMahon Limited	IPC
494	Maurice O'Brien	IPC
736 / 497	Lufthansa Aircraft Painting Shannon Limited	IPC
498	Irish Ispat	IPC
509	Amann Industries Corporation	IPC
516	Tara Mines Limited	IPC
517	Arcon Mines Limited	IPC
519	Gypsum Industries Limited	IPC
521	Roadstone Provinces Limited	IPC
533	Element Six	IPC
536	Sports Socks Company (Ireland) Limited	IPC
542	Pfizer Pharmaceuticals Production Corporation	IPC
545	Novartis Ringaskiddy Limited	IPC
546	Eli Lilly	IPC
547	Roche Ireland Limited	IPC
550	Anglo American Lisheen Mining Limited	IPC
551	Sara Lee (Ireland) Ltd	IPC
558	Analog Devices BV	IPC
559	Mr. Eugene Sheehan	IPC
571	Millipore Ireland B.V.	IPC
578	Electricity Supply Board	IPC
594	Grainger Sawmills Limited	IPC
595	Kepak Cork	IPC

**Enforcement Files Available at the Office of Environmental Enforcement,  
Inniscarra, Co. Cork**

<b>Licence Register No.</b>	<b>Facility Name</b>	<b>IPC or Waste</b>
596	Carbery Milk Products Limited	IPC
615	True Temper Limited	IPC
634	Parknageragh Pig Breeders Company	IPC
650	Hegarty Metals Processors	IPC
660	Michael Crowley	IPC
661	Oldpark Piggery	IPC
662	Jerry O'Brien	IPC
669	Electricity Supply Board	IPC
677	Mr Tom O'Brien	IPPC
678	AHP T/A Wyeth Nutritionals Ireland	IPC
680	Mr Martin O' Donovan	IPC
716	Electricity Supply Board	IPPC
734	Electricity Supply Board	IPPC
1-2 / 1-3	North Kerry Landfill Site	Waste
2-2	Ballyguyroe Landfill Site	Waste
8-1	Clonakilty Waste Transfer Station	Waste
12-2	Kinsale Road Landfill	Waste
17-2	Gortadroma Landfill Site	Waste
22-1	East Cork Landfill Site	Waste
23-1	Raffeen Landfill Site	Waste
37-1	Tradaree Point E.T.P.	Waste
41-1	Smithstown Industrial Estate	Waste
46-1	Ballylinan Landfill Site	Waste
50-1	Corrin	Waste
51-1	Bunlicky	Waste
61-2	Luddenmore	Waste
68-1	Youghal Landfill	Waste
69-1	Milltown Transfer Station	Waste
70-1	Benduff Landfill Site	Waste
72-1	Coolcaslagh Transfer Station	Waste
74-1	Donohill Landfill	Waste
74-2	Donohill Landfill	Waste
76-1	Longpavement	Waste
82-1	Ipodec Ireland Ltd	Waste
86-1	Kenmare Transfer Station	Waste
87-1	Caherciveen Transfer Station	Waste
89-1	Derryconnell Landfill Site	Waste
107-1	Waste Recovery Services (Fermoy) Ltd.	Waste
132-1	Lotamore	Waste
136-1	Sarsfieldcourt Industrial Estate	Waste
141-1	Baumont Quarry	Waste

**Enforcement Files Available at the Office of Environmental Enforcement,  
Inniscarra, Co. Cork**

<b>Licence Register No.</b>	<b>Facility Name</b>	<b>IPC or Waste</b>
142-1	Macroom Civic Amenity Site	Waste
145-1	Gleneden Trading Ltd	Waste
147-1	Ashgrove Recycling	Waste
160-1	Castletownbere Waste Transfer Station	Waste
170-1	Lisdeen Recycling Centre & Transfer Station	Waste
171-1	Materials Recovery & Transfer Facility	Waste
173-1	IPODEC Ireland Ltd	Waste
180-1	McGill Environmental	Waste
193-1	Irish Bulk Liquid Storage	Waste

**Enforcement Files Available at the Office of Environmental  
Enforcement, McCumiskey House, Richview, Dublin 14**

<b>Licence Register No.</b>	<b>Facility Name</b>	<b>IPC or Waste</b>
8	Leo Laboratories Limited	IPC
19	Pfizer Ireland Pharmaceuticals	IPC
26	Clare Calcite	IPC
32	Smurfit Paper Mills	IPC
51	BOC Gasses Ireland Lte	IPC
55	Irish Industrial Explosives Ltd.	IPC
57	Kingspan Insulation Ltd.	IPC
58	Kayfoam Woolfson	IPC
60	Arch Chemicals B.V.	IPC
65	Kingspan Building Products Ltd	IPC
74	Alumina Chemicals Ltd.	IPC
78	Loctite (Ireland) Ltd.(Ballyfermot)	IPC
80	Colfix (Dublin) Ltd.	IPC
83	Evode Industries Limited	IPC
86	Irish Tar & Bitumen Suppliers	IPC
101	Norbrook Manufacturing Ltd	IPC
106	Pauwels Trafo Ireland Ltd	IPC
111	Independent Newspapers	IPC
112	Thermal Heat Exchangers	IPC
116	Print & Display Ltd.	IPC
117	Kinerton Ltd.	IPC
119	Lawson Mardon Superior Ltd.	IPC
122	International Coatings Limited	IPC
125	Helsinn Chemicals Ireland Ltd.	IPC
131	Munekata Ireland Ltd.	IPC
143	Wood-Printcraft Limited	IPC
149	Modus Media International Dublin	IPC
164	The Irish Glass Bottle Company Limited	IPC
167	Kepak Clonee	IPC
171	McCarren & Company Ltd.	IPC
172	Honeyclover Ltd.	IPC
185	AIBP Ltd Dundalk	IPC
189	AIBP Dublin	IPC
190	AIBP Limited T/A AIBP Clones	IPC
198	Woodland Products Limited	IPC
199	John E. Coyle Limited	IPC
200	Sherry Brothers Limited	IPC
201	McNally & Finlay Limited	IPC
211	Sherlock Brothers Limited	IPC
212	Lithographic Universal Limited	IPC
214	Hallmark Furniture Company Limited	IPC

**Enforcement Files Available at the Office of Environmental  
Enforcement, McCumiskey House, Richview, Dublin 14**

<b>Licence Register No.</b>	<b>Facility Name</b>	<b>IPC or Waste</b>
215	Mr John Kieman	IPC
228	BASF Printing Systems Ireland Ltd	IPC
231	I. B. C. Limited	IPC
236	Wellman International Limited	IPC
237	Polyglass Limited	IPC
241	Coates of Ireland Limited t/a Coates Lorrilleux	IPC
244	FSW Coatings Limited	IPC
250	Manders Coatings & Inks Ireland Limited	IPC
252	INX International Ink Company Ltd.	IPC
253	Packaging Inks & Coatings	IPC
268	Irish Cement Ltd	IPC
275	Lufthansa Airmotive Ireland Limited	IPC
276	Hitech Plating	IPC
277	Plateco ZN Limited	IPC
278	Computer Plating Specialists Limited	IPC
281	Loredo Limited	IPC
289	Containers & Pressure Vessels Limited	IPC
293	W.I. Limited	IPC
298	Cahill Printers Limited	IPC
301	Guinness UDV Ireland	IPC
304	Anthony Fay	IPC
306	Forest Laboratories Ireland Limited	IPC
312	Irish Country Meats (Pigmeat) Limited	IPC
326	Protim Abrasives Limited	IPC
336	T.J. O'Mahony & Sons Limited	IPC
340	Heiton Buckley Limited	IPC
341	Heaton Buckley	IPC
345	Brooks Thomas Limited	IPC
346	CCM Limited T/A Kenn Truss	IPC
349	Woodroe Limited	IPC
354	Doherty Brothers Timber Company Limited	IPC
357	Cross Vetpharm Group Limited	IPC
363	IJM Timber Engineering Limited	IPC
368	Superwarm Homes (Limerick) Limited	IPC
371	Lissadell Towels Limited	IPC
376	Premier Periclase Limited	IPC
378	Quinn Group Limited	IPC
381	Smurfit Ireland Ltd	IPC
392	Jamestown Metal Resources Limited	IPC
401	Metal Processors Limited	IPC

**Enforcement Files Available at the Office of Environmental  
Enforcement, McCumiskey House, Richview, Dublin 14**

<b>Licence Register No.</b>	<b>Facility Name</b>	<b>IPC or Waste</b>
402	P. Carney Limited	IPC
422	Silver Hill Foods	IPC
425	McCarron Poultry Limited	IPC
427	Bernard Maguire	IPC
440	Harp	IPC
451	Kevin Kiernan	IPC
456	Jack Marry	IPC
458	Michael Caffrey	IPC
459	James Briody	IPC
464	MC-Building Chemicals Müller and Partners.	IPC
468	Everlac Paints	IPC
469	Kevin Kiernan	IPC
474	Patrick Kelly Timber Limited	IPC
475	Kells Stainless Limited	IPC
480	FLS Aerospace (Irl) Limited	IPC
483	Huntstown Power Company Limited	IPC
485	APW Enclosures Limited	IPC
486	Dublin Bay Power Ltd	IPC
490	Navan Carpets Limited	IPC
492	Swords Laboratories	IPC
493	James King	IPC
496	Colorman (Ireland) Limited	IPC
506	Bord Na Mona Energy Limited	IPC
507	Bord na Mona Energy Limited	IPC
522	Barclay Chemicals Manufacturing Limited	IPC
523	Loctite (Ireland) Limited	IPC
524	Syntheses Limited	IPC
526	Luke Bogue	IPC
528	Kingscourt Bricks Limited	IPC
532	G.E. Superabrasives Ireland	IPC
537	Rentsch Dublin Limited	IPC
538	New Inn Pig Farms Ltd	IPC
543	Thesio Ltd	IPC
549	Yamanouchi Ireland Company Limited	IPC
552	Swords Laboratories (TA Bristol Myers Squibb)	IPC
553	Xerox (Europe) Limited	IPC
568	Hitech Plating Limited	IPC
569	Ireland Power Energy Limited	IPC
574	Reheis Ireland	IPC
575	Burgess Galvin and Company Limited	IPC

**Enforcement Files Available at the Office of Environmental  
Enforcement, McCumiskey House, Richview, Dublin 14**

<b>Licence Register No.</b>	<b>Facility Name</b>	<b>IPC or Waste</b>
580	Burgos Limited	IPC
582	Marry Sow Unit	IPC
583	Xtratherm Limited	IPC
588	Gleneagle Woodcrafts Limited	IPC
589	Intel Ireland Limited	IPC
591	Monery By-Products (2000) Limited	IPC
597	College Proteins Limited	IPC
600	Brendan Kiernan	IPC
601	Mallinckrodt Medical Imaging - Ireland	IPC
602	Kilbride Piggeries Ltd	IPC
604	Trimproof Limited	IPC
612	Mr. John Kiernan	IPC
617	Lagan Pigs Limited	IPC
620	Mr. Frank Higgins	IPC
632	Galco Steel Limited	IPC
635	Jack Marry Broomfield	IPC
640	John Kiernan	IPC
642	Mr. Tom Lee	IPC
648	Becton Dickson Limited	IPC
652	AHP t/a Wyeth Medica Ireland	IPC
653	Irish Asphalt Limited	IPC
657	Drumagoland Farms Ltd	IPC
659	Microprint	IPC
665	Lagan Cement	IPC
679	Mr Gabriel Maguire Finaway Farms	IPC
3-3	Ballymount Baling Station	Waste
4-2	Arthurstown Landfill	Waste
9-2	Balleally Landfill	Waste
10-1	Basketstown Landfill Facility	Waste
15-1	Ballyogan Landfill Facility Ballyogan Recycling Park	Waste
20-1	Scotch Corner Landfill	Waste
33-1	Drogheda Landfill	Waste
34-1	Dundalk Landfill Amenity	Waste
35-1	Upper Sheriff Street	Waste
36-1	Tolka Quay Road	Waste
39-2	IPODEC Ireland Ltd.	Waste
40-1	520 Beech Road	Waste
42-1	Upper Sheriff Street	Waste
44-2	Thornton's Recycling Centre	Waste
45-1	Dean Waste Co. Ltd.	Waste

**Enforcement Files Available at the Office of Environmental  
Enforcement, McCumiskey House, Richview, Dublin 14**

<b>Licence Register No.</b>	<b>Facility Name</b>	<b>IPC or Waste</b>
54-2	Unit 1A	Waste
55-1	Sterile Technologies Ireland Ltd.	Waste
60-2	Whiteriver Landfill Site	Waste
79-1	Unit 41 Cookstown Industrial Estate	Waste
83-1	Lower Oriel Street	Waste
88-1	Corbally	Waste
95-2	Waste Management Centre	Waste
97-1	116 Sheriff Street	Waste
99-1	Unit 5, Airton Road	Waste
103-1	Knockharley Landfill	Waste
115-1	Soltec (Ireland) Limited	Waste
118-1	Marley Compost Ltd	Waste
122-1	Silver Lining Industries (Ireland) Ltd	Waste
127-1	Dunsink Landfill	Waste
129-1	Murphy Concrete Manufacturing Ltd.	Waste
131-1	Midland Waste Disposal Company Limited	Waste
134-1	N. Murphy Waste Disposal Limited	Waste
137-1	Site contained by the street frontages	Waste
140-1	Nurendale Ltd trading as Panda Waste Services	Waste
144-1	Sean Rooney Ltd trading as Bambi Bins & Wheel Bin Services Limited	Waste
146-1	Knockharley Landfill	Waste
152-2	Oxigen Environmental Ltd	Waste
151-1	Murphy Concrete Manufacturing Ltd	Waste
164-1	Former Hammond Lane Metal Co\Molloy & Sherry Site	Waste
182-1	Nature's Way	Waste
183-1	Greenstar Recycling Holdings Ltd	Waste



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Licence Register No.	Facility Name	IPC or Waste
731 / 1	SmartPly	IPC
28	IFI- Marino Pt	IPC
33	Runtalrad Ltd	IPC
709 / 41	Dublin Products Ltd.	IPPC
62	Sola ADC Lenses Ltd.	IPC
64	DIS Enbi seals Ireland Ltd.	IPC
85	Novartis Animal Health Ireland Limited	IPC
87	Schloetter (Ireland) Limited	IPC
93	PPI Adhesive Products Ltd.	IPC
98	Carnaud Metalbox Ireland Limited	IPC
99	IVAX Pharmaceuticals Ireland	IPC
105	A.O. Smith Electric Motors (Ireland) Limited	IPC
108	Irish Flexible Packaging	IPC
113	Tretorn Sport Ltd.	IPC
121	Donnelly Mirrors Ltd.	IPC
128	Servier International B.V.	IPC
137	Tech Industries Ireland Ltd	IPC
152	Boran Plastic Packaging Limited	IPC
156	Waterford Crystal Limited	IPC
163	Moy Isover Ltd.	IPC
165	Fair Oak Foods (Clonmel) Limited	IPC
166	Kepak Hacketstown	IPC
170	Kildare Chilling Company	IPC
175	Queally Pig Slaughtering Limited	IPC
177	Irish Country Meats Limited Camolin	IPC
179	Dawn Meats (Exports) Limited	IPC
180	Glanbia Fresh Pork Limited	IPC
181	Glanbia Fresh Pork Limited	IPC
183	Meadow Meats Limited	IPC
184	AIBP Limited T/A AIBP Nenagh	IPC
192	M. J. Bergin & Sons Limited	IPC
193	Slaney Foods Limited	IPC
194	Ashbourne Meats	IPC
197	A.B. Converters Limited	IPC
204	AIBP Ltd TA AIBP Cahir	IPC
205	AIBP Limited t/a AIBP Waterford	IPC
208	Merck Sharp & Dohme (Ireland) Limited	IPC
222	Irish Sugar plc	IPC
225	John Ronan & Sons	IPC

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Licence Register No.	Facility Name	IPC or Waste
229	General Paints Ltd	IPC
772 / 233	Curragh Tintawn Carpets Ltd.	IPPC
238	Michell Ireland Limited	IPC
239	Trimite Truecoat Limited	IPC
242	Irish Ropes Ltd	IPC
249	Shamrock Aluminium Limited	IPC
258	Tex Tech Industries (Ireland) Limited	IPC
259	Thomas A. Norton	IPC
274	Pat McCormack	IPC
280	Waterford Plating Company Limited	IPC
286	HDS Energy Ltd.	IPC
287	Braun Oral B Ireland Ltd	IPC
290	Kelly Coachbuilders Limited	IPC
294	Grant Engineering Limited	IPC
300	Pierce Engineering Limited	IPC
310	Glanbia Agribusiness	IPC
313	NN Euroball Ireland Limited	IPC
314	Radley Engineering Limited	IPC
706 / 320	T. & J. Standish (Roscrea) Limited	IPPC
322	Laois Sawmills Limited	IPC
323	Coolrain Sawmills Limited	IPC
325	P.D.M. Limited	IPC
331	Spaits	IPC
332	Randstone Ltd	IPC
337	Irish Forest Products Ltd	IPC
350	Waterford Joinery Limited	IPC
358	Woodfab Timber Limited	IPC
359	Glanbia Group (Ballyragget) Limited	IPC
676 / 366	Alert Packaging Limited	IPC
367	Coillte Teoranta	IPC
373	Kent Manufacturing Wexford Limited	IPC
375	Toomevara Farms	IPC
385	Waterford Metal Industries Limited	IPC
388	Michael O'Connor	IPC
394	Wexal	IPC
397	T. J. Hanrahan & J.K. Walshe	IPC
730 / 400	Clogrennane Lime Limited	IPPC
410	John Queally Fenor Farms	IPC
411	James and Nuala Gleeson	IPC
412	Gortnamuc Pigs Limited	IPC

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Licence Register No.	Facility Name	IPC or Waste
414	Messrs. Maurice & Ian Tierney	IPC
415	Sunglen Limited	IPC
418	Glanbia Farms Limited	IPC
420	Future Pigs Limited	IPC
426	Ballywalter farms ltd	IPC
429	Rennard Pig Farms Limited	IPC
430	Patrick Moore	IPC
443	Bulmers Limited	IPC
444	Bulmers Limited	IPC
447	James McGrath	IPC
448	E. Smithwick & Sons Limited	IPC
453	Rennard Pig Farms Limited	IPC
455	Thomas O'Reilly and Rory O'Brien	IPC
460	Sean Norton	IPC
467	Woodville Pig Farms Limited	IPC
470	Patrick Moore	IPC
478	Ballyfin Sawmills Ltd.	IPC
479	Cavanagh Foundry Limited	IPC
482	Edenderry Power Limited	IPC
488	Schering-Plough (Avondale)	IPC
489	Glen of Aherlow Pig Producers Co-Op Society Ltd	IPC
495	Irish Fertilizer Industries Ltd.	IPC
499	Bord na Mona Fuels Limited	IPC
500	Bord Na Mona Energy Limited (M500)	IPC
501	Bord na Mona Energy Limited	IPC
502	Bord Na Mona Energy Limited (M502)	IPC
503	Bord na Mona Allen Peat Limited	IPC
506	Bord Na Mona Energy Limited	IPC
507	Bord na Mona Energy Limited	IPC
510	Waterford Carpets Limited	IPC
511	Braun Oral-B Ireland Limited	IPC
514	Padraig Kiernan	IPC
518	SIAC Butlers Steel Limited	IPC
520	Waterford Stanley Limited	IPC
525	Honeywell International Technologies Ltd	IPC
527	Flemings' Fireclays Manufacturing Limited	IPC
530	Ormonde Brick Limited	IPC
531	Dineen Refractories Limited	IPC

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Licence Register No.	Facility Name	IPC or Waste
540	Honeywell Iropharm PLC	IPC
548	Eastman	IPC
554	Dairygold Farms Limited	IPC
555	Richard Keenan & Company Limited	IPC
556	Murray Timber (Ballon) Limited	IPC
560	Glanbia Farms Limited	IPC
562	Aughinish Alumina Limited	IPC
563	Jack and David Ronan	IPC
564	Arthur Dinan	IPC
565	National By-Products	IPC
567/667	Nypro Limited	IPPC
573	Jimmy Foran	IPC
584	Waterford Crystal Limited	IPC
586	Munster Proteins Limited t/a Waterford Proteins	IPC
590	HP Chemie Pelzer Limited	IPC
593	Weyerhaeuser Europe Limited	IPC
606/715	Electricity Supply Board	IPC
608	Crown Timber Plc	IPC
614	Glanbia Farms Limited	IPC
622	Hogg Enterprises Limited	IPPC
744 / 623	McGhan Limited t/a Inamed Corporation Ireland	IPPC
637	Munster Proteins Ltd.	IPC
638	GeneMedix Plc	IPC
645	ALZA Ireland Limited	IPC
649	Kevin Kiernan	IPC
651	Mr. Matthew Cunningham	IPC
654	Edenderry Power Limited	IPPC
656	Cherry's Breweries Limited	IPC
663	Veha Radiators Limited	IPC
673	AHP t/a Wyeth Medica Ireland	IPC
681	Mr. Padraig Kiernan	IPPC
686	Mr. John Queally	IPC
694	Electricity Supply Board	IPC
695	Electricity Supply Board	IPC
698	Honeywell International Technologies Limited T/A Honeywell Engines, Systems and Services	IPPC
707	Thomas and Eddie O'Mahony	IPC



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Licence Register No.	Facility Name	IPC or Waste
714	Electricity Supply Board	IPPC
735	Mr. Michael Monagle	IPPC
759	Office of Public Works	IPPC
11-1	Ballymurtagh Landfill Facility	Waste
14-1	Silliot Hill Landfill	Waste
16-2	Killurin Landfill Site	Waste
18-1	Kilbarry Landfill Site	Waste
19-1	Proposed Hardbog Landfill	Waste
25-1 / 25-2	Powerstown Landfill Site	Waste
30-2	Dunmore Landfill	Waste
32-1/ 32-2	Dungarvan Waste Disposal Site	Waste
48-1	Kilmurry South	Waste
49-1	Clonbulloge Ash Repository	Waste
52-1	Stagrennan Polder	Waste
53-1	Fassaroe	Waste
66-1	Rampere Landfill	Waste
75-1	Tramore Waste Disposal Site	Waste
80-1	Carnegie	Waste
81-3	KTK Landfill Limited	Waste
84-1	Aghfarrell	Waste
104-1	AES Tullamore	Waste
110-1	Peat Ash Ltd.	Waste
111-1	South East Recycling Centre	Waste
113-2 / 113-1	KMK Metals Recycling Ltd.	Waste
114-1	Yellow Bins (Waste Disposal) Ltd	Waste
116-1	Waterford Utility Services (Waste Disposal) Ltd	Waste
123-1	Custom Compost Limited	Waste
124-1	Carbury Mushrooms Limited	Waste
139-1	Haroldstown Transfer Station	Waste
156-1	KTK Sand & Gravel Ltd	Waste
158-1	Ray Whelan Ltd	Waste
165-1	Ballynagran Residual Landfill	Waste
168-1	Usk Residual Landfill	Waste
175-1	Kildare County Council	Waste
176-1	Kilcock Civic Amenity Centre	Waste
177-2 / 177-1	Onyx Ireland Limited	Waste
179-1	Padraig Thornton Waste Disposal Limited	Waste
181-1	Swalcliffe Ltd	Waste
184-1	Atlas Environmental	Waste
189-1	Dungarvan Material Recovery Facility	Waste
190-1	Waterford Gasworks	Waste

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Licence Register No.	Facility Name	IPC or Waste
191-1	Wexford County Council – townlands Holmestown Great, Glenduff, Bolgerstown, Muchwood, Ballyeaton.	Waste
194-1	Advanced Environmental Solution (Ireland) Limited	Waste
198-1	Bord na Móna Plc.	Waste
200-1	Recycling Centre and Waste Transfer Station	Waste
201-01	Bord na Mona plc	Waste
213-01	Roadstone Dublin Limited	Waste
218-01	Kings Tree Services Limited	Waste

# **APPENDIX T**

## **EPA Waste Permit Register**

Carlow Co. Council	Dermot McDonnell	Mortarstown, Carlow	WP 6/03	Treatment of any waste on land with a consequential benefit for Agricultural Activity	Soil and Stone - 170501, Concrete - 170101, Bricks - 170102 - No other waste types permitted.	First Schedule - Activity 5, Fourth Schedule - Class 10	Not exceeding 5000 tonnes per annum	06/02/2004	29/01/2004	26/01/2005
Carlow Co. Council	Joseph Waddock	Kilmaster, Carlow	WP1/02	Composting Facility	Fruit Wastes, Vegetable Wastes/food preparation residues, paper/cardboard	First schedule - Activity 5	Not exceeding 5000 tonnes per annum	09/12/2003	26/04/2004	25/04/2007
Carlow Co. Council	Dermot McDonnell	Mortarstown, Carlow	WP06/03	Treatment of any waste on land with a consequential benefit for agricultural activity	Soil and Stone - 170501, Concrete - 170101, Bricks - 170102 - No other waste types permitted.	First Schedule, Activity 5, Classes 10 & 13	Not exceeding 5000 tonnes per annum	17/12/2003	29/01/2004	28/01/2005
Carlow Co. Council	Wille Whehan	Kilmacart, Hacketstown, Co. Carlow	WP03/03	Disposal, Storage & Treatment of Waste	17 05 01 Soil & Stone, 17 01 01 Concrete, 17 01 02 Bricks	First Schedule, Activity 6; Fourth Schedule - Classes 10 & 13	Not exceeding 5000 tonnes per annum	24/09/2004	17/09/2004	3 yrs from the date of commencement of activities on the site
Carlow Co. Council	Tom McDonald	Kicang Quarries, Ltd. Fitzgerald's Pt, Curracliff, Bagenalstown, Co. Carlow	WP01/04	Disposal, Storage & Treatment of Waste	See Section 4.3 of Permits (Waste acceptance & handling)	First Schedule - Activity 6; Fourth Schedule - Classes 10 & 13	Not exceeding 5000 tonnes per annum	24/09/2004	17/09/2004	3 years from the date of commencement of activities on the site
Carlow Co. Council	Kyran O'Byrne	Tullowbeg, Bunclody Rd., Tullow, Co. Carlow	WP3/04	Waste Recovery Facility, C & D Waste	17 05 01 Soil & Stone, 17 01 01 Concrete, 17 01 02 Bricks	First Schedule, Activity 6; Fourth Schedule - Classes 10 & 13	Not exceeding 5000 tonnes per annum	24/09/2004		24 months from the date of commencement of activities on the site
Carlow Co. Council	Patrick O'Toole	Ballintrae, Fenagh, Co. Carlow	WP02/04	Composting Facility	See Attachment	First Schedule, Activity 5; Fourth Schedule - Class 2 & Class 10	Not exceeding 1000 cubic meters at any time	02/12/2004	23/11/2004	23/11/2007
Carlow Co. Council	CTO GreenClean Environmental Services	Bennekerry, Co. Carlow	WP01/03	Composting Facility	See Attachment	Fourth Schedule, Classes 2 & 13	Not exceeding 1000 cubic meters at any time	07/12/2004	24/05/2004	24/05/2005
Carlow Co. Council	CTO GreenClean Environmental Services	Mountview Grange, Tullow, Co. Carlow	WP02/03	Composting Facility	See Attachment	Fourth Schedule, Classes 2 & 13	Not exceeding 1000 cubic meters at any time	07/12/2004	24/05/2004	24/05/2005
Carlow Co. Council	Joe Waddock	Kilmaster & Moorastown, Co. Carlow	WP09/04	First Schedule Activity 6 Disposal of Waste	170501 Soil & Stones 170101 Concrete 170102 Bricks	Fourth Schedule, Classes 10 & 13	5,000	10/02/2005	01/02/2005	31/01/2008
	Joe Waddock	Kilmaster, Co. Carlow	WP11/04	First Schedule Activity 6 Recovery of Waste	See Schedule 1.	Fourth Schedule, Classes 2 & 10	The recovery of waste (other than hazardous waste) at a facility (other than a facility for the composting of waste where the amount of compost and waste held at the facility exceeds 1000m <sup>3</sup> at any time)	10/02/2005	04/02/2005	03/02/2008
Carlow Co. Council	Brian Kelly	Clonagoose, Fenagh Road, Borra, Co. Carlow	WP 12/04	Recycling or reclamation of metals and metal compounds	See Permit	Recovery of scrap metal or other metal waste. The dismantling or recovery of vehicles		21/06/2005	29/04/2005	29/04/2008
Carlow Co. Council	Pat Byrne	Rathearagh, Tullow, Co. Carlow	WP 08/05	Recovery of waste	17 01 01, 17 01 02, 17 01 07, 17 03 02, 17 05 04, 17 05 06	Fourth schedule, classes 10 & 13		27/07/2005	20/07/2005	24 months from the date of commencement of activities on the site
Carlow Co. Council	Michael Donagan	Upper Portlinton, Ticknock, Co. Carlow	WP 05/05	Recovery of waste	17 01 01, 17 01 02, 17 01 07, 17 03 02, 17 05 04, 17 05 06	Fourth schedule, Class 10		27/07/2005	20/07/2005	18 months from the date of commencement of activities on the site
Carlow Co. Council	Peter Murphy	Haroldstown, Tobinstown, Co. Carlow	WP 03/05	Recovery of waste	17 01 01, 17 01 02, 17 01 07, 17 03 02, 17 05 04, 17 05 06	Fourth schedule, class 10 & 13		27/07/2005	20/07/2005	36 months from the date of commencement of activities on the site
Carlow Co. Council	Tom McDonald	Miltown, Garryhill, Co. Carlow	WP 08/04	Disposal of waste	17 01 01, 17 01 02, 17 01 07, 17 03 02, 17 05 04, 17 05 06	Fourth schedule, Classes 10 & 13		27/07/2005	20/07/2005	36 months from the date of commencement of activities on the site
Carlow Co. Council	Simon Walton	Askea, Carlow Town, Carlow	WP 04/04	Recovery of waste	17 01 01, 17 01 02, 17 01 07, 17 03 02, 17 05 04, 17 05 06	First schedule, Activity 5, Fourth schedule, Class 10		27/07/2005	20/07/2005	24 months from the date of commencement of activities on the site
Carlow Co. Council	Breda Lyons	Ballykilduff, Tobinstown, Carlow	WP 02/05	Recovery of waste	17 01 01, 17 01 02, 17 01 07, 17 03 02, 17 05 04, 17 05 06	Fourth schedule, Class 10 & 13		27/07/2005	20/07/2005	12 months from the date of commencement of waste activities
Carlow Co. Council	Dermot McDonnell	Mortarstown Lower, Co. Carlow	WP 09/05	Disposal of waste	17 01 01, 17 01 02, 17 01 07, 17 03 02, 17 05 04, 17 05 06	First schedule, Activity 6, Third schedule, Class 1		27/07/2005	20/07/2005	18 months from the date of commencement of activities on the site
Carlow Co. Council	Tom Dunne	Straboe, Tullow, Co. Carlow	WP 05/05	Recovery of waste	17 01 01, 17 01 02, 17 01 07, 17 03 02, 17 05 04, 17 05 06	First schedule, Activity 5, Fourth schedule, Class 10		27/07/2005	20/07/2005	18 months from the date of commencement of activities on the site
Carlow Co. Council	Patrick O'Toole	Ballintrae, Fenagh, Co. Carlow	WP 04/05	Recovery of waste	See schedule 1 of permit	First schedule, Activity 5, Fourth schedule, Class 2 & 10		27/07/2005	07/07/2005	3 years from the date of commencement of activities on the site
Cavan Co. Council	Gerard Martin	Annahern, Shercock, Co. Cavan, Premises at: Enterprise Centre, Kells Road, Kingscourt, Co. Cavan	02/04	Recycling of solid non-toxic waste, as described in the application form from selected waste streams obtained from domestic, industrial & commercial premises that have a high recyclable content.	Wastes scheduled in the application form, similar wastes as may be approved, from time to time in writing, by the local authority.	Class 4 Fourth Schedule	5,000	16/09/2002	11/09/2002	10/09/2005
Cavan Co. Council	Mr Maths McBriain, Cavan Wheel & Bin, Alacken, Cavan	Alacken Co. Cavan	WP01/01	Recycling or reclamation of organic substances, waste recovery	Solid non-toxic waste	Class 4 Fourth Schedule		04/10/2001	Sept 2001	Sept 2004
Clare Co. Council	Clean (In) Refuse & Recycling Co. Ltd	Ballinagun West, Cree, Kilmuck, Co. Clare	010/02/WP/CL	Repackaging & Recovery of Waste	See attachment no. 1	1st Schedule - Activities 2.5 & 6 - 3rd Schedule - Classes 12 & 13 - 4th Schedule - Classes 2,3,4 & 13	5000	02/12/2002	29/11/2002	31/01/2005
Clare Co. Council	Mr Eamonn Conway	Clondanagh, Tuila, Co. Clare	003/01/WP/CL	Recovery of scrap metal or other metal waste,	dismantling or recovery of vehicles, recovery of scrap metal or other metal waste, recycling or reclamation of metals and metal compounds	Article 19 (a) of the Waste Management (Permit) Reg, 1998, 4th Sched. Of the WMA 1996, Class 3 and 1st Sched of the WM (Permit) Reg 1998, Activity 2 and 3		25/06/2001	20/06/2001	01/02/2004
Clare Co. Council	Modern Car Dismantlers	Doora Industrial Estate, Quin Road, Ennis, Co. Clare	002/01/WP/CL	Car dismantling	Recovery of scrap metal or other metal waste / The dismantling or recovery of vehicles.	WMA 1996, Sched 4, Class 3 and 1st Sched of WM (Permit) Regs 1998, Activity 2 and 3		25/06/2001	20/06/2001	01/02/2004



Clare Co. Council	Westside Recycling Co.	Bunnow, Doora, Co. Clare	006/02/WP/CL	Recovery of scrap metal, recovery of waste (other than hazardous waste), see permit		First Schedule of WM (Permit) Regs 1998, Activity 2 & 5	5000	15/02/2002	JAN 2002	31/01/2004
Clare Co. Council	Mr. Tom Harvey	Carrowsteel East, Inagh, Co. Clare	007/02/WP/CL		Shredding of waste newspaper for animal bedding	Class 2, 13 - Activity 5	5000	27/08/2002	19/08/02	31/01/2005
Clare Co. Council	Mr. & Mrs. Carmel & Pat Barrington	Conna, Cree, Kírush, Co. Clare	008/02/WP/CL		used polythene farm film	Activity 5, Classes 4 & 13	5000	31/10/2002	25/10/02	31/01/2005
Clare Co. Council	Rural Refuse & Recycling Ltd	Mohemoyland, Carron, Co. Clare	009/02/WP/CL		Glass bottles, aluminum beverage cans, cardboard, scrap metal, newspapers	Activities 2 & 5 - Classes 2,3,4,13	5000	13/11/2002	11/11/02	31/01/2005
Clare Co. Council	Tullagower Quarries Ltd.	Tullagower, Kírush, Co. Clare	011/02/WP/CL	Waste glass recovery	Waste glass	1st Schedule, Activity 5 / 3rd Schedule, Classes 12 & 13 / 4th Schedule, Classes 4, 11, 13	Yr1 2000 tonnes / Yr2 5000 tonnes / Yr3 8000 tonnes	02/12/2002	29/11/02	31/01/2005
Clare Co. Council	Clare Waste & Recycling Co. Ltd.	Raheen, Tuamgraney, Co. Clare	012/02/WP/CL		Construction and demolition waste, packaging waste, scrap metal, waste timber.	3rd Schedule Classes 12 & 13 / 4th Schedule Classes 2,3,4 & 13		16/12/2002	13/12/02	31/01/2005
Clare Co. Council	Inagh GAA Club	Inagh, Co. Clare.	002/03/WP/CL		Only inert materials shall be deposited by agreement with Clare Co. Council. Only soil and stone wastes, which conform to the EWC code reference 170501, may be accepted at the site. The only exception to this shall be the use of construction waste or imported stone/gravel to construct an access road on site.	Fourth Schedule, Class 5, First Schedule Class 10.		24/11/2003	21/11/03	30/09/2005
Clare Co. Council	Peter Egan	Spring Mount, Ballycun X, Bridgetown, Co. Clare	001/04/WPT/CL	The recovery of waste (other than hazardous waste) at a facility (other than a facility for the composting of waste where the amount of compost and waste held at the facility exceeds 1000 cubicmetres at any time)	17 05 01 Soil and stone wastes	4th Schedule of WMA 1998 Class 10,		21/04/2004	15/04/2004	
Clare Co. Council	Surplex Solutions Ltd	Unit 1 East Park Smithstown Shannon Co. Clare	003/04/WPT/CL	The recovery of waste (other than hazardous waste) at a facility (other than a facility for the composting of waste where the amount of compost and waste held at the facility exceeds 1000 cubicmetres at any time).	Recovery of scrap metal or other metal waste (other than hazardous waste)	First Schedule, Class 2 & 5, Fourth Schedule Classes 2, 3 & 4.		24/06/2004	22/06/2004	
Clare Co. Council	Michael Murphy	Knockaneon, Ennis, Co. Clare	005/04/WPT/CL	Activity 5, Class 10: The recovery of waste and the treatment of waste on any land with a consequential benefit for an agricultural activity or ecological system	Non-hazardous waste	Part 1 of the 1st Schedule of the WM(Permit) Regs '98		22/09/2004	14/09/2004	13/09/2007
Clare Co. Council	Daniel Dillon	Drumaneen, Crusheen, Co. Clare	008/04/WPT/CL	Activity 5, Class 10	17 05 04: Soil & Stone	Part 1 of the first schedule, activity 5 & Class 10 of the 4th Schedule		27/10/2004	22/10/2004	21/10/2007
Clare Co. Council	D.R.M. Construction Ltd.	Ballyghboy, Doora, Co. Clare	007/04/WPT/CL	The recovery and treatment of waste	17 05 04: Soil & Stone	Part one of the First Schedule-Activity5, Fourth Schedule-Class 10	30,000 tonnes	17/11/2004	15/11/2004	14/11/2007
Clare Co. Council	L & M Keating Ltd.	Croi Na Baile, Kilmihil, Co. Clare	004/04/WPT/CL	The recovery and treatment of waste	17 05 04: Soil & Stone	Part one of the First Schedule-Activity5, Fourth Schedule-Class 10	30,000 tonnes	17/11/2004	15/11/2004	14/11/2007
Clare Co. Council	Michael O'Meara	Kilcoo, Clonsilla, Co. Clare	016/04/WPT/CL	The recovery and treatment of waste	17 05 04: Soil & Stone	Activity 5, Class 10	30,000 tonnes	22/12/2004	21/12/2004	20/12/2007
Clare Co. Council	Diver Ciune	Ballymacahill, Ennis, Co. Clare	015/04/WPT/CL	The recovery and treatment of waste	17 05 04: Soil & Stone	Activity 5, Class 10	30,000 tonnes	22/12/2004	21/12/2004	20/12/2007
Clare Co. Council	Michael Courtney	Luckerbranner, Killalca, Co. Clare	021/04/WPT/CL	The recovery and treatment of waste	17 05 04: Soil & Stone	Activity 5, Class 10	30,000 tonnes	22/12/2004	21/12/2004	20/12/2007
Clare Co. Council	Shannon Abrasives	10 B Knockbeg Point, Shannon, Co. Clare	010/04/WPT/CL	The recovery and treatment of waste	12 01 99: Metal Contaminated Diamond lapping paste	Activity 5, Class 4	2 tonnes per annum	15/12/2004	03/12/2004	02/12/2007
Clare Co. Council	Michael Brooks	Shehanagh, Doora, Co. Clare	019/04/WPT/CL	The recovery and treatment of waste	17 05 04 Soil & Stone wastes	Activity 5 Class 10	20,000	12/01/2005	10/01/2005	09/01/2008
Clare Co. Council	Mary Brooks	Shehanagh, Doora, Co. Clare	020/04/WPT/CL	The recovery and treatment of waste	17 05 04 Soil & Stone wastes	Activity 5 Class 10	20,000	12/01/2005	10/01/2005	09/01/2008
Clare Co. Council	Clean (Ir) Refuse & Recycling Ltd	Ballynagun West, Cree, Kírush, Co. Clare	023/04/WPT/CL	Repackaging, recovery and disposal of Waste	See Annex 1 of permit	Third Schedule(Waste Disposal) Classes 11, 12, 13. Fourth Schedule (Waste Recovery) Classes 2, 3, 4, 11, 12, 13.	5,000	06/02/2005	01/02/05	31/01/2007
Clare Co. Council	Clare Waste & Recycling Co. Ltd.	Raheen, Tuamgraney, Co. Clare	011/05/WPT/CL	Waste Disposal, and Waste Recovery	See Annex 1 of permit	3rd Schedule Classes 11, 12, 13. 4th Schedule Classes 2, 3, 4, 13.	5,000	28/02/2005	28/2/05	31/05/2005
Clare Co. Council	Michael Hogan	Ballyghboy, Doora, Co. Clare	012/04/WPT/CL	Waste Disposal, and Waste Recovery	17 05 04	Class 10 activity 5	35,000 tonnes	31/03/2005	30/3/2005	
Clare Co. Council	Belwell Homes Ltd	Lakeview, Berrinck, Clonsilla, Co. Clare	14/04/WPT/CL	waste recovery	17 05 04, 17 01 07	Article 5, Class 10	4000 tonnes	13/04/2005	8/4/2005	
Clare Co. Council	Michael O'Meara	Kilcoo, Doora, Co. Clare	001/05/WPT/CL	The recovery and treatment of waste	17 05 04	Article 5, Class 10	30000 tonnes	13/04/2005	8/4/2005	
Clare Co. Council	Ogenneloe Hurling club	Ogenneloe, Co. Clare	024/04/WPT/CL	the recovery of waste (other than hazardous waste) at a facility and also treatment of any waste on land with a consequential benefit for an agricultural activity or ecological system	activity 5 class 10	activity 5, class 10	3000 tonnes	13/05/2005	13/4/2005	
Clare Co. Council	Michael Purcell	Bullyduff, Berrinck, Co. Clare	017/04/WPT/CL	The treatment of any waste on land with a consequential benefit for an agricultural activity or	Soil and Stone wastes	Fourth Schedule Class 10	20,000 total over the lifetime of the permit.	24/05/2005	19/5/05	19/05/2008
Clare Co. Council	James maíne Construction Ltd	Liscomick, Kídysart, Ennis, Co. Clare	022/05/WPT/CL	Recovery of waste	17 05 04	1st schedule, activity 5 class 10		30/06/2005	28/6/2005	28/06/2007
Clare Co. Council	Clare Civil Engineering	Roo Westm Ardnaclusha, Co. Clare	009/04/WPT/CL	Recovery of waste	17 05 04	first schedule, activity 5, class 10		12/07/2005	7/7/2005	07/07/2006
Clare Co. Council	Guerin and Considine Ltd	Sievenageeragh, Lisconnor, Co. Clare	018/05/WPT/CL	Recovery of waste	17 05 04	first schedule, activity 5, class 10		12/07/2005	13/7/2005	3 years from date of issue







				mixture of waste prior to submission to a waste disposal facility. Recycling or reclamation.	blending or mixture of waste prior to submission to a waste disposal facility activity; recycling or reclamation of organic substances; recycling or reclamation of metals and metal compounds; recycling or reclamation of other inorganic materials; storage of waste intended for submission to a waste recovery facility, subject to conditions.					
Cork Co. Council	Ritzdale Resources Ltd. t/a Crest Homes	Ballas Road, Carrigaline, Co. Cork.	19/02	Waste Recovery / Recycling	Inert Waste - Soil & Stone which conforms with the European Waste Catalogue code reference 170501.	Part 1 of the First Schedule of the WM (Permit) Regs, 1998 - Activity 5, Fourth Schedule of the WM Act, 1996 - Class 4 & 10.	04/06/2002	29/05/2002	28/05/2004	
Cork Co. Council	Gama-Tubin Construction Ltd.	Greenfield, Ballincellig, Co. Cork	22/02		Soil and stone which conforms with the European Waste Catalogue ref. 170501. No other waste types are permitted to be deposited at the facility.	Part 1 of the First Schedule of the WM (Permit) Regs, 1998, Activity 5 - Fourth Schedule of the WMA 1996, Class 4, 10.	27/06/2002	26/06/2002	26/06/2004	
Cork Co. Council	Gama-Tubin Construction Ltd.	Magin, Ballincellig, Co. Cork.	23/02		Soil and stone which conforms with the European Waste Catalogue ref. 170501. No other waste types are permitted to be deposited at the facility.	Part 1 of the First Schedule of the WM (Permit) Regs, 1998, Activity 5 - Fourth Schedule of the WMA 1996, Class 4, 10.	27/08/2002	26/06/2002	25/06/2004	
Cork Co. Council	Gama-Tubin Construction Ltd.	Lane of Cornelius Lynch, Innexenny, Waterfall, Co. Cork.	28/02		Soil and stone which conforms with the European Waste Catalogue code reference 170501. No other waste types are permitted to be deposited at this facility.	Part 1 of the First Schedule, Activity 5 / Fourth Schedule, Classes 4 & 10	30/02/2002	16/09/2002	16/09/2004	
Cork Co. Council	Glyntown Enterprises Ltd.	Unit 3, Silverbullet Warehousing, Sanfield Court, Glanmire, Co. Cork	11/01	Recovery and Disposal of Waste	Cardboard, Plastic, Newspapers, Magazines	Part 1 of the First Schedule of the WM (Permit) Regs, 1998 - Activity 5, 6 and Waste Recovery in accordance with the 4th Schedule of WMA 1996 - Class 4, 13 - 3rd Schedule of WMA, 1996 - Class 13.	15/07/2002	10/07/2002	09/07/2005	
Cork Co. Council	Advanced Skip Hire	Lehanaghmore, Togher, Co. Cork	12/01	Waste Recovery Activities	Cardboard, plastic, timber, metal, rubble, garden waste, textiles, other	Part 1 of the 1st Schedule of WM (Permit) Regs 1998 - Activity 5, 6 - 3rd Schedule of WMA 1996 - Class 13 - 4th Schedule of WMA 1996 - Class 4, 13.	15/07/2002	10/07/2002	09/07/2005	
Cork Co. Council	Cork Recycling Co Ltd.	Lehanaghmore, Togher, Co. Cork	17/02	Waste Recovery Activities	Cardboard, plastic and timber	Part 1 of 1st Schedule of WM (Permit) Regs 1998 - Activities 5 & 6 - 3rd Schedule of WMA 1996 - Class 13 / 4th Schedule of WMA 1996 - Class 4 & 13.	15/07/2002	10/07/2002	09/07/2005	
Cork Co. Council	Michael Fenton	Sluggan Cross, Whitechurch, Co. Cork.	26/02		End of Life Vehicles which conforms with the European Waste Catalogue Code Reference 160104	Part 1 of 1st Schedule of the Waste Management (Permit) Regulations 1996, Activity 2 & 3 - Fourth Schedule Classes 3 & 13.	05/11/2002	23/10/2002	22/10/2005	
Cork Co. Council	John Butler	Glinny, Riversick, Co. Cork	25/02		Soil and stone which conforms with the European Waste Catalogue code reference 170504 / Construction & Demolition Waste which conforms with the European Waste Catalogue code reference 170107	Activity 5, Classes 4 & 10	05/11/2002	31/10/2002	30/10/2004	
Cork Co. Council	John Butler	Glinny, Riversick, Co. Cork	CK (S) 113/04	Soil and stone and C & D recovery	17 05 04, 17 01 07	Class 10 and class 4 of the 4th schedule	75,000 tonnes	04/04/2005	24/03/2005	23/03/2007
Cork Co. Council	Martin O'Sullivan	Rathfide, Watergrasshill, Co. Cork	14/02		End of Life Vehicles 160104 - No other waste types shall be deposited at this facility.	Activity 2,3 of First Schedule / Classes 3,4,13 of Fourth Schedule	18/11/2002	11/11/2002	10/11/2005	
Cork Co. Council	Sorensen Civil Engineering	Lands of Thomas Herthy, Knocknagree Road, Boherbue, Cork.	36/02		Soil and stone which conforms to the EWC Ref. 170504. No other waste types are permitted.	First Schedule, Activity 5, Fourth Schedule, Classes 4 & 10.	16/01/2003	13/01/2003	12/01/2005	
Cork Co. Council	Sorensen Civil Engineering	Lands of John Cronn, Kiskeam Road, Boherbue, Co. Cork.	37/02		Soil and stone which conforms to the EWC Ref. 170504. No other waste types are permitted.	First Schedule, Activity 5, Fourth Schedule, Classes 4 & 10.	16/01/2003	13/01/2003	12/01/2005	
Cork Co. Council	Bernard Hyde	Carrigeen, Carrignagrohery, Fermoy, Co. Cork.	38/02		Soil and stone which conforms to the EWC Ref. 170504. No other waste types are permitted.	First Schedule, Activity 5, Fourth Schedule, Classes 4 & 10.	16/01/2003	13/01/2003	12/01/2005	
Cork Co. Council	Barry Murphy, Transpartners Ltd. t/a Cork Mini Skips	Churchfield Industrial Estate, John F. Connolly Road, Cork.	02/02	Waste Recovery Activities	Mixed municipal waste, glass, paper, cardboard, metal, plastic, rubble, topsoil, rubble, wood hedging & garden type, textiles may be managed at the facility.		20/12/2002	12/04/2002	30/06/2004	
Cork Co. Council	Dan Sheehan	Rathpeacon, Mallow Road, Co. Cork	33/02		Soil and stone which conforms with the EWC code ref. 170504	First Schedule, Activity 5, Fourth Schedule, Classes 4 & 10.	17/02/2003	13/02/2003	12/02/2006	
Cork Co. Council	Dan Sheehan	Rathpeacon, Mallow Road, Co. Cork	36/03		Soil and stone which conforms with the EWC code reference 170504 & C&D wastes which conforms with the EWC code 170107	First Schedule, Activity 5, Fourth Schedule Classes 4 & 10	Soil & Stone 25,000 tonnes / C&D 5,000 tonnes	01/08/2003	31/07/2003	30/07/2005
Cork Co. Council	Confidential Recycling Ltd. t/a CCS Cork	Unit 1B, Blamey Business Park, Blamey, Co. Cork.	30/02		Paper and Cardboard 200101 / Plastics 200139	First Schedule Activity 6, 5 - Fourth Schedule, Classes 4, 13, - Third Schedule, Class 13	05/03/2003	13/02/2003	12/02/2006	
Cork Co. Council	Abbeyross Manufacturing Co. Ltd, t/a Munster Waste Management	Spa Road, Mallow, Co. Cork	CK(N)12/03	Disposal of waste other than hazardous waste, recycling or reclamation of organic substances, recycling or reclamation of metals and metal compounds etc	Disposal of waste other than hazardous waste, recycling or reclamation of organic substances, recycling or reclamation of metals and metal compounds etc	Part 1 of the First Schedule, Activity 5, 6 and 4th Schedule of WMA 1996, Class. 2, 3 4, 13 and 3rd Schedule of WMA 1996, Class 12, 13	14/03/2003	11/03/2003	10/03/2004	
Cork Co. Council	John O'Connell	Killard, Blamey, Co. Cork	CK(S)03/03		Soil and stone which conforms to the EWC code reference 170504.	First Schedule, Activity 5 - Fourth Schedule, Class 10	30/04/2003	28/04/2003	27/04/2005	



					containing neither liquids nor other hazardous components Ferrous Metal 160117 and Non-ferrous Metal 160118.	Schedule Classes 3 & 13				
Cork Co. Council	ABS Recycling Ltd.	Old Bigge Store, Carriganter, Bantry, Co. Cork	CK(S)31/02		Paper and Cardboard EWC code references 200101 / Plastic which conforms with the EWC code reference 200139	First Schedule, Activities 5 & 6 / Fourth Schedule Classes 2,4,13 and Third Schedule Classes 12&13		07/05/2003	08/05/2003	05/09/2004
Cork Co. Council	Mr. Cornelius O'Keefe	Ballyegan, Glanworth, Co. Cork	CK(S)15/03		Soil and Stone - 17 05 04	First Schedule, Activity 5 / Fourth Schedule, Class 10.		12/05/2003	09/05/2003	08/05/2005
Cork Co. Council	Berrie Collins, Collins Waste Disposal	Farranbrien East, Newane Bridge, Co. Cork	CK(S) 18/02		See copy of permit for EWC codes (sludges, aqueous liquids, cardboard, concrete, bricks, tiles & ceramics, plastics, metal, clothes, textiles, mixed municipal waste, wood, glass, discarded electrical & electronic equipment	First Schedule, Activity 5 & 6 / Fourth Schedule, Classes 2,3,4 & 13 / Third Schedule Classes 12 & 13	5000	19/05/2003	15/05/2003	14/05/2005
Cork Co. Council	Thomas Fitzgerald	Carrigane, Kibehanny, Mitchelstown, Co. Cork	CK(S)027/03		Soil and stone which conforms with the European Waste Catalogue code reference 170504	First Schedule, Activity 5 / Fourth Schedule, Class 10.		23/05/2003	22/05/2003	21/05/2004
Cork Co. Council	Firibar Marshal	Meadstown, Carrigaine, Co. Cork	CK (S) 16/03		Soil and stone which conforms with the EWC code reference 170504.	First Schedule Activity 5 / Fourth Schedule Classes 4 & 10		10/06/2003	09/06/2003	08/06/2006
Cork Co. Council	Cork Institute of Technology	Balinasagbeg, Bishopstown, Co. Cork	CK (S) 26/03		Soil and stone which conforms with the EWC code reference 170504.	First Schedule Activity 5 / Fourth Schedule Classes 4 & 10		18/06/2003	17/06/2003	16/06/2006
Cork Co. Council	O'Connell Plant Hire (Grenagh) Ltd.	Ardamane, Blarney, Co. Cork	CK (S) 05/03		Soil and stone which conforms with the European Waste Catalogue code reference 170504.	First Schedule Activity 5 / Fourth Schedule Classes 4 & 10		17/06/2003	16/06/2003	15/06/2004
Cork Co. Council	John O'Flynn	Cloughias South, Mallow, Co. Cork	CK (S) 28/03		Soil and stone which conforms with the EWC code reference 170504.	First Schedule Activity 5, Fourth Schedule Class 10.		19/06/2003	17/06/2003	16/06/2006
Cork Co. Council	Donal & Catherine Moynihan	Murnagh Beg, Ballycurney, Co. Cork	CK(S) 33/03		Soil and stone which conforms with the EWC code reference 170504. No other waste types are permitted.	First Schedule, Activity 5, Fourth Schedule, Class 10		26/06/2003	25/06/2003	24/06/2004
Cork Co. Council	Kevin Barry	Cleary Road, Gortroe, Youghal, Co. Cork	CK(S) 32/03		End of life vehicles 160104 / end of life vehicles 160106 / ferrous metals 160107 / non-ferrous metals 160118	First Schedule, Activity 5, Fourth Schedule, Classes 4 & 13.		30/06/2003	27/06/2003	26/06/2006
Cork Co. Council	McGill Environmental	Ballinvoher, Castletownroche, Co. Cork	CK(S) 08/03		See copy of permit for EWC codes (sludges from on-site effluent treatment, urban waste water, sludges from treatment of urban waste water, treatment of industrial waste water, biological kitchen & canteen waste.	First Schedule, Activities 5 & 6 / Fourth Schedule Classes 2 & 13 / Third Schedule Class 13		08/07/2003	07/07/2003	06/07/2006
Cork Co. Council	Seamus O'Mora	Yenglimacarriga, Middleton, Co. Cork	CK(S) 14/03		Soil & stone which conform to the EWC ref. 170504. No other waste types are permitted.	First Schedule, Activity 5, Fourth Schedule, Class 10		17/07/2003	15/07/2003	14/07/2004
Cork Co. Council	Alan Browne	Mountains, Rylane, Co. Cork	CK(S) 34/03		Soil & stone which conforms with the EWC ref. 170504. No other waste types are permitted.	First Schedule, Activity 5, Fourth Schedule Class 10.		17/07/2003	15/07/2003	14/07/2006
Cork Co. Council	Youghal Waste Disposal & Recycling T/A Yellow Bin	Mudancs, Foxhole, Youghal, Co. Cork	CK(S) 23/03		Separately collected fractions which conform with the EWC code references 2001, other municipal wastes which conform with the EWC code reference 2003, construction and demolition wastes which conform with the EWC code reference 17. No other waste types are permitted.	First Schedule Activities 5 & 6 / Fourth Schedule Classes 2,3,4 & 13 / Third Schedule Classes 11, 12 & 13.		21/07/2003	17/07/2003	16/07/2005
Cork Co. Council	Ann Crowley	Liberty Stream, Ballygarvan, Co. Cork	CK(S) 20/03		Soil and stone which conforms with the EWC code reference 170504. No other waste types are permitted.	First Schedule Activity 5 / Fourth Schedule Class 10		18/07/2003	17/07/2003	16/07/2005
Cork Co. Council	Donal O'Donovan & Jerry O'Callaghan	Gornaglough, Ballinhasag, Co. Cork	CK(S) 09/03		Soil & stone which conforms with the EWC code reference 170504 & C&D wastes which conform with the EWC code reference 170107	First Schedule Activity 5 / Fourth Schedule Classes 4 & 10	Soil & Stone 30,000 tonnes / C&D 10,000 tonnes	01/08/2003	31/07/2003	30/07/2005
Cork Co. Council	Ricky Barnett	The Elms, Adamstown, Ballinhasag, Co. Cork	CK(S) 37/03		Soil & stone which conforms with the EWC code reference 170504.	Activity 5, Class 10		08/08/2003	07/08/2003	06/08/2006
Cork Co. Council	Jeremy Lynch	Balincra, Watertall, Co. Cork	CK(S) 45/03		Soil & stone which conforms with the EWC code ref. 170504. Mixture of concrete, bricks, tiles and ceramics other than those mentioned in 170106 with EWC ref. 170107.	Fourth Schedule, Class 10		02/09/2003	01/09/2003	31/08/2006
Cork Co. Council	David Crowley	Dangan, Bandon, Co. Cork	CK(S) 30/03	Soil Recovery	Subsoil 170504 / Topsoil 170504	Class 10 of 4th Schedule	13,000	07/10/2003	06/10/2003	05/10/2005
Cork Co. Council	D.B. O'Donovan	Clogheenduane, Templemichael, Kinsale, Co. Cork	CK(S) 47/03	Soil & Stone & C&D Waste Recovery	Subsoil 170504 / C&D 170701	Class 1 of the Third Schedule, Class 10 of the Fourth Schedule	5,000	21/10/2003	20/10/2003	20/10/2005
Cork Co. Council	John A. O'Sullivan	Ballydaly, Millstreet, Co. Cork	CK(S) 04/03	Dismantling & Vehicle Recovery	End of life vehicles 160104	Class 3 & 13 of the Fourth Schedule		21/10/2003	20/10/2003	20/10/2005
Cork Co. Council	Howley Civil Engineering Ltd.	c/o Conor Lynch, Ballinvinny, Glanmire, Co. Cork	CK(S) 42/03	Soil & Stone & C&D Waste Recovery	Soil & Stone 170504 / C&D 170107	Class 10 of the Fourth Schedule, Class 1 of the Third Schedule	204,990	21/10/2003	20/10/2003	20/10/2005
Cork Co. Council	John O'Connell	Killard, Blarney, Co. Cork	CK(S) 56/03	Soil & Stone, C&D / Dredger Soil	Soil & Stone 170504 / C&D 170107 / Dredged Soil 170504	Class 1 of the 3rd Schedule & Class 10 of the 4th Schedule	43,500	30/10/2003	29/10/2003	29/10/2006
Cork Co. Council	Bernard O'Mahony	Tullyland, Bandon, Co. Cork	CK(S) 51/03	Soil & Stone, C&D Waste Disposal	Soil & Stone 170504 / C&D 170107	Class 1 of the Third Schedule	5,000	18/06/2003	03/11/2003	03/11/2006
Cork Co. Council	Ballygarvan Stonecraft & Paving Co	Balinasreen, Ballygarvan, Co. Cork	CK(S) 44/03	Recycling Facility (water washing)	Water Washings 080120	Class 4 of the Fourth Schedule	900	04/11/2003	03/11/2003	03/11/2006
Cork Co. Council	Michael O'Donovan	Maulmacredmond, Clonakilly, Co. Cork	CK(S) 32/02	Soil & Stone & C&D Waste Recovery	Soil & Stone 170504 / C&D Waste 170107	Class 1 of the Third Schedule, Class 10 of the Fourth Schedule.	4,500	04/11/2003	03/11/2003	03/11/2005
Cork Co. Council	Howley Civil Engineering Ltd.	c/o Pat Ahern, Barryscourt, Carrigrohilla, Co. Cork	CK(S) 22/03	Soil & Stone / C&D Waste Recovery	Soil & Stone 170504 / C&D Waste 170107	Classes 4 & 10 of the Fourth Schedule	205,000	17/11/2003	14/11/2003	14/11/2006
Cork Co. Council	Gerard Murphy	Old Cobb Head, Carrigrohilla, Co. Cork	CK(S) 52/03	Soil & Stone & C&D Waste Recovery	Subsoil 17 05 04 / C & D Waste 17 09 04	Class 1 of the 3rd Schedule, Class 3&6 of the 4th Schedule	65,000	19/01/2004	16/01/2004	15/07/2004
Cork Co. Council	Valentine O'Driscoll	Ballderga, Little Island, Co. Cork	CK(S) 70/03	Soil & Stone, C&D Waste Recovery	Soil & Stone 17 05 04 / C&D 17 01 07	Class 10 of the Fourth Schedule	100,000	21/01/2004	20/01/2004	19/01/2006
Cork Co. Council	Michael O'Sullivan	Ivy Bridge, Ballyhillige, Mount Abbey, Mallow	CK(S) 78/03	Soil & Stone Recovery	Soil & Stone 17 05 04	Class 10 to the Fourth Schedule	4,000	20/01/2004	19/01/2004	18/01/2006



Cork Co. Council	John Fleming Construction Co. Ltd	Mallow Mill Site, Mallow, Co. Cork	CK(S) 74/03	Excavation Site with the recovery of rock	Excavated Stone 17 05 04	Class 4 of the Fourth Schedule	100,000	08/01/2004	06/01/2004	05/01/2006
Cork Co. Council	Dan Scully	Kesale Road, Ballygarvan, Co. Cork	CK (S) 57/03	Soil & Stone Recovery	Soil & Stone 17 05 04	Class 10 of the Fourth Schedule	21,000	22/12/2003	18/12/2003	18/12/2006
Cork Co. Council	Fribarr Marshal	Meacstown, Carrigaline, Co. Cork	CK (S) 59/03	Soil & Stone & C&D Waste Recovery	Soil & Stone 17 05 04, C&D 17 01 07, Dredging Spoil 17 05 06, Municipal Waste 20 03 99	Class 10 of the Fourth Schedule	38,800	22/12/2003	18/12/2003	18/12/2006
Cork Co. Council	Andy Daley	Teamore, Midleton, Co. Cork	CK (S) 68/03	Soil & Stone Recovery	Soil & Stone 17 05 04	Class 10 of the Fourth Schedule	5,000	10/12/2003	06/12/2003	08/12/2005
Cork Co. Council	Tagh O'Callaghan	IPP Ltd, Bay 2, Quartertown Industrial Estate, Quartertown	CK (S) 71/03	Recycling Facility (P.V.C.)	Plastic Shavings and Turnings 12 01 05	Activity 5 of the First Schedule and Class 4 of the Fourth Schedule		02/02/2004	30/01/2004	29/01/2007
Cork Co. Council	Glanmire Precision Ltd	Site No 7, Owenacurra Business Park, Knockgriffin	CK (S) 62/03	Soil & Stone Recovery	Soil & Stone 17 05 04	Class 10 of the Fourth Schedule	5,000	02/02/2004	30/01/2004	29/03/2004
Cork Co. Council	Daniel S. Coleman	Smoroney/Gormaclohy, Cork Road, Skibbereen, Co. Cork	CK (S) 48/03	Soil & Stone Recovery	Soil and Stone 17 05 04	Class 10 of the Fourth Schedule	5,560	06/02/2004	04/02/2004	03/02/2004
Cork Co. Council	Shanick Plant Hire Ltd	Carrig Demense, Mallow, Co. Cork (Amended Permit received 18/04/04)	CK (S) 83/04	Soil & Stone Recovery and C & D Recovery	Subsoil 170504, C & D Waste 17 01 07	Fourth Schedule Class 10 and Class 4 of the fourth schedule	40,000	27/05/2004	13/02/2004	12/02/2007
Cork Co. Council	Merchem Env Services Ltd	4 Haddington Terrace, Dun Laoghaire, Co Dublin	CK (N) 106/04	Warehouse for the storage of waste prior to submission to recovery.	paper and cardboard, waste electrical good, Widges, fluorescent tubes	Class 13 of the 4th schedule	5,000	25/03/2004	23/03/2004	22/03/2005
Cork Co. Council	Michael O'Sullivan	hy Bridge, Ballyhobge, Mounse Abbey, Mallow	CK (N) 110/04	Filling of low ground with imported soil & clean C&D material to make a roadway for access	Soil and Stone 17 05 04 Builders Rubble 17 01 07	Class 10 of the 4th Schedule & Class 4 of the 4th Schedule	5,000	05/04/2004	02/04/2004	01/04/2006
Cork Co. Council	Martin Murphy	Ballynasha, Old Mallow Road, Blarney	CK (S) 85/04	Lowing boglands, which are unable to be farmed	Soil and Stone - 17 05 04	Class 10 of the 4th Schedule	8,800	05/05/2004	30/04/2004	29/04/2006
Cork Co. Council	Martin Murphy	Gurranee, Bweeng, Mallow	CK (S) 88/04	Lowing boglands, which are unable to be farmed	Soil and Stone - 17 05 04	Class 10 of the 4th Schedule	30,000	05/05/2004	30/04/2004	29/04/2007
Cork Co. Council	Frank McCarthy	Ballymartin, Waterloo, Co. Cork	CK (S) 91/04	The treatment of waste on the land with the consequential benefit for agriculture or ecological benefit	Subsoil 17 05 04	Class 10 of the Fourth Schedule	1,800	06/02/2004	12/05/2004	11/05/2005
Cork Co. Council	Denis McSweeney & Son	Mwbeg East Enniskeane, Co. Cork	CK	Develop a pit for the extraction of sand and gravel				24/05/2004		
Cork Co. Council	Paudie Shaahan	Island, Burnfort, Mallow, Co. Cork	CK (S) 76/03	Landfill for reclamation purposes	Soil and Stone 17 05 04	Class 10 of the Fourth Schedule	27,000	04/06/2004	03/06/2004	02/06/2006
Cork Co. Council	William O'Keefe	Lisallynny, Chaneville, Co. Cork	CK (N) 119/04	Soil/Stone C & D Recovery	Earth 17 05 04, Subsoil 17 05 04, C & D 17 01 07	Class 10 & Class 4 of the Fourth Schedule	20,000	08/06/2004	04/06/2004	03/06/2007
Cork Co. Council	Paudie Shaahan	Island, Burnfort, Mallow, Co. Cork	CK (N) 137/04	Soil/Stone C & D Recovery	Soil and Stone 17 05 04 and C&D 17 01 07	Class 10 (Principal) & Class 4 of the Fourth Schedule	27,000	28/06/2004	25/06/2004	24/06/2006
Cork Co. Council	Scarff Plant Hire Ltd	Bellinacurra West, Midleton, Co. Cork	CK (S) 21/03	Soil & Stone, C & D & Metal Recovery.	17 05 04 Subsoil, 17 01 07, mixture of concrete, 17 02 01 wood, 17 04 05 iron and steel, 17 05 07 mixed metals	Class 3, 4, & 10 of the Fourth Schedule	32,760	24/06/2004	23/06/2004	22/06/2007
Cork Co. Council	Balinhassig Parish, Fr. Joseph Murphy PP	Rigsdale, Balinhassig, Cork	CK (S) 93/04	Construction of church car park	Mixture of concrete, bricks, tiles 17 01 07	Class 4 of the Fourth Schedule	15,500	15/07/2004	13/07/2004	12/07/2005
Cork Co. Council	Sorensen Civil Engineering	Aghmarta, Carrigaline, Co. Cork	CK (S) 103/04	Soil/Stone C & D Recovery	Soil and Stone 17 05 04 and Concrete blocks and tiles 17 01 07	Class 4 and class 10 of the Fourth Schedule	24,200	22/07/2004	21/07/2004	14/01/2005
Cork Co. Council	Michael Barry, Fribarr Buckley & David O'Sullivan, c/o Delaney Hurling & Football Club	Kibarry, Dublin Hill, Cork	CK(S) 149/04	Soil/Stone, C&D Recovery	17 05 04 Soil, Subsoil & Rock 17 01 07 C & D	Class 2 & 4 (Principal) & 13 of the Fourth Schedule	10,200	09/08/2004	05/08/2004	04/08/2007
Cork Co. Council	Dorstone Ltd.	Andokil, Sandycove, Kinsale	CK (S) 61/03	Soil & Stone Recovery	17 05 04 Soil & Stone	Class 10 of 4th Schedule	15,000	09/08/2004	06/08/2004	04/08/2007
Cork Co. Council	O'Brien Skip Hire Ltd.	Ballyrussell, Midleton, Co. Cork	CK (S) 114/04	Transfer station for the segregation of Building Rubble and construction related materials. Transfer of segregated products to permitted sites.	See Permit	Classes 2, 3, 4 & 13 of the fourth schedule, classes 12 & 13 of the third schedule	3,920	16/08/2004	13/08/2004	12/08/2007
Cork Co. Council	Loftus Civil Engineering Ltd.	Toureen North Burnfort, Mallow, Co. Cork	CK (S) 114/04	Agricultural land. Levels to be raised to increase output of land	17 05 04, 17 01 07	Class 10 & 4 of 4th Schedule	105,000	23/08/2004	13/08/2004	12/08/2004
Cork Co. Council	Cornelius Lynch	Inishenny, Waterford Co. Cork	CK (S) 136/04	Soil recovery	17 05 04 Soil	Class 4 & Class 10 of 4th Schedule	60,000	03/09/2004	02/09/2004	31/08/2007
Cork Co. Council	John Garde	Knockgriffin, Midleton, Co. Cork	CK (S) 01/03	Recycling Facility	20 01 38 Timber, 20 01 01 Cardboard, 20 01 40 Metal, 20 03 07/20 03 99 Mixed Domestic/Commercial, 17 01 07 C&C	Classes 11, 12 & 13 of the Third Schedule. Classes 2,3,4 & 13 of the Fourth Schedule	2,000	10/09/2004	08/09/2004	01/09/2005
Cork Co. Council	James Hegarty	Whitechurch rd, Whitechurch, Co. Cork	CK(N) 163/04	Soil & Stone Recovery	17 05 04 Soil & Stone	Class 10 & 4 of the 4th Schedule	4,500	20/09/2004	17/09/2004	14/09/2007
Cork Co. Council	CTO Environmental Solutions Ltd.	Westwood, Rosetta, Midleton	CK(S)165/04	Composting Facility	See Appendix 1 of Permit	Class 2 & 13 of the Fourth Schedule	38,264	30/09/2004	30/09/2004	29/09/2006
Cork Co. Council	John A Wood Ltd	Ballygarvan Sandstone Quarry, Kilarully, Ballygarvan, Co. Cork	CK(S) 88/04	Recovery/Recycling of Construction & Demolition Materials	17 01 01 Concrete, 17 01 02 Bricks, 17 01 03 Tiles, Concrete, Ceramic, Bricks, 17 01 07 Tiles	Class 4 of the 4th Schedule. Recycling or reclamation of other inorganic	100,000	07/10/2004	05/10/2004	04/10/2007
Cork Co. Council	Joe Daly	White Oaks, Beechmount, Sarsfield Court, Glanmire, Co. Cork	CK (S) 129/04	Soil, Stone & Construction & Demolition Recovery	17 07 07: Mixture of C&D Recovery, 17 05 04 Soil & Stone	Class 10 of the Fourth Schedule, Class 4 of the Fourth Schedule	31,000	11/10/2004	07/10/2004	06/10/2004
Cork Co. Council	Brian McSweeney	Cookstown, Blarney, Co. Cork	CK (S) 82/03	Soil & Stone Recovery	17 01 07: C&D, 17 05 04: Soil & Stone	Activity 10 of the Fourth Schedule	13,750	14/10/2004	13/11/2004	11/11/2007
Cork Co. Council	Glyntown Enterprises Ltd.	Sarsfield Court Industrial Estate, Glanmire, Co. Cork	CK (S) 167/04	Materials Recovery Facility	See Condition 5 of Permit	Classes 2, 3, 4 & 13 (Principal) of the Fourth Schedule	4,780 tonnes	23/11/2004	18/11/2004	18/11/2007
Cork Co. Council	Mc Inerney Construction Ltd.	Ballynacubby, Kinsale, Co. Cork	CK (S) 151/04	Soil, Stone & C&D Recovery	17 05 04: Soil & Stone, 17 01 07: C&D	Classes 2, 4 & 13 of the Fourth Schedule	50,000 tonnes	23/11/2004	18/11/2005	18/11/2004
Cork Co. Council	Abheryoss Manufacturing Co. Ltd.	Spa Rd., Mallow, Co. Cork	CK(N) 166/04	Waste Transfer Station	See Appendix 1 of Permit	Classes 12 & 13 of the Third Schedule, Classes 2, 3, 4, 12 & 13 of the Fourth Schedule	5,000 tonnes	28/11/2004	24/11/2004	23/11/2004
Cork Co. Council	Tom & Mary Hickey	Aherla More, Aherla, Co. Cork	CK(S)128/04	Soil Stone, C&D Sand/Clay Recovery	07 05 04: Soil & Stone, 17 01 07: C&D, 01 04 08: Waste Sand/Clay	Class 10 of the 4th Schedule (Principal) & Class 4 of the 4th Schedule	40,000	08/12/2004	30/11/2004	29/11/2007
Cork Co. Council	Pouladuff Dismantlers Ltd	Forge Hill, Pouladuff Road, Cork	CK(S) 168/04	Classes 3,4,7&13 of the fourth schedule	16 01 04: E.L.V., 16 01 17: Scrap Metal, 16 01 08: Scrap Metal 17 04 05: Iron & Steel	Classes 3,4,7&13 of the fourth schedule	4,000	14/12/2004	08/12/2004	07/12/2007
Cork Co. Council	Balinee Skip Hire	Cahir, Balinee, Co. Cork	CK(S) 02/03	C&D Waste Recovery	See Appendix 1 of Permit	Activity 5 & 6 of the first schedule; Classes 2,3,4 & 13 of the Fourth Schedule; Classes 12 & 13 of the Third Schedule; Repackaging & Storage of	5,000	22/12/2004	18/12/2004	13/12/2004
Cork Co. Council	John Buckley	Inchmahony & Prouse, Kilmartitty, Co. Cork	CK (S) 157/04	Composting Facility	See Appendix 1 of Permit	Class 2 & Class 13 of the 4th Schedule	5,000	10/01/2005	05/01/2005	04/01/2007



Cork Co. Council	Berrie Collins	Farranbrien East, Minane Bridge, Co. Cork	CK (S) 96/04	Waste Transfer Station	See Condition 5.5.1	Third Schedule Class 11, 12, 13, Fourth Schedule Class 2, 3, 4, 11, 12, 13	5,000	10/01/2005	06/01/2005	13/12/2006
Cork Co. Council	Mr. Frank Smith	Kiltra, Malow Co. Cork	CK (N) 162/04	E.L.V Recovery	E.L.V. 16 01 04	Classes 3, 4, 7, 13 of Fourth Schedule	95 no. per annum	12/01/2005	07/01/2005	03/01/2008
Cork Co. Council	Daclin Holford of Embassy Plant Hire Ltd.	Loughane East, Blaney, Co. Cork	CK (S) 112/04	Recovery of waste on the land with the consequential benefit for agricultural and ecological benefit.	Subsoil 17 05 04 / Mixture of concrete, bricks, tiles 17 01 07	Class 10 & 4 of the 4th Schedule	14,000	13/01/2005	12/01/2005	11/01/2005
Cork Co. Council	JAPREK Ltd	Sluggera Cross, Whitechurch, Co. Cork	CK (S) 66/03	Dismantling & Vehicle Recovery	E.L.V. 16 01 04	Classes 3 & 13 of the 4th Schedule	125	21/01/2005	18/01/2005	17/07/2006
Cork Co. Council	Maurice O'Connell	Meenane, Watergrasshill, Co. Cork	CK (S) 77/03	Commercial Development	Soil & Stone 17 05 04 / C&D 17 01 07	Classes 2 & 4 of 4th Schedule	50,800 Already placed/recovered	24/01/2005	26/01/2005	19/01/2006
Cork Co. Council	Aidan Buckley	Rathpeacon, Malow Road, Co. Cork	CK (S) 58/03	Dismantling and Vehicle Recovery	16 01 04	Class 3 and 13 of the fourth schedule	54.25 tonnes	30/03/2005	22/03/2005	21/03/2008
Cork Co. Council	David Walsh	Ballynaboina, Midleton, Co. Cork	CK (S) 127/04	Waste recovery	17 05 04	Activity 5, Class 4 and 10	25000 tonnes	30/03/2005		
Cork Co. Council	Murphy & O'Shea	Arish, Bantry, Co. Cork	CK (S) 72/03	soil and stone and c & d recovery	soil and stone and C & D	class 10 of the fourth schedule	19,500 tonnes	04/04/2005	24/03/2005	23/03/2007
Cork Co. Council	John O' Flynn	Cloughucas North, Malow, Co. Cork	CK (N) 173/04	Earth soil Recovery	soil and subsoil 17 05 04	Classes 2, 4 & 10 of the fourth schedule	8000 tonnes	05/04/2005	31/03/2005	30/03/2008
Cork Co. Council	Pat Buckley	Ballymacorcoran, Clonrohid, Macroom, Co. Cork	CK (S) 205/05	Soil and stone recovery	17 05 04 soil and stone and topsoil	Class 2 and 10 of the 4th schedule	20000 tonnes	11/04/2005	05/04/2005	04/08/2006
Cork Co. Council	Con Cronin	Castlebarrett, Meumeabbey, Malow, Co. Cork	CK (S) 80/03	Soil and stone recovery	17 05 04	class 10 and 13 of the 4th schedule	33500 tonnes	05/05/2005	22/04/2005	22/04/2008
Cork Co. Council	Countywide Drain services	Coolnashamroge, Farnanes, Co. Cork	CK (S) 63/03	waste recovery		activity 5, class 10		13/05/2005	22/04/2005	
Cork Co. Council	Martin McCarthy	Scarbarry, Watergrasshill, Co. Cork	CK (N) 175/04	E.L.V Recovery	16 01 04	Classes 3, 4, 7, 13 of Fourth Schedule	120 tonnes	16/05/2005	13/05/2005	12/05/2008
Cork Co. Council	Glyntown Enterprises Ltd.	Jimmy Barry Motors Warehousing, Colmansa, Bantry, co. Cork	CK (S) 182/04	Materials Recovery Facility	Paper & Cardboard, Plastic and metal	classes 2, 3, 4 & 13 of the fourth schedule	1300 tonnes	17/05/2005	09/05/2005	21/04/2008
Cork Co. Council	Finbar William Power	Ballart Millcove Castletownbere, Co. Cork	CK (S) 116/04	Yard used for receiving scrap metal including ELV Batteries and fluids will be removed from car bodies, batteries will be stored in steel cages, oils and fluids will be collected into a tank system for collection. All car bodies will then be composted	160104, 160117, 160118, 191002	4th schedule classes 3,4 & 13	300	14/06/2005	10/06/2005	08/06/2008
Cork Co. Council	Patrick Kelleher	Rooves More, Co. Cork	CNS 178/04	Tyre storage and recycling	Tyres 180103	4th schedule classes 4 & 13	400	21/06/2005	17/06/2005	14/05/2007
Cork Co. Council	Indaver Ireland Ltd	Unit 5, Ballydheen Industrial Estate, Malow, Co. Cork	CK (N) 209/05	Warehouse for the storage of waste paper	20 01 01	Class 13 of the fourth schedule	4000 tonnes	01/07/2005	28/06/2005	26/09/2006
Cork Co. Council	John Hickey	Courtna TD, Skibbereen, Co. Cork	CK (S) 172/04	Soil, subsoil and C&D recovery	17 05 04, 17 01 07	class 2 & 4 of the fourth schedule		05/07/2005	01/07/2005	30/06/2007
Cork Co. Council	Donal & Elizabeth Con	Knockane, Donoughmore, Co. Cork	CK (N) 138/04	subsoil & construction & Demolition Recovery	17 05 04, 17 01 07	Class 10 & Class 4 of the Fourth Schedule		21/07/2005	15/07/2005	13/07/2007
Cork Co. Council	Denis Lehane	Kilbrogan, Bandon, Co. Cork	CK(S) 134/04	Recovery of waste	See Condition 5 of Permit	Fourth schedule, Class 10		31/08/2005	30/08/2005	
Cork Co. Council	Maurice Cogan	Countstown, Little Island, Co. Cork	CK(S) 154/4	Soil Recovery	Soil and Stone	Class 10 and 4 of the 4th Schedule	65,700	19/09/2005	15/09/2005	13/09/2008
Cork Co. Council	DMc Sweeney & C. Denrehy	Gogganstown, Knockraha, Co. Cork	CK(S) 155/04	Soil/Stone, C&D Recovery	Soil and Stone, C&D Waste	Class 10 (Principal) & Class 4 of the 4th Schedule	4,500	19/09/2005	15/09/2005	12/09/2007
Cork Co. Council	Muecral Construction Ltd	Raleigh North, Macroom, Co. Cork	CK(S) 210/5	Recovery of Waste	Soil and Stone	Class 2, 4 and 10 of the 4th Schedule	4,500	12/09/2005	07/09/2005	Not exceeding 2 years
Cork Co. Council	Con & Martin Nyhan	Burleigh, Danganbeg, Bandon, Co. Cork	CK (S) 122/04	Recovery of Waste	17 05 04 17 01 07			12/09/2005	07/09/2005	
Cork Co. Council	Patrick O Connell	Knockeenamrogh & Carrigane	CK(N)158/04	Recovery of Waste	17 05 04	Activity 5 Class 10	20,000	12/09/2005	07/09/2005	Not exceeding 2 years
Cork Co. Council	Paul White	Foshole, youghall, Co. Cork	CK(S) 199/05	Recovery of Waste	17 05 04	Activity 5 Class 2 and 4	10,000	12/09/2005	07/09/2005	Not exceeding 2 years
Cork Co. Council	Robcon Ltd	Cork Airport, Kinsale Road, Co. Cork	CK (S) 242/05	Recovery of Waste	17 05 04	Activity 5 Class 4 and 13		12/09/2005	07/09/2005	Not exceeding 8 months
Cork Co. Council	Frank Power	Dunbittem East, Bantry, Co. Cork	CK (S) 211/05	Recovery of Waste	See Permit	Activity 5 and 6, 4th Schedule Class 2,3 and 13 and 3rd Schedule Class 12 and 13	5,000	12/09/2005	07/09/2005	Not exceeding 3 years
Cork Co. Council	David McSweeney	Faggot Hill, Clogheen, Co. Cork	CK (S) 135/04	Recovery of Waste	17 05 04 17 01 07	1st Schedule Activity 5 and Fourth Schedule Class 4 and 10	13,000	12/09/2005	07/09/2005	Not exceeding 2 years
Cork Co. Council	Finbarr O'Neill Ltd	Cleashanure, Overs, Co. Cork	CK (S) 150/04	Recovery of Waste	17 05 04 17 01 07	1st Schedule Activity 5 and Fourth Schedule Class 2, 4 10 and 13	10,000	12/09/2005	07/09/2005	Not exceeding 3 years
Cork Co. Council	Tim Ring	Carriganma, Macroom, Co. Cork	CK (S) 224/05	Recovery of Waste	17 05 04	1st Schedule Activity 5 and Fourth Schedule Class 2 and 10		12/09/2005	07/09/2005	Not exceeding 2 years
Cork Co. Council	Environmental Dredging Ireland	Disish Island, Castletownbere, Co. Cork	CK (S) 239/05	Recovery and stabilisation of dredged sediments from harbour	17 05 06	Classes 4 and 13 of the Fourth Schedule	90,000	28/09/2005	26/09/2005	25/03/2007
Cork Co. Council	Conor Curtin	Castlenarsson, Ballyhea, Co. Cork	CK (N) 223/05	C & D Recovery	Topsoil 17 05 04, Subsoil 17 05 04, C&D 17 01 07	Classes 2, 4 & 10 of the fourth schedule	34,000	12/10/2005	10/10/2005	09/10/2007
Cork Co. Council	Indaver Ireland Ltd	Unit 12 B, Ballydheen Industrial Park, Malow, Co. Cork	CK (N) 214/05	Transfer station	See Permit	Class 13 of the 3rd schedule, classes 2,3,4 & 13 of the 4th schedule		20/10/2005	17/10/2005	16/10/2006
Cork Co. Council	Michael and John Murphy	Skeahagh & Ballin abughy, Ballinacraig, Co. Cork	CK (N) 217/05	C & D Recovery	Soil and stone 17 05 04	classes 4 principal and 2 of the 4th schedule	8,000	01/11/2005	27/10/2005	26/10/2006
Cork Co. Council										
Dublin City Council	JVC Limited	Clonsaugh Industrial Estate, Formerly 'Little Tykes', Dublin 14	WP 98042	Recovery of dry recyclable waste	Paper, metal packaging, dry pulp fibre substitutes	3rd Schedule Classes 12,13 and 4th Schedule Classes 3,4,13		14/07/2004	04/10/2001	03/10/2004
Dublin City Council	John W. Hannay & Co. Ltd	Environment Park, 347 Bannow Road, Cabra, Dublin 7	WP 98059	Recovery of paper, cardboard, plastic and wood waste	Paper, cardboard, plastic and wood	Class 2, Class 3, and Class 4 of 4th schedule	25000	14/07/2004	06/02/2003	05/02/2006
Dublin City Council	Indaver Ireland	Crosbie Warehouse Number 2, Bond Road, Dublin Port, Dublin 1.	WP 98043	Storage of paper waste prior to submission to a recovery activity	Newspapers and magazines	Class 13 of the Fourth Schedule		14/07/2004	13/11/2001	12/11/2004
Dublin City Council	DOC Packaging	Unit 2B, Kilmore Industrial Estate, Dublin 10	WP 98044	Recovery of cardboard waste	Cardboard	Class 2 of the Fourth Schedule		14/07/2004	30/11/2001	29/11/2004



				to submission to a permitted/licensed disposal facility	waste					
Dublin City Council	Conservation Technology Ltd.	Davit Road, Dublin 12	WP 98054	The recovery of fluorescent tubes, sodium lamps and light bulbs which may contain mercury or its compounds	fluorescent tubes, sodium lamps and light bulbs	Class 13 of the Fourth Schedule		14/07/2004	30/06/2002	30/06/2005
Dublin City Council	Martin Services (Industrial) Ltd.	Unit 10 and Unit 11 Bluebell Business Park, Old Naas Road, Bluebell, Dublin 12	WP 98040	Temporary storage of non-hazardous sanitary waste prior to submission to a disposal activity.	Non-hazardous sanitary waste in appropriate secure identifiable containers	Class 13 of the Third Schedule		14/07/2004	30/04/2003	29/04/2005
Dublin City Council	Dublin Sanitary Disposals Ltd.	55D House, 16 Berrow Street, Dublin 4	WP 98063	Temporary storage of sanitary waste whose collection and disposal is not subject to special requirements in order to prevent infection	Sanitary towel and tampon waste whose collection and disposal is not subject to special requirements in order to prevent infection in rigid, secure, identifiable containers.	Class 13 of the Third Schedule	5000	14/07/2004	01/09/2003	31/08/2005
Dublin City Council	Mitchell Taylor Exports Ltd.	Newmarket, Dublin 8	WP 98045	Recovery and temporary storage of waste cooking oil	waste cooking oils	Class 13 of the Fourth Schedule		14/07/2004	01/09/2003	31/10/2004
Dublin City Council	G & T McGovern	9-12 Prides Lane and Rear 31 Ranelagh Road, Ranelagh, Dublin 8	WP 98066	The recovery of ferrous and non-ferrous metals	ferrous metals and non-ferrous metals	Class 3 and class 13 of the Fourth Schedule		14/07/2004	01/02/2003	31/01/2005
Dublin City Council	Oxygen Environmental Ltd.	Former CVP Complex, Kilmore Road, Dublin 12	WP 98075	Recovery of paper, cardboard, plastic, wood, white goods, metal, concrete, bricks, tiles, ceramics and soil and stone	paper, cardboard, plastic, wood, discarded electronic and electrical equipment corresponding to EWC code 20 01 36, metal, concrete, bricks, tiles, ceramics, soil and stones which does not contain dangerous substances	Class 2, class 3, class 4 and class 13 of the Fourth Schedule	20000	14/07/2004	12/12/2003	11/12/2004
Dublin City Council	Total Waste Control	Former King Crisps Factory, Jamestown Road, Dublin 8	WP 98069	Recovery of glass, paper, cardboard, plastic, wood, metal packaging, and discarded electronic and electrical equipment corresponding to EWC code 20 01 36	glass, paper, cardboard, plastic, wood, metal packaging and discarded electronic and electrical equipment corresponding to EWC code 20 01 36	Class 2, class 3 and class 4 of the Fourth Schedule	5000	14/07/2004	03/02/2004	02/02/2006
Dublin City Council	Clearway Deposits Ltd.	Lane Metal Company, Pigdon House Road, Ringsend, Dublin 4.	WP 98067	Recovery of scrap metal or other metal waste, and the dismantling or recovery vehicles	End-of-life vehicles ferrous metals and non-ferrous metals	Class 4 of the Fourth Schedule, Class 2 and class 3 of Part 1 of 1st schedule		14/07/2004	17/06/2004	18/08/2006
Dublin City Council	Codest Investments Ltd.	32 Backstop, Dublin 8	WP 98080	Recovery of scrap metal or other metal waste	Copper waste, Aluminium waste, stainless steel waste, lead waste	Class 3 of the Fourth Schedule, Class 2 of 1st schedule		14/07/2004	01/07/2004	30/06/2007
DunLaoghaire Rathdown Co. Council	Mardown Ltd	Total Farms, Blacklagan Road, Sanyford, Dublin 18	W4/4(18)	Import waste soil and stones for landscaping around sports centre.	Waste soil and stones - 17 05 04	Activity 6 (Disposal of waste (other than hazardous waste) at a facility (other than a landfill facility)	3,000		11/12/2003	31/03/2004
DunLaoghaire Rathdown Co. Council	St. Joseph's Boys AFC Ltd.	Parma Park, Rochestown Ave., Salyloggin, C. Dublin	W4/4(19)	The recovery of waste (other than hazardous waste) at a facility (other than a facility for the composting of waste where the amount of compost and waste held at the facility exceeds 1000 tonnes)	17-05-04 Uncontaminated Soil and Stones	Activity 5 - Waste Recovery	1,890	02/04/2004	29/03/2004	09/07/2004
DunLaoghaire Rathdown Co. Council	Shannon Homes (Dublin) Limited	Simons Ridge, Blacklagan Road, Sanyford, Dublin 18	W4/4(20)	The recovery of waste (other than hazardous waste) at a facility and also recycling or reclamation of organic substances which are not used as solvents	17 05 04	part 1 of the 1st schedule, activity 5 and 4	43,000 tonnes for phase 1 shannon homes lands, 38,000 tonnes for phase 2 Dwyer Nolan lands	04/04/2005	30/11/2004	
DunLaoghaire Rathdown Co. Council	The board of management, Catholic primary management, Association Trust	St. Annes national school, Monabridge Road, Shankill, Co. Dublin	W4/4(22)	The recovery of waste (other than hazardous waste) at a facility and also recycling or reclamation of other inorganic materials	17 05 04	part 1 of the 1st schedule, activity 5 and 4		04/04/2005	16/03/2005	
DunLaoghaire Rathdown Co. Council	Stackstown Golf Club	Kelystown Road, Rathfarnham, Dublin 18	W4/4(27)	Waste Management activities	17 05 04	Activity 4 and 5 of the 1st Schedule	1,000	09/09/2005	31/08/2005	28/04/2008
DunLaoghaire Rathdown Co. Council	Glenkerril Horries Limited	The Grange, Stillorgan, Co. Dublin	W4/4(28)	The recovery of waste (other than hazardous waste) at a facility (other than a facility for the composting of waste where the amount of compost and waste held at the facility exceeds 1000 tonnes)		Activity 5 of the First Schedule and Activity 4 of the Fourth Schedule		14/10/2005	12/10/2005	29/09/2006
Fingal Co. Council	Bally Waste Paper Ltd.	Rosemount Business Park, Ballycoolin Road, Dublin 15	WPT1(b)	Waste Recovery/Recycling	Waste paper, plastic, cardboard packaging and wood uncontaminated by putrescible material.	4,12		05/07/2002	24/08/2002	23/08/2005
Fingal Co. Council	Carno International via Flood Recycling	Banhill, Connally, Dublin 15.	WPT10	Waste recycling/disposal facility	No info. on permit	WM (Permit) Regs 1998		22/04/2002	17/04/2002	16/04/2005
Fingal Co. Council	Mr Colm Glynn	Newbarn, Kilsallaghan, Co. Dublin	WPT11	Treatment of waste on land with a consequential benefit for an agricultural activity or ecological system	Soil which conforms to the European Waste Catalogue code reference 170504. No other wastes are permitted.	Class 10, Activity 5		16/08/2002	11/07/2002	11/07/2005
Fingal Co. Council	Fagon Construction Ltd.	6th Floor, Iveagh Court, 6-8 Harcourt Road, Dublin 2.	WPT13	Treatment of any waste on land with a consequential benefit for an agricultural activity or ecological system at Margaretsdown, Skerries, Co. Dublin.	Soil which conforms with the European Waste Catalogue code reference 170504.	Fourth Schedule, Activity 10 - First Schedule, Activity 5.		07/10/2002	27/09/2002	28/09/2004
Fingal Co. Council	North County Dublin Pans Ltd.	Man O War, Skerries, Co. Dublin	WPT17	Recovery and dismantling of vehicles	130106 hydraulic oils containing only mineral oils / 130107 other hydraulic oils / 130108 brake fluids / 130601 oil waste not otherwise specified / 160100 end of life vehicles / 160204 discarded equipment containing free asbestos / 180801 lead batteries	First Schedule, Activity 3 - Fourth Schedule Activities 3, 4 & 13		05/12/2002	29/11/2002	04/12/2005



	Recycling	Co. Dublin			electrical and electronic goods, Batteries and Mercury containing lamps, Ink and laser jet cartridges, no processing of these wastes is to take place on site, except to remove hazardous components where there is on release of solid, liquid or gaseous material	Regulations 1998.			
Fingal Co. Council	Castle Contracts (Ir) Ltd.	Dishoge, Ocktewn, Co. Dublin	WPT23	Treatment of waste on land with a consequential benefit for agricultural activity or ecological system	Only the following inert material may be accepted on the site: Uncontaminated soil which conforms with the European Waste Catalogue code ref. 170504 - No other waste types are permitted to be deposited at this facility.	Fourth Schedule, Activity 10 / First Schedule, Activity 5	09/12/2002	24/12/2002	29/12/2003
Fingal Co. Council	Brendan Hagan	Knock Cross, Ballyrgan, Co. Dublin	WPT24		Uncontaminated soil which conforms to the European Waste Catalogue code reference 170501.	Fourth Schedule, Activity 10 - First Schedule, Activity 5.	28/02/2003	25/02/2003	24/02/2005
Fingal Co. Council	Alan Harford & Vincent Watson	Balrugh, Lusk, Co. Dublin	WPT26	Treatment of waste on land with a consequential benefit for an agricultural activity or ecological system	Uncontaminated soil which conforms to the European Waste Catalogue code reference 170501.	Fourth Schedule, Activity 10 - First Schedule, Activity 5.	13/02/2003	24/01/2003	23/01/2004
Fingal Co. Council	Mr. Sean Travers	Newtown, Garristown, Co. Dublin.	WPT27		Uncontaminated soil which conforms to the EWC code reference 170501. No other waste types are permitted to be deposited at this facility.	Fourth Schedule Activity 10 / First Schedule Activity 5.	03/08/2003	23/05/2003	22/05/2006
Fingal Co. Council	Noel Hickey	Bowhill, Balrothery, Co. Dublin	WPT28	Treatment of waste on land with a consequential benefit for an agricultural activity or ecological system	Uncontaminated soil which conforms to the European Waste Catalogue code reference 170501	Fourth Schedule, Activity 10 / First Schedule, Activity 5	13/02/2003	06/02/2003	05/02/2006
Fingal Co. Council	Mark McGuinness	Ballealy West, Lusk, Co. Dublin	WPT34		Uncontaminated soil which conforms to the EWC code reference 170501	Fourth Schedule, Activity 10 - First Schedule, Activity 5.	28/02/2003	25/02/2003	24/02/2005
Fingal Co. Council	Ballymun Regeneration Ltd.	St. Margarets Road, Ballymun, Ballymun, Co. Dublin.	WPT35	Recycling or reclamation of inorganic materials	The following C&D waste arising within the Ballymun Complex can be accepted on the site: Concrete, bricks, tiles and ceramics (170101, 170102, 170103) / Mixture of concrete, bricks, tiles and ceramics (170108) / Iron and steel (170405) / Cables (170410 / 170411)	Fourth Schedule Activity 4 / First Schedule Activity 5.	03/04/2003	28/03/2003	25/03/2006
Fingal Co. Council	Raymond Fox	Milhead, St Margarets, Co. Dublin	WPT5	Inert Landfill			29/06/2001	27/06/2001	27/06/2004
Fingal Co. Council	Mr. John Mangan & Mr. Gerard Tuohy, Ardara, Glastown	Tobergregan, Garristown, Co. Dublin in respect of lands at Ballymacum	WPT6a	Treatment of waste on land with a consequential benefit for an agricultural activity or ecological system	Soil which conforms to the European Waste Catalogue code reference 170504. No other wastes are permitted.	Class 10, Activity 5	06/09/2002	21/08/2002	20/08/2004
Fingal Co. Council	International Plant Hire Via Greenplan	Unit 1, St. Annes, Cloghan, Co. Dublin	WPT19	Waste Recycling Facility	Inert material, timber, builders rubble, garden waste, metal, cardboard, plastic and paper.	Part 1 of the 1st Schedule of the WM (Part II) Regs 1998, Activity 5.	11/08/2002	01/08/2002	31/05/2005
Fingal Co. Council	Mr. Sean O'Grady	Ward House, Ward Lower, Co. Dublin	WPT19		Uncontaminated soil which conforms to the EWC code reference 170504. No other waste types are permitted.	Fourth Schedule Activity 10, First Schedule Activity 5	25/08/2003	29/11/2002	28/11/2005
Fingal Co. Council	John McNally	Ring Commons, (East Curragh), Naui, Co. Dublin	WPT30		Uncontaminated soil which conforms to the EWC code reference 170501 - No other waste types are permitted.	Fourth Schedule Activity 10, First Schedule Activity 5	03/07/2003	25/06/2003	24/06/2005
Fingal Co. Council	Roadstone Dublin Ltd.	Huntstown Quarry, Finglas, Co. Dublin	WPT14	Recovery	Only the following c&d waste can be accepted at the site: concrete, bricks, tiles & ceramics that conform to the EWC ref. 170101, 170102 & 170103 respectively; asphalt, both containing and without tar ref. 170301 & 170302; iron & steel (rebar from reinforced concrete) ref. 170403 - No other waste types are to be accepted at the facility.	Fourth Schedule Activity 4, First Schedule, Activity 5	09/07/2003	30/06/2003	29/06/2006
Fingal Co. Council	Aldicos Limited	Damasown Way, Damasown Business Park, Dublin 15	WPT 29	Recycling/Recovery	Only the following inorganic waste can be accepted on the site: Paper and cardboard that conforms to the EWC ref. 200101. No other waste types are permitted to be deposited at this facility.	Fourth Schedule, Activity 4 and First Schedule, Activity 5.	09/07/2003	30/06/2003	29/06/2006
Fingal Co. Council	Techmatic Limited	Ballyrgan Business Park, Ballyrgan, Co. Dublin	WPT 39	Recycling / Storage / Recovery	Waste printing toner (including cartridges) EWC code 080309 / paper and cardboard EWC code 200101 / glass EWC code 200102 / small plastics EWC code 200103 / small metals (cans etc) EWC code 200105 / electronic equipment (e.g. printed circuit boards) EWC code 200124 - No other waste types are permitted	Fourth Schedule, Activities 3,4,12 & 13 / First Schedule Activity 5.	09/07/2003	02/07/2003	01/07/2006
Fingal Co. Council	SST Limited	Rainey, Lusk, Co. Dublin	WPT40		Uncontaminated soil which conforms to the EWC code reference 170504. No other waste types are permitted.	Fourth Schedule Activity 10 / First Schedule Activity 5.	26/08/2003	21/08/2003	20/08/2005
Fingal Co. Council	Mr. John Macken	Lackintown, The Naui, Co. Dublin	WPT38		C&D uncontaminated soil which conforms to the EWC code reference 170501. No other waste types are permitted.	Fourth Schedule Activity 10 / First Schedule Activity 5.	26/08/2003	21/08/2003	20/08/2004
Fingal Co. Council	Ping Golf Equipment Ltd.	Somerton, Castleknock, Dublin 15.	WPT63	Land Reclamation	Uncontaminated soil which conforms to the EWC code reference 170501. No other waste types are permitted.	N/A	02/07/2004	15/06/2004	14/06/2005
Fingal Co. Council	Garristown GFC	Garristown, Co. Dublin.	WPT 58	Land Reclamation	Uncontaminated soil which conforms to the EWC code reference 170501. No other waste types are permitted.	N/A	02/07/2004	25/05/2004	24/11/2004 (EXTENDED TO 27/05/2005-subject to the 15/11/2004)



	Loc.				demolition wastes only.	1998 - Activity 2, 5 & 6, 3rd Schedule of WM Act, 1996 and subject to the intake limit of Activity 6 - Activity 11, 12, & 13. 4th Schedule of WM Act, 1996, Activity 2,3,4, & 13..				
Fingal Co. Council	Dublin Cemeteries Committee	Dardistown Cemetery, Clonghan, Co. Dublin	WPT57	Land Reclamation	17 05 01 Uncontaminated soil conforming to above code only. No other waste types are permitted.	1st Schedule of WM Permit Regs. 1998 - Activity 5 - 4th Schedule of WMA, 1996 Activity 4.	N/A	02/07/2004	23/04/2004	22/07/2004
Fingal Co. Council	John McCormack	Newpark Care Centre, The Ward, Co. Dublin	WPT59	Land Reclamation	17 05 01 Uncontaminated soil	4th Schedule of WM Act, 1996 Activity 4 & 1st Sch. Of WM (Permit) Regs, 1998 Activity 5	N/A	08/07/2004	25/05/2004	24/11/2004
Fingal Co. Council	Gannon City Recovery & Recycling Services Ltd.	Unit 7, Rossville Industrial Park, Donabate, Co. Dublin	WPT 71	Dismantling & recovery of vehicles	18 01 00 end of life vehicles	4th Schedule of WM Act, 1996 Activity 13 & 1st Schedule of WM(Permit) Regs, 1998 Activity 3.	N/A	06/08/2004	29/07/2004	28/07/2007
Fingal Co. Council	Ring Commons Sports Centre	Ring Commons, Maul, Co. Dublin	WPT 44	Land Reclamation	Uncontaminated soil 17 05 01	1st Schedule of WM Permit Regs. 1998 - Activity 6, 4rd Schedule of WM Act, 1996 Activity 4	N/A	23/08/2004	28/05/2004	27/11/2004
Fingal Co. Council	Barrmore Demolition & Civil Engineering Ltd.	Baldyole Industrial Estate, Baldyole, Co. Dublin	WPT 64	Recycling Centre	17 01 00, 17 02 00, 17 04 00, 15 01 01	Fourth Schedule Activity 13, First Schedule of WM Act, 1996 and subject to the intake limit of Activity 6 - Activity 11, 12, & 13. 4th Schedule of WM Act, 1996, Activity 2,3,4, & 13..	N/A	25/08/2004	05/08/2004	04/09/2007
Fingal Co. Council	Peter Jenkins T/A Summerhill Spares	Ballymun Cross, Santry, Dublin 9	WPT 61	Recovery and Dismantling of Vehicles	18 01 00: End of Life Vehicles	Fourth Schedule of WMA '96, Activities 3, 4 & 13. First Schedule of the WM(Permit) Regs '98, Activity 3	N/A	29/09/2004	02/09/2004	01/09/2007
Fingal Co. Council	Frank Fanning & John Fynes	Margaretstown, Skerns, Co. Dublin	WPT 75	Land Reclamation	17 05 01: Uncontaminated Soil	Fourth Schedule of WMA '96-Activity 10, First Schedule of WM (Permit) Regs '98-Activity 5	N/A	18/11/2004	15/11/2004	14/08/2005
Fingal Co. Council	Frank Fanning	Ballyealy Lane, Lusk, Co. Dublin	WPT 78	Land Reclamation	17 05 01 Uncontaminated Soil	Fourth Schedule of WMA '96-Activity 10, First Schedule of WM (Permit) Regs '98-Activity 5	N/A	21/02/2005	11/02/2005	10/06/2005
Fingal Co. Council	William McGrath	Ballymadun, Garinstown, Co. Dublin	WPT 65	Land Reclamation	17 05 01 Uncontaminated Soil	Fourth Schedule of the Waste Management Act, 1996 and First Schedule of the Waste Management (Permit) Regulations, 1998	N/A	23/02/2005	02/09/2004	01/09/2007
Fingal Co. Council	Frank Fanning c/o T & M Bergin	Roscall, Ballypougal, Co. Dublin	WPT 63	Land Reclamation	170504	4th schedule of Waste Management Act, 1996 Activity 10, & 1st schedule activity 5	N/A	15/06/2005	10/06/2005	09/06/2006
Fingal Co. Council	Fingal D&D Ltd, t/a Fingal Fingal Recycling	Unit 1 IDA Industrial Estate, Balbriggan, Co. Dublin	WPT 89	Recycling	080317, 120105, 150100, 160200, 160600, 160100	4th Schedule of the WMA, Activity 3, 4 13 and 1st Schedule of WMPR 98 Activity 2 & 5	2,500	16/09/2005	02/09/2005	01/09/2008
Fingal Co. Council	William McGrath	Wyestown, Oxtown, Co. Dublin	WPT 85	Land Reclamation	17 05 04	4th Schedule Activity 10 and 5	n/a	06/10/2005	30/09/2005	29/09/2005
Galway Co. Council	Patrick J. Walsh, Galway Metal Company	Carrowmoreash, Oranmore, Co. Galway	WR/05	Recovery of scrap metal				13/11/2002	28/08/2001	27/08/2004
Galway Co. Council	Christina Sullivan	Townland of Echall, Ina Mor, Azzann, Chrois na Gallimhe	WR/08-2	Operation of a recovery and transfer facility for municipal waste including the operation of a compost facility for the organic fraction of the waste	Municipal wastes (household waste and similar commercial, industrial and institutional wastes) including separately collection fractions	Third Schedule, Class 13 / Fourth Schedule Classes 2 & 13		08/05/2003	01/05/2003	30/04/2006
Galway Co. Council	The City Recycling Company	The City Recycling Company, Dough Uisce, Marin Park, Galway	WR/09	Storage of glass for recycling	Glass & Cans	Waste Management Permit Regulations 1998.		12/01/2001	11/07/2002	11/07/2005
Galway Co. Council	Oliver Lyons	Carrowbrowne, Headford Road, Co. Galway.	WR/10	Reclamation and recycling of end-of-life vehicles				31/01/2002	21/01/2002	21/01/2005
Galway Co. Council	Gene Browne, City Bin Company Ltd.	Carrowmoreash, Oranmore, Co. Galway.	WR/19	Waste transfer station		WM (Permit) Regs, 1998	5000	31/01/2002	08/08/2001	08/08/2004
Galway Co. Council	Walsh Waste Ltd.	Cahercomick, Craughwell, Co. Galway.	WR/20-2	Operation of C&D waste sorting centre.	C&D waste sorting centre, specified recyclable municipal waste sorting and baling centre, land reclamation site using specified c&d isolators.	Third Schedule, Class 13 / Fourth Schedule Classes 2,3,4 & 13		30/06/2003	20/06/2003	19/06/2005
Galway Co. Council	Bama Waste Ltd.	Carrowbrowne, Headford Road, Co. Galway.	WR/22	Reclamation of lands using sorted sub soil, soil, rock, stone and concrete.		WM (Permit) Regs, 1998		31/01/2002	28/08/2001	28/08/2004
Galway Co. Council	Liam O'Toole, Killee, Inverin, Co. Galway	Facility Fomoroyle West, Bama, Co. Galway	WR/23-2	Reclamation of land using soil, sub soil, rock, stone & concrete.				29/10/2002	23/10/2002	23/04/2004
Galway Co. Council	Donie King	Townland of Cumaghmore, Headford Road, Co. Galway	WR/24	Reclamation of lands using sorted sub soil, soil, rock, stone and concrete.	Reclamation of lands using sorted sub soil, soil, rock, stone and concrete between months of March & September.	WM (Permit) Regulations, 1998		16/04/2002	25/03/2002	24/03/2004
Galway Co. Council	Peter & Tony Walsh	Cumaghmore Townland, Headford Road, Co. Galway.	WR/25	Reclamation of land using soil, sub soil, rock, stone and concrete.	Reclamation of land using soil, sub soil, rock, stone and concrete between months of April and August.	WM (Permit) Regulations, 1998		16/04/2002	25/03/2002	24/03/2004
Galway Co. Council	Henry Whyte	Arus Bhearnachan, Corbooley, Bama, Co. Galway.	WR/32	Reclamation of land using soil, sub soil, rock and stone	Reclamation of land using soil, sub soil, rock and stone	Article 19(a) of WM (Permit) Regulations 1998.		30/04/2002	22/04/2002	21/04/2004
Galway Co. Council	John Cusney, Carrowbrowne, Headford Road, Galway	Townland of Carrowbrowne, Headford Road, Co. Galway	WR/34	Reclamation of lands using sorted subsoil, topsoil, rock, block and plain concrete				29/10/2002	22/10/2002	21/10/2003
Galway Co. Council	Patrick Fahy	106 Seacrete, Knocknacarra, Galway	WR/35	Reclamation of land using topsoil, subsoil, rock, block and plain concrete	Subsoil, topsoil, rock, block & plain concrete			19/09/2002	13/09/2002	12/09/2004
Galway Co. Council	James Travers	Townland of Finville, Oranmore, Co. Galway	WR/48		170101 Concrete, 170102 Brcks, 170501 Soil and Stones	Activity 5, Class 10		21/02/2003	20/02/2003	19/02/2004
Galway Co. Council	Michael Morgan	Cluzie, Corandulla, Co. Galway	WR/49		1601 end-of-life vehicles from different means of transport and wastes from dismantling of end-of-life vehicles and vehicle maintenance	First Schedule, Activity 3, Classes 3 & 13		07/01/2003	23/12/2002	22/12/2005



Authority	Applicant	Location	Ref	Activity	Waste	Class	Capacity	Start Date	End Date	Review Date
Galway Co. Council	William Moran	Co. Galway Townland of Gurran Upper, Maree, Oranmore, Co. Galway.	WR/53	and demolition waste Reclamation of land using sorted construction and demolition waste	170101 Concrete, 170102 Bricks, 170103 Tiles and ceramics, 170501 soil and stones	Activity 5, Class 10		20/01/2003	09/01/2003	08/01/2004
Galway Co. Council	Fabian Brennan	Derryhole, Craughwell, Co. Galway	WR/56	Reclamation of land using sorted construction waste.	170101 Concrete / 170102 Bricks / 170501 Soil and stones	Fourth Schedule, Class 10		03/04/2003	31/03/2003	30/03/2005
Galway Co. Council	Gerard Finn	Cappagh, Kilmoneill, Ballinalee, Co. Galway.	WR/60	Reclamation of lands using clean, inert construction waste.	170501 Soil and stones	Fourth Schedule, Class 4		02/07/2003	27/06/2003	26/06/2004
Galway Co. Council	Joe Laminan	Cloonboe, Corrandulla, Co. Galway	WR/62	Reclamation of lands using clean, inert construction waste.	170501 Soil and stones / 170101 Concrete	Fourth Schedule, Class 10		22/05/2003	18/09/2003	17/09/2005
Galway Co. Council	Connaught Waste Recycling	Hanleys Building, Clara, Galway	WR/C3-2	Transfer station for dry recyclables	Timber, Plastic, Paper, Cardboard 150103, 150101, 200101, 200139	Fourth Schedule Classes 2 & 13			11/07/2002	11/07/2005
Galway Co. Council	Tempealach na nOilean Teo	Inis Oirr, Arann, Cuan na Gaillimhe	WR/16-2	Transfer station for dry recyclables and mixed waste	Paper, Plastic, Cardboard, Organics, Residual 150101, 200101, 200108, 200139, 200301	Fourth Schedule Class 13, Third Schedule Class 13	5000		11/07/2003	11/07/2006
Galway Co. Council	Thomas Lally	Cappagh Road, Bama, Galway	WR/47-2	Reclamation of Land	17 05 04 17 01 01	Fourth Schedule Class 4		10/06/2005	26/05/2005	26/05/2008
Galway Co. Council	Jack O'Flynn c/o Corrib Trucks	Carrowbrownie, Headford Road, Co. Galway.	WR/65	Recovery of end-of-life vehicles	160104 end-of-life vehicles	Fourth Schedule Classes 3 & 13		20/11/2003	11/11/2003	11/11/2006
Galway Co. Council	Wheeler Environmental Services Ltd.	Birmingham Road, Tuam, Co. Galway	WR/66	Sorting and transfer facility for segregated paper and cardboard.	200101 Paper & Cardboard	Fourth Schedule, Classes 12 & 13	1000	20/11/2003	11/11/2003	11/11/2004
Galway Co. Council	Gery Nolan	Carrowbrownie, Headford Road, Co. Galway.	WR/70	Land reclamation using C & D waste	17 01 01 Concrete, 17 05 01 Soil and Stones	4th Schedule, Class 4	Limit is set in relation to final land levels	15/04/2004	23/01/2004	23/01/2005
Galway Co. Council	James Burke	Rinville West, Oranmore	WR/79	Land reclamation using C & D waste	17 01 01 Concrete, 17 05 01 Soil and Stones	4th Schedule, Class 4	Limit is set in relation to final land levels	16/04/2004	16/04/2004	26/04/2005
Galway Co. Council	James Coen	Lurgan, Killmor, Ballynascie, Co. Galway.	WR/1-2 (Renewal of permit no. WR/11)	Sorting and transfer facility for construction and demolition waste. Reclamation of land using specified inert materials.	17 01 01 Concrete, 17 01 02 Bricks, 17 05 01 Soil and Stones, the following can be accepted but cannot be used for land reclamation: 15 01 01 paper and cardboard packaging, 15 01 03 wooden packaging, 17 01 03 tiles and ceramics, 17 02 01 wood, 17 02 03 plastic, 17 04 01 copper, bronze, brass, 17 04 02 aluminium, 17 04 03 lead, 17 04 04 zinc, 17 04 06 tin, 17 04 11 cables other than those mentioned 17 04 10, 17 08 02 gypsum-based construction materials other than those mentioned in 17 08 01.	Third Schedule, Class 13, Fourth Schedule, Class 2, 3, 4 & 13.	5000	18/06/2004	17/06/2004	17/06/2007
Galway Co. Council	Ailie Lawles	Killmor, Atymon, Amenry, Co. Galway.	WR/73	Sorting and transfer facility for construction and demolition waste. Reclamation of land using specified inert materials.	17 01 01 Concrete, 17 01 02 Bricks, 17 05 01 Soil and Stones, the following can be accepted but cannot be used for land reclamation: 15 01 01 paper and cardboard packaging (restricted to packaging from construction and demolition projects, 15 01 03 wooden packaging.	Third Schedule, Class 13, Fourth Schedule, Class 2, 3, 4 & 13.	5000	18/06/2004	17/06/2004	17/06/2007
Galway Co. Council	OCS One Complete Solutions Ltd	Kilmore, Galway road, Tuam	WR/78	Storage and transfer facility for specified hygiene waste	20 03 99	3rd Schedule, Class 13	200	30/06/2004	29/06/2004	29/06/2007
Galway Co. Council	Brendan Higgins	Graigueavaddoge, Caltra, Ballynascie	WR/69	Recovery and transfer facility for end-of-life vehicles	16 01 04 End-of-Life	4th Schedule, Class 3 and 13	200 vehicles per year		01/07/2003	01/07/2007
Galway Co. Council	Chris Crehan	Aille, Bama, Co. Galway	WR/28-2	Reclamation of land using specified inert materials.	17 05 04 Soils and stones, 17 01 01 Concrete, 17 01 02 Bricks	4th Schedule, Class 4	5000	23/07/2004	13/07/2004	13/07/2005
Galway Co. Council	John Heffeman	Drum West, Rahoon, Co. Galway	WR/72	Reclamation of land using specified inert materials.	17 05 04 Soils and stones	4th Schedule, Class 4	1000	23/07/2004	13/07/2004	13/10/2004
Galway Co. Council	Oliver Hughes	Castlecreevy, Corrandulla, Co. Galway	WR/39-3	Reclamation of land using specified inert materials.	17 05 04 Soils and stones, 17 01 01 Concrete, 17 01 02 Bricks	4th Schedule, Class 4	2000	23/07/2004	13/07/2004	13/01/2005
Galway Co. Council	Peter & Tony Walsh	Curraghmore, Headford Road, Co. Galway	WR25-2 (Renewal of permit no. WR25)	Reclamation of land using specified inert materials.	17 05 04 Soils and stones, 17 01 01 Concrete, 17 01 02 Bricks	4th Schedule, Class 4	20000	27/07/2004	26/07/2004	26/07/2005
Galway Co. Council	James Trayers	Rinville West, Oranmore, Co. Galway	WR48-2 (Renewal of permit no. WR25)	Reclamation of land using specified inert materials	17 05 04 Soils and stones, 17 01 01 Concrete, 17 01 02 Bricks	4th Schedule, Class 4	5000	27/07/2004	26/07/2004	26/07/2005
Galway Co. Council	Galway Metal Company	Carrowmoneash, Oranmore, Co. Galway	WR/C5-3 (Renewal of permit no. WR5-2)	Recovery of metals including end-of-life vehicles	16 01 04 16 01 06 16 01 18	3rd Schedule, Class 13, 4th Schedule, Class 3, 13	No tonnage limit set	01/09/2004	24/08/2004	24/08/2007
Galway Co. Council	Connaught Timber Products Ltd.	Derrybeg, Tynagh, Loughrea, Co. Galway	WR/01-3 (Renewal of Permit WR 01)	Recovery & Storage of Waste Timber	17 02 01: Wood (C&D Waste), 19 12 07: Wood (Mechanical Treatment of Waste) 20 01 36: Wood ( Municipal Waste)	Third Schedule Class 13, Fourth Schedule Class 2 & Class 13	No limit set	03/12/2004	01/12/2004	01/12/2004
Galway Co. Council	Frylle Ltd.	Townland of Kilcolgan, Kilcolgan Village, Co. Galway	WR 77	Storage of used cooking oil prior to transfer off-site for recovery and disposal.	02 03 09, 20 01 25 Edible oil and fat	4th Schedule, Class 13.	No limit set	11/01/2005	10/01/2004	10/01/2005
Galway Co. Council	Maree Development Association	Garran Upper, Maree, Oranmore, Co. Galway.	WR 66	Construction of a community pitch using specified construction waste.	17 05 04 Soil and stones	4th Schedule Class 4	Limit related to finished levels permitted	11/01/2005	10/01/2004	10/01/2005
Galway Co. Council	John Madden & Sons Ltd	Roadstone Provinces Ltd. Quarry, Ballgarraun, Two Mile Ditch, Tuam Rd.,	WR 67	Reclamation of land using specified inert materials	17 05 04 Soil and stones	4th Schedule Class 4	100,000	11/01/2005	10/01/2004	10/01/2005
Galway Co. Council	Connect industries	Unit 1B, Sincfield, Deepark Industrial Estate, Oranmore, Co. Galway	WR/90	Facility for the management of waste electrical and electronic equipment	20 01 36, 20 01 01, 15 01 03, 20 01 39, 20 01 40, 20 01 23, 09 01 10, 09 01 11, 09 01 12, 15 01 01, 15 01 02, 15 01 04, 15 01 06, 15 01 05, 16 02 10, 16 02 09, 16 02 11, 16 02 13, 16 02 14, 16 02 15, 16 02 16, 16 08 01, 16 08 02, 16 08 03, 16 08 04, 16 08 05, 16 08 06, 20 01 21, 20 01 23, 20 01 33, 20 01 34, 20 01 35, 20 01 36, 20 01 99.	Third Schedule Classes 12 & 13 Fourth Schedule Classes 3, 4, & 13	4000	24/02/2005	23/01/2005	13/02/2008
Galway Co. Council	Laurence Curran	Truskey West, Bama, Co. Galway	WR/27-2	Land reclamation using clean inert construction waste	17 01 01, 17 05 04	4th schedule, class 4	Limit is set in relation to final land levels	15/03/2005	26/02/2005	27/02/2005
Galway Co. Council	Patrick Fahy	Townland of Carrowbrownie, Headford Road, Co. Galway	WR/35-2	Reclamation of land using topsoil, subsoil, rock, block and plain concrete	17 01 01, 17 05 04	4th schedule, class 4		09/05/2005	06/05/2005	06/05/2006
Galway Co. Council	Fabian Brennan	Liscarrow, Craughwell, Co. Galway	WR/56-2	Reclamation of land using inert construction waste.	170101, 170102, 170504	4th schedule class 10		31/05/2005	26/05/2005	26/05/2007
Galway Co. Council	Damen Crehan	Boleybeg East, Bama, co. Galway	WR/85	Reclamation of land using inert construction waste.	170101, 170505	Fourth schedule class 4		31/05/2005	26/05/2005	26/05/2006



Galway Co. Council	William Moran	Oranmore, Co. Galway	WR/53-2	Reclamation of land using sorted construction and demolition waste	17 01 01, 17 01 02, 17 05 01	4th schedule, class 10		30/06/2005	28/06/2005	28/06/2006
Galway Co. Council	Kevin Barry, Jonathan Duggan & John Magee. Fides Children	Westport Road, Clifden, Co. Galway	WR/101	Reclamation of land	17 01 01, 17 05 04	Fourth schedule, Class 4	Limit is set in relation to final land levels	12/08/2005	11/08/2005	11/11/2005
Galway Co. Council	Kevin Scully	Clonboe, Carrandulla, Co. Galway	WR/63-2	Reclamation of land	17 01 01, 17 05 04	Fourth schedule, Class 10	Limit is set in relation to final land levels	05/08/2005	05/08/2005	05/08/2006
Galway Co. Council	Noel Faherty	Castlecarmey, Kivara, Co. Galway	WR/58	Reclamation of land	17 05 04	Fourth schedule, Class 10	Limit is set in relation to final land levels	11/07/2005	07/07/2005	07/07/2006
Galway Co. Council	Walsh Waste Ltd.	Caheeromick, Craughwell, Co. Galway	WR/20-3	Construction and demolition waste sorting centre Specified recyclable municipal waste sorting and	See permit for details	Third schedule, Class 13, Fourth schedule, Class 2, 3, 4, 13	Limit of 5000 tonnes	05/08/2005	05/08/2005	05/08/2007
Galway Co. Council	The City Br Co. Ltd	Carrowmanonash, Oranmore, Co. Galway	WR/19-3	Operation of a waste recovery station for dry recyclables	15 01 01, 15 01 02, 15 01 05, 15 01 06, 20 01 01, 20 01 39	Fourth schedule, Class 4 & 13	no limit on permit	12/08/2005	11/08/2005	11/08/2008
Galway Co. Council	P & D Lydon Plant Hire Ltd	Carrowbrownie, Headford Road, Co. Galway	WR/95	Reclamation of land	17 01 01, 17 05 04	Fourth schedule, Class 10	Limit is set in relation to final land levels	12/08/2005	11/08/2005	11/08/2006
Galway Co. Council	Coffey Construction Ltd	Moanbaun, Athenry, Co. Galway	WR/97	Recovery of specified construction waste	17 05 04		No limit on Permit	07/09/2005	09/05/2005	09/08/2005
Galway Co. Council	Ward baird Burke Construction Ltd	Glanmore, Kikieran, Co. Galway	WR/105	Reclamation of land using inert construction waste.	17 05 04 soil and stones	4th schedule, class 4	No limit est. Relates to final level of material	26/10/2005	18/10/2005	18/10/2006
Galway City Council	Richard O Halloran, Joe O Halloran & Sons Ltd, Joinery Works	Joinery Works, Tuam Road, Galway	WP14	Recovery, sorting, storage and use of wood waste as a fuel source for a workshop space heater where the amount of waste being burned does not exceed one tonne per hour	Untreated wood	WM (Permit) Regs 1998		09/10/2001	21/09/2001	21/09/2004
Galway City Council	T O'Higgins Manufacturing Ltd	Rahoon Road, Shantalla, Galway	WP13	Recovery, sorting, storage and use of wood waste as a fuel source for a workshop space heater where the amount of waste being burned does not exceed one tonne per hour		WMA 1996		27/12/2001	17/10/2001	17/10/2004
Galway City Council	Connect Industries Ltd., C/O Keville & O'Sullivan Associates.	Parkmore Industrial Estate West, Ballyart, Galway	WP16	Recovery	Metal, cardboard, paper and plastic only unless otherwise agreed with the City Council.	WM (Permit) Regs 1998, Class 3, 4, 11, 13 - Principal Activity is Class 4		22/05/2002	14/05/2002	13/05/2005
Galway City Council	Mr. Barney Keane c/o Ruairc O'Tuohig B.E., John Mooney & Co. Ltd., Consulting Engineers, Lough Corrib House, 5 Waterside, Galway	Ballyburke, Keeraun, Bama, Galway	WP18	Treatment of any waste on land with a consequential benefit for agricultural activity or ecological system.	Inert fill (e.g. uncontaminated sub-soil, soil, rock, stone and concrete)	4th Schedule, Class 10		24/10/2002	14/10/2002	14/10/2004
Galway City Council	Kenny Developments & Co.	Kingston, Galway	WP21	Recycling or reclamation of other inorganic materials.	Unless otherwise agreed with the City Council, the following materials only are permitted to be recovered at the facility: inert fill (e.g. uncontaminated sub-soil, soil, rock, stone and concrete, originating from c&d work.	Fourth Schedule, Class 4		26/05/2003	22/04/2003	21/04/2004
Galway City Council	Jack O'Flynn c/o Comb Trucks	Carrowbrownie, Headford Road, Co. Galway	WP59	Land reclamation	170101 Concrete / 170102 Bricks / 170501 Soil & stones	Fourth Schedule, Class 4			20/06/2003	19/06/2004
Galway City Council	Martin Joe Nohá	Cummer, Tuam, Co. Galway	WR/68	Recovery and transfer facility for end-of-life vehicles.	16 01 04 End-of-life vehicles	Fourth Schedule, Class 3 and 13	No limit set		15/01/2004	15/01/2007
Galway City Council	Papua's Building Company Ltd.	Cappagh Road, Galway	WP 20	Recovery of waste	Unless otherwise agreed with the City Council, the following materials only are permitted to be recovered at the facility: inert fill (e.g. uncontaminated sub-soil, soil, rock, stone and concrete, originating from c&d work.	4th Schedule Class 4	Not more than 1,800m3 for duration of permit	12/08/2004	06/08/2004	05/08/2006
Galway City Council	Galway City Recovery Services	New Docks Road, Galway	WP 24	Recovery of end-of-life vehicles	End-of-life vehicles	4th Schedule Class 13		17/08/200	26/04/2004	25/04/2006
Galway City Council	Galway Harbour Company	Galway Harbour Enterprise Park Renmore, Co. Galway	WP 26 Notification of amended permit rec. 3/9/04	Recycling or reclamation of other inorganic materials.	Inert fill (e.g. uncontaminated sub-soil, soil, rock, stone and concrete)	4th Schedule		25/08/2004	23/08/2004	24/08/2007
Galway City Council	San Serv Ltd.	Brimhill Business Park, Galway	WP 27	Storage of sanitary waste in sealed bin liners, pending collection, storage prior to submission to any activity referred to in a preceding paragraph of this schedule, other than temporary storage, pending collection, on the premises where the waste concerned is produced.	20 03 99	3rd Schedule		25/08/2004	24/08/2004	25/08/2007
Galway City Council	T O'Higgins (Manufacturing) Ltd.,	Rahoon Road, Shantalla, Galway	WP/31	Waste recovery	Class 9: Use of any waste principally as a fuel or other means to generate energy.	Class 3, 4th Schedule		17/01/2005	12/01/2005	11/01/2006
Galway City Council	Joseph O'Halloran & Sons Ltd (Joinery Works)	Tuam Road, Galway	WP/30	Waste recovery	Class 9: Use of any waste principally as a fuel or other means to generate energy.	Fourth Schedule, Class 9		17/02/2005	14/02/2005	13/02/2008
Galway City Council	Kenny Developments & Co.	Kenny Group House, Ros Ard, Cappagh Road, Galway	WP/29	Waste recovery	class 13	fourth schedule, class 13		04/04/2005	24/03/2005	3 years from date of issue
Galway City Council	Gerard Feeney	Mincion, Rahoon, Galway	WP/34	Recycling or reclamation of other inorganic materials.	Class 4 of the 4th schedule	4th schedule, class 4		15/04/2005	11/04/2005	
Galway City Council	S. Carroll Contracts Ltd, Civil	Brimhill Business Park, Galway	WP 35	Recycling or reclamation of other inorganic materials.	Class 4 of the 4th schedule	4th schedule, class 4		22/03/2005	18/08/2005	
Galway City Council	Stalcraft Transport Ltd	Old w.Lp Site, Tuam Road, Galway	WP/36	Recycling or reclamation of other inorganic materials.	Class 4 of the 4th schedule	see condition 4 of the permit		22/08/2005	18/08/2005	



Kerry Co. Council	Mr JJ Walsh	Main Street, Linnaw, Co. Kerry	WP/5/00	Store and crush cars	cars, vans or similar end of life vehicles. White goods, cookers, washing machines, dishwashers. Other metals suitable for recycling	3rd Schedule of the WMA, 1996, Class 12,13, and 4th Sched. - Class 3,4 & 13		03/10/2001	27/09/2001	27/09/2004
Kerry Co. Council	Coilte	Renegowan, Tralee, Co. Kerry	WP/15/02	Waste recovery facility	only peat from the North Kerry Landfill	4th schedule of WMA '96, Classes 2 & 10.	Not to exceed 15,000 cubic metres	24/06/2002	17/06/2002	16/06/2004
Kerry Co. Council	Coilte	Eske, Kilduff, Tralee, Co. Kerry	WP/10/01	Waste recovery facility	Peat from the North Kerry Landfill	Article 5(1) of WM (Perm) Regulations 1996 & 4th Schedule of WMA, 1996		22/07/2002	12/07/2002	12/07/2004
Kerry Co. Council	Kerry Shredded Paper Services	Tangney's Farm, Lisry Cross, Lisry, Co. Kerry	WP/12/02	Recycling Operation	recycling or reclamation of organic substances which are not used as solvents (including composting and other biological transformation processes), recycling or reclamation or other inorganic materials, storage of waste intended for submission to any activity referred to in a preceding paragraph of this Schedule, other than temporary storage, pending collection, on the premises which such waste is produced	Class 2,3 and 113 of the 4th Schedule of the WMA 1996	Not to exceed 35,000 tonnes	12/06/2002	02/06/2002	01/06/2004
Kerry Co. Council	Coilte	Kilmore, Tralee, Co. Kerry	WP/13/02	Waste recovery facility	Disposal of peat from North Kerry Landfill at Mulnaghinnana, Tralee only and does not allow for any waste, solid or otherwise from any other location other than the one previously mentioned.	4th Schedule, Classes 2 & 10		03/05/2002	26/04/2002	26/04/2004
Kerry Co. Council	Kerry Plastics & Recycling Ltd.	Unit G5, Clann Industrial Estate, Tralee, Co. Kerry.	WP/6/01	Recycling Facility	Plastic Packaging (EWC 150102)	First Schedule Part 1 No. 5 The recovery of waste.	150	05/11/2003	22/10/2003	21/10/2005
Kerry Co. Council	Roadbridge Ltd.	Rathmore, Kilduff, Tralee, Co. Kerry.	WP/25/03	Re-use of soil & shale for road construction at Rathmore, Kilduff, Tralee, Co. Kerry.		Fourth Schedule, Classes 2,4 & 10	125,000	02/12/2003	22/10/2003	21/10/2004
Kerry Co. Council	Kelly Farm Modernisation Ltd.	Knocknabouli, Ballydesmond, Co. Kerry	WP/26/03	Re-use of inert waste for land reclamation	17 05 04 Soil and stone 01 concrete, bricks, tiles and mixtures	WMA, 1996, 4th Sch. - Class 4	50,000	05/05/2004	13/04/2004	31/12/2004
Kerry Co. Council	Andrew Thornton	Ballyronan, Ballyheigue, Co. Kerry	SP/21/03	Storage of Recyclable Materials	Dry Plastic, PVC Material	WMA 1996, 4th Schedule Class 4 & Class 13	1,000	05/05/2004	26/03/2004	31/12/2004
Kerry Co. Council	Sean Treacey	Rangue, Kilbrin, Co. Kerry	WP/08/01	Recyclable end of life vehicles	End of life Vehicles	WMA 1996, 3rd Schedule Class 12 & 13, 4th Schedule Class 3, 4 & 13	300	05/05/2004	26/03/2004	31/12/2004
Kerry Co. Council	Southmore Enterprises	Flemby, Tralee, Co. Kerry	WP/28/04	Re-use of inert waste for land reclamation	17 05 04 Soil and stone	WMA 1996, 4th Schedule Class 2, 4, & 10	60,000	05/05/2004	13/04/2004	31/12/2004
Kerry Co. Council	Dillon Waste Ltd.	Lohercannon, Tralee, Co. Kerry	WP/19/02	Transfer Station/Recycling Facility	Mixed Municipal Waste and non-hazardous recyclables	WMA 1996, 3rd Schedule Class 12 & 13, 4th Schedule Class 2, 3, 4, 11, 12 & 13	5,000	05/05/2004	30/03/2004	31/12/2004
Kerry Co. Council	Michael Hanafin	Knocknacaska, Laccamore, Co. Kerry	WP/27/03	Re-use of inert waste for land reclamation	Inert waste, clay, soil and stone 17 01 07, 17 05 04	Waste Management Act 1996, Fourth Schedule Class 2, 4 and 10.	20,000	16/12/2003	27/04/2004	27/04/2007
Kerry Co. Council	Southwest Bin on Wheels Ltd.	Knockane, Listowel, Co. Kerry	WP/17/02	Recovery of waste other than hazardous waste		Fourth Schedule, Classes 3,4,11 & 13	1,000	11/06/2004	31/05/2004	30/05/2007
Kerry Co. Council	Dennis Moriarty	The Kemas Ltd., Basin View, Tralee	WP/30/04	Waste recovery facility	Inert Waste such as soil & Stone. EWC 17 01 07 and 17 05 04	Class 2, Class 6 & Class 10, of the 4th Sch. of WMA 1996	12,000	09/07/2004	18/06/2004	18/06/2006
Kerry Co. Council	Tom Keane	Laham, Kilbrin, Co. Kerry	WP/34/04	Re-use of inert waste for Land Reclamation	17 01 01, 17 01 02, 17 01 03, 17 01 07 & 17 05 04: Inert Waste, Clay, Soil & Stone	Fourth Schedule of the WMA '96, Classes 2,4 & 10	45,000 tonnes in Total	07/10/2004	20/09/2004	20/09/2007
Kerry Co. Council	Dennis O' Connor	Ballyhea, Dingle, Co. Kerry	WP/33/04	Re-use of inert waste for Land Reclamation	17 01 01, 17 01 02, 17 01 03, 17 01 07 & 17 05 04: Inert Waste, Clay, Soil & Stone	Fourth Schedule of the WMA '96, Classes 2,4 & 10	50,000 tonnes in Total	07/10/2004	02/09/2004	02/09/2007
Kerry Co. Council	Sorenson Civil Engineering Ltd.	Garraundarragh & Urrchogal, Gortalea, Tralee, Co. Kerry	WP/43/04	Re-use of inert waste for Land Reclamation	17 01 01 - 07, 17 05 04: Inert waste, clay, soil & stone	Fourth Schedule of the WMA '96, Classes 2,4 & 10	75,000 tonnes in Total	07/10/2004	02/09/2004	02/09/2006
Kerry Co. Council	Sorenson Civil Engineering Ltd.	Lands at Urrchogal, Gortalea, Tralee, Co. Kerry	WP/46/04	Re-use of inert waste for Land Reclamation	17 01 01, 17 01 02, 17 01 03, 17 01 07 & 17 05 04: Inert Waste, Clay, Soil & Stone	Fourth Schedule of the WMA '96, Classes 2,4 & 10	100,000 tonnes in Total	07/10/2004	02/08/2004	02/09/2006
Kerry Co. Council	Sorenson Civil Engineering Ltd.	Lands at Flemby, Gortalea, Tralee, Co. Kerry	WP/45/04	Re-use of inert waste for land reclamation	17 01 01, 17 01 02, 17 01 03, 17 01 07 & 17 05 04: Inert Waste, Clay, Soil & Stone	Fourth Schedule of the WMA '96, Classes 2,4 & 10	50,000 tonnes in Total	07/10/2004	02/09/2004	02/09/2006
Kerry Co. Council	Sorenson Civil Engineering Ltd.	Lands at Glanbane, Gortalea, Tralee, Co. Kerry	WP/44/04	Re-use of inert waste for land reclamation	17 01 01, 17 01 02, 17 01 03, 17 01 07 & 17 05 04: Inert Waste, Clay, Soil & Stone	Fourth Schedule of the WMA '96, Classes 2,4 & 10	170,000 tonnes in Total	07/10/2004	02/09/2004	02/09/2006
Kerry Co. Council	John Jameson	Cloontarck, Gortalea, Tralee	WP/39/04	Recovery of inert waste for Land Reclamation	Inert Waste: 17 01 01, 17 01 02, 17 01 03, 17 01 07, 17 05 04	Fourth Schedule, Classes 2, 4 & 10	100,000 tonnes in total	01/11/2004	22/10/2004	22/10/2007
Kerry Co. Council	Patrick Mansfield	Chutehal, Tralee, Co. Kerry	WP/36/04	Recovery of inert waste for Land Reclamation	Inert Waste: 17 01 01, 17 01 02, 17 01 03, 17 01 07, 17 05 04	WMA '96, Fourth Schedule Class 2, 4 & 10	30,000 tonnes in total	01/11/2004	22/10/2004	22/10/2007
Kerry Co. Council	Tom McCarthy T/A Linnaw Plant Hire	Tullig, Castleisland	WP/57/04	Recovery of inert waste for Land Reclamation	Inert Waste: 17 01 01, 17 01 02, 17 01 03, 17 01 07, 17 05 04	WMA '96, Fourth Schedule Classes 2, 4 & 10	30,000 tonnes in total	18/11/2004	17/11/2004	17/11/2007
Kerry Co. Council	Pat Scott	Rushreen, Friest, Kilmaley	WP/55/04	Recovery of inert waste for Land Reclamation	Inert Waste: 17 01 01, 17 01 02, 17 01 03, 17 01 07, 17 05 04	WMA '96, Fourth Schedule Classes 2, 4 & 10	35,000 tonnes in total	10/12/2004	18/11/2004	18/11/2007
Kerry Co. Council	Kilamey Waste Disposal	Sheans East, Kilamey, Co. Kerry	WP/31/04	Recovery of inert waste for Land Reclamation	Inert Waste: 17 01 01, 17 01 02, 17 01 03, 17 01 07, 17 05 04	WMA '96, Fourth Schedule Classes 2, 4 & 10	90,000 tonnes in total	10/12/2004	18/11/2004	18/11/2007
Kerry Co. Council	ESB	ESB Generating Station, Daeils, Caherciveen	WP/52/04	Recovery of inert waste for Land Reclamation & Recovery of Scrap	Inert Waste: 17 01 01, 17 01 02, 17 01 03, 17 01 07, 17 05 04, 17 04 05, 17 04 07	WMA '96, Fourth Schedule Classes 3 & 4		10/12/2004	29/11/2004	29/11/2006
Kerry Co. Council	Nail Sheehan	Ahaneboy, Knocknagoshel, Tralee	WP/58/04	Recovery of inert waste for Land Reclamation	Inert Waste: 17 01 01, 17 01 02, 17 01 03, 17 01 07, 17 05 04	WMA '96, Fourth Schedule Classes 2, 4 & 10	12,000 tonnes in total	10/12/2004	26/11/2004	26/11/2007
Kerry Co. Council	Fames Construction	Cloghers, Ballyard, Tralee	WP/63/04	Inert Waste	Soil, Stone, Rubble	4th Schedule, Classes 2 & 4	15,000 tonnes	08/02/2005	20/01/2005	20/01/2008
Kerry Co. Council	Griffin Bros Contractors Ltd	Camp, Ballyseedy	WP/62-04	Inert Waste	Soil/Stone, Rubble	4th Schedule Classes 2,4	20,000	08/02/2005	20/01/2005	20/01/2008



Kerry Co. Council	Thomas Walsh	Lessaneara, Abbeydorney, Co. Kerry	WP05-02	Inert Waste	Inert waste/ Land reclamation	4th schedule class 2 & 4	32,000	19/04/2005	03/03/2005	03/03/2007	
Kerry Co. Council	Thomas Walsh	Leith West, Tralee, Co. Kerry	WP05-01	Inert Waste	Inert waste/ Land reclamation	4th schedule class 2, 4 & 10	22,000	19/04/2005	03/03/2005	03/03/2007	
Kerry Co. Council	William Biggane	Bawnaskeery, Soartaglin Road, Castleisland, Co. Kerry	Wp61-04	Inert Waste	Inert waste, clay, soil, stone, land reclamation	4th schedule class 2, 4 & 10	8000 per annum	19/04/2005	16/02/2005	16/02/2007	
Kerry Co. Council	Annette Gallant	Knockecreen, Knocknagoshet, Co. Kerry	WP05/04	Inert Waste	17 01 01, 17 01 02, 17 01 03, 17 01 07, 17 05 04	4th schedule class 2, 4 & 10	8,000	27/04/2005	22/03/2005	22/03/2007	
Kerry Co. Council	Declan McGaley	Tonbwee, Castleisland, Co. Kerry	WP/24/03	Car Dismantler	End of life Vehicles	4th schedule class 3, 4, 13	35,000	27/04/2005	04/07/2005	04/07/2007	
Kildare Co. Council	Mr. Michael Wall	Caversown Little, Kilgown, Co. Kildare	17/2000	Recovery of waste other than hazardous waste	Inert Waste: 17 01 01, 17 01 02, 17 01 03, 17 01 07, 17 05 04	Activity 5, Part 1 of the 1st Schedule of the WM (Permit) Regs, 1998.		18/07/2001	12/12/2000	12/12/2003	
Kildare Co. Council	Mr. Michael Wall	Caversown Little, Kilgown, Co. Kildare	17/2000A	Landraise	soils and stones 17 05 04	Activity 5	150,000 tonnes	30/03/2005	21/03/2005	21/03/2005	
Kildare Co. Council	Mr. Dermot Dunne	Shanacoin, Kildare, Co. Kildare	20/2001	Recovery of waste other than hazardous waste.	Recovery of waste other than hazardous waste at a facility (other than a facility for the composting of waste where the waste held at the facility exceeds 1000 cubic metres at any time).	Activity 5, Part 1 of the 1st Schedule of the WM (Permit) Regs, 1998.		18/07/2001	31/01/2001	31/01/2004	
Kildare Co. Council	Mr. Ernie Bennett	Blackditch, Nurney, Co. Kildare	24/2001	Recovery of waste other than hazardous waste.	Recovery of waste other than hazardous waste at a facility (other than a facility for the composting of waste where the waste held at the facility exceeds 1000 cubic metres at any time).	Activity 5, Part 1 of the 1st Schedule of the WM (Permit) Regs, 1998.		18/07/2001	02/03/2001	02/03/2004	
Kildare Co. Council	Mr. Padraig Thomson, Thomson Waste Disposal Ltd.	PDM Ltd., Dikimilltown, Kil, Co. Kildare	34/2001	Recovery of scrap metal or other metal waste & the recovery of waste (other than hazardous waste)	Recovery of waste other than hazardous waste at a facility (other than a facility for the composting of waste where the waste held at the facility exceeds 1000 cubic metres at any time).	Activity 2, Activity 5 in accordance with Part 1 of the 1st Schedule of the WM (Permit) Regulations, 1998.		18/07/2001	16/07/2001	16/07/2004	
Kildare Co. Council	Peter Maguire	Grange, Enfield, Co. Kildare	32/2001	Recovery of soil based materials to restore the lands	Inert subsoil, topsoil, sand, gravel, clay, marls & stone, shall be used to reclaim/raise the site.	Part 1 of the 1st Sched of the WM (Permit) Reg 1998, Activity 5		01/10/2001	28/08/2001	28/08/2004	
Kildare Co. Council	John Behan	Blackhall, Quarry, Punchestown, Naas, Co. Kildare	37/2001	Recovery of soil based materials to restore the lands. Small quantities of brick, block, concrete and stone are allowable for the purpose of haul roads/hardstanding areas.	Inert subsoil, topsoil, sand, gravel, clay, marls & stone, shall be used to reclaim/raise the site.	Part 1 of the 1st Sched of the WM (Permit) Reg 1998, Activity 5		26/09/2001	21/09/2001	21/09/2004	
Kildare Co. Council	Nephin Trading	Kerdiffstown, Johnstown, Co. Kildare	40/2001	Recovery of waste other than hazardous waste	Recovery of construction and demolition waste	Part 1 of the 1st Sched of the WM (Permit) Reg 1998, Activity 5		26/09/2001	21/09/2001	21/09/2004	
Kildare Co. Council	James Leigh	Baronsland, Usk, Dunlavin, Co. Kildare	39/2001	Recovery of waste other than hazardous waste	Inert subsoil, topsoil, sand, gravel, clay, marls and stone	Part 1 of the 1st Sched of the WM Permit Regs 1998		12/11/2001	08/11/2001	08/11/2004	
Kildare Co. Council	Damian and Ann Cassidy o/o Brian Connolly Associates	Moods, Robertstown, Co. Kildare	43/2001	Recovery of waste other than hazardous waste	Inert subsoil, topsoil, sand, gravel, clay, marls, and stone	Part 1 of the 1st Sched of the WM Permit Regs 1998		12/11/2001	01/11/2001	01/11/2004	
Kildare Co. Council	Robert Wilson	Brooklough, Coill Dubh, Co. Kildare	44/2001	Recovery of waste other than hazardous waste	Inert subsoil, topsoil, sand, gravel, clay, marls, and stone	Part 1 of the 1st Sched of the WM Permit Regs 1998		12/11/2001	01/11/2001	01/11/2004	
Kildare Co. Council	Noel Higgins	Leragh, Killock	11/2000	Recovery of scrap metal or other metal waste, the dismantling or recovery of vehicles	Scrap metal or other metal waste	Part 1 of the 1st Schedule of the WM (Permit) Regs, 1998		04/01/2002	14/12/2001	13/12/2004	
Kildare Co. Council	Nephin Trading Ltd.	Kerdiffstown, Johnstown, Co. Kildare	47/2001	Recovery of waste other than hazardous waste	waste other than hazardous waste	Part 1 of the 1st Schedule of the WM (Permit) Regs, 1998, Activity 5.		04/01/2002	02/01/2002	36 months from date of issue 02/01/2005	
Kildare Co. Council	Mr. Peter Twomey	Newtown, Maynooth, Co. Kildare	38/2001	Recovery of waste other than hazardous waste	waste other than hazardous waste	Part 1 of the 1st Schedule of the WM (Permit) Regulations, 1998, Activity 5.		16/01/2002	11/01/2002	36 months from date of issue 11/01/05	
Kildare Co. Council	Trustees Turf Club	Turf Club Offices, Curragh Racecourse, Loughbrown, The Curragh, Co. Kildare	42/2001	Recovery of waste other than hazardous waste	waste other than hazardous waste	Part 1 of the 1st Schedule of the WM (Permit) Regulations, 1998, Activity 5.		16/01/2002	11/01/2002	36 months from date of issue 11/01/05	
Kildare Co. Council	Recyclenet Ireland Ltd.	Cappanarigold, Rathnagan, Co. Kildare	49/2001	Recovery of scrap metal, the recovery of waste (other than hazardous waste)	Scrap Metal, waste other than hazardous waste	Part 1 of the First Schedule of the WM(Permit) Regs. 1998.		20/02/2002	18/02/2002	36 months from date of issue 18/02/05	
Kildare Co. Council	Frank Murphy	Blackbrench, Naas, Co. Kildare	46/2001	Recovery of waste (other than hazardous waste)	Inert subsoil, topsoil, sand, gravel, clay, marls and stone shall be used to reclaim/raise the site. Small quantities of waste brick, block & concrete may be accepted to allow for haul roads or hardstanding areas.	Part 1 of First Schedule of WM (Permit) Regulations, 1998, Activity 5.		11/03/2002	28/02/2002	27/02/2005	
Kildare Co. Council	Alford Ltd., T/A Halligans.	Halligans, Hempstown, Blessington, Co. Wicklow	51/2001	Recovery of scrap metal or other metal waste and the dismantling or recovery of vehicles		Part 1 of the First Schedule of the WM (Permit) Regulations, 1998 - Activity 2 & 3.		11/03/2002	07/03/2002	06/03/2005	
Kildare Co. Council	Thomas Clinton	Boston Hill, Ramangan, Co. Kildare	79/2002	Recovery of waste (other than hazardous waste)	Recovery of soil based materials to restore the lands. Small quantities of brick, block, concrete and stone are allowable for the purpose of haul roads/hardstanding areas.	Part 1 of the First Schedule of the WM (Permit) Regulations, 1998 - Activity 5.		10/06/2002	06/06/2002	05/06/2005	



	Ltd.			Remanufacturing or recovery of vehicles		Part 1 of the First Schedule of the WM (Permit) Regulations, 1998 - Activities 2 & 3				
Kildare Co. Council	Steven Sullivan	Moorebridge, The Curragh, Co. Kildare Facility based at Blackranch, Naas, Co. Kildare.	41/2001	Recovery of waste (other than hazardous waste)	Only inert subsoil, topsoil, sand, gravel, clay, marls and stone shall be used to reclaim/raise the site. Small quantities of waste brick, block and concrete may be accepted at the site to allow for haul roads or hardstanding areas.	Part 1 of the First Schedule of the WM (Permit) Regulations, 1998 - Activity 5.		21/06/2002	14/06/2002	13/12/2003
Kildare Co. Council	Eileen O'Connor	Parsonstown, Carbury, Co. Kildare	50/2001	Recovery of waste (other than hazardous waste)	Only spent mushroom compost from that be imported into this facility and landspread in accordance with the conditions of this permit. All materials shall be spread inside the site.	Part 1 of the First Schedule of the WM (Permit) Regulations, 1998 - Activity 5.		21/06/2002	14/06/2002	13/06/2005
Kildare Co. Council	Emmanuel Stynes, Director, EMS Civil Engineering	Brownstown, The Curragh, Co. Kildare	69/2002	Recovery of waste (other than hazardous waste)	Salvage of waste brick. Brick that cannot be salvaged may be deposited in the small pit in order to restore the pit. The permit holder may salvage other waste and materials from time to time with the agreement of Kildare CC.	Part 1 of the First Schedule of the WM (Permit) Regulations, 1998 - Activity 5.		21/06/2002	14/06/2002	16/06/2005
Kildare Co. Council	Nick Beale, General Manager, ReadyMix (Dublin) Ltd.	ReadyMix Dublin Ltd., 5/23 East Wall Road, Dublin 3 Facility: Walshestown Sand Pit, Naas, Co. Kildare	71/2002	Recovery of waste (other than hazardous waste)	Only inert subsoil, topsoil, sand, gravel, clay, marls and stone and inert concrete waste, shall be used to restore/raise the site.	Part 1 of the First Schedule of the WM (Permit) Regulations, 1998 - Activity 5.		21/06/2002	13/06/2002	12/06/2005
Kildare Co. Council	Patrick Marlehan	Newtown, Moone, Co. Kildare	64/2002	Recovery of scrap metal or other metal waste / recovery of waste (other than hazardous waste) & disposal of waste (other than hazardous waste)		Part 1 of the First Schedule of the WM (Permit) Regs '98 - Activity 2, 5, 6.	5000	28/06/02	27/06/02	26/06/05
Kildare Co. Council	P.J. Stone	Kinamorough, Donadea, Clane, Co. Kildare	75/2002	Recovery of waste (other than hazardous waste)		Part 1 of the First Schedule of the WM (Permit) Regs, 1998, Activity 5.		28/06/02	27/06/02	27/12/03
Kildare Co. Council	Bord na Mona Horticulture Ltd.	Kilberry, Athy, Co. Kildare	86/2002	Recovery of waste (other than hazardous waste)		Part 1 of the First Schedule of the WM (Permit) Regs, 1998, Activity 5.		28/06/02	27/06/02	26/06/05
Kildare Co. Council	Kildare Estates	7 Ard na Laoi, Craddockstown, Naas, Co. Kildare	61/2002	Recovery of waste (other than hazardous waste)	Only inert subsoil, topsoil, sand, gravel, clay, marls and stone shall be used to reclaim/raise the site. Small quantities of blocks, bricks and broken concrete may be permitted for use in hardstanding areas.	Part 1 of the First Schedule of the WM (Permit) Regs, 1998 - Activity 5.	Max. 40 trucks per day	05/07/2002	16/05/2002	15/05/2004
Kildare Co. Council	Matt Stone	Ballygibben, Edengery, Co. Offaly.	56/2001	Recovery of waste (other than hazardous waste)	Only inert subsoil, topsoil, shall be used to reclaim/raise the site.	Part 1 of the First Schedule of WM (Permit) Regulations, 1998, Activity 5.		09/07/2002	08/07/2002	07/01/2004
Kildare Co. Council	Ryston Industries Ltd	Abbeystead, Castledermot, Co. Kildare	87/2002	Recovery of waste (other than hazardous waste)	waste scheduled in the application form	Part 1 of the First Schedule of WM (Permit) Regs, 1998 - Activity 5.		21/08/2002	20/08/2002	20/08/2005
Kildare Co. Council	Thomas Calkin	Puckarstown, Kilmagee, Naas, Co. Kildare.	57/2001	Recovery of waste (other than hazardous waste)	Only inert subsoil, topsoil, sand, gravel, clay, marls and stone shall be used to reclaim/raise the site. Small quantities of blocks, bricks & broken concrete may be permitted for haul roads	Part 1 of the First Schedule of WM (Permit) Regs, 1998 - Activity 5.		29/08/2002	27/08/2002	26/08/2004
Kildare Co. Council	Matthew Dempsey	Griffin Rath, Cebrage, Co. Kildare.	13/2000	Recovery of waste (other than hazardous waste)	Only inert subsoil, topsoil, sand, gravel, clay, marls and stone, shall be used to reclaim/raise the site. The permit holder shall ensure adequate steps are taken to prevent acceptance of any other waste types.	Activity 5		16/09/2002	12/09/2002	11/09/2004
Kildare Co. Council	Ray Kavanagh	Stephenstown, Naas, Co. Kildare.	73/2002	Recovery of waste (other than hazardous waste)	Only inert subsoil, topsoil, sand, gravel, clay, marls and stone, shall be used to reclaim/raise the site. Small quantities of blocks, bricks and broken concrete may be permitted for use in hardstanding areas and/or haul roads. All material shall be deposited inside the site boundary.	Activity 5		16/09/2002	12/09/2002	11/09/2005
Kildare Co. Council	Peter Duff	Roscoffey, Donadea, Naas, Co. Kildare	54/2001	Recovery of waste (other than hazardous waste)	Only appropriate non-hazardous treated sludges, as submitted in the application form, shall be landspread. Any other sludges the permit holder intends to landspread shall be agreed in advance in writing by Kildare Co. Council prior to their use on land.	Activity 5		17/10/2002	09/10/2002	08/10/2005
Kildare Co. Council	Mr. Thomas Ashe	Turnings, Straffan, Co. Kildare.	68/2002	Recovery of waste (other than hazardous waste)	Only inert subsoil, topsoil, sand, gravel, clay, marls and stone, shall be used to reclaim/raise the site unless otherwise approved in writing by Kildare Co. Council.	Activity 5		17/10/2002	09/10/2002	09/04/2004
Kildare Co. Council	Enviroserve Ltd.	Thompson Enterprise Centre, Clane Business Park, Clane, Co. Kildare	93/2002	Recovery of scrap metal or other metal waste / recovery of waste (other than hazardous waste)	Wastes scheduled in the application form / similar wastes as may be approved, from time to time in writing, by Kildare Co. Co.	Activit 2, 5		17/10/2002	09/10/2002	08/10/2005
Kildare Co. Council	LJM Developments (Ireland) Ltd.	Kilgown, Kilkullen, Co. Kildare	90/2002	Recovery of waste (other than hazardous waste)	Only inert subsoil, topsoil, sand, gravel, clay, marls and stone shall be used to reclaim/raise the site. Small quantities of brick, block and concrete may be accepted at the site to allow for haul roads or hardstanding areas.	Activity 5		13/11/2002	07/11/2002	06/11/2005



Kildare Co. Council	Applicant	Address	Reference No.	Activity	Description	Waste Type	Quantity	Start Date	End Date	Final Date
		Kildare			moles and stone, shall be used to reclaim/raise the site. Small quantities of blocks, bricks and broken concrete may be permitted for use in hardstanding areas and/or haul roads. All material shall be dep					
Kildare Co. Council	Mrs. Gertrude Byrne	Grove House, Ballykealy, Monasterevin, Co. Kildare.	96/2002	Recovery of waste (other than hazardous waste)	Only inert subsoil, topsoil, sand, gravel, clay, marls and stone shall be used to reclaim/raise the site. Small quantities of waste brick, block and concrete may be accepted at the site to allow for haul roads or hardstanding areas.	Activity 5		13/11/2002	07/11/2002	08/11/2005
Kildare Co. Council	Retumbath Ltd.	Unit 35, Kildare Enterprise Centre, Melitta Road, Kildare.	97/2002	Recovery of scrap metal or other metal waste / The recovery of waste which is composed of or contains mercury or its compounds	Wastes scheduled in the application form / similar wastes as may be approved, from time to time in writing, by Kildare Co. Co.	Part 1 of First Schedule - Activity 2 & 4		16/12/2002	13/12/2002	12/12/2005
Kildare Co. Council	Messrs. Joseph and James O'Hagan, O'Hagan Waste Disposal Ltd.	Boherreen, Stranrair, Co. Kildare.	101/2002		Household, commercial, construction & demolition, Industrial	First Schedule, Activities 2,5,6	5000	27/01/2003	24/01/2003	23/01/2006
Kildare Co. Council	Irish Lamp Recycling Ltd.	Blackpark, Kilkenny Road, Athy, Co. Kildare	02/2000A		Wastes scheduled in the application form	First Schedule, Activities 2 & 4		11/02/2003	07/02/2003	06/02/2006
Kildare Co. Council	T.Hennessey & Sons Ltd.	Myersstown, Two Mile House, Naas, Co. Kildare.	106/2002	Recovery of scrap metal or other metal waste and dismantling or recovery of vehicles	Wastes schedule in the application form	First Schedule, Activities 2 & 3		11/02/2003	07/02/2003	06/02/2006
Kildare Co. Council	Marion Developments Ltd	Kilbock, Co. Kildare	114/2003		Inert subsoil, topsoil, sand, gravel, clay, marls and stone shall be used to reclaim/raise the site. Small quantities of blocks, bricks and broken concrete may be permitted for use in hardstanding areas and/or haul roads	First Schedule, Activity 5		08/04/2003	08/04/2003	07/04/2004
Kildare Co. Council	Lawson Constructor Ltd.	Lipstown, Narraghmore, Co. Kildare	119/2003		Only inert subsoil, topsoil, sand, gravel, clay, marls and stone shall be used to reclaim/raise the site. Small quantities of blocks, bricks and broken concrete may be permitted for use in hardstanding areas and/or haul roads.	First Schedule, Activity 5		01/05/2003	29/04/2003	28/04/2004
Kildare Co. Council	Bolton RVD Ltd.	Belhus, Grangeford, Castledermot, Co. Kildare	125/2003		Wastes scheduled in the application form.	First Schedule, Activity 5		09/05/2003	07/05/2003	06/05/2006
Kildare Co. Council	David Behan	Kilkenmore, Sallins, Co. Kildare	120/2003			First Schedule, Activity 5		09/05/2003	07/05/2003	06/05/2004
Kildare Co. Council	P.J. Falor & Patrick & Ann Fallon of Paul D. Griffin	Ballycurragh, Maynooth, Co. Kildare	112/2003		Only inert subsoil, topsoil, sand, gravel, clay, marls and stone, shall be used to reclaim/raise the site. Small quantities of blocks, bricks and broken concrete may be permitted for use in hardstanding areas and/or haul roads. All material shall be deposited inside the site boundary.	First Schedule, Activity 5		19/06/2003	17/06/2003	16/06/2004
Kildare Co. Council	Dan Courtney	Dangan, Celbridge, Co. Kildare	128/2003	Recovery	Only inert subsoil, topsoil, sand, gravel, clay, marls and stone, shall be used to reclaim/raise the site. Small quantities of blocks, bricks and broken concrete may be permitted for use in hardstanding areas and/or haul roads.	First Schedule, Activity 5		22/08/2003	08/08/2003	07/08/2004
Kildare Co. Council	Greenstar Recycling Ltd.	Ryebrook Business Park, Leixlip, Co. Kildare	03/2000A		Recycling and reclamation of metals and metal compounds and recycling or reclamation of other inorganic compounds	First Schedule, Activity 2 & 5		22/08/2003	05/08/2003	04/08/2006
Kildare Co. Council	Mr. Olla Cross	Allenwood South, Naas, Co. Kildare	115/2003	Recovery		First Schedule, Activity 5		05/08/2003	04/08/2003	03/08/2004
Kildare Co. Council	John Moran	Woolstown, Eskestown, Co. Kildare	140/2003	Landraise	Soil based materials	First Schedule, Activity 5	200,000	20/10/2003	16/10/2003	16/10/2006
Kildare Co. Council	James Lynch	Flemingstown Stn, Ballymore Eustace	152/2003	Landraise	Inert/Sub Soil Topsoil, Sand, Gravel, Clay, Marls & Stone	Activity 5	8,000	06/02/2004	03/02/2004	03/02/2007
Kildare Co. Council	A Pettigrew	Unit 22/23 Tern Enterprises PLC, Melitta Road, Kildare	147/2003		Paper Shredding Machine & Baler	Activity 5	5000 tonnes per annum	06/02/2004	29/01/2004	29/01/2007
Kildare Co. Council	Stephen O'Sullivan	Blacktrench, Naas, Co. Kildare.	41/2001	Landraise	17 01 01 Concrete, 17 01 02 Bricks, 17 05 04 Soil and Stones	Activity 5, Part 1, 1st Schedule	2,000,000	16/03/2004	11/03/2004	14/06/2005
Kildare Co. Council	Terese Smullen, O'Conor Furey & Associates Ltd., Abbins House, Eyre St., Newbridge, Co. Kildare	Allenwood Stn. Co. Kildare	153/2003	Landraise	17 05 04 Soil, & Gravel	Activity 5 Part 1 1st Schedule	8,000	08/04/2004	05/03/2004	05/03/2005
Kildare Co. Council	Weenroule JV	Kilmorebrannagh, Johnstownbridge	136/2003	Landraise	17 05 04 Soil & Stones	Activity 5 Part 1 1st Schedule	10,000	01/04/2004	31/03/2004	31/03/2007
Kildare Co. Council	Weenroule JV	Kilshinmurray, Broadford	136/2003	Landraise	17 05 04 Soil & Stones	Activity 5 Part 1 1st Schedule	10,000	01/04/2004	31/03/2004	31/03/2007
Kildare Co. Council	Weenroule JV	Ballyonan, Broadford	139/2003	Landraise	17 05 04 Soil & Stones	Activity 5 Part 1 1st Schedule	10,000	01/04/2004	31/03/2004	31/03/2007
Kildare Co. Council	Weenroule JV	Balling, Broadford	141/2003	Landraise	17 05 04 Soil & Stones	Activity 5 Part 1 1st Schedule	10,000	01/04/2004	31/03/2004	31/03/2007
Kildare Co. Council	Weenroule JV	Balling, Broadford	142/2003	Landraise	17 05 04 Soil & Stones	Activity 5 Part 1 1st Schedule	10,000	01/04/2004	31/03/2004	31/03/2007
Kildare Co. Council	Weenroule JV	Balling, Broadford	143/2003	Landraise	17 05 04 Soil & Stones	Activity 5 Part 1 1st Schedule	10,000	01/04/2004	31/03/2004	31/03/2007
Kildare Co. Council	Tom Gavin	Thornberry, Kil	30/2001A	Landraise	17 05 05 Soil & Stones	Activity 5	100,000	15/04/2004	14/04/2004	13/04/2007
Kildare Co. Council	Retumbath Ltd.	UNA, Oldmill Industrial Estate,	172/2002	Recovery of scrap metal		Activity 2, Activity 5 in accordance with		07/05/2004	13/12/2003	10/12/2006
Kildare Co. Council	Ringdale Ltd.	CRDawn, Athgarven	15/2000A	Landraise	17 05 04 Soil & Stones	Activity 5	50000	31/05/2004	28/05/2004	28/05/2007
Kildare Co. Council	D. Flanagan & N. McDonald	Brownstown, Melon Hill, Kicullen,	162/2004	Landraise	17 05 04 Soil & Gravel	Activity 5, Part 1 of the 1st Schedule	50000	08/08/2004	03/08/2004	03/08/2007
Kildare Co. Council	Seamus Tougher	Alleeburnish, Newbridge	162/2000A (renewed)	Landraise	17 05 05 Top Soil, Sub Soil & Rubble	Activity 5, Part 1 of the 1st Schedule	700000	17/08/2004	15/08/2004	15/08/2007
Kildare Co. Council	N & C Enterprises Ltd	The Pl. Kilmessog	126/2003	Landraise	17 05 04 - Inert Material	Activity 5, Part 1, 1st Schedule	150,000	30/09/2004	29/09/2004	25/09/2007
Kildare Co. Council	MacHale Plant Hire Ltd	Reelbog, Blessington	129/2003	Landraise	Sub Soil, Clean Excavated material some	Activity 5, Part 1, 1st Schedule	80000	14/07/2004	12/07/2004	12/07/2007
Kildare Co. Council	Pauline Thornton Waste Disposal	PDM Ltd., Ockmiltown, Kil. Co. Kildare	34/2001 A	Woodchipping Facility	Timber	Activity 2 and 5	20,000 tonnes of timber	03/08/2004	28/07/2004	28/07/2007
Kildare Co. Council	John Behan	Blackhall, Quarry, Punchestown, Naas, Co. Kildare	37/2001A	Landraise	17 05 04 Topsoil, Subsoil, Stones	Activity 5 Part 1 1st Schedule	200,000	27/08/2004	25/08/2004 (additional info submitted)	25/09/2007
Kildare Co. Council	Rev. Fr. J. O'Connell	Yeomanstown, Caragh, Naas, Co. Kildare	168/2004	Landraise	Topsoil	Activity 5, Part 1, 1st Schedule	16,000 tonnes	09/09/2004	08/09/2004	08/09/2007
Kildare Co. Council	T. Tougher	Ladytown & Lawestown, Naas, Co. Kildare	167/2004	Landraise	17 05 04: Soil & Stones	Activity 5, Part 1, 1st Schedule	100,000 tonnes	29/09/2004	15/09/2004	15/09/2007
Kildare Co. Council	Brandenberry Ltd.	Millemum Park, Naas, Co. Kildare	168/2004	Landraise	Soil based materials	Activity 5, Part 1, 1st Schedule	100,000 tonnes in total	20/10/2004	15/10/2004	15/10/2007
Kildare Co. Council	Kevin & Berna Nolan	Maddensstown Stn., Nanny, Co. Kildare	175/2004	Landraise	Inert Soil & top soil	Activity 5, Part 1, 1st Schedule	15,000 tonnes	03/11/2004	01/11/2004	01/11/2007
Kildare Co. Council	Ark Ltd.	Dranmansstown South, Rathangan, Co.	172/2004	Landraise	17 01 01: Concrete, 17 01 02: Bricks, 17 01 04	Activity 5, Part 1, 1st Schedule	100,000 tonnes	17/11/2004	12/11/2004	12/11/2007



Kildare Co. Council	Richard Kinsella & Sons Ltd. Ltd Eco Bedding Ite.	Woodlands East, Castlecomer	21/2000A	Storage and Yard	Paper Cardboard	Activity 5 Part 1 1st Schedule	5,000	29/1/2004	12/1/2004	12/1/2007
Kildare Co. Council	Christopher McCormack	Kilgovan, Kilkullen, Co. Kildare	173/2004	Landraise	Soil & Stones	Activity 5	100,000 tonnes	04/12/2005	22/12/2004	21/12/2007
Kildare Co. Council	Green Avenue Landscapes Ltd.	Green Ave. Naas	177/2004	Recovery of Surplus Landscaping Material	Green Waste	Activity 5	1,000m <sup>3</sup>	04/01/2005	22/12/2004	21/12/2007
Kildare Co. Council	Coffey Construction Ltd	Punchosawn Racecourse, Naas	186/2005	Landraise	17 05 01 Inert Materials	Activity 5	20,000	16/02/2005	10/02/2005	10/02/2008
Kildare Co. Council	M & M Cold Stores Ltd.,	Kerdistown, Naas, Co. Kildare	176/2004	Landraise	17 05 01 Soils	Activity 5	100,000	18/02/2005	01/02/2005	01/02/2008
Kildare Co. Council	Frank Heavey	Barretstown, Newbridge, Co. Kildare	174/2004	Landraise	Inert Materials 17 05 01	Activity 5	150,000	28/02/2005	23/02/2005	14/05/2005
Kildare Co. Council	Menolly Enterprises	Whitabrown, Castle Dillon Lr, Straffan	189/2005	Landraise	Soils and stones 17 05 04	Activity 5	10,000 tonnes	30/03/2005	23/03/2005	23/03/2008
Kildare Co. Council	Glassco Recycling Ltd	Old mill Ind Est, Oldmilltown, Kil, Co. Kildare	160/2004	Recycling and storage facility	20 01 02	activity 5	5000 tonnes per annum	22/04/2005	14/04/2005	14/04/2008
Kildare Co. Council	Bridford Developments Ltd	Palmerstown Demense, Johnstown, Naas, Co. Kildare	194/2005	Landraise	Top Soil and sub soil	activity 5	200,000 total	15/06/2005	07/06/2005	07/12/2005
Kildare Co. Council	Hazel Bagnal	Allenwood South, Naas, Co. Kildare	183/2004	Landraise	Soil and stones	Activity 5	10,000	28/07/2005	21/07/2005	21/07/2008
Kildare Co. Council	Greenline Pallets Ltd	Unit D2, M7 Business Park, Newhall, Naas, Co. Kildare	200/2005	Recovery of inert wastes	15 01 03	Activity 5	10,000 tonnes	28/07/2005	21/07/2005	21/07/2008
Kildare Co. Council	PJ Carey	Millenium Park Western Link Road, Naas, Co. Kildare	201/2005	Landraise	Soil and stones	Activity 5	50,000 tonnes	28/07/2005	21/07/2005	21/07/2008
Kildare Co. Council	James Philips	539 Geraldine, Athy, Co. Kildare	7/2000A	Dismantling and recovery of vehicles	15 01 04, 16 01 04, 17 04	Activity 2 and 4	5000 tonnes per annum	11/09/2005	09/09/2005	09/09/2008
Kildare Co. Council	Frank Heavey	Blacktrench, Naas, Co. Kildare	174/2004A	Landraise	17 05 04	Activity 5	100,000	30/09/2005	20/09/2005	20/09/2008
Kildare Co. Council	Colonel Laing O'Rourke JV	N7 Site Project Office, Blackchurch Lane, Blackchurch, Co. Kildare	203/2005	Landraise	17 05 04	Activity 5	200,000	30/09/2005	20/09/2005	20/09/2008
Kildare Co. Council	Claire Garey and John Clarke	Plickerstown, Kimeague, Naas, Co. Kildare	202/2005	Landraise	17 05 04	Activity 5	500	10/10/2005	30/09/2005	30/09/2005
Kildare Co. Council	All Spares (Kildare) Ltd	Ballysax, The Curagh, Co. Kildare	83/2002A	Recovery of Scrap Metal	See permit for details	Activity 2 and 3	157	10/10/2005	30/09/2005	30/09/2005
Kilkenny Co. Council	Campill Community	Campill Community, Ballyrobin, Callan, Co. Kilkenny.	WMP05/2000	Landraise	020106 animal manure, 020304, 020203, 020501, 020601, 020704.	Fourth Schedule, R2, R9, R10, R13	5000	06/09/2002	11/06/2001	11/06/2004
Kilkenny Co. Council	Doherty Wheele Bins	Castelinch	WMP01/2002	Waste Recovery Facility - Storage & Sorting of Recyclable Materials	150100 (waste packaging), 170000 (inert non hazardous only), 200101 (paper and cardboard), 200102 (glass), 200139 (plastics).	Fourth Schedule, R4, R13	5000	20/11/2003	06/08/2002	06/08/2005
Kilkenny Co. Council	New Rose Port Company	Ballyvaneec / Forreastown & Ringville	WMP04/2002	Placement of dredged material	170504 - dredging spoil	Fourth Schedule, R10	5000	20/11/2003	19/11/2002	19/11/2005
Kilkenny Co. Council	Patrick O'Brien, Melville Developers	Sheastown	WMP06/2002	Waste Recovery Facility - C&D Waste	170501 (Soil & Stones) / 170101 (Concrete) / 170102 (Brick)	Fourth Schedule, R2, R4, R10	5000	20/11/2003	01/07/2002	01/07/2005
Kilkenny Co. Council	Greg O'Neill	Cloghale	WMP07/2002	Waste Recovery Facility - C&D Waste	170501 (Soil & Stones) / 170101 (Concrete) / 170102 (Brick)	Fourth Schedule, R2, R4, R10	5000	20/11/2003	09/07/2002	09/07/2005
Kilkenny Co. Council	E&M Roles	Gaultstown, Slonogue	WMP10/2002	Waste Recovery Facility - C&D Waste	170501 (Soil & Stones) / 170101 (Concrete) / 170102 (Brick)	Fourth Schedule R2, R4, R10	5000	20/11/2003	22/07/2002	22/07/2005
Kilkenny Co. Council	Kevin Heffeman	Ballyvaneed, Glenmore	WMP11/2002	Waste Recovery Facility - C&D Waste	170501 (Soil & Stones) / 170101 (Concrete) / 170102 (Brick)	Fourth Schedule R2, R4, R10	5000	20/11/2003	22/07/2002	22/07/2005
Kilkenny Co. Council	Berry Dunne	Leggelsrath	WMP12/2002	Waste Recovery Facility - Storage & Sorting of Recyclable Materials	150100 (waste packaging), 170000 (inert non hazardous only), 200101 (paper and cardboard), 200102 (glass), 200139 (Plastics).	Fourth Schedule R4, R13	5000	20/11/2003	28/03/2003	28/03/2008
Kilkenny Co. Council	Jimmy O'Brien	Kilspay, Ferrybank	WMP15/2002	Waste Recovery Facility - C&D Waste	170501 (Soil & Stones) / 170101 (Concrete) / 170102 (Brick)	Fourth Schedule, R2, R4, R10	5000	20/11/2003	30/08/2002	30/08/2005
Kilkenny Co. Council	John Barry	Sugarstown, Thomastown	WMP16/2002	Waste Recovery Facility - C&D Waste	170501 (Soil & Stones) / 170101 (Concrete) / 170102 (Brick)	Fourth Schedule, R2, R4, R10	5000	20/11/2003	29/08/2002	29/08/2005
Kilkenny Co. Council	Bill & Paul Hamey	Granny, Kilmacow	WMP20/2002	Waste Recovery Facility - C&D Waste	170501 (Soil & Stones) / 170101 (Concrete) / 170102 (Brick)	Fourth Schedule, R2, R4, R10	5000	20/11/2003	23/04/2003	24/04/2006
Kilkenny Co. Council	Advanced Environmental Solutions	Hebron Road	WMP21/2002	Waste Facility - Storage and Sorting of Recyclable materials and skips	150100 (waste packaging), 170000 (inert non hazardous only), 200101 (paper and cardboard), 200102 (glass), 200139 (plastics), 170400 (waste metal non hazardous).	Fourth Schedule, 02, 03, 04, 13	5000	20/11/2003	11/05/2002	11/05/2005
Kilkenny Co. Council	Ivan Shennon	Ballyhandrickeon, Ballycallan	WMP22/2002	Waste Recovery Facility - C&D Waste	170501 (Soil & Stones) / 170101 (Concrete) / 170102 (Brick)	Fourth Schedule, R2, R4, R10	5000	20/11/2003	11/05/2002	11/05/2005
Kilkenny Co. Council	Patrick Walsh	Killicran	WMP23/2002	Waste Recovery Facility - C&D Waste	170501 (Soil & Stones) / 170101 (Concrete) / 170102 (Brick)	Fourth Schedule, R2, R4, R10	5000	20/11/2003	19/11/2002	19/11/2005
Kilkenny Co. Council	Force Plant Hire	Achnure, Callan	WMP25/2002	Waste Recovery Facility - C&D Waste	170501 (Soil & Stones) / 170101 (Concrete) / 170102 (Brick)	Fourth Schedule, R2, R4, R10	5000	20/11/2003	14/11/2002	14/11/2005











Authority	Applicant	Address	Reference	Description	Waste	Class	Capacity	Start Date	End Date	Notes
Limerick Co. Council	Tom Joe Kearney	Yocmans Td., Keshcarrigan, Co. Limerick	S 807/19/04/13	Will be filling the area in question with soil excavated from site granted planning permission in nearby Keshcarrigan Village	Soils and sub-soils only	Class 10 of the 4th Schedule of the WMA 1996	N/A	12/01/2005	01/12/2004	Not exceeding 24 months from date of issue
Limerick Co. Council	Stephen Reynolds Pknt Hire	Carrickbaun TD, Drumshanbo, Co. Leitrim	S 807/19/K	Tip for soil from road widening schemes	Soils and sub-soils only	Class 10 of the 4th Schedule of the WMA 1996	9,600	12/01/2005	20/10/2004	Not exceeding 36 months from date of issue
Limerick Co. Council	Joe McLoughlin Waste Disposal	Ardoonum, Drumshanbo, Co. Leitrim	S 807/19/D	Facility for Recycling and Waste Transfer Station	As Listed and described in Part 1 - Waste Activities Permitted, of Waste Permit granted	Classes 11 & 13 of 3rd Schedule of WMA 1996, and classes 2,3,4,11,13 of 4th Schedule	5,000	12/01/2005	23/12/2004	12 months from date of issue, or until a licence is granted by the EPA, whichever is the shorter period.
Limerick Co. Council	Erin Recyclers Ltd	Rossilver Road, Kirlough, Co. Limerick	S 807/19/A	Scrap metal recovery and transfer facility, at Rossilver Road, Kirlough, Co. Limerick	Scrap metal	Activity 2 - first schedule of waste management, Class 3 & 13 of the fourth schedule	11,000 tonnes	27/07/2005	24/06/2005	31/03/2006
Limerick Co. Council	Mr. Ian Feeney	Bohy Td., Dromahaire, Co. Leitrim	S 807/19/05/02	Facility to accept soils and subsoils only	Soils and sub-soils only	Activity 5 of the first schedule, Class 10 of the fourth schedule		27/07/2005	22/07/2005	Not exceeding 12 months from date of issue
Limerick Co. Council	Munster Metal Co. Ltd	Clondmogh, Ennis Road, Co. Limerick	WPLK01A	Metal Recycling Facility	Metals	Class 3 and 13 of the 4th Schedule of the WMA, 1996		04/07/2002	03/07/2002	02/07/2005
Limerick Co. Council	Bob Sweeney, Car Dismantling Facility	Cocreeady, Castleconnell, Co. Limerick	WPLK03	Car Dismantling	Recycling or reclamation of metal and metal compounds, storage of waste intended for submission	Class 3 and 13 of the 4th Schedule of the WMA, 1996		10/02/2001	09/01/2001	09/01/2004
Limerick Co. Council	Paddy Hoare	Crescent House, Hartstonge Street, Limerick	WPLK06	Pitch & Putt Course	Only clean, inert building rubble (i.e. concrete, brick and stone) and subsoil material shall be used as fill on the site. No organic matter (including organic soils, timber or any other biodegradable matter) plastics, metals, refuse, hazardous wastes shall be imported to the site.			20/11/2001	13/11/2001	13/11/2004
Limerick Co. Council	Chietain Construction Ltd.	Rathmore House, Raheen, Co. Limerick	WPLK04		Only clean, inert building rubble (i.e. concrete, brick and stone) and subsoil material shall be used as fill on the site. No organic matter (including organic soils, timber or any other biodegradable matter) plastics, metals, refuse, hazardous wastes shall be imported to the site.	Class 4 and Class 13 of the Fourth Schedule of the WM Act, 1996 & subject to the conditions set out in the attached Schedule.		20/11/2001	15/05/2001	15/05/2004
Limerick Co. Council	Mr Ray Mulally	7 Waterville, Ennis Road, Limerick - facility address: Bloodmill Road, Singland, Co. Limerick	WPLK10	Waste disposal activities	Concrete, Bricks, Tiles and Ceramics, Mixed Tiles, Bricks and Ceramics, Soils and Stones	Class 4 and Class 13 of the Fourth Schedule of the WM Act, 1996 & subject to the conditions set out in the attached Schedule		29/01/2002	24/01/2002	24/01/2005
Limerick Co. Council	Mr. Thomas O'Neill	Derreen, Castleconnell, Co. Limerick	WPLK05	Shredding Facility	Sawdust, shavings, cuttings, wood, particle board and veneer other than those mentioned in 03 01 04 on EWC.	Class 3, Class 13 of Fourth Schedule of WMA 1996		27/02/2002	25/02/2002	24/02/2005
Limerick Co. Council	Mr. John Ahem	Toumalulla, Co. Limerick	WPLK07	Motor vehicle dismantling and recycling	Class 3 Recycling or reclamation of metals and metal compounds and Class 13 storage of waste intended for submission to any activity referred to in a preceding paragraph of this schedule other than temporary storage, pending collection, on the premises where such waste is produced.	Class 3 & 13 of the Fourth Schedule of the WMA, 1996.		19/02/2002	14/02/2002	14/02/2005
Limerick Co. Council	Mr. Shay Sweeney	Em Park, Canina, Co. Limerick	WPLK 14	Recycling or Reclamation of other (i.e. non-metal) inorganic materials (class 4) & storage of waste (class 13)	Only clean, inert building rubble (i.e. concrete brick & stone) & subsoil material shall be used as fill on the site. No organic matter (including organic soils, timber or any other biodegradable matter) plastics, metals, refuse, hazardous wastes shall be imported to the site.	Classes 4 & 13 of the Fourth Schedule of WMA, 1996		17/09/2002	12/09/2002	11/09/2005
Limerick Co. Council	Mr. Darry White, T/A Whites Skip Hire	Mount Plummer, Broadford, Co. Limerick	WPLK 17	Waste Transfer Station	See copy of waste permit	Classes 12 & 13 of 3rd Schedule & Classes 2,3,4 & 14 of Fourth Schedule		25/11/2002	13/11/2002	12/11/2005
Limerick Co. Council	Wish Glass Recycling Ltd.	Unit 6, Dock Road Commercial Park, Dock Road, Co. Limerick	WPLK 19	Glass Recycling	See copy of waste permit			28/05/2003	21/05/2003	20/05/2006
Limerick Co. Council	David Doupe Transport Ltd. T/A Clean State Recycling	Shanagolden Industrial Estate, Shanagolden, Co. Limerick	WPLK16	Expanded polystyrene & foam polypropylene recycling		Fourth Schedule, Classes 4 & 13		16/06/2003	12/06/2003	11/06/2006
Limerick Co. Council	Mr. Neilus Healy	The Hill, Abbeyfeale, Co. Limerick	WPLK22		160103 end of life tyres / 160104 / end of life vehicles / 160106 end of life vehicles containing neither liquids nor other hazardous components			07/08/2003	21/07/2003	20/07/2006
Limerick Co. Council	Mr. Peter Finn	Glengon South, Toumalulla, Co. Limerick	WPLK08		End of Life Vehicles	Classes 3 & 13 of the 4th Schedule		20/08/2003	14/08/2003	13/08/2006
Limerick Co. Council	Mr. James Carey	Kilmoreen, Kildimo, Co. Limerick	WPLK24		170101 Concrete / 170102 Bricks / 170103 Tiles & Ceramics / 170107 Mixture of concrete, bricks, tiles and ceramics other than those mentioned in 170106.	Class 10 & Class 13 of the Fourth Schedule of the WMA, 1996		08/09/2003	05/09/2003	04/09/2006
Limerick Co. Council	Mr Maurice Crehan	Coolaleen, Broadford, Co. Limerick	WPLK 23	Composting Facility	See copy of waste permit for EWC codes	Class 2 & 13 of the Fourth Schedule		22/12/2003	12/12/2003	12/12/2006



		Newcastle West, Co. Limerick / Rathnagore, Ardragh, Co. Limerick		Importation of subsoil and stone	Excavated soil from contaminated sites) EWC codes: 170101, 170102, 170103, 170107, 170504	Schedule				
Limerick Co. Council	Mr Denis Collins	Lyons Excavations, St. Mary's Road, Newcastle West, Co. Limerick / Knockanes, Adare, Co. Limerick	WPLK27	Agricultural Land to be reclaimed using importation of subsoil and stone	Excavated soil from contaminated sites) EWC codes: 170101, 170102, 170103, 170107, 170504	Classes 10 & 13 of the Fourth Schedule		15/01/2004	05/01/2004	05/01/2007
Limerick Co. Council	Dave O'Riordan	Cahernary, Caherny, Co. Limerick	WPLK21	End of life vehicles	16 01 03, 16 01 04, 16 01 06, 16 01 07, 16 06 01	Fourth Schedule - class 3 & 13		19/05/2004	14/05/2004	13/05/2007
Limerick Co. Council	Pat Kely	Gurtacloone, Knockaney, Co. Limerick	WPLK25	End of life vehicles	16 01 03, 16 01 04, 16 01 06, 16 01 07, 16 06 01	Fourth Schedule - class 3 & 13		19/05/2004	14/05/2004	13/05/2007
Limerick Co. Council	Linnell Ltd., Bridgewater Court, Harveys Quay, Limerick	Clonmacken, Co. Limerick	WPLK 30	Recovery of inert material (Class 4)	17 C+D waste, 170101 Concrete / 170102 Bricks / 170103 Tiles & Ceramics / 170107 Mixture of bricks, tiles and ceramics / 170504 soil and stones (incl. Topsoil)	Class 4 & Class 13 of the Fourth Schedule of the WMA, 1996		20/07/2004	16/07/2004	16/07/2007
Limerick Co. Council	Nolan Civil Engineering Ltd.	M.G. Hyes & Co., Annacotty Business Park, Annacotty	WPLK31	Recovery of waste material	Concrete, stone, rubble, soil/subsoil	Classes 4 and 13 of the 4th Schedule	55,000	27/08/2004	13/09/2004	13/09/2007
Limerick Co. Council	Michael Mann	Ballyronoge South, Co. Limerick	WPLK36	Recovery of Inert Material	C & D Wastes, EWC Codes: 17 01 01, 17 01 02, 17 01 03, 17 01 07, 17 05 04	Classes 4 & 13 of the 4th Schedule	26,000	04/10/2004	30/09/2004	30/09/2007
Limerick Co. Council	Deil Products	Raheen Business Park, Raheen, Co. Limerick	WPLK40	Acceptance of waste (electrical & electrical equipment)	20, 20 01 36, 20 01 35	Class 13 of the 4th Schedule	20 tonnes (Household) & 10 tonnes (commercial)	01/11/2004	27/10/2004	27/10/2007
Limerick Co. Council	Mr. Binman Ltd	Warehouse No. 5, Harbour Road, Foynes, Co. Limerick	WPLK47	Storage of refused derived fuel intended for export	19, 191210	Class 13 of the 4th Schedule	Household: 2,700 Commercial: 1,800	02/02/2005	26/01/2005	26/01/2008
Limerick Co. Council	Ned Long	Drombanna, Co. Limerick	WPLK16(A)	Car dismantling facility	Oils, radiators, batteries	4th schedule, class 3 and 13	360 tonnes per annum	24/03/2005	01/03/2005	01/03/2008
Limerick Co. Council	Pat McCarthy	Bonemore, Broadford, Co. Limerick	WPLK46	Transfer and storage of farm plastics	02 01 04, 07 02 13, 15 01 02, 17 02 03, 20 01 02	4th schedule, class 4 and 13	900/1000 tonnes per annum	22/04/2005	15/04/2005	15/04/2008
Limerick Co. Council	Munster Metal Co. Ltd	Old Stabright building, Clondrigh, Ennis	WPLK 01(b)	Ferrous and non ferrous metal recycling facility	02 01 10, 12 01 01, 15 01 04, 17 04 01, 19 12 01	4th schedule, class 3 and 13	60000 tonnes approx	25/04/2005	15/04/2005	3 years from the date of issue
Limerick Co. Council	Fenton Car parts Ltd	Loughmore House, Raheen, Co. Limerick	WPLK02(e)	Dismantling/ recovery of vehicles	see appendix 1	4th schedule, class 3 and 13	100 tonnes	04/05/2005	28/04/2005	28/04/2008
Limerick Co. Council	Thomas O'Neil (grain merchants) Ltd	Berreen, Castleconnell, Co. Limerick	WPLK05(A)	Waste wood processing facility	03 01 01, 03 01 05, 03 03 01, 15 01 03, 17 02 01, 19 12 07, 20 01 36	Class 2 and 13 of the 4th schedule	7355 tonnes	04/05/2005	28/04/2005	28/04/2008
Limerick Co. Council	Dermot & Aisling O'Brien	Knockbrack West, Lisnagry, Co. Limerick	WPLK53	Import of waste soil and rubble to reuse land for the purpose of the construction of a dwelling	17 01 01, 17 01 02, 17 01 03, 17 05 05	Classes 4 and 13 of the fourth schedule	5000 tonnes	04/05/2005	28/04/2005	28/04/2008
Limerick Co. Council	Christian Construction Ltd.	Coonagh Cross, Ennis road, Co. Limerick	WPLK04(A)	Storage and recycling of inorganic materials	17 01 01, 17 01 02, 17 01 03, 17 01 07, 17 05 04	Classes 4 and 13 of the fourth schedule	75000 tonnes	09/05/2005	04/05/2005	04/05/2008
Limerick Co. Council	Alan & Catherine Stack	Annagh, Lisnagry, Co. Limerick	WPLK58	Storage and recycling of inorganic materials	17 01 01, 17 01 02, 17 01 03, 17 01 07, 17 05 04	Classes 4 and 13 of the fourth schedule	3000m <sup>3</sup>	18/05/2005	11/05/2005	11/05/2008
Limerick Co. Council	John D. O'Connor,	Rower, Adare, Co. Limerick	WPLK49	Used cooking oil processing plant to produce Bio-diesel for use in Diesel engines & buses/heavy	20 20 01, 25 02 03, 02 03 02, 02 03 04, 02 03 99	Classes 2, 3, 9, 13 of fourth schedule	300	23/05/2005	18/05/2005	18/05/2008
Limerick Co. Council	Patrick Kelly	Dromboy Upper, Lisnagry, Co. Limerick / Facility at Knockbrack West, Lisnagry Co. Limerick	WPLK63	Low syng land to be filled with soil, sub-soil and building rubble	17, 17 01 01, 17 01 02, 17 01 03, 17 01 07, 17 05 04	4 & 13 of fourth schedule	5000	30/05/2005	26/05/2005	26/05/2008
Limerick Co. Council	DGD Papers Limited	Bay Mt, Raheen Business Park, Raheen, Co. Limerick	WPLK09(A)	Paper shredding and document destruction prior to incineration and landfill	1501, 15 01 01, 15 01 02, 20 01 01, 20 01 39, 20 01 35, 20 01 36	Classes 13 of the third schedule & 12 & 13 of the fourth schedule	4000	30/05/2005	26/05/2005	26/05/2008
Limerick Co. Council	John Moore	McMannus Yard, Rooragh, Ballysheehy, Co. Limerick	WPLK56	Dismantling & Recovery of vehicles	see appendix 1	4th schedule classes 3 & 13	100 cars per annum	20/06/2005	13/06/2005	13/06/2008
Limerick Co. Council	Dan O'Connor	Diamond Business Park, Gortboy, Newcastle West, Co. Limerick	WPLK60	Recovery of inert materials	17 01 01, 17 01 02, 17 01 03, 17 01 07, 17 05 04, 17 09 04	4th schedule classes 4 & 13	3500	29/06/2005	24/06/2005	23/06/2008
Limerick Co. Council	Peter Ward	Knocknasha, Tourmatulla, Co. Limerick	WPLK11	Recycling facility	See permit for details	Class 12 & 13 of the third schedule, class 2, 3, 4 & 13 of the fourth schedule	2750 tonnes	01/07/2005	30/06/2005	29/06/2008
Limerick Co. Council	Bob Sweeney	Coolrady, Castleconnell, Co. Limerick	WPLK03(A)	Dismantling of recovery of end of life vehicles	see appendix 1	Class 3 & 13 of the fourth schedule	300 tonnes	01/07/2005	27/06/2005	26/06/2008
Limerick Co. Council	Fiona Galvin	Moorestown, Killinane, Kilmallock, Co. Limerick	WPLK66	Recovery of inert materials	17 01 01, 17 01 02, 17 01 03, 17 01 07, 17 05 04	Classes 4 & 13 of the fourth schedule	<5000 tonnes	21/07/2005	19/07/2005	19/07/2008
Limerick Co. Council	Munster Metal Co. Ltd	Clondrigh, Ennis Road, Co. Limerick	WPLK01	Ferrous and non ferrous metal recovery & end of life vehicle facility	see appendix 1	Classes 3, 4 & 13 of the fourth schedule. Class 13 or the third	50,720 tonnes	22/07/2005	19/07/2005	19/07/2008
Limerick Co. Council	Ms I. McNamara & Mr M. O'Dwyer	"Lisheaf", Golf Links Rd., Castletroy, Co. Limerick	WPLK74	Recovery of inert material at development site	17 01 01, 17 01 02, 17 01 03, 17 05 04	Classes 4 & 13 of the fourth schedule	13,000 tonnes	10/08/2005	04/08/2005	04/08/2008
Limerick Co. Council	Paul & Eileen Madden	Blossom Hill, Rathkeale, Co. Limerick	WPLK51	Import of waste soils and rubble to reuse land levels	17 01 01, 17 01 02, 17 01 03, 17 05 04	Classes 4 & 13 of the fourth schedule	76,000 tonnes	24/08/2005	22/08/2005	22/08/2008
Limerick Co. Council	Mr John Shanahan, Aherm Auto Dismantlers	Tourmatulla, Co. Limerick	WPLK07(a)	Dismantling or recovery of end of life vehicles	see appendix 1	Classes 3 & 13 of the 4th Schedule	200	25/08/2005	23/08/2005	23/08/2008
Limerick Co. Council	Tommy Holmes	Dromsalagh, Cappamore, Co. Limerick	WPLK57	Dismantling recovery and storage of end of life vehicles	see appendix 1	Classes 3 & 13 of the 4th Schedule	100	12/09/2005	07/09/2005	07/09/2008
Limerick Co. Council	Tank Trans Ltd	Promenade Road, Tolka Quay, Dublin 3	WPLK287/050	Recovery	See Appendix A	See Permit		12/09/2005	06/09/2005	
Limerick Co. Council	Pat Campbell	Dromsalagh, Cappamore, Co. Limerick	WPLK69	Recovery of Inert Material	17 01 01, 17 01 02, 17 01 03, 17 01 07, 17 05 04	Classes 4 & 13 of the 4th Schedule	1,000	28/20/05	26/10/2005	26/10/2008
Limerick Co. Council	John McInerney	Dough Spanish Point, Millown Malzay, Co. Clare	WPLK62	Recovery of Inert Material	17 01 01, 17 01 02, 17 01 03, 17 01 07, 17 05 04	Classes 4 & 13 of the 4th Schedule	120,000	18/10/2005	05/10/2005	05/10/2008
Limerick City Council	DGD Papers Ltd.	Camheen, Mungret, Limerick	WPLK 09	paper, cardboard, plastics and materials	paper, cardboard, plastics and materials	Class 13 of the 3rd Schedule and 12 and 13 of the 4th Schedule of the WMA 1996		21/01/2002	15/01/2002	15/01/2005
Limerick City Council	Shannon Textiles	Kilkeely Road, Thomondgate, Limerick	WP01-02	Recycling or Reclamation of organic substances which are not used as solvents	Textile waste	Classes 2 & 13	5000	14/11/2002	11/06/2002	10/06/2005
Limerick City Council	SITA Recycling	Unit 7, Crossgata Industrial Estate, Limerick	WP 02-02	Commercial Waste Recycling		Classes 2,3,4,13		14/11/2002	22/07/2002	21/07/2005
Limerick City Council	Reduce, Reuse & Recycle Ltd	Galvone Industrial Estate, Galvone, Limerick	WP 02-03	Commercial Waste Recycling	Commercial and industrial waste of similar composition to municipal waste subject to the quantities listed in Schedule H.	Classes 11, 12, 13 - 3rd Schedule & Classes 2,3,4,13 of 4th Schedule	5000	14/11/2002	15/08/2002	14/08/2005
Limerick City Council	Canon Hygiene	Kilmallock Road Enterprise Centre, Limerick	WP 02-04		Non hazardous sanitary towel, nappy and incontinence waste in appropriate secure identifiable containers subject to the quantities listed in Schedule D.	3rd Schedule - Class 13		14/11/2002	08/11/2002	07/11/2005
Limerick City Council	Rentokil Initial Ltd	Rosemadda Business Park, Ballysanson Road, Limerick	WP 03-01	Temporary storage of non-hazardous healthcare	EWC Code 180104 waste prior to submission to a permitted licensed disposal activity.	3rd Schedule - Class 13	5,000	20/10/2003	02/09/2003	02/09/2006



Authority	Applicant	Site Name	Permit Reference	Facility Description	Waste Types	Classes	Capacity	Start Date	End Date	Notes
Limerick City Council	Coffey Construction Ltd	Greenpark, Old Limerick Racecourse, Dook Road, Limerick	WP 05-01	composts housing schema The importation of structural fill for a road development.	The recovery of waste (other than hazardous waste) at a facility (other than a facility for the composting of waste where the amount of compost and waste held at the facility exceeds 1000 cubic meters at any time)		50,000	03/02/2005	25/01/2005	24/01/2006
Limerick City Council	Fitzgerald Skip Hire	Temaru, Rathbarna, Limerick	WP 05-02	Commercial Waste Transfer Facility	The recovery of waste (other than hazardous waste) at a facility (other than a facility for the composting of waste where the amount of compost and waste held at the facility exceeds 1000 cubic meters at any time)	Classes 2,3,4 & 13 of the Fourth Schedule	5,000	25/02/2005	17/02/2005	16/02/2007
Limerick City Council	Timothy O'Connor, T/A polyresin Plastics	Kilsmey Road, Abbeyville, Co. Limerick	WP/LK43	Segregation and granulation of plastics	07 02 13, 12 01 05, 15 01 02, 17 02 03, 20 01 39	Classes 4 and 13 of the fourth schedule	60/70 tonnes	01/04/2005	24/03/2005	
Limerick City Council	Hegarty metal Recycling	Ballsbridge Road, Limerick	WP 05-04	Ferrous and Non-Ferrous Metal and End of Life vehicle recovery	The recovery of waste (other than hazardous waste) at a facility (other than a facility for the composting of waste where the amount of compost and waste held at the facility exceeds 1000 cubic meters at any time)	Activities 3, 4, 13 in accordance with the fourth schedule. Activities 12 & 13 in accordance with the third schedule	50,000	26/05/2005	01/05/2005	01/05/2008
Longford Co. Council	John Crosean, 22 Ardncassa, Longford	Unit 8, Industrial Estate, Longford	WC02/01	Waste Processing and Recycling Facility		Class 3, Class 13		12/11/2002	23/05/2002	22/05/2005
Longford Co. Council	Flancare (Clonmel) Distributions Ltd.	Flancare Site (Residential Part), Ballymahon, Co. Longford.	WC02/02A Amended Permit		Only construction and demolition waste, sand, gravel, subsoil and topsoil which conform to the EWC ref. 170101, 170102, 170103, 170107, 170504, 170904 may be accepted at this site. No other waste types are to be deposited at this facility.	Fourth Schedule Classes 2 & 4		11/08/2003	06/08/2003	12 months from commencement of waste activities on site
Longford Co. Council	Manning Brothers Contracts Ltd.	Knockshaw, Longford, Co. Longford	WP03/02		Only topsoil and subsoil which conform to the EWC code reference 170504 may be accepted at this site. No other waste types are to be deposited at this facility.	Fourth Schedule, Classes 2 & 4		16/06/2003	12/06/2003	11/06/2005
Longford Co. Council	Michael Moranhan	Ardncassa, Longford, Co. Longford	WP03/03		Only topsoil & subsoil which conform to the EWC code reference 170504 may be accepted at the site. No other waste types are to be deposited at this facility.	Third Schedule Class 1 & Fourth Schedule Classes 2 & 4		31/07/2003	29/07/2003	24 months from date of commencement of waste activities on site
Longford Co. Council	J.F. Builders Ltd.	Mart Road, Ballymahon, Co. Longford	WP03/04	Recovery & Recycling of Waste	Only topsoil, subsoil and c&d waste which conforms to the EWC code references 170101, 170102, 170103, 170107, 170504, 170904 may be accepted at this site.	First Schedule, Activity 5 / Fourth Schedule, Classes 2 & 4		08/09/2003	05/09/2003	04/09/2004
Longford Co. Council	Lze, Mary & Anne Concanon	Denygeel, Lanesboro, Co. Longford	WP03/05	Recovery & Recycling of Waste	Only topsoil and subsoil waste which conforms to the European Waste catalogue code references 170504 may be accepted at this site. No other waste types are to be deposited at this facility.	First Schedule, Activity 5 / Fourth Schedule Classes 2 & 4		20/10/2003	16/10/2003	15/10/2004
Longford Co. Council	Johnston Farm Equipment	Cartrongeeragh, Co. Longford	WP03/06		Only construction and demolition waste which conforms to the EWC code references 170101, 170102, 170103, 170107, 170904 may be accepted at this site. No other waste types are to be deposited at this facility.	First Schedule, Activity 5 / Fourth Schedule Class 4.		19/11/2003	05/11/2003 Amendment: Additional information received 23/12/04	24 months from date of commencement of waste activities on site
Longford Co. Council	Richard Monaghan	Muckerswell, Garrahd, Co. Longford	WP 03/04	Depositing of construction & excavated in earth fill material (topsoil and subsoil)	17 01 001, 17 01 02, 17 02 03, 17 01 07, 17 05 04, 17 09 04	Activity 5 - WM Permit Regs. 1998, 4th Schedule WMA, 1998 - Class 2, 4, 10, 13	1000 cubic meters	12/05/2004	19/04/2004	19/04/2007
Longford Co. Council	Michael Maguire	Calkrighmore, Co. Longford	WP01/04	The recovery of waste (other than hazardous waste) at a facility (other than a facility for the composting of waste where the amount of compost and waste held at the facility exceeds 1000 cubic metres at any time)	17 05 04 Topsoil and Subsoil	Activity 5 Class 2, 4 and 13		02/04/2004	23/03/2004	22/03/2005
Longford Co. Council	Rhyme Rock Ltd.	Kilne, Co Longford	WP05/04	Recovery of waste (other than haz waste etc.		4th Schedule, Class2, Class 4 and Class 13		14/05/2004	07/05/2004	06/05/2006
Longford Co. Council	M & N Nolan Motor Company Ltd.	Cumyngs, Newdownforbes	WP02/04	Class 13 Storage of waste etc.				14/05/2004	07/05/2004	06/05/2007
Longford Co. Council	Longford Town Council.	Little Water Street, Longford	WP06/04	Storage prior to submission to any activity referred to in a preceding paragraph of this schedule, other than temporary storage, pending collection, on the premises where the waste concerned is produced.	20 03 01, 20 03 03. (Street sweepings and municipal waste conforming to above codes)	Activity 5, 4th Schedule, Class 2, Class 4, Class 13		31/05/2004	31/05/2004	30/05/2007
Longford Co. Council	Michael Maguire	Calkrighmore, Co. Longford	WP07/04	The recovery of waste (other than hazardous waste) at a facility (other than a facility for the composting of waste where the amount of compost and waste held at the facility exceeds 1000 cubic metres at any time.	17 05 04 Topsoil and Subsoil	Activity 5, Fourth Schedule, Class 2, Class 4, Class 13		31/05/2004	31/05/2004	30/05/2005
Longford Co. Council	Benny Ledwith	Longford Road, Drumlish, Co. Longford	WP08/04	The recovery of waste (other than hazardous waste) at a facility (other than a facility for the composting of waste where the amount of compost and waste held at the facility exceeds 1000 cubic metres at any time.		Activity 5, First Schedule, Fourth Schedule, Class 2, Class 4, Class 10 and Class 13		23/07/2004	23/07/2004	22/07/2007



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Longford Co. Council	Mr. Michael Haney	Caldraghmore, Co. Longford	WP12/04	Recovery of Waste	Activity 5 - The recovery of waste (other than hazardous waste) at a facility (other than a facility for the composting of waste where the amount of compost and waste held at the facility exceeds 1000 cubic metres at any time)	Fourth Schedule Classes 2, 4 & 13		10/02/2005	10/02/2005	09/02/2008
Longford Co. Council	Mr. Bran Muirhill	Creevaghbag, Ballymahon, Co. Longford	WP13/04	Recovery of Waste	Activity 5 - The recovery of waste (other than hazardous waste) at a facility (other than a facility for the composting of waste where the amount of compost and waste held at the facility exceeds 1000 cubic metres at any time)	Fourth Schedule Classes 2, 4, 10 & 13		10/02/2005	10/02/2005	09/02/2008
Longford Co. Council	James Mulheem	Crookau, Ballymacmack, Longford	WP03/05	Recovery of waste	Activity 5 - the recovery of waste	4th Schedule, Class2, Class 4 and Class 13		19/04/2005	19/04/2005	one year from date of issue
Longford Co. Council	Louis Henterich	Moneyegan, Lismore, Longford	WP01/05	Recovery of waste	Activity 5 - the recovery of waste	4th Schedule, Class2, Class 4 and Class 13		21/04/2005	20/04/2005	12 months from date of issue
Longford Co. Council	Anthony Mullaedy	Clooneilly, Moynes, Longford	WP04/05	Recovery of waste	Activity 5 - the recovery of waste	4th Schedule, Class2, Class 4 and Class 13		24/05/2005	24/05/2005	3 years from date of issue
Longford Co. Council	Gerry Shannon & Damien Shannon	Minard, Longford	WP05/05	Recovery of waste	Activity 5 - the recovery of waste	4th Schedule, Class2, Class 4 and Class 13		24/05/2005	24/05/2005	three years from date of issue
Longford Co. Council	John Macken	Rathcroghan, Granard, Co. Longford	WP09/05	Recovery of waste	Activity 5 - the recovery of waste	4th Schedule, Class2, Class 4, Class 10 and Class 13		14/06/2005	13/06/2005	3 years from date of issue
Longford Co. Council	Paidraig Smith & Sylvia Smith	Dunbeggan, Co. Longford	WP 08/05	Recovery of waste	Activity 5 of the first schedule	4th schedule, class 2,4 and 13		05/07/2005	27/06/2005	36 months from date of issue
Longford Co. Council	James Harnilly & Seamus Harnilly	Faghay, Longford	WP 06/05	Recovery of waste	Activity 5 of the first schedule	Fourth schedule, Classes 2, 4 & 13		29/07/2005	27/07/2005	36 months from date of issue
Longford Co. Council	Padmig Brady	Danzwey, Drumlish, Co. Longford	WP 10/05	Recovery of waste	Activity 5 of the first schedule	Fourth schedule, Classes 2,4 & 13		29/07/2005	27/07/2005	36 months from date of issue
Longford Co. Council	Landmark Construction Ltd	Craneymore, Eogaworthstown, Co. Longford	WP 11/05	Recovery of waste	Activity 5 of the first schedule	Fourth schedule, classes 2, 4, 10 & 13		29/07/2005	27/07/2005	36 months from date of issue
Longford Co. Council	Creagan McCabe	Mulcaigher, Longford	WP 02/05	Recovery of waste	Activity 5 of the first schedule	Fourth schedule, Classes 2,4 & 13		29/07/2004	27/07/2005	36 months from date of issue
Longford Co. Council	John Tinnelly & Sons Ltd	Former ABP Meat Processing Plant, Bridge Street, Longford	WP 012/05	Recovery of waste	Activity 5 of the first schedule	fourth schedule, Classes 4, 11 & 13		29/07/2005	29/07/2005	12 months from date of issue
Louth County Council	Mr David Cassidy,	Grangebellaw, Dunleer, Co. Louth	WP6	Dismantling and recovery of vehicles	End-of-life vehicles & those scheduled in the application form.	First Schedule of WM Permit Regs, 1998, Activity 3 & Fourth Schedule of WM Act, 1996, Classes 3, 4, 5, 7 & 13.		12/03/2002	15/10/2001	14/10/2004
Louth County Council	Mr. Michael Tastle	Anagog, Ardee, Co. Louth	WP8	Plastics and Cardboard for Recovery	Composting of waste where the amount of compost & waste held exceeds 1000 cubic metres at any time, storage of waste intended for submission to any activity referred to in a preceding paragraph of this schedule, other than temporary storage, pending collection on the premises where such waste is produced.	Waste Activity, in accordance with Part 1, First Schedules of the Waste Management (Permit) Reg's, 1998 - Activity 5, Class 13		03/12/2001	29/11/2001	28/11/2004
Louth County Council	Gannon Hygiene (Ireland) Ltd	Unit 4, St. Johns Road, Ardee, Co. Louth	WP3	Temporary storage of waste prior to submission		Activity 6, Class 13		22/11/2002	31/07/2001	30/07/2004
Louth County Council	Techmatic Ltd	Unit 1, Newgrange Business Park, Donore Road, Drogheda, Co. Louth	WP7	Collection and recycling of waste from computer hardware and software components	Wastes scheduled in the application form	Activity 6, Classes 13,3,4	5000	22/11/2002	30/07/2001	29/07/2004
Louth County Council	Trustees of Dundalk Golf Club	Golf Links Road, Backrock, Co. Louth	WP22	Waste Recovery	Soil and Stone which conforms with the European Waste Catalogue Code Reference 170501	Activity 5, Classes 2, 10, & 13		14/08/2002	12/08/2002	11/08/2005
Louth County Council	Mr Brian McEvoy, Ace Skips	corral, Kikerley, Dundalk, Co. Louth	WP17	Recovery and disposal of skip waste	The recovery of waste (other than hazardous waste) at a facility (other than a facility for the composting of waste; where the amount of compost and waste held at at the facility exceeds 1000 cubic metres at any time	WMA 1996 and WM(Permit) Regs 1998 - Activity 5, Class 12 and 4th schedule of the WMA 1996, Class 3, 4 and 13		15/08/2002	12/08/2002	11/08/2004
Louth County Council	Martin Durty	Castletown Cross, Dundalk, Co. Louth	WP010		waste scheduled in the application form	Activity 3, Class 2, 13		24/10/2002	17/07/2002	16/07/2005
Louth County Council	Coe Salvage Ltd.	Coes Road Industrial Estate, Dundalk, Co. Louth	WP019		waste scheduled in the application form	Activity 3, Classes 2,3,4,13		31/10/2002	24/10/2002	23/10/2005
Louth County Council	Ormo Rubber Ireland Ltd.	Dromakin, Co. Louth	WP 033/02		waste scheduled in the application form	Activity 3, Classes 3,4, 13		12/11/2002	07/11/2002	08/11/2005
Louth County Council	Emblem Engineering Ltd.	Unit 5, Donore Industrial Estate, Drogheda, Co. Louth	WP 028/02		waste scheduled in the application form	Activity 3, Classes 3,4, 13		22/11/2002	15/11/2002	14/11/2005
Louth County Council	Mr Stephen Kieran, Killeenacoolie Garden Compost	Killeenacoolie, Reaydenny, Dundalk, Co. Louth	WP025/02		waste scheduled in the application form	Activity 5, Classes 2, 3,4 and 13		28/02/2003	25/02/2003	
Louth County Council	Rye Valley Foods Ltd.	Flossanahay, Durinshan, Sheshanstown, Knockattin (at Knockbridge), Glyde Farm (Tallenstown), Co. Louth.	WP 035/02		Only effluent treatment plant sludge from the permit holders premises at Carrickmacross, as scheduled in the application form, is to be accepted for storage and recovery at the facility.	First Schedule, Activity 5 / Fourth Schedule Class 10, Class 13.		21/03/2003	13/03/2003	12/03/2004



Authority	Applicant	Address	Waste Ref	Activity	Waste Description	Waste Code	Quantity	Start Date	End Date	Expiry Date
Louth County Council	Catherine Loughlin	Do. Louth	WP 37/02		Reference 170504	Schedule Classes 2,4,13		17/07/2003	14/07/2003	13/07/2004
Louth County Council	Mr. Ted Russell	Ronanmor, Bellurgen, Dundalk, Co. Louth	WP 2003/04		Soil & stone which conforms to the EWC Reference 170504.	First Schedule - Activity 5 / Fourth Schedule Classes 2,4 & 13		18/07/2003	14/07/2003	13/07/2005
Louth County Council	Shane Conway T/A Louth Meath Recycling	Newincuse, Termonfeckin, Co. Louth	WP 2003/05		Waste scheduled in the application form	First Schedule, Activity 3 / Fourth Schedule Classes 2,3,4 & 13		05/08/2003	29/07/2003	28/11/2004
Louth County Council	Louth Transport Ltd.	Chribanstown, Rosarypenny, Dundalk, Co. Louth	WP 011/01		End-of-life vehicles as schedule in the application form & similar wastes as may be approved from time to time, in writing, by the Local Authority.	First Schedule, Activity 3 / Fourth Schedule Classes 2,3,4 & 13		15/08/2003	08/08/2003	07/08/2005
Louth County Council	Mr. Thomas Donegan	Bawnasiffe, Monasterboice, Co. Louth	WP 2003/03		Soil and stone which conforms to the EWC reference 170504.	First Schedule, Activity 5 / Fourth Schedule Classes 2 & 10.		30/09/2003	12/09/2003	11/03/2004
Louth County Council	Dilban Recycling Limited	Loughran's Stores, Haynestown, Dundalk, Co. Louth.	WP36/02	Recovery of plastic and cardboard	120189 plastic sheeting off-cuts / 150101 paper and cardboard packaging / 150102 plastic packaging / 160304 inorganic wastes other than those mentioned in 160305.	First Schedule - Activity 5	10000	27/11/2003	11/09/2003	10/03/2005
Louth County Council	Jons Civil Engineering (Drogheda) Ltd.	Killneer Road, Monymore, Drogheda, Co. Louth	WP 2003/11	Recovery of soil and stone waste with a consequential benefit for an agricultural activity.	17 C&D wastes (including excavated soil from contaminated sites) / 1705 soil (including excavated soil from contaminated sites), stones and dredging spoil / 170504 soil & stones other than those mentioned in 170503.	First Schedule - Activity 5	40,000	01/12/2003	29/10/2003	29/10/2004
Louth County Council	Mr. Peter Grimes	Begran, Colton, Co. Louth	WP 2003/07	Recovery of soil and stone waste with a consequential benefit for an agricultural activity.	17 C&D wastes (including excavated soil from contaminated sites) / 1705 soil (including excavated soil from contaminated sites), stones and dredging spoil / 170504 soil and stones other than those mentioned in 170503	First Schedule - Activity 5	8000	01/12/2003	28/10/2003	28/10/2006
Louth County Council	Shanlis Pine Limited	Shanlis, Ardee, Co. Louth	WP 29/02	The disposal of wood waste by incineration at a furniture manufacturing premises.	Wg wastes from wood processing and the production of panels and furniture, pulp, paper and cardboard / 0301 wastes from wood processing and the production of panels and furniture / 030105 sawdust, shavings, cuttings, wood, particle board and veneer containing dangerous substances.	First Schedule - Activity 1	2.5	01/12/2003	22/10/2003	22/10/2006
Louth County Council	Gotvise Ltd, T/A Orange Skips	Unit 10, East Coast Business Park, Mathews Lane, Drogheda, Co. Louth.	WP 31/02	Recovery of mixed skip wastes	17 C&D wastes (including excavated soil from contaminated sites) / 1705 other C&D waste / 170904 mixed C&D wastes other than those mentioned in 170901, 170902 and 170903 / 2002 garden and park wastes (including cemetery waste) / 200201 biodegradable waste / 200202 soil & stones / 200301 mixed municipal waste	First Schedule - Activity 5	5000	01/12/2003	26/09/2003	25/09/2005
Louth County Council	Frederick O'Hagan	Clonty Street, Dundalk, Co. Louth	WP 2003/09	Recovery of scrap or other metal waste	170901 copper, bronze brass / 170402 aluminium / 170403 lead / 170404 zinc / 170405 iron and steel / 170406 tin / 070407 mixed metal / 160117 ferrous metal / 160118 non-ferrous metal	First Schedule - Activity 2	1000	02/12/2003	12/11/2003	12/11/2005
Louth County Council	Mrs Rose Gulley	Barronstown, Hackbalscrokk, Dundalk, Co. Louth	WP 2003/22	Recovery of soil and stone waste with a consequential benefit for an agricultural activity.	17 Construction and Demolition wastes (including excavated soil from contaminated sites) 17 05 soil (including excavated soil from contaminated sites), stones and dredging spoil, 17 05 04 soil and stones other than those mentioned in 17 05 03	First Schedule - Activity 5	4,500		26/11/2003	26/11/2005
Louth County Council	Brandon Maguire, Via Express Skips	Woodstown, Ardee, Co. Louth	WP 2003/08	Recovery of mixed skip wastes	See Permit for EWC codes	First Schedule - Activities 5,6	3,000		27/11/2003	27/11/2006
Louth County Council	Mr Brendan Roddy, Mountbagnet, Riverstown Dundalk, Co. Louth	Rampark, Jenkinstown, Dundalk, Co. Louth	WP 2003/19	Recovery of soil and stone waste with a consequential benefit for an agricultural activity.	17 Construction and Demolition wastes (including excavated soil from contaminated sites) 17 05 soil (including excavated soil from contaminated sites), stones and dredging spoil, 17 05 04 soil and stones other than those mentioned in 17 05 03	First Schedule - Activity 5	50,000 tonnes per annum (estimated)		27/11/2003	27/11/2006
Louth County Council	Mr John O Doherty	Bellurgen, Jenkinstown, Dundalk, Co. Louth	WP 2003/13	Recovery of soil and stone waste with a consequential benefit for an agricultural activity.	17 Construction and Demolition wastes (including excavated soil from contaminated sites) 17 05 soil (including excavated soil from contaminated sites), stones and dredging spoil, 17 05 04 soil and stones other than those mentioned in 17 05 03	First Schedule - Activity 5	50,000 tonnes per annum (estimated)	16/02/2004	09/02/2004	09/02/2006
Louth County Council	AV Packaging Company Ltd	AV Packaging Company Ltd, Coes Road Industrial Estate, Dundalk, Co. Louth	WP 2003/18	The storage and repackaging of feminine sanitary waste prior to disposal	15 Waste packaging, absorbents, wiping cloths, filter materials and protective clothing not otherwise specified 15 02 absorbents, filter materials, wiping cloths and protective clothing 15 02 03 absorbents, filter materials, wiping cloths and protective clothing other than those mentioned in 15 02 02.	First Schedule - Activity 5	1 tonne (max)	16/02/2004	29/01/2004	29/01/2007



Authority	Applicant	Address	Ref	Activity	Waste	Schedule	Quantity	Start	End	Review
Louth County Council	Mr John O'Doherty	Bellurgan/Jenkinson, Jenkinson, Dundalk, Co. Louth	WP 2003/13	Recovery of soil and stone waste with a consequential benefit for an agricultural activity.	17 Construction and Demolition wastes (including excavated soil from contaminated sites) 17 05 soil (including excavated soil from contaminated sites), stones and dredging spoil, 17 05 04 soil and stones other than those mentioned in 17 05 03	First Schedule - Activity 5	50,000 tonnes per annum (estimated)	04/03/2004	09/02/2004	09/02/2008
Louth County Council	Louth Timber Products Limited	Louth Timber Products Limited, Richard Taffel's Holdings, Louth, Dundalk, Co. Louth	WP 2003/26	The incineration of wood waste and the use of wood waste principally as a fuel at a furniture manufacturing premises.	03 wastes from wood processing and the production of panels and furniture, pulp, paper and cardboard / 0301 wastes from wood processing and the production of panels and furniture / 030105 sawdust, shavings, cuttings, wood, particle board and veneer core	First Schedule - Activity 1	10 tonnes (estimate)	04/03/2004	02/03/2004	02/03/2007
Louth County Council	AV Packaging Company Ltd.	AV Packaging Co. Ltd, Coes Road Industrial Estate, Dundalk	WP 2003/18							
Louth County Council	John & Mark McShane T/A Ardee Car Parts, 15 Lurgan Road, Silverbridge, Co. Armagh	Gill Links Road, Townparks, Ardee, Co. Louth	WP 2003/16	The dismantling and recovery of vehicles	05 12 19 - waste engine, gear and lubricating oils 01 01 04 - end-of-life vehicles 06 06 05 lead batteries from dismantling of end-of-life vehicles at the facility	First Schedule - Activity 3 (as per SI 165) of 1998)		24/05/2004	04/03/2004	04/03/2007
Louth County Council	Lenvion Ltd. T/A Lenvion Environmentals	Loughran's Stores, Clermont Park, Haggardstown, Dundalk, Co. Louth.	WP 2003/24	The recovery of oil waste (other than hazardous waste) at a facility (other than a facility for the composting of waste where the amount of compost and waste held at the facility exceeds 1000 cubic metres at any time)	02 01 04 Waste plastics (except packaging) 20 01 36 discarded electrical and electronic equipment other than those mentioned in 20 01 21, 20 01 23 and 20 01 35	Activity 5 1st Schedule	1000 (02 01 04) 100 (20 01 36)	07/04/2004	23/03/2004	23/03/2008
Louth County Council	Frederick O'Hagan	Racecourse Road, Dundalk, Co Louth	WP 2003/15	The recovery of scrap or other metal waste; the recovery of soil and stone waste with a consequential for an agricultural activity	17 09 01 copper, bronze, brass 17 04 02 aluminium, 17 04 03 lead, 17 04 04 zinc, 17 04 05 iron and steel, 17 04 06 tin, 07 04 07 mixed metal and 17 05 04 soil and stones other than those mentioned in 17 05 03	1st Schedule - Activity 2 and 5	1000 (17 04) 31,000 (17 05 04)	07/04/2004	16/03/2004	16/03/2005
Louth County Council	Rye Vafay Foods Ltd.	Rossmakey, Dunmanon, Dunmanon, Rossmakey, Dunmahon, Stephenstown, Knockathin (all Knockbridge), Glyde Farm (Tallanstown), Co. Louth.	WP 2004/01	The storage and recovery of sludge, from an effluent treatment plant, on land with a consequential benefit for an agricultural activity	02 02 04 sludges from on-site effluent treatment, 02 03 05 sludges from on-site effluent treatment	1st Schedule - Activity 5	2,000	07/04/2004	16/03/2004	16/03/2007
Louth County Council	Fanel Brothers (Ardee) Limited	John Street, Ardee, Co. Louth	WP 2004/03	The use of wood and sawdust waste principally as a fuel to generate energy at a furniture manufacturing premises.	03 01 05 sawdust, shavings, cuttings, wood, particle board and veneer other than those mentioned in 03 01 04	First Schedule - Act 5	375 (estimate)	19/05/2004	18/05/2004	18/05/2008
Louth County Council	Trustees of Ardee Celtic FC	Town Parks, Ardee	WP 2004/11	Recovery of soil and stone waste	17 05 04 soil and stones other than those mentioned in 17 05 03	1st Schedule - Activity 5	20,000 tonnes in total (estimated)	01/07/2004	01/07/2004	31/12/2004
Louth County Council	Nail Murrain	Annaghvack, Hackballsross, Dundalk, Co. Louth.	WP 2004/04	Recovery of soil and stone waste with a consequential benefit for agricultural land	17 05 04 soil and stones other than those mentioned in 17 05 03	1st Schedule - Activity 5	7500 tonnes in total (estimated)	23/07/2004	22/07/2004	21/07/2006
Louth County Council	Matlock Rangers GFC	School Lane, Colton, Co Louth	WP 2004/16	Recovery of soil and stone waste	17 05 04 soil and stones other than those mentioned in 17 05 03	1st Schedule - Activity 5	7,500 tonnes in total (estimated)	27/08/2004	22/08/2004	21/08/2005
Louth County Council	Natural Power Supply Ltd.	Labanstown & Cruselstown, Cloughthead, Drogheda, Co. Louth	WP 2003/27	The treatment of brewery waste on land with a consequential benefit for biomass production	See Condition 5.1 of Permit	1st Schedule - Activity 5	1000 tonnes	08/09/2004	30/08/2004	30/08/2007
Louth County Council	Michael Gentry (Jnr)	Begriath, Tullyallen, Drogheda, Co. Louth	WP 2004/18	Raising ground levels for agricultural/horticultural purposes using soil and stone waste.	17 05 04 soil and stones other than those mentioned in 17 05 03	First Schedule - Activity 5	74,000m <sup>3</sup> in total (estimated)	10/01/2005	06/01/2005	05/01/2008
Louth County Council	The Recycling Village Ltd.	Units 4 & 4A, Tinure Business Park, Tinure, Dunlee, Co. Louth	WP 2004/15	Recovery of WEEE	20 01 21, 20 01 35 20 01 36	First Schedule - Activities 2 & 4	Initially 250, increasing to 1,000 over a period of eighteen months	12/01/2005	10/01/2005	09/01/2005
Louth County Council	Brian McElroy via/ Ace Skips,	Ace Skips, Cortal, Kikerley, Dundalk, Co. Louth	WP 2004/08	The recovery of recyclables, and the bulk/repackaging of waste for landfill disposal, arising from skip hire wastes from household, commercial and industrial customers.	15 01 01, 15 01 03, 15 01 04, 17 09 04, 20 01 01, 20 01 38, 20 01 40, 20 02 01, 20 03 01, 20 03 03.	First Schedule - Activities 5,6	Total estimated at 2000 t pa	28/01/2005	17/01/2005	16/01/2008
Louth County Council	Frederick O'Hagan,	Racecourse Road, Marsh North, Dundalk, Co Louth	WP 2004/19	Raising ground levels for agricultural purposes using soil and stone waste.	17 05 04	First Schedule - Activity 5	52,000 tonnes in total (estimated)	21/02/2005	08/02/2005	07/02/2008
Louth County Council	OCS One Complete Solution Ltd.	Unit 4, John Street, Ardee, Co. Louth	WP 2004/14	Repackaging feminine hygiene, nappy and incontinence waste for collection and disposal	18 01 04	First Schedule - Activity 6	80 to 90 tonnes	21/02/2005	08/02/2005	07/02/2005
Louth County Council	Stephen McCourt,	Townparks, Ardee, Co. Louth	WP 2004/28	Raising ground levels at a development site using soil and stone waste.	17 05 04 soil and stones other than those mentioned in 17 05 03	First schedule - Activity 5	2000m <sup>3</sup> (estimated)	12/04/2005	07/04/2005	06/04/2008
Louth County Council	Ms Catherine Loughlin	"Rohanmor", Bellurgan, Dundalk, Co. Louth	WP 2004/17	Re-use of soil and stone waste in the construction of a flood defence bund.	17 05 04 soil and stones other than those mentioned in 17 05 03	First Schedule - Activity 5	800m <sup>3</sup> in total (estimated)	12/04/2005	21/03/2005	20/03/2008
Louth County Council	Alan Kieran	Ashville, Funshog, Dunleer, Co. Louth	WP 2005/02	Recovery of food grade containers from the soft drinks manufacturing industry	15 01 02, 15 01 04, 15 01 05	First Schedule - Activity 5	260	13/07/2005	30/06/2005	29/06/2008
Louth County Council	Jons Civil Engineering Company Ltd	Killneer Road, Moneymore, Drogheda, Co. Louth	WP 2004/27	Recovery of soil and stone waste with a consequential benefit for an agricultural activity.	17 05 04, 17 05 03	First schedule - Activity 5	45,000 tonnes	31/08/2005	28/07/2005	27/07/2008
Louth County Council	Lenvion Ltd. T/A Lenvion Environmentals	Clermont Park, Haggardstown, Dundalk, Co. Louth	WP 2004/30	Various waste recovery activities, including the shredding and repackaging of plastics, the use of edible oil as fuel and the transfer of paper, cardboard and WEE	See schedule A of permit	First schedule, Activity 2 & 5	5000 tonnes	31/08/2005	27/07/2005	26/07/2008
Louth County Council	Kisaran Concrete Ltd	Gallstown, Grangebellew, Co Louth	WP 2004/29	Recovery of in-situ construction and demolition waste	See Permit for EWC codes	First Schedule - Activity 5	10 000	28/09/2005	08/09/2005	05/09/2008



		Location	Reference	Activity	Waste Description	Class	Start Date	End Date	Expiry Date
Mayo County Council	Glencre Teoranta	Munmore, Bunnahowen, Bangor Erna, Ballina, Co. Mayo	PER3		Recycling or reclamation of metal and metal compounds, storage of waste intended for submission	Class 7 of the 3rd Schedule of the WMA 1996 and Class 11 and 2 of the WMA 1996 and WM(Permits) Regs 1998	11/12/2001	08/12/2001	31/03/2004
Mayo County Council	Bourke Waste Removal Ltd	Clogher, Westport, Co. Mayo	PER4	Storage of waste	Storage of waste, repackaging prior to submission, recycling or reclamation of organic substances, recycling or reclamation of metals and metals compounds, exchange or waste	Class 13 of the 4th Sched of the WMA 1996, Class 12 and 13 of the 3rd Schedule of the WMA 1996 and Class 2,4,12 of the 4th Sched of the WMA 1996	19/10/2001	17/10/2001	30/09/2004
Mayo County Council	Kevin McNamara	Knockbrack, Ballyhauns, Co. Mayo	PER5	Reclamation and Recycling of end-of-life Vehicles			29/05/2002	17/05/2002	16/05/2005
Mayo County Council	Lennon Quarries Ltd.	Glencastle, Balmullet, Co. Mayo	PER6	Reclamation of lands using clean past material exported from Lennon Quarries Ltd.		Class 10 of Fourth Schedule of WMA 1996	20/01/2003	19/12/2002	18/12/2005
Mayo County Council	John Dempsey	Whitestream, Carrowreagh, Boniconlon, Co. Mayo	PER5	Reclamation and Recycling of end-of-life Vehicles			29/05/2002	17/05/2002	16/05/2005
Mayo County Council	Pat King	Derynasteeagh, Castlebar, Co. Mayo	PER13	Spreading of waste on land with a consequential benefit for an agricultural activity or ecological system, including composting and other biological transformation processes.	170101 Concrete / 170102 Bricks / 170103 Tiles and ceramics / 170501 Soil and stones	Class 10 of 4th Schedule	27/02/2003	18/02/2003	17/02/2006
Mayo County Council	KOG Logistics Ltd.	Authadrinagh, Ballinrobe Road, Castlebar, Co. Mayo	PER14	Reclamation of lands	Reclamation of lands using sorted sub-soil, soil, rock, stone and concrete. The material must not contain any other type of material or waste.	Class 10 of Fourth Schedule	02/05/2003	24/04/2003	23/04/2004
Mayo County Council	Mr. Sean Naughton	Obonconda, Belcarra, Castlebar, Co. Mayo	PER15	Recycling or reclamation of metals and metal compounds		Class 9 of Fourth Schedule	20/01/2003	19/12/2002	18/12/2005
Mayo County Council	Mr. Thomas Higgins	Kiscoonagh, Balfinidine, Claremorris, Co. Mayo	PER16	Reclamation of land using sorted, sub-soil, rock, stone and concrete.		Class 10 of Fourth Schedule	31/01/2003	13/01/2003	12/01/2008
Mayo County Council	Liam Rose	Farnaght, Leenane Road, Westport, Co. Mayo	PER17	Recovery of waste	170101 Concrete / 170102 Bricks / 170103 Tiles and ceramics / 170501 Soil and stones	Activity 5, Class 10	06/02/2003	03/02/2003	02/02/2006
Mayo County Council	Michael Gannon	Sheeuan, Castlebar Road, Westport, Co. Mayo	PER18		170101 Concrete / 170102 Bricks / 170103 Tiles and ceramics / 170501 soil and stones	Activity 5, Class 10	06/02/2003	03/01/2003	02/01/2006
Mayo County Council	Tom Munster	Lodge Road, Westport, Co. Mayo	PER19		170101 Concrete / 170102 Bricks / 170103 Tiles and ceramics / 170501 soil and stones	Activity 5, Class 10	06/02/2003	03/01/2003	02/01/2008
Mayo County Council	Vincent Conlon	Sheeuan, Castlebar Road, Westport, Co. Mayo	PER20		170101 Concrete / 170102 Bricks / 170103 Tiles and ceramics / 170501 soil and stones	Activity 5, Class 10	06/02/2003	03/02/2003	02/02/2006
Mayo County Council	Mountain View Securities Ltd.	Linnagh Road, Castlebar	PER22		170101 Concrete / 170102 Bricks / 170103 Tiles and Ceramics / 170501 Soil and Stones.	First Schedule, Activity 5 - Class 10	02/05/2003	24/04/2003	23/04/2006
Mayo County Council	T.J. Gaughan, Co. Ltd.	Industrial Park, Moneen, Castlebar, Co. Mayo	PER23		Temporary storage, sorting, segregating and preparing for transporting of inert waste materials for recycling and disposal for that fraction of the waste that is un-recyclable or can not be disposed of with benefit within the site boundaries.		02/05/2003	24/04/2003	23/04/2004
Mayo County Council	Michael Lavele	Knocknaskebble, Castlebar, Co. Mayo	PER24		170101 Concrete / 170102 Bricks / 170103 Tiles and Ceramics / 170501 Soil and stones.	Class 10, Fourth Schedule / First Schedule Activity 5.	02/05/2003	24/04/2003	23/04/2006
Mayo County Council	Mr. Michael Lavele	Knocknaskebble, Castlebar, Co. Mayo	PER24		170101 Concrete / 170102 Bricks / 170103 Tiles & Ceramics / 170501 Soil & Stones	1st Schedule, Activity 5 / 4th Schedule, Class 10	16/05/2003	24/04/2003	23/04/2006
Mayo County Council	McGrath Industrial Waste Ltd.	Unit 2, Moneen Industrial Estate, Drumconlon, Castlebar.	PER25	Recovery and Recycling of Reclamation	Paper, cardboard, glass, timber, plastics	First Schedule, Activity 5 / Fourth Schedule	02/05/2003	28/04/2003	27/04/2006
Mayo County Council	P&D Horan	Cushinsteeuan, Westport, Co. Mayo	PER27			1st Schedule, Activity 5 / 4th Schedule	12/05/2003	08/05/2003	07/05/2006
Mayo County Council	Noel Heraty	Ardygommon, Ballinrobe Road, Westport Co. Mayo	PER28		170101 Concrete / 170102 Bricks / 170103 Tiles & Ceramics / 170501 Soil & Stones	1st Schedule, Activity 5 - Class 10	03/06/2003	28/05/2003	27/05/2006
Mayo County Council	Mr. Michael Devaney	No. 2 Burree Road, Ballina, Co. Mayo	PER26	Dismantling, Storage & Recovery of ELVs	End of life vehicles		16/07/2003	10/07/2003	09/07/2006
Mayo County Council	Mr. Tom Denning	Cappagh, Pontoon Road, Castlebar	PER33	Class 10 of 4th Schedule	170101 concrete / 170102 bricks / 170103 tiles & ceramics / 170501 soil & stones	First Schedule Activity 5 - Class 10	21/07/2003	16/07/2003	15/07/2006
Mayo County Council	Mr. Jimmy Burke	Mountain - Common, Aghamore, Ballyhauns, Co. Mayo	PER36		170101 Concrete / 170102 Bricks / 170103 Tiles & Ceramics / 170501 Soil & Stones	First Schedule Activity 5 - Fourth Schedule Class 10	13/08/2003	11/08/2003	10/08/2006
Mayo County Council	Fahy Community Development Ltd.	Fahy, Westport, Co. Mayo	PER31		170101 Concrete / 170102 Bricks / 170103 Tiles & Ceramics / 170501 Soil & Stones	First Schedule Activity 5 - Fourth Schedule Class 10	28/08/2003	22/08/2003	
Mayo County Council	Cathal Gilmarin	Aiden Street, Killimogh, Co. Mayo	PER29		170101 Concrete / 170102 Bricks / 170103 Tiles & Ceramics / 170501 Soil and Stones	First Schedule, Activity 5 / Fourth Schedule Class 10	24/09/2003	13/09/2003	12/09/2006



	Contractors	Mayo			Tiles and ceramics / 170501 soil & stones.					
Mayo County Council	Wood Systems Ltd.	Kilmaine Road, Balfinrobe, Co. Mayo	PER38	Recycling or reclamation of organic substances which are not used as solvents (including composting or other biological transformation processes)	Waste wood (mostly broken pallets) for chipping in an electric powered waste wood chipper and its disposal to chipboard factories as a raw material by truck & the repair for reuse of that fraction of the incoming pallets not chipped.	First Schedule, Activity 5 - Class 2		24/10/2003	13/10/2003	12/10/2006
Mayo County Council	T.J. Gaughan & Patrick Flannery	Roadstone Quarry, Monroon, Castlebar, Co. Mayo	PER 47 - 28/11/2003		Soil and Stones 17 05 01	Activity 5, of the First Schedule and Class 10 of the Fourth Schedule.		06/01/2004	05/01/2004	05/01/2007
Mayo County Council	Foal Freight Ltd	Cannabur, Ballyheane, Castlebar, Co. Mayo	PER 46		Cardboard, Newsprint, Pallets, Plastic, Metals	Classes 2, 3, 4, 12 and 13 of the fourth Schedule and Activity 5 of the First Schedule, Classes 12 and 13 of the Third Schedule		24/12/2003	23/12/2003	23/12/2006
Mayo County Council	Noel Regan	Carrowtrella, Ballina, Co. Mayo (Lands of Brendan Ruthledge - Site 1)	PER 42	Soil & Stones	17 05 01 Soil and Stones	Activity 5 of the First Schedule and Class 10 of the Fourth Schedule.			01/11/2003	01/11/2006
Mayo County Council	Noel Regan	Carrowtrella, Ballina, Co. Mayo (Lands of Brendan Ruthledge - Site 2)	PER 43	Soil & Stones	18 05 01 Soil and Stones	Activity 5 of the First Schedule and Class 10 of the Fourth Schedule.			01/11/2003	01/11/2006
Mayo County Council	Ward & Burke Construction Ltd	Tyrone, Killoolan, Co. Galway	PER 48		170101 Concrete, 170102 bricks, 170103 Tiles and ceramics, 170501 Soil and stone.	Activity 5 of the First Schedule and Class 10 of the Fourth Schedule.		11/02/2004	02/02/2004	02/02/2007
Meath Co. Council	Water Henry	Rathcore, Enfield, Co. Meath	WMP/2000/19	Recovery of Waste at a facility/ treatment of any waste on land	Soil and Stone which conforms with the European Waste Catalogue code ref. 17051, concrete - code ref. 170101 and bricks - code ref. 170102	4th Schedule, Activity 5 and Class 10		04/02/2000	19/12/2000	18/12/2004
Meath Co. Council	John Friary, Frarrock Ltd	Raneevoge, Crossakel, Kells, Co. Meath	WMP 1798	The Dismantling and Recovery of Vehicles	Recycling and reclamation of metal and metal compounds, storage of waste intended for submission to any activity	4th Schedule, Class. 3, 4, 7, 13		22/12/2000	20/12/2000	19/12/2003
Meath Co. Council	Dennis O'Driscoll	Ballymacamey, The Ward, Co. Meath	WMP 2000/42	Treatment of waste on land with a consequential benefit for an agricultural activity or ecological system.				15/05/2001	10/05/2001	09/05/2004
Meath Co. Council	Duggan & McCarthy	Cionmagaddan, Navan, Co. Meath	WMP 2000/30	Treatment of Waste and recovery of waste (other than hazardous waste)	Soil and Stone, which conform to the EWC Code Ref: 170501, Construction and Demolition of waste which can be accepted on site is Concrete Code Ref: 170101, Bricks - EWC Code Ref: 170102.	4th Sched of the WM(Permit) Reg, 1998, Activity 5 and 4th Schedule of the WMA, 1996, Class 10		15/01/2001	05/01/2001	04/01/2004
Meath Co. Council	Paul Daly	Factory Road, Bellewstown, Trim, Co. Meath	WMP 2000/33	Treatment of Waste and recovery of waste (other than hazardous waste)	Soil and Stone which conforms with EWC Code Ref: 170501	4th Sched of the WM(Permit) Reg, 1998, Activity 5 and 4th Schedule of the WMA, 1996, Class 10		17/01/2001	11/01/2001	10/01/2004
Meath Co. Council	Nagrac 2000 Ltd	Donegal Road, Gibbstown, Navan, Co. Meath	WMP 2000/41	Recovery of Waste (other than hazardous waste) and recycling or reclamation of organic substances.	Plastic particles, plastic, inorganic off specification batches, small plastics, mixed flexible plastics, clear pvc bottles, clear PET bottles, mixed rigid plastic, opaque PCV jars and bottles, green PET jars and bottles, Brown PET jars and bottles, PE bottles and other plastic packaging	4th Sched of the WM(Permit) Reg, 1998, Activity 5 and 4th Schedule of the WMA, 1996, Class 2		31/01/2001	29/01/2001	28/01/2004
Meath Co. Council	Ms. Bridget Rooney	Orstown, Kells, Co. Meath	WMP 4/98	Recycling or Reclamation of metals and metal compounds, recycling or reclamation of inorganic materials, recovery of components from catalyst.		3rd Schedule of the WMA 1996		15/05/2001	10/05/2001	09/05/2004
Meath Co. Council	Patrick Muggin	Rathmore Abbey, Co. Meath	WMP 2000/34	treatment of any waste on land with a consequential benefit for an agricultural activity or ecological system	Soil and stone which conforms with EWCC Ref: 170501	Activity 5, WM(Permit) Reg 1998, 4th Schedule of the WMA, 1996, Class 10			11/05/2001	10/05/2004
Meath Co. Council	PF Dixon Plant Hire	Rathcore, Enfield, Co. Meath	2001/8	treatment of any waste on land with a consequential benefit for an agricultural activity or ecological system	Uncontaminated Soil and Stone Wastes which conforms with the European Waste Catalogue code ref. 17 05 01, Concrete (EWC reference 17 01 01) and Brick (EWC 17 01 02) are only permitted for the purposes of construction of a haul road through the site	1st Sched of the WM (Permit) Reg 1998, Activity 5 and 4th Sched of the WMA, 1996, Class 10		26/07/2001	20/07/2001	19/07/2004
Meath Co. Council	PF Dixon Plant Hire	Cleganrow, Rathcore, Enfield, Co. Meath	2002/6	Recovery of waste (other than hazardous waste) & the treatment of any waste on land with a consequential benefit for an agricultural activity or ecological system	Only uncontaminated soil & stone waste, which conform to the European Waste Catalogue (2002 edition) code ref. 170504 may be accepted at the site.	Activity 5, Class 10		19/09/2002	16/09/2002	15/09/2005
Meath Co. Council	Mr Gerry McAeer	Millfield, Bective, Navan, Co. Meath	WMP 2001/13	Treatment of any waste on land with a consequential benefit for an agricultural activity or ecological system	Soil and Stone which conforms with EWC code ref. 170501	1st Schedule of the WM (Permit) Reg 1998, Activity 5 and 4th Sched of the WMA, 1996, Class 10		14/08/2001	04/08/2001	03/08/2004
Meath Co. Council	SEDE Ireland Ltd. Ballymount Cross Tallaght Dublin 24.	Landspreading of calcium hydroxide sludge in townlands of Ballymacoll Little, Loughsalagh, Rowan, Clackstown, Dunboyne, Castlebar, Kildare, Co. Meath	WMP 2001/17	The recovery of waste other than hazardous waste / the treatment of any waste on land with a consequential benefit for an agricultural activity or ecological system.		1st Schedule of the WM (Permit) Regulations, 1998 - Activity 5 & 4th Schedule of WM Act 1996, Class 10.		21/08/2001	16/08/2001	15/08/2004

	Ashbourne Industrial Park, Cookstown, Ashbourne, Co. Meath	Cookstown, Ashbourne, Co. Meath		Fourth Schedule of the Waste Mgt. Act. 1996.	Class 3, Recycling or reclamation of metals and metal compounds, Class 4, Recycling or reclamation of other inorganic materials, Class 13, Storage of waste intended for submission to any activity referred to in a preceding paragraph of this Schedule, other than temporary storage, pending collection, on the premises where such waste is produced.	Part Schedule of the WM (Permit) Regulations 1996, in accordance with the Fourth Schedule of the Waste Management Act 1996. Class 3, 4 & 13.				21/03/2004
Meath Co. Council	Xirathem Limited, c/o Paul Carroll & Associates, Brookfield House, Athlumney, Navan, Co. Meath.	Liscartan, Kells Road, Navan, Co. Meath.	WMP 2001/5	The treatment of any waste on land with a consequential benefit for an agricultural activity or ecological system.	Activity 5, 1st Schedule - The Recovery of waste (other than hazardous waste) at a facility (other than a facility for the composting of waste where the amount of compost and waste held at the facility exceeds 1000 cubic metres at any time) & Class 10, The treatment of any waste on land with a consequential benefit for an agricultural activity or ecological system.	Permitted waste recovery activity, in accordance with the First Schedule of the Waste Management (Permit) Regulations, 1996 & Class 10 in accordance with the Fourth Schedule of the WM Act, 1996.	03/09/2001	23/06/2001	22/09/2004	
Meath Co. Council	P&B Connolly (Dublin) Ltd.	Cashford, Nau, Co. Meath	WMP 2001/6		The recovery of waste other than hazardous waste / the treatment of any waste on land with a consequential benefit for an agricultural activity or ecological system.	Activity 5 in accordance with the First Schedule of the Waste Management (Permit) Regulations, 1996 & Class 10, the treatment of any waste on land with a consequential benefit for an agricultural activity or ecological system.	14/11/2001	07/11/2001	06/11/2004	
Meath Co. Council	John Coyle c/o Frank Burke & Associates, Co. Meath.	Kilbrew, Ashbourne & Loughlinstown, Ratoath, Co. Meath.	WMP 2001/7		The recovery of waste other than hazardous waste / the treatment of any waste on land with a consequential benefit for an agricultural activity or ecological system & the treatment of any waste on land with a consequential benefit for an agricultural activity or ecological system.	Waste recovery activity, in accordance with the First Schedule of the WM (Permit) Regs, 1996, Activity 5 & in accordance with the Fourth Schedule of the WM Act, 1996, Class 10.	30/11/2001	28/11/2001	27/11/2004	
Meath Co. Council	Mr. Lyndon Douglas	Ardostown, Summerhill, Co. Meath	WMP 2001/24	Treatment of waste on land with a consequential benefit for an agricultural activity or ecological system.	The recovery of waste (other than hazardous waste) at a facility (other than a facility for the composting of waste where the amount of compost and waste held at the facility exceeds 1000 cubic metres at any time). The treatment of any waste on land with a consequential benefit for an agricultural activity or ecological system.	Activity 5 WM (Permit) Regs, 1996 and Class 10 in accordance with the Fourth Schedule of the WMA, 1996.	06/12/2001	04/12/2001	03/12/2004	
Meath Co. Council	Pat Fallon Construction Ltd	Newgrange Business Park, Donore Road, Drogheda, Co. Louth	WMP 2001/14	Treatment of waste on land with a consequential benefit for an agricultural activity or ecological system.	The recovery of waste (other than hazardous waste) at a facility (other than a facility for the composting of waste where the amount of compost and waste held at the facility exceeds 1000 cubic metres at any time). The treatment of any waste on land with a consequential benefit for an agricultural activity or ecological system.	Activity 5 WM (Permit) Regs, 1996 and Class 10 in accordance with the Fourth Schedule of the WMA, 1996.	26/01/2002	24/01/2002	23/01/2005	
Meath Co. Council	Pat Fallon Construction Ltd., c/o Frank Burke & Associates, Beldiana, Trim Road, Navan, Co. Meath.	Callaghanstown, Julianstown, Co. Meath	WMP 2001/23		Only uncontaminated soil & stone waste, which conform to the European Waste Catalogue Code Ref. 170501, may be accepted at the Site. The only C&D waste permitted on the site, shall be solely for the purposes of upgrading the existing haul road, shall correspond with the following EWC refs 170101 concrete and 170102 bricks.	Activity 5, Class 10	13/09/2002	10/09/2002	09/09/2005	
Meath Co. Council	Keegan Quarries	Clegarrow, Rathmolyon, Co. Meath.	WMP2001/3	Recovery & treatment of waste	Uncontaminated soil and stone waste which conform to the EU Waste Cat. Ref. 170501 may be accepted at the site.	Activity 5 - First Schedule of WM(Permit) Regs, 1996 & Class 10 - 4th Schedule of WMA, 1996.	07/03/2002	26/02/2002	27/02/2005	
Meath Co. Council	Mark Pendry Hatch	Lonford House, Longford Rd., Duleek, Co. Meath.	WMP2001/26	Recovery & treatment of waste	Uncontaminated soil and stone waste which conform to the EU Waste Cat. 17 05 01. Only exception - use of C&D waste or imported stone/gravel to construct a temporary haul road through the site. This waste shall correspond with EWC Ref 170101 concrete and 170102 brick.	First Schedule of the WM (Permit) Regulations, 1996, Activity 5 & Fourth Schedule of WMA, 1996, Class 10.	06/03/2002	26/02/2002	27/02/2005	
Meath Co. Council	Mr. Michael Foley	Crossdrum Upper, Oldcastle, Co. Meath.	WMP2001/23	Recovery & treatment of waste	Uncontaminated soil and stone waste which conform to the EWC ref. 170501 shall be accepted at the site. Concrete and brick are only permitted for the purposes of construction of a haul road through the site.	First Schedule of the WM (Permit) Regs, 1996 - Activity 5 and Fourth Schedule of WMA 1996 - Class 10	16/04/2002	12/04/2002	11/04/05 - 36 months from date of issue	
Meath Co. Council	Gerard Doolin c/o Philip Farrelly & Company, 2 Kennedy Rd, Navan, Co. Meath	Kilcaneey, Maynooth, Co. Meath.	WMP2001/29	Dismantling and recovery of vehicles. Recycling or reclamation, recovery, storage.	Hydraulic oils containing only mineral oils, brake fluids, chlorinated engine, gear and lubricating oils, non-chlorinated engine, gear and lubricating oils, end of life vehicles, discarded equipment and shredded residues, batteries and accumulators, paints, varnishes, vitreous enamels, adhesive, sealants and printing inks.	First Schedule of WM (Permit) Regs, 1996 - Activity 3 & in accordance with the Third Schedule of WMA 1996 - Class 13 & Fourth Schedule of WMA 1996 - Classes 2, 3, 4, 7 & 13.	16/04/2002	12/04/2002	11/04/05 - 36 months from date of issue	



		Meath		Recovery of waste (other than hazardous waste) & treatment of waste on land with a consequential benefit for an agricultural activity or ecological system.	Waste (other than hazardous waste)	1st Schedule of WM (Permit) Regs, 1996 - Activity 5 and in accordance with Fourth Schedule of WMA, 1996 - Class 10.	03/02/2002	01/03/2002	30/04/2005
Meath Co. Council	Gerard Byrne	Golehill, Kinnegad, Co. Meath	WMP 2002/01	Recovery of waste (other than haz waste) & the treatment of waste on land with a consequential benefit for an agricultural activity or ecological system.	Only uncontaminated waste, soil & stone, concrete, bricks, tiles & ceramics as per European Waste Catalogue (edition valid from 01st January 2002). Code references available from permit.	1st Schedule of WM (Permit) Regs, 1996 - Activity 5 and 4th Schedule of WMA, 1996 - Class 10.	07/06/2002	30/05/2002	29/05/2005
Meath Co. Council	John O'Connell c/o Frank Burke & Associates, Baldara, Trim Road, Navan, Co. Meath.	Rosinstown, Rosinstown, Co. Meath	WMP 2001/31	Recovery & treatment of waste	Only uncontaminated soil and stone waste, which conform to the European Waste Catalogue code reference 17 05 01 may be accepted at the site.	1st Schedule of WM (Permit) Regs, 1996 - Activity 5 and Fourth Schedule	05/08/2002	31/05/2002	6 months from the date of commencement of activities on site.
Meath Co. Council	Ulrick McDonnell	Bonestown, Dunshaughlin, Co. Meath	WMP 2001/10	Waste Recovery	Only uncontaminated soil & stone waste which conforms to EU Waste Catalogue code ref. 170504 (2002 edition) may be accepted at the site. See permit.	1st Schedule of WM (Permit) Regs, 1996 - Activity 5 and 4th Schedule of WMA 1996 - Class 10	21/09/2002	17/08/2002	10/06/2005
Meath Co. Council	Jack Merry c/o Declan P. Walsh	Meth Road, Tullyallen, Drogheda, Co. Louth - Location of Facility: Proudfootstown, Dowth, Co. Meath.	WMP 2000/38		Only uncontaminated soil and stone waste which conform to the EU Waste Catalogue (EW/C) 2002 edition 170504, may be accepted at the site. See permit.	Activity 5, Class 10	17/07/2002	11/07/2002	10/07/2005
Meath Co. Council	Trim Plant Limited	Scurloughstown, Co. Meath	WMP 2002/4		Only uncontaminated soil and stone waste which conform to the European Waste Catalogue (2002 edition) Ref. 170504	Activity 5, Class 10	06/08/2002	02/08/2002	01/08/2005
Meath Co. Council	Terry Lyons	Oldtown, Summerhill, Rathmolyon, Co. Meath	WMP 2002/14		Only uncontaminated soil and stone waste, which conform to the European Waste Catalogue (2002 edition) code reference 170504 may be accepted at the site.	Activity 5, Class 10	06/08/2002	01/08/2002	31/07/2005
Meath Co. Council	Finn Sheedy	Rainleek, Dunboyne, Co. Meath	WMP 2002/5	Recovery & treatment of waste	Only uncontaminated soil & stone waste which confirm to the EU Waste Catalogue 2002 edition ref. 170504, 170101 and 170102 are only permitted for the purposes of the construction of a haul road through the site.	Activity 5, Class 10	28/08/2002	23/08/2002	22/08/2005
Meath Co. Council	Jimmy Collins c/o Michael P.O'Grady & Associates	Emmet Street, Trim, Co. Meath	WMP 2001/33	Recovery of Waste (other than hazardous waste)	Only uncontaminated soil and stone waste which conform to the European Waste Catalogue 2002 edition code ref. 170504	Activity 5, Class 10	10/09/2002	07/09/2002	06/09/2005
Meath Co. Council	O'Connell Agr-Environmental, 31 New Inn, Enfield, Co. Meath	(1) Carrolstown Estate, Trim, Co. Meath, (2) Rathcomick, Kildakey, Co. Meath, (3) Croboy, Hill of Down, Enfield, Co. Meath	WMP 2002/23		Only "Guiness for Expon" dust and "Rosa House" dust, which conform with the following European Waste Catalogue 2002 edition code reference 020799	Activity 5, Classes 10 & 13	10/09/2002	13/09/2002	12/09/2005
Meath Co. Council	Mr. Brian Smith, c/o Farrelly & Co., 2 Kennedy Road, Navan Co. Meath	Booleen Linn, Duleek, Co. Meath	WMP 2/98		See copy of Permit	Activity 3, Classes 3, 4, 7 & 13	10/09/2002	04/09/2002	03/09/2005
Meath Co. Council	Mr. Owen Hoey, c/o Frank Burke & Associates	Drakestown, Castleown-Kilpatrick, Navan, Co. Meath.	WMP 2002/7		Only uncontaminated soil & stone waste, which confirm to the EU Waste Catalogue (2002 edition) Ref. 170504 (soil & stones) may be accepted at the site.	Activity 5, Class 10	13/09/2002	10/09/2002	09/09/2005
Meath Co. Council	Carrollstown Estate Ltd.	Carrollstown, Trim, Co. Meath	WMP 2002/20		See copy of permits 020106 / 020107 / 020304 / 030308 / 030105 / 200108 / 200201	Activity 5, Classes 2 & 13	27/09/2002	26/09/2002	25/09/2005
Meath Co. Council	Midland Contractors Limred	Corown, Kells, Co. Meath	WMP 2002/2	Recovery of waste (other than hazardous waste) at a facility (other than a facility for the composting of waste where the amount of compost and waste held at the facility exceeds 1000 cubic metres at any time).	Only uncontaminated soil & stone waste, which conform to the European Waste Catalogue (2002 edition) code reference 170504 (soil & stones) may be accepted at the site. There shall be no construction and demolition waste accepted or deposited at the site.	Activity 5, Class 10	03/10/2002	01/10/2002	30/09/2005
Meath Co. Council	Seamus Darby c/o Foley Engineering Services	Mullingar Road, Kinnegad, Co. Westmeath. Location of Facility: Ballynabamey, Clonard, Co. Meath.	WMP 2000/43	Recovery of waste (other than hazardous waste) & the treatment of waste on land with a consequential benefit for an agricultural activity or ecological system.	Only uncontaminated soil and stone waste, which conform to the European Waste Catalogue (2002 edition) code reference 170504 (soil and stones) may be accepted at the site. No C&D waste shall be accepted or deposited at the site.	Activity 5, Class 10	16/10/2002	11/10/2002	10/10/2005
Meath Co. Council	James & Alma Gurney	Shadok, Stamullen, Co. Meath	WMP 2002/24	Recovery of waste (other than hazardous waste) & the treatment of waste on land with a consequential benefit for an agricultural activity or ecological system.	Only uncontaminated soil and stone waste, which conform to the European Waste Catalogue (2002 edition) code reference 170504 (soil and stones) may be accepted at the site.	Activity 5, Class 10	06/11/2002	31/10/2002	30/10/2005
Meath Co. Council	Mr. James McKenna	Knocknanagin, Athboy, Co. Meath	WMP 2002/15	Recovery of waste (other than hazardous waste) & treatment of waste on land	Only uncontaminated soil and stone waste, which conform to the European Waste Catalogue (2002 edition) code reference 170504 may be accepted at the site.	Activity 5, Class 10	08/11/2002	05/11/2002	05/11/04 (24 months from date of commencement of activities on the site)
Meath Co. Council	Organic Gork Marketing Ltd.	Wilkinstown, Navan, Co. Meath	WMP 2002/26		Activated sludge, spent grain, biodegradable kitchen and carafeen waste, woodchips and sawdust, green waste, mushroom compost, cocoa shell, cardboard and paper	First schedule - Activity 5 / 4th Schedule, classes 2, 4 & 13	28/11/2002	19/11/2002	18/11/2005
Meath Co. Council	Michael McCormack, c/o Frank Burke & Associates	Hilltown Little, Bellewstown, Duleek, Co. Meath.	WMP 2002/10		Only uncontaminated soil and stone waste, which conform to the European Waste Catalogue (2002 edition) code reference 170504 (soil and stones) may be accepted at the site.	Activity 5, Class 10	28/11/2002	19/11/2002	36 months from date of commencement of work on site

						Schedule Classes 11 & 13 / Fourth Schedule Classes 3, 4 & 13				commencement of work on site
Meath Co. Council	John Kevin Connet	Kilbrew, Ashbourne, Co. Meath	WMP 2002/26	Only uncontaminated soil and stone waste which conform to the EWC (2002 edition) code reference 170504 (soil and stones) may be accepted at the site. There shall be no C&D waste accepted or deposited at the site.	First Schedule Activity 5 / Fourth Schedule, Class 10		15/01/2003	13/01/2003	24 months from date of commencement of waste activities on site	
Meath Co. Council	Anthony Hoban	Pheopostown, Killock, Co. Meath	WMP 2002/28	Only uncontaminated soil and stone waste, which conforms to the EU Waste Catalogue (2002 edition) code reference 170504 (soil and stones) may be accepted at the site. Concrete waste, conforming to EWC code reference 170101 may be used in the construction of the haul road only.	Activity 5, Class 10		10/02/2003	04/02/2003	03/02/2006	
Meath Co. Council	Frank Howay, via FGH Enterprises Ltd.	Molerick, Hill of Down, Enfield, Co. Meath	WMP 2002/27	Only uncontaminated soil & stone waste, which conforms to the European Waste Catalogue (2002 edition) code reference 170504 (soil and stones) may be accepted at the site. Mixture of concrete, bricks, tiles and ceramics waste, conforming to European Waste Catalogue code reference 170107 may be used in the construction of the haul road only.	First Schedule, Activity 5 / Fourth Schedule, Class 10.		21/02/2003	19/02/2003	09/03/2006	
Meath Co. Council	Tom O'Malley	Millown, Killock, Co. Meath	WMP 2002/29	Only uncontaminated soil and stone waste which conforms to the EU Waste Catalogue (2002 Edition) code reference 170504 (soil & stones) may be accepted at the site.	First Schedule, Activity 5 / Fourth Schedule, Class 10.		03/03/2003	27/02/2003	36 months from date of commencement of work on site	
Meath Co. Council	Michael Bray c/o Brendan McGovern, Johasbrook Surveys Limited	Girsey, Fordstown, Navan, Co. Meath	WMP 2002/31	Only uncontaminated soil and stone waste, which conforms to the European Waste Catalogue (2002 edition) code reference 170504 (soil and stones) may be accepted at the site.	First Schedule, Activity 5 / Fourth Schedule, Class 10.		10/03/2003	04/03/2003	36 months from date of commencement of work on site	
Meath Co. Council	Trim Plant Ltd.	Oldtown, Johnstown, Navan, Co. Meath	WMP 2002/3	Only uncontaminated soil and stone waste, which conforms to the EU Waste Catalogue (2002 edition) code reference 170504 (soil and stones) may be accepted at the site. No other waste types shall be accepted or deposited at this facility.	First Schedule, Activity 5 / Fourth Schedule, Class 10.		10/04/2003	08/04/2003	36 months from date of commencement of work on site	
Meath Co. Council	Gerry Tute	Mannanslow, Ardath, Co. Meath	WMP 2003/12	Only uncontaminated soil and stone waste, which conforms to the EWC (2002 edition) code reference 170504 (soil and stones) may be accepted at the site.	First Schedule, Activity 5, Class 10		23/04/2003	18/04/2003	3 months from date of commencement of activities on site.	
Meath Co. Council	O'Connell Agri-Environmental	Balindery House, Balindery, Enfield, Co. Meath	WMP 2003/2	Only "Guinness for Export" dust and "Roast House" dust which conforms with the following EWC (2002 edition) shall be transported and spread on the participating farm lands. C20799 wastes from the production of alcoholic and non alcoholic beverages (except coffee, tea and cocoa) wastes not otherwise specified ("Guinness for Export" dust and "Roast House" dust.	First Schedule, Activity 5, Classes 10 & 13		23/04/2003	18/04/2003	36 months from date of commencement of work on site	
Meath Co. Council	Gerry Tute c/o Thomas A. Keenan,	Mooney's, Primastown, Ashbourne, Co. Meath	WMP 2002/21	Only uncontaminated soil and stone waste, which conforms to the EWC (2002 Edition) code reference 170504 (soil & stones) may be accepted at the site.	First Schedule, Activity 5, Class 10		23/04/2003	18/04/2003	36 months from date of commencement of work on site	
Meath Co. Council	Joe Fanagan	Ballydamas, Co. Meath	WMP 2002/18	Only uncontaminated soil and stone waste, which conforms to the EWC 2002 edition code reference 170504 (soil & stones) may be accepted at the site.	First Schedule, Activity 5, Class 10		23/04/2003	18/04/2003	12/05/2006	
Meath Co. Council	Rose McManus	Creewood, Siane, Co. Meath	WMP 2002/25	Only uncontaminated soil and stone waste, which conforms to the European Waste Catalogue (2002 edition) code reference 170504 (soil and stones) may be accepted at the site.	First Schedule, Activity 5, Class 10		08/05/2003	07/05/2003	6 months from the date of commencement of activities on site.	
Meath Co. Council	Charlie Flattery, c/o Ms. Maeva Fanning, Phip Fanelly & Company	Agher, Summerhill, Co. Meath	WMP 2002/19	Only uncontaminated soil and stone waste, which conform to the European Waste Catalogue (2002 edition) code reference 170504 (soil and stones) may be accepted at the site. There shall be no construction and demolition waste accepted or deposited at the site.	First Schedule, Activity 5, Fourth Schedule, Class 10		18/05/2003	13/05/2003	24 months from date of commencement of waste activities on site	
Meath Co. Council	McKenna Waste Paper Recycling Company Ltd. c/o Abbi & Associates, Besswell House, Besswell Lane, Drogheda, Co. Louth.	Commons, Duesek, Co. Meath	WMP 2003/1	Only uncontaminated paper and cardboard waste corresponding to code 030308 (wastes from sorting of paper and cardboard destined for recycling) of the EWC published by EPA (Jan 2002 edition)	First Schedule Activity 5, Fourth Schedule Classes 2 & 13		03/06/2003	26/05/2003	25/05/2006	
Meath Co. Council	Oliver Craig	Ballybogan, Clonard, Co. Meath	WMP 2003/13	Only uncontaminated soil and stone waste, which conforms to the EWC 2002 edition code reference 170504 (soil & stones) may be accepted at the site.	First Schedule Activity 5, Class 10		09/06/2003	30/05/2003	36 months from date of commencement of work on site	



	Christopher Flynn & Associates	Co. Meath			which conforms to the EWC 2002 edition code reference 170504 (soil & stones) may be accepted at the site. Concrete waste, conforming to EWC ref. 170101 may be used in the construction of the haul road only.	Schedule Class 10				36 months from date of commencement of work on site
Meath Co. Council	Westroute JV, c/o SIAC	Towlagh, Clonard, Enfield, Co. Meath.	WMP 2003/14		Only uncontaminated soil and stone waste which conforms to the EWC (2002 edition) code reference 170504 (soil & stones) may be accepted at the site.	First Schedule Activity 5, Fourth Schedule Class 10		20/06/2003	06/06/2003	36 months from date of commencement of work on site
Meath Co. Council	John Thornton	Marby, Kells, Co. Meath	WMP 2003/4			First Schedule, Activity 5, Classes 10 & 13		23/06/2003	26/06/2003	36 months from date of commencement of work on site
Meath Co. Council	Bellewstown Race Committee	Ballymagavey Stud, Balaish, Navan, Co. Meath	WMP 2003/06		Only uncontaminated soil and stone waste, which conforms to the EWC Catalogue (2002 edition) code reference 170504 (soil & stones) may be accepted at the site.	First Schedule Activity 5, Fourth Schedule Class 2.		30/07/2003		36 months from date of commencement of work on site
Meath Co. Council	Lyons Excavations Ltd.	Ashbourne Rugby Club, Milltown, Ashbourne, Co. Meath.	WMP 2003/18		Only uncontaminated soil and stone waste, which conforms to the EWC (2002 edition) code reference 170504 (soil & stones) may be accepted at the site.	First Schedule Activity 5, Fourth Schedule Class 10		25/08/2003	21/08/2003	28/09/2005
Meath Co. Council	TD Cadwell & Sons Ltd.	Raneevogue, Crossakiel, Co. Meath	WMP 2003/5		See copy of permit for listing of waste types accepted	First Schedule Activity 3, Fourth Schedule Classes 3,4,7 & 13		29/08/2003	27/08/2003	26/08/2006
Meath Co. Council	Datastroy Ltd.	Summerhill Enterprise Centre, Summerhill, Co. Meath	WMP 2003/30	Collection and recycling of paper, cardboard and IT equipment.	200101, 200140, 191212, 160202, 160205, 160200	Activity 5 of First Schedule, Classes 2,3,4,13 of the Fourth Schedule		24/09/2003	19/09/2003	18/09/2006
Meath Co. Council	Kevin J. Kane	Williamstown, Trim Road, Navan, Co. Meath	WMP 2003/27	Raising of site by using in-situ excavated topsoil and subsoil materials.	170501	Class 10 of 4th Schedule	25000	02/10/2003	26/09/2003	36 months from date of commencement of work on site
Meath Co. Council	Patrick McKenna	Basketstown and Ballynamona, Summerhill, Co. Meath	WMP 2002/11		Only uncontaminated soil and stone waste which conforms to the EWC (2002 edition) code reference 170504 (soil & stones) may be accepted at the site.	First Schedule Activity 5 / Fourth Schedule, Class 10		22/10/2003	20/10/2003	19/10/2006
Meath Co. Council	Paddy Carry	Drumbarragh, Kells, Co. Meath	WMP 2003/8		Only uncontaminated soil and stone waste, which conforms to the EWC (2002 edition) code reference 170504 (soil & stones) may be accepted at the site. Under no circumstances shall C&D waste be deposited at this site with the exception of concrete waste ref. 170101.	First Schedule Activity 5 / Fourth Schedule Class 10.		30/10/2003	24/10/2003	23/10/2008
Meath Co. Council	Larry Stafford	Agher, Summerhill, Co. Meath	WMP 2003/15	Infill of low lying land	Subsoil, top soil and rock not containing dangerous substances.	Activity 5 First Schedule: Class 10 4th Schedule	13,000	10/11/2003	07/11/2003	36 months from date of commencement of work on site
Meath Co. Council	Dermot Reilly & Sons	New Haggard, Trim, Co. Meath	WMP 2002/17	Land reclamation	Class 10 - Code 170501	Class 10	97,142	19/11/2003	14/11/2003	36 months from date of commencement of work on site
Meath Co. Council	Pat Duffy	Kingstown & Camuff Groat, Hayes, Navan, Co. Meath	WMP 2003/31	Land reclamation	Soil & Stones 170504	Class 10	40,000	25/11/2003	21/11/2003	36 months from date of commencement of work on site
Meath Co. Council	Pat Hughes	Lisoman, Bellewstown, Drogheda, Co. Meath	WMP 2003/26	Land reclamation	Soil 170504	Class 10	70,000	25/11/2003	21/11/2003	36 months from date of commencement of work on site
Meath Co. Council	Sean Moran	Umberstown Great, Rathmoyan, Co. Meath	WMP 2003/22	Land reclamation	Soil 170504	Class 10	4,500	25/11/2003	21/11/2003	12 months from commencement of waste activities on site
Meath Co. Council	Concillstown Estates	Concillstown, Trim, Co. Meath	WMP 2003/39		Classes 2 & 13	4th Schedule of 1998 Regs		15/01/2004	09/01/2004	3 years from commencement date
Meath Co. Council	Hugh Calvey	Moorechurch, Julianstown, Co. Meath	WMP 2003/6		Sewage Sludge	Activity 5 of the First Schedule and Class 10 and 13 of the Fourth Schedule	616	06/01/2004	05/01/2004	05/01/2007
Meath Co. Council	Jonn Jones (Excavations) Ltd	Unit 1, Enfield Industrial Estate, Enfield Co. Meath	WMP 2003/40	Land reclamation	Soil and Stone	Activity 5 of the First Schedule and Class 10 of the Fourth Schedule	37,000	26/01/2004	22/01/2004	3 years from commencement date
Meath Co. Council	John Jones Ltd	Newcastle, Enfield, Co. Meath (Doom's Land)	WMP 2003/41	Land reclamation	Soil and Stone	Activity 5 of the First Schedule and Class 10 of the Fourth Schedule		26/01/2004	22/01/2004	3 years from commencement date
Meath Co. Council	Thomas McGuinness	Woodtown & Bellewstown Trim, Co. Meath	WMP 2003/43	Land reclamation	Topsoil & Subsoil 17 05 01	Class 10 of the Fourth Schedule	39,450m <sup>3</sup>	23/01/2003	23/01/2004	36 months from commencement
Meath Co. Council										
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Meath Co. Council	Padraig Thornton Waste Disposal	Dunboyne Industrial Estate, Dunboyne	WMP 2003/33	Recycling Facility	Storage of waste	Activity 5 3rd Schedule & 4th Schedule	5,000	05/04/2004	01/04/2004	36 months from date of commencement of waste activities on site
Meath Co. Council	Lyndon Douglas	Windtown, Dunsany, Co. Meath	WMP 2003/45	The recovery of waste (other than hazardous waste) at a facility (other than a facility for the composting of waste where the amount of compost and waste held at the facility exceeds 1000 cubic metres at any time).	17 05 04 Uncontaminated soil and stone waste	Activity 5 Class 10		14/04/2004	05/04/2004	04/04/2007
Meath Co. Council	P.J. McDonnell	Bormannstown, Stranmillis, Co. Meath	WMP 2003/28	Land reclamation	17 05 04 Soil	Class 10 4th Schedule	35,000	25/04/2004	21/04/2004	20/04/2007
Meath Co. Council	Ward & Burke Construction Ltd.	Mount Sion, Longwood, Co. Meath	WMP 2003/52	Land reclamation	17 05 04 Soil	Class 10 4th Schedule	24,000	26/04/2004	21/04/2004	19 months from commencement of Activities
Meath Co. Council	Christy Reynolds	Grennanstown, Stranmillis, Co. Meath	WMP 2004/5	Land reclamation	17 05 04 Soil	Class 10 4th Schedule	54,400	26/04/2004	21/04/2004	36 months from commencement of Activities



Meath Co. Council	Applicant	Location	WMP No.	Waste Description	Waste Code	Class	Volume	Start Date	End Date	Completion Date
Meath Co. Council	Reasuna (RCH) Ltd	Batterstown, Co. Meath	WMP 2003/53	Slabs and Recover Waste Concrete	17 01 01 Waste Concrete	Classes 4 & 13, Fourth Schedule	30,000	31/03/2004	28/05/2004	27/06/2007
Meath Co. Council	Food Surplus Management	Dakree Business Park, Trim, Co. Meath	WMP 2003/19	The recovery of waste (other than hazardous waste) at a facility (other than a facility for the composting of waste where the waste held at the facility exceeds 1000 cubic metres at any time).	02 01 02 Animal/Plastic waste, 02 02 02 Animal/Plastic waste, 02 03 03 Materials unsuitable for consumption or processing, 02 05 01 Materials unsuitable for consumption or processing, 02 06 01 Materials unsuitable for consumption or processing, 15 01 01 Paper and cardboard packaging, 15 01 02 Plastic packaging, 15 01 03 Wooden Packaging, 19 12 01 Paper and cardboard	Activity 5 of the First Schedule and Class 13 of the Fourth Schedule, Class 11, 12 & 13 of the third schedule		08/06/2004	03/08/2004	02/06/2007
Meath Co. Council	Dense Paul	Mulleghfeeling, Bellewstown, Co. Meath	WMP 2004/6	Land reclamation	17 05 04 Topsoil & Subsoils	Class 10 4th Schedule	2700m3	23/06/2004	17/06/2004	16/06/2005
Meath Co. Council	Pat Hanrahan	Mullyh, Kizzock, Co. Meath	WMP 2003/32	Land reclamation	17 05 04 Soil & stone	Class 10 4th Schedule		20/05/2004	17/06/2004	16/06/2007
Meath Co. Council	John O'Connell	Ballymaglassan and Roanstown, Batterstown, Co. Meath	WMP 2003/38	Land reclamation	17 05 04 Soil & stone	Class 10 4th Schedule		10/05/2004	29/04/2004	28/04/2007
Meath Co. Council	Sean Mahon	Dakree Business Park, Trim	WMP 2004/8	Recovery of waste (other than haz)	See Condition 4.3 of Permit	1st Schedule of WM Permit Regs 1996 - Activity 5, 4th Schedule of WM Act, 1996: Class 13, 2, 3, 4 and 3rd Schedule Class 11, 12 & 13		02/07/2004	29/06/2004	36 months from commencement of Activities
Meath Co. Council	Nagrac Ltd	Donegal Road, Gibbstown, Navan, Co. Meath	WMP 2004/3	Recycling	See condition 4.1 of permit.	4th Schedule		02/07/2004	29/06/2004	36 months from commencement of Activities
Meath Co. Council	Ulick McDonnell	Boneslow, Donahughlin, Co. Meath	WMP 2004/10	Land reclamation	This permit and permit WMP 2004/10 shall not be operated simultaneously.	1st Schedule of WM Permit Regs, 1996 - Activity 5, 4th Schedule of WMA, 1996: Class 10		02/07/2004	29/05/2004	36 months from commencement of Activities
Meath Co. Council	Roadstone Ltd.	Broommount, Trim, Co. Meath	WMP 2004/12	Recycling C + D waste	17 01 01, 17 01 02, 17 01 03, 17 01 07, 17 03 02, 17 04 05, 17 05 04	Class 4, Class 13, Class 3, 4th Schedule	30000 (mixed C + D)	14/07/2004	08/07/2004	07/07/2007
Meath Co. Council	John Coyle	Kilbrew, Ashbourne, Co. Meath & Loughinstown Co. Meath	WMP 2003/36	Land reclamation	17 05 04 Soil & stone	Class 10 4th Schedule	90,000	23/08/2004	13/08/2004	13/08/2007
Meath Co. Council	Cathal McCarthy	Phoeopostown, Garlow Cross, Navan, Co. Meath	WMP 2003/54	Land reclamation	17 05 04 Soil & stone	Class 10 4th Schedule	58322m3	29/08/2004	13/08/2004	13/08/2007
Meath Co. Council	Joe Dunne	Barstown, Dunboyne	WMP 2004/15	Land reclamation	17 05 04	Class 10, 4th Schedule	8,500m3	27/08/2004	23/08/2004	3 years from the date of commencement of activities on site
Meath Co. Council	John Fallon	Peterstown, Trim, Co. Meath	WMP 2004/15	Land Reclamation	17 05 04	Class 10, 4th Schedule	12,600 tonnes	06/09/2004	30/08/2004	3 years from the date of commencement of activities on site
Meath Co. Council	Robert Moran	Mazetown, Tara, Co. Meath	WMP 2004/7	Land reclamation	17 05 04	Class 10, 4th Schedule	100,000 tonnes	28/09/2004	21/09/2004	3 years from the date of commencement of activities on site
Meath Co. Council	Cusack Homes Ltd.	Gardanrath Rd. Upper, Townsparks, Kells, Co. Meath	WMP 2004/11	Land Reclamation	17 05 04	Class 10, Fourth Schedule	3,000 tonnes	25/09/2004	21/09/2004	3 years from the date of commencement of activities on site
Meath Co. Council	Derek Branigan	Cloghan, Ardcoth, Co. Meath	WMP 2004/13	Land Reclamation	17 05 04	Class 10, Fourth Schedule	3,000 tonnes	23/09/2004	21/09/2004	3 years from the date of commencement of activities on site
Meath Co. Council	Philip McCann	Firpark, Crossakiel, Kells, Co. Meath	WMP 2004/2	Recycle Facility	02 01 08, 19 12 12, 02 01 07, 02 03 04, 20 01 08, 03 03 06, 03 01 05, 20 02 01	Class 2, Class 13, Fourth Schedule	8,000 tonnes	29/09/2004	21/09/2004	3 years from the date of commencement of activities on site
Meath Co. Council	Jona-Sak Joint Venture	N2 Ringles - Ashbourne Road Scheme	WMP 2004/25	Land Reclamation	17 05 04	Class 4, Fourth Schedule	700,000 m3	12/10/2004	08/10/2004	3 years from the date of commencement of activities on site
Meath Co. Council	Frank Hughes	Beymore, Drogheda, Co. Meath	WMP 2004/16	Land Reclamation	17 05 04	Class 10, 4th Schedule	150,000 tonnes	12/10/2004	06/10/2004	3 years from the date of commencement of activities on site
Meath Co. Council	Recycled Products Ltd.	Avondale, Patin Rd., Bryansdown, Co. Meath	WMP 2004/34	Recycle Facility	17 01 04	Class 4 & 13, Fourth Schedule	5,000 start, increase to 25,000 tonnes	12/10/2004	06/10/2004	3 years from the date of commencement of activities on site
Meath Co. Council	Tom Curran	Clegarrow, Enfield, Co. Meath	WMP 2003/35	Land reclamation	17 05 04	Class 10, 4th Schedule	90,000 m3	12/10/2004	06/10/2004	3 years from the date of commencement of activities on site
Meath Co. Council	Tony Sutton	Danestown, Kantstown, Navan, Co. Meath	WMP 2004/26	Land reclamation	17 05 04	Class 10, 4th Schedule	20,000 tonnes	12/10/2004	06/10/2004	3 years from the date of commencement of activities on site
Meath Co. Council	Kilsaran Concrete Ltd.	Mitchelstown, Dunsany, Co. Meath	WMP 2004/17	Recovery of Waste	17 05 04: Soil & Stones, 17 01 01: Concrete, 17 01 02: Bricks, 17 01 03: Tiles & ceramics, 17 01 07: mbdure of concrete, bricks, tiles & ceramics	First Schedule-Activity 5, Fourth Schedule-Classes 10, 2, 4 & 11		26/10/2004	15/10/2004	3 years from the date of commencement of activities on site
Meath Co. Council	John Stack	Fleekstown Bridge, Kilsallaghan, Co. Meath	WMP 2004/21	Recovery & treatment of waste	See section 4.4 of Permit	First Schedule-Activity 5, Fourth Schedule-Class 10		26/10/2004	15/10/2004	3 years from the date of commencement of activities on site
Meath Co. Council	Noel Monaghan	Middleborough, Longwood, Enfield, Co. Meath	WMP 2004/32	Recovery of non-hazardous waste, reclamation & recycling of organic substances	See section 4.4 of Permit	First Schedule-Activity 5, Fourth Schedule-Class 2		26/10/2004	20/10/2004	1 year from the date of commencement of activities on site
Meath Co. Council	Murphy Concrete Manufacturing	Moorechurch, Julianstown, Co. Meath	WMP 2004/28	Land reclamation	17 05 04	Class 10, 4th Schedule		08/11/2004	02/11/2004	3 years from the date of commencement of activities on site
Meath Co. Council	PFD Plant Hire Ltd.	Ballynaskes, Rathcore, Enfield, Co. Meath	WMP 2004/19	Land reclamation	17 05 04	Class 10, 4th Schedule	50,000 tonnes	11/11/2004	08/11/2004	3 years from the date of commencement of activities on site



										3 years from the date of commencement of activities on site
Meath Co. Council	Datastroy Ltd	Summerhill Enterprise Centre, Summerhill, Co. Meath	WMP 2004/35	Recovery Facility	20 01 01, 19 12 12, 19 12 07, 20 01 36, 20 01 40, 16 02 14, 19 12 08, 20 01 39, 16 02 16, 20	4th Schedule, Classes 2, 3, 4, 13		11/11/2004	08/11/2004	3 years from the date of commencement of activities on site
Meath Co. Council	McCabe Building Contractors	Milfree Park, Rathoath, Co. Meath	WMP 2004/41	Recovery Facility	17 05 04: Soil & Stones	First Schedule-Activity 5, Fourth Schedule-Class 2		24/11/2004	19/11/2004	3 years from the date of commencement of activities on site
Meath Co. Council	Tom O'Connor	Balinabrackey, Clonard, Co. Meath	WMP 2004/18	Land reclamation	17 05 04	Class 10 Fourth Schedule		14/12/2004	02/12/2004	3 years from the date of commencement of activities on site
Meath Co. Council	James Fox	Rossan, Kinnegad, Co. Meath	WMP 2004/38	Land Reclamation	17 05 04	Class 10 4th Schedule		10/01/2005	22/12/2004	3 years from commencement of Activities on site
Meath Co. Council	Roadstone provinces Ltd.,	Mullaghchrone, Donore, Co. Meath.	WMP 2004/42	Recycling & Storage	17 01 01, 17 01 02, 17 01 03, 17 01 07, 17 03 02, 17 04 05, 17 05 04	Class 3, 4, 13 Fourth Schedule	30,000 approx. mixed C&D waste	10/01/2005	07/01/2005	3 years from commencement of Activities on site
Meath Co. Council	Gerry Tierney,	Middlebrough, Longwood, Co. Meath	WMP 2004/46	Recovery & Treatment of Waste	17 05 04	Activity 5 Class 10 of 4th Schedule	2,000 waste soils & stones	11/01/2005	01/07/2005	3 Years from commencement date
Meath Co. Council	Agatha Mulvaney	Oakley Park, Kells, Co. Meath	WMP 2004/52	Recycling Facility	17 05 04 / 17 01 01 / 17 01 02	Activity 5, 4th Schedule, class 4		18/01/2005	12/01/2005	3 Years from commencement of activities on site
Meath Co. Council	Templant Ltd.	Oldtown, Johnstown, Navan, Co. Meath	WMP 2004/29	Recovery Facility	170504, 170101, 170102	Activity 5, 4th Schedule, class 10	22,124m <sup>3</sup> to complete activity	07/02/2005	01/02/2005	3 years from commencement date
Meath Co. Council	John Jones (Excavations) Limited	Newcastle, Enfield, Co. Meath	WMP 2004/51	Recovery Facility	17 05 04: Soil & Stones	Activity 5 in accordance with 4th Schedule Class 10.		07/02/2005	31/01/2005	30/01/2008
Meath Co. Council	Mark Laird,	Johnstown, Slane, Co. Meath	WMP2004/53	Recovery Facility	17 05 04, 17 01 01, 17 01 02	Activity 5, Class 4 and 10	50,000 to complete project	17/02/2005	15/02/2005	14/02/2008
Meath Co. Council	Petina Loughran	Wilkinstown, Dunshaughlin, Co. Meath	WMP 2004/39	Recovery Facility	17 05 04, 17 01 01, 17 01 02	Activity 5 in accordance with 4th schedule, Class 10	9,500m <sup>3</sup> to complete project	17/02/2005	15/02/2005	14/02/2008
Meath Co. Council	Ward & Burke Construction Ltd.	Kilken, Dunsaney, Co. Meath	WMP 2004/55	Recovery Facility	17 05 04, 17 01 01, 17 01 02	Activity 5 in accordance with 4th Schedule, Class 10	26,000 tonnes to complete project	17/02/2005	15/02/2005	14/02/2008
Meath Co. Council	Linda O' Loughlin	Milcheltown, Tam, Co. Meath	WMP 2004/22	Recovery Facility	17 05 04, 17 01 01, 17 01 02	Activity 5 in accordance with 4th schedule, class 10	76,875m <sup>3</sup>	04/04/2005	31/03/2005	36 months from commencement of Activities
Meath Co. Council	Food surplus management, c/o Thomas A Keenan, National	39 Kildery Hallm Ashbourne, Co. Meath	WMP 2004/45	Recovery Facility	15 01 01, 19 12 01, 15 01 02	Activity 5, Class 11, 12, 13		20/04/2005	18/04/2005	
Meath Co. Council	Kieran Henson	Cushinstown, Garristown, Ramfeigh, Co. Meath	WMP 2005/2	Land Reclamation	17 05 04, 17 01 01	Activity 5, Class 10	52,110 m <sup>3</sup>	19/05/2005	09/05/2005	36 months from commencement of Activities
Meath Co. Council	Mark Pendery Hatch,	Commons Duleek, Co. Meath	WMP 2004/49	Land Reclamation	17 05 04, 17 01 01, 17 01 02	Activity 5 of 4th Schedule Class 10	21,400m <sup>3</sup>	23/05/2005	09/05/2005	36 months from commencement of Activities
Meath Co. Council	Organic Gold Marketing Limited	Wilkinstown, Navan, Co. Meath	WMP 2004/44	Recycling & Storage	02 01 06, 19 12 01, 19 12 07, 20 01 99, 20 02 01	Activity 5, in accordance with 4th schedule, class 2, 11 & 13		25/05/2005	23/05/2005	36 months from commencement of Activities
Meath Co. Council	Clashford Recovery Facility Limited	Naul, Co. Meath	WMP/2005/13	Land Reclamation	170504	Class 10 4th Schedule	3000,000m <sup>3</sup>	14/06/2005	30/05/2005	28/02/2006
Meath Co. Council	Christy Reynolds	Demeestown, Stamullen, Co. Meath	WMP 2004/47	Land reclamation	17 05 04, 17 01 01	Activity 5, fourth schedule - class 10		24/06/2005	15/06/2005	36 months from commencement of Activities
Meath Co. Council	Thomas Curtis	Mull, Nether, Co. Meath	WMP 2004/31	Land reclamation	17 05 04, 17 01 01	Activity 5, fourth schedule - class 10	43,625 m <sup>3</sup>	24/06/2005	15/06/2005	36 months from commencement of Activities
Meath Co. Council	J & D Burke Civil Engineering & Plant Hire	Batterjohn, Drumree, Co. Meath	WMP 2005/4	Land reclamation	17 05 04	Activity 5, fourth schedule - class 10	30000 tonnes	24/06/2005	15/06/2005	24 months from commencement of activities
Meath Co. Council	Peter Joseph Bary	Newtown, Rathganley, Killock, CO. Meath	WMP 2004/57	Composting facility	02 01 03, 02 01 07, 20 02 01, 20 02 02	Activity 5, first schedule, class 2 & 13	5000 tonnes	01/07/2005	25/06/2005	36 months from commencement of Activities
Meath Co. Council	Barney Tigue	Crossrum, Oldcastle, Co. Meath	WMP 2005/10	Land reclamation	17 05 04, 17 01 01	First schedule, activity 5, Fourth schedule class 10	52,000m <sup>3</sup>	01/07/2005	29/06/2005	36 months from commencement of Activities
Meath Co. Council	Kilmoor Cross Nurseries Ltd	Kilmoor Cross, Cushinstown, Ashbourne, Co. Meath	WMP 2005/09	Land reclamation	17 05 04	Activity 5, Class 10	10,000m <sup>3</sup>	07/07/2005	01/07/2005	3 years from commencement of Activities on site
Meath Co. Council	Paul Flanagan	Loughran, Camaross, Kells, Co. Meath	WMP 2005/05	Land reclamation	17 05 04, 17 01 01	4th schedule, class 10 activity 5	43,707m <sup>3</sup>	07/07/2005	01/07/2005	36 months from commencement of Activities
Meath Co. Council	Carrollstown Estate Ltd.	Carrollstown, Trim, Co. Meath	WMP 2005/03	Storage of waste	20 01 25	activity 5, class 13		07/07/2005	01/07/2005	36 months from commencement of Activities
Meath Co. Council	PF Dixon Plant Hire Ltd	Ballynaskes, Ramcore, Enfield, Co. Meath	WMP 2003/44	Recovery of waste	See condition 4 of permit	First schedule, Activity 5, Fourth schedule Class 2, 3, 4 & 13		30/08/2005	25/08/2005	36 months from commencement of Activities
Meath Co. Council	Stephen Kenny	Knightstown, Wilkinstown, Navan, Co. Meath	WMP 2005/6	Land reclamation	17 05 04	Activity 5 Class 10	193,400	04/10/0504	09/05/2005	36 months from commencement of Activities
Meath Co. Council	Seamus Boylan	Ongestown, Berhemee, Navan, Co. Meath	WMP 2005/22WMP	Land reclamation	17 05 04, 17 01 01	Activity 5 Class 10	75,000	03/10/2005	27/09/2005	36 months from commencement of Activities
Meath Co. Council	Brian Darcy	Ballycam, Enfield, Co. Meath	WMP 2005/08	Land reclamation	17 05 04	Activity 5, Class 10	46,450	23/09/2005	15/09/2005	14/09/2008
Meath Co. Council	Terry Lyons	Oldtown, Summerhill, Rathmolyon, Co. Meath	WMP 2005/07	Land reclamation	17 05 04	Activity 5, Class 10	36,000	23/09/2005	15/09/2005	14/09/2008
Meath Co. Council	Padraig and Fergus Dixon	Tobertylow, Co. Meath	WMP 2004/33	Land reclamation	17 05 04	Activity 5, Class 10	300,000	12/09/2005	01/09/2005	01/09/2008
Meath Co. Council	Height For Hire (Environmental) Ltd	Killineer, North Road, Drogheda, Co. Louth	306/2005	Hazard waste	See Appendix A of permit	Article 4, Part I and II of First Schedule				
Meath Co. Council	Paddy Macken	Hairistown, Slane Co. Meath	WMP 2005/28	Storage Facility	20 01 25	Activity 5 class 13	N/A	17/10/2005	13/10/2005	36 months from grant date
Meath Co. Council	Gerard Tuite Plant hire limited	Oleestown, Duleek, Co. Meath	WMP 20 05/17	Land reclamation	17 05 04	Activity 5 class 10	21,860m <sup>3</sup> to complete	17/10/2005	13/10/2005	36 months from grant date



Monaghan Co. Council	Annie Callan	Monanny, Carrickmacross, Monaghan	WP 29/04	Treatment of waste on land with a consequential benefit for an agricultural activity or ecological system	17 05 04: Uncontaminated Soil & Syone Waste	Activity 5, Class 10	20,000	07/10/2004	24/09/2004	24/09/2005
Monaghan Co. Council	Seamus Brennan	Legnacree, Castleshane, Co. Monaghan	WP 30/04	The recovery and the treatment of waste on land with a consequential benefit for an agricultural activity or ecological system	Top soil & sub-soil	Activity 5, Class 10	10,000m3	12/10/2004	29/09/2004	29/09/2005
Monaghan Co. Council	Joseph Sullivan	Rakeeragh, Monaghan	WP01/5	Recovery of waste	17 05 01, 17 01 07	Activity 5, Class 10	3000m3	09/05/2005	26/01/2005	three years from the issue date
Monaghan Co. Council	Francis McGulgan	Newgrove, Monaghan, Co. Monaghan	WP05/5	Recovery of waste	17 05 01, 17 01 07	Activity 5, Class 10	1000m3	09/05/2005	09/02/2005	three years from the issue date
Monaghan Co. Council	McMahon & Eakin	Nafferty, Carrickmacross, Co. Monaghan	WP03/5	Recovery of waste	17 05 01, 17 01 07	Activity 5, Class 10	8000m3	09/05/2005	26/01/2005	three years from the issue date
Monaghan Co. Council	Sean Mulligan	Glassdrummond East, Clontibret, Monaghan, Co. Monaghan	WP02/5	Recovery of waste	17 05 01, 17 01 07	Activity 5, Class 10	3000m3	09/05/2005	26/01/2005	three years from the issue date
Monaghan Co. Council	Brian Finnegan	Monaha, Donaghmoyle, Carrickmacross, Co. Monaghan	WP04/5	Recovery of waste	17 05 01, 17 01 07	Activity 5, Class 10	500m3	09/05/2005	14/04/2005	14/04/2006
Monaghan Co. Council	Eugene Ward	Greaghglass, Monaghan, Co. Monaghan	WP04/5	Recovery of waste	17 05 01, 17 01 07	Activity 5, Class 10	8000m3	09/05/2005	23/03/2005	three years from the issue date
Monaghan Co. Council	Paddy McGuinness	Annahagh, Monaghan, Co. Monaghan	WP09/5	Recovery of waste	17 05 01, 17 01 07	Activity 5, Class 10	24000m3	09/05/2005	21/04/2005	three years from the issue date
Monaghan Co. Council	Eamon Sherry	Annahagh, Monaghan, Co. Monaghan	WP10/5	Recovery of waste	17 05 01, 17 01 07	Activity 5, Class 10	27000m3	09/05/2005	21/04/2005	three years from the issue date
Monaghan Co. Council	Terrence McGinn	Firtully, Clontibret, Monaghan	WP14/5	Treatment of waste on land with a consequential benefit for an agricultural activity or ecological system	Only uncontaminated soil and stone waste which conform to the EU Waste Catalogue	Activity 5, Class 10	12,000	08/07/2005	08/07/2008	
Monaghan Co. Council	John McClatchey	Silverstream, Glaslough, Monaghan	WP 16/5	Treatment of waste on land with a consequential benefit for an agricultural activity or ecological system	Only uncontaminated soil and stone waste which conform to the EU Waste Catalogue	Activity 5, Class 10	1,000	11/07/2005	11/07/2008	
Monaghan Co. Council	Paudric McAree	Killybough, Tydavnet, Monaghan	WP18/5	Treatment of waste on land with a consequential benefit for an agricultural activity or ecological system	Only uncontaminated soil and stone waste which conform to the EU Waste Catalogue	Activity 5, Class 10	4,000	17/08/2005	17/08/2005	
Monaghan Co. Council	Donagh Quarries	Mullaghbane, Glaslough, Monaghan	WP20/5	Treatment of waste on land with a consequential benefit for an agricultural activity or ecological system	Only uncontaminated soil and stone waste which conform to the EU Waste Catalogue	Activity 5, Class 10	18,000	17/08/2005	17/08/2008	
Monaghan Co. Council	Robert Adams	Aughnaseca, Monaghan	WP21/5	Treatment of waste on land with a consequential benefit for an agricultural activity or ecological system	Only uncontaminated soil and stone waste which conform to the EU Waste Catalogue	Activity 5, Class 10	2,000	19/07/2005	19/07/2006	
Monaghan Co. Council	Patrick Murphy	Tullynacrussey, Castleshane, Monaghan	WP22/5	Treatment of waste on land with a consequential benefit for an agricultural activity or ecological system	Only uncontaminated soil and stone waste which conform to the EU Waste Catalogue	Activity 5, Class 10	500	17/08/2005	17/08/2008	
Monaghan Co. Council	Kevin Connolly	Mullaghbrack, Smithboro, Monaghan	WP24/5	Treatment of waste on land with a consequential benefit for an agricultural activity or ecological system	Only uncontaminated soil and stone waste which conform to the EU Waste Catalogue	Activity 5, Class 10	2,500	17/08/2005	17/08/2008	
Monaghan Co. Council	Pat McGivney	Lisdoonan, Carrickmacross, Monaghan	WP26/5	Treatment of waste on land with a consequential benefit for an agricultural activity or ecological system	Only uncontaminated soil and stone waste which conform to the EU Waste Catalogue	Activity 5, Class 10	6,000	17/08/2005	17/08/2005	
Monaghan Co. Council	Christopher Mulligan	Moghanzevy, Smithboro, Monaghan	WP27/5	Treatment of waste on land with a consequential benefit for an agricultural activity or ecological system	Only uncontaminated soil and stone waste which conform to the EU Waste Catalogue	Activity 5, Class 10	1,000	18/08/2005	18/08/2005	
Monaghan Co. Council	Sean McEvaney	Drumgarve, Threemilehouse, Monaghan	WP28/5	Treatment of waste on land with a consequential benefit for an agricultural activity or ecological system	Only uncontaminated soil and stone waste which conform to the EU Waste Catalogue	Activity 5, Class 10	4,000	17/08/2005	17/08/2005	
Monaghan Co. Council	P.J. McEneaney	Drumlung, Lisdoonan, Carrickmacross	WP29/5	Treatment of waste on land with a consequential benefit for an agricultural activity or ecological system	Only uncontaminated soil and stone waste which conform to the EU Waste Catalogue	Activity 5, Class 10	6,000	03/10/2005	03/10/2006	
Monaghan Co. Council	Mary McDonald	Drumlung, Lisdoonan, Monaghan	WP30/5	Treatment of waste on land with a consequential benefit for an agricultural activity or ecological system	Only uncontaminated soil and stone waste which conform to the EU Waste Catalogue	Activity 5, Class 10	6,000	03/10/2005	03/10/2006	
Monaghan Co. Council	Kelly McKeown	Bocka Lower, Carrickmacross, Monaghan	WP31/5	Treatment of waste on land with a consequential benefit for an agricultural activity or ecological system	Only uncontaminated soil and stone waste which conform to the EU Waste Catalogue	Activity 5, Class 10	27,000	24/08/2005	24/08/2006	
Monaghan Co. Council	Silverhill	Emyvale, Monaghan	WP32/5	Treatment of waste on land with a consequential benefit for an agricultural activity or ecological system	Only uncontaminated soil and stone waste which conform to the EU Waste Catalogue	Activity 5, Class 10	5,000	03/10/2005	03/10/2006	
Monaghan Co. Council	Raymond Kelly	Drumully, Emyvale, Monaghan	WP33/5	Treatment of waste on land with a consequential benefit for an agricultural activity or ecological system	Only uncontaminated soil and stone waste which conform to the EU Waste Catalogue	Activity 5, Class 10	1,000	03/10/2005	03/10/2006	
Monaghan Co. Council	Erda O'Brien	Derrygasson, Emyvale	WP36/5	Treatment of waste on land with a consequential benefit for an agricultural activity or ecological system	Only uncontaminated soil and stone waste which conform to the EU Waste Catalogue	Activity 5, Class 10	30,000	03/10/2005	03/10/2006	
Monaghan Co. Council	Martin Leanagh	Dunree, Laragh, Castleshane, Monaghan	WP37/5	Treatment of waste on land with a consequential benefit for an agricultural activity or ecological system	Only uncontaminated soil and stone waste which conform to the EU Waste Catalogue	Activity 5, Class 10	10,000	03/10/2005	03/10/2006	
Offaly Co. Council	Owen Wyer Waste, The Glebe, Durrow, Co. Offaly	The Glebe, Durrow, Co. Offaly	WP-04/2001	Waste processing and recycling operations	Reclamation and recycling of metals and metal compounds, inorganic materials, storage of waste intended for submission.	4th Sched. WMA 1996, Class 3, 4 and 13		19/10/2001	17/10/2001	16/10/2004
Offaly Co. Council	Loughrane Concrete Brr	Balinaguishe, Brr, Co. Offaly	WPS/02	Disposal of waste (other than hazardous waste) and treatment of any waste on land with a consequential benefit for an agricultural activity or ecological system	Disposal of waste (other than hazardous waste) and treatment of any waste on land with a consequential benefit for an agricultural activity or ecological system	First Schedule of the WM (Permit) Regs, activity 6 and Class 10 of the 4th Schedule of the WMA 1996		26/06/2002	14/06/2002	13/06/2005
Offaly Co. Council	Loughrane Concrete Brr	Balinaguishe, Brr, Co. Offaly	WP19/02			First Schedule, Activity 6 / Fourth Schedule, Class 10		18/03/2003	14/03/2003	36 months from date of commencement of work on site
Offaly Co. Council	Sean Carey	Ballycon, Mount Lucas, Tulamore, Co. Offaly	WP10/02		Only uncontaminated soil and stones, which conform to the European Waste Catalogue code reference 170504 may be accepted at the site. No other waste types are to be deposited at this facility.	Activity 5, Class 10		09/10/2002	07/10/2002	06/10/2005
Offaly Co. Council	Noel Regan & Sons (Plant Hire) Ltd	Ishlawn, Ballaghaderreen, Co. Roscommon, Erry, New Road, Clara, Co. Offaly	WP12/2002	Recovery of waste other than those mentioned	Only uncontaminated soil and stones, which conform to the European Waste Catalogue code reference 170504 and originate from the construction of Clara Sewerage Scheme may be accepted at the site.	Activity 5, Class 10		14/10/2002	10/10/2002	10/04/2004



Offaly Co. Council	Gerard Killaly	Shean, Edenderry, Co. Offaly	WP 11/02		Only uncontaminated soil & stones which conform to the EWC code reference 170504 and originate from the construction of Clara Sewerage Scheme may be accepted at the site.	Activity 5, Class 10		02/12/2002	26/11/2002	27/11/2005
Offaly Co. Council	Liam Condon, Condon Car Dismantlers	Cappancur Industrial Estate, Cappancur, Tullamore, Co. Offaly.	WP189(2)02	Dismantling and recovery	End-of-life vehicles	Third schedule - Class 13, Fourth Schedule - Class 3 & 13, First Schedule - Activities 2 & 3.		19/12/2002	10/12/2002	09/12/2005
Offaly Co. Council	John Joseph Clancy TA Clancy's Recovery	Loughan, Tullamore, Co. Offaly	WP17/02	Storage of waste	Storage of end-of-life vehicles	Fourth Schedule - Class 13		14/02/2003	19/01/2003	12/01/2006
Offaly Co. Council	Irish Metal Refineries Ltd.	Cappancur Industrial Estate, Cappancur, Tullamore, Co. Offaly	WP299(2)03	Recovery of scrap metal or other metal waste		First Schedule, Class 3,4,7,12 & 13 - Activity 2	500 tonnes at any one time	18/03/2003	14/03/2003	13/03/2006
Offaly Co. Council	Michael McNameera & Co. Ltd.	Gavin's Quarry, Arden Road, Tullamore, Co. Offaly.	WP24/03		Only excavated materials which conform to the EU Waste Catalogue ref. 170504 and originate from the construction of the new Regional Hospital Tullamore, may be accepted at the site.	First Schedule, Activity 5 / Fourth Schedule, Class 10.		03/04/2003	02/04/2003	30/09/2005 (received notification, on 04/10/04, of renewal of permit to this date, old expiry date was: 01/04/2004)
Offaly Co. Council	David Bracken Junior, Ballycumber Exports	The Pound, Ballycumber, Co. Offaly.	WP9/01	Dismantling and Recovery	End-of-Life vehicles - EWC Code 160104	Third Schedule, Class 13 / Fourth Schedule, Classes 3 & 13 / First Schedule Activities 2 & 3.		17/06/2003	13/06/2003	12/06/2006
Offaly Co. Council	David Bracken Senior	Clara Road, Ballycumber, Co. Offaly.	WP/501		End-of-Life vehicles - EWC Code 160104	Third Schedule, Class 13 / Fourth Schedule, Classes 3 & 13 / First Schedule Activities 2 & 3.		17/06/2003	13/06/2003	
Offaly Co. Council	Oliver Fay	Gavin's Quarry, Arden Road, Tullamore, Co. Offaly.	WP29/03		Only excavated materials which conform to the EU Waste Catalogue ref. 170504 may be accepted at the site. No other waste types are to be deposited at this facility.	Fourth Schedule, Class 10 / First Schedule Activity 5.		14/07/2003	11/07/2003	10/07/2004
Offaly Co. Council	Gerry Seery	Carrick Road, Edenderry, Co. Offaly	WP16/02		Only excavated materials which conform to the EWC code reference 170504 may be accepted at the site.	Fourth Schedule, Class 10 / First Schedule Activity 5.		14/07/2003	10/07/2003	09/07/2006
Offaly Co. Council	Tom Newson	Holmshill, Bluebell, Tullamore, Co. Offaly	WP34/03		Only excavated materials which conform to the EWC code reference 170504 may be accepted at the site.	Fourth Schedule, Class 10 / First Schedule Activity 5.		01/09/2003	26/08/2003	25/02/2004
Offaly Co. Council	Midland Rifle Range	Cloghan Road, Bluebell, Tullamore, Co. Offaly	WP33/03		Only excavated materials which conform to the EWC code reference 170504 may be accepted at the site.	Fourth Schedule, Class 10 / First Schedule Activity 5.		01/09/2003	26/08/2003	25/08/2004
Offaly Co. Council	Tullamore Golf Club	Brookfield, Tullamore, Co. Offaly	WP32/03		Only excavated materials which conform to the EWC code reference 170504 may be accepted at the site.	Fourth Schedule, Class 10 / First Schedule Activity 5.		01/09/2003	29/08/2003	28/11/2003
Offaly Co. Council	Pius Larkin	Cookderragh, Doon, Co. Offaly	WP26/03		Only excavated materials which conform to the EWC code reference 170504 (soil & stones other than those mentioned in 170503) may be accepted at the site.	Fourth Schedule Class 10, First Schedule Activity 5.		24/09/2003	22/09/2003	21/09/2006
Offaly Co. Council	Michael Egan	New Road, Clara, Co. Offaly	WP08/02(2)03		Only excavated materials which conform to the EWC code reference 170504 may be accepted at the site. No other waste types are to be deposited at this facility.	Fourth Schedule Class 10, First Schedule Activity 5.		09/10/2003	02/10/2003	01/10/2004
Offaly Co. Council	Michael Kimurray	Ballycan, Mount Lucas, Tullamore, Co. Offaly	WP 31/03		Only excavated materials which conform to the EWC code reference 170504 (soil & stones other than those mentioned in 170503) may be accepted at the site.	Fourth Schedule Class 10, First Schedule Activity 5.		08/10/2003	29/09/2003	28/09/2004
Offaly Co. Council	Mr. Oliver Cribben	Bellinowart South, Bracknagh, Co. Offaly	WP35/03		Only excavated materials which conform to the EWC code reference, 170504 (soil & stones other than those mentioned in 170503) may be accepted at the site. No other waste types are to be deposited at this facility.	Fourth Schedule Class 4, First Schedule, Activity 5.		24/11/2003	21/11/2003	20/02/2004
Offaly Co. Council	Mr Kieran Claffey	Clonony More, Cloghan, Co. Offaly	WP26/03		Only excavated materials which conform to the EWC code reference 17 05 04 (soil and stones other than those mentioned in 17 05 03) may be accepted at the site. Neither other waste types are to be deposited at this facility.	Class 10 of the Fourth Schedule and Activity 5 of the First Schedule		10/12/2003	09/12/2003	09/12/2004
Offaly Co. Council	Brendan Beauclot	Dunow, Tullamore	WP42/03	Facility to disassemble computers by hand	16 02 14 Discarded equipment other than those mentioned in 160209 to 160213.	Activities 2 & 5 of the First Schedule and Classes 3, 4 & 13 of the Fourth Schedule	50 tonnes per year	18/02/2004	12/02/2004	12/02/2007
Offaly Co. Council	Andrew Grennan	Mooreck, Ballycumber, Co. Offaly/Lasmonaghan, Ballycumber, Co. Offaly	WP 43-03	Disposal of Waste	17 05 04 Soil and Stones other than those mentioned in 17 05 03	Class 10 of the Fourth Schedule and Activity 5 of the First Schedule		27/02/2004	27/02/2004	27/02/2005
Offaly Co. Council	ESB International	ESB Generating Station, Rhode	WP 46/04	Recovery of waste	Activity 3 - Recycling or Reclamation of Metals and Metal Compounds Activity 4 - Recycling and Reclamation of other Inorganic Compounds	Activity 5		07/05/2004	04/05/2004	03/05/2005
Offaly Co. Council	Anthony Quinn	Osigan, Geashill, Tullamore, Co. Offaly	WP 37/03		17 05 04 soil and stones other than those mentioned in 17 05 03	Class 10 of the Fourth Schedule and Activity 5	15000	01/06/2004	31/05/2004	30/05/2007
Offaly Co. Council	Tony Flanagan	Ross, Scraggan, Co. Offaly.	WP 44-03		17 05 04 soil and stones other than those mentioned in 17 05 03	Class 10 of the Fourth Schedule and Activity 5 of the First Schedule	2000	11/06/2004	09/06/2004	08/06/2005
Offaly Co. Council	Maurice Gunning	Bermon, Co. Offaly	WP 52-04	Recovery of waste	17 05 04 Soil and Stones other than those mentioned in 17 05 03	4th Schedule of WMA, 1996, Class 10 1st Schedule of WM Permit Regs., 1998, Activity 5	15,000	30/08/2004	18/06/2004	17/06/2005



	Entreprises Ltd.				17 05 04: Soil & Stones other than those mentioned in 17 05 03	Activity 5 of the First Schedule				
Offaly Co. Council	Noel Regan & Sons (Plant Hire) Ltd	Aghamore, Raheen Rd., Co. Offaly	WP 18/02(2)04	Facility to accept top soil	17 05 04: Soil & Stones other than those mentioned in 17 05 03	First Schedule-Activity 5, Fourth Schedule-Classes 4 & 10	10,000 tonnes	28/10/2004	28/10/2004	28/10/2005
Offaly Co. Council	Chrisy Gorman	Mulagh Hill, Killurn, Tullamore, Co. Offaly	WP55/04	Facility to accept top soil	17 05 04: Soil & Stones other than those mentioned in 17 05 03	First Schedule-Activity 5, Fourth Schedule-Class 4, Fourth Schedule-Class 10	Less than 5,000 tonnes	03/12/2004	25/11/2004	24/11/2007
Offaly Co. Council	Chrisy Gorman	Mulagh Hill, Killurn, Tullamore, Co. Offaly	WP59/04		17 05 04	Class 4 & 10	Less than 5,000 tonnes	28/02/2005	25/11/2004	24/11/2007
Offaly Co. Council	Tom Naughton	Tinnamuck West, Moate, Co. Offaly	WP 55/04	Facility to accept top soil	17 05 04: Soil & Stones other than those mentioned in 17 05 03	First Schedule-Activity 5, Fourth Schedule-Class 4, Fourth Schedule-Class 10	Less than 5,000 tonnes	03/12/2004	26/11/2004	25/11/2007
Offaly Co. Council	Aidan Usher	The Derries, Edenderry, Co. Offaly	WP66/04	Site to be raised for dwelling house	17 05 04 Soil & stones other than those mentioned in 17 05 03	1st schedule Activity 5, 4th schedule class 4 4th schedule class 10		12/05/2005	01/04/2005	31/03/2008
Offaly Co. Council	Celsus Doolan Plant Hire Ltd	Kinabinnia, Tullamore, Co. Offaly	WP65/04	Field to be raised for agricultural use	17 05 04 Soil & stones other than those mentioned in 17 05 03	1st schedule Activity 5, 4th schedule class 4 4th schedule class 10		17/05/2005	01/04/2005	31/03/2008
Offaly Co. Council	John Casey	Cavemount, Dangan, Co. Offaly	WP64/04	Filing for a yard	17 05 04, 17 01 01, 17 01 02	1st schedule Activity 5, 4th schedule class 4		17/05/2005	21/04/2005	20/10/2005
Offaly Co. Council	Killeshal Precast Ltd	Killeshal, Dangan, Co. Offaly	WP58/04	Manufacture and treatment of concrete products	17 01 01 Concrete	1st schedule Activity 5, 4th schedule class 4 4th Schedule class 11, 13		17/05/2005	11/03/2005	10/03/2008
Offaly Co. Council	Heaton Contractors Ltd	Scraggan, Tullamore, Co. Offaly	WP63/04	Re-instatement of land	17 05 04	First Schedule-Activity 5, Fourth Schedule-Classes 4, 10		12/05/2005	19/04/2005	18/04/2008
Offaly Co. Council	Michael Egan	New Road, Clara, Co. Offaly	WP08-02(3)05	Filing in of gravel pit.	17 05 04	First Schedule-Activity 5, Fourth Schedule-Classes 4, 10		12/05/2005	19/04/2005	18/04/2005
Offaly Co. Council	Sean O'Farrell	The Derries, Edenderry, Co. Offaly	WP 69-05	Raise site to bring it up to road level	17 05 04	First Schedule-Activity 5, Fourth Schedule-Classes 4, 10		20/06/2005	27/04/2005	26/04/2008
Offaly Co. Council	Stephen Conroy	Cionad, Dangan, Co. Offaly	WP 75-05	Low lying field	17 05 04	First schedule - Activity 5, Fourth schedule-classes 4, 10		20/06/2005	16/05/2005	15/05/2008
Offaly Co. Council	Patrick Grogan	Middle Road, Feeghs, Banagher, Co. Offaly	WP 73/05	Low lying field	17 05 04	First Schedule-Activity 5, Fourth Schedule-Classes 4 & 10		20/06/2005	17/05/2005	16/11/2005
Offaly Co. Council	Willie Moran	Gortacawn, Banagher, Co. Offaly	WP 80/05	Fit site with soil and stones for agricultural benefit	17 05 04	First Schedule-Activity 5, Fourth Schedule-Classes 4 & 10		20/06/2005	19/05/2005	19/05/2008
Offaly Co. Council	Patrick Molloy	Tonlemore, Clonham, Co. Offaly	WP 78/05	Fit site with soil and stones for agricultural benefit	17 05 04	First Schedule-Activity 5, Fourth Schedule-Classes 4 & 10	5000 per annum	20/06/2005	06/05/2005	06/05/2008
Offaly Co. Council	Aidan and Martina Mahony	Cushina, Portlannington, Co. Offaly	WP 79/05	Filing in of 0.5 acres of land and raising land by 1 metre with soil and stones	17 05 04	First Schedule-Activity 5, Fourth Schedule-Classes 4 & 10		20/06/2005	09/05/2005	09/11/2005
Offaly Co. Council	Pat McBride	Derry Rovers F.C., Kilane, Edenderry, Co. Offaly	WP 83/05	Build up a viewing area around the soccer pitch	17 05 04	First schedule - activity 5, Fourth schedule class 4		20/06/2005	26/05/2005	26/05/2006
Offaly Co. Council	Matthew Kelly	Back Road, Dangan, Co. Offaly	WP 74/05	Raising of site	17 05 04	First schedule - activity 5, Fourth schedule class 4, class 10		20/06/2005	05/05/2005	04/05/2006
Offaly Co. Council	Tom Tyrrell	Tinnamuck West, Moate, Co. Offaly	WP 71/05	Field to be raised for agricultural use	17 05 04	First schedule - activity 5, Fourth schedule class 4, class 10		20/06/2005	5/5/2005	04/05/2008
Offaly Co. Council	Martin Kearney	Ballykean, Shan, Edenderry	WP 47/04	Leveling of site	17 05 04	First schedule - activity 5, Fourth schedule class 4, class 10		20/06/2005	01/04/2005	31/03/2008
Offaly Co. Council	Eamonn Flannery	Cumraghan, Banagher, Co. Offaly	WP 22 03	Reconstruction of low lying land	17 05 04	First schedule - activity 5, Fourth schedule class 4, class 10		20/06/2005	19/05/2005	18/05/2008
Offaly Co. Council	Heaton Contractors Ltd	Meeaghans, Tullamore, Co. Offaly	WP 62/04	Re-instatement of land	17 05 04	First schedule - activity 5, Fourth schedule class 4, class 10		20/06/2005	20/05/2005	19/05/2008
Offaly Co. Council	Aidan Usher	The Derries, Edenderry, Co. Offaly	WP 66/04	Site to be raised for dwelling house	17 05 04	First schedule - activity 5, Fourth schedule class 4, 10		20/06/2005	01/04/2005	31/03/2008
Offaly Co. Council	John Casey	Cavemount, Dangan, Co. Offaly	WP 64/04	Filing for a yard	17 05 04, 17 01 01, 17 01 02	First schedule - activity 5, fourth schedule class 4		20/06/2005	21/04/2005	20/10/2005
Offaly Co. Council	Heaton Contractors Ltd	Scraggan, Tullamore, Co. Offaly	WP 63/04	Re-instatement of land	17 05 04, 17 05 03	First Schedule, Activity 5, Fourth Schedule, Class 10.		20/06/2005	19/04/2005	19/04/2008
Offaly Co. Council	Nicholas O'Neill	Skerries, Clonbullogue, Tullamore, Co. Offaly	WP 70/05	Field to be raised for agricultural use	17 05 04, 17 05 03	first schedule, activity 5, fourth schedule class 4 & 10		20/06/2005	22/04/2005	21/04/2008
Offaly Co. Council	Michael Egan	New Road, Clara, Co. Offaly	WP 08-02(3)05	Filing in of gravel pit.	17 05 04, 17 05 03	first schedule, activity 5, fourth schedule class 4 & 10		20/06/2005	19/04/2005	18/04/2008
Offaly Co. Council	Midano Rifle Club	Derrymore, Blueball, Tullamore, Co. Offaly	WP 72/05	soil and stones for road	17 05 04, 17 05 03	First schedule, Activity 5, Fourth schedule, Class 4 & 10	61,000	20/06/2005	21/04/2005	20/04/2008
Offaly Co. Council	In Granite Ltd	Kilcoursey, Clara, Co. Offaly	WP 56/04	Manufacture and treatment of concrete products	17 01 01	First schedule, Activity 5, Fourth schedule, Classes 4, 11 & 13		17/05/2005	11/03/2005	10/03/2008
Offaly Co. Council	Joe Cummins	Ballystrig, Rhode, Co. Offaly	WP 92/05	Field to be raised for agricultural use	17 05 04 17 05 03	First schedule, Activity 5, Fourth schedule, Classes 4 & 10		25/08/2005	23/08/2005	22/08/2008
Offaly Co. Council	Ward & Burke Construction	Sillogee Wood, Durnow Demesne, Tullamore, Co. Offaly	WP 91/05	Construction of an access road and casing of area around a well	17 05 04, 17 05 03	First schedule, activity 5, Fourth schedule, class 4		25/08/2005	16/08/2005	15/08/2008
Offaly Co. Council	Patrick Grogan	Kilcumey Mtr, Clonham, Co. Offaly	WP 97/05	Making a road through farm land	17 01 01, 17 01 02	First schedule, Activity 5, Fourth schedule, class 4		25/08/2005	18/08/2005	17/11/2005
Offaly Co. Council	Sean Kelly	Derryville, Portlannington, Co. Offaly	WP 89/05	Using broken waste concrete to make a yard	17 01 01	First schedule, Activity 5, Fourth schedule, Class 4		25/08/2005	18/08/2005	17/11/2005
Offaly Co. Council	Patrick R Mangan	Thomwell, Edenderry, Co. Offaly	WP 93/05	Low lying field to be raised for agricultural use	17 05 04, 17 05 03	First schedule, Activity 5, Fourth schedule, Class 4 & 10		25/08/2005	28/07/2005	27/07/2008
Offaly Co. Council	Tim O'Connor	Kilneen, Dangan, Co. Offaly	WP 86/05	Proposes to raise the site with soil and stones to build on	17 05 04, 17 05 03	First schedule, Activity 5, Fourth schedule, Class 4		31/08/2005	06/07/2005	05/07/2008
Offaly Co. Council	Richard Bailey	Mountcartern, Banagher, Co. Offaly	WP 67/05	Raising of a low lying area of the field with soil and stones in order to make the field level for	17 05 04, 17 05 03	First schedule, Activity 5, Fourth schedule, Class 4 & 10		31/08/2005	15/07/2005	14/07/2008
Offaly Co. Council	Michael Dunne	Cushina, Portlannington, Co. Offaly	WP 88/05	Raise the level of a field	17 05 04, 17 05 03	First schedule, activity 5, Fourth schedule, class 4 & 10		31/08/2005	13/07/2005	12/07/2008



				material arising from the development "32 Berth Public Marina at Ballylesque" (PD/00/1764). The dredged materials is to be dewatered and spread on land at the facility.		1996				
Roscommon Co. Council	Bergh Waste Disposal Ltd.	Ballagherdeen Industrial Estate, Ballagherdeen, Co. Roscommon	WMP/2/02	Recycling & Waste Transfer Station		3rd Schedule, Activities 11, 12 & 13 & 4th Schedule, Activities 2,3,4,11 & 13	Not to exceed 5,000 tonnes per annum.	12/06/2002	07/06/2002	06/08/2004
Roscommon Co. Council	Fergus Hanley	Ballylesque, Co. Roscommon	WMP/04/02	Recovery	Recovery of 30,000m <sup>3</sup> of boulder clay arising from the development at the ESB power station at Lanesboro. The material is to be used in the construction of embankments under the roads and carpark for a new Marina project in Ballylesque.	Class 10 of the 4th Schedule of the WMA 1996		09/08/2002	07/08/2002	06/08/2004
Roscommon Co. Council	Padraig Beina, Beina's Bins Ltd	Kilmacusey, Elphin, Co. Roscommon	WMP/03/02	Handling and separation of dry recyclables	Handling and separation of dry recyclables, ie, paper, plastic, timber packaging, glass and cans	Article 5 of the WMP(Permit) Regs, 1998	5,0000 ply	23/08/2002	21/08/2002	20/08/2005
Roscommon Co. Council	McSharry Brothers Plant Sales Ltd.	Fourmilahouse, Roscommon	WMP/07/02	Recovery of end of life vehicles		Classes 3, 4, 5, 6, 8, 18		10/10/2002	09/10/2002	09/10/2005
Roscommon Co. Council	Hanley Brothers Ltd.	ESB Powerstation, Shannonbridge	WMP/08/02	Recovery of subsoil	Facility for the recovery of 53,000m <sup>3</sup> of subsoil arising from the development at the ESB power station at Shannonbridge. The material is to be used in the restoration of ground where quarrying was carried out under planning permission Ref. No. 97/428	Class 4 of 4th Schedule		19/11/2002	18/11/2002	17/11/2004
Roscommon Co. Council	Hanley Brothers Ltd.	Laragan, Elphin, Co. Roscommon	WMP/10/02	Recovery of subsoil	Facility for the recovery of 36,000m <sup>3</sup> of subsoil arising from the development at the ESB power station at Shannonbridge. The material is to be used in the restoration of ground where quarrying was carried out.	Class 10 of 4th Schedule		20/01/2003	14/01/2003	13/01/2005
Roscommon Co. Council	Wills Brothers Ltd.	Ballylahan Bridge, Foxford, Co. Mayo	WMP/11/02	Recovery				31/01/2003	28/01/2003	27/01/2005
Roscommon Co. Council	Conor Hannan, Athlone Properties	Monkland, Athlone, Co. Roscommon	WMP/03/03	Recovery of Inorganic and Organic material which will be used to fill an excavated quarry.		4th Schedule - Classes 4 & 2		13/05/2003	08/05/2003	07/05/2005
Roscommon Co. Council	Vincent Hanly	Ardaraighmore Townland, Roscommon	WMP/14/02	Recovery	Facility for the recovery of 15,000m <sup>3</sup> of inorganic and organic material. The material is to be used in the filling of a low-lying site with boulder clay.	4th Schedule - Classes 4 & 2		14/05/2003	13/05/2003	12/05/2005
Roscommon Co. Council	T.Conroy & Sons	Ardaraighmore Townland, Roscommon	WMP/13/02	Recovery	Facility for the recovery of 2,600m <sup>3</sup> of Inorganic and Organic material. The material is to be used in filling site with subsoil material.	4th Schedule - Classes 4,2 & 13		30/06/2003	27/06/2003	26/06/2005
Roscommon Co. Council	Shine Construction (Athlone) Ltd.	Daneshill, Monkland, Roscommon	WMP/13/03	Recovery	Facility for the recovery of 700m <sup>3</sup> of Inorganic material. This material will be used in the filling of low-lying site with Inorganic material.	4th Schedule - Class 4		13/08/2003	11/08/2003	10/08/2005
Roscommon Co. Council	Garry Nolan	Clooneybaine Townland, Roscommon	WMP/10/03	Recovery	Facility for the recovery of 45,000m <sup>3</sup> of subsoil/soil from various projects within County Roscommon. The material is to be used in the filling of a low-lying site with boulder clay, which will have a consequential benefit for an agricultural activity or ecological system.	4th Schedule - Class 2 & 4		15/10/2003	13/10/2003	12/10/2006
Roscommon Co. Council	Pat Gaynor	Ratra, Tibohine, Co. Roscommon	WMP/05/03	Facility for the recovery of subsoil/soil from the various projects within Co. Roscommon. The material is to be used in the filling of low-lying site with boulder clay, which will have a consequential benefit for an agricultural activity or ecological system.	Soil/Subsoil Class 17-05-04	Fourth Schedule, Classes 2 & 4	65000	20/11/2003	19/11/2003	18/11/2006
Roscommon Co. Council	Sean Doyle & Sons	Clooneybaine, Lanesboro Road, Roscommon	WMP/08/03	Facility for the recovery of subsoil/soil from the various projects within Co. Roscommon. The material is to be used in the filling of low-lying site with boulder clay, which will have a consequential benefit for the development of the site at a later stage.	Soil/Subsoil Class 17-05-04	Schedule 4, Class 2 and Class 4	10,000m <sup>3</sup>		21/01/2004	21/01/2007
Roscommon Co. Council	Gerry Nolan	Tromau, Roscommon	WMP/12/02	Facility for the recovery of subsoil/soil	17-05-04 Soil/Subsoil	Schedule 4, Class 2 and Class 4, Class 10 and Class 13	21,000m <sup>3</sup>	29/04/2004	26/04/2004	25/04/2007
Roscommon Co. Council	Donal Conlon	Camadoc, Kilmora, Co. Roscommon	WMP/10/04	Facility for the recovery of boulder clay	17 05 04: Boulder Clay	Schedule 4, Class 2 & 4	2,500m <sup>3</sup>	02/11/2004	29/10/2004	25/10/2006
Roscommon Co. Council	Mike Griffin	Rooskagh, Beahamulla, Athlone, Co. Roscommon	WMP/C1/05	Facility for the recovery of 3000m <sup>3</sup> of inorganic material. This material will be used in the filling of low lying site with inorganic material	17 05 04	schedule 4, Class 4 and class 10	5,240m <sup>3</sup> Inorganic Material	21/03/2005	18/03/2005	3 years from the date of issue
Roscommon Co. Council	St. Michael's GAA Club	Knockaduff, Coofehall, Boyle, co. Roscommon	WMP/13/04	Filling of low lying area to allow development of training facilities. The material is to be used in the filling of a low lying site with boulder clay, which will have a consequential benefit for an agricultural activity or ecological system	17 05 04	schedule 4, class 10	2000 tonnes	21/03/2005	14/03/2005	2 years from the date of issue



					from various building projects in Co. Roscommon. This material will be used in the filling of low lying site with subsoil material					
Roscommon Co. Council	Mika Griffin	Roodagh, Beshamulla, Athlone, Co. Roscommon	WMP/01/05	Facility for the recovery of 3000m3 of inorganic material. This material will be used in the filling of low lying site with inorganic material	17 05 04	4th schedule, class 4 & 10	5240m3 inorganic material	29/04/2005	18/03/2005	three years from the date of issue
Roscommon Co. Council	Fergal O' Gara	Roxborough, Townland, Roscommon	WMP/18/02	Deposit of approx 8000m3 of subsoil, which will be excavated from sites in the Roscommon area	17 05 04	4th schedule, class 2 & 4	8000m3 of subsoil	25/05/2005	24/05/2005	three years from the date of issue
Roscommon Co. Council	Matt Brennan	Leroynne & Cionastior Townland	WMP/11/04	Filling of low area with excess soil from housing development	17 05 04	Fourth schedule, class 10		08/06/2005	08/09/2005	three years from the date of issue
Roscommon Co. Council	Aidan Greghy	Foughl, Tren, Castlere, Co. Roscommon	WMP/08/05	Facility for the recovery of 50,000m3 of topsoil and subsoil to improve the agricultural value of the land	17 05 04	fourth schedule, class 2,4 and 10	50,000m3	13/07/2005	12/07/2005	3 years from the date of issue
Roscommon Co. Council	Pat Gaynor	Ratra, Tibohine, Co. Roscommon.	WMP/05/05	Facility for the recovery of 64,886m3 of subsoil from various projects within county	17 05 04	Fourth schedule, Class 2 & 4	64,886 cubic metres	20/07/2005	19/07/2005	3 years from the date of issue
Roscommon Co. Council	Mark Kelly	Araghty, Atnleague, CO. Roscommon	WMP/14/05	Lands to be raised by placing subsoil and topsoil to improve the agricultural value of land	17 05 04	Fourth schedule, Class 2, 4 & 10	50,000 m3	05/08/2005	04/08/2005	3 years from the date of issue
Roscommon Co. Council	ABS Recovery Ltd	Unit 2, Monksland Trading Centre, Athlone, Co. Roscommon	WMP/06/05	Facility for the short-term storage of damaged cars	16 01 04	Fourth schedule, Class 13		05/08/2005	04/08/2005	3 years from the date of issue
Roscommon Co. Council	Sean Doyle & Sons	Circular Road, Roscommon	WMP/09/03	Crushing of waste glass to sand particles for wind blades	17 02 02	Fourth schedule, Class 4 & 10	10 tonnes per wk	11/08/2005	09/08/2005	3 years from the date of issue
Roscommon Co. Council	Brendan McManus	Boggarfin, Roscommon Road, Athlone, Co. Roscommon	WMP/15/05	Filing of site with subsoil and topsoil with the purpose of improving the site for agricultural use	17 05 04	Fourth schedule, Class 2, 4, 10 & 13	5000 tonnes	11/08/2005	05/08/2005	2 years from the date of issue
Roscommon Co. Council	Noel Regan & Sons Plant Hire Ltd	Ishlawn, Belleghaderreen, Co. Roscommon	WMP/17/05	Filing of site with subsoil and topsoil with the purpose of improving the site for agricultural use	17 05 04	Fourth schedule, Class 2, 4, 13	100,000m3	16/08/2005	15/08/2005	3 years from the date of issue
Roscommon Co. Council	Michael Hester	Longford, Castlere, Co. Roscommon	WMP/07/05	Lands to be raised by placing subsoil and topsoil to improve the agricultural value of land	17 05 04	Fourth schedule, Class 2, 4 and 10	50,000m3	19/08/2005	17/08/2005	3 years from the date of issue
Roscommon Co. Council	Conor Hannon	Cranigan, Drum, Athlone	WMP/09/05	Lands to be raised by placing subsoil and topsoil to improve the agricultural value of land	17 05 04	Schedule 4, Class 2 and 4	155,000m3	15/09/2005	22/07/2005	22/07/2008
Roscommon Co. Council	Kevin Leahy	Liscarrow, Fuerty, Co. Roscommon	WMP/13/05	Recovery of Life Vehicles	16 01 04	Schedule 8 Class 3 and Schedule 4 Class 3, 4, 5, 8 and 13		03/10/2005	29/09/2005	29/09/2008
Roscommon Co. Council	Kilbride Developments	Coolshaghena Townland, Co. Roscommon	WMP/12/05	Lands to be raised by placing subsoil and topsoil to improve the agricultural value of land	17 05 04	Schedule 4, Class 4 and 10	20,000	15/09/2005	22/07/2005	22/07/2008
Roscommon Co. Council	Micland Contractors	Ballyclare, Ballyesque, Co. Roscommon	WMP/21/05	Filing of site with subsoil and topsoil with the purpose of improving the site for agricultural use	17 05 04	Schedule 4, Class 2, 4, 10 and 13	45,000m3	26/09/2005	23/09/2005	23/09/2008
Roscommon Co. Council	Tom Connolly	Comasser, Killoon, Athlone, Co. Roscommon	WMP/16/05	Filing of site with subsoil and topsoil with the purpose of improving the site for agricultural use	17 05 04	Schedule 4 Class, 2, 4 and 13	17,440m3	07/09/2005	02/09/2005	02/09/2008
Roscommon Co. Council	Constructors Morris Bros. Ltd	Kilkeevan Park, Castlere, Co. Roscommon	WMP/25/05	Filing site with imported fill including gravel, building rubble with the purpose of raising the site	Soil/Subsoil Class 17-05-04	Schedule 4, class 4	4,000 cubic metres	26/10/2005	19/10/2005	2 years from the date of issue
Roscommon Co. Council	D & M Ward	Barnog, Athlone, Co. Roscommon	WMP/27/05	Filing the site with imported fill consisting of subsoil and topsoil	Soil/Subsoil Class 17-05-04	Schedule 4, class 2, class 4, class 11 and class 14		25/10/2005	24/10/2005	2 years from the date of issue
South Dublin Co. Council	JVC Recycling Limited	Unit 5, Cookstown Industrial Estate, Dublin 24	WPR023	Recycling Facility	Household, inorganic materials	Fourth Schedule 3,4&13 / First Schedule, Part 1, Activity 5		12/08/2002	21/02/2002	20/02/2005
South Dublin Co. Council	Burns Waste Recycling Ltd.	Greenogue Industrial Estate, Rathcoole	WPR024	Transfer Station & Recycling Facility	Domestic, Commercial and Industrial Non-Toxic Waste	Fourth Schedule 3,4&13 / First Schedule, Part 1, Activity 2.5 & 6		12/08/2002	08/05/2002	07/05/2005
South Dublin Co. Council	Roadstone Dublin Ltd.	Fortunestown, Belgard Quarry, Co. Dublin	WPR025	Recycle Facility	Recovery of C&D Waste	Fourth Schedule 5 / First Schedule, Part 1, Activity 5.		12/08/2002	20/05/2002	19/05/2005
South Dublin Co. Council	Masterson Metals Ltd.	Unit F1, Weatherwell Business Park, North Lock Road, Clonsilla, Dublin 22.	WPR018	Recycling facility for recovery of scrap metals	Materials of the following nature only, shall be accepted and processed through the recycling facility - copper and copper alloys / aluminium and aluminium alloys / stainless steel / lead / zinc / steel	4th Schedule 3 & 13 / First Schedule, Part 1, Activity 2.	Commercial 8000 tonnes / Industrial 4000 tonnes / Misc 1000 tonnes	08/10/2002	01/10/2002	30/09/2005
South Dublin Co. Council	Mr. Paul Cooke	Glassamucky, Gohernadreena, Co. Dublin	WPR026	Temporary Landfill for Reclamation of Land for Agricultural Purposes	Uncontaminated soil, clay, subsoil, rock and construction & demolition waste subject to certain criteria. C&D waste will only be accepted if it has been sorted so that it consists of only dry, inert, non hazardous material such as bricks, blocks and concrete mass. No plastics, asbestos, plaster board, timber or any other material shall be accepted.	Fourth Schedule 4 & 10 / First Schedule, Part 1, Activity 5.	Total volume not to exceed 59,000m <sup>3</sup>	25/10/2002	01/10/2002	30/09/2003
South Dublin Co. Council	Cummins Metal Recycling Ltd.	John F. Kenney Drive, Naas Road, Dublin 12	WPR002	Transfer station for metals and an end of life vehicle recovery facility		Fourth Schedule 3 & 13 / First Schedule, Part 1, Activity 2&3			01/05/2003	30/04/2006
South Dublin Co. Council	Westlink Recovery Services Ltd.	Red Cow, Naas Road	WPR006	End of life vehicle recovery facility		Fourth Schedule 3 & 13 / First Schedule, Part 1, Activity 2&3			01/07/2003	30/06/2006
South Dublin Co. Council	Textile Recycling Ltd.	Glen Abbey Complex, Belgard Road, Tallaght, Dublin 24.	WPR014	Transfer station for used clothing		Fourth Schedule 4 & 13 / First Schedule, Part 1, Activity 5			01/05/2003	30/04/2006
South Dublin Co. Council	Recoverable Resources Co-op Ltd	Unit 3 Hibernian Insurance Industrial Estate, Greenhills Road, Dublin 24.	WPR015	Transfer station for used beverage containers		Fourth Schedule 3 & 13 / First Schedule, Part 1, Activity 2			01/05/2003	30/04/2006
South Dublin Co. Council	Smurfit Ireland Ltd. /a Smurfit Recycling Ireland	Lower Ballymount Road, Walkinstown, Dublin 12.	WPR021	Transfer station for waste paper and cardboard		Fourth Schedule 4 & 13 / First Schedule, Part 1, Activity 5			01/07/2003	31/06/06
South Dublin Co. Council	Bailey Waste Recycling Ltd.	Unit 14A Greenogue Business Park, Rathcoole, Co. Dublin	WPR026	Transfer station for domestic inorganic materials		Fourth Schedule 2&3 / First Schedule, Part 1, Activity 5		10/12/2004	01/05/2003	30/04/2006
South Dublin Co. Council	TPH Recycling Ltd. /a Goatstown Waste	Unit 51 Fourth Avenue, Cookstown Industrial Estate, Dublin 24.	WPR031	Transfer station for domestic inorganic materials		Fourth Schedule 3,4 & 13 / First Schedule, Part 1, Activity 2&5			01/05/2003	30/04/2006
South Dublin Co. Council	Gardon Enterprises Ltd.	Unit 77 Broomhill Road, Tallaght, Dublin 24	WPR033	Transfer station for waste computers		Fourth Schedule, 3, 4&10 / First Schedule, Part 1, Activity 5			01/07/2003	30/06/2006
South Dublin Co. Council	Renokil Initial Ltd.	Unit C1 Merrywell Business Park, Ballymount Road, Dublin 12	WPR034	Waste transfer station for non-hazardous clinical waste		Third Schedule, Activity 13 / First Schedule, Part 1, Activity 5.			01/07/2003	30/06/2006
South Dublin Co. Council	Barna Pallets Ireland	Newcastle Road, Lucan, Co. Dublin	WPR037	Wooden pallet recovery and reconditioning facility		Fourth Schedule, 2&11 / First Schedule, Part 1, Activity 5			15/08/2003	14/08/2006
South Dublin Co. Council	Tom Donohue	Edmonstown Road, Ráthamham	WPR040	Recovery - Creation of road access through forest at Craugh Rd.		4th Schedule 4 and 10 - 1st Schedule, Part 1, Activity 5		09/07/2004	01/02/2004	31/01/2006
South Dublin Co. Council	Oxigen	Ballymount Road	WPR041	Materials Recycling Facility		4th Schedule 3&4 and 3rd Schedule No. 12 and 13. - 1st Schedule, Part, Activity 5		09/07/2004	01/04/2004	31/03/2007







					150102 / Wooden Packaging 150103 / Metallic Packaging 150104 / Composite Packaging 150105 / Mixed Packaging 150106 / Glass 150107 / Paper & Cardboard 200101 / Plastics 200108 / Metals 200109	17.10	2011/2003	07/11/2003	07/11/2008	
Waterford Co. Council	John Connolly	Carrigavrahane, Fenor, Co. Waterford	WP 01/04	Recovery of Waste	Topsoil and Subsoil	Activity 5 of the First Schedule	5000	02/02/2004	30/01/2004	30/01/2007
Waterford Co. Council	Patrick Allen	36 Pearse Park, Clonmel, Co. Tipperary	WP/02/2004	Dismantling or recovery of waste				25/03/2004	25/03/2004	24/03/2004
Waterford Co. Council	Cappoquin GAA Club,	Cappoquin, Co. Waterford	WP03/04	Recovery of waste	Top Soils and Sub Soils	Activity 5, Part 1 of the First Schedule of the WM (Permit) Regs. 1998	1500	05/04/2004	30/03/2004	29/03/2007
Waterford Co. Council	Larry O'Loughane	Kilmack West, Clonmel	WP 07/04	The recovery of waste (other than hazardous waste) at a facility (other than a facility for the composting of waste where the waste held at the facility exceeds 1000 cubic metres at any time).	Topsoil and Subsoil	4th Schedule of WMA, 1996	5,000	27/04/2004	20/04/2007	25/04/2007
Waterford Co. Council	William Murphy	Minfield, Portlough	WP06/04	Recovery of waste	Topsoil and Subsoil	Activity 5	5,000	27/04/2004	25/04/2004	25/04/2007
Waterford Co. Council	Pat Houllihan	Ballymacmaguire South, Co. Waterford	WP06/04	Recovery of waste	Top Soils and Sub Soils	Activity 5 Part 1 of the 1st Schedule of WM (Permit Regs.) 1998	5,000	27/04/2004	26/04/2004	25/04/2005
Waterford Co. Council	Maurice Lenthian	Newtown, Kilmacross, Co. Waterford	WP05/04	Dismantling and recovery of end of life vehicles				27/04/2004	19/04/2004	18/04/2007
Waterford Co. Council	Thomas White	Coolteigen, Woodstown, Co. Waterford	WP/10/04	Recovery of waste	Top Soils and Sub Soils	Activity 5 of the First Schedule	4500	04/06/2004	02/06/2004	01/06/2007
Waterford Co. Council	Mary Dwane	Bawnabrahier, Dunganen, Co. Waterford	WP/11/04	Recovery of waste	Top Soils and Sub Soils	Activity 5 of the First Schedule	5000	04/06/2004	02/06/2004	01/06/2007
Waterford Co. Council	Cara Waste Management Ltd.	Coolinagoppoge, Tramore, Co. Waterford	WP/12/04	Recovery of material	15 01 01 Paper and Cardboard Packaging, 15 01 02 Plastic Packaging, 15 01 03 Wooden Packaging, 15 01 04 Metallic Packaging, 15 01 05 Composite Packaging, 15 01 06 Mixed Packaging, 15 01 07 Glass, 20 01 01 Paper and Cardboard, 20 01 39 Plastics, 20 01 40 Metals, 10 10 08 Casting Cores, 10 03 05 Waste Aluminium.	Activity 5 of the First Schedule	2160	18/06/2004	16/06/2004	15/06/2007
Waterford Co. Council	Thomas Burke	Kilrea, Cappoquin	WP 13/04	Recovery of waste	Topsoil and Subsoil	Activity 5	5,000	02/07/2004	30/06/2004	29/06/2007
Waterford Co. Council	Thomas Driver	Lisellen Intake, Tramore, Co. Waterford	WP 15/04	Sea Wall Repair	Subsoil (170504), stone (170504), Rock(170504)	Recovery of waste (other than hazardous waste) at a facility (other than a facility for the composting of waste where the waste held at the facility exceeds 1000m3 at any time)	5,000	23/07/2004	22/07/2004	21/07/2007
Waterford Co. Council	Joseph Murphy	Carriscrackdockbog, Dunhill Co. Waterford	WP16/04	Recovery of waste	Sub-soil and Topsoil	Activity 5	5,000	03/08/2004	27/08/2004	26/08/2007
Waterford Co. Council	Sindale Transport Ltd.	Kilure, Co. Waterford	WP17/04	Recovery of Waste	Sub-soil and Topsoil	Activity 5, Part 1 of 1st schedule of WM (Permit) Regs. 1998	5,000	03/09/2004	27/08/2004	26/08/2007
Waterford Co. Council	Tony Kirwan Civil Engineering Contractors Ltd	Gaultstown, Butestown, Co. Waterford	WP018/04	Fourth Schedule-Classes 4 & 10	Construction & Demolition	4th Schedule, Classes 4 & 10	5,000	01/11/2004	29/10/2004	28/10/2007
Waterford Co. Council	Dermot O' Brian	Bafinlevale East, Ballyduff upper	WP 23/05	recycling or reclamation of other inorganic materials	subsoil and stones	part 1 of the 1st schedule, activity 5	5000 tonnes	06/05/2005	05/05/2005	04/05/2008
Waterford Co. Council	James Cahill	Ballygibbon Lower, Co. Waterford	WP 24/05	Recovery of waste	Top Soils and Sub Soils	Activity 5, Part 1 of the First Schedule of the WM (Permit) Regs. 1998	1500 tonnes	13/05/2005	12/05/2005	11/05/2008
Waterford Co. Council	Cappawhite Contractors Limited	Ballyhane, Cappawhite, Co. Tipperary, Division of Carrickmacross, Kilmacdon.	WP 19/04	Recovery of waste	Top Soils and Sub Soils	Activity 5 of the First Schedule	5,000	31/05/2005	27/05/2005	26/05/2008
Waterford Co. Council	Tony Kirwan Civil Engineering	Ballycraddock, Kilmacdon, Co. Waterford	WP 25/05	Filing existing sloping field to return land to agricultural use	17 01 07, 17 05 04	Activity 5 of the First Schedule	25,000	23/06/2005	27/06/2005	27/06/2008
Waterford Co. Council	Philip Cusack	Gortahilly, Dunmore East, Co. Waterford	265	Topsoil and subsoil	17 05 04	Recycling or reclamation of other inorganic materials	6,000	07/08/2005	22/08/2005	21/08/2008
Waterford Co. Council	Jim Moroney	Ballycullane, Dunganen, Co. Waterford	37/05	Breakers Yard	16 01 04	Activity 3	500	04/10/2005	03/10/2005	03/10/2008
Waterford City Council	IPODEC Ireland Ltd.	Carriganard, Six Cross Roads, Kibarry, Waterford.	WR/02/00	Materials Handling & Recycling Facility	blending, mixture or re-packaging of waste prior to submission to any waste disposal activity. Recycling or reclamation of organic substances, metals or metal compounds or other organic materials and storage of waste prior to submission to any waste disposal activity	WMA, 1996 and WM(permit) Reg, 1998 SI No: 165 of 1998		20/12/2000	01/12/2000	01/12/2003
Waterford City Council	Cara Waste Management Ltd.	Parkview House, Beech Hill, Clonskeagh, Dublin 4/Coolinagoppoge, Tramore, Co. Waterford	WP/06/2003	Recovery and transfer for recycling of the material detailed in Table 1.1 of Waste Permit	See Condition 1.7 of Waste Permit for EWC codes.			13/01/2004	28/10/2003	28/10/2006
Waterford City Council	Mario and Jane Parélla	Carrickhill, KIL Co. Waterford	WP/04/04	Recovery of waste	Top Soils and Sub Soils	Activity 5 of the First Schedule	1000	08/04/2004	03/04/2004	02/04/2005
Waterford City Council	Waterford Institute of Technology	Woodstown, Co. Waterford	WP/05/04	Recovery of waste	Top Soils and Sub Soils	Activity 5 of the First Schedule	5000	26/05/2004	24/05/2004	23/05/2007
Waterford City Council	W & M Mulcany	Skenanara (Humble), Dunganen, Co. Waterford	WP/21/05	Recovery of waste	Top Soils and Sub Soils	Activity 5 of the First Schedule	5000 tonnes	04/03/2005	03/03/2005	
Waterford City Council	Jerry Power	Jarleville, Tallow, Co. Waterford	WP20/05	Recovery of waste	15 01 03	Activity 5 of the First Schedule	5000 tonnes	04/03/2005	01/03/2005	



	Lina Metal Co.			compounds, other inorganic materials.		in accordance with the 4th schedule of the WMA, 1996, Class 3, 4, 13.				
Westmeath Co. Council	Mr Joe Conry, Gandy Motors Ltd via Mullingar Car Dismantlers,	Railway Yard, Grove Street, Mullingar, Co Westmeath	WP3	Treat and recover metal and metal compounds	Recycling or reclamation of metals and metal compounds. Recycling or reclamation of other inorganic materials. Storage of waste	4th Schedule of the WMA, 1996 Class, 3, 4 and 13		29/1/2001	08/11/2000	08/11/2003
Westmeath Co. Council	Athlone Waste Disposal Company Ltd.	Carronroy, Athlone.	WP-01-2001	Disposal & Recovery	Recycling or reclamation of organic substances which are not used as solvents (incl) composting and other biological transformation processes.	3rd Schedule of WMA 1996, Class 11, 12, 13 & 4th Schedule of WMA 1996, Class 2 & 13.		07/02/2002	12/06/2001	12/06/2004
Westmeath Co. Council	Mullingar Employment Action Group	Railway Yard, Grove St. Mullingar, Co. Westmeath	WP-02-2001	Recycling or reclamation	Recycling or reclamation of metals and metal compounds and of other inorganic materials (limited to glass)	3rd Schedule of WMA 1996, Class 13 & 4th Schedule of WMA Class 3, 4, 13		07/02/2002	11/06/2001	11/06/2004
Westmeath Co. Council	Glenmeath Company Ltd.	Walshestown South, Mullingar, Co. Westmeath	WP-03-2001	Recycling & Reclamation	Recycling or reclamation of organic substances which are not used as solvents (including composting and other biological transformation processes)	3rd Schedule of WMA 1996, Class 13 & 4th Schedule of WMA, Class 2, 3, 4, 13		11/06/2002	11/06/2002	11/06/2004
Westmeath Co. Council	John Commons	Walshestown, Mullingar, Co. Westmeath	WP-07/2002			Classes 2,4,11,13		14/08/2002	07/08/2002	08/08/2005
Westmeath Co. Council	Ms. Deirdre Newman Dilger	Lacken, Mullyhamham, Co. Westmeath	WP-08/2002	Waste Recovery Activities	No municipal solid/household domestic waste except for clean newspaper shall be accepted at the facility.	Classes 2, 11, 13		22/08/2002	19/08/2002	18/08/2005
Westmeath Co. Council	Brendan Gaffey	Tullycross, Moydrum, Athlone, Co. Westmeath	WP-09/2002			Classes 2,4,11,13 - 4th Schedule		14/11/2002	07/11/2002	06/11/2005
Westmeath Co. Council	Tony Hamell	Corbonny, Athlone, Co. Westmeath	WP-10/2002	Waste Recovery Activities		Classes 2,4,11,13 - 4th Schedule		22/11/2002	14/11/2002	13/11/2005
Westmeath Co. Council	Coffey Construction	Lugcasha, Ballymore, Co. Westmeath	WP-12/2002	Waste Recovery Activities	No municipal solid/household domestic waste shall be accepted at the facility.	Fourth Schedule - Classes 2,4,10		03/01/2003	19/12/2002	18/12/2005
Westmeath Co. Council	Coffey Construction	Dunegan, Mount Temple, Moate, Co. Westmeath	WP-14/2002	Waste Recovery Activities	No municipal solid/household domestic waste shall be accepted at the facility.	Fourth Schedule - Classes 2,4,10		03/01/2003	19/12/2002	18/12/2005
Westmeath Co. Council	Coffey Construction	Shinnagorthe, Moate Road, Ballymore, Co. Westmeath	WP-13/2002	Waste Recovery Activities	No municipal solid/household domestic waste shall be accepted at the facility.	Fourth Schedule - Classes 2,4,10		03/01/2003	19/12/2002	18/12/2005
Westmeath Co. Council	John & Brian Hamill	Mansinstown, Mullingar, Co. Westmeath	WP-17/2003	Inert Waste		Fourth Schedule - Classes 2,4,11,13		03/08/2003	15/06/2003	14/06/2006
Westmeath Co. Council	Anneville Agri Services	Anneville, Gaycrook, Mullingar, Co. Westmeath	WP-20-2003	Inert Waste	No municipal solid/household domestic waste shall be accepted at the facility.	Fourth Schedule - Classes 2, 10 & 13		12/06/2003	09/06/2003	08/06/2006
Westmeath Co. Council	Anneville Agri Services	Bracklyn Estate, Bracklyn, Rahamney, Co. Westmeath	WP-21-2003	Inert Waste	No municipal solid/household domestic waste shall be accepted at the facility.	Fourth Schedule - Classes 2, 10 & 13		12/06/2003	09/06/2003	08/06/2006
Westmeath Co. Council	James B. McDonnell	Prebaun, Moylescar, Mullingar, Co. Westmeath	WP-23-2003	Inert Waste	No municipal solid/household domestic waste shall be accepted at the facility.	Fourth Schedule - Classes 2,4,10,11 & 13		12/06/2003	05/06/2003	04/06/2006
Westmeath Co. Council	Mr. John Devery	Ballykeeran, Athlone, Co. Westmeath	WP-16-2003	Vehicle dismantling or recovery facility	Only material which conforms to the following EWC code references shall be accepted at the facility: 130113 (other hydraulic oils) / 130205 (Mineral-based non-chlorinated engine, gear and lubricating oils) / 130208 (other engine, gear and lubricating oils) / 160104 (end-of-life vehicles) / 160601 (lead batteries).	First Schedule, Activity 3 - Fourth Schedule Classes 3,4, 13.		17/06/2003	10/08/2003	09/06/2006
Westmeath Co. Council	Mr. Brendan Gaffney	Tullycross, Moydrum, Athlone, Co. Westmeath	WP-29-2003	Inert Waste		Fourth Schedule, Classes 2,4,10,11,13		09/07/2003	04/07/2003	03/07/2006
Westmeath Co. Council	Eamonn Gorman	Clonfad, Kinnegad, Co. Westmeath	WP-18-2003	Inert waste		Fourth Schedule, Classes 2,4,10,11 & 13		30/07/2003	25/07/2003	24/07/2006
Westmeath Co. Council	Tony Gallagher	Carrick, Daystown, Co. Westmeath	WP-24-2003	Inert waste		Fourth Schedule, Classes 2,4,10,11 & 13		30/07/2003	25/07/2003	24/07/2006
Westmeath Co. Council	Bennett Construction Ltd.	Forest Park Estate, Clonmore, Mullingar, Co. Westmeath	WP-22-2003	Inert waste		Fourth Schedule, Classes 2,4,11 & 13		30/07/2003	25/07/2003	24/07/2006
Westmeath Co. Council	Eamonn Braden	Ballykeeran, Athlone, Co. Westmeath	WP-26-2003	Inert Waste		Fourth Schedule, Classes 2,4,11 & 13		08/08/2003	01/08/2003	31/07/2006
Westmeath Co. Council	Rosemount GAA	Rosemount, Moate, Co. Westmeath	WP-31-2003	Inert Waste		Fourth Schedule, Classes 2,4,11 & 13		25/08/2003	20/08/2003	19/08/2006
Westmeath Co. Council	Westroute JV, c/o SIAC House Monastery Road, Clondalkh, Co. Dublin.	Kinnegad Townland, Kinnegad, Co. Westmeath	WP-27-2003	Inert Waste		Fourth Schedule, Class 10		25/08/2003	20/08/2003	19/08/2006
Westmeath Co. Council	Walace Recycling Ltd.	Unit 16/17, Mullingar Business Park, Mullingar, Co. Westmeath	WP-19-2003	Waste Transfer Station & Recycling Facility	Municipal, Commercial & Industrial Waste	5000		03/09/2003	29/08/2003	28/08/2006
Westmeath Co. Council	Mr. Sean Sheil	Golden Island, Athlone, Co. Westmeath	WP-33-2003	Recovery	Waste to be treated shall be confined to Class 2 (Limited to Soil EWC Code 170504) and Class 4 (Limited to Soil and Stone EWC Code 170504) of the Fourth Schedule. No municipal solid/household domestic waste shall be accepted at the facility.	Fourth Schedule, Classes 2,4, 11 & 13		09/09/2003	04/09/2003	03/09/2006
Westmeath Co. Council	Mr. William O'Neill	Ballykeeran, Athlone, Co. Westmeath	WP-30-2003	Recovery	Inert Waste. Waste to be treated shall be confined to Class 2 (Limited to Soil EWC Code 170504) and Class 4 (Limited to Soil and Stone EWC Code 170504) of the Fourth Schedule.	Fourth Schedule, Classes 2,4,10,11 & 13		09/09/2003	04/09/2003	03/09/2006
Westmeath Co. Council	Mr. Ollie Gavin	Carrick O'Brien, Athlone, Co. Westmeath	WP-32-2003		Waste to be treated shall be confined to Class 2 (Limited to Soil EWC Code 170504) and Class 4 (Limited to Soil and Stone EWC Code 170504) of the Fourth Schedule.	Fourth Schedule, Classes 2,4,11 & 13		24/09/2003	18/09/2003	17/09/2006
Westmeath Co. Council	Michael Dunning	Carrick O'Brien, Athlone, Co. Westmeath	WP-34-2003	Inert Waste Soil/Subsoil	170504 Soil/Subsoil	27000		07/10/2003	02/10/2003	01/10/2006
Westmeath Co. Council	Renickill Initial Ltd.	Unit 2, Bhyry Industrial Estate, Athlone, Co. Westmeath	WP-25-2003	Storage (Temporary) of Sanitary Waste Prior to Disposal	180104	50		09/10/2003	06/10/2003	05/10/2006



					Class 4 (Limited to Soil and Stone EWC)					
Westmeath Co. Council	Clohanboy Developments	Clohanboy and Curragh, Athlone, Co. Westmeath	WP-41/2004	Inert Waste	C & D wastes EWC code 170504	Class (11 & 12) (2 & 4)		24/05/2004	19/05/2004	19/05/2007
Westmeath Co. Council	Buckley Construction	Old Gaway Road, Baylough, Athlone, Co. Westmeath	WP-37-2003	Construction	17 05 04	Class (11 & 12) (2 & 4)		24/05/2004	20/05/2004	20/05/2007
Westmeath Co. Council	Owen Fay & Co Ltd.	Arduagh, Walshstown South, Mullingar, Co. Westmeath.	WP-44-2004	Inert Waste	17 01 01 Inert waste namely soil and stones. The treatment of any waste on land with a consequential benefit for an agricultural activity or ecological system. Use of waste obtained from an activity referred to in the fourth schedule of the WMA 1996. Storage of waste intended for submission to any activity referred to in a preceding paragraph of the aforementioned schedule, other than temporary storage, pending collection, on the premises where such waste is produced.	Fourth Schedule, Classes 4,10,11 & 13		11/06/2004	03/06/2004	02/06/2007
Westmeath Co. Council	Christopher Lynch Waste Management Ltd.	Cionmore Industrial Estate, Mullingar, Co. Westmeath.	WP-15-2004	Commercial & Industrial waste	See Permit Part 1 Activities Permitted	Third Schedule, Classes 11, 12 & 13, Fourth Schedule, Classes 2, 3, 4 & 13	5000	11/06/2004	04/06/2004	03/06/2007
Westmeath Co. Council	Tony McCarthy	The Barrenes, Athlone, Co. Westmeath.	WP-46-2004	Treatment, storage, and recycling of scrap metal.		Fourth Schedule, Classes 3, 4 & 13		29/06/2004	24/06/2004	23/06/2007
Westmeath Co. Council	Veronica Sammon	Ballykeeran, Athlone, Co. Westmeath	WP-45-2004	Soil, inert waste	17 05 04	Class 2, 4, 10, 11 & 13		02/07/2004	29/06/2004	29/06/2007
Westmeath Co. Council	Kathleen Casey	Ballygowan, Athlone	WP-46-2004	Fill site	17 01 01	Class 2, 4, 11 and 13		06/07/2004	01/07/2004	01/07/2007
Westmeath Co. Council	James Doolan	Ballygowan, Athlone	WP-47-2004	Fill site	17 01 01	Class 2, 4, 11 and 13		05/07/2004	01/07/2004	01/07/2007
Westmeath Co. Council	Jamison Flanagan	Comamaddy, Athlone	WP-43-2004	gravel fill	17 05 04	Class 2, 4, 10, 11 & 13		07/07/2004	02/07/2004	02/07/2007
Westmeath Co. Council	Fergal Conroy	Slanebeg, Mullingar	WP-04/01-2002	Fill site	17 01 01, 17 05 04	Fourth Schedule, Class 2, 3, 4, 11 & 13		26/07/2004	06/07/2004	06/07/2007
Westmeath Co. Council	Michael Dolan	Slanemore	WP-36-2003		See Permit	First Schedule, Activity 5 - Fourth Schedule Classes 2, 4, 13.	2080	17/08/2004	03/08/2004	03/08/2007
Westmeath Co. Council	Patrick McCarthy	Glenwood, Bayln, Athlone, Co. Westmeath	WP-49-2004	Fill site	Soils & stones	Class 2, 4, 11 and 13		18/08/2004	23/08/2004	18/08/2007
Westmeath Co. Council	Alan Fox	Peninsulate, Delvin, Co. Westmeath	WP-50-2004	Soil & Stone Acceptance	17 05 04	Class 2, 4, 11 & 13		07/09/2004	01/09/2004	01/09/2007
Westmeath Co. Council	Seamus Donaghy T/A Regional Developments Ltd.	Churchview Estate, Coosan, Athlone, Co. Westmeath	WP-51-2004	Inert Waste Acceptance	See Section 1.1 of Permit (General Conditions)	Class 2, 4, 11 & 13		04/10/2004	27/09/2004	26/09/2007
Westmeath Co. Council	Jim Mele	Kinkill, Castlepollard, Co. Westmeath	WP/53/2004	Grading of field with topsoil for agri benefit	17 05 04	Recovery of waste	5000 tonnes	16/03/2005	03/03/2005	02/03/2008
Westmeath Co. Council	Aidan Ingle	Woodstown, The Downs, Mullingar, Co. Westmeath	WP/60/2004	Topsoil for landscaping around new house	17 05 04	Recovery of waste	5000 tonnes	16/03/2005	03/03/2005	02/03/2008
Westmeath Co. Council	Thomas Kirwan	Daystown, Mullingar, Co. Westmeath	WP/64/2005	Soil and stone mounds	17 05 04	Recovery, Class 2, 4, 13	20,000 tonnes	24/03/2005	15/03/2005	14/03/2008
Westmeath Co. Council	Justin Golden	Craggan House, Dublin Road, Athlone, Co. Westmeath	WP 61/2004	Landscaping of old house	17 05 04	Recovery of waste	1000 tonnes	27/06/2005	16/06/2005	15/06/2008
Westmeath Co. Council	Marin Crane	Collinstown, Co. Westmeath	WP 66/2005	Filling of low lying land	17/05/2004	Recovery	700 tonnes	27/06/2005	16/06/2005	15/06/2008
Westmeath Co. Council	Robert Fagan	Mullingar Equestrian Centre, Rathcolman, Mullingar, Co. Westmeath	WP 69/2005	Mounding of soil for viewing arena for showjumping	17 05 04	Recovery	2000 tonnes	16/06/2005	16/06/2005	15/06/2008
Westmeath Co. Council	Thomas Marshall	Knockmore, Ballinagore, Co. Westmeath	WP 78/2005	Infill of site of existing site to construct single dwelling	17 05 04	Recovery of waste	1000 tonnes	27/06/2005	16/06/2005	15/06/2008
Westmeath Co. Council	Paddy Walsh	The Downs, Mullingar, Co. Westmeath	WP 74/2005	Infill of low lying land	17 05 04	Recovery	1000 tonnes	27/06/2005	16/06/2005	15/06/2008
Westmeath Co. Council	Andrews Construction Ltd	Great Down, The Downs, Mullingar, Co. Westmeath	WP 58/2004	Infill of sand for reclamation	17 05 04	Recovery	10,000 tonnes	27/06/2005	16/06/2005	15/06/2008
Westmeath Co. Council	Seamus Coyne	Rochfordbrodge, Co. Meath	WP 71/2005	Infill of low lying land	17 05 04	Recovery of waste	5000 tonnes	27/06/2005	16/06/2005	15/06/2008
Westmeath Co. Council	Bridgid Dunne	Coralstown, Mullingar, Co. Westmeath	WP 75/2005	Inert waste	17 05 04	Fourth schedule, class 10		27/06/2005	16/06/2005	15/06/2008
Westmeath Co. Council	Garrod Construction	Old Carmelite College, Mullingar, Co. Westmeath	WP 63/2004	Recovery of waste for infill & landscaping purposes	17 05 04	Recovery of waste	1500 tonnes	27/06/2005	16/06/2005	15/06/2008
Westmeath Co. Council	Ger Flynn	Banagher, Knockman, Kilkonan, CO. Westmeath	WP 72/2005	Infill of low lying land	Top soil and sub soil	Recovery	20,000 in total	27/06/2005	26/06/2005	25/06/2008
Westmeath Co. Council	Michael Finn Contracting Ltd	Newbristly, Rathconrath, Mullingar, Co. Westmeath	WP 85/2005	Recovery site for soil and subsoil	soil and sub soil 17 05 04	Disposal of waste	5000 tonnes	01/07/2005	27/06/2005	26/06/2008
Westmeath Co. Council	Garrycastle GAA Club	Garrycastle, Athlone, Co. Westmeath	WP 85/2005	Basic football grounds	soil and sub soil 17 05 04	Recovery of waste	8600 tonnes	01/07/2005	22/06/2005	21/06/2008
Westmeath Co. Council	Finnerty Plant Hire	Cois na hAbhainn, The Mart, Station Road, Mullingar, Co. Westmeath	WP 96/2005	Infill of land for housing development	17 05 04	Recovery	6000 tonnes	07/07/2005	01/07/2005	30/06/2008
Westmeath Co. Council	Midway Installations Ltd	Slabh Rua Housing Development, Ballinacorney Road, Mullingar, Co. Westmeath	WP 89/2005	Infill of site for building purposes	17 05 04	Recovery	4000 tonnes	07/07/2005	01/07/2005	30/06/2008
Westmeath Co. Council	Bernard Fallon	Farrinstown, Rochfordbrodge, Co. Westmeath	WP 87/2005	Recovery of waste - infill of low lying land	17 05 04	Recovery of waste	189,000 tonnes	07/07/2005	01/07/2005	30/06/2008
Westmeath Co. Council	Tim Wraher	Shuren, Kibeggan, Co. Westmeath	WP 76/2005	Infill of land for agri reclamation	17 05 04	Recovery	3400 tonnes	07/07/2005	01/07/2005	30/06/2008
Westmeath Co. Council	Josephine & Ray McLaughlin	Hightown, Coralstown, Mullingar, Co. Westmeath	WP 97/2005	Infill on site with top soil for single dwelling	17 05 04	recovery	400 tonnes	07/07/2005	01/07/2005	30/06/2008
Westmeath Co. Council	Ned Buckley	Cooleen, Moate, Co. Westmeath	WP 98/2005	Greenfield site to be filled and landscaped	soil, subsoil and stone	Recovery of waste	5000 tonnes	11/07/2005	05/07/2005	04/07/2008
Westmeath Co. Council	Mick Finn	Balling, Davin, Co. Westmeath	WP 94/2005	Recovery	17 05 04	class 2, 4, 10, 13	5000 tonnes	14/07/2005	11/07/2005	10/07/2008
Westmeath Co. Council	Laurance Carey	Skeahanagh, Kibeggan, Co. Westmeath	WP 88/2005	Reprofiling land for purpose of agricultural development	inert soil and subsoil	Recovery of waste	57,000m3	15/07/2005	12/07/2005	11/07/2008
Westmeath Co. Council	Adway Construction Ltd	Clonbrusk, Athlone, Co. Westmeath	WP 59/2004	Proposed residential housing development	17 05 04, 17 05 06	Recovery of waste	5000 tonnes	15/07/2005	12/07/2005	11/07/2008
Westmeath Co. Council	Thomas Fox	Ballymore, Tyrelspass, Co. Westmeath	WP 92/2005	Reprofiling land for purpose of agricultural development	inert soil and subsoil	Recovery of waste	151,000m3	15/07/2005	12/07/2005	11/07/2008
Westmeath Co. Council	Michael Finn Contracting Ltd	Oak Lodge, Boardiscown, Mullingar, Co. Westmeath	WP 100/2005	Recovery of waste	17 05 04	Class 2, 4, 10, 11, 13	5000 tonnes	27/07/2005	22/07/2005	21/07/2008
Westmeath Co. Council	Anthony Scally	Athconnor, Kibeggan, Co. Westmeath	WP 95/2005	Recovery of low lying land	17 05 04	Class 10	35,000 tonnes	18/08/2005	08/08/2005	07/08/2008
Westmeath Co. Council	Noel Regan & Sons	Newtown, Russelstown Road, Mullingar, Co. Westmeath	WP 82/2005	Recovery of waste	17 05 04	Class 10	25,000m3	18/08/2005	08/08/2005	07/08/2008



Authority	Applicant	Address	Ref No	Activity	Code	Class	Volume	Start Date	End Date	Expiry Date
Westmeath Co. Council	Noel Regan & Sons	Podstown, Russelstown Road, Mullingar, Co. Westmeath	WP 84/2005	Recovery of waste	17 05 04	Class 10	20,000m3	18/08/2005	08/08/2005	07/08/2008
Westmeath Co. Council	Noel Regan & Sons	Podstown/Boardstown, Russelstown Road, Mullingar, Co. Westmeath	WP 79/2005	Recovery	17 05 04	Class 10	40,000m3	18/08/2005	08/08/2005	07/08/2008
Westmeath Co. Council	Oliver Conroy	Kildalton, Mullingar, Co. Westmeath	WP 86/2005	Wood Recycling	16101 150103	Classes 2-13 of 4th Schedule	5105	06/09/2005	29/08/2005	28/08/2008
Westmeath Co. Council	George Alexander	Leskilly, Ballynagorta, Mullingar	WP 106/2005	Recovery of waste, infill of lowlying land	170504	Class 10	4387	06/09/2005	29/08/2005	28/08/2008
Westmeath Co. Council	Michael Newman	Torque, Tyrrelpass, Co. Westmeath	WP 89/2005	Recovery (infill of lowlying land for agricultural)	170504	Class 10	81,400 M3	22/09/2005	13/09/2005	12/09/2008
Westmeath Co. Council	Laurence Carey	Kiddoghan, Tyrrelpass, Co. Westmeath	WP 110/2005	Infill of land	170504	Class 10	95,000 M3	12/09/2005	05/09/2005	04/09/2008
Westmeath Co. Council	Maurice Maher	Kiddoghan, Tyrrelpass, Co. Westmeath	WP 90/2005	Infill of land	170504	Class 10	26,000M3	12/09/2005	05/09/2005	04/09/2008
Westmeath Co. Council	Denis Moran Snr	Meehan Quamer, Coosan	WP 105/2005	Filling of site with subsoil and Topsoil with the purpose of improving the site for agricultural use	178 05 D4	Recovery	5,000	19/10/2005	10/10/2005	09/10/2008
Westmeath Co. Council	Albert Casey	4 Richdale court, Mullingar, Co. Westmeath	WP-102-2005	Infill the low lying land for agri purposes	17 05 04	Recovery	50,000	20/10/2005	10/10/2005	09/10/2008
Westmeath Co. Council	Sansary Ltd	Blyny Commercial Park, Blyny, Garrycastle, Westmeath	WP-115-2005	Commercial storage	16 01 04	Disposal of waste	200	20/10/2005	17/10/2005	16/10/2008
Westmeath Co. Council	Fergus Fagg	Comamagh, Athlone, Co. Westmeath	WP-107-2005	Filling of site with subsoil and Topsoil with the purpose of improving the site for agricultural use	17 05 04	Recovery of waste	5,000	20/10/2005	10/10/2005	09/10/2008
Westmeath Co. Council	St. Carans National School	Bayin, Athlone, Co. Westmeath	WP-113-2005	Greenfield site-part of school playing area to be filled with sand/gravelite, landscaped for purposes	17 05 04	Recovery of waste	10,000	20/10/2005	10/10/2005	09/10/2008
Westmeath Co. Council	David Kirby	Castletowngaughan, Co. Westmeath	WP-57-2004	Repository for spoil materials	17 05 04	Disposal of waste	5,000	20/10/2005	10/10/2005	09/10/2005
Wexford Co. Council	Recycling 2000	Karloque Industrial Estate, Wexford	98/001	Treat/Store Waste				23/01/2001	08/12/1998	Remains valid unless revoked
Wexford Co. Council	Mr. Patrick Berridge, Ballyshannon Farms	Adamstown, Enniscorthy, Co. Wexford	WP-02-001	Generate methane gas from the 300tonne anaerobic digester for energy supply to power a CHP unit for electrical generation		Fourth Schedule - Activities 9, 10, 11, 13		02/10/2002	13/09/2002	12/09/2004
Wexford Co. Council	Mr. John Molloy	Tomgarrow, Ballycamey, Enniscorthy, Co. Wexford	WP/00/015	Dismantling or Recovery of Vehicles	Vehicles for dismantling or recovery	Fourth Schedule - 3,13		23/08/2003	19/06/2003	18/06/2004
Wexford Co. Council	Dr. William O'Leary, Specialised Metals Ltd.	Unit 17, Gotey Business Park, Gotey, Co. Wexford.	WP/03/01	Recovery	Recovery of metals and metal compounds from catalytic converters, discarded electrical/electronic equipment. Recovery of metals from electronic equipment. Recovery of plastics.	Fourth Schedule -		21/08/2003	04/07/2003	03/01/2004
Wexford Co. Council	Kilnenny/Ballyfad Community Field c/o Patrick Hughes	Kilnenny/Ballyfad Community Field	WP/03/02	Disposal	Only inert subsoil (170504), topsoil (170504), sand (170504), gravel (170504), clay (170504), marls (170504), stone (170501), shall be used to reclaim/raise the site. All material shall be deposited inside the site boundary.		5000	01/09/2003	24/07/2003	23/07/2005
Wexford Co. Council	Courtown Golf Club	Kilnenny, Courtown, Co. Wexford	WP/03/03	Recovery	Topsoils & subsoils	Fourth Schedule	2000	05/08/2003	03/09/2003	02/09/2005
Wexford Co. Council	Sean Leacy	Baroghill, Courtown, Gorey	WP/04/05	Waste recovery facility	Only inert sub soil (17 05 04), topsoil (17 05 04), clay (17 05 04), marls (17 05 04), stone (17 05 01), shall be used to reclaim/raise the site. All materials shall be deposited inside the site boundary.	Fourth Schedule, Part 1, Class 10 of the WMA, 1996-2003	Annual intake does not exceed 5000	06/04/2004	31/03/2004	30/03/2006
Wexford Co. Council	Pat Neville & Sons Ltd.	Ballinray Upper, Courtown	WP/03/07	Waste recovery facility	Only inert subsoil (17 05 04), topsoil (17 05 04), sand (17 05 04), gravel (17 05 04), clay (17 05 04), marls (17 05 04), stone (17 05 01), shall be used to reclaim/raise the site. All material shall be deposited inside the site boundary.	Fourth Schedule, Part 1, Class 5 of WM (PermB) Regs 1998	Annual intake does not exceed 5000	06/04/2004	26/03/2004	05/04/2006
Wexford Co. Council	Cleary & Doyle Contracting Ltd	Rosslare Golf Club, Rosslary Strand	WP/03/11	Recovery of waste	Only inert subsoil (17 05 04), topsoil (17 05 04), sand (17 05 04), shall be used to reclaim/raise & periodic dressing for Golf Course on the site.	Fourth Schedule, of WM (PermB) Regs. 1998	5000	06/04/2004	31/03/2004	30/03/2006
Wexford Co. Council	Treway Ltd.	Colinstown Townland, Co. Wexford	WP/04/04	Waste recovery facility	Only inert subsoil (17 05 04), topsoil (17 05 04), sand (17 05 04), gravel (17 05 04), clay (17 05 04), marls (17 05 04), shall be used to reclaim/raise the site.	Fourth Schedule of the WM (PermB) Regs, 1998	5000	06/04/2004	27/02/2004	26/02/2006
Wexford Co. Council	Paddy Browns Plant Hire	Ballycovan, Taggart	WP/04/06	Recovery of waste	17 05 04 - Soils and Subsoils	4th Schedule of the WMA, 1996 Class, 3, 4 and 13	5,000	10/05/2004	23/04/2004	22/04/2006
Wexford Co. Council	Paddy Browns Plant Hire	Slad, Kilsirane	WP/04/07	Recovery of waste	17 05 04 - Soils and Subsoils	4th Schedule of the WMA, 1996 Class, 3, 4 and 13	5,000	10/05/2004	19/04/2004	18/04/2006
Wexford Co. Council	Sean Doyle	Corbally, Kilmuckridge, Co. Wexford.	WP/04/09	Recovery of waste (other than hazardous waste) at a facility for the composting of waste where the amount of compost and waste held at the facility exceed 1000 cubic metres at any time.	17 05 04	This permit is for the recovery of soil, topsoil & subsoils & in accordance with the fourth schedule part 1, class 10, of the WMA 1996 - 20303.	Not to exceed 5000 tonnes per annum	21/05/2004	16/05/2004	17/05/2006
Wexford Co. Council	Richard Warren	Ballyweller, Gorey, Co. Wexford	WP/03/12	The spreading of waste (other than hazardous waste) at a facility (other than a landfill facility) where the annual intake does not exceed 5000 tonnes per annum	17 05 04	This permit is for the recovery of 65000 m3 tonnes approx. of soil, topsoil & subsoils & in accordance with the fourth schedule part 1, class 10, of the WMA 1996 - 20303.	Not to exceed 5000 tonnes per annum	21/05/2004	18/05/2004	17/05/2006
Wexford Co. Council	Eileen Codd	Newtown, Fernycamp, Wexford	WP/04/13	The recovery of waste (other than hazardous waste) at a facility for the composting of waste where the amount of compost and waste held at the facility exceed 1000 cubic metres at any time.	17 05 04	This permit is for the recovery of soil, topsoil & subsoils & in accordance with the fourth schedule part 1, class 10, of the WMA 1996 - 20303.	Not to exceed 5000 tonnes per annum	02/08/2004	31/05/2004	30/05/2006



				The recovery of waste (other than hazardous waste) at a facility for the composting of waste where the amount of compost and waste held at the facility exceed 1000 cubic metres at any time.	17 05 04	This permit is for the recovery of soil, topsoil & subsoils & in accordance with the Fourth Schedule, part 1, class 10, of WMA 1996-2003	Not to exceed 5000 tonnes per annum	16/06/2004	08/06/2004	07/06/2006
Wexford Co. Council	Sean Kinsella	Borehovel, Kilara, Gorey, Co. Wexford.	WP/04/10	The recovery of waste (other than hazardous waste) at a facility for the composting of waste where the amount of compost and waste held at the facility exceed 1000 cubic metres at any time.	17 05 04 and 17 05 01	This permit is for the recovery of 5000m3 approx. of soil, topsoil & subsoils & in accordance with the fourth schedule, part 1, class 10 & 13 of the WMA, 1996-2003	Not to exceed 5000 tonnes per annum	16/06/2004	08/06/2004	07/06/2006
Wexford Co. Council	James O'Connor	Bogganstown, Drinegh, Wexford	WP/04/11	The recovery of waste (other than hazardous waste) at a facility for the composting of waste where the amount of compost and waste held at the facility exceed 1000 cubic metres at any time). To reclaim / raise the site for agricultural purposes	17 05 04 soils- Topsoils and Subsoils	This Waste Permit is for the recovery of 20000m3 tonnes approx. of soil, topsoil & subsoils & in accordance with the fourth Schedule, Part 1, Class 10 of the WMA, 1996-2003	20000m3 approx.	24/08/2004	25/06/2004	24/06/2006
Wexford Co. Council	Tommy James	Bergy Commons, The Dorr, Clearstown, Bridgetown, Co. Wexford	WP/04/16	The recovery of waste (other than hazardous waste) at a facility for the composting of waste where the amount of compost and waste held at the facility exceed 1000 cubic metres at any time.	17 05 04 soils- Topsoil and Subsoil	This permit is for the recovery of 50000m3 approx. of soil, topsoil & subsoils & in accordance with the fourth schedule, part 1, class 10 & 13 of the WMA, 1996-2003	50000m3 approx.	24/06/2004	25/06/2004	24/06/2006
Wexford Co. Council	Liam Livingstone Ltd.	Knechtmaur, Bunclody	WP/04/17	Recovery of Waste	Topsoils & subsoils	4th Schedule of the WMA, 1996	3,000-5,000	04/08/2004	28/07/2004	25/07/2006
Wexford Co. Council	Philip O'Grady Plant Hire Ltd.	Ballynasloney, Oylegate, Enniscorthy	WP/04/22	Recovery of Waste	Topsoils & subsoils	4th Schedule, Part 1, Class 10 of WMA, 1996-2003	10,000m3 max.	04/08/2004	28/07/2004	25/07/2006
Wexford Co. Council	Redmond Construction	Ramstown Upper, Gorey	WP/04/15	Recovery of Waste	Topsoils & subsoils	4th Schedule, Part 1, Class 10 of WMA, 1996-2003	5,000	06/08/2004	04/08/2004	03/08/2006
Wexford Co. Council	Liam Murphy	Rathkyle, Adamstown	WP 03/04	Recovery of waste	Soil, topsoil & subsoils	4th Schedule, Part 1, Class 10 of WMA, 1996-2003	15,000m3	13/08/2004	09/08/2004	08/08/2006
Wexford Co. Council	Wexford Golf Club	Mulgannon, Wexford Town, Co. Wexford	WP/04/26	The Recovery of Waste	17 05 04 & 17 05 01: Top Soils and Sub Soils	1st Schedule, part 1, of the WM(Permit) Regs 1998, 4th schedule, part 1, Class 10 of the WMA '96-'03	15000m3	08/09/2004	27/08/2004	26/08/2006
Wexford Co. Council	Sports (Wexford) Ltd.,	Coolobta, Wexford (Wexford Racecourse)	WP/04/19	Waste Acceptance	17 05 04, Topsoil, subsoil, sand, gravel, clay, marls, stones	4th Schedule Part 1, Class 10 of WMA,	10,000	01/02/2005		24 months from date of issue
Wexford Co. Council	Sports (Wexford) Ltd.,	Coolobta, Wexford (Wexford Racecourse)	WP/04/19	Recovery of waste	17 05 04	4th schedule part 1, class 10 of Waste Management Act	10,000 tonnes	15/03/2005	19/01/2005	24 months from date of issue
Wexford Co. Council	Damen Goff, Goff Recycling Ltd	Ballyknockan, St. Helens, Kilara, Rosslara Harbour, Co. Wexford	WP/04/12	Material recovery facility	15 01 01, 15 01 02, 15 01 03, 15 01 04, 15 01 05, 15 01 06, 15 01 07, 15 01 08, 16 01 20, 19 12 01, 19 12 02, 19 12 03, 19 12 04, 19 12 05, 19 12 07, 19 12 08, 20 01 01, 20 01 02, 20 01 10, 20 01 11, 20 01 38, 20 01 39, 20 01 40	4th Schedule, Classes 2,3,4,11 & 13 and 3rd Schedule Class 13	20,000 tonnes	15/03/2005	21/12/2004	20/12/2005
Wexford Co. Council	Cleanfill Ltd	Toberanerin Upper, Gorey, Co. Wexford	WP/04/27	The spreading of waste on land (the waste is only good quality soil/clay and clean stone) on an area of land with a consequential benefit for an agricultural activity or ecological system	17 05 04, 17 05 01	4th schedule of waste management act 1998 and 1st schedule, part 1, class 5 of waste management (permit) regulations 1998	not to exceed 30,000m3 approx.	15/03/2005	31/01/2005	24 months from date of issue
Wexford Co. Council	Cleanfill Ltd	Ballyneen, Kilmick, Co. Wexford	WP/04/33	the spreading of any waste on land (the waste is only good quality soil/clay and clean stone) on an area of land with a consequential benefit for an agricultural activity or ecological system	17 05 04	4th schedule of the waste management act 1998, 1st schedule, part 1, class 5 of waste management (permit) regulations 1998	Not to exceed 15,000 tonnes approx per annum	15/03/2005	31/01/2005	24 months from date of issue
Wexford Co. Council	Terra Investments Ltd	Churchtown, Taggart, Rosslara Harbour, Co. Wexford	WP/04/32	the spreading of any waste on land (the waste is only good quality soil/clay and clean stone) on an area of land with a consequential benefit for an agricultural activity or ecological system	17 05 04	4th schedule of the waste management act 1998, 1st schedule, part 1, class 5 of waste management (permit) regulations 1998	15,000 tonnes	15/03/2005	31/01/2005	24 months from date of issue
Wexford Co. Council	Archdale Construction Ltd	Scaughmolin, Murrinstown, Co. Wexford	WP/04/30	the spreading of any waste on land (the waste is only good quality soil/clay and clean stone) on an area of land with a consequential benefit for an agricultural activity or ecological system	17 05 04, 17 05 01	4th schedule of the waste management act 1998, 1st schedule, part 1, class 5 of waste management (permit) regulations 1998	Not to exceed 12,000m3 approx per annum	15/03/2005	31/01/2005	24 months from date of issue
Wexford Co. Council	Tommy James Ltd.,	Ballyscartin, Gorey, Co. Wexford	WP/04/31	The spreading of any waste on land (the waste is only good quality soil/clay and clean stone) on an area of land with a consequential benefit for an agricultural activity or ecological system (the consequential benefit is remediation of land for cattle grazing) including composting and other biological transformation processes.	17 05 04 & 17 05 01	This waste permit is for the Recovery of a maximum of 15,000m <sup>3</sup> approx., per annum of soil, Topsoil and clean stone in accordance with the 4th schedule of the Waste Management Act 1998 and First Schedule, Part 1, class 5 of Waste Management (Permit) Regulations, 1998	Not to exceed 15,000m <sup>3</sup> approx. per annum	13/04/2005	15/03/2005	24 months from date of issue
Wexford Co. Council	Joan French	Lacken, Whitemoor, New Ross, Co. Wexford.	WP/04/02	The spreading of any waste on land (the waste is only good quality soil/clay and clean stone) on an area of land with a consequential benefit for an agricultural activity or ecological system (the consequential benefit is remediation of land for cattle grazing) including composting and other biological transformation processes.	17 05 04 & 17 05 01	This Waste Permit is for the Recovery of a maximum of 5,000m3 approx., per annum of soil, Topsoil and clean stone in accordance with the 4th Schedule of the Waste Management Act 1998 and First Schedule, Part 1, class 5 of Waste Management (Permit) Regulations, 1998	Not to exceed 5,000m3 approx. per annum	13/04/2005	15/03/2005	24 months from date of issue
Wexford Co. Council	Wexford Commercials Ltd	Monan East, Enniscorthy, Co. Wexford	WP/05/06	The spreading of any waste on land on an area of land with a consequential benefit for an agricultural activity or ecological system including composting and other biological transformation processes	17 05 04	This waste permit is for the recovery of a maximum of 32000m3 per annum of soil, topsoil and clean stone in accordance with the 4th schedule of the waste management act 1996, and the 1st schedule, part 1, class 5	not to exceed 32000m3 per annum	24/05/2005	23/05/2005	3 years from date of issue



				The spreading of any waste on land (The waste is only good quality soil/clay and clean stone) on an area of land with a consequential benefit for an agricultural activity or ecological system (the consequential benefit is remediation of land for cattle grazing) including composting and other biological transformation processes.		The waste permit shall be for the recovery of a maximum of 40,000m <sup>3</sup> approx., per annum of soil, Topsoil and clean stone in accordance with the 4th schedule of the Waste Management Act 1996 and first schedule, part 1, class 5 of WMP Regulations, 1998	40,000m <sup>3</sup> approx., per annum of soil			36 months from date of issue.
Wexford Co. Council	Newtown Sand & Gravel Ltd.,	Newtown Lower, Coolgreany, Gorey, Co. Wexford	WP/04/39	The spreading of any waste on land (The waste is only good quality soil/clay and clean stone) on an area of land with a consequential benefit for an agricultural activity or ecological system	17 05 04, 17 05 03	Spreading of any waste on land with consequential benefit for an agricultural	60,000m <sup>3</sup>	08/06/2005	24/05/2005	36 months from date of issue.
Wexford Co. Council	Murray Waste Recycling Ltd	Coolmore, Ferns, Co. Wexford	WP/05/03	Non hazardous dry recyclables	See conditions of permit	4th schedule, classes 2,3,4,11,13 and the 3rd schedule class 13	8000 tonnes	06/07/2005	05/07/2005	not exceeding 24 months from date of issue
Wexford Co. Council	Edward Murphy	Tomgarrow, Wells, Gorey, Co. Wexford	WP/04/36	Dismantling or Recovery of Vehicles	See conditions of permit	4th schedule, class 3 & 13		06/07/2005	05/07/2005	not exceeding 36 months from date of issue
Wexford Co. Council	Tommy James Ltd.,	Tomnatunshoge, Enniscorthy, Co. Wexford	WP/04/40	The spreading of any waste on land (The waste is only good quality soil/clay and clean stone) on an area of land with a consequential benefit for an agricultural activity or ecological system	17 05 04	4th schedule, class 5	35,000m <sup>3</sup>	06/07/2005	05/07/2005	not exceeding 24 months from date of issue
Wexford Co. Council	John Bailey	Kilncooley, Kinshamtaun, Kilmuckridge, Gorey, Co. Wexford	WP/04/29	The spreading of any waste on land (the waste is only good quality soil/clay and clean stone) on an area of land with a consequential benefit for an agricultural activity or ecological benefit	17 05 04	first schedule, part 1, class 5	15,000 tonnes	06/07/2005	05/07/2005	not exceeding 24 months from date of issue
Wexford Co. Council	A1 Usca Developments	Cherryrichard, Enniscorthy, Co. Wexford	WP/04/21	Spreading of any waste on land with consequential benefit for an agricultural activity	17 05 04	1st schedule, part 1, class 5	15,000 tonnes	08/07/2005	05/07/2005	not exceeding 24 months from date of issue
Wexford Co. Council	John McIlroy t/a McIlroy Meta Recycling Ltd	Tomgarrow, Ballycarny, Enniscorthy, Co. Wexford	WP/05/14	Dismantling or Recovery of Vehicles	See conditions of permit	Class 3 and 13	6000	12/09/2005	17/08/2005	not exceeding 24 months from date of issue
Wexford Co. Council	Cleanfill Ltd	Ryanne, Oilgate, Co. Wexford	WP/05/08	Soil, topsoil and clean stone	17 05 04		8,000	12/09/2005	16/08/2005	not exceeding 36 months from date of issue
Wexford Co. Council	John Cadogan t/a Cadogan Plant Hire	Sinnotsmill, Castlebridge, Co. Wexford	WP/05/02	Spreading of any waste on land with consequential benefit for an agricultural activity	17 05 04	Class 1 of the First Schedule	43,000M <sup>3</sup>	12/09/2005	29/07/2005	24 months from date of issue
Wexford Co. Council	Rogan Quarry & concrete products Ltd	Balyhit, Broadway, Co. Wexford	WP/04/37	Waste permit for soil, topsoil and clean stone	17 05 04	Class 10 of the 4th schedule	10,000 M <sup>3</sup> over 2 years	26/10/2005	14/09/2005	24 months from date of issue
Wexford Co. Council	Patrick Maguire	Ballinakill, Ferns, Co. Wexford	WP/03/13	The waste activity will be acceptance of clean stone/soil in order to partially fill the marble cle	17 05 04	class 10 of the 4th schedule	5,000	26/10/2005	05/10/2005	1 year from date of issue
Wicklow Co. Council	Richard Sharpe	Johnstown North, Ballymoye, Arklow, Co. Wicklow	Ess/15/8/12(4)	Waste recovery facility	Recycling or reclamation of organic substances which are not used as solvents (including composting and other biological transformation processes), spreading of any waste on land with a consequential benefit for an agricultural activity or ecological system	4th Schedule of the WMA 1996		18/04/2001	28/03/2001	27/03/2004
Wicklow Co. Council	Tom Mulligan	The Paddock, Kilmacanogue, Co. Wicklow	Ess/15/8/12(10)	Waste recovery facility	Recovery of waste (other than hazardous waste) / The spreading of any waste on land with a consequential benefit for an agricultural activity or ecological system	Activity 5, Class 10	Not to exceed 18,000 tonnes for duration of permit	28/05/2002	27/05/2002	26/05/2004
Wicklow Co. Council	Morris-Sisk Consortium, C/O John Barnett & Assoc.	Unit 7, CSA House, Dundrum Business Park, Windy Arbour, Dublin 14 - (Site located at Kildareen, Newcastle Co. Wicklow)	Ess/15/8/12(12)	Waste recovery facility (other than hazardous waste)	Recovery of waste (other than hazardous waste) / The spreading of any waste on land with a consequential benefit for an agricultural activity or ecological system	Activity 5, Class 10	Max. storage shall not exceed 250,000 tonnes for duration of permit	28/05/2002	27/05/2002	26/05/2005
Wicklow Co. Council	Morris-Sisk Consortium, C/O John Barnett & Assoc.	Unit 7, CSA House, Dundrum Business Park, Windy Arbour, Dublin 14	Ess/15/8/12(13)		Recovery of waste (other than hazardous waste) / The spreading of any waste on land with a consequential benefit for an agricultural activity or ecological system	Activity 5, Class 10	Max. tonnage not to exceed 350,000 tonnes for duration of permit	29/05/2002	27/05/2002	28/05/2005
Wicklow Co. Council	Kevin Devin	Tomland, Roundwood, Co. Wicklow	Ess/15/8/12(9)	Waste recovery facility	Inert material can be accepted throughout in accordance with EWC code 170504 - Soil & Stones. See Permit	Activity 5, Class 10	Max. tonnage not to exceed 36,000 tonnes for duration of permit	08/06/2002	10/05/2002	09/05/2004
Wicklow Co. Council	Kevin Devin	Tomland, Annamoe, Bray, Co. Wicklow	Ess/15/8/12(151)	Class 10 and 13 Recovery	17 05 04, 20 02 02	Activity 5, class 10 & 13	150,000 tonnes	31/03/2005	30/03/2005	29/03/2008
Wicklow Co. Council	Mr. Andrew Hanlon	Monaspic, Blessington, Co. Wicklow	Ess/15/8/12(8)	Waste recovery facility	Recovery of waste (other than hazardous waste) / The spreading of any waste on land with a consequential benefit for an agricultural activity or ecological system	Activity 5, Class 10	Max. tonnage not to exceed 20,000 tonnes for duration of permit	28/05/2002	16/05/2002	15/05/2004
Wicklow Co. Council	Pat O'Shea, GAA, Boieynass, Ashford, Co. Wicklow	GAA Grounds, Ashford	Ess/15/8/12(18)		EWC Code 170504 soil and stones. Suitably sized concrete, bricks, tiles and ceramics (EWC Codes 170101, 170102, 170103) may be used in place of quarried stone and gravel for the Waste Inspection Area and Waste Quarantine Area.	Activity 5, Class 10	Max. tonnage of 13,000 tonnes for duration of permit	04/11/2002	18/10/2002	17/10/2004
Wicklow Co. Council	Pat O'Neill, Glencormack Timber Ltd.	Kilpa, Aughm	Ess/15/8/12(37)		EWC code 170504 soil and stones, suitably sized concrete, bricks, tiles and ceramics (EWC codes 170101, 170102, 170103) may be used in place of quarried stone and gravel for the Waste Inspection Area and Waste Quarantine Area.	1st Schedule, Activity 5 - Class 10	25,000 tonnes for duration of permit	21/11/2002	08/11/2002	07/11/2004

Wicklow Co. Council	Denis Byrne	Balinacorney, Roundwood, Co. Wicklow	Ess/15/8/12(36)	Waste Recovery	Stones. Suitably sized concrete, bricks, tiles and ceramics (EWC codes 170101, 170102, 170103) may be used in place of quarried stone and gravel for the Waste Inspection Area and Waste Quarantine Area. No other wastes are permitted onto the site.	1st Schedule, Activity 5 - Class 10	25,000 tonnes for duration of permit	13/01/2003	31/12/2002	30/12/2005
Wicklow Co. Council	David Whyte	Ballynamina, Roundwood, Co. Wicklow	Ess/15/8/12 (17)	Waste Recovery	Inert material - EWC code 170504 - soil and stones. Suitably sized concrete, bricks, tiles and ceramics (EWC codes 170101, 170102, 170103) may be used in place of quarried stone and gravel for the Waste Inspection Area and Waste Quarantine Area. No other wastes are permitted onto the site.	1st Schedule, Activity 5 - Class 10		16/12/2002	18/11/2002	17/11/2004
Wicklow Co. Council	Jonathan Sutton	Forview, Glassnamullen, Bray, Co. Wicklow	Ess/15/8/12(34)		Only the following inert material can be accepted throughout the site in accordance with the EWC code 170504 soil and stones. Suitably sized concrete, bricks, tiles and ceramics (EWC codes 170101, 170102, 170103) may be used in place of quarried stone and gravel for the Waste Inspection Area and Waste Quarantine Area.	1st Schedule, Activity 5 - Class 10	12,000 tonnes for duration of permit	19/02/2003	14/02/2003	13/08/2004
Wicklow Co. Council	Cullen Excavations Ltd.	Ballygarret, Kibboke Road, Newtownmountkennedy.	Ess/15/8/12(42)	Waste Recovery	Suitably sized concrete, bricks, tiles and ceramics (EWC codes 170101, 170102, 170103) may be used in place of quarried stone and gravel for the Waste Inspection Area and Waste Quarantine Area.	1st Schedule, Activity 5 - Class 10	160,000 tonnes	28/02/2003	18/02/2003	17/02/2006
Wicklow Co. Council	Cullen Excavations Ltd.	Ballygarret, Kibboke Road, Newtownmountkennedy.	Ess/15/8/12(157)	Class 2 & 4 Recovery	17 03 02	Activity 5, class 2 & 4	10,000 tonnes	18/03/2005	18/09/2005	15/03/2008
Wicklow Co. Council	Morris Sisk Consortium	Baaybeg, Rathnew, Co. Wicklow	Ess/15/8/12(31)		Only inert material can be accepted throughout the site in accordance with EWC code 170504 soil & stones	Activity 5, Class 10	350,000 tonnes for duration	29/01/2003	17/01/2003	16/01/2006
Wicklow Co. Council	Richard Page	Rath Con Farm, Grangecon	Ess/15/8/12(62)		Wastewort originating from the brewing industry.	Activity 5, Class 2 & 10	5,000 tonnes p/a	23/05/2003	21/05/2003	20/05/2006
Wicklow Co. Council	Derek Beame	Roanestryw, Tinahely	Ess/15/8/12(66)	Waste Recovery	Only following inert material with EWC codes 170504 & 200202 soil and stones can be accepted at the site. Suitably sized concrete, bricks, tiles and ceramics (EWC codes 170101, 170102, 170103 & 170107) may be used in place of quarried stone & gravel for the Waste Inspection Area and Waste Quarantine Area. No other wastes are permitted onto the site.	Fourth Schedule, Class 10	20,000 tonnes for duration of permit	17/06/2003	06/06/2003	06/05/2006
Wicklow Co. Council	Michael Scott	Ballyfad Lower, Rathdrum	Ess/15/8/12(65)	Waste Recovery	Only the following inert material can be accepted throughout the site in accordance with the EWC codes 170504 and 200202 - soil and stones. Suitably sized concrete, bricks, tiles and ceramics (EWC codes 170101, 170102, 170103 and 170107 may be used in place of quarried stone and gravel for the Waste Inspection Area and Waste Quarantine Area.	Fourth Schedule, Class 10	Not to exceed 50,000 tonnes for duration of permit	17/06/2003	09/06/2003	06/06/2006
Wicklow Co. Council	S.M. Morris	Balinclore Quarry, Kibboke	Ess/15/8/12(35)		Only the following inert material can be accepted throughout the site in accordance with the EWC code 170300, asphalt, tar and tarred products.	First Schedule, Activity 5 / Fourth Schedule, Class 4.	5,000 tonnes/annum	01/07/2003	27/06/2003	26/06/2006
Wicklow Co. Council	S.M. Morris	Balinclore Quarry, Kibboke	Ess/15/8/12(155)	Class 3,4,13 Recovery	17 01 01, 17 01 02, 17 01 03, 17 01 07, 17 03 02, 17 03 04, 17 04 05	Activity 5, class 3,4 and 13	75000 tonnes	06/04/2005	04/04/2005	03/04/2008
Wicklow Co. Council	Lenrock Construction (Seamus Moran)	Tomnafinnogus, Tinahely	Ess/15/8/12(49)		Only the following inert material can be accepted throughout the site in accordance with the EWC codes 170504 and 200202 - soil and stones. Suitably sized concrete, bricks, tiles and ceramics (EWC codes 170101, 170102, 170103 & 170107) may be used in place of quarried stone and gravel for the Waste Inspection Area and Waste Quarantine Area.	First Schedule, Activity 5 / Fourth Schedule, Class 10.	70,000 tonnes for duration of permit	03/07/2003	24/06/2003	23/06/2006
Wicklow Co. Council	John Burke Building Contractors Ltd.	Blairstoe Golf Course	Ess/15/8/12(55)		Only the following inert material can be accepted throughout the site in accordance with the EWC codes 170504 and 200202 soil and stones. No other wastes are permitted onto the site.	First Schedule, Activity 5 / Fourth Schedule, Class 4.	300 tonnes for duration of permit	03/07/2003	24/06/2003	23/12/2003



	3AA Club				Only the following inert material can be accepted throughout the site in accordance with the EWC code 170504 soil & stones. Suitably sized concrete, bricks, glass and ceramics (EWC codes 170101, 170102, 170103) may be used in place of quarried stone and gravel for the Waste Inspection Area and Waste Quarantine Area.					
Wicklow Co. Council	Hall Developments Ltd.	Milwood, Aughrim, Co. Wicklow	Ess/15/8/12(55)	Waste Recovery	Only the following inert material can be accepted throughout the site in accordance with the EWC codes 170504 and 200202 soil & stones.	First Schedule, Activity 5, Fourth Schedule, Class 4		17/07/2003	10/07/2003	09/07/2008
Wicklow Co. Council	Antonia Lawlor	Kimurray South, Bray, Co. Wicklow	Ess/15/8/12(70)	Waste Recovery	Only the following inert material can be accepted throughout the site in accordance with the EWC codes 170504 and 200202 - soil and stones. Suitably sized concrete, bricks, tile and ceramics (EWC codes 170101, 170102, 170103 and 170107) may be used in place of quarried stone and gravel for the Waste Inspection Area and Waste Quarantine Area.		90,000 tonnes for duration of permit	21/08/2003	16/08/2003	17/08/2006
Wicklow Co. Council	Thomas Crommond	Rockleak, Avoca, Co. Wicklow	Ess/15/8/12(56)	Recovery	Only the following inert material can be accepted throughout the site in accordance with the EWC codes 170504 and 200202 soil and stones. Suitably sized concrete, bricks, glass and ceramics (EWC codes 170101, 170102, 170103 and 170107) may be used in place of quarried stone and gravel for the Waste Inspection Area and Waste Quarantine Area. No other wastes are permitted onto the site.	First Schedule, Activity 5 / Fourth Schedule Class 10	35,000	17/09/2003	15/09/2003	14/09/2006
Wicklow Co. Council	Mr. Maurice Sheehy	Merrymount, Rathnew, Co. Wicklow	Ess/15/8/12	Waste Recovery	Only the following inert material can be accepted throughout the site in accordance with the EWC codes 170504 and 200202 soil and stones. Suitably sized concrete, bricks, tiles and ceramics (EWC codes 170101, 170102, 170103 and 170107) may be used in place of quarried stone and gravel for the Waste Inspection Area and Waste Quarantine Area.	First Schedule, Activity 5 / Fourth Schedule Class 4	40,000	12/09/2003	10/09/2003	09/09/2006
Wicklow Co. Council	Mr. & Mrs. Deering	Miltown, Dunlavin, Co. Wicklow	Ess/15/8/12(68)	Waste Recovery	Only the following inert material may be accepted throughout the site in accordance with EWC codes 170504 & 200202 soil and stones. Suitably sized concrete (EWC codes 170101) may be used in place of quarried stone and gravel for the Waste Inspection Area, Waste Quarantine Area.	First Schedule, Activity 5, Class 10	250,000	15/10/2003	10/10/2003	09/10/2006
Wicklow Co. Council	Michael Healy, M.Healy Plant Hire, 'Healan'	Kilacoran, Aughrim, Co. Wicklow	Ess/15/8/12(77)	Waste Recovery	Only the following inert material may be accepted throughout the site in accordance with EWC codes 170504 & 200202 soil and stones. Suitably sized concrete (EWC codes 170101) may be used in place of quarried stone and gravel for the Waste Inspection Area, Waste Quarantine Area.	First Schedule, Activity 5, Class 10		15/10/2003	10/10/2003	09/10/2006
Wicklow Co. Council	Arklow Harbour Commissioners & Tristway Ltd	Arklow Harbour, North Quay, Arklow, Co. Wicklow	Ess/15/8/12(80)		EWC Codes 17 05 04, 20 02 02 and 17 01 01	Activity 5 of the First Schedule and Class 1 of the Third Schedule	5,000	24/12/2003	23/12/2003	22/12/2006
Wicklow Co. Council	Morris Sisk Consortium	Ballynamoney to Newtownmoun Kennedy N11 Alignment	Ess/15/8/12(91)	Waste Recovery	See Waste Permit for EWC Codes	Activity 5 of the First Schedule and Class 4 of the Fourth Schedule.		26/01/2004	23/01/2004	22/07/2005
Wicklow Co. Council	Delahunt Brothers	Belinacloagh, Wicklow/Ballykeapoge, Wicklow	Ess/15/8/12(90)	Class 10 Recovery	EWC codes 17 05 04, 20 02 02, and 17 01 01, 17 01 02, 17 01 03m 17 01 07	Class 10	35,000	05/02/2004	29/01/2004	28/01/2007
Wicklow Co. Council	Don Monnesey St. Ltd	Balesse Wood, Rathdrum	Ess/15/8/12(93)	Class 10 Recovery	17 01 01	Class 10	5,000	07/04/2004	31/03/2004	30/03/2007
Wicklow Co. Council	Liam Mallon	Kilarra, Arklow	Ess/15/8/12(94)	Class 10 Recovery	17 05 04, 20 02 02 and 17 01 01	Class 10	25,000	07/04/2004	31/03/2004	30/03/2007
Wicklow Co. Council	Harry Kavanagh	Ballynatten, Arklow	Ess/15/8/12(14)	Class 4 Recovery	17 05 04, 20 02 02 and 17 01 01, 17 01 02, 17 02 03, 17 01 07	Class 4	40,000	14/04/2004	05/05/2004	04/10/2005
Wicklow Co. Council	Seonaid Yonka	Carrigrohane, Glencolumbkille, Rathdrum	Ess/15/8/12(87)	Class 10 Recovery	17 05 04, 20 02 02, and 17 01 01	Activity 5	30,000	28/04/2004	23/04/2004	22/04/2007
Wicklow Co. Council	Brendan Cleenan	Ballydures, Sea Road Kibodee	Ess/15/8/12(83)	Class 10 Recovery	17 05 04, 20 02 02	Activity 5	10,000	28/04/2004	23/04/2004	22/10/2004
Wicklow Co. Council	Stanley O'Reilly	Terrapin, The Mounagh	Ess/15/8/12(97)	Class 3 & 4 Recovery	Most not hazardous substances under EWC 17 Category	Activity 5	5,000	28/04/2004	23/04/2004	22/04/2007
Wicklow Co. Council	S.M. Morris Ltd	Prestnewtown, Greystones	Ess/15/8/12(101)	Class 13 Recovery	17 05 04	Activity 5	75,000	07/05/2004	05/05/2004	04/05/2006
Wicklow Co. Council	S.M. Morris Ltd	Prestnewtown, Greystones	Ess/15/8/12(102)	Class 10 Recovery	17 05 04	Activity 5	100,000	07/05/2004	05/05/2004	04/05/2006
Wicklow Co. Council	S.M. Morris Ltd	Prestnewtown, Greystones	Ess/15/8/12(100)	Class 13 Recovery	17 05 04	Activity 5	25,000	07/05/2004	06/05/2004	04/05/2004
Wicklow Co. Council	Edward Manning	Ballynamina, Roundwood, Co. Wicklow	Ess/15/8/12(65)	Class 10 Recovery	17 05 04, 20 02 02	First Schedule - Activity 5	50,000	14/05/2004	11/05/2004	10/05/2007
Wicklow Co. Council	Trewer Nuzum	Ballynatten, Arklow, Co. Wicklow	Ess/15/8/12(99)	Class 10 Recovery	17 05 04, 20 02 02 and 17 01 01, 17 01 02, 17 01 03, 17 01 07	First Schedule - Activity 5	50,000	16/06/2004	14/06/2004	13/06/2007
Wicklow Co. Council	P.J. O'Halloran	Castleruddy House, Castleruddy, Stradford-on-Slaney, Co. Wicklow.	Ess/15/8/12(76)	Class 10 Recovery	17 05 04, 20 02 02 and 17 01 01	First Schedule - Activity 5, and Fourth Schedule, class 10	25,000	18/06/2004	10/05/2005	09/05/2007
Wicklow Co. Council	Tom Moyan	Ballintombay Lower, Greenane, Rathdrum, Co. Wicklow	Ess/15/8/12(98)	Class 10 Recovery	17 05 04, 20 02 02	First Schedule - Activity 5, and Fourth Schedule, class 10	5,000	24/06/2004	22/06/2004	21/06/2005
Wicklow Co. Council	Glenview Hotel	Glen of the Downs, Deltany, Co. Wicklow	Ess/15/8/12(69)	Class 10 Recovery	17 05 04, 20 02 02	First Schedule - Activity 5, and Fourth Schedule, class 10	5,000	24/06/2004	21/06/2004	22/02/2005



Wicklow Co. Council	John Lawless and Patrick Byrne	Balnahinch, Newtownmountkennedy, Co. Wicklow	Ess/15/8/12(103)	Class 10 Recovery	17 05 04, 20 02 02 and 17 01 01	Activity 5	50,000	15/07/2004	14/07/2004	13/07/2007
Wicklow Co. Council	John Lawless and Patrick Byrne	Balnahinch, Newtownmountkennedy, Co. Wicklow	Ess/15/8/12(103)	Class 10 Recovery	17 05 04, 20 02 02	First Schedule - Activity 5, and Fourth Schedule, class 10	30,000	29/07/2004	13/07/2004	12/07/2007
Wicklow Co. Council	Powercourt Manor Health Farm Ltd.	Coonakey, Enniskerry, Co. Wicklow	Ess/15/8/12(109)	Class 10 Recovery	17 05 04, 20 02 02	First Schedule - Activity 5, and Fourth Schedule, class 4	25,000	29/07/2004	06/07/2004	05/07/2005
Wicklow Co. Council	Chris Byrne	Oakhill, Redcross, Co. Wicklow		Class 10 Recovery	17 05 04, 20 02 02 and 17 01 01	First Schedule - Activity 5, and Fourth Schedule, class 10	10,000	29/07/2004	27/07/2004	26/07/2007
Wicklow Co. Council	John McAllister	Kilclobran, Aughrim	Ess/15/8/12(72)	Class 10 Recovery	17 05 04, 20 02 02 - spreading of waste on land with a consequential benefit for an agricultural activity or ecological system	Activity 5, Class 10	2,000	27/07/2004	14/07/2004	13/07/2005
Wicklow Co. Council	William Norse	Kilmarin, Newcastle, Co. Wicklow	Ess/15/8/12(86)		17 05 04, 20 02 02 and 17 01 01	First Schedule - Activity 5, and Fourth Schedule, class 10		23/08/2004	04/08/2004	03/02/2005
Wicklow Co. Council	Albert Leonard	Killegar, Enniskerry, Co. Wicklow	Ess/15/8/12 (104)	Class 10 Recovery	17 05 04, 20 02 02 & 17 01 01	Activity 5, Class 10: The recovery of waste & the spreading of waste on land with a consequential benefit for an agricultural activity or ecological system	40,000	21/09/2004	03/09/2004	02/09/2007
Wicklow Co. Council	Albert Leonard	Killegar, Enniskerry, Co. Wicklow	Ess/15/8/12(182)	Class 10 recovery	17 05 04, 20 02 02	Fourth schedule, class 10	43,000 tonnes	30/06/2005	17/06/2005	16/06/2008
Wicklow Co. Council	Fiona Walsh	Kilmacrogue, Co. Wicklow	Ess/15/8/12 (113)	Class 4 waste Recovery Facility	17 05 04, 20 02 02 & 17 01 01	Activity 5, Class 4: The recovery of waste	4,000 tonnes	29/09/2004	24/09/2004	23/01/2005
Wicklow Co. Council	Dan Morrissey Ltd	Babbakey, Co. Carlow	Ess/15/8/12 (111)	Class 4 waste Recovery Facility	17 03 02	Activity 5, Class 4	5,000 tonnes per annum	29/09/2004	24/09/2004	23/09/2007
Wicklow Co. Council	Jarath Sweeney	Summerhill House Hotel, Enniskerry, Co. Wicklow	Ess/15/8/12 (121)	Class 4 Recovery	17 05 04, 20 02 02	Activity 5, Class 4	12,000 tonnes	01/10/2004	24/09/2004	23/04/2005
Wicklow Co. Council	Derek Bunon	Barmarie Wood, Barmarie, Enniskerry, Co. Wicklow	Ess/15/8/12 (120)	Class 10 Recovery	17 05 04, 20 02 02 & 17 01 01	Activity 5, Class 10	16,000 tonnes	01/10/2004	24/09/2004	23/09/2007
Wicklow Co. Council	M&S Ryan Plant Hire Ltd.	Ballygannon Beg, Rathdrum, Co. Wicklow	Ess/15/8/12 (105)	Class 10 Recovery	17 05 04, 20 02 02 & 17 01 01	Activity 5, Class 10	30,000 tonnes	01/10/2004	24/09/2004	23/09/2004
Wicklow Co. Council	William Norse	Kilmarin, Newcastle, Co. Wicklow	Ess/15/8/12 (86)	Activity 5, Class 10	See Condition 5.3 of Permit	Activity 5, Class 10		13/10/2004	04/08/2004	03/02/2005
Wicklow Co. Council	Seamus Byrne	Ardnaby, Knockanna, Co. Wicklow	Ess/15/8/12 (116)	Class 10 Recovery	17 05 04, 20 02 02	Activity 5, Class 10	35,000 tonnes	19/10/2004	18/10/2004	17/10/2007
Wicklow Co. Council	William O'Sullivan	Blarney Golf Club, Blarney, Co. Wicklow	Ess/15/8/12 (115)	Class 10 Recovery & 13 Storage	17 05 04, 20 02 02	Activity 5, Classes 10 & 13	20,000 tonnes	19/10/2004	18/10/2004	17/10/2007
Wicklow Co. Council	David Whyte T/A Balydonara Transport	Ballynamina, Roundwood, Co. Wicklow	Ess/15/8/12 (110)	First Schedule-Activity 5, Classes 4 & 10 Recovery	17 05 04, 20 02 02, 17 01 01	First Schedule-Activity 5, Classes 4 & 10	300,000 tonnes in total	25/10/2004	22/10/2004	21/10/2007
Wicklow Co. Council	Lee Halpin	Lowlow, Rathdrum, Co. Wicklow	Ess/15/8/12 (112)	Class 4 & Class 10 Recovery	17 05 04, 20 02 02, 17 01 01	Fourth Schedule, Activity 5, Class 4 & Class 10 Recovery	50,000 tonnes in total	25/10/2004	21/10/2004	20/04/2005
Wicklow Co. Council	Glenmaire Golf Club	Greenanna, Rathdrum, Co. Wicklow	Ess/15/8/12 (123)	Class 4 Recovery	17 05 04, 20 02 02, 17 01 01, 17 01 02	Fourth Schedule, Class 4	5,000 tonnes in total	25/10/2004	22/10/2004	21/10/2008
Wicklow Co. Council	Cullen Excavations Ltd.	Ballygarret, Kicoole, Co. Wicklow	Ess/15/8/12 (92)	Class 4 & 13 Recovery	17 05 04, 20 02 02 & 17 01 01	First Schedule, Activity 5 & Fourth Schedule, Classes 4 & 13	240,000 tonnes in total	18/11/2004	02/11/2004	01/11/2007
Wicklow Co. Council	Noel Regan & Sons (Plant Hire) Ltd	Ballyguile, Wicklow Town, Co. Wicklow	Ess/15/8/12 (133)	Class 10 Recovery	17 05 04, 20 02 02, 17 01 01-03, 17 01 07	Fourth Schedule, Class 10	5,000 tonnes	18/11/2004	11/11/2004	10/05/2005
Wicklow Co. Council	Noel Regan & Sons (Plant Hire) Ltd	Bray Business Park, Southern Cross Rd., Bray, Co. Wicklow	Ess/15/8/12 (132)	Class 10 Recovery	17 05 04, 20 02 02, 17 01 01-03, 17 01 07	First Schedule, Activity 5 & Fourth Schedule, Class 10	5,000 tonnes	18/11/2004	11/11/2004	10/05/2005
Wicklow Co. Council	Glencomack Timber Ltd.,	Balinacarrig Upper, Rathdrum, Co. Wicklow	Ess/15/8/12 (124)	Class 10	17 05 04 & 20 02 02	First Schedule, Activity 5 & Fourth Schedule, Class 10	120,000 tonnes in total	23/11/2004	10/11/2004	09/11/2007
Wicklow Co. Council	Roadstone Dublin Ltd.	Fassroe Sand & Gravel Pit, Fassroe, Bray, Co. Wicklow	Ess/15/8/12 (54)	Class 4 & 13 Recovery	17 01 01, 17 01 02, 17 01 03, 17 01 07, 17 03 02	First Schedule, Activity 5 & Fourth Schedule, Classes 4 & 13	50,000 tonnes	24/11/2004	10/11/2004	09/11/2007
Wicklow Co. Council	Dermot Fanning	Drumangan, Glenealy, Co. Wicklow	Ess/15/8/12 (140)	Class 10	17 05 04, 20 02 02	First Schedule, Activity 5 & Fourth Schedule, Class 10	15,000 tonnes	24/11/2004	18/11/2004	17/11/2007
Wicklow Co. Council	S.M Morris	Kilruddery, Glispur, Bray, Co. Wicklow	Ess/15/8/12 (144)	Class 10 Recovery	17 05 04 & 20 02 02	Activity 5, Class 10	60,000 tonnes	14/12/2004	10/12/2004	09/12/2008
Wicklow Co. Council	Glencomack Timber Ltd.	Kilpicks, Aughrim, Co. Wicklow	Ess/15/8/12 (128)	Class 10 Recovery	17 05 04 & 20 02 02	Activity 5, Class 10	40,000 tonnes	14/12/2004	10/12/2004	09/12/2008
Wicklow Co. Council	Stan O'Reilly	Tempan, The Murrigh, Wicklow	Ess/15/8/12 (134)	Class 2,3,4,12&13 Recovery	Most incl hazardous substances under EWC 17and 20 Category	Activity 5, Classes 2,3,4,12&13	25,000 tonnes	14/12/2004	09/12/2004	08/12/2007
Wicklow Co. Council	Colien Construction	Bray Business Park, Southern Cross Rd., Bray, Co. Wicklow	Ess/15/8/12 (143)	Class 10 Recovery	17 05 04, 20 02 02	Activity 5, Class 10	10,000 tonnes	14/12/2004	09/12/2004	08/12/2005
Wicklow Co. Council	Elan May	Drumgoff, Glenmalur, Co. Wicklow	Ess/15/8/12 (138)	Class 10 Recovery	17 05 04, 20 02 02	Activity 5, Class 10	60,000 tonnes	22/12/2004	20/12/2004	19/12/2008
Wicklow Co. Council	Tony Lawlor T/A Marrakesh Ltd.	The Downs, Kilpedder, Co. Wicklow	Ess/15/8/12 (141)	Class 10 Recovery	17 05 04, 20 02 02	Activity 5, Class 10	30,000 tonnes	22/12/2004	20/12/2004	19/12/2008
Wicklow Co. Council	Sylvester Dehmut	Ballintekin, Wicklow, Co. Wicklow	Ess/15/8/12 (127)	Class 10 Recovery	17 05 04, 20 02 02, 17 01 01	Activity 5, Class 10	150,000 tonnes	22/12/2004	20/12/2004	19/12/2007
Wicklow Co. Council	Leon Transport, Recycling	Murrigh, Wicklow Town, Co. Wicklow	Ess/15/8/12(148)	Class 2,3,4,12 & 13 Recovery	20 02 01 / 20 01 38 / 20 01 40 / 16 01 06 / 17 04 Non Hazardous / 15 01 Non Hazardous	Activity 5 classes 2, 3, 4, 12, 13	25,000 tonnes	10/01/2005	08/01/2005	05/01/2008
Wicklow Co. Council	Leon Transport, Recycling	Murrigh, Wicklow Town, Co. Wicklow	Ess/15/8/12(148)	Class 2,3,4,12 & 13 Recovery	15 01 01, 15 01 02, 15 01 04, 15 01 07, 16 01 06, 16 02 11, 16 06 04, 16 06 05, 17 05 04, 17 09 04, 20 01 10, 20 01 11, 20 01 23, 20 01 34, 20 01 36, 20 01 39, 20 01 40, 20 02 02	Activity 5 Classes 2,3,4,12 & 13	25,000 tonnes	11/02/2005	09/02/2005	08/02/2008
Wicklow Co. Council	Kavin Meale	Ballintekin, Wicklow	Ess/15/8/12(117)	Class 10 Recovery	17 05 04, and 20 02 02	Activity 5 Class 10	50,000	21/01/2005	20/01/2005	19/01/2007
Wicklow Co. Council	King's Tree services Ltd.,	Coonbeg, Wicklow, Co. Wicklow	Ess/15/8/12(118)	Class 2 Recovery	020103, 020107, 200201, 030101, 170201	First Schedule, Activity 5 Fourth Schedule, Class 2	5,000	26/01/2005	25/01/2005	24/01/2008
Wicklow Co. Council	Clifton Scannell Emerson Associates	Blackberry Lane, Delgany, Co. Wicklow	Ess/15/8/12(146)	Class 4 Recovery	17 05 04, 20 02 02	First Schedule, Activity 5, Class 4	10,000	28/02/2005	24/02/2005	23/02/2008
Wicklow Co. Council	Arkow Waste Disposal Ltd	Clone, Aughrim, co. Wicklow	Ess/15/8/12(153)	Classes 2,3,4,12,13.	17 01 01, 17 01 02, 17 01 07, 17 02 01, 17 03 02, 17 04 07, 17 05 04, 20 03 01, 20 03 07	4th Schedule, classes 2,3,4,12,13.	25,000	11/02/2005	09/02/2005	08/02/2008
Wicklow Co. Council	Anne Moore	Scrathagh Cross Road, Arklow, County Wicklow	Ess/15/8/12(131)	Class 10 Recovery	17 05 04, 20 02 02	Activity 5 Class 10	30,000 tonnes	28/02/2005	24/02/2005	23/02/2008
Wicklow Co. Council	S.M. Morris Ltd	Kilmacurra, Brimley, Kilpedder, Co. Wicklow	Ess/15/8/12(145)	Class 10 Recovery	17 05 04, 20 02 02	Activity 5 Class 10	25,000 tonnes	28/02/2005	24/02/2005	23/02/2007
Wicklow Co. Council	Holl Developments Ltd.	Kilclobran, Aughrim, Co. Wicklow	Ess/15/8/12(149)	Class 10 Recovery	17 05 04, 20 02 02	Activity 5 Class 10	10,000 tonnes	28/02/2005	24/02/2005	23/02/2008









**APPENDIX U**

**NCDWC Waste Permit Register Survey 2003**

## LIST OF LICENCED C&D WASTE FACILITIES.

### WASTE TRANSFER SITES ACCEPTING C&D WASTES.

<u>REGION</u>	<u>COUNTY</u>	<u>LICENCEE</u>	<u>ADDRESS</u>	<u>LICENCE REF NO</u>
South-West	Cork	Waste Recovery Services (fermoy)	Cullengh, Fermoy, Cork	107 - 1
South-West	Cork	Ahern Industrial Services Ltd	Sarsfield Ind Est, Glanmire, Cork	136 - 2
South-West	Cork	Cork County Council	Macroon Civic Amenity Site, Cork	142 - 1
South-West	Cork	Ashgrove Recycling	Churchfield Ind Est Cork	147 - 1
South-West	Cork	Ipodec Ireland Ltd	Forge Hill, Kinsale Rd, Cork	173 - 1
Dublin	Dublin	Dean Waste Company	Sherif Street Upper, Dublin 1	42 - 1
Dublin	Dublin	Padraig Thornton Waste Disposal	Kileen Rd, Ballyfermot, Dublin 10	44 - 2
Dublin	Dublin	Dean Waste Company	Greenhills Rd, Walkinstown, Dublin 12	45 - 1
Dublin	Dublin	Greyhound Waste Management Centre	Knockmitten Ln, Western Ind Est, D12	95 - 2
Dublin	Dublin	Swalcliffe Ltd	116 Sherif Street Upper, Dublin 1	97 - 1
Dublin	Dublin	N. Murphy Waste Disposal Ltd	Sandyhill, St Margarets, Co Dublin	134 - 1
Dublin	Dublin	Oxigen Environmental Ltd	Robinhood Ind Est, Ballymount, D22	152 - 1
Dublin	Dublin	Greenstar Recycling Holdings	Millennium Business Park, Grange, Ballycoolin, Dublin 11.	183-1
Dublin	Dublin	Greenstar Materials Recovery Ltd.	14B Phase 3, Road 3A, Greenogue Industrial Estate, Rathcoole, Co. Dublin.	188-1
West	Galway	Bruscar Bhearna Teoranta	Carrowbrowne, Headford Rd, Galway	106 - 2
West	Galway	Dean Waste Company	Townlands of Carrowmoneash, Galway	148 - 1
South-West	Kerry	Kerry County Council	Coolcaslagh Transfer Station, Killarney	72 - 1
Mid-East	Kildare	Yellow Bins Waste Disposal Ltd	Donore, Caragh, Kildare	114 - 1
Mid-East	Kildare	Brivin Enterprises Ltd	Westside Waste, Blacklion, Maynooth	162 - 1
Mid-East	Kildare	Neiphin Trading Ltd.	Kerdiffstown, Naas, Co. Kildare	47-1
Midland	Laois	Ray Whelan Ltd - Waste Services	Cappanaboe, Co Laois	158 - 1

Midland	Offaly	Advanced E Rent A Bin.	Cappincur, Tullamore, Co. Offaly	104-1
Mid-West	Limerick	Mr Binman Ltd	Laddenmore, Killmallock, Limerick	61 - 2
Mid-West	Limerick	Cussen & Company (crane hire)	Ballykeefe Townland, Dock Rd, Limerick	82 - 1
Mid-West	Limerick	Ipodec Ireland Ltd	Ballykeefe Dock Rd, Limerick	82 - 2
Midland	Longford	Mulleadys Limited	Cloonagh, Drumlish, Longford	169 - 1
Border	Louth	Bambi Bins & Wheel Bin Services	Coes Road, Dundalk, Co Louth	144 - 1
West	Mayo	McGrath Ind . Waste Ltd	Gortnafolla Castlebar, Co Mayo	143 - 1
Mid-East	Meath	Midland Waste Disposal Co	Clonmagaddan, Navan, Co Meath	131 - 1
Mid-East	Meath	Panda Waste Services	Rathdrinagh, Beauparc, Co Meath	140 - 1
West	Roscommon	Bergin Waste Disposal	Ballaghaderreen Ind Est, Co Roscommon	163 - 1
Border	Sligo	Waste Disposal (Sligo) Ltd	Deepwater Quay, Sligo	45 - 1
South-East	Waterford	Waterford Utility Serv. Waste Disp.	Six Cross, Carriganard, Butlerstown, Wford	116 - 1
South-East	Waterford	IPODEC Ireland Ltd.	Carrignard, Six Cross Roads, Business Park, Waterford City.	177-1
South-East	Wexford	South East Recycling Company	Carrigbawn, Pembrokestown, Wexford	111 - 1

Above figures per EPA Website as at 10/08/2004

Note: New licenses issued from 01/08/2003 to 10/08/04 are highlighted in red.

### LANDFILL SITES ACCEPTING C&D WASTES

<u>REGION</u>	<u>COUNTY</u>	<u>LICENCEE</u>	<u>ADDRESS</u>	<u>LICENCE REF NO</u>
South-East	Carlow	Powerstown Landfill	County Buildings, Athy Rd, Carlow	25 - 1
South-West	Cork	East Cork Landfill	Roassmore, Carrigtohill, Cork	22 - 1
South-West	Cork	Kinsale Road Landfill	South City Link Road, Cork	12 - 1
South-West	Cork	Youghal Landfill	Youghal Mudlands, Cork	68 - 1
Border	Donegal	Ballynacarrick Landfill	Ballintra, Donegal	24 - 1
Border	Donegal	Balrane Landfill	Balrane, Killybegs, Donegal	90 - 1
Dublin	Dublin	Balleally Landfill	Balleally, Lusk, Co Dublin	9 - 1

South-West	Kerry	North Kerry Landfill	Muingnaminnane, Kerry	1 - 2
Mid-East	Kildare	KTK Landfill	Borwnstown & Carnalway, Kilcullen	81 - 2
Mid-West	Limerick	Cortadroma Landfill	Shanagoldin, Foynes, Limerick	17 - 1
Border	Louth	Whiteriver Landfill	Co Hall, Millennium Centre, Dundalk	60 - 1
West	Mayo	Derrinmera Landfill	Newport, Co Mayo	21 - 1
West	Mayo	Rathroeen Landfill	Ballina, Co Mayo	67 - 1
Border	Monaghan	Scotch Corner Landfill	Annyally, Castleblaney, Monaghan	
Midland	Offaly	Derryclure Landfill	Offaly Co Council, Tullamore	29 - 1
West	Roscommon	Ballahadereen Landfill	Roscommon	59 - 1
South-East	Tipperary	Ballaghvney Landfill	Ballymackey, Tipperary	78 - 1
South-East	Waterford	Tramore Landfill	Tramore Burrows, Waterford	75 - 1
Midland	Westmeath	Ballydonagh Landfill	Ballydonagh, Dublin Road, Athlone	28 - 1
Midland	Westmeath	Marlinstown Landfill	Marlinstown Bog, Mullingar	71 - 1
Mid-East	Wicklow	Marrakesh Ltd-Kilmurry Landfill	Kilmurry South, Bray, Co Wicklow	48 - 1
Dublin	Dublin	Murphy Environmental	Hollywood, The Naul, Co Wicklow	129 - 1
Mid-East	Meath	Murphy Environmental	Gormanstown, Co Meath	151 - 1
Mid-East	Kildare	KTK Sand & Gravel	Ballymore Eustace, Co Kildare	156 - 1
Dublin	Dublin	Southern Excavations Ltd	Aghfarrell, Britas, Co Dublin	84 - 1
Dublin	Dublin	Dunsink Landfill	Fingal, Co Dublin	127 - 1

Above figures per EPA Website as at 10/08/2004

**HAZARDOUS WASTE FACILITIES ACCEPTING CONTAMINATED SOILS.**

<b><u>REGION</u></b>	<b><u>COUNTY</u></b>	<b><u>LICENCEE</u></b>	<b><u>ADDRESS</u></b>	<b><u>LICENCE REF NO</u></b>
Midland	Laois	Atlas Environmental Ireland Ltd	Clonminam Industrial Estate, Portlaoise, Co. Laois.	184-1
Dublin	Dublin	Cara Waste Management Ltd	Site No. 14A1 Phase 3, Road 3A, Greenogue Industrial Estate, Rathcoole Co. Dublin	185-1

Local Authority	Name of Operator	Address/Location of Facility	Type of Permission; Permit	Ref.	Description of Facility	Waste Types Handled	Waste Scheduling Activities	Tonnes per year	Commercial Industrial Waste Accepted?	Waste Permit Received	Date of Issue	Date of Expiry
Cavan Co. Council	Gerard Martin,	Annaherin, Shercock, Co. Cavan, Premises at: Enterprise Centre, Kells Road, Kingscourt, Co. Cavan	Permit	02/04	Recycling of solid non-toxic waste, as described in the application form from selected waste streams obtained from domestic, industrial & commercial premises that have a high recyclable content.	Wastes scheduled in the application form, similar wastes as may be approved, from time to time in writing, by the local authority.	Class 4 Fourth Schedule	5,000 tonnes per year		16/09/2002	11/09/2002	10/09/2005
Cavan Co. Council	Mr Mattie McBreen, Cavan Wheel a Bin, Alacken, Cavan	Alacken Co. Cavan	Permit	WP01/01	Recycling or reclamation of organic substances, waste recovery	Solid non-toxic waste	Class 4 Fourth Schedule			04/10/2001	Sept 2001	Sept 2004
Cavan Co. Council	Rodney Wilton	Kiffa, Crosserlough, Co. Cavan 049 4336138	Permit	W02/8		Inert C&D Waste		100 tonnes per annum				01/05/06
Clare Co. Council	Clean (Ir) Refuse & Recycling Co. Ltd	Ballinagun West, Cree, Kiltrush, Co. Clare	Permit	010/02/WP/CL	Repackaging & Recovery of Waste	See attachment no. 1	1st Schedule - Activities 2,5 & 6 - 3rd Schedule - Classes 12 & 13 - 4th Schedule - Classes 2,3,4 & 13	5000		02/12/2002	29/11/2002	31/01/2005
Clare Co. Council	Inagh GAA Club	Lickaun, Kilnamona, Co. Clare	Permit	002/03/WPT/CL		Soil and Stone		6000 tonnes total				30/09/2005
Clare Co. Council	Mr Eamonn Conway	Clondanagh, Tulla, Co. Clare	Permit	003/01/WP/CL	Recovery of scrap metal or other metal waste.	dismantling of recovery of vehicles, recovery of scrap metal or other metal waste, recycling or reclamation of metals and metal compounds	Article 19 (a) of the Waste Management (Permit) Reg, 1998, 4th Sched. Of the WMA 1996, Class 3 and 1st Sched of the WM (Permit) Reg 1998, Activity 2 and 3			25/06/2001	20/06/2001	01/02/2004
Clare Co. Council	Modern Car Dismantlers	Doora Industrial Estate, Quin Road, Ennis, Co. Clare	Permit	002/01/WP/CL	Car dismantling	Recovery of scrap metal or other metal waste / The dismantling or recovery or vehicles.	WMA 1996, Sched 4, Class 3 and 1st Sched of WM(Permit) Regs 1998, Activity 2 and 3			25/06/2001	20/06/2001	01/02/2004
Clare Co. Council	Mr. Liam Kinwan	Ballynagard, Ballynacally, Co. Clare.	Permit	005/02/WP/CL	Recovery of waste		4th Schedule of WMA 1996, Class 3, 4 & 13 & 1st Schedule of WM (Permit) Regs 1998, Activity 2 & 5	Not to exceed 5000 tonnes		15/02/2002	11/02/2002	31/01/2004
Clare Co. Council	Westside Recycling Co.	Bunnow, Doora, Co. Clare	Permit	006/02/WP/CL	Recovery of scrap metal, recovery of waste (other than hazardous waste), see permit		First Schedule of WM (Permit) Regs, 1998, Activity 2 & 5 and Fourth Schedule of WMA 1996, Class 3, 4 & 13.	5000 tonnes per annum		15/02/2002	Jan 2002	31/01/2004
Clare Co. Council	Mr. Tom Harvey	Carrowkeel East, Inagh, Co. Clare	Permit	007/02/WP/CL		Shredding of waste newspaper for animal bedding	Class 2, 13 - Activity 5	5000 tonnes		27/08/2002	19/08/02	31/01/2005
Clare Co. Council	Mr. & Mrs. Carmel & Pat Barrington	Clonina, Cree, Kiltrush, Co. Clare	Permit	008/02/WP/CL		used polythene farm film	Activity 5, Classes 4 & 13	5000 tonnes		31/10/2002	25/10/02	31/01/2005
Clare Co. Council	Rural Refuse & Recycling Ltd.	Mohermoyland, Carron, Co. Clare	Permit	009/02/WP/CL		Glass bottles, aluminium beverage cans, cardboard, scrap metal, newspapers	Activities 2 & 5 - Classes 2,3,4,13	5000 tonnes		13/11/2002	11/11/02	31/01/2005



Clare Co. Council	Tullagower Quarries Ltd.	Tullagower, Kilrush, Co. Clare	Permit	011/02/WP/CL	Waste glass recovery	Waste glass	1st Schedule, Activity 5 / 3rd Schedule, Classes 12 & 13 / 4th Schedule, Classes 4, 11, 13	Yr1 2000 tonnes / Yr2 5000 tonnes / Yr3 8000 tonnes		02/12/2002	29/11/02	31/01/2005
Clare Co. Council	Clare Waste & Recycling Co. Ltd.	Raheen, Tuamgraney, Co. Clare	Permit	012/02/WP/CL		Construction and demolition waste, packaging waste, scrap metal, waste timber.	3rd Schedule Classes 12 & 13 / 4th Schedule Classes 2,3,4 & 13			18/12/2002	13/12/02	31/01/2005
Cork City Council	Denis Healy & Company Ltd.	South West Business Park, Tramore Road, Cork	Permit	631		Only wastes described in the application namely: mixed municipal waste, glass, paper, cardboard, metal, plastic, rubble, soil & stones, timber, may be managed at the facility on the site.	3rd Schedule, Class 13 / 4th Schedule Classes 2,3,4 & 13 / 1st Schedule, Class 5			10/03/2003	08/03/02	30/06/2004
Cork City Council	Barry Murphy Transpartners Ltd. T/A Cork Mini Skips	Churchfield Industrial Estate, John F. Connolly Road, Cork	Permit	902		Only wastes described in the application and included in the following: mixed municipal waste, glass, paper, cardboard, metal, plastic, rubble, topsoil, rubble, wood, hedging & garden type, textiles may be managed at the facility on the site.	3rd Schedule, Class 13 / 4th Schedule Classes 2,3,4 & 13 / 1st Schedule, Class 5			10/03/2003	12/04/02	30/06/2004
Cork City Council	Rehab Recycling Partnership	Monahan Road, Cork	Permit	635		Only materials described in the application namely: glass bottles, aluminium cans, steel cans, paper, may be managed at the facility on the site.	3rd Schedule, Class 13 / 4th Schedule Classes 2,3,4 & 13 / 1st Schedule, Class 5			10/03/2003	12/04/02	30/06/2004
Cork City Council	Gerlan Cars and Parts Ltd.	11 Rutland Street, Cork	Permit	907		Only wastes described in the application and included in the following: cars, disused cars, car parts, may be managed at the facility on the site.	3rd Schedule, Class 13 / 4th Schedule Classes 2,3,4 & 13 / 1st Schedule, Class 5			10/03/2003	12/04/02	30/06/2004
Cork City Council	Cork Institute of Technology	Rossa Ave., Cork	Permit	907A		Only wastes described in the application, i.e. 5,000 tonnes per annum of natural soil	3rd Schedule, Activities 1,11,13 / First Schedule - Class 6	5,000 tonnes per year		10/03/2003	15/08/02	31/07/2005
Cork City Council	Nemo Rangers Hurling & Football Club	South Douglas Road, Cork	Permit	907B		Only wastes described in the application i.e. 5,000 tonnes per annum of natural soil, may be managed on the site.	3rd Schedule, Activities 1,11,13 / First Schedule - Class 6	6,000 tonnes per year		10/03/2003	15/08/02	31/07/2005
Cork Co. Council	Pouladuff Dismantlers Ltd	Forge Hill, Pouladuff Road, Cork	Permit	02/1999	Dismantling or recovery of vehicles					18/11/2002	Re-issued (New version not rec'd)	30/06/2004
Cork Co. Council	Cork Metal Company	Dublin Hill, Cork	Permit	08/01	Recycling or reclamation of metals and metal compounds; recycling or reclamation of other inorganic materials; storage of waste intended for submission to a waste recovery facility; repackaging of waste prior to submission to a waste disposal facility; storage of waste intended for submission to a waste disposal facility	Metals, oil and batteries, end of life vehicles (see permit for further details)	WM Permit Regs 1998			29/04/2002	17/04/2002	28/02/2005



Cork Co. Council	Ipodec Ireland Ltd	Forge Hill, Pouladuff Road, Cork	Permit	02/01	Recycling or reclamation of organic substances, waste recovery	metal compounds, inorganic materials, repackaging of waste prior to submission, paper, cardboard, glass, plastic, metals, wooden pallets, oil and batteries	Article 19 of the WM(permit) reg 1998 - section 57 or 58 of the WMA 1996 and section 34(5) or 40(7) of the WMA 1996	5000		04/04/2001	02/04/2001	30/04/2004
Cork Co. Council	John O'Brien/ t/a John O'Brien Skip Hire	Ballyrussell, Middleton, Co. Cork	Permit	S/2/00	Repackaging of waste	Repackaging of waste prior to submission to any waste disposal activity, storage of waste prior to submission to any waste disposal activity, recycling or reclamation of metals and metal compounds, recycling or reclamation of inorganic materials, recycling	Article 5 of the Waste Management (permit) Reg, 1998	1000		09/04/2001	04/04/2001	28/02/2004
Cork Co. Council	CTO Env Services	Westwood, Rostellan, Middleton, Co. Cork	Permit	09/01	Storage of waste prior to submission to any waste recovery activity	Organohalogen Compounds, Zinc, Nickel, Copper, Lead, Tin, Barium, Boron, Uranium, Cobalt, Tellurium, Silver	Article 5 of the Waste Management (permit) Reg, 1998			28/12/2001	17/12/2001	30/09/2004
Cork Co. Council	Countrywide Drain Services Ltd.	Cronody, Dripsey, Co. Cork.	Permit	03/00	Agricultural Activity, Sludge Disposal.	Recovery of waste provided for in Class 10 of the 4th Schedule of the WMA, 1996 by treatment on land with consequential benefit for agricultural activities on lands located at Knocknagoul, Farnanes, Rooves Beg, Coachford & Berrings.	Class 10 of the Fourth Schedule of the WMA 1996.			21/02/2002	14/02/2002	14/02/2005
Cork Co. Council	Ted O'Donoghue	Knockpogue, Waterfall, Co. Cork.	Permit	01/00	Waste disposal facility, storage of waste, blending mixture of waste prior to submission to a waste disposal facility. Recycling or reclamation.	Waste disposal facility, storage of waste, blending or mixture of waste prior to submission to a waste disposal facility activity; recycling or reclamation of organic reclamation of metals and metal compounds; recycling or reclamation of other inorganic materials; storage of waste intended for submission to a waste recovery facility, subject to conditions.	Waste Management Regs, 1998.			21/02/2002	14/02/2002	31/12/2004
Cork Co. Council	Ritzdale Resources Ltd. t/a Crest Homes	Ballea Road, Carrigaline, Co. Cork.	Permit	19/02	Waste Recovery / Recycling	Inert Waste - Soil & Stone which conforms with the European Waste Catalogue code reference 170501.	Part 1 of the First Schedule of the WM (Permit) Regs, 1998 - Activity 5, Fourth Schedule of the WM Act, 1996 - Class 4 & 10.			04/06/2002	29/05/2002	28/05/2004
Cork Co. Council	Gama-Tubin Construction Ltd.	Greenfield, Ballincollig, Co. Cork	Permit	22/02		Soil and stone which conforms with the European Waste Catalogue ref. 170501. No other waste types are permitted to be deposited at the facility.	Part 1 of the First Schedule of the WM (Permit) Regs, 1998, Activity 5 - Fourth Schedule of the WMA 1996, Class 4, 10.			27/06/2002	26/06/2002	25/06/2004
Cork Co. Council	Gama-Tubin Construction Ltd.	Maglin, Ballincollig, Co. Cork.	Permit	23/02		Soil and stone which conforms with the European Waste Catalogue ref. 170501. No other waste types are permitted to be deposited at the facility.	Part 1 of the First Schedule of the WM (Permit) Regs, 1998, Activity 5 - Fourth Schedule of the WMA 1996, Class 4, 10.			27/06/2002	26/06/2002	25/06/2004
Cork Co. Council	Gama-Tubin Construction Ltd.	Land of Cornelius Lynch, Inniskenny, Waterfall, Co. Cork.	Permit	28/02		Soil and stone which conforms with the European Waste Catalogue code reference 170501. No other waste types are permitted to be deposited at this facility.	Part 1 of the First Schedule, Activity 5 / Fourth Schedule, Classes 4 & 10			30/10/2002	16/09/2002	15/09/2004

Cork Co. Council	Glyntown Enterprises Ltd.	Unit 3, Silverbullet Warehousing, Sarsfield Court, Glanmire, Co. Cork	Permit	11/01	Recovery and Disposal of Waste	Cardboard, Plastic, Newspapers, Magazines	Part 1 of the First Schedule of the WM (Permit) Regs. 1998 - Activity 5, 6 and Waste Recovery in accordance with the 4th Schedule of WMA 1996 - Class 4, 13 - 3rd Schedule of WMA, 1996 - Class 13.			15/07/2002	10/07/2002	09/07/2005
Cork Co. Council	Advanced Skip Hire	Lehanaghmore, Togher, Co. Cork	Permit	12/01	Waste Recovery Activities	Cardboard, plastic, timber, metal, rubble, garden waste, textiles, other	Part 1 of the 1st Schedule of WM (Permit) Regs 1998 Activity 5, 6 - 3rd Schedule of WMA 1996 - Class 13 - 4th Schedule of WMA 1996 - Class 4, 13.			15/07/2002	10/07/2002	09/07/2005
Cork Co. Council	Cork Recycling Co Ltd.	Lehanaghmore, Togher, Co. Cork	Permit	17/02	Waste Recovery Activities	Cardboard, plastic and timber	Part 1 of 1st Schedule of WM (Permit) Regs 1998 - Activities 5 & 6 - 3rd Schedule of WMA 1996 - Class 13 / 4th Schedule of WMA 1996 - Class 4 & 13.			15/07/2002	10/07/2002	09/07/2005
Cork Co. Council	Michael Fenton	Sluggera Cross, Whitechurch, Co. Cork	Permit	26/02		End of Life Vehicles which conforms with the European Waste Catalogue Code Reference 160104	Part 1 of 1st Schedule of the Waste Management (Permit) Regulations 1998, Activity 2 & 3 - Fourth Schedule Classes 3 & 13.			05/11/2002	23/10/2002	22/10/2005
Cork Co. Council	John Butler	Glinny, Riverstick, Co. Cork	Permit	25/02		Soil and stone which conforms with the European Waste Catalogue code reference 170504 / Construction & Demolition Waste which conforms with the European Waste Catalogue code reference 170107	Activity 5, Classes 4 & 10			05/11/2002	31/10/2002	30/10/2004
Cork Co. Council	Martin O'Sullivan	Rathfilode, Watergrasshill, Co. Cork	Permit	14/02		End of Life Vehicles 160104 - No other waste types shall be deposited at this facility.	Activity 2,3 of First Schedule / Classes 3,4,13 of Fourth Schedule			18/11/2002	11/11/2002	10/11/2005
Cork Co. Council	Sorensen Civil Engineering	Lands of Thomas Herlihy, Knocknagree Road, Boherbue, Cork.	Permit	36/02		Soil and stone which conforms to the EWC Ref. 170504. No other waste types are permitted.	First Schedule, Activity 5, Fourth Schedule, Classes 4 & 10.			16/01/2003	13/01/2003	12/01/2005
Cork Co. Council	Sorensen Civil Engineering	Lands of John Cronin, Kiskeam Road, Boherbue, Co. Cork.	Permit	37/02		Soil and stone which conforms to the EWC Ref. 170504. No other waste types are permitted.	First Schedule, Activity 5, Fourth Schedule, Classes 4 & 10.			16/01/2003	13/01/2003	12/01/2005
Cork Co. Council	Bernard Hyde	Carrigeen, Carrignagroghera, Fermoy, Co. Cork.	Permit	38/02		Soil and stone which conforms to the EWC Ref. 170504. No other waste types are permitted.	First Schedule, Activity 5, Fourth Schedule, Classes 4 & 10.			16/01/2003	13/01/2003	12/01/2005
Cork Co. Council	Barry Murphy, Transpartners Ltd. T/a Cork Mini Skips	Churchfield Industrial Estate, John F. Connolly Road, Cork.	Permit	02/02	Waste Recovery Activities	Mixed municipal waste, glass, paper, cardboard, metal, plastic, rubble, topsoil, rubble, wood hedging & garden type, textiles may be managed at the facility.				20/12/2002	12/04/2002	30/06/2004
Cork Co. Council	Dan Sheehan	Rathpeacon, Mallow Road, Co. Cork	Permit	33/02		Soil and stone which conforms with the EWC code ref. 170504	First Schedule, Activity 5, Fourth Schedule, Classes 4 & 10.			17/02/2003	13/02/2003	12/02/2006
Cork Co. Council	Confidential Recycling Ltd. t/a CCS Cork	Unit 1B, Blarney Business Park, Blarney, Co. Cork.	Permit	30/02		Paper and Cardboard 200101 / Plastics 200139	First Schedule Activity 6, 5 Fourth Schedule, Classes 4, 13, - Third Schedule, Class 13			05/03/2003	13/02/2003	12/02/2006



Cork Co. Council	Abbeyross Manufacturing Co. Ltd, t/a Munster Waste Management	Spa Road, Mallow, Co. Cork	Permit	CK(N)12/03	Disposal of waste other than hazardous waste, recycling or reclamation of organic substances, recycling or reclamation of metals and metal compounds etc	Disposal of waste other than hazardous waste, recycling or reclamation of organic substances, recycling or reclamation of metals and metal compounds etc	Part 1 of the First Schedule, Activity 5, 6 and 4th Schedule of WMA 1996, Class, 2, 3 4, 13 and 3rd Schedule of WMA 1996, Class 12, 13			14/03/2003	11/03/2003	10/09/2004
Cork Co. Council	John O'Connell	Killard, Blarney, Co. Cork	Permit	CK(S)03/03		Soil and stone which conforms to the EWC code reference 170504.	First Schedule, Activity 5 - Fourth Schedule, Class 10			30/04/2003	28/04/2003	27/04/2005
Cork Co. Council	Hammond Lane Metal Co. Ltd.	Ringaskiddy, Co. Cork	Permit	CK(S)15/02		End of Life Vehicles 160104 & 160106 containing neither liquids nor other hazardous components Ferrous Metal 160117 and Non-ferrous Metal 160118.	First Schedule, Activities 2 & 3 / Fourth Schedule Classes 3 & 13			07/05/2003	06/05/2003	05/05/2006
Cork Co. Council	ABS Recycling Ltd.	Old Biggs Store, Carrignagert, Bantry, Co. Cork	Permit	CK(S)31/02		Paper and Cardboard EWC code references 200101 / Plastic which conforms with the EWC code reference 200139	First Schedule, Activities 5&6 - Fourth Schedule Classes 2,4,13 and Third Schedule Classes 12&13			07/05/2003	06/05/2003	05/09/2004
Cork Co. Council	Mr. Cornelius O'Keeffe	Ballyegan, Glanworth, Co. Cork	Permit	CK(S)15/03		Soil and Stone - 17 05 04	First Schedule, Activity 5 / Fourth Schedule, Class 10.			12/05/2003	09/05/2003	08/05/2005
Cork Co. Council	Bertie Collins, Collins Waste Disposal	Farranbrien East, Minane Bridge, Co. Cork	Permit	CK(S) 18/02		See copy of permit for EWC codes (sludges, aqueous liquids, cardboard, concrete, bricks, tiles & ceramics, plastics, metal, clothes, textiles, mixed municipal waste, wood, glass, discarded electrical & electronic equipment	First Schedule, Activity 5 & 6 / Fourth Schedule, Classes 2,3,4 & 13 / Third Schedule Classes 12 & 13	5,000 pa		19/05/2003	15/05/2003	14/05/2005
Cork Co. Council	Thomas Fitzgerald	Carrigane, Kilbehenny, Mitchelstown, Co. Cork	Permit	CK(S)027/03		Soil and stone which conforms with the European Waste Catalogue code reference 170504	First Schedule, Activity 5 / Fourth Schedule, Class 10.			23/05/2003	22/05/2003	21/05/2004
Cork Co. Council	Finbarr Marshal	Meadstown, Carrigaline, Co. Cork	Permit	CK (S) 16/03		Soil and stone which conformw with the EWC code reference 170504.	First Schedule Activity 5 / Fourth Schedule Classes 4 & 10			10/06/2003	09/06/2003	08/06/2006
Cork Co. Council	Cork Institute of Technology	Ballinaspigbeg, Bishopstown, Co. Cork	Permit	CK (S) 26/03		Soil and stone which conforms with the EWC code reference 170504.	First Schedule Activity 5 / Fourth Schedule Classes 4 & 10			18/06/2003	17/06/2003	16/06/2006
Cork Co. Council	O'Connell Plant Hire (Grenagh) Ltd.	Ardamadane, Blarney, Co. Cork	Permit	CK (S) 05/03		Soil and stone which conforms with the European Waste Catalogue code reference 170504.	First Schedule Activity 5 / Fourth Schedule Classes 4 & 10			17/06/2003	16/06/2003	15/06/2004
Cork Co. Council	John O'Flynn	Cloughluas South, Mallow, Co. Cork	Permit	CK (S) 28/03		Soil and stone which conforms with the EWC code reference 170504.	First Schedule Activity 5, Fourth Schedule Class 10.			19/06/2003	17/06/2003	16/06/2006
Cork Co. Council	Donal & Catherine Moynihan	Murnaigh Beg, Ballyvourney, Co. Cork	Permit	CK(S) 33/03		Soil and stone which conforms with the EWC code reference 170504. No other waste types are permitted.	First Schedule, Activity 5, Fourth Schedule, Class 10			26/06/2003	25/06/2003	24/06/2004
Cork Co. Council	Kevin Barry	Cleary Road, Gortroe, Youghal, Co. Cork	Permit	CK(S) 32/03		End of life vehicles 160104 / end of life vehicles 160106 / ferrous metals 160107 / non-ferrous metals 160118	First Schedule, Activity 5, Fourth Schedule, Classes 4 & 13.			30/06/2003	27/06/2003	26/06/2006
Cork Co. Council	McGill Environmental	Ballinvoher, Castletownroche, Co. Cork	Permit	CK(S) 08/03		See copy of permit for EWC codes (sludges from on-site effluent treatment, urban waste water, sludges from treatment of urban waste water, treatment of industrial waste water, biological kitchen & canteen waste.	First Schedule, Activities 5 & 6 / Fourth Schedule Classes 2 & 13 / Third Schedule Class 13			08/07/2003	07/07/2003	06/07/2006

Cork Co. Council	Seamus O'Mora	Tempienacarriga, Middleton, Co. Cork	Permit	CK(S) 14/03		Soil & stone which conform to the EWC ref. 170504. No other waste types are permitted.	First Schedule, Activity 5, Fourth Schedule, Class 10			17/07/2003	15/07/2003	14/07/2003
Cork Co. Council	Alan Browne	Mountrivers, Rylane, Co. Cork	Permit	CK(S) 34/03		Soil & stone which conforms with the EWC ref. 170504. No other waste types are permitted.	First Schedule, Activity 5, Fourth Schedule Class 10.			17/07/2003	15/07/2003	14/07/2006
Cork Co. Council	Ann Crowley	Ballygarven, Co. Cork 021 488 8327	Permit	CK(S) 20/03		Soil and Stone						17/07/2005
Cork Co. Council	Youghal Waste Disposal	Mudlands, Foxhole, Youghal, Co. Cork 024 98087	Permit	CK (S) 23/03		Waste Recycling/ Transfer Station						15/01/2005
Cork Co. Council	Ricky Barrett	The Elms, Adamstown, Ballinhasig, Co. Cork 086 838 1327	Permit	CK (S) 37/03		Soil Recovery						07/11/2006
Cork Co. Council	Jeremy Lynch	Ballinore, Waterfall, North Cork 086 279 0311	Permit	CK (S) 45/03		Soil and Stone/C&D Waste Recovery						01/09/2005
Cork Co. Council	David Crowley	Dangan, Bandon, Co. Cork 023 41488	Permit	CK(S) 30/03		Soil and Stone Recovery						05/10/2005
Cork Co. Council	D.B. O'Donovan	Clogheenduan, Templemichael, Kinsale, Co. Cork 021 488 5144	Permit	CK (S) 47/03		Soil and Stone/C&D Waste Recovery						20/10/2005
Cork Co. Council	Howley Civil Engineering	Ballinvinny, Glanmire, Co. Cork 021 4383290	Permit	CK (S) 42/03		Soil and Stone/C&D Waste Recovery						20/10/2005
Cork Co. Council	John Forde	Ballyvodana, Fermoy, Cork 021 488 0218	Permit	CK (N) 05/02		Soil & Stone Waste Recovery						13/11/2004
Cork Co. Council	Paul Hickey	Curragh Upper, Fermoy, Cork 087 266 8578	Permit	CK (N) 06/02		Soil & Stone/C&D Waste Recovery						13/11/2004
Cork Co. Council	John Cashman	Glanmire, Co. Cork 021 482 1726	Permit	CK (S) 39/02		Soil & Stone Recovery						07/03/2004
Cork Co. Council	John O'Connell	Killiard, Blarney, Co. Cork 021 438 5484	Permit	CK (S) 56/03		Soil & Stone/C&D/Spoil Waste Recovery						29/10/2006
Cork Co. Council	Green Dragon Recycling Ltd	Corbally North, Glanmire, Co. Cork 021 485 8701	Permit	CK (S) 46/03								29/10/2006
Cork Co. Council	Noel O'Sullivan	Cappagh, Kinsale Co. Cork 021 477 2193	Permit	CK (S) 35/02								03/11/2004
Cork Co. Council	Bernard O'Mahony	Tullyland, Bandon, Co. Cork 021 477 5529	Permit	CK (S) 51/03		Soil & Stone/ C & D Waste						03/11/2006
Cork Co. Council	Michael O'Donovan		Permit	CK (S) 44/03		Soil & Stone/ C & D Waste						
Cork Co. Council	Ballygarvan Stonecraft & Paving Co.		Permit									
Dublin City Council	O Connor & Murphy	9a Fitzwilliam Street, Ringsend, Dublin 4	Permit	WP 98025	Dismantling or Recovery of Vehicles		Article 19			25/04/2001	07/08/2000	06/08/2003
Dublin City Council	Alan Rowe Motors	60/61 North King St. Dublin 7.	Permit	WP 98028	Dismantling or Recovery of Vehicles		Article 19			25/04/2001	14/11/2000	14/07/2003
Dublin City Council	South Dubin Autos	Rear of 371-385 South Circular Road, Rialto, Dublin 8	Permit	WP98030	Dismantling or Recovery of Vehicles		Article 19			25/04/2001	08/09/2000	07/09/2003
Dublin City Council	JVC Limited	Clonshaugh Industrial Estate, Formerly "Little Tykes", Dublin 14.	Permit	WP			3rd Schedule Classes 12,13 and 4th Schedule Classess 3,4,13					
Dun Laoghaire-Rathdown Co. Council	Stars of Erin Gaelic Club	Ballybrack Road, Glencullen, Kilternan, Co. Dublin	Permit	W4/4(15)		Only uncontaminated soil and stone wastes, which conform to the European waste catalogue code ref 170504, may be accepted at the site and no other waste shall be accepted.	First Schedule Activity 6 - Fourth Schedule Activity 4			16/04/2003		08/08/2003



Fingal Co. Council	Materials Asset Management Ltd. (formerly Mann Org. (Ir) Ltd.)	Unit 10, Rosemount Business Park, Ballycoolin Road, Blanchardstown, Co. Dublin	Permit	WPT3(A)	Recycling Operation					25/08/2000	06/07/2000	06/07/2003
Fingal Co. Council	Bailey Waste Paper Ltd.	Rosemount Business Park, Ballycoolin Road, Dublin 15	Permit	WPT1(b)	Waste Recovery/Recycling	Waste paper, plastic, cardboard packaging and wood uncontaminated by putrescible material.	4.12			05/07/2002	24/06/2002	23/06/2005
Fingal Co. Council	Michael Jones	Whitewtown, Rush, Co. Dublin	Permit	WPT18	Land reclamation							28/11/2005
Fingal Co. Council	Ken McCarthy	Shallon Lane, The Ward, Co Dublin	Permit	WPT08	Land reclamation							28/11/2005
Fingal Co. Council	Fergus Buttery	Newhaggard, Lusk Co. Dublin	Permit	WPT33	Land reclamation							27/02/2005
Fingal Co. Council	John Macken	Leckinstown, The Naul, Co. Dublin	Permit	WPT38	Land reclamation							20/08/2004
Fingal Co. Council	SST Ltd	Raheny, Lusk, Co. Dublin	Permit	WPT40	Land reclamation							20/08/2004
Fingal Co. Council	Carno International t/a Flood Recycling	Barnhill, Clonsilla, Dublin 15.	Permit	WPT10	Waste recycling/disposal facility	No info. on permit	WM (Permit) Regs 1998			22/04/2002	17/04/2002	16/04/2005
Fingal Co. Council	Mr Colm Glynn	Newbam, Kilsallaghan, Co. Dublin	Permit	WPT11	Treatment of waste on land with a consequential benefit for an agricultural activity or ecological system	Soil which conforms to the European Waste Catalogue code reference 170504. No other wastes are permitted.	Class 10, Activity 5			16/08/2002	11/07/2002	11/07/2005
Fingal Co. Council	Fajon Construction Ltd.	8th Floor, Iveagh Court, 6-8 Harcourt Road, Dublin 2.	Permit	WPT13	Treatment of any waste on land with a consequential benefit for an agricultural activity or ecological system at Margaretstown, Skerries, Co. Dublin.	Soil which conforms with the European Waste Catalogue code reference 170504.	Fourth Schedule, Activity 10 - First Schedule, Activity 5.			07/10/2002	27/09/2002	26/09/2004
Fingal Co. Council	North County Dublin Parts Ltd.	Man O War, Skerries, Co. Dublin	Permit	WPT17	Recovery and dismantling of vehicles	130106 hydraulic oils containing only mineral oils / 130107 other hydraulic oils / 130108 brake fluids / 130601 oil waste not otherwise specified / 160100 end of life vehicles / 160204 discarded equipment containing free asbestos / 160601 lead batteries	First Schedule, Activity 3 - Fourth Schedule Activities 3.4 & 13			05/12/2002	29/11/2002	04/12/2005
Fingal Co. Council	Fingal Recycling	Unit 5, Feltrim Industrial Park, Swords, Co Dublin	Permit	WPT2	Waste recovery/treatment/Data Destruction Recycling	Wood, cardboard, paper, plastic, metal and electrical and electrical goods. Batteries & mercury containing lamps, no processing of these wastes to take place on site, except to remove hazardous components where there is no release of solid, liquid or gaseous material.				12/07/2001	24/08/2000	24/08/2003

Fingal Co. Council	Fingal D&D Ltd, t/a Fingal Fingal Recycling	Unit 5, Fettrim Industrial Park, Swords, Co. Dublin	Permit	WPT2(b)	Recovery/recycling facility	Wood, cardboard, paper, plastic, metal, electrical, and electronic goods, Batteries and Mercury containing lamps, ink and laser jet cartridges, no processing of these wastes is to take place on site, except to remove hazardous components where there is on release of solid, liquid or gaseous material	Waste Management Permit Regulations 1998.			16/08/2002	14/06/2002	14/06/2005
Fingal Co. Council	Roadstone Dublin Ltd.	Fortunestown, Co. Dublin. Facility located at Hunstown Quarry, Kishane, Finglas, Co. Dublin.	Permit	WPT21	Treatment of any waste on land with a consequential benefit for an agricultural activity or ecological system at the mentioned location.	Uncontaminated soil from the Dublin Port Tunnel Project which conforms with the European Waste Catalogue code reference 170504.	Fourth Schedule, Activity 10 - First Schedule, Activity 5.			03/10/2002	30/09/2002	29/09/2003
Fingal Co. Council	C&M Construction	Noel Brennan House, Castle Street, Ashbourne, Co. Meath	Permit	WPT22	Treatment of waste on land with a consequential benefit for an agricultural activity or ecological system	Only inert material can be accepted on the site: Uncontaminated soil which conforms to the European Waste Catalogue ref. 170504. No other waste types are permitted.	4th Schedule Activity 10, First Schedule, Activity 5.			18/10/2002	11/10/2002	11/10/2003
Fingal Co. Council	Castle Contracts (Irt) Ltd.	Drishoge, Oldtown, Co. Dublin	Permit	WPT23	Treatment of waste on land with a consequential benefit for agricultural activity or ecological system	Only the following inert material may be accepted on the site: Uncontaminated soil which confirms with the European Waste Catalogue code ref. 170504 - No other waste types are permitted to be deposited at this facility.	Fourth Schedule, Activity 10 / First Schedule, Activity 5			09/12/2002	24/12/2002	23/12/2003
Fingal Co. Council	Brendan Hagan	Knock Cross, Balbriggan, Co. Dublin	Permit	WPT24		Uncontaminated soil which conforms to the European Waste Catalogue code reference 170501.	Fourth Schedule, Activity 10 - First Schedule, Activity 5.			28/02/2003	25/02/2003	24/02/2006
Fingal Co. Council	Dan Kennedy	Hollywood Great, Naul, Co. Dublin	Permit	WPT25		Uncontaminated soil which conforms to the EWC code reference 170501	Third Schedule, Activity 1 - First Schedule, Activity 6.			28/02/2003	25/02/2003	24/08/2003
Fingal Co. Council	Alan Hartford & Vincent Watson	Balough, Lusk, Co. Dublin	Permit	WPT26	Treatment of waste on land with a consequential benefit for an agricultural activity or ecological system	Uncontaminated soil which conforms to the European Waste Catalogue code reference 170501.	Fourth Schedule, Activity 10 - First Schedule, Activity 5.			13/02/2003	24/01/2003	23/01/2004
Fingal Co. Council	Mr. Sean Travers	Newtown, Garristown, Co. Dublin.	Permit	WPT27		Uncontaminated soil which conforms to the EWC code reference 170501. No other waste types are permitted to be deposited at this facility.	Fourth Schedule Activity 10 / First Schedule Activity 5.			03/06/2003	23/05/2003	22/05/2006
Fingal Co. Council	Noel Hickey	Bowhill, Balrothery, Co. Dublin	Permit	WPT28	Treatment of waste on land with a consequential benefit for an agricultural activity or ecological system	Uncontaminated soil which conforms to the European Waste Catalogue code reference 170501	Fourth Schedule, Activity 10 / First Schedule, Activity 5			13/02/2003	06/02/2003	05/02/2006



Fingal Co. Council	Fingal Sporting Ground	Hollywood Great, Naul, Co. Dublin	Permit	WPT31		Uncontaminated soil which conforms to the EWC code reference 170501. No other waste types are permitted to be deposited at this facility.	Fourth Schedule, Activity 10 / First Schedule, Activity 5			03/06/2003	26/05/2003	25/11/2003
Fingal Co. Council	Mr. Denis Harford o/o Fajon Construction Ltd.	Skerries Road, Lusk, Co. Dublin	Permit	WPT32		Uncontaminated soil which conforms to the EWC code reference 170501. No other waste types are permitted to be deposited at this facility.	Third Schedule, Activity 1 - First Schedule, Activity 6.			03/06/2003	26/05/2003	25/11/2003
Fingal Co. Council	Mark McGuinness	Balleally West, Lusk, Co. Dublin	Permit	WPT34		Uncontaminated soil which conforms to the EWC code reference 170501	Fourth Schedule, Activity 10 - First Schedule, Activity 5.			28/02/2003	25/02/2003	24/02/2005
Fingal Co. Council	Ballymun Regeneration Ltd.	St. Margarets Road, Balcurris, Ballymun, Co. Dublin.	Permit	WPT35	Recycling or reclamation of inorganic materials	The following C&D waste arising within the Ballymun Complex can be accepted on the site: Concrete, bricks, tiles and ceramics (170101, 170102, 170103) / Mixture of concrete, bricks, tiles and ceramics (170106) / Iron and steel (170405) / Cables (170410 / 170411)	Fourth Schedule Activity 4 / First Schedule Activity 5.			03/04/2003	26/03/2003	25/03/2006
Fingal Co. Council	Irish Kennel Club	The Show Centre, Cloghran, Co. Dublin	Permit	WPT37			Third Schedule, Activity 1 - First Schedule, Activity 6.			03/06/2003	26/05/2003	25/11/2003
Fingal Co. Council	Raymond Fox	Millhead, St Margarets, Co. Dublin	Permit	WPT5	Inert Landfill					29/06/2001	27/06/2001	27/06/2004
Fingal Co. Council	Mr. John Mangan & Mr. Gerard Tuite, Ardcaith, Garrisown	Tobergregan, Garristown, Co. Dublin in respect of lands at Ballymadam	Permit	WPT6a	Treatment of waste on land with a consequential benefit for an agricultural activity or ecological system	Soil which conforms to the European Waste Catalogue code reference 170504. No other wastes are permitted.	Class 10, Activity 5			06/09/2002	21/08/2002	20/08/2004
Fingal Co. Council	International Plant Hire t/a Greenclean	Unit 1, St. Annes, Cloghran, Co. Dublin	Permit	WPT9	Waste Recycling Facility	Inert material, timber, builders rubble, garden waste, metal, cardboard, plastic and paper.	Part 1 of the 1st Schedule of the WM (Permit) Regs 1998, Activity 5.			11/06/2002	01/06/2002	31/05/2005
Fingal Co. Council	Mr. Sean O'Grady	Ward House, Ward Lower, Co. Dublin	Permit	WPT19		Uncontaminated soil which conforms to the EWC code reference 170504. No other waste types are permitted.	Fourth Schedule Activity 10, First Schedule Activity 5			25/06/2003	29/11/2002	28/11/2005
Fingal Co. Council	John McNally	Ring Commons, (East Curragh), Naul, Co. Dublin	Permit	WPT30		Uncontaminated soil which conforms to the EWC code reference 170501 - No other waste types are permitted.	Fourth Schedule Activity 10, First Schedule Activity 5			03/07/2003	25/06/2003	24/06/2005
Fingal Co. Council	Roadstone Dublin Ltd.	Huntstown Quarry, Finglas, Co. Dublin	Permit	WPT14	Recovery	Only the following c&d waste can be accepted at the site: concrete, bricks, tiles & ceramics that conform to the EWC ref. 170101, 170102 & 170103 respectively; asphalt, both containing and without tar ref. 170301 & 170302; iron & steel (rebar from reinforced concrete) ref. 170405 - No other waste types are to be accepted at the facility.	Fourth Schedule Activity 4, First Schedule, Activity 5			09/07/2003	30/06/2003	29/06/2006
Fingal Co. Council	Alldocs Limited	Damastown Way, Damastown Business Park, Dublin 15	Permit	WPT 29	Recycling/Recovery	Only the following inorganic waste can be accepted on the site: Paper and cardboard that conforms to the EWC ref. 200101. No other waste types are permitted to be deposited at this facility.	Fourth Schedule, Activity 4 and First Schedule, Activity 5.			09/07/2003	30/06/2003	29/06/2006

Fingal Co. Council	Techmatic Limited	Balbriggan Business Park, Balbriggan, Co. Dublin	Permit	WPT 39	Recycling / Storage / Recovery	Waste printing toner (including cartridges) EWC code 080309 / paper and cardboard EWC code 200101 / glass EWC code 200102 / small plastics EWC code 200103 / small metals (cans etc) EWC code 200105 / electronic equipment (e.g. printed circuit boards) EWC code 200124 - No other waste types are permitted	Fourth Schedule, Activities 3,4,12 & 13 / First Schedule Activity 5.			09/07/2003	02/07/2003	01/07/2006
Galway Co. Council	Noel Flaherty	Castlecarney, Kinvara, County Galway	Permit	WR/58	Fourth Schedule Class 10 - The treatment of any waste on land with a consequential benefit for agricultural activity.		Fourth Schedule Class 10 - The treatment of any waste on land with a consequential benefit for agricultural activity.					
Galway Co. Council	Joe Lenihan	Clonboo, Corrandulla, County Galway	Permit	WR/62			Fourth Schedule Class 10 - The treatment of any waste on land with a consequential benefit for agricultural activity.					18-Sep-05
Galway Co. Council	Kevin Scully	Clonboo, Corrandulla, County Galway	Permit	WR/63			Fourth Schedule Class 10 - The treatment of any waste on land with a consequential benefit for agricultural activity.					04-Feb-05
Galway Co. Council	Jack O'Flynn	Corrib Trucks, Carrowbrowne, Headford Road, Galway	Permit	WR/65			Class 3 of the Fourth Schedule - Recycling or reclamation of metals and metal compounds					11-Nov-06
Galway Co. Council	Wheelie Environmental Refuse Services Ltd.	Birmingham Road, Tuam, County Galway	Permit	WR/66			Class 12 +13 Third Schedule Classes 3, 4, 12, 13 Fourth Schedule Principal Activity Class 12 of Third Schedule					11-Nov-04
Galway Co. Council	Sean Forde	Cahermorris, Corrandulla, County Galway	Permit	WR/67			Fourth Schedule Class 3 Recycling or reclamation of metals and metal compounds.					
Galway Co. Council	Martin Nohilly	Cummer, Tuam, County Galway	Permit	WR/68			Fourth Schedule Class 3 Recycling or reclamation of metals and metal compounds.					15-Jan-07
Galway Co. Council	Brendan Higgins	Graigwenavaddoge, Caltra, Ballinasloe, County Galway	Permit	WR/69			Fourth Schedule Class 3 and Class 13					
Galway Co. Council	Gerry Nolan	Carrowbrowne, Headford Road, Galway	Permit	WR/70			Fourth Schedule Class 4- Reclamation of land for agricultural purposes using waste construction material					23-Jan-05
Galway Co. Council	Gerry Nolan	Carrowbrowne, Headford Road, Galway	Permit	WR/71			Fourth Schedule Class 4- Reclamation of land for agricultural purposes using waste construction material					
Galway Co. Council	John Heffernan	Drum West, Galway	Permit	WR/72			Fourth Schedule Class 4- Reclamation of land for agricultural purposes using waste construction material					



Galway Co. Council	Alfie Lawless	Killimor, Attymon, Athenry, County Galway	Permit	WR/73			Fourth Schedule: Class 3 Recycling or reclamation of metals and metal compounds, Class 4 Recycling and reclamation of other inorganic materials, Class 13 Storage of waste intended for submission to any activity referred to in a preceeding paragraph					
Galway Co. Council	Michael Burke	Baunogue, Loughrea	Permit	WR/74								
Galway Co. Council	Henry Kenny	Cloonamore, Inishboffin, County Galway	Permit	WR/75			Class 13 Third Schedule, Class 13 Fourth Schedule					
Galway Co. Council	Wheele Environmental Refuse Services Ltd	Addergoole More, Dunmore, County Galway	Permit	WR/76			Third Schedule Class 11, 12, 13 Fourth Schedule Class 2, 3, 4, 11, 12, 13					
Galway Co. Council	Frylite Ltd. / Frylite Cooking Oils	Frylite Cooking Oils, Kilcoigan, County Galway	Permit	WR/77			Schedule 4 Class 13 Storage of any waste intended for submission to any activity referred to in a preceeding paragraph of this schedule other than temporary storage pending collection on the premises where such waste is produced.					
Galway Co. Council	OCS One Complete Solution Ltd	Unit 20, Kilmore, Galway Road, Tuam, County Galway	Permit	WR/78			Third Schedule Class 13					
Galway Co. Council	James Burke	Renville West, Oranmore, County Galway	Permit	WR/79			Fourth Schedule Class 4- Reclamation of land for agricultural purposes using waste construction material					22-Jun-04
Galway Co. Council	Connaught Timber Products Ltd.	Derrybeg, Tynagh (0509) 45138	Permit	WR/01-2								11-Jul-05
Galway Co. Council	Connacht Waste Recycling	Hanley's Buildings, Claregalway (091) 799297	Permit	WR/03-2			Recycling Paper, Plastics, Metals					28-Aug-04
Galway Co. Council	Galway Metal Company Ltd.	Oranmore 091794358	Permit	WR/05-2			Recovery / Recycling Metal					12-Dec-02
Galway Co. Council	James Coen	Lurganbeg, Killimor, Ballinasloe 0905 76466	Permit	WR/11			Class Four . Sorting of C & D waste and landfilling same.					12-Oct-02
Galway Co. Council	Timpeallacht na nOileáin Teo.	Baile Thiar & Baile an Fhoma, Inis Oírr Baile an Fhoma Inis Oírr 099 75008	Permit	WR/16-2			Class 13 Third Schedule Class 2 Fourth Schedule					18-Jul-04
Galway Co. Council	The City Bin Co. Ltd.	Carrowmoneash, Oranmore, Co. Galway 091 771800	Permit	WR/19-2			Third Schedule Class 11 and 13					20-Jun-05
Galway Co. Council	James Burke	Renville West, Oranmore, Co. Galway 086-2533056	Permit	WR/38			Fourth Schedule Class 4- Reclamation of land for agricultural purposes using waste construction material					19-Jun-03
Galway Co. Council	Damien Crehan	Boley Beg East, Barna, County Galway 091-565211	Permit	WR/44			Fourth Schedule Class 4- Reclamation of land for agricultural purposes using waste construction material					

Galway Co. Council	Stan Mortimer	Claregalway, County Galway 087-2472939	Permit	WR/46			Fourth Schedule Class 4- Reclamation of land for agricultural purposes using waste construction material						
Galway Co. Council	Thomas Lally	Drum East, Rahoon, Galway 091 591286	Permit	WR/47			Fourth Schedule Class 4- Reclamation of land for agricultural purposes using waste construction material						31-Oct-04
Galway Co. Council	James Trayers	Renville, Oranmore, County Galway 091-790603	Permit	WR/48			Fourth Schedule Class 4- Reclamation of land for agricultural purposes using waste construction material						20-Feb-04
Galway Co. Council	Patrick J. Walsh, Galway Metal Company	Carrowmoneash, Oranmore, Co. Galway	Permit	WR/05	Recovery of scrap metal						13/11/2002	28/08/2001	27/08/2004
Galway Co. Council	Christina Sullivan	Townland of Eochail, Inis Mor, Arainn, Chontae na Gallimhe	Permit	WR/08-2	Operation of a recovery and transfer facility for municipal waste including the operation of a compost facility for the organic fraction of the waste	Municipal wastes (household waste and similar commercial, industrial and institutional wastes) including separately collection fractions	Third Schedule, Class 13 / Fourth Schedule Classes 2 & 13				08/05/2003	01/05/2003	30/04/2006
Galway Co. Council	The City Recycling Company	The City Recycling Company, Dough Uisce, Merlin Park, Galway	Permit	WR/09	Storage of glass for recycling	Glass & Cans	Waste Management Permit Regulations 1998.				12/01/2001	11/07/2002	11/07/2005
Galway Co. Council	Oliver Lyons	Carrowbrowne, Headford Road, Co. Galway.	Permit	WR/10	Reclamation and recycling of end-of-life vehicles						31/01/2002	21/01/2002	21/01/2005
Galway Co. Council	Gene Browne, City Bin Company Ltd.	Carrownamoneash, Oranmore, Co. Galway.	Permit	WR/19	Waste transfer station			WM (Permit) Regs, 1998	5000 T per Annum		31/01/2002	08/08/2001	08/08/2004
Galway Co. Council	Walsh Waste Ltd.	Cahercoormick, Craughwell, Co. Galway.	Permit	WR/20-2	Operation of C&D waste sorting centre.	C&D waste sorting centre, specified recyclable municipal waste sorting and baling centre, land reclamation site using specified c&d materials.	Third Schedule, Class 13 / Fourth Schedule Classes 2,3,4 & 13				30/06/2003	20/06/2003	19/06/2005
Galway Co. Council	Barna Waste Ltd.	Carrowbrowne, Headford Road, Co. Galway.	Permit	WR/22	Reclamation of lands using sorted sub soil, soil, rock, stone and concrete.			WM (Permit) Regs, 1998			31/01/2002	28/08/2001	28/08/2004
Galway Co. Council	Liam O'Toole, Kilroe, Inverin, Co. Galway	Facility: Forradoyle West, Barna, Co. Galway	Permit	WR/23-2	Reclamation of land using soil, sub soil, rock, stone & concrete.						29/10/2002	23/10/2002	23/04/2004
Galway Co. Council	Donie King	Towland of Curraghmore, Headford Road, Co. Galway	Permit	WR/24	Reclamation of lands using sorted sub soil, soil, rock, stone and concrete.	Reclamation of lands using sorted sub soil, soil, rock, stone and concrete between months of March & September.	WM (Permit) Regulations, 1998				16/04/2002	25/03/2002	24/03/2004
Galway Co. Council	Peter & Tony Walsh	Curraghmore Townland, Headford Road, Co. Galway.	Permit	WR/25	Reclamation of land using soil, sub soil, rock, stone and concrete.	Reclamation of land using soil, sub soil, rock, stone and concrete between months of April and August.	WM (Permit) Regulations, 1998				16/04/2002	25/03/2002	24/03/2004
Galway Co. Council	Laurence Curran, c/o Nicholas Curran	Truskey East, Barna, Co. Galway	Permit	WR/27	Reclamation of land using sub soil, rock, block & non-reinforced concrete	Sub soil, rock, block & reinforced concrete					06/09/2002	29/08/2002	28/08/2003



Galway Co. Council	Henry Whyte	Arus Bhearrachain, Corbooley, Bama, Co. Galway.	Permit	WR/32	Reclamation of land using soil, sub soil, rock and stone	Reclamation of land using soil, sub soil, rock and stone	Article 19(a) of WM (Permit) Regulations 1998.			30/04/2002	22/04/2002	21/04/2004
Galway Co. Council	John Curley, Carrowbrowne, Headford Road, Galway	Townland of Carrowbrowne, Headford Road, Co. Galway	Permit	WR/34	Reclamation of lands using sorted subsoil, topsoil, rock, block and plain concrete					29/10/2002	22/10/2002	21/10/2003
Galway Co. Council	Patrick Fahy	106 Seacrets, Knocknacarra, Galway	Permit	WR/35	Reclamation of land using topsoil, subsoil, rock, block and plain concrete	Subsoil, topsoil, rock, block & plain concrete				19/09/2002	13/09/2002	12/09/2004
Galway Co. Council	Oliver Hughes	Caherlistrane, Co. Galway	Permit	WR/39	Reclamation of land using topsoil, subsoil and rock	Topsoil, sub soil & rock				06/09/2002	18/07/2002	17/07/2003
Galway Co. Council	J.J. Higgins, Knockglass, Ballinrobe, Co. Mayo	Townland of Brooklodge Demesne, Ballyglunin, Tuam, Co. Galway	Permit	WR/45	Reclamation of land topsoil, subsoil, rock, block and plain concrete					29/10/2002	22/10/2002	21/10/2003
Galway Co. Council	James Trayers	Townland of Rinville, Oranmore, Co. Galway	Permit	WR/48		170101 Concrete, 170102 Bricks, 170501 Soil and Stones	Activity 5, Class 10			21/02/2003	20/02/2003	19/02/2004
Galway Co. Council	Michael Mongan	Cluide, Corrandulla, Co. Galway	Permit	WR/49		1601 end-of-life vehicles from different means of transport and wastes from dismantling of end-of-life vehicles and vehicle maintenance	First Schedule, Activity 3, Classes 3 & 13			07/01/2003	23/12/2002	22/12/2005
Galway Co. Council	J.J. Ratigan & Company Ltd.	Townland of Derrigimlagh, Ballyconnelly, Co. Galway	Permit	WR/52	Reclamation of land using sorted construction and demolition waste	170101 Concrete, 170102 Bricks, 170501 Soil and Stones	Activity 5, Class 10			20/01/2003	14/01/2003	13/01/2004
Galway Co. Council	William Moran	Townland of Gurrán Upper, Maree, Oranmore, Co. Galway.	Permit	WR/53	Reclamation of land using sorted construction and demolition waste	170101 Concrete, 170102 Bricks, 170103 Tiles and ceramics, 170501 soil and stones	Activity 5, Class 10			20/01/2003	09/01/2003	08/01/2004
Galway Co. Council	Fabian Brennan	Derryhole, Craughwell, Co. Galway	Permit	WR/56	Reclamation of land using sorted construction waste.	170101 Concrete / 170102 Bricks / 170501 Soil and stones	Fourth Schedule, Class 10			03/04/2003	31/03/2003	30/03/2005
Galway Co. Council	Gerard Finn	Cappagh, Kilconnell, Ballinaloe, Co. Galway.	Permit	WP/60	Reclamation of lands using clean, inert construction waste.	170501 Soil and stones	Fourth Schedule, Class 4			02/07/2003	27/06/2003	26/06/2004
Galway City Council	Richard O Halloran, Joe O Halloran & Sons Ltd, Joinery Works	Joinery Works, Tuam Road, Galway	Permit	WP14	Recovery, sorting, storage and use of wood waste as a fuel source for a workshop space heater where the amount of waste being burned does not exceed one tonne per hour	Untreated wood	WM (Permit) Regs 1998			09/10/2001	21/09/2001	21/09/2004

Galway City Council	T O'Higgins Manufacturing Ltd	Rahoon Road, Shantalla, Galway	Permit	WP13	Recovery, sorting, storage and use of wood waste as a fuel source for a workshop space heater where the amount of waste being burned does not exceed one tonne per hour		WMA 1996			27/12/2001	17/10/2001	17/10/2004
Galway City Council	Connect Industries Ltd., C/O Keville & O'Sullivan Associates.	Parkmore Industrial Estate West, Ballybrit, Galway.	Permit	WP16	Recovery	Metal, cardboard, paper and plastic only unless otherwise agreed with the City Council.	WM (Permit) Regs 1998, Class 3, 4, 11, 13 - Principal Activity is Class 4			22/05/2002	14/05/2002	13/05/2005
Galway City Council	Mr. Bartley Keane c/o Ruaic O'Tuairisg B.E., John Mooney & Co. Ltd., Consulting Engineers, Lough Corrib House, 5 Waterside, Galway	Ballyburke, Keeraun, Bama, Galway.	Permit	WP18	Treatment of any waste on land with a consequential benefit for agricultural activity or ecological system.	Inert fill (e.g. uncontaminated sub-soil, soil, rock, stone and concrete)	4th Schedule, Class 10			24/10/2002	14/10/2002	14/10/2004
Galway City Council	Kenny Developments & Co.	Kingston, Galway.	Permit	WP21	Recycling or reclamation of other inorganic materials.	Unless otherwise agreed with the City Council, the following materials only are permitted to be recovered at the facility: inert fill (e.g. uncontaminated sub-soil, soil, rock, stone and concrete, originating from c&d work.	Fourth Schedule, Class 4			26/05/2003	22/04/2003	21/04/2004
Galway City Council	Jack O'Flynn c/o Corrib Trucks	Carrowbrowne, Headford Road, Co. Galway.	Permit	WP59	Land reclamation	170101 Concrete / 170102 Bricks / 170501 Soil & stones	Fourth Schedule, Class 4				20/06/2003	19/06/2004
Kerry Co. Council	Mr JJ Walsh	Main Street, Lixmaw, Co. Kerry	Permit	WP/5/00	Store and crush cars	cars, vans or similar end of life vehicles. White goods, cookers, washing machines, dishwashers. Other metals suitable for recycling	3rd Schedule of the WMA, 1996, Class 12,13, and 4th Sched - Class 3,4 13			03/10/2001	27/09/2001	27/09/2004
Kerry Co. Council	Killarney Waste Disposal	Aughacureen, Killarney, Co. Kerry	Permit	WP/6/01	Waste recycling facility	cardboard and packaging waste, paper, plastic bottles or film, metals, pallets/limber waste, glass, construction and demolition waste, garden and soil waste, municipal waste and mixed municipal waste	3rd Schedule of the WMA- 1996, Class 11, 12 and 13 and 4th Schedule of the WMA, 1996, Class 2,3 and 13	Shall not exceed 5,000		31/10/2001	22/10/2001	22/10/2003
Kerry Co. Council	Coillte	Renagowan, Tralee, Co. Kerry	Permit	WP/15/02	Waste recovery facility	only peat from the North Kerry Landfill	4th chedule of WMA '96, Classes 2 & 10.	Not to exceed 15,000 cubic metres		24/06/2002	17/06/2002	16/06/2004
Kerry Co. Council	Coillte	Esk, Kielduff, Tralee, Co. Kerry	Permit	WP/10/01	Waste recovery facility	Peat from the North Kerry Landfill	Article 5(1) of WM (Permit) Regulations 1998 & 4th Schedule of WMA, 1996	Not to exceed 20,000 cubic metres		22/07/2002	12/07/2002	12/07/2004



Kerry Co. Council	Kerry Shredded Paper Services	Tangney's Farm, Listry Cross, List5y, Co. Kerry	Permit	WP/12/02	Recycling Operation	recycling or reclamation of organic substances which are not used as solvents (including composting and other biological transformation processes); recycling or reclamation or other inorganic materials, storage of waste intended for submission to any activity referred to in a preceding paragraph of this Schedule, other than temporary storage, pending collection, on the premises which such waste is produced	Class 2,3 and 113 of the 4th Schedule of the WMA 1996	Not to exceed 35,000 tonnes		12/08/2002	02/08/2002	01/08/2004
Kerry Co. Council	Coillte	Kilmore, Tralee, Co. Kerry	Permit	WP/13/02	Waste recovery facility	Disposal of peat from North Kerry Landfill at Mulgnaminnane, Tralee only and does not allow for any waste, solid or otherwise from any other location other than the one previously mentioned.	4th Schedule, Classes 2 & 10	Not to exceed 40,000 cubic metres		02/05/2002	26/04/2002	26/04/2004
Kildare Co. Council		Allenwood South, Naas, Co.Kildare 086 320 8793	Permit	115/2003		Soil / C&D / Timber						09/04/2004
Kildare Co. Council		Flemingstown, Mullacash, Brannockstown, Co. Kildare	Permit	152/2003		Soil / C&D / Timber						02/03/2007
Kildare Co. Council		Team Enterprise Business Park, Kildare 087 2753777	Permit	140/2003		Soil / C&D / Timber						16/10/2006
Kildare Co. Council	Greenstar Recycling Ltd	Ryebrook Business Park, Leixlip, Co.Kildare	Permit	03/2000	Recovery of scrap metal or other metal, recovery of waste		Part 1 of the 1st Sch. WMA, 1998, Activity 2 and Activity 5			20/11/2000	03/08/2000	03/08/2003
Kildare Co. Council	Ringdale Ltd	Oldtown, Athgarvan, Co. Kildare	Permit	15/2000	Recovery of waste (other than hazardous waste)		Part 1 of the 1st Sched. of the WM Regs., Activity 5,			20/11/2000	20/10/2000	20/10/2003
Kildare Co. Council	Mr. Seamus Tougher	Hillsborough, Newbridge, Co. Kildare	Permit	16/2000	Recovery of waste (other than hazardous waste)	Recovery of waste other than hazardous waste.	Activity 5			20/11/2000	08/11/2000	08/11/2003
Kildare Co. Council	KTK Sand & Gravel Ltd.	Coughlanstown East, Ballymore Eusatace, Co. Kildare	Permit	09/2000	Waste Recovery Facility	Recovery of waste other than hazardous waste.	Activity 5			20/11/2000	27/07/2000	27/07/2003
Kildare Co. Council	Mr. Michael Wall	Calverstown Little, Kilgowan, Co. Kildare.	Permit	17/2000	Recovery of waste other than hazardous waste	Recovery of waste other than hazardous waste at a facility (other than a facility for the composting of waste where the waste held at the facility exceeds 1000 cubic metres at any time).	Activity 5, Part 1 of the 1st Schedule of thw WM (Permit) Regs, 1998.			18/07/2001	12/12/2000	12/12/2003
Kildare Co. Council	Mr. Dermot Dunne	Shanacoon, Kildare, Co. Kildare.	Permit	20/2001	Recovery of waste other than hazardous waste.	Recovery of waste other than hazardous waste at a facility (other than a facility for the composting of waste where the waste held at the facility exceeds 1000 cubic metres at any time).	Activity 5, Part 1 of the 1st Schedule of thw WM (Permit) Regs, 1998.			18/07/2001	31/01/2001	31/01/2004
Kildare Co. Council	Mr. Ernie Bennett	Blackditch, Numey, Co. Kildare	Permit	24/2001	Recovery of waste other than hazardous waste.	Recovery of waste other than hazardous waste at a facility (other than a facility for the composting of waste where the waste held at the facility exceeds 1000 cubic metres at any time).	Activity 5, Part 1 of the 1st Schedule of thw WM (Permit) Regs, 1998.			18/07/2001	02/03/2001	02/03/2004

Kildare Co. Council	Mr. Tom Gavin	Thornberry, Kill, Naas, Co. Kildare.	Permit	30/2001	Recovery of waste other than hazardous waste.	Recovery of waste other than hazardous waste at a facility (other than a facility for the composting of waste where the waste held at the facility exceeds 1000 cubic metres at any time).	Activity 5, Part 1 of the 1st Schedule of the WM (Permit) Regs, 1998.			18/07/2001	16/07/2001	16/07/02 (possible 24 month further extension)
Kildare Co. Council	Mr. Padraig Thornton, Thornton Waste Disposal Ltd.	PDM Ltd., Oldmilltown, Kill, Co. Kildare.	Permit	34/2001	Recovery of scrap metal or other metal waste & the recovery of waste (other than hazardous waste)	Recovery of waste other than hazardous waste at a facility (other than a facility for the composting of waste where the waste held at the facility exceeds 1000 cubic metres at any time).	Activity 2, Activity 5 in accordance with Part 1 of the 1st Schedule of the WM (Permit) Regulations, 1998.			18/07/2001	16/07/2001	16/07/2004
Kildare Co. Council	Peter Maguire	Grange, Enfield, Co. Kildare	Permit	32/2001	Recovery of soil based materials to restore the lands	Inert subsoil, topsoil, sand, gravel, clay, marls & stone, shall be used to reclaim/raise the site.	Part 1 of the 1st Sched of the WM (Permit) Reg. 1998, Activity 5			01/10/2001	28/08/2001	28/08/2004
Kildare Co. Council	John Behan	Blackhall, Quarry, Punchestown, Naas, Co. Kildare	Permit	37/2001	Recovery of soil based materials to restore the lands. Small quantities of brick, block, concrete and stone are allowable for the purpose of haul roads/ hardstanding areas.	Inert subsoil, topsoil, sand, gravel, clay, marls & stone, shall be used to reclaim/raise the site.	Part 1 of the 1st Sched of the WM (Permit) Reg. 1998, Activity 5			26/09/2001	21/09/2001	21/09/2004
Kildare Co. Council	James Leigh	Baronsland, Usk, Dunlavin, Co. Kildare	Permit	39/2001	Recovery of waste other than hazardous waste	Inert subsoil, topsoil, sand, gravel, clay, marls, and stone	Part 1 of the 1st Sched of the WM Permit Regs 1998			12/11/2001	06/11/2001	06/11/2004
Kildare Co. Council	Damian and Ann Cassidy c/o Brian Connolly Associates	Moods, Robertstown, Co. Kildare	Permit	43/2001	Recovery of waste other than hazardous waste	Inert subsoil, topsoil, sand, gravel, clay, marls, and stone	Part 1 of the 1st Sched of the WM Permit Regs 1998			12/11/2001	01/11/2001	01/11/2004
Kildare Co. Council	Robert Wilson	Brockagh, Coill Dubh, Co. Kildare	Permit	44/2001	Recovery of waste other than hazardous waste	Inert subsoil, topsoil, sand, gravel, clay, marls, and stone	Part 1 of the 1st Sched of the WM Permit Regs 1998			12/11/2001	01/11/2001	01/11/2004
Kildare Co. Council	Noel Higgins	Laragh, Kilcock	Permit	11/2000	Recovery of scrap metal or other metal waste, the dismantling or recovery of vehicles	scrap metal or other metal waste	Part 1 of the 1st Schedule of the WM (Permit) Regs, 1998			04/01/2002	14/12/2001	36 months from date of issue 14/12/2004
Kildare Co. Council	Neiphen Trading Ltd.	Kerdiffstown, Johnstown, Co. Kildare	Permit	47/2001	Recovery of waste other than hazardous waste	waste other than hazardous waste	Part 1 of the 1st Schedule of the WM (Permit) Regs, 1998, Activity 5.			04/01/2002	02/01/2002	36 months from date of issue 02/01/2005
Kildare Co. Council	Mr. Peter Twomey	Newtown, Maynooth, Co. Kildare.	Permit	38/2001	Recovery of waste other than hazardous waste	waste other than hazardous waste	Part 1 of the 1st Schedule of the WM (Permit) Regulations, 1998, Activity 5.			16/01/2002	11/01/2002	36 months from date of issue 11/01/05
Kildare Co. Council	Trustees Turf Club	Turf Club Offices, Curragh Racecourse, Loughbrown, The Curragh, Co. Kildare.	Permit	42/2001	Recovery of waste other than hazardous waste	waste other than hazardous waste	Part 1 of the 1st Schedule of the WM (Permit) Regulations, 1998, Activity 5.			16/01/2002	11/01/2002	36 months from date of issue 11/01/05
Kildare Co. Council	Recyclenet Ireland Ltd.	Cappanargid, Rathanagan, Co. Kildare.	Permit	49/2001	Recovery of scrap metal, the recovery of waste (other than hazardous waste)	Scrap Metal, waste other than hazardous waste.	Part 1 of the First Schedule of the WM(Permit) Regs. 1998.			20/02/2002	18/02/2002	36 months from date of issue 18/02/05



Kildare Co. Council	Frank Murphy	Blacktrench, Naas, Co. Kildare.	Permit	46/2001	Recovery of waste (other than hazardous waste)	Inert subsoil, topsoil, sand, gravel, clay, marls and stone shall be used to reclaim/raise the site. Small quantities of waste brick, block & concrete may be accepted to allow for haul roads or hardstanding area.	Part 1 of First Schedule of WM (Permit) Regulations, 1998, Activity 5.			11/03/2002	28/02/2002	27/02/2005
Kildare Co. Council	Aford Ltd., T/A Halligans.	Halligans, Hempstown, Blessington, Co. Wicklow.	Permit	51/2001	Recovery of scrap metal or other metal waste and the dismantling or recovery of vehicles.		Part 1 of the First Schedule of the WM (Permit) Regulations, 1998 - Activity 2 & 3.			11/03/2002	07/03/2002	06/03/2005
Kildare Co. Council	KTK Sand & Gravel Ltd.	c/o Environment & Resource Management Ltd., No. 21 Link Business Park, Kilcullen, Co. Kildare.	Permit	09/2000	Recovery of waste (other than hazardous waste)	Inert subsoil, topsoil, sand, gravel, clay, marls, stone, bricks, blocks and concrete shall be used to reclaim/raise the site.	Part 1 of the First Schedule of the WM (Permit) Regulations, 1998 - Activity 5.			22/03/2002	27/07/2000	26/07/2003
Kildare Co. Council	Thomas Clinton	Boston Hill, Rathangan, Co. Kildare	Permit	79/2002	Recovery of waste (other than hazardous waste)	Recovery of soil based materials to restore the lands. Small quantities of brick, block, concrete and stone are allowable for the purpose of haul roads/hardstanding areas.	Part 1 of the First Schedule of the WM (Permit) Regulations, 1998 - Activity 5.			10/06/2002	06/06/2002	05/06/2005
Kildare Co. Council	Johnny Stone, All Spares (Kildare) Ltd.	Ballysax, The Curragh, Co. Kildare	Permit	83/2002	Recovery of scrap metal or other metal waste, the dismantling or recovery of vehicles	Scrap metal & other metal waste	Part 1 of the First Schedule of the WM (Permit) Regulations, 1998 - Activities 2 & 3.			10/06/2002	06/06/2002	05/06/2005
Kildare Co. Council	Stevan Sullivan	Mooresbridge, The Curragh, Co. Kildare. Facility based at Blacktrench, Naas, Co. Kildare.	Permit	41/2001	Recovery of waste (other than hazardous waste)	Only inert subsoil, topsoil, sand, gravel, clay, marls and stone shall be used to reclaim/raise the site. Small quantities of waste brick, block and concrete may be accepted at the site to allow for haul roads or hardstanding areas.	Part 1 of the First Schedule of the WM (Permit) Regulations, 1998 - Activity 5.			21/06/2002	14/06/2002	13/12/2003
Kildare Co. Council	Eileen O'Connor	Parsonstown, Carbury, Co. Kildare	Permit	50/2001	Recovery of waste (other than hazardous waste)	Only spent mushroom compost from shall be imported into this facility and landspread in accordance with the conditions of this permit. All materials shall be spread inside the site.	Part 1 of the First Schedule of the WM (Permit) Regulations, 1998 - Activity 5.			21/06/2002	14/06/2002	13/06/2005
Kildare Co. Council	Emmanuel Stynes, Director, EMS Civil Engineering	Brownstown, The Curragh, Co. Kildare	Permit	69/2002	Recovery of waste (other than hazardous waste)	Salvage of waste brick. Brick that cannot be salvaged may be deposited in the small pit in order to restore the pit. The permit holder may salvage other waste c&d materials from time to time with the agreement of Kildare CC.	Part 1 of the First Schedule of the WM (Permit) Regulations, 1998 - Activity 5.			21/06/2002	14/06/2002	16/06/2005
Kildare Co. Council	Nick Beale, General Manager, Readymix (Dublin) Ltd.	Readymix Dublin Ltd., 5/23 East Wall Road, Dublin 3 Facility: Walshestown Sand Pit, Naas, Co. Kildare	Permit	71/2002	Recovery of waste (other than hazardous waste)	Only inert subsoil, topsoil, sand, gravel, clay, marls and stone and inert concrete waste, shall be used to restore/raise the site.	Part 1 of the First Schedule of the WM (Permit) Regulations, 1998 - Activity 5.			21/06/2002	13/06/2002	12/06/2005

Kildare Co. Council	Patrick Meriehan	Newtown, Moone, Co. Kildare	Permit	64/2002	Recovery of scrap metal or other metal waste / recovery of waste (other than hazardous waste) & disposal of waste (other than hazardous waste)		Part 1 of the First Schedule of the WM (Permit) Regs '98 - Activity 2, 5, 6.	No greater than 5000 tonnes per annum shall be "disposed" of from the overall recovery operation		28/06/02	27/06/02	26/06/05
Kildare Co. Council	P.J. Stone	Kilnamoragh, Donadea, Clane, Co. Kildare	Permit	75/2002	Recovery of waste (other than hazardous waste)		Part 1 of the First Schedule of the WM (Permit) Regs, 1998, Activity 5.			28/06/02	27/06/02	27/12/03
Kildare Co. Council	Bord na Mona Horticulture Ltd.	Kilberry, Athy, Co. Kildare	Permit	86/2002	Recovery of waste (other than hazardous waste)		Part 1 of the First Schedule of the WM (Permit) Regs, 1998, Activity 5.			28/06/02	27/06/02	26/06/05
Kildare Co. Council	Kildare Estates	7 Ard na Laoi, Craddockstown, Naas, Co. Kildare.	Permit	61/2002	Recovery of waste (other than hazardous waste)	Only inert subsoil, topsoil, sand, gravel, clay, marls and stone shall be used to reclaim/raise the site. Small quantities of blocks, bricks and broken concrete may be permitted for use in hardstanding areas.	Part 1 of the First Schedule of the WM (Permit) Regs, 1998 - Activity 5.	Max. 40 trucks per day		05/07/2002	16/05/2002	15/05/2004
Kildare Co. Council	Matt Stone	Ballygibben, Edenderry, Co. Offaly.	Permit	56/2001	Recovery of waste (other than hazardous waste)	Only inert subsoil, topsoil, shall be used to reclaim/raise the site.	Part 1 of the First Schedule of WM (Permit) Regulations, 1998, Activity 5.			09/07/2002	08/07/2002	07/01/2004
Kildare Co. Council	James Sex	Barrettstown, Newbridge, Co. Kildare.	Permit	82/2002	Recovery of waste (other than hazardous waste)	Only inert subsoil, topsoil, sand, gravel, clay, marls and stone shall be used to reclaim/raise the site. Small quantities of blocks, bricks and broken concrete may be permitted for use in hardstanding areas and/or haul roads.	Part 1 of the First Schedule of WM (Permit) Regs, 1998 - Activity 5.			16/07/2002	12/07/2002	11/07/2003
Kildare Co. Council	Ryston Industries Ltd	Abbeylands, Castledermot, Co. Kildare	Permit	87/2002	Recovery of waste (other than hazardous waste)	waste scheduled in the application form	Part 1 of the First Schedule of WM (Permit) Regs, 1998 - Activity 5.			21/08/2002	20/08/2002	20/08/2005
Kildare Co. Council	Thomas Callan	Pluckerstown, Kilmeague, Naas, Co. Kildare.	Permit	57/2001	Recovery of waste (other than hazardous waste)	Only inert subsoil, topsoil, sand, gravel, clay, marls and stone shall be used to reclaim/raise the site. Small quantities of blocks, bricks & broken concrete may be permitted for haul roads.	Part 1 of the First Schedule of WM (Permit) Regs, 1998 - Activity 5.			29/08/2002	27/08/2002	26/08/2004
Kildare Co. Council	Matthew Dempsey	Griffin Rath, Celbridge, Co. Kildare.	Permit	13/2000	Recovery of waste (other than hazardous waste)	Only inert subsoil, topsoil, sand, gravel, clay, marls and stone, shall be used to reclaim/raise the site. The permit holder shall ensure adequate steps are taken to prevent acceptance of any other waste types.	Activity 5			16/09/2002	12/09/2002	11/09/2004
Kildare Co. Council	Ray Kavanagh	Stephenstown, Naas, Co. Kildare.	Permit	73/2002	Recovery of waste (other than hazardous waste)	Only inert subsoil, topsoil, sand, gravel, clay, marls and stone, shall be used to reclaim/raise the site. Small quantities of blocks, bricks and broken concrete may be permitted for use in hardstanding areas and/or haul roads. All material shall be deposited inside the site boundary.	Activity 5			16/09/2002	12/09/2002	11/09/2005



Kildare Co. Council	Peter Duffy	Rathcoffey, Donadea, Naas, Co. Kildare.	Permit	54/2001	Recovery of waste (other than hazardous waste)	Only appropriate non-hazardous treated sludges, as submitted in the application form, shall be landspread. Any other sludges the permit holder intends to landspread shall be agreed in advance in writing by Kildare Co. Council prior to their use on land.	Activity 5			17/10/2002	09/10/2002	08/10/2005
Kildare Co. Council	Mr. Thomas Ashe	Turnings, Straffan, Co. Kildare.	Permit	68/2002	Recovery of waste (other than hazardous waste)	Only inert subsoil, topsoil, sand, gravel, clay, marls and stone, shall be used to reclaim/raise the site unless otherwise approved in writing by Kildare Co. Council.	Activity 5			17/10/2002	09/10/2002	09/04/2004
Kildare Co. Council	Enviroserve Ltd.	Thompson Enterprise Centre, Clare Business Park, Clane, Co. Kildare	Permit	93/2002	Recovery of scrap metal or other metal waste / recovery of waste (other than hazardous waste)	Wastes scheduled in the application form / similar wastes as may be approved, from time to time in writing, by Kildare Co. Co.	Activit 2, 5			17/10/2002	09/10/2002	08/10/2005
Kildare Co. Council	Patrick Keogh, Blackwood, Athy, Co. Kildare	Blackwood, Athy, Co. Kildare	Permit	65/2002	Recovery of waste (other than hazardous waste)	Only topsoil, shall be used to reclaim / raise the site unless otherwise approved in writing by Kildare CC.	Activity 5			31/10/2002	30/10/2002	29/10/2003
Kildare Co. Council	Mr. Con Counihan	25 Riverdale, Leixlip, Co. Kildare	Permit	62/2002	Recovery of waste (other than hazardous waste)	Only topsoil and inert subsoil, sand, gravel, clay and stone shall be used to reclaim/raise the site. Small quantities of waste brick, block and concrete may be accepted at the site to allow for haul roads or hardstanding areas.	Activity 5			13/11/2002	07/11/2002	06/11/2003
Kildare Co. Council	LJM Developments (Ireland) Ltd.	Kilgowan, Kilcullen, Co. Kildare	Permit	90/2002	Recovery of waste (other than hazardous waste)	Only inert subsoil, topsoil, sand, gravel, clay, marls and stone shall be used to reclaim/raise the site. Small quantities of brick, block and concrete may be accepted at the site to allow for haul roads or hardstanding areas.	Activity 5			13/11/2002	07/11/2002	06/11/2005
Kildare Co. Council	Mr. P.J. Stone	353A Old Greenfield, Maynooth, Co. Kildare	Permit	92/2002	Recovery of waste (other than hazardous waste)	Only inert subsoil, topsoil, sand, gravel, clay, marls and stone, shall be used to reclaim/raise the site. Small quantities of blocks, bricks and broken concrete may be permitted for use in hardstanding areas and/or haul roads. All material shall be dep	Activity 5			13/11/2002	07/11/2002	06/11/2004
Kildare Co. Council	Mrs. Gertrude Byrne	Grove House, Ballykelly, Monasterevin, Co. Kildare.	Permit	96/2002	Recovery of waste (other than hazardous waste)	Only inert subsoil, topsoil, sand, gravel, clay, marls and stone shall be used to reclaim/raise the site. Small quantities of waste brick, block and concrete may be accepted at the site to allow for haul roads or hardstanding areas.	Activity 5			13/11/2002	07/11/2002	06/11/2005
Kildare Co. Council	Retumbatt Ltd.	Unit 35, Kildare Enterprise Centre, Melitta Road, Kildare.	Permit	97/2002	Recovery of scrap metal or other metal waste / The recovery of waste which is composed of or contains mercury or its compounds	Wastes scheduled in the application form / similar wastes as may be approved, from time to time in writing, by Kildare Co. Co.	Part 1 of First Schedule - Activity 2 & 4			16/12/2002	13/12/2002	12/12/2005
Kildare Co. Council	Messrs. Joseph and James O'Hagan, O'Hagan Waste Disposal Ltd.	Bohereen, Straffan, Co. Kildare.	Permit	101/2002		Household, commercial, construction & demolition, industrial.	First Schedule, Activities 2,5,6	5,000 tonnes		27/01/2003	24/01/2003	23/01/2006

Kildare Co. Council	Irish Lamp Recycling Ltd	Blackpark, Kilkenny Road, Athy, Co. Kildare.	Permit	02/2000A		Wastes scheduled in the application form	First Schedule, Activities 2 & 4			11/02/2003	07/02/2003	06/02/2006
Kildare Co. Council	T.Hennessy & Sons Ltd.	Mylerstown, Two Mile House, Naas, Co. Kildare.	Permit	106/2002	Recovery of scrap metal or other metal waste and dismantling or recovery of vehicles	Wastes schedule in the application form	First Schedule, Activities 2 & 3			11/02/2003	07/02/2003	06/02/2006
Kildare Co. Council	Merion Developments Ltd.	Kilcock, Co. Kildare	Permit	114/2003		Inert subsoil, topsoil, sand, gravel, clay, marls and stone shall be used to reclaim/raise the site. Small quantities of blocks, bricks and broken concrete may be permitted for use in hardstanding areas and/or haul roads.	First Schedule, Activity 5			09/04/2003	08/04/2003	07/04/2004
Kildare Co. Council	Lawson Construction Ltd.	Lipstown, Narraghmore, Co. Kildare	Permit	119/2003		Only inert subsoil, topsoil, sand, gravel, clay, marls and stone shall be used to reclaim/raise the site. Small quantities of blocks, bricks and broken concrete may be permitted for use in hardstanding areas and/or haul roads.	First Schedule, Activity 5			01/05/2003	29/04/2003	28/04/2004
Kildare Co. Council	Bolton RVO Ltd.	Bellvue, Grangeford, Castledermot, Co. Kildare	Permit	125/2003		Wastes scheduled in the application form.	First Schedule, Activity 5			09/05/2003	07/05/2003	06/05/2006
Kildare Co. Council	David Behan	Killeenmore, Sallins, Co. Kildare	Permit	120/2003			First Schedule, Activity 5			09/05/2003	07/05/2003	06/05/2004
Kildare Co. Council	P.J. Fallon & Patrick & Ann Fallon c/o Paul D. Griffin	Ballycurraghan, Maynooth, Co. Kildare	Permit	112/2003		Only inert subsoil, topsoil, sand, gravel, clay, marls and stone, shall be used to reclaim/raise the site. Small quantities of blocks, bricks and broken concrete may be permitted for use in hardstanding areas and/or haul roads. All material shall be deposited inside the site boundary.	First Schedule, Activity 5			19/06/2003	17/06/2003	16/06/2004
Kilkenny Co. Council	BEOFS	Camphill Community, Ballytobin, Callan, Co. Kilkenny.	Permit	WMP 5/2000	Recovery of waste (other than hazardous waste)		Article 5			06/09/2002	14/06/2001	13/06/2004
Laois Co. Council	Tony Dooley, Grennatta Plastics Ltd.	Grennan, Attanagh, Durrow, Co Laois	Permit	WMP003	Recovery of plastics		4th Schedule of the Waste Management Act, 1996			28/07/2000	01/08/2000	31/07/2003
Laois Co. Council	Tommy Ward	Acragar, Mountmellick, Co Laois	Permit	WMP007	Recovery of scrap metal or other metal waste, recovery of waste which is composed of or contains mercury	Solvent reclamation or regeneration. Recycling or reclamation or metals or metal compounds, storage of waste	4th Schedule of the Waste Management Act, 1996			30/08/2000	01/09/2000	31/08/2003
Laois Co. Council	Mr. Con Ward The Midland Scrap Metal Co.	Harbour Street, Mountmellick, Co. Laois	Permit	WMP005	Recovery of scrap metal and other metal, the recovery of glass	recycling of reclamation of metal and metal compounds. Recycling or reclamation of other inorganic materials. Storage of waste intended for submission to any activity	WMA 1996, and Article 4 of the WM(Permit) Reg, 1998, Class, 3, 4, and 13			22/11/2000	20/11/2000	19/11/2003
Laois Co. Council	Mr. Denis Whelan	Ballydavis, Portlaoise, Co. Laois	Permit	WMP008		Vehicles for dismantling; similar wastes as may be approved from time to time in writing by the Council	Class 3 & 13			05/11/2002	01/11/2002	31/10/2005
Laois Co. Council	Mr. William Lawless	Ridge Road, Portlaoise, Co. Laois	Permit	WMP004	Recovery of scrap metal and other metal waste	Wastes scheduled in the application form.	Classes 3 & 13			03/02/2003	01/02/2003	31/01/2006



Laois Co. Council	Advanced Environmental Solutions (Ireland) Ltd.	Kylealesha, Portlaoise, Co. Laois	Permit	WMP 013		Wastes listed in Schedule F. See copy of permit.	Classes 11 & 13 of 3rd Schedule and Classes 2,3,4 & 13 of 4th Schedule			21/03/2003	01/03/2003	28/02/2006
Laois Co. Council	Interrec B.V. Ireland Ltd.	Moorefield, Castletown, Co. Laois	Permit	WMP 012	Recovery of scrap metal or other metal wastes	Wastes scheduled in the application form.	Activity 2,5 of 1st Schedule and Classes 3,4,13 of 4th Schedule			31/03/2003	01/04/2003	31/03/2006
Laois Co. Council	A1 Metal Recycling	Acragar, Mountmellick, Co Laois 0502 24119	Permit	WMP007b	Recovery of scrap metal or other metal							
Laois Co. Council	<b>PENDING</b> Corrigeen Construction Co Ltd	Clonehane, Emo Road, Ballybrittas, Co Laois 0502 61700	Permit	WMP022	Recovery of waste at a facility- Filling in a quarry with inert C&D waste							
Laois Co. Council	Daniel Brennan	Kilcruise Lower, Wolfhill, Athy, Co Kildare (Tom Keenan 01835 2097)	Permit	WMP023	Recovery of waste at a facility - levelling of agricultural field with clean soil material							
Laois Co. Council	<b>PENDING</b> John Kileen	Clonadadoran, Portlaoise, Co Laois 0502 21174	Permit	WMP024	Recovery of waste at a facility - levelling of agricultural field with clean soil material			7,500m3 per annum				
Laois Co. Council	<b>PENDING</b> Hinch Plant Hire Ltd	Derrygarran, Portlaoise, Co. Laois 0502 24380	Permit	WMP027	Recovery of Waste on land for an agricultural benefit			40,000 per annum				01/02/2007
Laois Co. Council	Ballybrophy Group Water Scheme	Green Road, Ballybrophy, Borris-in-Ossary, Co.Laois 0502 41336	Permit	WMP028	Filling in of partially backfilled quarry with soil and stone waste							
Limerick Co. Council	Munster Metal Co. Ltd	Clondrinagh, Ennis Road, Co. Limerick	Permit	WPLK01A	Metal Recycling Facility	Metals	Class 3 and 13 of the 4th Schedule of the WMA, 1996			04/07/2002	03/07/2002	02/07/2005
Limerick Co. Council	Bob Sweeney, Car Dismantling Facility	Coolready, Castleconnell, Co. Limerick	Permit	WPLK03	Car Dismantling	Recycling or reclamation of metals and metal compounds, storage of waste intended for submission	Class 3 and 13 of the 4th Schedule of the WMA, 1996			10/02/2001	09/01/2001	09/01/2004
Limerick Co. Council	Paddy Hoare	Crescent House, Hartstonge Street, Limerick.	Permit	WPLK06	Pitch & Putt Course	Only clean, inert building rubble (i.e. concrete, brick and stone) and subsoil material shall be used as fill on the site. No organic matter (including organic soils, timber or any other biodegradable matter) plastics, metals, refuse, hazardous wastes shall be imported to the site.				20/11/2001	13/11/2001	13/11/2004
Limerick Co. Council	Chieftain Construction Ltd.	Rathmore House, Raheen, Co. Limerick.	Permit	WPLK04		Only clean, inert building rubble (i.e. concrete, brick and stone) and subsoil material shall be used as fill on the site. No organic matter (including organic soils, timber or any other biodegradable matter) plastics, metals, refuse, hazardous wastes shall be imported to the site.	Class 4 and Class 13 of the Fourt Schedule of the WM Act, 1996 & subject to the conditions set out in the attached Schedule.			20/11/2001	15/05/2001	15/05/2004

Limerick Co. Council	Mr Ray Mullally	7 Waterville, Ennis Road, Limerick - facility address: Bloodmill Road, Singland, Co. Limerick	Permit	WPLK10	Waste disposal activities	Concrete, Bricks, Tiles and Ceramics, Mixed Tiles, Bricks and Ceramics, Soils and Stones	Class 4 and Class 13 of the Fourt Schedule of the WM Act, 1996 & subject to the conditions set out in the attached Schedule.			29/01/2002	24/01/2002	24/01/2005
Limerick Co. Council	Mr. Thomas O'Neill	Derreen, Castleconnell, Co. Limerick.	Permit	WPLK05	Shredding Facility	Sawdust, shavings, cuttings, wood, particle board and veneer other than those mentioned in 03 01 04 on EWC.	Class 3, Class 13 of Fourth Schedule of WMA 1996.			27/02/2002	25/02/2002	24/02/2005
Limerick Co. Council	Mr. John Ahern	Tournafulla, Co. Limerick	Permit	WPLK07	Motor vehicle dismantling and recycling	<u>Class 3</u> Recycling or reclamation of metals and metal compounds and <u>Class 13</u> storage of waste intended for submission to any activity referred to in a preceding paragraph of this schedule other than temporary storage, pending collection, on the premises where such waste is produced.	Class 3 & 13 of the Fourth Schedule of the WMA, 1996.			19/02/2002	14/02/2002	14/02/2005
Limerick Co. Council	Mr. Shay Sweeney	Elm Park, Clarina, Co. Limerick	Permit	WP LK 14	Recycling or Reclamation of other (i.e. non-metal) inorganic materials (class 4) & storage of waste (class 13)	Only clean, inert building rubble (i.e. concrete brick & stone) & subsoil material shall be used as fill on the site. No organic matter (including organic soils, timber or any other biodegradable matter), plastics, metals, refuse, hazardous wastes shall be imported to the site.	Classes 4 & 13 of the Fourth Schedule of WMA, 1996			17/09/2002	12/09/2002	11/09/2005
Limerick Co. Council	Mr. Derry White, T/A Whites Skip Hire	Mount Plummer, Broadford, Co. Limerick	Permit	WPLK 17	Waste Transfer Station	See copy of waste permit	Classes 12 & 13 of 3rd Schedule & Classes 2,3,4 & 14 of Fourth Schedule			25/11/2002	13/11/2002	12/11/2005
Limerick Co. Council	Irish Glass Recycling Ltd.	Unit 6, Dock Road Commercial Park, Dock Road, Co. Limerick.	Permit	WPLK 19	Glass Recycling	See copy of waste permit				26/05/2003	21/05/2003	20/05/2006
Limerick Co. Council	David Doupe Transport Ltd. T/A Clean Slate Recycling	Shanagolden Industrial Estate, Shanagolden, Co. Limerick.	Permit	WPLK18	Expanded polystyrene & foam polypropylene recycling		Fourth Schedule, Classes 4 & 13			16/06/2003	12/06/2003	11/06/2006
Limerick Co. Council	Earth Buddies Ltd.	Foynes Harbour, Foynes, Co. Limerick	Permit	WPLK 20	Waste Transfer Station & Composting Facility	See Table 2 of waste permit	Third Schedule, Classes 7,12 & 13 - Fourth Schedule Classes 2,4 & 13			30/06/2003	26/06/2003	25/10/2003
Limerick City Council	Ipodec Ireland	Galvone Industrial Estate, Galvone, Limerick	Permit	WP/01-00	Waste disposal activities	Municipal Waste, Commerical and Industrial Waste	Permitted waste disposal activities, in accordance with the Third Schedule of the Waste Management Act, 1996, Class 12 and Class 13, Permitted waste recovery activities, in accordance with the Fourth Schedule of the Waste Management Act, 1996, Class 2, 3, 4 and 13			06/11/2000	02/11/2000	05/11/2003
Limerick City Council	DGD Papers Ltd.	Camheen, Mungret, Limerick	Permit	WPLK 09		paper, cardboard, plastics and materials	Class 13 of the 3rd Schedule and 12 and 13 of the 4th Schedule of the WMA 1996			21/01/2002	15/01/2002	15/01/2005



Limerick City Council	Shannon Textiles	Killeely Road, Thomondgate, Limerick	Permit	WP01-02	Recycling or Reclamation of organic substances which are not used as solvents	Textile waste	Classes 2 & 13	5,000		14/11/2002	11/06/2002	10/06/2005
Limerick City Council	SITA Recycling	Unit 7, Crossagalla Industrial Estate, Limerick	Permit	WP 02-02	Commercial Waste Recycling		Classes 2,3,4,13			14/11/2002	22/07/2002	21/07/2005
Limerick City Council	Reduce, Reuse & Recycle Ltd.	Galvone Industrial Estate, Galvone, Limerick	Permit	WP 02-03	Commercial Waste Recycling	Commercial and industrial waste of similar composition to municipal waste subject to the quantities listed in Schedule H.	Classes 11,12,13 - 3rd Schedule & Classes 2,3,4,13 of 4th Schedule	5,000		14/11/2002	15/08/2002	14/08/2005
Limerick City Council	Canon Hygiene	Kilmallock Road Enterprise Centre, Limerick	Permit	WP 02-04		Non hazardous sanitary towel, nappy and incontinence waste in appropriate secure identifiable containers subject to the quantities listed in Schedule D.	3rd Schedule - Class 13			14/11/2002	08/11/2002	07/11/2005
Limerick City Council	Peter Ward	Knocknadiha, Toumafulla, Co Limerick 069 81086	Permit	WPLK11		Industrial Waste - Plastic, cardboard, metal, timber and builders' rubber						
Limerick City Council	Denis Aherne	Lemonfield, Creora, Co Limerick 061 301294	Permit	WPLK12		Clean inert C&D waste, subsoil						
Limerick City Council	Patrick McCarthy	Carrig East, Clarina, Co. Limerick 061 394002	Permit	WPLK15		Inert C&D waste, subsoil						
Limerick City Council	James Carey	Kilmooreen, Kildimo, Co. Limerick 069 77197	Permit	WPLK24		Recovering of inert waste material						
Limerick City Council	Denis Collins	Lyons Excavations, St Mary's Road, Newcastle West. Co Limerick 069 77197	Permit	WPLK26		Agricultural land to be reclaimed using importation of subsoil and soil.						
Limerick City Council	Denis Collins	Lyons Excavations, St Mary's Road, Newcastle West. Co Limerick 069 77198	Permit	WPLK27		Agricultural land to be reclaimed using importation of subsoil and soil.						
Longford Co. Council	John Crossan, 22 Ardnacassa, Longford.	Unit 8, Industrial Estate, Longford.	Permit	WC02/01	Waste Processing and Recycling Facility		Class 3, Class 13			12/11/2002	23/05/2002	22/05/2005
Longford Co. Council	Fiancare (Clonmel) Distributions Ltd.	Fiancare Site (Residential Part), Ballyminion, Co. Longford.	Permit	WC02/02		Only uncontaminated soil and stones, which conform to the European Waste Catalogue code reference 170501, originating from Lanesborough Power Station Construction Site, Co. Longford, may be accepted at the site.	Activity 5, Classes 1, 2 & 4			12/11/2002	01/09/2002	01/09/2003
Longford Co. Council	Manning Brothers Contracts Ltd.	Knockahaw, Longford, Co. Longford	Permit	WP03/02		Only topsoil and subsoil which conform to the EWC code reference 170504 may be accepted at the site. No other waste types are to be deposited at this facility.	Fourth Schedule, Classes 2 & 4			16/06/2003	12/06/2003	11/06/2005
Longford Co. Council	Morohan Plant Hire Ltd	Ardnacassa, Longford	Permit									
Louth County Council	Mr David Cassidy,	Grangebellew, Dunleer, Co. Lough	Permit	WP6	Dismantling and recovery of vehicles	End-of-life vehicles & those scheduled in the application form.	First Schedule of WM Permit Regs, 1998, Activity 3 & Fourth Schedule of WM Act, 1996, Classes 3, 4, 5, 7 & 13.			12/03/2002	15/10/2001	14/10/2004

Louth County Council	Mr. Michael Taaffe	Anaglog, Ardee, Co. Louth	Permit	WP8	Plastics and Cardboard for Recovery	Composting of waste where the amount of compost & waste held exceeds 1000 cubic metres at any time, storage of waste intended for submission to any activity referred to in a preceding paragraph of this schedule, other than temporary storage, pending collection on the premises where such waste is produced.	Waste Activity, in accordance with Part 1, First Schedule of the Waste Management (Permit) Reg's, 1998 - Activity 5, Class 13			03/12/2001	29/11/2001	28/11/2004
Louth County Council	Cannon Hygiene (Ireland) Ltd	Unit 4, St. Johns Road, Ardee, Co. Louth	Permit	WP3	Temporary storage of waste prior to submission		Activity 6, Class 13			22/11/2002	31/07/2001	30/07/2004
Louth County Council	Techmatic Ltd	Unit 1, Newgrange Business Park, Donore Road, Drogheda, Co. Louth	Permit	WP7	Collection and recycling of waste from computer hardware and software components	Wastes scheduled in the application form	Activity 6, Classes 13,3,4	5,000 per annum		22/11/2002	30/07/2001	29/07/2004
Louth County Council	Trustees of Dundalk Golf Club	Golf Links Road, Blackrock, Co. Louth	Permit	WP22	Waste Recovery	Soil and Stone which conforms with the European Waste Catalogue Code Reference 170501	Activity 5, Classes 2, 10, & 13			14/08/2002	12/08/2002	11/08/2005
Louth County Council	Mr Brian McElroy, Ace Skips	corial, Kikerley, Dundalk, Co. Louth	Permit	WP17	Recovery and disposal of skip waste	The recovery of waste (other than hazardous waste) at a facility (other than a facility of for the composting of waste; where the amount of compost and waste held at at the facility exceeds 1000 cubic metres at any time	WMA 1996 and WM(Permit) Regs 1998 - Activity 5, Class 12 and 4th schedule of the WMA 1996, Class 3, 4 and 13			15/08/2002	12/08/2002	11/08/2004
Louth County Council	M&B Construction Ltd.	Kenilworth Villa, Kenilworth Road, Dublin 6 with Facility at Ballydonnel, Baltray, Co. Louth	Permit	WP 034/02		Soil and stone which conforms to the European Waste Catalogue Code Reference 170501	Activity 5, Class 10			24/10/2002	21/10/2002	21/10/2003
Louth County Council	Paul Clarke	Castletown, Dunleer, Co. Louth	Permit	WP 021			Activity 5, Class 10			24/10/2002	10/09/2002	10/09/2003
Louth County Council	Brendan Lennon	Thornbury, Clermont, Haynestown, Dundalk, Co. Louth - Facility: Haggardstown, Blackrock, Co. Louth	Permit	WP011		Soil and stone which conforms to the European Waste Catalogue Code Reference 170504	Activity 5, Class 10			24/10/2002	06/09/2002	06/09/2003
Louth County Council	Martin Duffy	Castletown Cross, Dundalk, Co. Louth.	Permit	WP010		waste scheduled in the application form	Activity 3, Class 2, 13			24/10/2002	17/07/2002	16/07/2005
Louth County Council	Coe Salvage Ltd.	Coes Road Industrial Estate, Dundalk, Co. Louth	Permit	WP019		waste scheduled in the application form	Activity 3, Classes 2,3,4,13			31/10/2002	24/10/2002	23/10/2005
Louth County Council	Crumb Rubber Ireland Ltd.	Dromiskin, Co. Louth	Permit	WP 033/02		waste scheduled in the application form	Activity 3, Classes 3,4, 13			12/11/2002	07/11/2002	06/11/2005
Louth County Council	Emblem Engineering Ltd	Unit 5, Donore Industrial Estate, Drogheda, Co. Louth	Permit	WP 028/02		waste scheduled in the application form	Activity 3, Classes 3,4, 13			22/11/2002	15/11/2002	14/11/2005
Louth County Council	Mr Stephen Kieran, Killencoole Garden Compost	Killencoole, Reaypenny, Dundalk, Co. Louth	Permit	WP025/02		waste scheduled in the application form	Activity 5, Classes 2, 3 4 and 13			28/02/2003	25/02/2003	
Louth County Council	Rye Valley Foods Ltd.	Rossmakay, Dunmahon, Stephenstown, Knockattin (all Knockbridge), Glyde Farm (Tallanstown), Co. Louth.	Permit	WP 035/02		Only effluent treatment plant sludge from the permit holders premises at Carrickmacross, as scheduled in the application form, is to be accepted for storage and recovery at the facility.	First Schedule, Activity 5 / Fourth Schedule Class 10, Class 13.			21/03/2003	13/03/2003	12/03/2004



Louth County Council	Glen Emmets GFC	Glen Emmets GFC, Tullyallen, Drogheda, Co. Louth	Permit	WP 2003/06		Soil & stone which conforms to the EWC Reference 170504.	First Schedule - Activity 5 / Fourth Schedule Classes 2,4,13			03/06/2003	28/04/2003	27/10/2003
Mayo County Council	Glancre Teoranta	Muinmore, Bunnahowen, Bangor Erris, Ballina, Co. Mayo	Permit	PER3		Recycling or reclamation of metals and metal compounds, storage of waste intended for submission	Class 7 of the 3rd Schedule of the WMA 1996 and Class 11 and 2 of the WMA 1996 and WM(Permits) Regs 1998			11/12/2001	06/12/2001	31/10/2004
Mayo County Council	Bourke Waste Removal Ltd	Clogher, Westport, Co. Mayo	Permit	PER4	Storage of waste	Storage of waste, repackaging prior to submission, recycling or reclamation of organic substances, recycling or reclamation of metals and metal compounds, exchange or waste	Class 13 of the 4th Sched of the WMA 1996, Class 12 and 13 of the 3rd Schedule of the WMA 1996 and Class 2,4,12 of the 4th Sched of the WMA 1996			19/10/2001	17/10/2001	30/09/2004
Mayo County Council	Kevin McNamara	Knockbrack, Ballyhaunis, Co. Mayo	Permit	PER5	Reclamation and Recycling of end-of-life Vehicles					29/05/2002	17/05/2002	16/05/2005
Mayo County Council	Lennon Quarries Ltd.	Glencastle, Belmullet, Co. Mayo	Permit	PER8	Reclamation of lands using clean peat material exported from Lennon Quarries Ltd.		Class 10 of Fourth Schedule of WMA 1996			20/01/2003	19/12/2002	18/12/2005
Mayo County Council	John Dempsey	Whitestream, Carrowreagh, Bonniclonn, Co. Mayo	Permit	PER9	Reclamation and Recycling of end-of-life Vehicles					29/05/2002	17/05/2002	16/05/2005
Mayo County Council	Pat King	Derrynaskeagh, Castlebar, Co. Mayo	Permit	PER13	Spreading of waste on land with a consequential benefit for an agricultural activity or ecological system, including composting and other biological transformation processes.	170101 Concrete / 170102 Bricks / 170103 Tiles and ceramics / 170501 Soil and stones	Class 10 of 4th Schedule			27/02/2003	18/02/2003	17/02/2006
Mayo County Council	KOG Logistics Ltd.	Authadrinagh, Ballinrobe Road, Castlebar, Co. Mayo	Permit	PER14	Reclamation of lands	Reclamation of lands using sorted sub-soil, soil, rock, stone and concrete. The material must not contain any other type of material or waste.	Class 10 of Fourth Schedule			02/05/2003	24/04/2003	23/04/2004
Mayo County Council	Mr. Sean Naughton	Clooncundra, Belcarra, Castlebar, Co. Mayo.	Permit	PER15	Recycling or reclamation of metals and metal compounds		Class 3 of Fourth Schedule			20/01/2003	19/12/2002	18/12/2005
Mayo County Council	Mr. Thomas Higgins	Kilscoagh, Ballindine, Claremorris, Co. Mayo.	Permit	PER16	Reclamation of land using sorted, sub-soil, rock, stone and concrete.		Class 10 of Fourth Schedule			31/01/2003	13/01/2003	12/01/2006
Mayo County Council	Liam Rose	Farnaght, Leenane Road, Westport, Co. Mayo	Permit	PER17	Recovery of waste	170101 Concrete / 170102 Bricks / 170103 Tiles and ceramics / 170501 Soil and stones	Activity 5, Class 10			06/02/2003	03/02/2003	02/02/2006
Mayo County Council	Michael Gannon	Sheeaun, Castlebar Road, Westport, Co. Mayo	Permit	PER18		170101 Concrete / 170102 Bricks / 170103 Tiles and ceramics 170501 soil and stones	Activity 5, Class 10			06/02/2003	03/01/2003	02/01/2006
Mayo County Council	Tom Munster	Lodge Road, Westport, Co. Mayo	Permit	PER19		170101 Concrete / 170102 Bricks / 170103 Tiles and ceramics 170501 soil and stones	Activity 5, Class 10			06/02/2003	03/01/2003	02/01/2006

Mayo County Council	Vincent Conlon	Sheeaun, Castlebar Road, Westport, Co. Mayo	Permit	PER20		170101 Concrete / 170102 Bricks / 170103 Tiles and ceramics 170501 soil and stones	Activity 5, Class 10			06/02/2003	03/02/2003	02/02/2006
Mayo County Council	Mountain View Securities Ltd.	Lannagh Road, Castlebar.	Permit	PER22		170101 Concrete / 170102 Bricks / 170103 Tiles and Ceramics / 170501 Soil and Stones.	First Schedule, Activity 5 - Class 10			02/05/2003	24/04/2003	23/04/2006
Mayo County Council	T.J. Gaughan, Co. Ltd.	Industrial Park, Moneen, Castlebar, Co. Mayo.	Permit	PER23		Temporary storage, sorting, segregating and preparing for transporting of inert waste materials for recycling and disposal for that fraction of the waste that is un-recyclable or can not be disposed of with benefit within the site boundaries.				02/05/2003	24/04/2003	23/04/2004
Mayo County Council	Michael Lavelle	Knocknaskibbole, Castlebar, Co. Mayo	Permit	PER24		170101 Concrete / 170102 Bricks / 170103 Tiles and Ceramics / 170501 Soil and stones.	Class 10, Fourth Schedule / First Schedule Activity 5.			02/05/2003	24/04/2003	23/04/2006
Mayo County Council	Mr. Michael Lavelle	Knocknaskibbole, Castlebar, Co. Mayo	Permit	PER24		170101 Concrete / 170102 Bricks / 170103 Tiles & Ceramics / 170501 Soil & Stones	1st Schedule, Activity 5 / 4th Schedule, Class 10			16/05/2003	24/04/2003	23/04/2006
Mayo County Council	McGrath Industrial Waste Ltd.	Unit 2, Moneen Industrial Estate, Drumconlon, Castlebar.	Permit	PER25	Recovery and Recycling or Reclamation	Paper, cardboard, glass, timber, plastics	First Schedule, Activity 5 / Fourth Schedule			02/05/2003	28/04/2003	27/04/2006
Mayo County Council	P&D Horan	Cushinsheeaun, Westport, Co. Mayo	Permit	PER27			1st Schedule, Activity 5 / 4th Schedule			12/05/2003	08/05/2003	07/05/2006
Mayo County Council	Noel Heraty	Ardygommon, Ballinrobe Road, Westport, Co. Mayo	Permit	PER28		170101 Concrete / 170102 Bricks / 170103 Tiles & Ceramics / 170501 Soil & Stones	1st Schedule, Activity 5 - Class 10			03/06/2003	28/05/2003	27/05/2006
Mayo County Council	Mr. Michael Devaney	No. 2 Bunree Road, Ballina, Co. Mayo	Permit	PER26	Dismantling, Storage & Recovery of ELV's	End of life vehicles				16/07/2003	10/07/2003	09/07/2006
Mayo County Council	McGrath Industrial Waste Ltd., Turlough, Castlebar, Co. Mayo	Moneen Industrial Estate, Drumconlon, Castlebar, Co. Mayo.	Permit	PER 25		Metals, metal compounds and other inorganic materials.						27/04/2006
Mayo County Council	Cathal Gilmartin Main Street, Kiltimagh	Main Street, Kiltimagh	Permit	PER 29		Soil and Stones, non - hazardous waste.						12/10/2006
Mayo County Council	Fahy Community Development Association	Fahy, Westport	Permit	PER 31		Soil and Stones, non - hazardous waste.						21/08/2006
Mayo County Council	Tom Denning, Station Road, Castlebar	Cappagh, Pontoon Road, Castlebar	Permit	PER 33		Non- Hazardous Waste - Concrete, Bricks, Tiles and Ceramics, Soil and Stones.						15/07/2006
Mayo County Council	Jimmy Burke Tubber, Aghamore, Ballyhaunis	Tubber, Aghamore, Ballyhaunis	Permit	PER 33		Non- Hazardous Waste - Concrete, Bricks, Tiles and Ceramics, Soil and Stones.						10/08/2006
Mayo County Council	Wood Systems Ltd Kilmaine Road, Ballinrobe	Wood Systems Ltd Kilmaine Road, Ballinrobe	Permit	PER 38		Waste Timber products, pallets						12/08/2006
Mayo County Council	T.J. Gaughan & Patrick Flannery, Davitt Errace, Castlebar, Co. Mayo	Roadstone Quarry, Moneen, Castlebar, Co. Mayo.	Permit	PER 47		C&D		<1,000m3				23/12/2006
Meath Co. Council	Nicro Metals Ltd	Villa Maria, Balrath Road, Kells, Co. Meath	Permit	WMP/3/98	Recycling and Storage	Recycling and reclamation of metal and metal compounds, storage of waste intended for submission to any activity	4th Schedule of the Waste Management Act, 1996, Class 3 and Class 13			12/10/2000	11/10/2000	10/10/2003
Meath Co. Council	Clive Craig	Ballybogan, Clonard, Co Meath	Permit	WMP 2000/21	Recovery of waste (other than hazardous waste) and treatment of any waste on land	Soil and Stone wastes, which conform to EWC Code Ref: 170501, Only exception to this shall be the use of imported stone/gravel to construct an access to road on site	1st Sched of the WM (Permit) Reg 1998, Activity 5 and 4th Sched of the WMA, 1996, Class 10			23/08/2000	21/08/2000	20/08/2003



Meath Co. Council	Walter Hendy	Rathcore, Enfield, Co Meath	Permit	WMP/2000/19	Recovery of Waste at a facility/ treatment of any waste on land	Soil and Stone which conforms with the European Waste Catalogue code ref. 17051, concrete - code ref. 170101 and bricks - code ref: 170102	4th Schedule, Activity 5 and Class 10			04/02/2000	19/12/2000	18/12/2004
Meath Co. Council	John Friary, Friarsrock Ltd	Raneevoge, Crossakeil, Kells, Co. Meath	Permit	WMP 1/98	The Dismantling and Recovery of Vehicles	Recycling and reclamation of metal and metal compounds, storage of waste intended for submission to any activity	4th Schedule, Class, 3, 4, 7, 13			22/12/2000	20/12/2000	19/12/2003
Meath Co. Council	Michael Foley	Mulhussey, Kilclock, Co Meath	Permit	WMP 2000/11	Recovery of waste and treatment of any waste on land	Soil and Stone, which conform to the ETC Code Ref: 17 05 01. <b>Only acceptance is the use of imported stone/gravel to construct an access road on site</b>	Part 1 of 1st Sched.of WM Regs. Activity 5, Class 10			28/07/2000	21/07/2000	20/07/2003
Meath Co. Council	Francis O'Malley	Jenkinstown, Kilcock, Co Meath	Permit	WMP 2000/12	Recovery of waste and treatment of any waste on land	Soil and Stone, which conform to the ETC Code Ref: 17 05 01. <b>Only acceptance is the use of imported stone/gravel to construct an access road on site</b>	Part 1 of 1st Sched.of WM Regs. Activity 5, Class 10			28/07/2000	21/07/2000	20/07/2003
Meath Co. Council	David Walsh, Datastroy Ltd	Unit 1A Summerhill Enterprise Centre, Summerhill, Co Meath	Permit	WMP 2000/4	Recovery of waste, recycling and reclamation of organic substances which are not used as solvents	Only uncontaminated office paper and obsolete printer and computer parts containing no solvents/inks which conform with ETC Code Ref: 20 0101 04 (paper)	4th Schedule of WMA, 1996, Activity 5, Class 2			09/08/2000	31/07/2000	30/07/2003
Meath Co. Council	P J Hannafin	Mullagh, Kilcock, Co Meath	Permit	WMP 2000/22	Recovery of waste	Soil and Stone, which conform to the ETC Code Ref: 17 05 01. <b>Only acceptance is the use of imported stone/gravel to construct an access road on site</b>	Part 1 of 1st Sched. of WM Regs. 1998, Activity 5, Class 10			02/10/2000	01/09/2000	01/09/2003
Meath Co. Council	Trim Plant Ltd.	Scurlockstown, Co Meath	Permit	WMP 2000/26	Recovery of waste and treatment of any waste on land	Soil and Stone, which conform to the ETC Code Ref: 17 05 01. <b>Only acceptance is the use of imported stone/gravel to construct an access road on site</b>	Part 1 of 1st Sched. Of WM Regs. 1998, Activity 5, Class 10			29/08/2000	28/08/2000	27/08/2003
Meath Co. Council	Organic Gold Ltd	Wilkinstown, Navan, Co. Meath	Permit	WMP 2000/17	Recovery of waste, Land Treatment, Surface impoundment, Recycling and treatment of any waste		Part 1 of the 1st Sched. Of WM Regs. Third Schedule WM Act, Class 1,2, 4			28/09/2000	26/09/2000	25/09/2003
Meath Co. Council	Christopher McLoughlin	Ardsallagh, Navan, Co. Meath	Permit	WMP 2000/23	Treatment of Waste and recovery of waste (other than hazardous waste)	Soil and Stone, which conform to the European Waste Catalogue Code Ref: 17 05 17 07 01	Part 1 of the 1st Sch. Of the WMA, 1998 and 4th Sched. Of the WMA, 1996, Class 10			19/09/2000	18/09/2003	
Meath Co. Council	Dennis O'Driscoll	Ballymacamey, The Ward, Co. Meath	Permit	WMP 2000/42	Treatment of waste on land with a consequential benefit for an agricultural activity or ecological system.					15/05/2001	10/05/2001	09/05/2004

Meath Co. Council	Duignan & McCarthy	Clonmagaddan, Navan, Co. Meath	Permit	WMP 2000/30	Treatment of Waste and recovery of waste (other than hazardous waste)	Soil and Stone, which conform to the EWC Code Ref: 170501 , Construction and Demolition of waste which can be accepted on site is Concrete Code Ref: 170101, Bricks - EWC Code Ref: 170102,	4th Sched of the WM(Permit) Reg, 1998, Activity 5 and 4th Schedule of the WMA, 1996, Class 10			15/01/2001	05/01/2001	04/01/2004
Meath Co. Council	Paul Daly	Factory Road, Bellewstown, Trim, Co Meath	Permit	WMP 2000/33	Treatment of Waste and recovery of waste (other than hazardous waste)	Soil and Stone which conforms with EWC Code Ref: 170501	4th Sched of the WM(Permit) Reg, 1998, Activity 5 and 4th Schedule of the WMA, 1996, Class 10			17/01/2001	11/01/2001	10/01/2004
Meath Co. Council	Nagtrac 2000 Ltd	Donegal Road, Gibbstown, Navan, Co. Meath	Permit	WMP 2000/41	Recovery of Waste(other than hazardous waste) and recycling or reclamation of organic substances,	Plastic particles, plastic, inorganic off specification batches, small plastics, mixed flexible plastics, clear pvc bottles, clear PET bottles, mixed rigid plastic, opaque PCV jars and bottles, green PET jars and bottles, Brown PET jars and bottles, PE bottles and other plastic packaging	4th Sched of the WM(Permit) Reg, 1998, Activity 5 and 4th Schedule of the WMA, 1996, Class 2			31/01/2001	29/01/2001	28/01/2004
Meath Co. Council	Ms. Bridget Rooney	Oristown, Kells, Co. Meath	Permit	WMP 4/98	Recycling or Reclamation of metals and metal compounds, recycling or reclamation of inorganic materials, recovery of components from catalyst.		3rd Schedule of the WMA 1996			15/05/2001	10/05/2001	09/05/2004
Meath Co. Council	Patrick Miggin	Rathmore Athboy, Co. Meath	Permit	WMP 2000/34	treatment of any waste on land with a consequential benefit for an agricultural activity or ecological system	Soil and stone which conforms with EWCC Ref: 170501	Activity 5, WM(Permit) Reg 1998, 4th Schedule of the WMA, 1996, Class 10				11/05/2001	10/05/2004
Meath Co. Council	SIAC O'Rourke JV	Dardistown, Julianstown, Co. Meath	Permit	2001/15	treatment of any waste on land with a consequential benefit for an agricultural activity or ecological system	Uncontaminated Soil and Stone Wastes which conforms with the European Waste Catalogue code ref. 17 05 01,	1st Sched of the WM (Permit) Reg 1998, Activity 5 and 4th Sched of the WMA, 1996, Class 10			26/07/2001	20/07/2001	19/07/2003
Meath Co. Council	PF Dixon Plant Hire	Rathcore, Enfield, Co Meath	Permit	2001/8	treatment of any waste on land with a consequential benefit for an agricultural activity or ecological system	Uncontaminated Soil and Stone Wastes which conforms with the European Waste Catalogue code ref. 17 05 01, Concrete (EWC reference 17 01 01) and Brick (EWC 17 01 02) are only permitted for the purposes of construction of a haul road though the site	1st Sched of the WM (Permit) Reg 1998, Activity 5 and 4th Sched of the WMA, 1996, Class 10			26/07/2001	20/07/2001	19/07/2004



Meath Co. Council	PF Dixon Plant Hire	Clegarrow, Rathcore, Enfield, Co. Meath	Permit	2002/16	Recovery of waste (other than hazardous waste) & the treatment of any waste on land with a consequential benefit for an agricultural activity or ecological system	Only uncontaminated soil & stone waste, which conform to the European Waste Catalogue (2002 edition) code ref. 170504 may be accepted at the site.	Activity 5, Class 10			19/09/2002	16/09/2002	15/09/2005
Meath Co. Council	Mr Tony Cromwell	Balgeeth, Moorepark Ardcath, Co. Meath	Permit	WMP 2000/45	Treatment of any waste on land with a consequential benefit for an agricultural activity or ecological system	Soil and Stone which conforms with EWC code ref. 170501	1st Sched of the WM (Permit) Reg 1998, Activity 5 and 4th Sched of the WMA, 1996, Class 10			01/08/2001	27/07/2001	26/07/2003
Meath Co. Council	Mr Gerry McAleer	Millfield, Bective, Navan, Co. Meath	Permit	WMP 2001/13	treatment of any waste on land with a consequential benefit for an agricultural activity or ecological system	Soil and Stone which conforms with EWC code ref. 170501	1st Schedule of the WM (Permit) Reg 1998, Activity 5 and 4th Sched of the WMA, 1996, Class 10			14/08/2001	04/08/2001	03/08/2004
Meath Co. Council	SEDE Ireland Ltd. Ballymount Cross Tallaght Dublin 24.	Landspreading of calcium hydroxide sludge in townlands of Ballymacoll Little, Loughsallagh, Rowan, Crickstown, Dunboyne, Castletown, Kilbride, Co. Meath	Permit	WMP 2001/17	The recovery of waste other than hazardous waste / the treatment of any waste on land with a consequential benefit for an agricultural activity or ecological system.		1st Schedule of the WM (Permit) Regulations, 1998 Activity 5 & 4th Schedule of WM Act 1996, Class 10.			21/08/2001	16/08/2001	15/08/2004
Meath Co. Council	Japanese Autospares, Unit 7 Ashbourne Industrial Park, Cookstown, Ashbourne, Co. Meath	Unit 7, Ashbourne Industrial Park, Cookstown, Ashbourne, Co. Meath	Permit	WMP 2000/31	Permitted waste activity in accordance with the Fourth Schedule of the Waste Mgt. Act. 1996.	Class 3, Recycling or reclamation of metals and metal compounds, Class 4, Recycling or reclamation of other inorganic materials, Class 13, Storage of waste intended for submission to any activity referred to in a preceding paragraph of this Schedule, other than temporary storage, pending collection, on the premises where such waste is produced.	4th Schedule of the WM (Permit) Regulations 1998, in accordance with the Fourth Schedule of the Waste Management Act 1996. Class 3, 4 & 13.			03/09/2001	22/08/2001	21/08/2004
Meath Co. Council	Xtratherm Limited, c/o Paul Carroll & Associates, Brookfield House, Athlumney, Navan, Co. Meath.	Liscartan, Kells Road, Navan, Co. Meath.	Permit	WMP 2001/5	The treatment of any waste on land with a consequential benefit for an agricultural activity or ecological system.	Activity 5, 1st Schedule - The Recovery of waste (other than hazardous waste) at a facility (other than a facility for the composting of waste where the amount of compost and waste held at the facility exceeds 1000 cubic metres at any time) & Class 10, The treatment of any waste on land with a consequential benefit for an agricultural activity or ecological system.	Permitted waste recovery activity, in accordance with the First Schedule of the Waste Management (Permit) Regulations, 1998 & Class 10 in accordance with the Fourth Schedule of the WM Act, 1996.			03/09/2001	23/08/2001	22/08/2004

Meath Co. Council	P&B Connolly (Dublin) Ltd.	Clashford, Naul, Co. Meath	Permit	WMP 2001/6		The recovery of waste other than hazardous waste / the treatment of any waste on land with a consequential benefit for an agricultural activity or ecological system.	Activity 5 in accordance with the First Schedule of the Waste Management (Permit) Regulations, 1998 & Class 10 - the treatment of any waste on land with a consequential benefit for an agricultural activity or ecological system.			14/11/2001	07/11/2001	06/11/2004
Meath Co. Council	John Coyle c/o Frank Burke & Associates, Co. Meath.	Kilbrew, Ashbourne & Loughinstown, Ratoath, Co. Meath.	Permit	WMP 2001/7		The recovery of waste other than hazardous waste / the treatment of any waste on land with a consequential benefit for an agricultural activity or ecological system.	Waste recovery activity, in accordance with the First Schedule of the WM (Permit) Reg's, 1998, Activity 5 & in accordance with the Fourth Schedule of the WM Act, 1996, Class 10.			30/11/2001	28/11/2001	27/11/2004
Meath Co. Council	Mr. Lyndon Douglas	Arodstown, Summerhill, Co. Meath	Permit	WMP 2001/24	Treatment of waste on land with a consequential benefit for an agricultural activity or ecological system.	The recovery of waste (other than hazardous waste) at a facility (other than a facility for the composting of waste where the amount of compost and waste held at the facility exceeds 1000 cubic metres at any time). The treatment of any waste on land with a consequential benefit for an agricultural activity or ecological system.	Activity 5 WM (Permit) Reg's, 1998 and Class 10 in accordance with the Fourth Schedule of the WMA, 1996.			06/12/2001	04/12/2001	03/12/2004
Meath Co. Council	Pat Fallon Construction Ltd	Newgrange Business Park, Donore Road, Drogheda, Co. Louth	Permit	WMP 2001/14	Treatment of waste on land with a consequential benefit for an agricultural activity or ecological system.	The recovery of waste (other than hazardous waste) at a facility (other than a facility for the composting of waste where the amount of compost and waste held at the facility exceeds 1000 cubic metres at any time). The treatment of any waste on land with a consequential benefit for an agricultural activity or ecological system.	Activity 5 WM (Permit) Reg's, 1998 and Class 10 in accordance with the Fourth Schedule of the WMA, 1996.			28/01/2002	24/01/2002	23/01/2005
Meath Co. Council	Pat Fallon Construction Ltd., c/o Frank Burke & Associates, Baldara, Trim Road, Navan, Co. Meath.	Calliaghstown, Julianstown, Co. Meath	Permit	WMP 2001/23		Only uncontaminated soil & stone waste, which conform to the European Waste Catalogue Code Ref. 170501, may be accepted at the Site. The only C&D waste permitted on the site, shall be solely for the purposes of upgrading the existing haul road, shall correspond with the following EWC refs 170101 concrete and 170102 bricks.	Activity 5, Class 10			13/09/2002	10/09/2002	09/09/2005
Meath Co. Council	Keegan Quarries	Clegarrow, Rathmolyon, Co. Meath.	Permit	WMP2001/3	Recovery & treatment of waste	Uncontaminated soil and stone waste which conform to the EU Waste Cat. Ref. 170501 may be accepted at the site.	Activity 5 - First Schedule of WM(Permit) Regs, 1998 & Class 10 - 4th Schedule of WMA, 1996.			07/03/2002	28/02/2002	27/02/2005
Meath Co. Council	Mark Pendry Hatch	Lonford House, Longford Rd., Duleek, Co. Meath.	Permit	WMP2001/26	Recovery & treatment of waste	Uncontaminated soil and stone waste which conform to the EU Waste Cat. 17 05 01. Only exception - use of C&D waste or imported stone/gravel to construct a temporary haul road through the site. This waste shall correspond with EWC Ref 170101 concrete and 170102 brick.	First Schedule of the WM (Permit) Regulations, 1998, Activity 5 & Fourth Schedule of WMA, 1996, Class 10.			06/03/2002	28/02/2002	27/02/2005



Meath Co. Council	Mr. Michael Foley	Crossdrum Upper, Oldcastle, Co. Meath.	Permit	WMP2001/28	Recovery & treatment of waste	Uncontaminated soil and stone waste which conform to the EWC ref. 170501 shall be accepted at the site. Concrete and brick are only permitted for the purposes of construction of a haul road through the site.	First Schedule of the WM (Permit) Regs, 1998 - Activity 5 and Fourth Schedule of WMA 1996 - Class 10			16/04/2002	12/04/2002	11/04/05 - 36 months from date of issue
Meath Co. Council	Gerard Doolin c/o Philip Farrelly & Company, 2 Kennedy Rd, Navan, Co. Meath	Killeaney, Maynooth, Co. Meath.	Permit	WMP2001/29	Dismantling and recovery of vehicles. Recycling or reclamation, recovery, storage.	Hydraulic oils containing only mineral oils, brake fluids, chlorinated engine, gear and lubricating oils, non-chlorinated engine, gear and lubricating oils, end of life vehicles, discarded equipment and shredded residues, batteries and accumulators, paints, varnishes, vitreous enamels, adhesive, sealants and printing inks.	First Schedule of WM (Permit) Regs, 1998 - Activity 3 & In accordance with the Third Schedule of WMA 1996 - Class 13 & Fourth Schedule of WMA 1996 - Classes 2, 3, 4, 7 & 13.			16/04/2002	12/04/2002	11/04/05 - 36 months from date of issue
Meath Co. Council	Patrick Farrelly	Castlekeeran, Carnaross, Kells, Co. Meath	Permit	WMP 2001/30	Treatment of any waste on land with a consequential benefit for an agricultural activity or ecological system.	Waste (other than hazardous waste)	First Schedule of WM (Permit) Regs, 1998 - Activity 5 and in accordance with Fourth Schedule of WMA, 1996 - Class 10.			03/05/2002	01/05/2002	30/04/2005
Meath Co. Council	Gerard Byrne	Colehill, Kinnegad, Co. Meath	Permit	WMP 2002/01	Recovery of waste (other than haz waste) & the treatment of waste on land with a consequential benefit for an agricultural activity or ecological system.	Only uncontaminated waste, soil & stone, concrete, bricks, tiles & ceramics as per European Waste Catalogue (edition valid from 01st January 2002). Code references available from permit.	1st Schedule of WM (Permit) Regs, 1998 - Activity 5 and 4th Schedule of WMA, 1996 - Class 10.			07/06/2002	30/05/2002	29/05/2005
Meath Co. Council	John O'Connell c/o Frank Burke & Associates, Baldara, Trim Road, Navan, Co. Meath.	Roanstown, Ratoath, Co. Meath	Permit	WMP 2001/31	Recovery & treatment of waste	Only uncontaminated soil and stone waste, which conform to the European Waste Catalogue code reference 17 05 01 may be accepted at the site.	1st Schedule of WM (Permit) Regs, 1998 - Activity 5 and Fourth Schedule			05/06/2002	31/05/2002	6 months from the date of commencement of activities on site.
Meath Co. Council	Ulick McDonnell	Bonestown, Dunshaughlin, Co. Meath	Permit	WMP 2001/10	Waste Recovery	Only uncontaminated soil & stone waste which conforms to EU Waste Catalogue code ref. 170504 (2002 edition) may be accepted at the site. See permit.	1st Schedule of WM (Permit) Regs, 1998 - Activity 5 and 4th Schedule of WMA 1996 - Class 10			21/06/2002	17/06/2002	16/06/2005
Meath Co. Council	Jack Marry c/o Declan P. Walsh	Main Road, Tullyallen, Drogheda, Co. Louth - Location of Facility: Proudfootstown, Dowth, Co. Meath.	Permit	WMP 2000/36		Only uncontaminated soil and stone waste which conform to the EU Waste Catalogue (EWC) 2002 edition 170504, may be accepted at the site. See permit.	Activity 5, Class 10			17/07/2002	11/07/2002	10/07/2005
Meath Co. Council	Trim Plant Limited	Scurlockstown, Co Meath	Permit	WMP 2002/4		Only uncontaminated soil and stone waste which conform to the European Waste Catalogue (2002 edition) Ref. 170504	Activity 5, Class 10			06/08/2002	02/08/2002	01/08/2005
Meath Co. Council	Terry Lyons	Oldtown, Summerhill, Rathmolyon, Co. Meath	Permit	WMP 2002/14		Only uncontaminated soil and stone waste, which conform to the European Waste Catalogue (2002 edition) code reference 170504 may be accepted at the site	Activity 5, Class 10			06/08/2002	01/08/2002	31/07/2005

Meath Co. Council	Finn Sheedy	Rathleek, Dunboyne, Co. Meath	Permit	WMP 2002/5	Recovery & treatment of waste	Only uncontaminated soil & stone waste which confirm to the EU Waste Catalogue 2002 edition ref. 170504. 170101 and 170102 are only permitted for the purposes of the construction of a haul road through the site.	Activity 5, Class 10			28/08/2002	23/08/2002	22/08/2005
Meath Co. Council	Jimmy Collins c/o Michael P.O'Grady & Associates	Emmet Street, Trim, Co. Meath	Permit	WMP 2001/33	Recovery of Waste (other than hazardous waste)	Only uncontaminated soil and stone waste which confirm to the European Waste Catalogue 2002 edition code ref. 170504	Activity 5, Class 10			10/09/2002	07/09/2002	06/09/2005
Meath Co. Council	O'Connell Agri-Environmental, 31 New Inn, Enfield, Co. Meath	(1) Carrollstown Estate, Trim, Co. Meath, (2) Rathcormick, Kildalkey, Co. Meath, (3) Croboy, Hill of Down, Enfield, Co. Meath	Permit	WMP 2002/23		Only "Guinness for Export" dust and "Roast House" dust, which conforms with the following European Waste Catalogue 2002 edition code reference 020799	Activity 5, Classes 10 & 13			10/09/2002	13/09/2002	12/09/2005
Meath Co. Council	Mr. Brian Smith, c/o Farrelly & Co., 2 Kennedy Road, Navan Co. Meath	Booilies Little, Duleek, Co. Meath	Permit	WMP 2/98		See copy of Permit	Activity 3, Classes 3, 4, 7 & 13			10/09/2002	04/09/2002	03/09/2005
Meath Co. Council	Mr. Owen Hoey, c/o Frank Burke & Associates	Drakestown, Castletown-Kilpatrick, Navan, Co. Meath.	Permit	WMP 2002/7		Only uncontaminated soil & stone waste, which confirm to the EU Waste Catalogue (2002 edition) Ref. 170504 (soil & stones) may be accepted at the site.	Activity 5, Class 10			13/09/2002	10/09/2002	09/09/2005
Meath Co. Council	Carrollstown Estate Ltd.	Carrollstown, Trim, Co. Meath	Permit	WMP 2002/20		See copy of permit 020106 / 020107 / 020304 / 030308 / 030105 / 200108 / 200201	Activity 5, Classes 2 & 13			27/09/2002	26/09/2002	25/09/2005
Meath Co. Council	Midland Contractors Limited	Cortown, Kells, Co. Meath	Permit	WMP 2002/2	Recovery of waste (other than hazardous waste) at a facility (other than a facility for the composting of waste where the amount of compost and waste held at the facility exceeds 1000 cubic metres at any time).	Only uncontaminated soil & stone waste, which conform to the European Waste Catalogue (2002 edition) code reference 170504 (soil & stones) may be accepted at the site. There shall be no construction and demolition waste accepted or deposited at the site.	Activity 5, Class 10			03/10/2002	01/10/2002	30/09/2005
Meath Co. Council	Seamus Darby c/o Foley Engineering Services	Mullingar Road, Kinnegad, Co. Westmeath. Location of Facility: Ballynabarney, Clonard, Co. Meath.	Permit	WMP 2000/43	Recovery of waste (other than hazardous waste) / the treatment of waste on land with a consequential benefit for an agricultural activity or ecological system.	Only uncontaminated soil and stone waste, which conforms to the European Waste Catalogue (2002 edition) code reference 170504 (soil and stones) may be accepted at the site. No C&D waste shall be accepted or deposited at the site.	Activity 5, Class 10			16/10/2002	11/10/2002	10/10/2005
Meath Co. Council	Mr. Larry Crehan, Waynestown, Dunboyne, Co. Meath	Waynestown, Dunboyne, Co. Meath	Permit	WMP 2002/9		Only uncontaminated soil and stone waste which conform to the European Waste Catalogue (2002 edition) code reference 170504 may be accepted at the site.	Activity 5, Class 10			31/10/2002	24/10/2002	Commenced 18/02/03 Expires 17/08/03



Meath Co. Council	James & Alma Guiney	Stadalt, Stamullen, Co. Meath	Permit	WMP 2002/24	Recovery of waste (other than hazardous waste) / the treatment of waste on land with a consequential benefit for an agricultural activity or ecological system.	Only uncontaminated soil and stone waste, which conforms to the European Waste Catalogue (2002 edition) code reference 170504 (soil and stones) may be accepted at the site.	Activity 5, Class 10			06/11/2002	31/10/2002	30/10/2005
Meath Co. Council	Mr. James McKenna	Knocknahattin, Athboy, Co. Meath	Permit	WMP 2002/15	Recovery of waste (other than hazardous waste) & treatment of waste on land	Only uncontaminated soil and stone waste, which conform to the European Waste Catalogue (2002 edition) code reference 170504 may be accepted at the site	Activity 5, Class 10			08/11/2002	05/11/2002	05/11/04 (24 months from date of commencement of activities on the site)
Meath Co. Council	Organic Gold Marketing Ltd.	Wilkinstown, Navan, Co. Meath	Permit	WMP 2002/26		Activated sludge, spent grain, biodegradable kitchen and canteen waste, woodchips and sawdust, green waste, mushroom compost, cocoa shell, cardboard and paper	First schedule - Activity 5 / 4th Schedule, classes 2,4 & 13			28/11/2002	19/11/2002	18/11/2005
Meath Co. Council	Michael McGuinness, c/o Frank Burke & Associates	Hilltown Little, Bellewstown, Duleek, Co. Meath.	Permit	WMP 2002/10		Only uncontaminated soil and stone waste, which conform to the European Waste Catalogue (2002 edition) code reference 170504 (soil and stones) may be accepted at the site.	Activity 5, Class 10			28/11/2002	19/11/2002	36 months from date of commencement of work on site
Meath Co. Council	Doherty Quarries	Cruicetown, Slane, Co. Meath	Permit	WMP 2001/34		See copy of waste permit on file	First Schedule Activities 2 & 5 / Third Schedule Classes 11 & 13 / Fourth Schedule Classes 3,4 & 13			09/12/2002	04/12/2002	36 months from date of commencement of work on site
Meath Co. Council	John Kevin Connell	Kilbrev, Ashbaume, Co. Meath	Permit	WMP 2002/6		Only uncontaminated soil and stone waste which conform to the EWC (2002 edition) code reference 170504 (soil and stones) may be accepted at the site. There shall be no C&D waste accepted or deposited at the site.	First Schedule Activity 5 / Fourth Schedule, Class 10			15/01/2003	13/01/2003	24 months from date of commencement of waste activities on site
Meath Co. Council	Anthony Hoban	Pheopotstown, Killock, Co. Meath	Permit	WMP 2002/28		Only uncontaminated soil and stone waste, which conforms to the EU Waste Catalogue (2002 edition) code reference 170504 (soil and stones) may be accepted at the site. Concrete waste, conforming to EWC code reference 170101 may be used in the construction of the haul road only.	Activity 5, Class 10			10/02/2003	04/02/2003	03/02/2006
Meath Co. Council	Frank Hevey, t/a FGH Enterprises Ltd.	Molerick, Hill of Down, Enfield, Co. Meath	Permit	WMP 2002/27		Only uncontaminated soil & stone waste, which conforms to the European Waste Catalogue (2002 edition) code reference 170504 (soil and stones) may be accepted at the site. Mixture of concrete, bricks, tiles and ceramics waste, conforming to European Waste Catalogue code reference 170107 may be used in the construction of the haul road only.	First Schedule, Activity 5 / Fourth Schedule, Class 10			21/02/2003	19/02/2003	Commenced 10/03/03 Expires 09/03/06

Meath Co. Council	Tom O'Malley	Milltown, Killock, Co. Meath	Permit	WMP 2002/29	Only uncontaminated soil and stone waste which conforms to the EU Waste Catalogue (2002 Edition) code reference 170504 (soil & stones) may be accepted at the site.	First Schedule, Activity 5 / Fourth Schedule, Class 10.			03/03/2003	27/02/2003	36 months from date of commencement of work on site
Meath Co. Council	Michael Bray c/o Brendan McGovern, Johnsbrook Surveys Limited	Girley, Fordstown, Navan, Co. Meath	Permit	WMP 2002/31	Only uncontaminated soil and stone waste, which conforms to the European Waste Catalogue (2002 edition) code reference 170504 (soil and stones) may be accepted at the site.	First Schedule, Activity 5 / Fourth Schedule, Class 10.			10/03/2003	04/03/2003	36 months from date of commencement of work on site
Meath Co. Council	Ward & Burke Construction Ltd. c/o Enviroco Management Ltd.	Grangend Common, Rathoath Road, Dunshaughlin, Co. Meath	Permit	WMP 2003/3	Only uncontaminated soil and stone waste, which conforms to the EWC (2002 Edition) code reference 170504 (soil and stones) and which arises from the Dunshaughlin Sewerage Scheme only.	First Schedule, Activity 5 / Fourth Schedule, Class 10.				04/03/2003	Commenced 12/03/03 Expires 11/09/03
Meath Co. Council	Trim Plant Ltd.	Oldtown, Johnstown, Navan, Co. Meath	Permit	WMP 2002/3	Only uncontaminated soil and stone waste, which conforms to the EU Waste Catalogue (2002 edition) code reference 170504 (soil and stones) may be accepted at the site. No other waste types shall be accepted or deposited at this facility.	First Schedule, Activity 5 / Fourth Schedule, Class 10.			10/04/2003	08/04/2003	36 months from date of commencement of work on site
Meath Co. Council	Gerry Tuite	Mannanstown, Ardcath, Co. Meath	Permit	WMP 2003/12	Only uncontaminated soil and stone waste, which conforms to the EWC (2002 edition) code reference 170504 (soil and stones) may be accepted at the site.	First Schedule, Activity 5, Class 10			23/04/2003	16/04/2003	3 months from date of commencement of activities on site.
Meath Co. Council	O'Connell Agri-Environmental	Ballinderry House, Ballinderry, Enfield, Co. Meath	Permit	WMP 2003/2	Only "Guinness for Export" dust and "Roast House" dust which conforms with the following EWC (2002 edition) shall be transported and spread on the participating farm lands. 020799 wastes from the production of alcoholic and non-alcoholic beverages 9except coffee, tea and cocoa) wastes not otherwise specified ("Guinness for Export" dust and "Roast House" dust.	First Schedule, Activity 5, Classes 10 & 13			23/04/2003	16/04/2003	36 months from date of commencement of work on site
Meath Co. Council	Gerry Tuite c/o Thomas A. Keenan,	Mooneyhill, Primarestown, Ashbourne, Co. Meath	Permit	WMP 2002/21	Only uncontaminated soil and stone waste, which conforms to the EWC (2002 Edition) code reference 170504 (soil & stones) may be accepted at the site.	First Schedule, Activity 5, Class 10			23/04/2003	16/04/2003	36 months from date of commencement of work on site
Meath Co. Council	Joe Flanagan	Ballyadams, Co. Meath	Permit	WMP 2002/18	Only uncontaminated soil and stone waste, which conforms to the EWC 2002 edition code reference 170504 (soil & stones) may be accepted at the site.	First Schedule, Activity 5, Class 10			23/04/2003	16/04/2003	Commenced 13/05/03 Expires 12/05/05
Meath Co. Council	Rose McManus	Creewood, Slane, Co. Meath	Permit	WMP 2002/25	Only uncontaminated soil and stone waste, which conforms to the European Waste Catalogue (2002 edition) code reference 170504 (soil and stones) may be accepted at the site.	First Schedule, Activity 5, Class 10			08/05/2003	07/05/2003	6 months from the date of commencement of activities on site.



Meath Co. Council	Charlie Flattery, c/o Ms. Maeve Fanning, Philip Farrelly & Company	Agher, Summerhill, Co. Meath	Permit	WMP 2002/19		Only uncontaminated soil and stone waste, which conform to the European Waste Catalogue (2002 edition) code reference 170504 (soil and stones) may be accepted at the site. There shall be no construction and demolition waste accepted or deposited at the site.	First Schedule, Activity 5, Fourth Schedule, Class 10			16/05/2003	13/05/2003	24 months from date of commencement of waste activities on site
Meath Co. Council	McKenna Waste Paper Recycling Company Ltd. c/o Abbi & Associates, Bessexwell House, Bessexwell Lane, Drogheda, Co. Louth.	Commons, Duleek, Co. Meath	Permit	WMP 2003/1		Only uncontaminated paper and cardboard waste corresponding to code 030308 (wastes from sorting of paper and cardboard destined for recycling) of the EWC published by EPA (Jan 2002 edition)	First Schedule Activity 5, Fourth Schedule Classes 2 & 13			03/06/2003	26/05/2003	25/05/2006
Meath Co. Council	Clive Craig	Ballyboggan, Clonard, Co. Meath	Permit	WMP 2003/13		Only uncontaminated soil and stone waste, which conforms to the EWC 2002 edition code reference 170504 (soil & stones) may be accepted at the site.	First Schedule Activity 5, Class 10			09/06/2003	30/05/2003	36 months from date of commencement of work on site
Meath Co. Council	Dermot O'Reilly & Sons, c/o Christopher Flynn & Associates	Ginnets Little and Drumard, Summerhill, Co. Meath	Permit	WMP 2003/10		Only uncontaminated soil and stone waste, which conforms to the EWC 2002 edition code reference 170504 (soil & stones) may be accepted at the site. Concrete waste, conforming to EWC ref. 170101 may be used in the construction of the haul road only.	First Schedule Activity 5, Fourth Schedule Class 10			09/06/2003	30/05/2003	36 months from date of commencement of work on site
Meath Co. Council	Westroute JV, c/o SIAC	Towlaght, Clonard, Enfield, Co. Meath.	Permit	WMP 2003/14		Only uncontaminated soil and stone waste which conforms to the EWC (2002 edition) code reference 170504 (soil & stones) may be accepted at the site.	First Schedule Activity 5, Fourth Schedule Class 10			20/06/2003	06/06/2003	36 months from date of commencement of work on site
Meath Co. Council	John Thornton	Martry, Kells, Co. Meath	Permit	WMP 2003/4			First Schedule, Activity 5, Classes 10 & 13			23/06/2003	26/06/2003	36 months from date of commencement of work on site
Offaly Co. Council	Owen Wyer Waste, The Glebe, Durrow, Co. Offaly	The Glebe, Durrow, Co. Offaly	Permit	WP-04/2001	Waste processing and recycling operations	Redamation and recycling of metals and metal compounds, inorganic materials, storage of waste intended for submission.	4th Sched. WMA 1996, Class 3, 4 and 13			19/10/2001	17/10/2001	16/10/2004
Offaly Co. Council	Michael Egan	New Road, Clara, Co. Offaly	Permit	WP8/02	The recovery of waste other than hazardous waste and the treatment of any waste on land with a consequential benefit for an agricultural activity or ecological system.	Uncontaminated soil and stones which conform to the European Waste Catalogue code ref. 170501, originating from the Westwood Grove/Park Housing Development at Erry (Ballycumber Road), Clara may be accepted at the site. No other waste types are to be deposited at this facility.	Activity 5 in accordance with the First Schedule of the WM (Permit) Regs. 1998 and Class 10 in accordance with the Fourth Schedule of the WM Act, 1996.			08/04/2002	02/04/2002	01/04/2003

Offaly Co. Council	Loughnane Concrete Bricks	Ballinaguilsha, Birr, Co. Offaly	Permit	WP9/02	Disposal of waste (other than hazardous waste) and treatment of any waste on land with a consequential benefit for an agricultural activity or ecological system	Disposal of waste (other than hazardous waste) and treatment of any waste on land with a consequential benefit for an agricultural activity or ecological system	First Schedule of the WM (Permit) Regs, activity 6 and Class 10 of the 4th Schedule of the WMA 1996			26/06/2002	14/06/2002	13/06/2005
Offaly Co. Council	Loughnane Concrete Bricks	Ballinaguilsha, Birr, Co. Offaly	Permit	WP19/02			First Schedule, Activity 6 / Fourth Schedule, Class 10			18/03/2003	14/03/2003	36 months from date of commencement of work on site
Offaly Co. Council	Sean Carey	Ballycon, Mount Lucas, Tullamore, Co. Offaly	Permit	WP10/02		Only uncontaminated soil and stones, which conform to the European Waste Catalogue code reference 170504 may be accepted at the site. No other waste types are to be deposited at this facility.	Activity 5, Class 10			09/10/2002	07/10/2002	06/10/2005
Offaly Co. Council	Noel Regan & Sons (Plant Hire) Ltd	Ishlawn, Ballaghaderreen, Co. Roscommon, Erry, New Road, Clara, Co Offaly	Permit	WP12/2002	Recovery of waste other than those mentioned	Only uncontaminated soil and stones, which conform to the European Waste Catalogue code reference 170504 and originate from the construction of Clara Sewerage Scheme may be accepted at the site.	Activity 5, Class 10			14/10/2002	10/10/2002	10/04/2004
Offaly Co. Council	Noel Regan & Sons (Plant Hire) Ltd	Aghamore, Raheen Road, Clara, Co. Offaly	Permit	WP18/02		Only uncontaminated soil and stones, which conform to the EWC code reference 170504 and originate from the construction of Clara Sewerage Scheme may be accepted at the site.	Activity 5, Class 10			29/01/2003	24/01/2003	23/01/2004
Offaly Co. Council	Gerard Killaly	Shean, Edenderry, Co. Offaly	Permit	WP 11/02		Only uncontaminated soil & stones which conform to the European Waste Catalogue code reference 170504 may be accepted at the site. No other waste types are to be deposited at the facility.	Activity 5, Class 10			02/12/2002	28/11/2002	27/11/2005
Offaly Co. Council	Liam Condon, Condon Car Dismantlers	Cappancur Industrial Estate, Cappancur, Tullamore, Co. Offaly.	Permit	WP1/99(2)02	Dismantling and recovery	End-of-life vehicles	Third schedule - Class 13, Fourth Schedule - Class 3 & 13, First Schedule - Activities 2 & 3.			19/12/2002	10/12/2002	09/12/2005
Offaly Co. Council	John Joseph Clancy TA Clancy's Recovery	Loughaun, Tullamore, Co. Offaly	Permit	WP17/02	Storage of waste	Storage of end-of-life vehicles	Fourth Schedule - Class 13			14/02/2003	13/01/2003	12/01/2006
Offaly Co. Council	Irish Metal Refineries Ltd.	Cappancur Industrial Estate, Cappancur, Tullamore, Co. Offaly	Permit	WP2/99(2)03	Recovery of scrap metal or other metal waste		First Schedule, Class 3,4,7,12 & 13 - Activity 2	500 tonnes at any one time		18/03/2003	14/03/2003	13/03/2006
Offaly Co. Council	Michael McNamara & Co. Ltd.	Galvin's Quarry, Arden Road, Tullamore, Co. Offaly.	Permit	WP24/03		Only excavated materials which conform to the EU Waste Catalogue ref. 170504 and originate from the construction of the new Regional Hospital Tullamore, may be accepted at the site.	First Schedule, Activity 5 / Fourth Schedule, Class 10.			03/04/2003	02/04/2003	01/04/2004
Offaly Co. Council	David Bracken Junior, Ballycumber Exports	The Pound, Ballycumber, Co. Offaly.	Permit	WP3/01	Dismantling and Recovery	End-of-Life vehicles - EWC Code 160104	Third Schedule, Class 13 / Fourth Schedule, Classes 3 & 13 / First Schedule Activities 2 & 3.			17/06/2003	13/06/2003	12/06/2006



Offaly Co. Council	David Bracken Senior	Clara Road, Ballycumber, Co. Offaly.	Permit	WP/501		End-of-Life vehicles - EWC Code 160104	Third Schedule, Class 13 / Fourth Schedule, Classes 3 & 13 / First Schedule Activities 2 & 3.			17/06/2003	13/06/2003	
Offaly Co. Council	Oliver Fay	Galvins Quarry, Arden Road, Tullamore, Co. Offaly.	Permit	WP29/03		Only excavated materials which conform to the EU Waste Catalogue ref. 170504 may be accepted at the site. No other waste types are to be deposited at this facility.	Fourth Schedule, Class 10 / First Schedule Activity 5.			14/07/2003	11/07/2003	10/07/2004
Offaly Co. Council	Gerry Seery	Carrick Road, Edenderry, Co. Offaly	Permit	WP16/02		Only excavated materials which conform to the EWC code reference 170504 may be accepted at the site.	Fourth Schedule, Class 10 / First Schedule Activity 5.			14/07/2003	10/07/2003	09/07/2006
Roscommon Co. Council	Waterways Ireland	17/19 Lower Hatch St., Dublin 2.	Permit	WMP/1/02	Facility for the recovery of 16,000m3 of dredged material arising from the development "32 Berth Public Marina at Ballyleague" (PD/00/1764). The dredged materials is to be dewatered and spread on land at the facility.	Dredged material	Class 10 of the 4th Schedule of WMA 1996			03/05/2002	30/04/2002	29/04/2004
Roscommon Co. Council	Bergin Waste Disposal Ltd.	Ballaghaderreen Industrial Estate, Ballaghaderreen, Co. Roscommon.	Permit	WMP/2/02	Recycling & Waste Transfer Station		3rd Schedule, Activities 11, 12 & 13 & 4th Schedule, Activities 2,3,4,11 & 13	Not to exceed 5,000 tonnes per annum.		12/06/2002	07/06/2002	06/06/2004
Roscommon Co. Council	Fergus Hanley	Ballyleague, Co. Roscommon	Permit	WMP/04/02	Recovery	Recovery of 30,000m3 of boulder clay arising from the development at the ESB power station at Lanesboro. The material is to be used in the construction of embankments under the roads and carpark for a new Marina project in Ballyleague.	Class 10 of the 4th Schedule of the WMA 1996			09/08/2002	07/08/2002	06/08/2004
Roscommon Co. Council	Padraig Beirne, Beirnes Bins Ltd	Kilmacumsey, Elphin, Co. Roscommon	Permit	WMP/03/02	Handling and separation of dry recyclables	Handling and separation of dry recyclables, ie, paper, plastic, timber packaging, glass and cans	Article 6 of the WM(Permit) Regs, 1998	5,000 p/y		23/08/2002	21/08/2002	20/08/2005
Roscommon Co. Council	McSharry Brothers Plant Sales Ltd.	Foumlehouse, Roscommon	Permit	WMP/07/02	Recovery of end of life vehicles		Classes 3, 4, 5, 6, 8, 13			10/10/2002	09/10/2002	09/10/2005
Roscommon Co. Council	Hanley Brothers Ltd.	ESB Powerstation, Shannonbridge	Permit	WMP/08/02	Recovery of subsoil	Facility for the recovery of 53,000m3 of subsoil arising from the development at the ESB power station at Shannonbridge. The material is to be used in the restoration of ground where quarrying was carried out under planning permission Ref. No. 97/428	Class 4 of 4th Schedule			19/11/2002	18/11/2002	17/11/2004
Roscommon Co. Council	Hanley Brothers Ltd.	Laragan, Elphin, Co. Roscommon	Permit	WMP/10/02	Recovery of subsoil	Facility for the recovery of 36,000m3 of subsoil arising from the development at the ESB power station at Shannonbridge. The material is to be used in the restoration of ground where quarrying was carried out.	Class 10 of 4th Schedule			20/01/2003	14/01/2003	13/01/2005
Roscommon Co. Council	Wills Brothers Ltd.	Ballylahan Bridge, Foxford, Co. Mayo	Permit	WMP/11/02	Recovery					31/01/2003	28/01/2003	27/01/2005



Roscommon Co. Council	Conor Hannon, Athlone Properties	Monksland, Athlone, Co. Roscommon	Permit	WMP/03/03	Recovery of Inorganic and Organic material which will be used to fill an excavated quarry.		4th Schedule - Classes 4 & 2			13/05/2003	08/05/2003	07/05/2005
Roscommon Co. Council	Vincent Hanly	Ardsallaghmore Townland, Roscommon.	Permit	WMP/14/02	Recovery	Facility for the recovery of 15,000m <sup>3</sup> of inorganic and organic material. The material is to be used in the filling of a low-lying site with boulder clay.	4th Schedule - Classes 4 & 2			14/05/2003	13/05/2003	12/05/2005
Roscommon Co. Council	T. Connolly & Sons	Ardsallaghmore Townland, Roscommon.	Permit	WMP/13/02	Recovery	Facility for the recovery of 2,600m <sup>3</sup> of inorganic and organic material. The material is to be used in filling site with subsoil material.	4th Schedule - Classes 4,2 & 13			30/06/2003	27/06/2003	26/06/2005
South Dublin Co. Council	JVC Recycling Limited	Unit 8, Cookstown Industrial Estate, Dublin 24.	Permit	WPR023	Recycling Facility	Household, inorganic materials				12/08/2002	21/02/2002	20/02/2005
South Dublin Co. Council	Burns Waste Recycling Ltd.	Greenogue Industrial Estate, Rathcoole	Permit	WPR024	Transfer Station & Recycling Facility	Domestic, Commercial and Industrial Non Toxic Waste				12/08/2002	08/05/2002	07/05/2005
South Dublin Co. Council	Roadstone Dublin Ltd.	Fortunestown, Belgard Quarry, Co. Dublin.	Permit	WPR025	Recycle Facility	Recovery of C&D Waste				12/08/2002	20/05/2002	19/05/2005
South Dublin Co. Council	Milestone Metals Ltd.	Unit F1, Weatherwell Business Park, Ninth Lock Road, Clondalkin, Dublin 22.	Permit	WPR018	Recycling facility for recovery of scrap metals	Materials of the following nature only, shall be accepted and processed through the recycling facility - copper and copper alloys / aluminium and aluminium alloys / stainless steel / lead / zinc / steel.		Commercial 8000 tonnes / Industrial 4000 tonnes / Misc 1000 tonnes		08/10/2002	01/10/2002	30/09/2005
South Dublin Co. Council	Mr. Paul Cooke	Glassamucky, Goherabraena, Co. Dublin	Permit	WPR026	Temporary Landfill for Reclamation of Land for Agricultural Purposes	Untamated soil, clay, subsoil, rock and construction & demolition waste subject to certain criteria. C&D waste will only be accepted if it has been sorted so that it consists of only dry, inert, non hazardous material such as bricks, blocks and concrete mass. No plastics, asbestos, plaster board, timber or any other material shall be accepted.		Total volume not to exceed 59,000m <sup>3</sup>		25/10/2002	01/10/2002	30/09/2003
South Dublin Co. Council	Millgrove Ltd.	Ballinascorney Golf Club, Ballinascorney, Co. Dublin	Permit	WPR028	Import fill for the purposes of reconfiguration of the 3rd Green at Ballinascorney Golf Club.	Only non-hazardous concrete, masonry (bricks & blocks), rubble and excavated hardcore as well as uncontaminated clay and topsoil shall be accepted for use as fill.				25/10/2002	01/09/2002	31/08/2003
South Dublin Co. Council	Mr. Tom Donohue	Cruagh Road, Rockbrook, Rathfarnham, Dublin 16	Permit	WPR040		Recovery of C&D waste - creation of access route through forestry lands		35,000				01/01/2006
South Dublin Co. Council	Mr. Frances Geaney	Glenarane House, Glenaraneen, Brittas, Co. Dublin	Permit	WPR036		Recovery of C&D waste - Land Reclamation		35,000				01-Oct-05
South Tipperary Co. Council	Mr. Pat O'Donnell	Ballyboe, Ballypatrick, Clonmel, Co. Tipperary.	Permit	1/01-WP	Composting Facility		Section 19 Article 5 of WM (Permit) Regs			30/01/2002	30/11/2001	30/01/2005
South Tipperary Co. Council	David Woodlock	Jesuits Walk, Garrinch, Fethard, Co. Tipperary	Permit	WP/ST/02/03	Filling of a 5 acre gravel pit with inert material to match existing levels of surrounding lands.		First Schedule, Activity 5	7,000 tonnes of topsoil & 167,000 tonnes of subsoil & inert materials		13/06/2003	01/05/2003	01/05/2004

South Tipperary Co. Council	Mr. Gus Fahey	Donaghmore, Lisonagh, Clonmel	Permit	WP3/02	Waste recovery	Recovery of soil-based materials to restore the lands. Small quantities of brick, block, concrete and stone are allowable for the purpose of haul roads / hardstanding areas. Only inert subsoil, topsoil, sand, gravel, clay, marls and stone shall be used to reclaim/raise the site.	Fourth Schedule, Activities 2,4,10			13/06/2003	20/12/2002	19/12/2003
South Tipperary Co. Council	Mr. John Russell	Rathronan, Clonmel, Co. Tipperary	Permit	WP/ST/03/03	Filling of several depressions with inert material		Fourth Schedule, Activity 5	350 tonnes of topsoil		13/06/2003	20/12/2002	19/12/2003
South Tipperary Co. Council	Mr. Michael Bailey	Doonoor, Grenane	Permit	WP 04/02	Recovery of scrap metal or other metal waste & dismantling or recovery of vehicles	Only wastes scheduled in the application form.	Fourth Schedule, Activities 2,3,4,13			13/06/2003	20/12/2002	19/12/2003
South Tipperary Co. Council	O'Meara Waste Disposal Ltd.	Suir Island, Clonmel	Permit	WP/ST/01/03	Waste transfer station	Municipal, metal, c&d, timber, glass wool, food, cardboard and glass	Third Schedule, Classes 11 & 12 - Fourth Schedule, Class 3 & 4	4,000		13/06/2003	01/05/2003	01/05/2006
South Tipperary Co. Council	Mr Ned Morris	Crohane, Noan, Killenaule, Co. Tipperary 052 52200	Permit	WM/WP 05/03		Inert subsoil, topsoil, sand, grave, clay, marls and stone used for a consequential benefit for an agricultural activity also has permission for a crusher to recycle builders rubble	4 acres					27-Jun-06
South Tipperary Co. Council	Mr John Hale	Ballinagarrane North, Clonmel, Co. Tipperary, 025 26062	Permit	WM/WP 27/03		Inert Subsoil, topsoil, sand, grave, clay, marls and stone used for a consequential benefit for an agricultural activity.						06-Nov-05
South Tipperary Co. Council	Mr John Hurley	Clashaniska, Clonmel, Co. Tipperary 052 22751	Permit	WM/WP 05/02		Inert Subsoil, topsoil, sand, grave, clay, marls and stone used for a consequential benefit for an agricultural activity.						18-Dec-05
Waterford Co. Council	Thomas Phelan	The Glen, Faithlegge, Co. Waterford	Permit	WPER/02/2001	Depositing of Construction and Demolition waste	Construction and Demolition Waste	Article 4 of the WM(Permit) Reg, 1998	5,000		09/03/2001	07/03/2001	06/03/2006
Waterford Co. Council	John Dwane	Bawnabraher, Dungarvan, Co. Waterford.	Permit	WP06/01	Recovery of material	Top soil, sub soil and C&D waste	S.I. 165, 1998	5,000		24/10/2001	12/10/2001	11/10/2004
Waterford Co. Council	Nemeton Teo	Maol A Choirne, Na Rinn, Dungarban, Co. Phortlairge	Permit	WP08/01	Recovery of material	Top soil, sub soil and C&D waste	S.I. 165, 1998	5,000		24/10/2001	12/10/2001	11/10/2004
Waterford Co. Council	Sam Shire Services (Recycling) Ltd.	Mayfield Road, Lismore, Co. Waterford	Permit	WP05/01	Recycling material at its premises	Recovery & shipment for recycling of material - Timber, Aluminium, Plastic, Cardboard and Paper	S.I. 165, 1998	8,800		24/10/2001	12/10/2001	11/10/2004
Waterford Co. Council	Mr. Cyril Power	Ballymacmague North, Dungarvan, Co. Waterford	Permit	WP02/2002		Top soil and Subsoil	S.I. 165, 1998	10,000 tonnes		25/07/2002	24/07/2002	17/07/2005
Waterford Co. Council	Tallow G.A.A. c/o Ms. Fiona McDonnell	Townspark East, Tallow	Permit	WP03/2002	Recovery of material	Top soil and Subsoil	S.I. 165, 1998	5,000 tonnes p/a		01/08/2002	17/07/2002	17/07/2005
Waterford Co. Council	Anthony Dunphy	Bawnacarrigaun, Dungarvan, Co. Waterford.	Permit	WP04/2002	Recovery of material	Top soil and Subsoil	S.I. 165, 1998	5,000 tonnes p/a		01/08/2002	18/07/2002	18/07/2005
Waterford Co. Council	Mr. Noel Hearne	Kill St. Nicholas, Passage East, Co. Waterford	Permit	WP/05/02	Recovery	Top soil and Subsoil		5,000 tonnes p/a		26/11/2002	24/10/2002	24/10/2005
Waterford Co. Council	Vicky Heslop	Tooracurragh, Ballymacarby, Co. Waterford.	Permit	WP/06/02	Organic Waste			2,500 (m <sup>3</sup> )		18/12/2002	25/10/2002	24/10/2005
Waterford Co. Council	Mr. Billy O'Connell	Chapel Lane, Clashmore, Co. Waterford.	Permit	WP/07/02	Recovery	Top soil and Subsoil	S.I. 165, 1998	5,000 tonnes p/a		20/12/2002	17/12/2002	17/12/2005



Waterford Co. Council	SE Construction (Kent) Ltd.	Coolgower, Tramore Road, Co. Waterford.	Permit	WP/08/02	Recovery	Top soil and Subsoil	S.I. 165, 1998	5,000 tonnes p/a		20/12/2002	17/12/2002	17/12/2005
Waterford Co. Council	Gabriel Robinson, Murphy Brothers Agricultural Contractors Ltd.	Coolnagoppoge, Tramore, Co. Waterford	Permit	WP/03/2003	Recovery of Material	Top soil and Subsoil		5,000 tonnes p/a		02/07/2003	01/07/2003	30/06/2006
Waterford Co. Council	Henry Skehan	Raheen, Kilmeaden, Co. Waterford	Permit	WP/01/2003	Recovery of Material	Top soil and Subsoil		5,000 tonnes p/a		02/07/2003	17/04/2003	17/04/2006
Waterford Co. Council	Paul Murphy	Killowen, Tramore, Co. Waterford.	Permit	WP/02/2003	Recovery of Material	Top soil and Subsoil		5,000 tonnes p/a		02/07/2003	12/05/2003	12/05/2006
Waterford City Council	IPODEC Ireland Ltd.	Carriganard, Six Cross Roads, Kilbarry, Waterford.	Permit	WR/02/00	Materials Handling & Recycling Facility	bending, mixture or repackaging of waste prior to submission to any waste disposal activity. Recycling or reclamation of organic substances, metals or metal compounds or other organic materials and storage of waste prior to submission to any waste disposal activity	WMA, 1996 and WM(permit) Reg, 1998 Si No: 165 of 1998			20/12/2000	01/12/2000	01/12/2003
Westmeath Co. Council	Mr. Tony McCarth, The Hammond Lane Metal Co.	The Batteries, Athlone, Co. Westmeath.	Permit	WP1	Recycling, Reclamation of metals and metal compounds, other inorganic materials.		Permitted waste recovery activities, in accordance with the 4th schedule of the WMA, 1996, Class 3, 4, 13.			07/02/2001	06/11/2000	06/11/2003
Westmeath Co. Council	Michael Wallace Skip Hire Ltd	Mullingar Business Park, Zone B, Mullingar, Co. Westmeath	Permit	WP-01/2000	Waste processing and recycling operations	Recycling or reclamation of organic substances which are not used as solvents, Recycling and reclamation of metal and metal compounds, recycling or reclamation or other inorganic materials, Storage of waste intended for submission	3rd Schedule of the WMA, 1996, Class 11,13, and 4th Sched - Class 2, 3, 4 13			29/01/2001	03/10/2000	03/10/2003
Westmeath Co. Council	Mr Joe Ganly, Ganly Motors Ltd t/a Mulingar Car Dismantlers,	Railway Yard, Grove Street, Mullingar, Co. Westmeath	Permit	WP3	Treat and recover metal and metal compounds	Recycling or reclamation of metals and metal compounds. Recycling or reclamation of other inorganic materials. Storage of waste	4th Schedule of the WMA, 1996 Class, 3, 4 and 13			29/01/2001	08/11/2000	08/11/2003
Westmeath Co. Council	Athlone Waste Disposal Company Ltd.	Cartronroy, Athlone.	Permit	WP-01-2001	Disposal & Recovery	Recycling or reclamation of organic substances which are not used as solvents (incl) composting and other biological transformation processes.	3rd Schedule of WMA 1996, Class 11, 12, 13 & 4th Schedule of WMA 1996, Class 2 & 13.			07/02/2002	12/06/2001	12/06/2004
Westmeath Co. Council	Mullingar Employment Action Group	Railway Yard, Grove St. Mullingar, Co. Westmeath	Permit	WP-02-2001	Recycling or reclamation	Recycling or reclamation of metals and metal compounds and of other inorganic materials (limited to glass)	3rd Schedule of WMA 1996, Class 13 & 4th Schedule of WMA Class 3, 4, 13			07/02/2002	11/06/2001	11/06/2004
Westmeath Co. Council	Glenmarr Company Ltd.	Walshestown South, Mullingar, Co. Westmeath	Permit	WP-03-2001	Recycling & Reclamation	Recycling or reclamation of organic substances which are not used as solvents (including composting and other biological transformation processes)	3rd Schedule of WMA 1996, Class 13 & 4th Schedule of WMA, Class 2, 3, 4, 13			11/06/2002	11/06/2002	11/06/2004
Westmeath Co. Council	John Commons	Walshestown, Mullingar, Co. Westmeath	Permit	WP-07/2002			Classes 2,4,11,13			14/08/2002	07/08/2002	06/08/2005
Westmeath Co. Council	Ms. Deirdre Newman Dilger	Lacken, Multyfarnham, Co. Westmeath	Permit	WP-08/2002	Waste Recovery Activities	No municipal solid/household domestic waste except for clean newspaper shall be accepted at the facility.	Classes 2, 11, 13			22/08/2002	19/08/2002	18/08/2005
Westmeath Co. Council	Brendan Gaffey	Tullycross, Moydrum, Athlone, Co. Westmeath	Permit	WP-09/2002			Classes 2,4,11,13 - 4th Schedule			14/11/2002	07/11/2002	06/11/2005
Westmeath Co. Council	Tony Harrett	Clonbonny, Athlone, Co. Westmeath	Permit	WP-10/2002	Waste Recovery Activities		Classes 2,4,11,13 - 4th Schedule			22/11/2002	14/11/2002	13/11/2005
Westmeath Co. Council	Coffey Construction	Lugacaha, Ballymore, Co. Westmeath	Permit	WP-12/2002	Waste Recovery Activities	No municipal solid/household domestic waste shall be accepted at the facility.	Fourth Schedule - Classes 2,4,10			03/01/2003	19/12/2002	18/12/2005

Westmeath Co. Council	Coffey Construction	Dunegan, Mount Temple, Moate, Co. Westmeath	Permit	WP-14/2002	Waste Recovery Activities	No municipal solid/household domestic waste shall be accepted at the facility.	Fourth Schedule - Classes 2,4,10			03/01/2003	19/12/2002	18/12/2005
Westmeath Co. Council	Coffey Construction	Snimnagorha, Moate Road, Ballymore, Co. Westmeath	Permit	WP-13/2002	Waste Recovery Activities	No municipal solid/household domestic waste shall be accepted at the facility.	Fourth Schedule - Classes 2,4,10			03/01/2003	19/12/2002	18/12/2005
Westmeath Co. Council	John & Brian Hamill	Marlinstown, Mullingar, Co. Westmeath	Permit	WP-17/2003	Inert Waste		Fourth Schedule - Classes 2,4,11,13			03/06/2003	15/06/2003	14/06/2006
Westmeath Co. Council	Anneville Agri Services	Anneville, Gaybrook, Mullingar, Co. Westmeath	Permit	WP-20-2003	Inert Waste	No municipal solid/household domestic waste shall be accepted at the facility.	Fourth Schedule - Classes 2, 10 & 13			12/06/2003	09/06/2003	08/06/2006
Westmeath Co. Council	Anneville Agri Services	Bracklyn Estate, Bracklyn, Rahamey, Co. Westmeath	Permit	WP-21-2003	Inert Waste	No municipal solid/household domestic waste shall be accepted at the facility.	Fourth Schedule - Classes 2, 10 & 13			12/06/2003	09/06/2003	08/06/2006
Westmeath Co. Council	James B. McDonnell	Prebaun, Moylisca, Mullingar, Co. Westmeath	Permit	WP-23-2003	Inert Waste	No municipal solid/household domestic waste shall be accepted at the facility.	Fourth Schedule - Classes 2,4,10,11 & 13			12/06/2003	05/06/2003	04/06/2006
Westmeath Co. Council	Mr. John Devery	Ballykeeran, Athlone, Co. Westmeath	Permit	WP-16-2003	Vehicle dismantling or recovery facility	Only material which conforms to the following EWC code references shall be accepted at the facility: 130113 (other hydraulic oils) / 130205 (Mineral-based non-chlorinated engine, gear and lubricating oils) / 130208 (other engine, gear and lubricating oils) / 160104 (end-of-life vehicles) / 160601 (lead batteries).	First Schedule, Activity 3 - Fourth Schedule Classes 3,4, 13.			17/06/2003	10/06/2003	09/06/2006
Westmeath Co. Council	Mr. Brendan Gaffney	Tullycross, Moydrum, Athlone, Co. Westmeath	Permit	WP-29-2003	Inert Waste		Fourth Schedule, Classes 2,4,10,11,13			09/07/2003	04/07/2003	03/07/2006
Wexford Co. Council	Recycling 2000	Kerlogue Industrial Estate, Wexford	Permit	98/0001	Treat/Store Waste					23/01/2001	08/12/1998	Remains valid unless revoked
Wexford Co. Council	Mr. Patrick Berridge, Ballyshannon Farms	Adamstown, Enniscorthy, Co. Wexford	Permit	WP-02-001		Generate methane gas from the 300tonne anaerobic digester for energy supply to power a CHP unit for electrical generation	Fourth Schedule - Activities 9, 10, 11, 13			02/10/2002	13/09/2002	12/09/2004
Wexford Co. Council	Mr. John Molloy	Tomgarrow, Ballycarney, Enniscorthy, Co. Wexford	Permit	WP/00/015	Dismantling or Recovery of Vehicles	Vehicles for dismantling or recovery	Fourth Schedule - 3,13			23/06/2003	19/06/2003	18/06/2004
Wicklow Co. Council	Irish Pet Crematorium	Bray Vet Animal Hsp, Old Conna Avenue, Bray, Co. Wicklow	Permit	ESS/15/8/12(2)	Incineration of waste (other than hsp waste or hazardous)	Waste	WMA 1996 and Waste Management Permit Reg, 1998, Section 5			04/12/2000	22/11/2000	22/11/2003
Wicklow Co. Council	Richard Sharpe	Johnstown North, Ballymoyle, Arklow, Co. Wicklow	Permit	Ess/15/8/12(4)	Waste recovery facility	Recycling or reclamation of organic substances which are not used as solvents (including composting and other biological transformation processes), spreading of any waste on land with a consequential benefit for an agricultural activity or ecological system	4th Schedule of the WMA 1996			18/04/2001	28/03/2001	27/03/2004
Wicklow Co. Council	Joseph Kelly	Lisheens, Manor Kilbride, Blessington, Co. Wicklow.	Permit	Ess/15/8/12(7)	Waste recovery facility	Recovery of waste (other than hazardous waste) / The spreading of any waste on land with a consequential benefit for an agricultural activity or ecological system	Activity 5, Class 10			14/05/2002	02/03/2002	01/11/2003



Wicklow Co. Council	Tom Mulligan	The Paddock, Kilmacanogue, Co. Wicklow	Permit	Ess/15/8/12(10)	Waste recovery facility	Recovery of waste (other than hazardous waste) / The spreading of any waste on land with a consequential benefit for an agricultural activity or ecological system	Activity 5, Class 10	Not to exceed 18,000 tonnes for duration of permit		28/05/2002	27/05/2002	26/05/2004
Wicklow Co. Council	Morris-Sisk Consortium, C/O John Barnett & Assoc.	Unit 7, CSA House, Dundrum Business Park, Windy Arbour, Dublin 14 - (Site located at Killadreenan, Newcastle Co. Wicklow)	Permit	Ess/15/8/12(12)	Waste recovery facility (other than hazardous waste)	Recovery of waste (other than hazardous waste) / The spreading of any waste on land with a consequential benefit for an agricultural activity or ecological system	Activity 5, Class 10	Max. storage shall not exceed 250,000 tonnes for duration of permit		28/05/2002	27/05/2002	26/05/2005
Wicklow Co. Council	Morris-Sisk Consortium, C/O John Barnett & Assoc	Unit 7, CSA House, Dundrum Business Park, Windy Arbour, Dublin 14	Permit	Ess/15/8/12(13)	Waste recovery facility	Recovery of waste (other than hazardous waste) / The spreading of any waste on land with a consequential benefit for an agricultural activity or ecological system	Activity 5, Class 10	Max. tonnage not to exceed 350,000 tonnes for duration of permit		29/05/2002	27/05/2002	26/05/2005
Wicklow Co. Council	Kevin Devlin	Tomriland, Roundwood, Co. Wicklow	Permit	Ess/15/8/12(9)	Waste recovery facility	Inert material can be accepted throughout in accordance with EWC code 170504 - Soil & Stones. See Permit	Activity 5, Class 10	Max. tonnage not to exceed 36,000 tonnes for duration of permit		06/06/2002	10/05/2002	09/05/2004
Wicklow Co. Council	Liam Mounsey	Roundwood Park Farm, Roundwood	Permit	Ess/15/8/12(15)	Waste recovery facility	Recovery of waste (other than hazardous waste) at a facility (other than a facility for the composting of waste where the waste held at the facility exceeds 1000 cubic meters at any time)	Activity 5, Class 10			02/09/2002	23/08/2002	22/08/2003
Wicklow Co. Council	Mr. Andrew Hanlon	Monaspic, Blessington, Co. Wicklow	Permit	Ess/15/8/12(8)	Waste recovery facility	Recovery of waste (other than hazardous waste) / The spreading of any waste on land with a consequential benefit for an agricultural activity or ecological system	Activity 5, Class 10	Max. tonnage not to exceed 20,000 tonnes for duration of permit		28/05/2002	16/05/2002	15/05/2004
Wicklow Co. Council	T.G. Hamilton, Three Castles, Blessington, Co. Wicklow	Crosscoolharbour, Blessington, Co. Wicklow	Permit	Ess/15/8/12(16)	Waste recovery facility	Only inert material can be accepted throughout the site in accordance with the EWC code 170504 Soil & Stones. Suitably sized concrete, bricks, tiles & ceramics (EWC codes 170101, 170102, 170103) may be used in place of quarried stone & gravel for the Waste Inspection Area & Waste Quarantine Area. No other wastes are permitted onto the site.	Activity 5, Class 10	25,000 tonnes for duration of permit		19/09/2002	11/09/2002	10/09/2003
Wicklow Co. Council	Pat O'Shea, GAA, Boleynass, Ashford, Co. Wicklow	GAA Grounds, Ashford	Permit	Ess/15/8/12(18)		EWC Code 170504 soil and stones. Suitably sized concrete, bricks, tiles and ceramics (EWC Codes 170101, 170102, 170103) may be used in place of quarried stone and gravel for the Waste Inspection Area and Waste Quarantine Area.	Activity 5, Class 10	Max. tonnage of 13,000 tonnes for duration of permit		04/11/2002	18/10/2002	17/10/2004
Wicklow Co. Council	Pat O'Neill, Glencormack Timber Ltd.	Kilpipe, Aughrim	Permit	Ess/15/8/12(37)		EWC code 170504 soil and stones, suitably sized concrete, bricks, tiles and ceramics (EWC codes 170101, 170102, 170103) may be used in place of quarried stone and gravel for the Waste Inspection Area and Waste Quarantine Area.	1st Schedule, Activity 5 - Class 10	25,000 tonnes for duration of permit		21/11/2002	08/11/2002	07/11/2004



Wicklow Co. Council	Brendan Henpenstall	Deer Park Farm, Kilquade.	Permit	Ess/15/8/12(23)	Waste Recovery	EWC Code 170504 soil and stones. Suitably sized concrete, bricks, tiles and ceramics (EWC Codes 170101, 170102, 170103) may be used in place of quarried stone and gravel for the Waste Inspection Area and Waste Quarantine Area. No other wastes are permitted onto the site.	1st Schedule, Activity 5 - Class 10	7,200 tonnes for duration of permit		16/12/2002	13/11/2002	12/11/2003
Wicklow Co. Council	Trevor Glover	Ballard Lodge, Ashford, Co. Wicklow	Permit	Ess/15/8/12 (39)	Waste Recovery	Inert material - EWC Code 170504 Soil and Stones. Suitably sized concrete, bricks, tiles and ceramics (EWC codes 170101, 170102, 170103) may be used in place of quarried stone and gravel for the Waste Inspection Area and Waste Quarantine Area. No other wastes are permitted onto the site.	1st Schedule, Activity 5 - Class 10	1,000 tonnes for duration of permit		16/12/2002	04/12/2002	03/12/2003
Wicklow Co. Council	Denis Byrne	Ballinacorbeg, Roundwood, Co. Wicklow	Permit	Ess/15/8/12(36)	Waste Recovery	Only the following inert material can be accepted throughout the site in accordance with the EWC code 170504 soil and stones. Suitably sized concrete, bricks, tiles and ceramics (EWC codes 170101, 170102, 170103) may be used in place of quarried stone and gravel for the Waste Inspection Area & Waste Quarantine Area.	1st Schedule, Activity 5 - Class 10	25,000 tonnes for duration of permit		13/01/2003	31/12/2002	30/12/2005
Wicklow Co. Council	David Whyte	Baltynamina, Roundwood, Co. Wicklow	Permit	Ess/15/8/12 (17)	Waste Recovery	Inert material - EWC code 170504 - soil and stones. Suitably sized concrete, bricks, tiles and ceramics (EWC codes 170101, 170102, 170103) may be used in place of quarried stone and gravel for the Waste Inspection Area and Waste Quarantine Area. No other wastes are permitted onto the site.	1st Schedule, Activity 5 - Class 10			16/12/2002	18/11/2002	17/11/2004
Wicklow Co. Council	Jonathan Sutton	Fortview, Glassnamullen, Bray, Co. Wicklow	Permit	Ess/15/8/12(34)		Only the following inert material can be accepted throughout the site in accordance with the EWC code 170504 soil and stones. Suitably sized concrete, bricks, tiles and ceramics (EWC codes 170101, 170102, 170103) may be used in place of quarried stone and gravel for the Waste Inspection Area and Waste Quarantine Area.	1st Schedule, Activity 5 - Class 10	12,000 tonnes for duration of permit		19/02/2003	14/02/2003	13/08/2004
Wicklow Co. Council	Cullen Excavations Ltd.	Ballygarret, Kilcoole Road, Newtownmountkennedy.	Permit	Ess/15/8/12(42)	Waste Recovery	Suitably sized concrete, bricks, tiles and ceramics (EWC codes 170101, 170102, 170103) may be used in place of quarried stone and gravel for the Waste Inspection Area and Waste Quarantine Area.	1st Schedule, Activity 5 - Class 10	160,000 tonnes		28/02/2003	18/02/2003	17/02/2006
Wicklow Co. Council	Morris Sisk Consortium	Ballybeg, Rathnew, Co. Wicklow	Permit	Ess/15/8/12(31)		Only inert material can be accepted throughout the site in accordance with EWC code 170504 soil & stones	Activity 5, Class 10	350,000 tonnes for duration		29/01/2003	17/01/2003	16/01/2006
Wicklow Co. Council	Seamus Nolan	Laragh East, Laragh	Permit	Ess/15/8/12		Only inert material can be accepted throughout the site in accordance with the EWC code 170504 soil and stones. Suitably sized concrete, bricks, tiles and ceramics (EWC codes 170101, 170102, 170103) may be used in place of quarried stone and gravel.	Activity 5, Class 4	2,000 tonnes for duration of permit		25/03/2003	20/03/2003	19/09/2003

Wicklow Co. Council	Rathnew AFC	Merrymeeting, Rathnew, Co. Wicklow	Permit	Ess/15/8/12(64)		Only inert top soil can be accepted at the site. See copy of permit.	Activity 5, Class 10	4,000 tonnes for duration of permit		10/04/2003	28/03/2003	27/09/2003
Wicklow Co. Council	Richard Page	Rath Con Farm, Grangecon	Permit	Ess/15/8/12(62)		Weakwort originating from the brewing industry.	Activity 5, Class 2 & 10	5,000 tonnes p/a		23/05/2003	21/05/2003	20/05/2006
Wicklow Co. Council	Derek Beattie	Rosnastw, Tinahely	Permit	Ess/15/8/12(66)	Waste Recovery	Only following inert material with EWC codes 170504 & 200202 soil and stones can be accepted at the site. Suitably sized concrete, bricks, tiles and ceramics (EWC codes 170101, 170102, 170103 & 170107) may be used in place of quarried stone & gravel for the Waste Inspection Area and Waste Quarantine Area. No other wastes are permitted onto the site.	Fourth Schedule, Class 10	20,000 tonnes for duration of permit		17/06/2003	06/06/2003	06/05/2006
Wicklow Co. Council	Michael Scott	Ballyhad Lower, Rathdrum	Permit	Ess/15/8/12(65)	Waste Recovery	Only the following Inert material can be accepted throughout the site in accordance with the EWC codes 170504 and 200202 - soil and stones. Suitably sized concrete, bricks, tiles and ceramics (EWC codes 170101, 170102, 170103 and 170107 may be used in place of quarried stone and gravel for the Waste Inspection Area and Waste Quarantine Area.	Fourth Schedule, Class 10	Not to exceed 50,000 tonnes for duration of permit		17/06/2003	09/06/2003	06/08/2006
Wicklow Co. Council	S.M. Morris	Ballindare Quarry, Kilbride	Permit	Ess/15/8/12(35)		Only the following inert material can be accepted throughout the site in accordance with the EWC code 170300, asphalt, tar and tarred products.	First Schedule, Activity 5 / Fourth Schedule, Class 4.	5,000 tonnes/annum		01/07/2003	27/06/2003	26/06/2006
Wicklow Co. Council	Lenrock Construction (Seamus Moran)	Tomnafinnogue, Tinahely	Permit	Ess/15/8/12(49)		Only the following inert material can be accepted throughout the site in accordance with the EWC codes 170504 and 200202 - soil and stones. Suitably sized concrete, bricks, tiles and ceramics (EWC codes 170101, 170102, 170103 & 170107) may be used in place of quarried stone and gravel for the Waste Inspection Area and Waste Quarantine Area.	First Schedule, Activity 5 / Fourth Schedule, Class 10.	70,000 tonnes for duration of permit		03/07/2003	24/06/2003	23/06/2006
Wicklow Co. Council	John Burke Building Contractors Ltd.	Blainroe Golf Course	Permit	Ess/15/8/12(59)		Only the following inert material can be accepted throughout the site in accordance with the EWC codes 170504 and 200202 soil and stones. No other wastes are permitted onto the site.	First Schedule, Activity 5 / Fourth Schedule, Class 4.	300 tonnes for duration of permit		03/07/2003	24/06/2003	23/12/2003
Wicklow Co. Council	T.Geoghegan, Carnew Emmets GAA Club.	GAA Grounds, Carnew, Co. Wicklow	Permit	Ess/15/8/12(75)	Recovery	Only inert material can be accepted throughout the site in accordance with the EWC code 170504 soil & stones. Suitably sized concrete, bricks, tiles and ceramics (EWC codes 170101, 170102, 170103) may be used in place of quarried stone and gravel for the Waste Inspection Area and Waste Quarantine Area.	First Schedule, Activity 5, Class 4	20,000 tonnes for duration of permit		15/07/2003	14/07/2003	13/07/2005
Wicklow Co. Council	Holt Developments Ltd.	Millwood, Aughrim, Co. Wicklow	Permit	Ess/15/8/12(55)	Waste Recovery	Only the following inert material can be accepted throughout the site in accordance with the EWC codes 170504 and 200202 soil & stones.	First Schedule, Activity 5, Fourth Schedule, Class 4			17/07/2003	10/07/2003	09/07/2003



Wicklow Co. Council	Michael Noble, GreenValleys Recycling and Trading Ltd.	South Quays, Wicklow 0404 61022	Permit	1	Recycling Organics, metals, glass							
Wicklow Co. Council	Ray Gaffney	Ballyvaltron, Barndarrig 0404-31384	Permit	3	Land Reclamation							
Wicklow Co. Council	Patricia Quinn	Tomriland, Annamoe, Bray 0404 45630, 087 2252721	Permit	6	Land Reclamation							
Wicklow Co. Council	Joseph Kelly	Lisheens, Manor Kilbride 01-4582136 087- 2493007	Permit	7	Land Reclamation							
Wicklow Co. Council	Tony Lawlor	Ballyremon Commons, Kilmacanogue 01- 2868119 087-2551361	Permit	14	Land Reclamation							
Wicklow Co. Council	Patricia Quinn	Tomriland, Annamoe, Bray 0404 45630, 087 2252721	Permit	43	Land Reclamation							
Wicklow Co. Council	Thomas Gregory	The Bank, Ballybeg, Rathnew	Permit	47	Recovery							
Wicklow Co. Council	Geraldine Arthur	Fiddlers Lane, Ballenabamey, Redcross 087-7651313	Permit		Land Reclamation							
Wicklow Co. Council	Patrick Harrington	Woodend, Blessington. 086 817 7274	Permit		Land Reclamation							

Footnote: the class or activity, in accordance with the Third or Fourth Schedules of the Waste Management Act, for which a permit has been granted

## **APPENDIX V**

### **List of Local Authority websites containing waste permit information**

Carlow County Council, available at:

<http://www.countycarlow.ie/services/environment/reports/WastePermitsCarlowCoCo.xls>

Cork County Council, available at:

<http://www.corkeco.ie/co/pdf/41934795.xls>

Donegal County Council, available at:

<http://www.donegalcoco.ie/NR/rdonlyres/5054F48D-1564-46A6-B577-7CAC82101A91/0/WPregisterJuly06.pdf>

Fingal County Council, available at:

<http://www.fingalcoco.ie/livinginfingal/wastemanagementandrecycling/enforcementregulation/wastemanagementpermits/filedownload.85.en.html>

Limerick County Council, available at:

<http://www.lcc.ie/NR/rdonlyres/B6715D8C-B706-4FB2-8C8AE5C3E8D81217/0/RegisterofWastePermitsupdated240706.pdf>

Louth County Council, available at:

<http://www.louthcoco.ie/downloads/Environment/wastepermitcurrentpermit.xls>

North Tipperary County Council, available at:

<http://www.tipperarynorth.ie/rawdata/Environ/WPG040706.xls>

Sligo County Council, available at:

[http://www.sligococo.ie/download/Enviroment/Permits%20Issued\\_Sligo.pdf](http://www.sligococo.ie/download/Enviroment/Permits%20Issued_Sligo.pdf)

South Dublin County Council, available at:

[http://environment.southdublin.ie/index.php?option=com\\_docman&task=cat\\_view&gid=404&Itemid=206](http://environment.southdublin.ie/index.php?option=com_docman&task=cat_view&gid=404&Itemid=206)



Connaught Waste Region, available at:

[http://www.connaughtwaste.ie/WAP\\_Public/SortTable2.asp?holder=&refno=&LA=6%2FGalway+City+Council&fackeyword=&whkeyword=&EU=&exp=b&Submit=Submit](http://www.connaughtwaste.ie/WAP_Public/SortTable2.asp?holder=&refno=&LA=6%2FGalway+City+Council&fackeyword=&whkeyword=&EU=&exp=b&Submit=Submit)

Galway County Council from the Connaught Waste Region database, available at:

[http://www.connaughtwaste.ie/WAP\\_Public/SortTable2.asp?holder=&refno=&LA=5%2FGalway+County+Council&fackeyword=&whkeyword=&EU=&exp=b&Submit=Submit](http://www.connaughtwaste.ie/WAP_Public/SortTable2.asp?holder=&refno=&LA=5%2FGalway+County+Council&fackeyword=&whkeyword=&EU=&exp=b&Submit=Submit)

Leitrim County Council from the Connaught Waste Region database, available at:

[http://www.connaughtwaste.ie/WAP\\_Public/SortTable2.asp?holder=&refno=&LA=4%2FLeitrim+County+Council&fackeyword=&whkeyword=&EU=&exp=b&Submit=Submit](http://www.connaughtwaste.ie/WAP_Public/SortTable2.asp?holder=&refno=&LA=4%2FLeitrim+County+Council&fackeyword=&whkeyword=&EU=&exp=b&Submit=Submit)

Mayo County Council from the Connaught Waste Region database, available at:

[http://www.connaughtwaste.ie/WAP\\_Public/SortTable2.asp?holder=&refno=&LA=1%2FMayo+County+Council&fackeyword=&whkeyword=&EU=&exp=b&Submit=Submit](http://www.connaughtwaste.ie/WAP_Public/SortTable2.asp?holder=&refno=&LA=1%2FMayo+County+Council&fackeyword=&whkeyword=&EU=&exp=b&Submit=Submit)

Roscommon County Council from the Connaught Waste Region database, available at:

[http://www.connaughtwaste.ie/WAP\\_Public/SortTable2.asp?holder=&refno=&LA=3%2FRoscommon+County+Council&fackeyword=&whkeyword=&EU=&exp=b&Submit=Submit](http://www.connaughtwaste.ie/WAP_Public/SortTable2.asp?holder=&refno=&LA=3%2FRoscommon+County+Council&fackeyword=&whkeyword=&EU=&exp=b&Submit=Submit)

Sligo County Council from the Connaught Waste Region database, available at:

[http://www.connaughtwaste.ie/WAP\\_Public/SortTable2.asp?holder=&refno=&LA=2%2FSligo+County+Council&fackeyword=&whkeyword=&EU=&exp=b&Submit=Submit](http://www.connaughtwaste.ie/WAP_Public/SortTable2.asp?holder=&refno=&LA=2%2FSligo+County+Council&fackeyword=&whkeyword=&EU=&exp=b&Submit=Submit)

## **APPENDIX W**

**Letter sent to Local Authorities as part of the C&D W Permit Survey**

**2005**

*Address of Environment Section in the Local Authority*

Dear Sir or Madam:

We are currently completing an ERDTI project funded by the Environmental Protection Agency. The project aims to benchmark construction and demolition waste production in Ireland for 2004 and 2005. We have audited 58 construction projects over the past two-years to generate construction waste factors (kg of waste per m<sup>2</sup> of floor area) for industry. This data is being extrapolated to national estimates by applying the unit waste factors to construction output.

Dublin Road,  
Galway

Telephone: +353-91-753161  
Facsimile: +353-91-751107

Western Road,  
Castlegar,  
Co. Mayo

Telephone: +353-94-9225700  
Facsimile: +353-94-9225757

In order to provide reliable statistics, a comparison with estimates obtained from our construction and demolition waste management infrastructure i.e. waste permitted sites/facilities is required. The following information is required for 2004 and 2005:

- A list of all the permitted sites within your local authority functional area with location details.
- Permit number.
- Expiration Date.
- Class of waste accepted.
- Maximum tonnage permitted for acceptance.
- Actual tonnage and composition accepted at each site.

Uimhíne,  
Co. Galway

Telephone: +353-96-41800  
Facsimile: +353-96-41100

Uíonán Uí Uíora,  
Hornsea Road,  
Galway

Telephone: +353-91-753140  
Facsimile: +353-91-776740

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From the EPA's waste register, we have identified the following permits for your area:

- *List of permit in the functional area.*

Could you confirm that the above listed permits are correct and submit the following data for each one?

- Maximum tonnage permitted for acceptance.
- Actual tonnage and composition accepted at each site.

If any new permits have been granted could you please provide details of them as well.

All submitted data will be treated as confidential and will appear in numerical format only i.e. tonnages and composition. The data will provide the part of the methodology used by the EPA to produce national statistics for construction and demolition waste production.

Could you please submit this data at the latest by Friday the 26<sup>th</sup> of May 2006 to the Research Unit, Department of Building and Civil Engineering, Galway-Mayo Institute of Technology, Dublin Road, Galway.

If you have any queries, please do not hesitate to contact me at 091 742161 or at [Mark.Kelly@gmit.ie](mailto:Mark.Kelly@gmit.ie)