



# ANNUAL ENVIRONMENTAL REPORT

**REPORTING PERIOD: 1<sup>ST</sup> January 2012 – 31<sup>ST</sup> December 2012**

**WASTE LICENCE  
REGISTRATION NO:**

WL106-02

**LICENSEE:**

**BRUSCAR BHEARNA TEORANTA  
(BARNNA WASTE)**

**LOCATION OF ACTIVITY:**

CARROWBROWNE,  
HEADFORD ROAD,  
CO. GALWAY.

**ATTENTION:**

Michelle McKim  
EPA, REGIONAL INSPECTORATE  
JOHN MOORE ROAD, CASTLEBAR  
CO. MAYO.

**PREPARED BY:**

MR. CAMPBELL FINNIE  
(Barna Waste)

**CONTRIBUTIONS FROM:**

MR. SEAN CURRAN  
(Managing Director/Facility Manager)  
MR. DAMIEN MONAGHAN  
(Operations Manager)  
MR. CORMAC O'DONNELL  
(Transport Manager)  
MR. NIALL JORDAN  
(Deputy Facility Manager)  
EMERALD ENVIRONMENTAL SERVICES  
COMPLETE LABORATORY SOLUTIONS (CLS)  
P.J. TOBIN CONSULTING ENGINEERS

**DECLARATION:**

"All the data and information presented in this report has been checked and certified as being accurate. The quality of the information is assured to meet licence requirements;"

*Campbell Finnie*

## **1.0 Introduction**

The following is the Annual Environmental Report (AER) for **Barna Waste** for the period **1<sup>st</sup> January 2012 to 31<sup>st</sup> December 2012** for the Waste Transfer / Recycling Facility at Carrowbrowne, Headford Road, Co. Galway only.

This report is in compliance with Condition 10.8 of Waste Licence No. WL106-02, which states:

*“The licensee shall submit to the Agency for its agreement not later than January 31<sup>st</sup> of each year thereafter, an Annual Environmental Report (AER).”*

*The AER shall include as a minimum the information specified in Schedule G: Content of Annual Environmental Report and shall be prepared in accordance with any relevant written guidance issued by the Agency.”*

This is a consolidated report, which includes details on all aspects of the site’s environmental performance for the given period.

It is the policy of Barna Waste to conduct its business of waste acceptance, waste storage and waste transfer at the waste transfer station in such a manner that associated activities minimise any potential adverse effects on the environment. This commitment is expressed in the company’s Environmental Management Policy, presented on the next page.

## **1.1 Environmental Policy**

This policy clearly sets out the overall aims and intentions of the company with respect to the environment. The creation of our Environmental Policy was the first step taken in the development of our EMS System, as required by Condition 2.1, of the Waste Licence. This document has been reviewed but no changes were made since last year’s submission of the report.

# Brúscar Bhearna Teoranta (BARNA WASTE)

## *Environmental Policy*

**Brúscar Bhearna Teoranta** provides a service to the community in the management of waste activities such as disposal and recovery which is operated under licence 106-2 from the EPA.

**Brúscar Bhearna Teoranta** regards environmental protection as an essential requirement of its operation. BBT will undertake to conduct its business in a manner which protects the environment of the Customers, Employees and Communities in which it operates. This policy is consistent in its goals with the nature, scale and environmental impacts of our activities, products and services set out in the scope of our EMS system.

**Brúscar Bhearna Teoranta** will communicate this policy to all employees as part of the induction process for full time and temporary employees and any sub contractors who are engaged to carry out work on site.

### **Guiding Principles:**

BBT is committed to...

- a) continual improvements, prevention of pollution and conservation of natural resources which are attributed to its facility.
- b) complying with relevant environmental legislation, regulations and other requirements pertinent to its facility.
- c) the continual assessment of the aspects and impacts of its activities, functions, products and services.
- d) providing a framework for setting and reviewing the environmental objectives and targets of its environmental action programmes.
- e) providing appropriate training and continual communication on its environmental issues to all its employees.
- f) Making this policy & any all other official records available to the public.

**Signed:** \_\_\_\_\_  
**FACILITY MANAGER**

**Date:** \_\_\_\_\_

**Signed:** \_\_\_\_\_  
**MANAGING DIRECTOR**

**Date:** \_\_\_\_\_

## **2. Waste Management at the Facility**

### **2.1 Waste Activities**

As required by Schedule G of our waste licence the principal processes of the facility are outlined below:

1. The recycling / recovery of various waste streams for the diversion of these wastes away from landfill. The facility enables Barna Waste and other waste contractors, local authorities to collect waste from domestic/commercial/industrial sectors and deliver it to our facility for sorting / processing and then transfer for disposal or recovery.
2. Within the facility heavy plant enables the segregation of the waste, (ie. a manual picking station, ballistic separating machines, magnets, edicurrents, balers, shredders, a pre-shredding machine, loading shovels, forklifts (with forks), forklifts (with clamp attachments), grab machines, screeners, crushers). This machinery is used on a daily basis to help separate, move and manage the various waste streams on site.
3. The facility also has a fully operational civic amenity site which is open to the public. The civic amenity site is staffed during operational hours and allows the segregation of general waste, mixed recyclables, cardboard, glass, timber, stones, metal, clothes, batteries and all types of white goods and electrical items.
4. C&D materials are currently being processed outside of the facility because of the space required by the machinery. Currently C&D waste is managed using a screener and a crusher and on occasions a trommel which work in tandem and allow us to recycle the good quality inert materials.
5. Our purpose built composting process has been operational since 1<sup>st</sup> January 2010. This is a back end process forced aeration system which processes the compostable material to European Standards. The process is licenced through our existing EPA licence and is also monitored by DAFF. The process is currently in its validation stage under the supervision of DAFF.
6. A summary of the current waste activities carried out at our facility are detailed below:
  - Landfill Waste – the majority of mixed waste loads that come to our facility are able to be segregated in some way either by hand or by machine (grab or loading shovel) to ensure that most of the recyclable material which is in a reasonable condition is recovered. Only the non recyclable fractions are then transferred into our own vehicles for landfill disposal
  - Mixed Recyclables – the company have invested in some of the best technology available to process domestic kerbside recyclables which are collected around Connacht. The ballistic separators, magnet, edicurrent and manual picking station allow us to produce segregated recyclable fractions from the original mixed recyclables and send for recycling. Materials currently being recycled via the picking station include paper, newspaper, cardboard, plastic bottles, plastic bags, plastic trays, steel and aluminium cans. This process is currently able to process around 13 tonnes of recyclables per hour on one shift.

- Composting Facility – we operate a compost process at the site which is in a separate area / building to the other materials. This process allows for the delivery of segregated collections of catering / food waste, green waste and sludge. This material is mixed and put through a forced aeration composting system to allow it to break down. The material is controlled by measuring temperature, adding air and monitoring on a daily basis to ensure the process is working. The material is then screened and put in a pasteurisation bunker to reach 70 degrees for one hour before being testing for EColi and Salmonella. Once tests are successfully passed and material has reached the temperatures the material is deemed to be stable and can be shipped as a compost.
- Separately collected recycling – the company also encourage recycling from our commercial customers and source segregated collections are available throughout Connacht. These collections result in collection and recycling of cardboard, paper (various grades), metals and plastics (various grades). These materials are checked for quality and once passed are baled immediately and sent for recycling.
- Confidential shredding – the company also offers customers a confidential shredding service where materials are collected in pre-paid bags or they have the option to deliver to our facility. Materials are shredded and then can be sent off site for recycling (99% of the time it is paper products) but we can shred all types of material in the machine that we have.
- Timber processing – timber is processed in its own dedicated area at the site and the material is processed using two machines a waste reducer (pre-shedder) and a timber shredder which shreds the segregated clean timber to a size which can be sent off site for recycling into chipboard, landfill cover or for boiler fuel.
- Metal recycling – the processing of metal products is carried out within the composting building in a dedicated area. We have a grab machine and baler in this area specifically used for baling this material into a form that can be easily sold as scrap to the UK or Irish metal markets. Some sorting of metal on higher grade materials is also carried out where possible.
- Civic Amenity Site – the site is staffed during operational hours and allows the segregation of general waste, mixed recyclables, cardboard, glass, timber, stones, metal, clothes, batteries and all types of white goods and electrical items.
- General recycling – Barna Waste are always reviewing markets around the world to try and offer as many recycling avenues as possible to our customers and in addition to the items listed above are currently collecting, segregating and sending the following waste types off site for recycling:
  - end of life tyres, glass, batteries, industrial plastics, agricultural plastics, plasterboard

This section of the report was intended to give the reader a summary of the material types and the processing procedures used by Barna Waste during the reporting period. Any additional information required is available by contacting the company directly. Tours of the facility are available if arranged in advance.

## 2.2 Waste Activities Licensed

The waste activities carried out above are done so within the boundaries of our EPA Waste Licence WL106-2 and the Waste Management Act 1996. The following list is a summary of the waste types and activities for which we are licenced:

*Licensed waste disposal activities, in accordance with the Third Schedule of the Waste Management Act, 1996.*

- Class 11. Blending or mixture prior to submission to any activity referred to in a preceding paragraph of this Schedule.**
- Class 12. Repackaging prior to submissions to any activity referred to in a preceding paragraph of this Schedule.**
- Class 13. 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 was produced.**

*Licensed waste recovery activities, in accordance with the Fourth Schedule of the Waste Management Act, 1996.*

- Class 2. Recycling or reclamation of organic substances, which are not used as solvents (including composting and other biological transformation processors).**
- Class 3. Recycling or reclamation of metals and metal compounds.**
- Class 4. Recycling or reclamation of other inorganic materials.**
- Class 12. Exchange of waste for submission to any activity referred to in a preceding paragraph of this Schedule:**
- 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:**

## 2.3 Composition and Quantity of Waste Received at the Facility

The Waste Transfer Station at Barna Waste is limited not only in the materials that can be accepted at the facility but also by the quantities which can be accepted. The following is a summary of the tonnages of different waste streams permitted to be accepted during this reporting period:

### Waste Categories and Quantities acceptable at Transfer Station

<b>WASTE TYPE</b>	<b>MAXIMUM TONNES PER ANNUM</b>
Household	55,500 option A or 55,500 option B
Commercial	17,500 option A or 17,500 option B
Construction & Demolition	30,000 option A or 50,000 option B
Industrial Non Haz Solids	23,000 option A or 23,000 option B
Biodegradable Waste	40,000 option A or 20,000 option B
<b>TOTAL</b>	<b>166,000 tonnes</b>

These tonnages are set and documented in our EPA licence WL106-2 (schedule A).

## **2.4 Waste In / Out Results for this year and past years (2002 – 2012)**

This section of the report outlines the quantities and composition of the waste types accepted and removed from the facility for either disposal or recovery / recycling. As required by the Agency results for the current reporting year (2012) AND ALL PREVIOUS years are included therefore results for reporting periods 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011 and the current reporting period of 2012 are outlined below.

This year's figures have been included with EWC codes as per the requirement in Schedule G of our waste licence WL106-2.

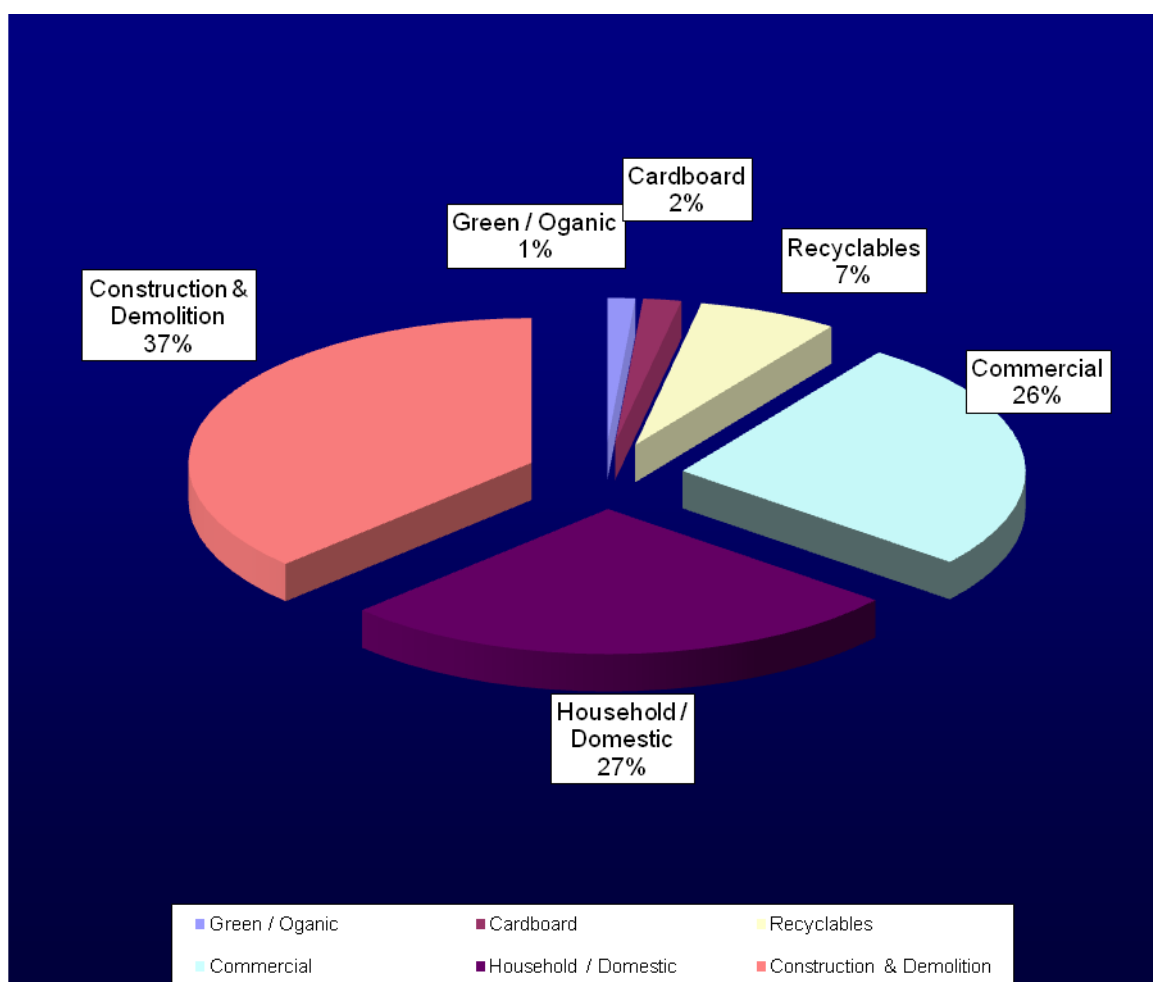
## Waste In / Out Results for 2002 Period

**Table 2.4.1: Waste Incoming during period 1<sup>st</sup> January 2002 – 31<sup>st</sup> December 2002**

The following table outlines the waste that was received on site at the Barna Waste facility during the previous reporting period:-

Waste Type	Tonnes	%
Green / Organic / Timber	480.84	1.3%
Cardboard	700.39	1.8%
Recyclables	2595.08	6.6%
Commercial	10,245.00	26.1%
Household / Domestic	10,557.39	26.9%
Construction and Demolition	14,616.47	37.3%
<b>Total</b>	<b>39,195.17</b>	

Figure 2.1 illustrates the percentage breakdown of materials received on site for each of the main categories detailed above.

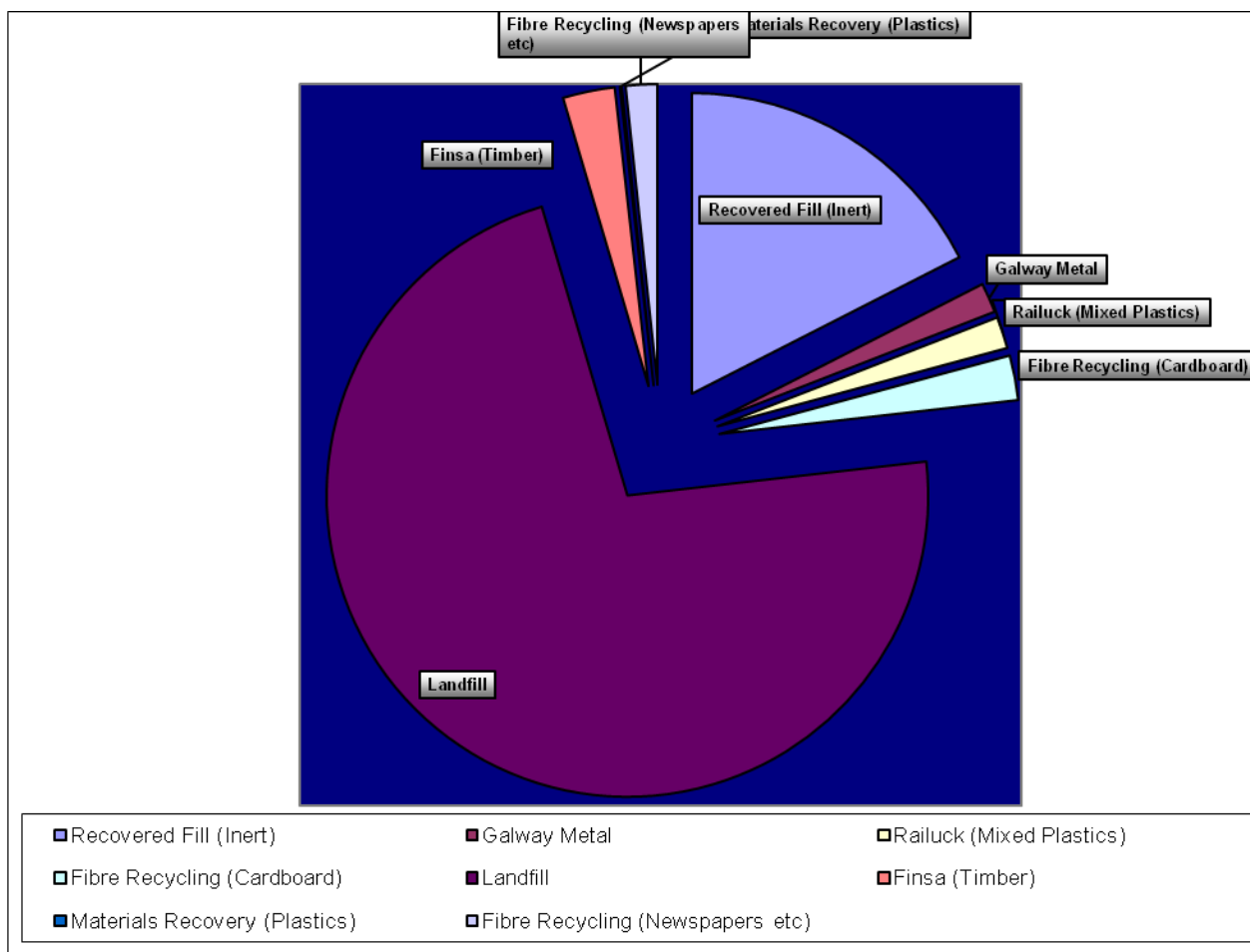


**Figure 2.4.2: Percentage Breakdown of Waste Received on site from 1<sup>st</sup> January – 31<sup>st</sup> December 2002**



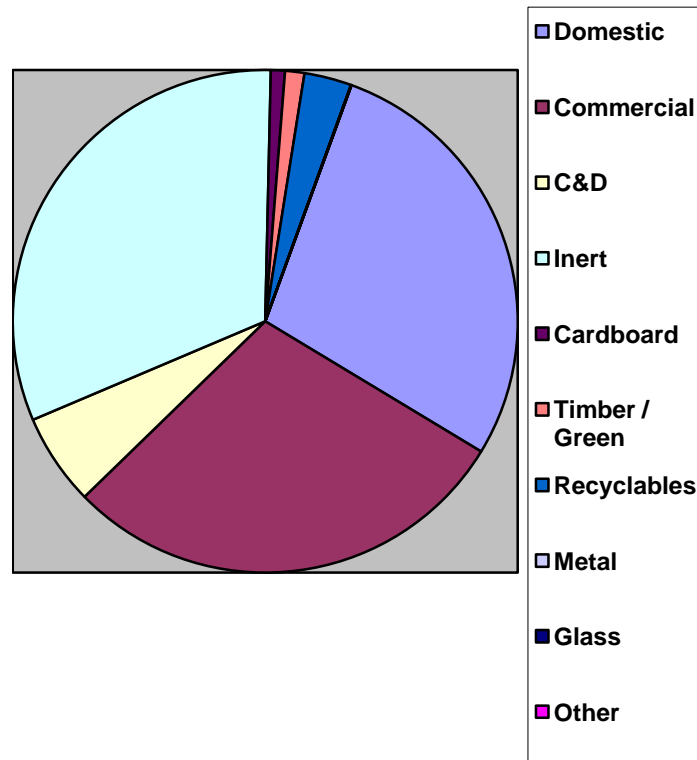
**Table 2.4.3: Total Wastes Outgoing 1<sup>st</sup> January 2002 – 31<sup>st</sup> December 2002**

Waste Type	Tonnes	% of Waste In
Materials Recovery (Plastic)	37.17	0.1%
Galway Metal	639.5	1.6%
Railuck (Mixed Plastics)	662.91	1.7%
Fibre Recycling (Newspapers etc)	677.98	1.7%
Fibre Recycling (Cardboard)	919.50	2.4%
Finsa Products (Timber)	1,092.50	2.8%
Recovered Fill	6859.40	17.5%
Ballinasloe Landfill	28,232.69	72%
<b>Total</b>	<b>39,121.65</b>	



**Figure 2.4.4: Percentage Breakdown of Waste outgoing from 1<sup>st</sup> January 2002 to 31<sup>st</sup> December 2002**

## Waste In 2003

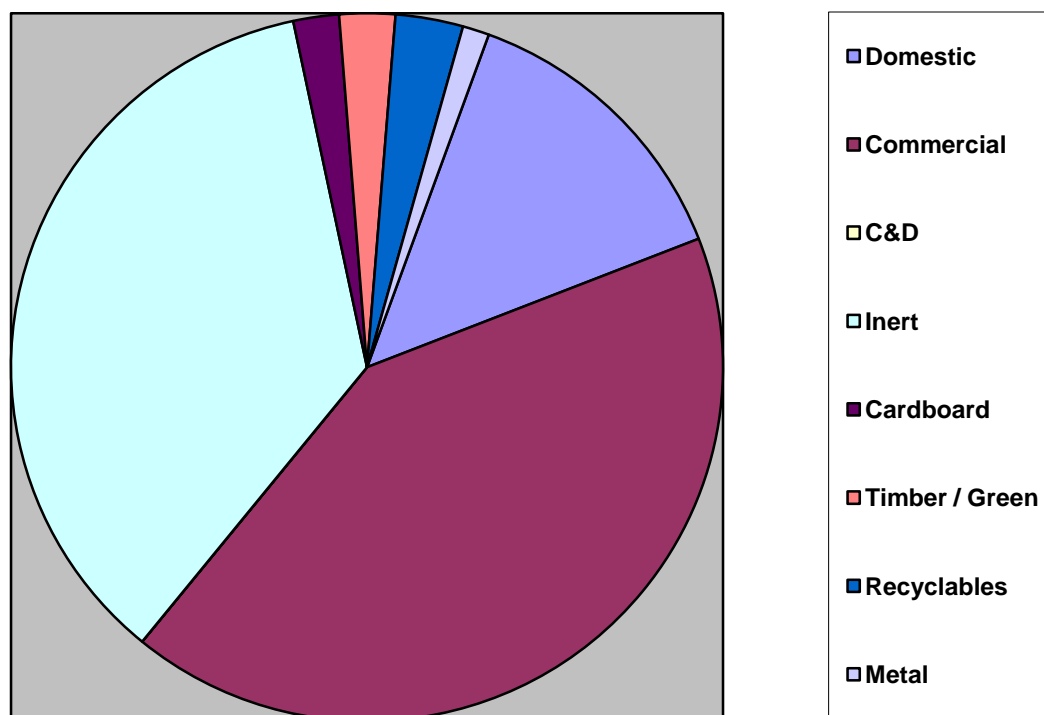


**Figure 2.4.5:**  
**Breakdown of Waste Received on site from 1<sup>st</sup> January – 31<sup>st</sup> December 2003**

WASTE TYPE	WASTE IN (tonnes per annum)
<i>Domestic</i>	20015.92
<i>Commercial</i>	20663.18
<i>C &amp; D</i>	4199.2
<i>Inert</i>	22612.4
<i>Cardboard</i>	643.2
<i>Timber / Green</i>	878.55
<i>Recyclables</i>	2154.1
<i>Metal</i>	15
<i>Glass</i>	3.54
<i>Others (public weighing)</i>	8.02
<b>TOTAL</b>	<b>71193.08</b>

**Table 2.4.3: Total Wastes Incoming 1<sup>st</sup> January 2003 – 31<sup>st</sup> December 2003**

## Waste Out 2003



**Figure 2.4.6:**  
Breakdown of Waste going off site for Recovery or Disposal from 1<sup>st</sup> January – 31<sup>st</sup> December 2003

WASTE TYPE	WASTE OUT (tonnes per annum)
<i>Domestic</i>	8545.18
<i>Commercial</i>	26393.02
<i>Inert</i>	22602.2
<i>Cardboard</i>	1308.24
<i>Timber / Green</i>	1601.04
<i>Recyclables</i>	1937.22
<i>Metal</i>	761.87
<b>TOTAL</b>	<b>63,418.72</b>

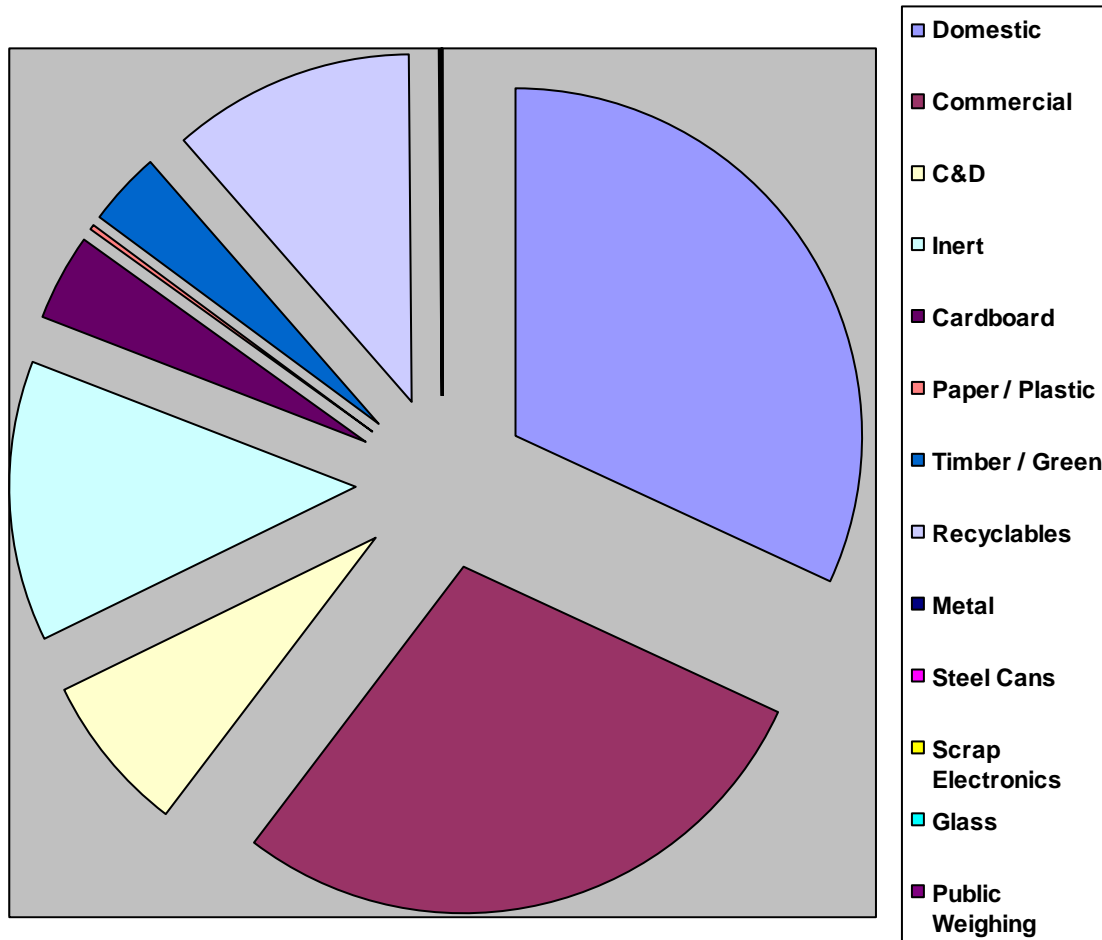
**Table 2.4.7: Total Wastes Outgoing 1<sup>st</sup> January 2003 – 31<sup>st</sup> December 2003**

WASTE TYPE	RECYCLING (tonnes per annum)	% OF TOTAL RECYCLING
<i>Inert</i>	22602.2	80.1%
<i>Cardboard</i>	1308.24	4.6%
<i>Timber / Green</i>	1601.04	5.7%
<i>Recyclables</i>	1937.22	6.9%
<i>Metal</i>	761.87	2.7%
<b>TOTAL</b>	<b>28,210.57</b>	<b>39% of total waste in was recycled for 2003</b>

**Table 2.4.8: Recycling waste out details for 1<sup>st</sup> January – 31<sup>st</sup> December 2003**

Waste In / Out Reports for 2004

## Waste In 2004

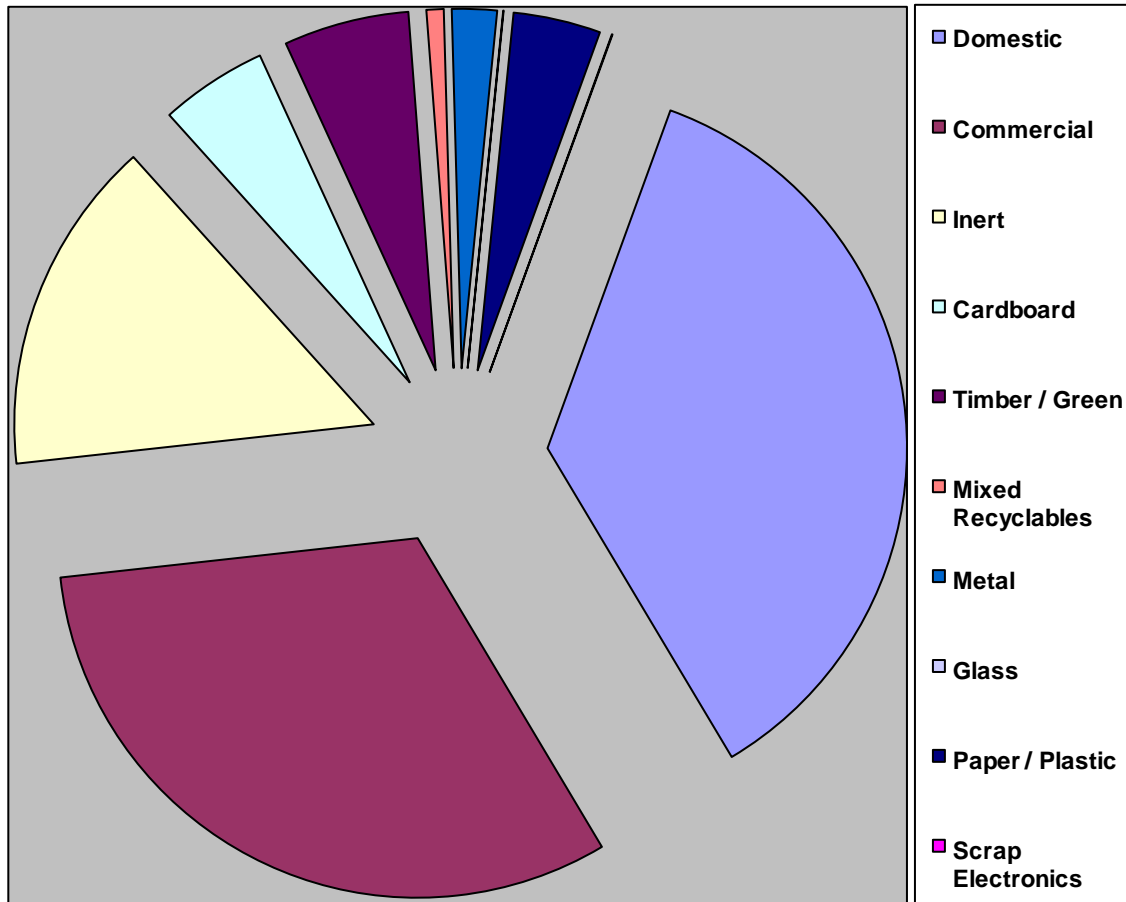


**Figure 2.4.9:**  
**Breakdown of Waste Received on site from 1<sup>st</sup> January – 31<sup>st</sup> December 2004**

WASTE TYPE	WASTE IN (tonnes per annum)
<i>Domestic</i>	19,796.62
<i>Commercial</i>	17,691.68
<i>C &amp; D</i>	4575.1
<i>Inert</i>	8115.82
<i>Cardboard</i>	2506.52
<i>Paper / Plastic</i>	143.74
<i>Scrap Electronics</i>	1.20
<i>Timber / Green</i>	2111.85
<i>Mixed Kerbside Recyclables</i>	6990.80
<i>Metal</i>	45.00
<i>Steel Cans</i>	5.23
<i>Glass</i>	15.76
<i>Public Weighing</i>	15.88
<b>TOTAL</b>	<b>62,045.20</b>

**Table 2.4.10: Total Wastes Incoming 1<sup>st</sup> January 2004 – 31<sup>st</sup> December 2004**

## Waste Out 2004



**Figure 2.4.11:**  
Breakdown of Waste going off site for Recovery or Disposal from 1<sup>st</sup> January – 31<sup>st</sup> December 2003

WASTE TYPE	WASTE OUT (tonnes per annum)
<i>Domestic</i>	19,299.33
<i>Commercial</i>	17,114.50
<i>Inert</i>	8115.82
<i>Cardboard</i>	2591.73
<i>Paper / Plastic</i>	2113.6
<i>Timber / Green</i>	3028.51
<i>Recyclables</i>	416.23
<i>Scrap Electronics</i>	14.69
<i>Glass</i>	9.98
<i>Metal</i>	1085.37
<b>TOTAL</b>	<b>53,789.76</b>

**Table 2.4.12: Total Wastes Outgoing 1<sup>st</sup> January 2003 – 31<sup>st</sup> December 2004**

All outlets for the materials going out have been approved in advance by the EPA. Our outlets for the waste types above are listed below:

- 1) Metal goes to Galway Metal
- 2) Timber / Green waste goes to Finsa Forest Products or Weyerhaeuser Europe
- 3) Paper / Cardboard / Steel Cans / Aluminium / Plastic / Scrap plastic all goes to AWS (Alternative Waste Solutions)
- 4) Glass goes to Eclipse Recycling
- 5) Scrap Electronics go to Cara Environmental
- 6) Inert material goes into our permitted site within our facility
- 7) All Domestic and Commercial waste goes to the Poolboy landfill site in Ballinasloe
- 8) In addition to the above Barna Waste also have Batteries collected by Returnbatt and send tyres as required to Crumb Rubber or to Crossmore Transport

Barna Waste requests and keeps on file recycling certificates from all the companies that take material from the premises for recycling / disposal / recovery.

<b>WASTE TYPE</b>	<b>RECYCLING (tonnes per annum)</b>	<b>% OF TOTAL RECYCLING</b>
<i>Inert</i>	8115.82	46.73%
<i>Cardboard</i>	2591.73	14.9%
<i>Timber / Green</i>	3028.51	17.4%
<i>Recyclables</i>	416.23	2.4%
<i>Paper / Plastic</i>	2113.6	12.17%
<i>Scrap Electronics</i>	14.69	0.1%
<i>Metal</i>	1085.37	6.3%
<b>TOTAL</b>	<b>17,365.95</b>	<b>28% of total waste in was recycled for 2004</b>

**Table 2.4.13: Recycling waste out details for 1<sup>st</sup> January 2004 – 31<sup>st</sup> December 2004**

Waste In / Out Reports for 2005

## Waste In 2005

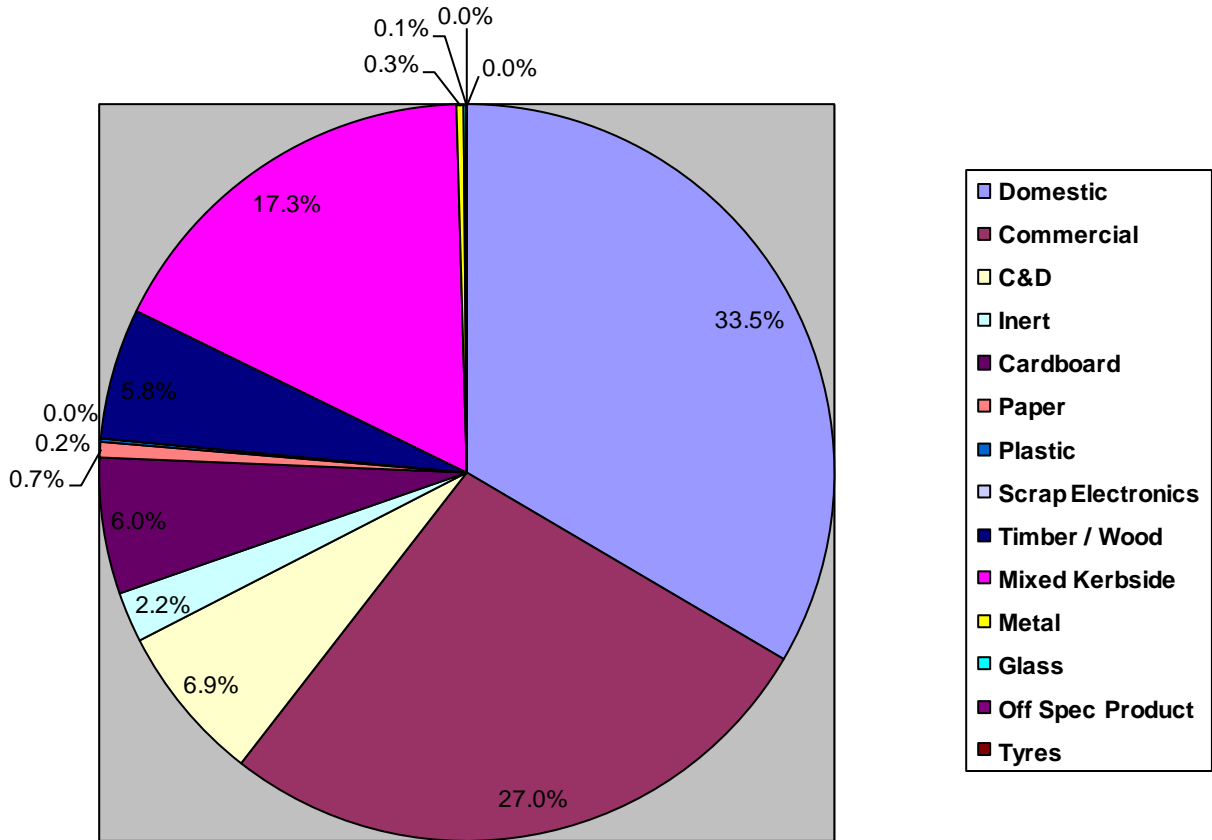
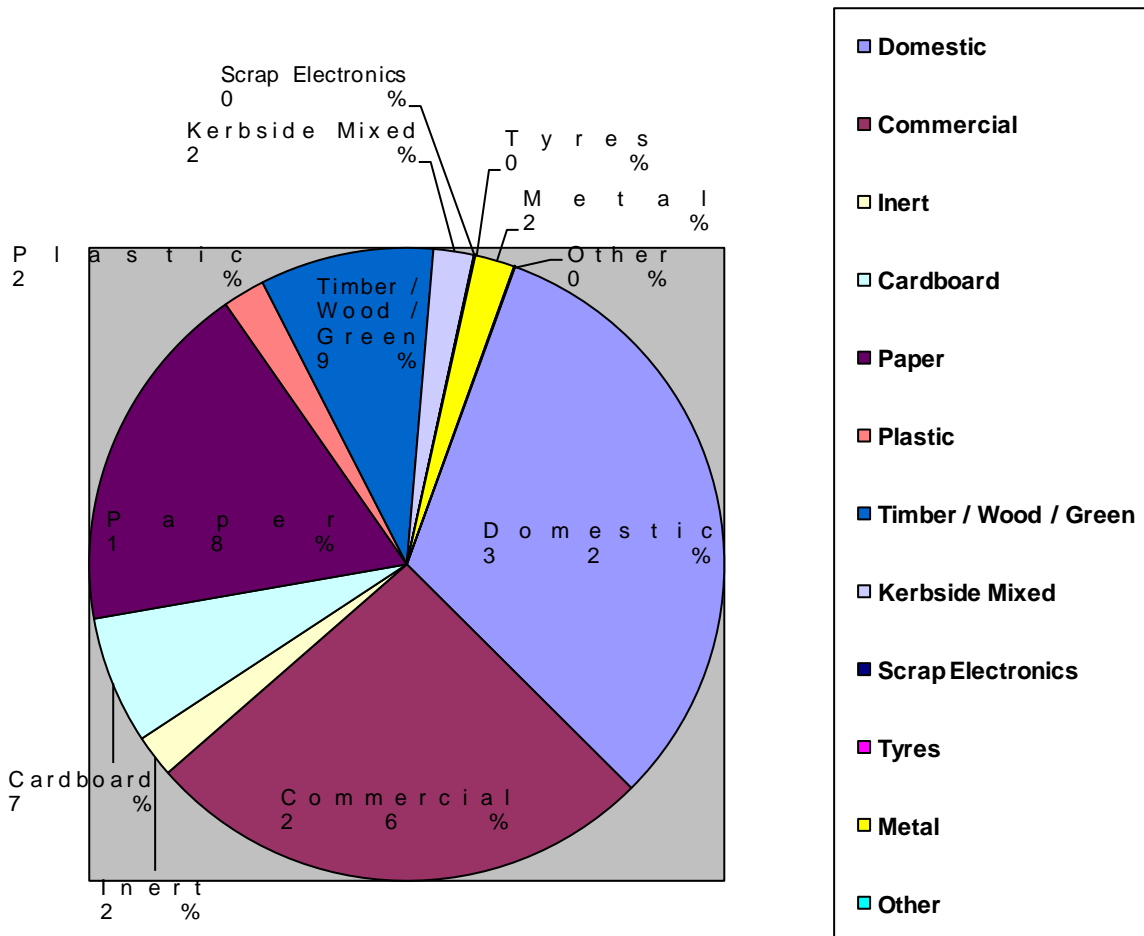


Figure 2.4.14: Breakdown of Waste Received on site from 1<sup>st</sup> January 2005 – 31<sup>st</sup> December 2005

WASTE TYPE	WASTE IN (tonnes per annum)
<i>EWC 200301 Domestic</i>	22134.78
<i>EWC 200100 Commercial</i>	17874.97
<i>EWC 170100 C &amp; D</i>	4594.86
<i>EWC 200202 Inert</i>	1463.6
<i>EWC 200101 Cardboard</i>	3962.02
<i>EWC 200101 Paper</i>	449.78
<i>EWC 200103 Plastic</i>	100.52
<i>EWC 160201 Scrap Electronics</i>	0.76
<i>EWC 200138 Timber / Wood / Green</i>	3808.28
<i>EWC 150101 Mixed Kerbside Recyclables</i>	11443.15
<i>EWC 170407 Metal</i>	205.12
<i>EWC 170202 Glass</i>	78.98
<i>EWC 160304 Off Spec Product</i>	1.17
<i>EWC 160103 Tyres</i>	12.95
<b>TOTAL</b>	<b>66130.94</b>

Table 2.4.15: Total Wastes Incoming 1<sup>st</sup> January 2005 – 31<sup>st</sup> December 2005

# Waste Out 2005



**Figure 2.5.0:**  
Breakdown of Waste going off site for Recovery or Disposal from 1<sup>st</sup> January 2005 – 31<sup>st</sup> December 2005

WASTE TYPE	WASTE OUT (tonnes per annum)
<i>EWC 200301 Domestic</i>	21593.80
<i>EWC 200100 Commercial</i>	17667.66
<i>EWC 200202 Inert</i>	1463.6
<i>EWC 200101 Cardboard</i>	4408.69
<i>EWC 200101 Paper</i>	12221.53
<i>EWC 200103 Plastic</i>	1457.49
<i>EWC 200138 Timber / Wood / Green</i>	6003.09
<i>EWC 150101 Recyclables</i>	1391.82
<i>EWC 160201 Scrap Electronics</i>	14.96
<i>EWC 160103 Tyres</i>	40.32
<i>EWC 170407 Metal</i>	1366.35
<b>Other</b>	36.7
<b>TOTAL</b>	<b>67666.01</b>

**Table 2.5.1: Total Wastes Outgoing 1<sup>st</sup> January 2005 – 31<sup>st</sup> December 2005**



## 2.5.2 Summary of Recycling Outlets used in 2005

Barna Waste are committed to finding new recycling markets in Ireland, Europe and Worldwide to ensure materials produced from the picking station and the other areas in our waste transfer station are sent to the best possible recycling outlets.

All outlets for the materials going out have been approved in advance by the EPA.

A summary of the recycling outlets used for 2005 is included below:

- 1) Metal products are sent to S.Norton Metal Merchants in Liverpool. Alternative outlets include Midland Scrap Metal (Portlaoise) and Galway Metal.
- 2) Timber / Wood / Green waste goes to Finsa Forest Products or Weyerhaeuser Europe
- 3) Paper / Cardboard / Steel Cans / Aluminium / Plastic (various grades) all go via AWS (Alternative Waste Solutions) for recycling
- 4) Paper / Cardboard are also sent to CWS (Complete Waste Solutions) for recycling
- 5) Paper / Cardboard are also sent to Highlander International Recycling for recycling
- 6) Paper / Cardboard are also sent to Parry & Evans for recycling
- 7) Scrap Electronics go to Cara Environmental
- 8) Inert material goes into our permitted site within our facility
- 9) Tyres are sent to Crossmore Transport in Limerick for recycling
- 10) All non recoverable waste goes to the Poolboy Landfill Site in Ballinasloe

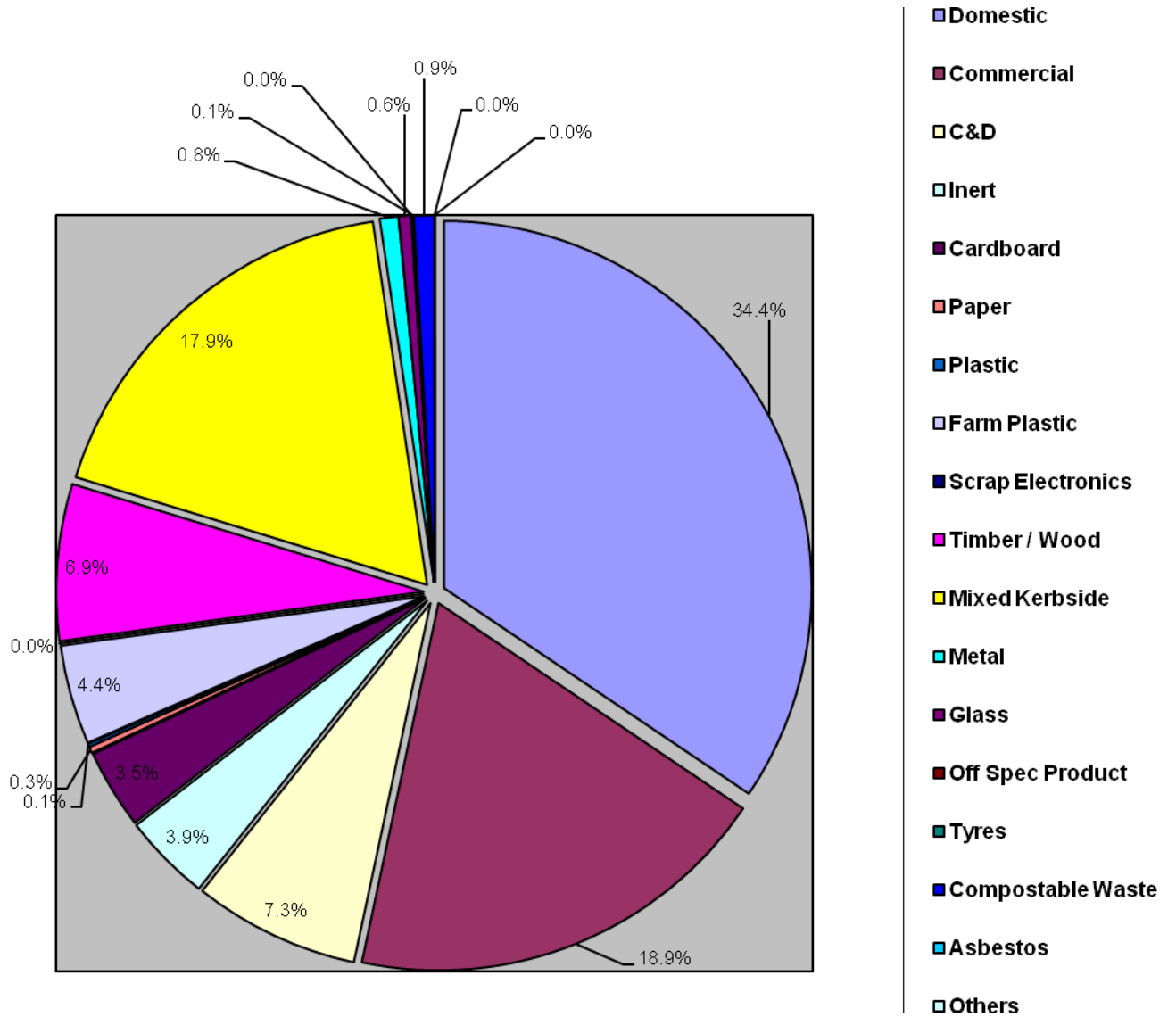
Barna Waste requests and keeps on file recycling certificates from all the companies that take material from the premises for recycling / disposal / recovery.

<b>WASTE TYPE</b>	<b>RECYCLING (tonnes per annum)</b>	<b>% OF TOTAL RECYCLING</b>
<i>EWC 200202 Inert</i>	1463.6	5%
<i>EWC 200101 Cardboard</i>	4408.69	15%
<i>EWC 200101 Paper</i>	12221.53	43%
<i>EWC 200103 Plastic</i>	1457.49	5%
<i>EWC 200138 Timber / Wood / Green</i>	6003.09	21%
<i>EWC 150101 Recyclables</i>	1391.82	5%
<i>EWC 160201 Scrap Electronics</i>	14.96	Less than 1%
<i>EWC 160103 Tyres</i>	40.32	Less than 1%
<i>EWC 170407 Metal</i>	1366.35	5%
<b>Other</b>	36.7	Less than 1%
<b>TOTAL</b>	<b>28404.55</b>	<b>43% of total waste in was recycled for 2005</b>

**Table 2.5.3: Breakdown of recycling waste out details for 1<sup>st</sup> January – 31<sup>st</sup> December 2005**

**Waste In / Out Reports for 2006**

**WASTE IN**

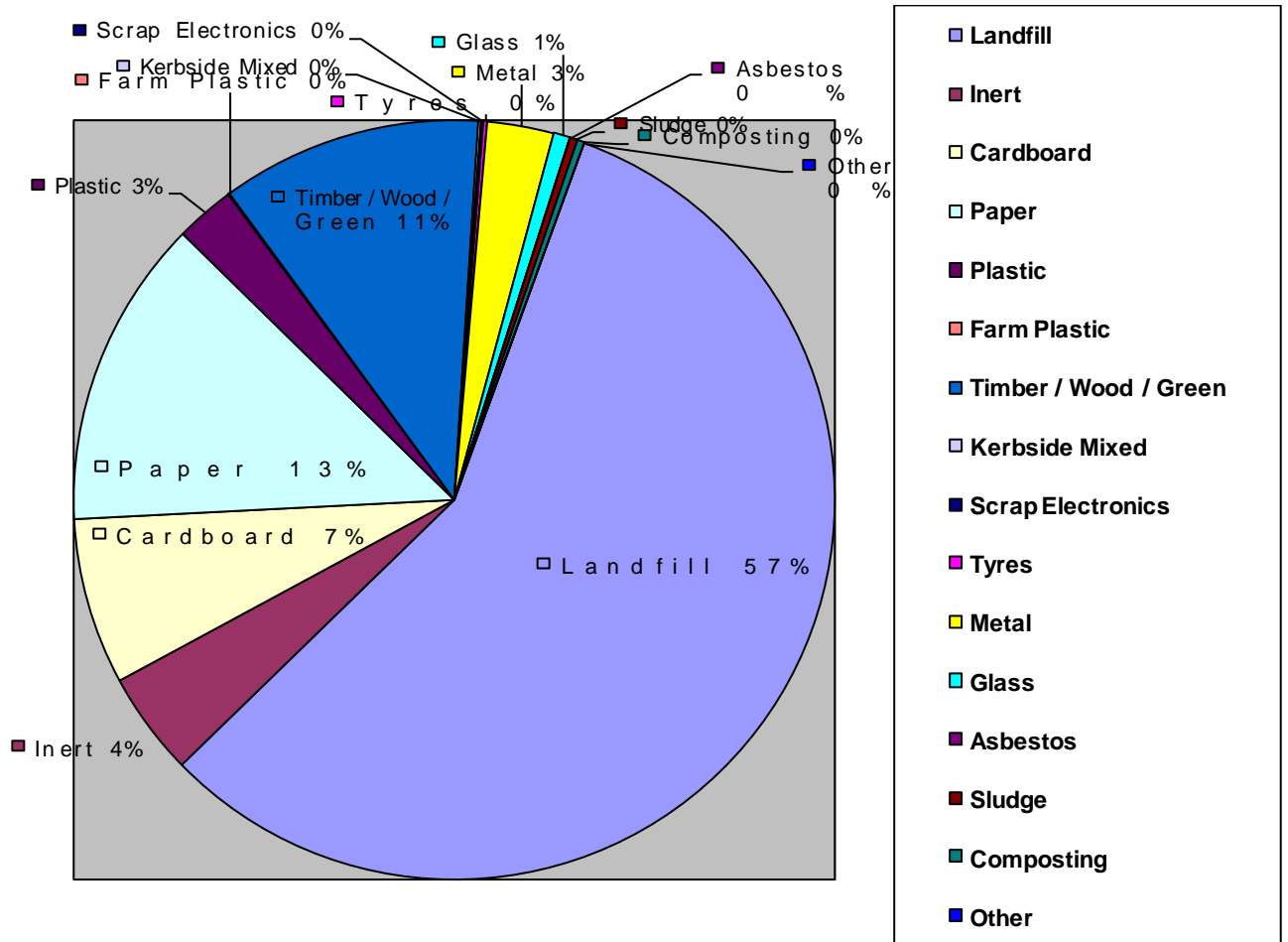


**Figure 2.6.0:**  
**Breakdown of Waste Received on site from 1<sup>st</sup> January 2006 – 31<sup>st</sup> December 2006**

<b>WASTE TYPE</b>	<b>WASTE IN (tonnes per annum)</b>
<i>EWC 200301 Domestic</i>	29328.22
<i>EWC 200100 Commercial</i>	16095.29
<i>EWC 170100 C &amp; D</i>	6234.14
<i>EWC 200202 Inert</i>	3295.65
<i>EWC 200101 Cardboard</i>	2980.02
<i>EWC 200101 Paper</i>	239.55
<i>EWC 200103 Plastic</i>	121.71
<i>EWC 200104 Farm Plastic</i>	3729.12
<i>EWC 160201 Scrap Electronics</i>	6.89
<i>EWC 200138 Timber / Wood / Green</i>	5862.05
<i>EWC 150101 Mixed Kerbside Recyclables</i>	15244.71
<i>EWC 170407 Metal</i>	698.92
<i>EWC 170202 Glass</i>	470.45
<i>EWC 160304 Off Spec Product</i>	15.28
<i>EWC 200108 Food Waste</i>	753.51
<i>EWC 200201 Garden &amp; Park Waste</i>	
<i>EWC 200304 Sludge</i>	
<i>Compostable materials</i>	
<i>EWC 160103 Tyres</i>	59.78
<i>EWC 170605 Asbestos</i>	3.10
<i>Others (Public weighing)</i>	8.45
<b>TOTAL</b>	<b>85146.84</b>

**Table 2.6.1: Total Wastes Incoming 1<sup>st</sup> January 2006 – 31<sup>st</sup> December 2006**

## Waste Out 2006



**Figure 2.6.2: Breakdown of Waste going off site for Recovery or Disposal from 1<sup>st</sup> January 2006 – 31<sup>st</sup> December 2006**

WASTE TYPE	WASTE OUT (tonnes per annum)
<i>EWC 191212 Mechanically treated mixed waste for landfill (Commercial / Domestic)</i>	45754.84
<i>EWC 200202 Inert</i>	3518.12
<i>EWC 200101 Cardboard</i>	5660.60
<i>EWC 200101 Paper</i>	10516.62
<i>EWC 200103 Plastic</i>	2023.17
<i>EWC 200104 Farm Plastic</i>	47.12
<i>EWC 200138 Timber / Wood / Green</i>	8875.78
<i>EWC 150101 Recyclables</i>	90.35
<i>EWC 160201 Scrap Electronics</i>	78.44
<i>EWC 160103 Tyres</i>	130.64
<i>EWC 170407 Metal</i>	2267.10
<i>EWC 200102 Glass</i>	559.56
<i>EWC 170605 Asbestos</i>	9.04
<i>EWC 200304 Sludge</i>	258.74
<i>EWC200108 Composting</i>	240.89
<i>Others</i>	1.62
<b>TOTAL</b>	<b>80,032.63</b>

**Table 2.6.3: Total Wastes Outgoing 1<sup>st</sup> January 2006 – 31<sup>st</sup> December 2006**

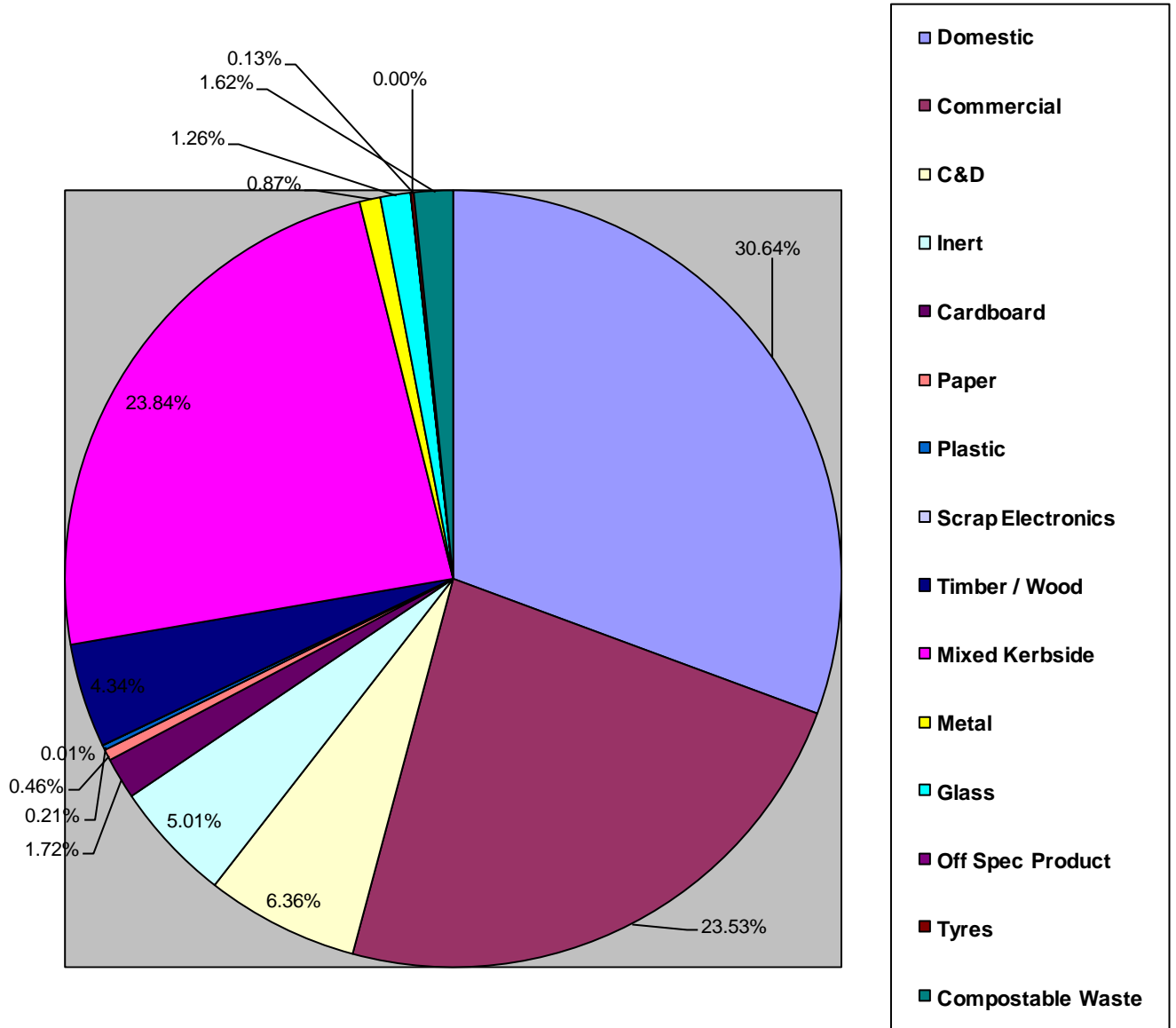
Breakdown of the recycling elements for 2006:

WASTE TYPE	RECYCLING (tonnes per annum)	% OF TOTAL RECYCLING
<i>EWC 200202 Inert</i>	3518.12	10%
<i>EWC 200101 Cardboard</i>	5660.60	17%
<i>EWC 200101 Paper</i>	10516.62	31%
<i>EWC 200103 Plastic</i>	2023.17	6%
<i>EWC 200138 Timber / Wood / Green</i>	8875.78	26%
<i>EWC 150101 Recyclables</i>	90.35	Less than 1%
<i>EWC 160201 Scrap Electronics</i>	78.44	Less than 1%
<i>EWC 160103 Tyres</i>	130.64	Less than 1%
<i>EWC 170407 Metal</i>	2267.10	7%
<i>EWC200108 Composting</i>	240.89	Less than 1%
<i>EWC 200102 Glass</i>	559.56	2%
<i>EWC 200104 Farm Plastic</i>	47.12	Less than 1%
<b>TOTAL</b>	<b>34008.39 tonnes</b>	<b>40% of total waste in was recycled for 2006</b>

**Table 2.6.4: Breakdown of recycling waste out details for 1<sup>st</sup> January – 31<sup>st</sup> December 2006**

**Waste In / Out Reports for 2007**

**WASTE IN**



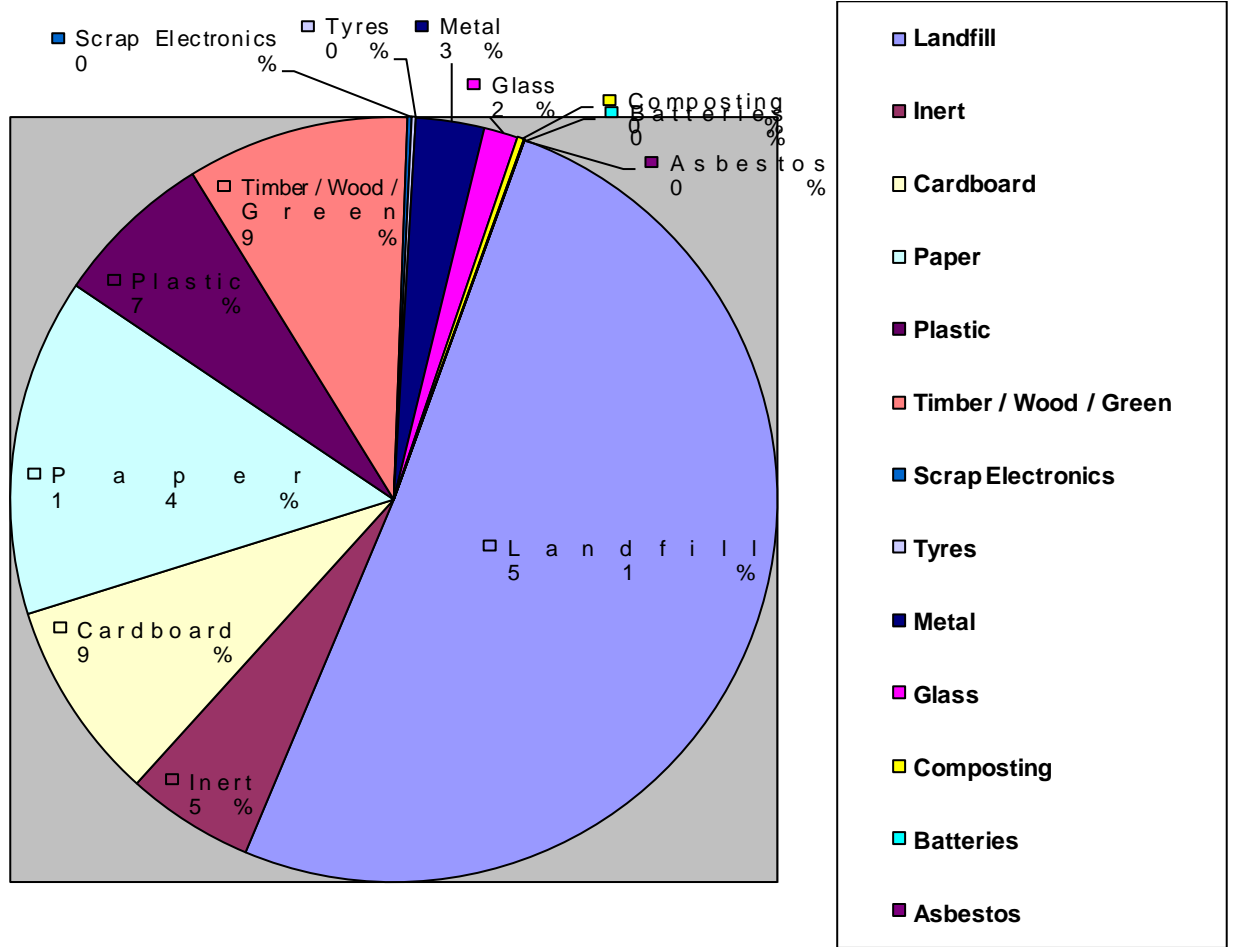
**Figure 2.7.0:**  
**Breakdown of Waste Received on site from 1<sup>st</sup> January 2007 – 31<sup>st</sup> December 2007**

Waste in for 2007: Table of quantities by waste type

<b>WASTE TYPE</b>	<b>WASTE IN (tonnes per annum)</b>
<i>EWC 200301 Domestic</i>	28840.92
<i>EWC 200100 Commercial</i>	22150.64
<i>EWC 170100 C &amp; D</i>	5988.48
<i>EWC 200202 Inert</i>	4720.19
<i>EWC 200101 Cardboard</i>	1621.48
<i>EWC 200101 Paper</i>	436.96
<i>EWC 200103 Plastic</i>	193.75
<i>EWC 160201 Scrap Electronics</i>	5.46
<i>EWC 200138 Timber / Wood / Green</i>	4082.74
<i>EWC 150101 Mixed Kerbside Recyclables</i>	22440.51
<i>EWC 170407 Metal</i>	817.07
<i>EWC 170202 Glass</i>	1181.63
<i>EWC 160304 Off Spec Product</i>	4.60
<i>EWC 200108 Food Waste</i> <i>EWC 200201 Garden &amp; Park Waste</i> <i>EWC 200304 Sludge</i> <i>Compostable materials</i>	1525.88
<i>EWC 160103 Tyres</i>	120.96
<b>TOTAL</b>	<b>94,131.27</b>

**Table 2.7.1: Total Wastes Incoming 1<sup>st</sup> January 2007 – 31<sup>st</sup> December 2007**

## Waste Out 2007



**Figure 2.7.2: Breakdown of Waste going off site for Recovery or Disposal from 1<sup>st</sup> January 2007 – 31<sup>st</sup> December 2007**



Waste out for 2007: Table of quantities by waste type

WASTE TYPE	WASTE OUT (tonnes per annum)
<i>EWC 191212 Mechanically treated mixed waste for landfill (Commercial / Domestic)</i>	44558.56
<i>EWC 200202 Inert</i>	4720.19
<i>EWC 200101 Cardboard</i>	7431.38
<i>EWC 200101 Paper</i>	12512.83
<i>EWC 200103 Plastic</i>	5927.02
<i>EWC 200138 Timber / Wood / Green</i>	8230.50
<i>EWC 160201 Scrap Electronics</i>	154.38
<i>EWC 160103 Tyres</i>	151.76
<i>EWC 170407 Metal</i>	2534.82
<i>EWC 200102 Glass</i>	1253.18
<i>EWC 160601 Batteries</i>	33.34
<i>EWC 170605 Asbestos</i>	3.38
<i>EWC200108 or EWC 200304 Compostable Material</i>	1443.65
<b>TOTAL</b>	<b>88954.99</b>

**Table 2.7.3: Total Wastes Outgoing 1<sup>st</sup> January 2007 – 31<sup>st</sup> December 2007**

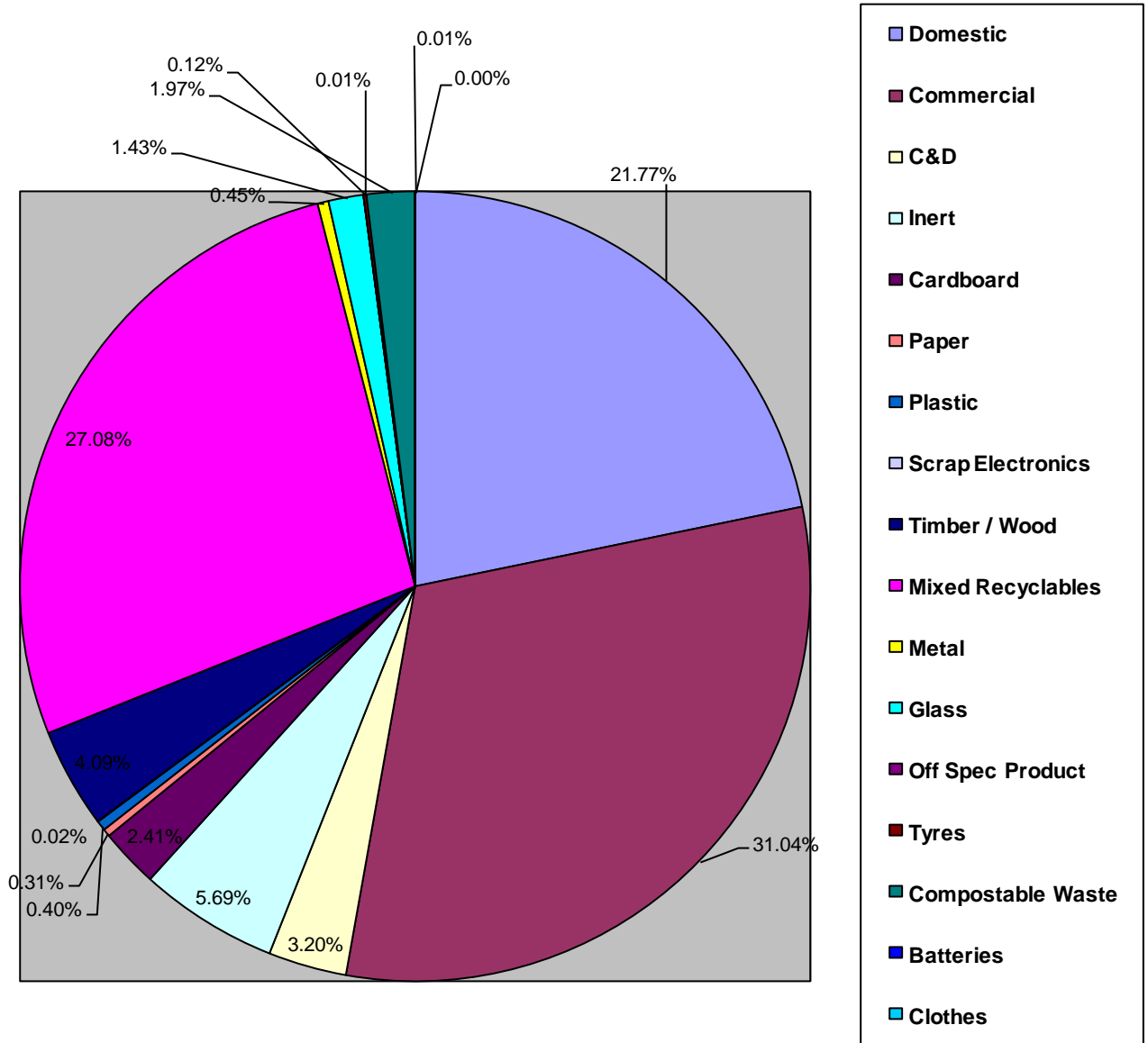
The following table shows the % breakdown of the recyclable materials sent off site for recovery / recycling during 2007:

WASTE TYPE (Recyclable materials only)	RECYCLING (tonnes per annum)	% OF TOTAL RECYCLING
<i>EWC 200202 Inert</i>	4720.19	10%
<i>EWC 200101 Cardboard</i>	7431.38	17%
<i>EWC 200101 Paper</i>	12512.83	28%
<i>EWC 200103 Plastic</i>	5927.02	13%
<i>EWC 200138 Timber / Wood / Green</i>	8230.50	19%
<i>EWC 160201 Scrap Electronics</i>	154.38	Less than 1%
<i>EWC 160103 Tyres</i>	151.76	Less than 1%
<i>EWC 170407 Metal</i>	2534.82	6%
<i>EWC 200102 Glass</i>	1253.18	3%
<i>EWC 160601 Batteries</i>	33.34	Less than 1%
<i>EWC200108 or EWC 200304 Compostable Material</i>	1443.65	3%
<b>TOTAL</b>	<b>44,393.05</b>	<b>47% of total waste in was recycled for 2007</b>

**Table 2.7.4: Breakdown of recycling waste out details for 1<sup>st</sup> January 2007 – 31<sup>st</sup> December 2007**

**Waste In / Out Reports for 2008**

**WASTE IN (2008)**



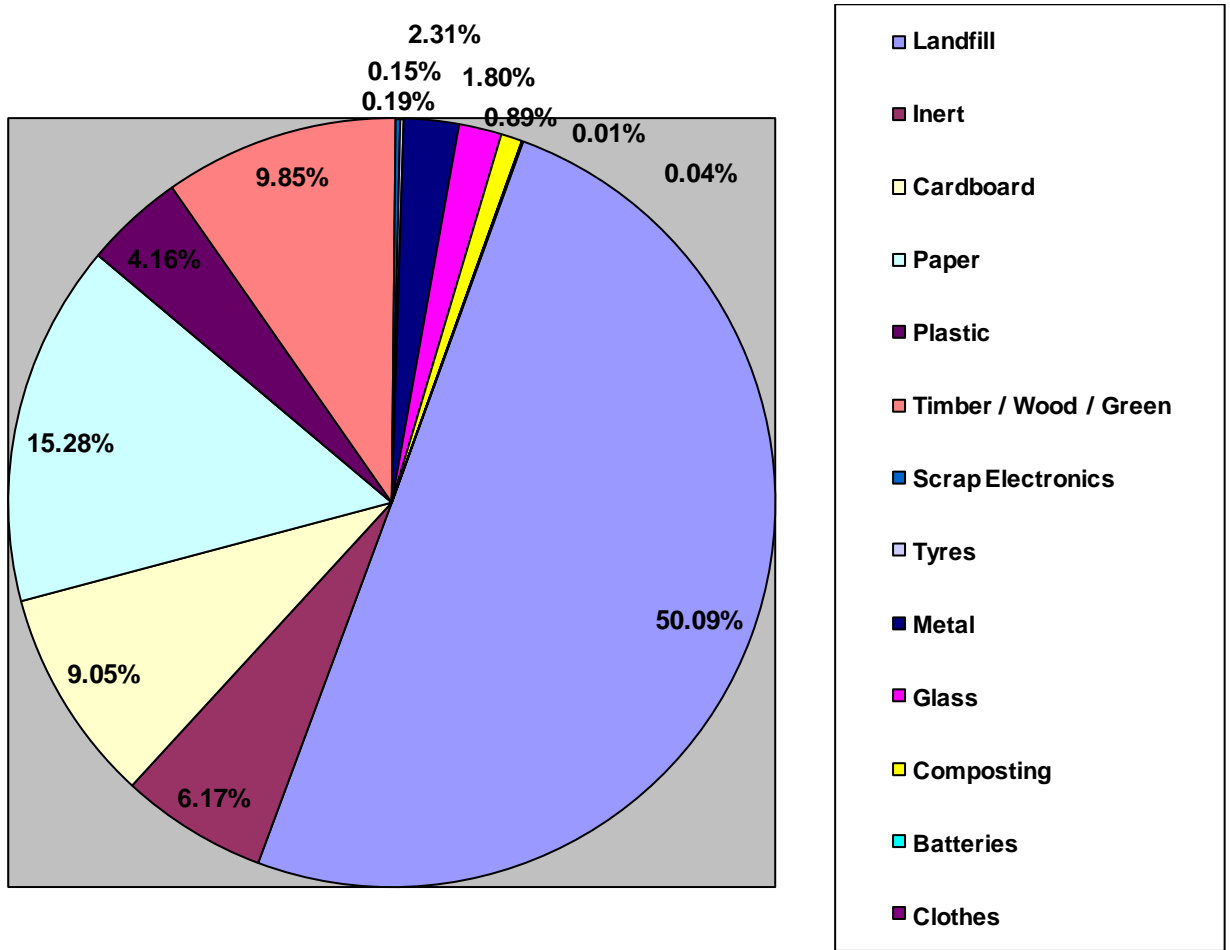
**Figure 2.8.0:**  
**Breakdown of Waste Received on site from 1<sup>st</sup> January 2008 – 31<sup>st</sup> December 2008**

Waste in for 2008: Table of quantities by waste type

<b>WASTE TYPE</b>	<b>WASTE IN (tonnes per annum)</b>
<i>EWC 200301 Domestic</i>	18539.17
<i>EWC 200100 Commercial</i>	26433.11
<i>EWC 170100 C &amp; D</i>	2729.37
<i>EWC 200202 Inert</i>	4846.37
<i>EWC 200101 Cardboard</i>	2055.49
<i>EWC 200101 Paper</i>	267.90
<i>EWC 200103 Plastic</i>	344.76
<i>EWC 160201 Scrap Electronics</i>	16.00
<i>EWC 200138 Timber / Wood / Green</i>	3481.57
<i>EWC 150101 Mixed Kerbside Recyclables</i>	23064.37
<i>EWC 170407 Metal</i>	382.35
<i>EWC 170202 Glass</i>	1216.29
<i>EWC 160304 Off Spec Product</i>	2.56
<i>EWC 200108 Food Waste</i> <i>EWC 200201 Garden &amp; Park Waste</i> <i>EWC 200304 Sludge</i> <i>Compostable materials</i>	1674.44
<i>EWC 200110 Clothes</i>	0.10
<i>EWC 160601 Batteries</i>	6.20
<i>EWC 160103 Tyres</i>	100.18
<b>TOTAL</b>	<b>85,160.23 TONNES</b>

**Table 2.8.1: Total Wastes Incoming 1<sup>st</sup> January 2008 – 31<sup>st</sup> December 2008**

## Waste Out 2008



**Figure 2.8.2: Breakdown of Waste going off site for Recovery or Disposal from 1<sup>st</sup> January 2008 – 31<sup>st</sup> December 2008**

Waste out for 2008: Table of quantities by waste type

WASTE TYPE	WASTE OUT (tonnes per annum)
<i>EWC 191212 Mechanically treated mixed waste for landfill (Commercial / Domestic)</i>	39362.81
<i>EWC 200202 Inert</i>	4846.37
<i>EWC 200101 Cardboard</i>	7107.66
<i>EWC 200101 Paper</i>	12008.22
<i>EWC 200103 Plastic</i>	3272.20
<i>EWC 200138 Timber / Wood / Green</i>	7743.46
<i>EWC 160201 Scrap Electronics</i>	150.60
<i>EWC 160103 Tyres</i>	114.99
<i>EWC 170407 Metal</i>	1816.43
<i>EWC 200102 Glass</i>	1411.75
<i>EWC 160601 Batteries</i>	10.82
<i>EWC 200110 Clothes</i>	35.26
<i>EWC 170802 Gypsum / Plasterboard</i>	264.70
<i>EWC200108 or EWC 200304 Compostable Material</i>	699.78
<b>TOTAL</b>	<b>78845.05</b>

**Table 2.8.3: Total Wastes Outgoing 1<sup>st</sup> January 2008 – 31<sup>st</sup> December 2008**

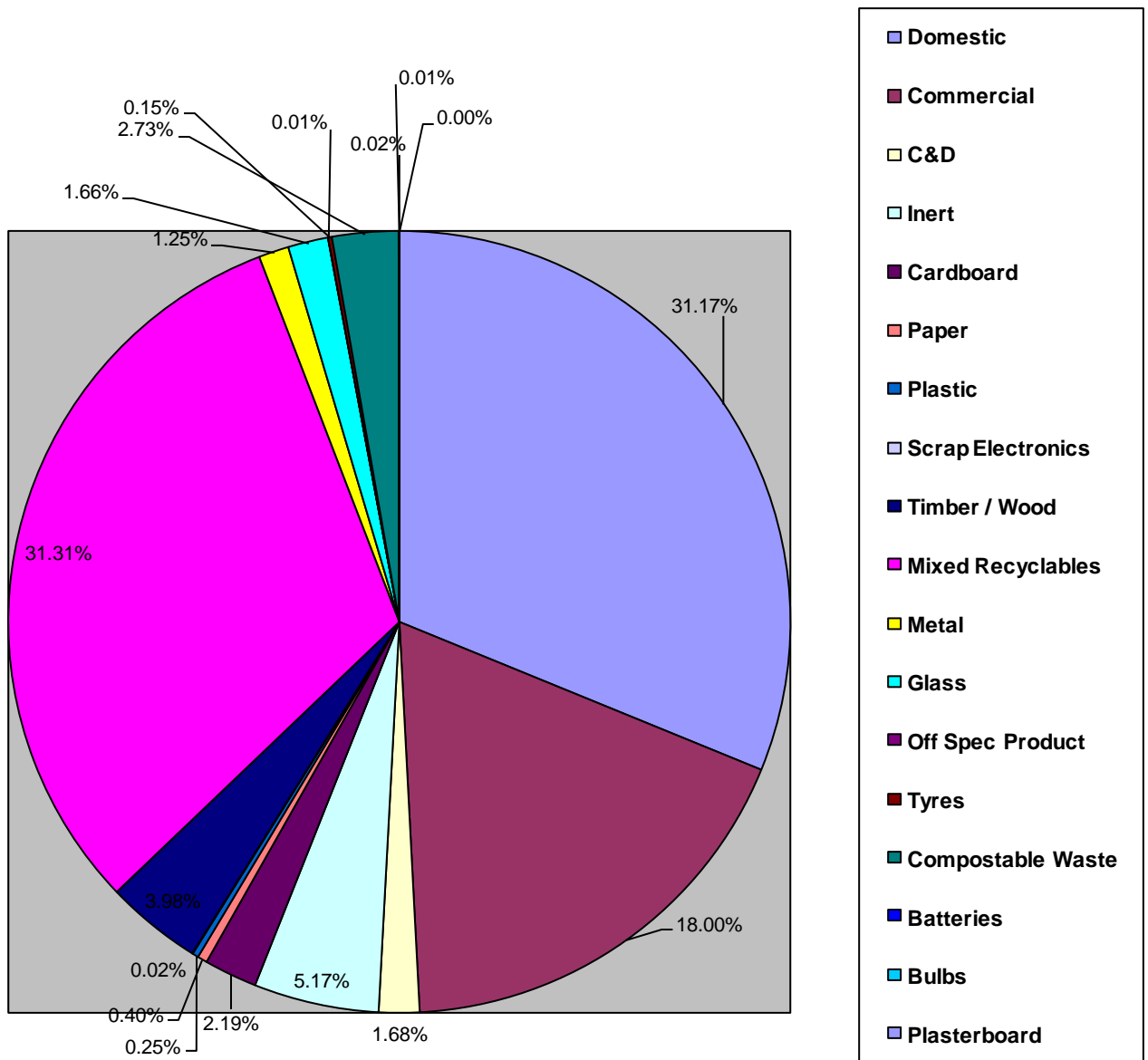
The following table shows the % breakdown of the recyclable materials sent off site for recovery / recycling during 2008:

WASTE TYPE (Recyclable materials only)	RECYCLING (tonnes per annum)	% OF TOTAL RECYCLING
<i>EWC 200202 Inert</i>	4846.37	12%
<i>EWC 200101 Cardboard</i>	7107.66	18%
<i>EWC 200101 Paper</i>	12008.22	30%
<i>EWC 200103 Plastic</i>	3272.20	8%
<i>EWC 200138 Timber / Wood / Green</i>	7743.46	20%
<i>EWC 160201 Scrap Electronics</i>	150.60	Less than 1%
<i>EWC 160103 Tyres</i>	114.99	Less than 1%
<i>EWC 170407 Metal</i>	1816.43	5%
<i>EWC 200102 Glass</i>	1411.75	4%
<i>EWC 160601 Batteries</i>	10.82	Less than 1%
<i>EWC 200110 Clothes</i>	35.26	Less than 1%
<i>EWC 170802 Gypsum / Plasterboard</i>	264.70	Less than 1%
<i>EWC200108 or EWC 200304 Compostable Material</i>	699.78	2%
<b>TOTAL</b>	<b>39,482.24</b>	<b>46% of total waste in was recycled for 2008</b>

**Table 2.8.4: Breakdown of recycling waste out details for 1<sup>st</sup> January 2008 – 31<sup>st</sup> December 2008**

**Waste In / Out Reports for 2009**

**WASTE IN (2009)**



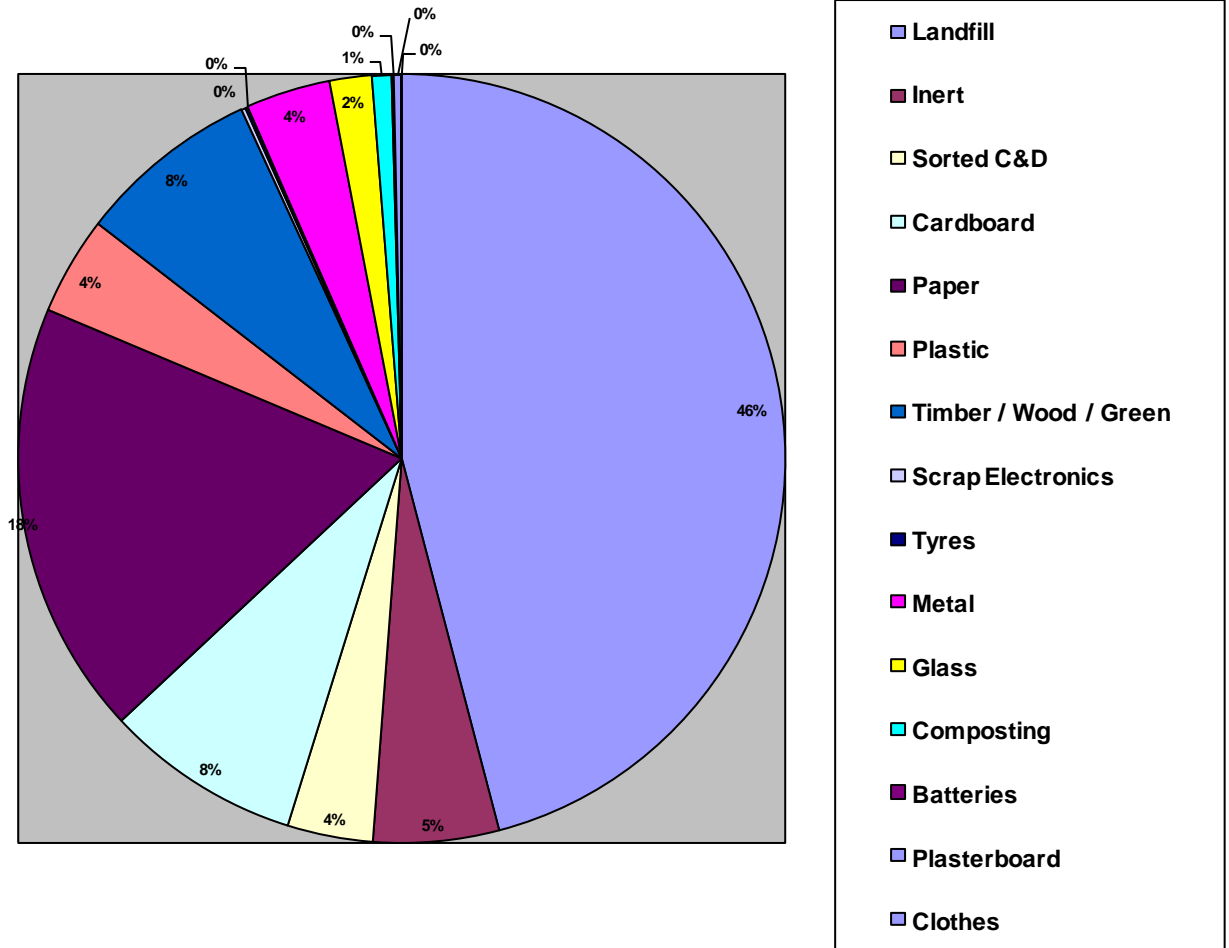
**Figure 2.9.0:**  
**Breakdown of Waste Received on site from 1<sup>st</sup> January 2009 – 31<sup>st</sup> December 2009**

Waste in for 2009: Table of quantities by waste type

<b>WASTE TYPE</b>	<b>WASTE IN (tonnes per annum)</b>
<i>EWC 200301 Domestic</i>	22356.82
<i>EWC 200100 Commercial</i>	12905.46
<i>EWC 170100 C &amp; D</i>	1202.76
<i>EWC 200202 Inert</i>	3708.53
<i>EWC 200101 Cardboard</i>	1570.58
<i>EWC 200101 Paper</i>	289.72
<i>EWC 200103 Plastic</i>	180.09
<i>EWC 160201 Scrap Electronics</i>	14.88
<i>EWC 200138 Timber / Wood / Green</i>	2852.59
<i>EWC 150101 Mixed Kerbside Recyclables</i>	22451.12
<i>EWC 170407 Metal</i>	893.56
<i>EWC 170202 Glass</i>	1189.34
<i>EWC 160304 Off Spec Product</i>	6.70
<i>EWC 200108 Food Waste</i> <i>EWC 200201 Garden &amp; Park Waste</i> <i>EWC 200304 Sludge</i> <i>Compostable materials</i>	1960.91
<i>EWC 170802 Plasterboard / Gypsum</i>	16.14
<i>EWC 160601 Batteries</i>	5.52
<i>EWC 200121 Fluorescent Tubes</i>	0.1
<i>EWC 160103 Tyres</i>	110.12
<b>TOTAL</b>	<b>71,714.94 TONNES</b>

**Table 2.9.1: Total Wastes Incoming 1<sup>st</sup> January 2009 – 31<sup>st</sup> December 2009**

## Waste Out 2009



**Figure 2.9.2: Breakdown of Waste going off site for Recovery or Disposal from 1<sup>st</sup> January 2009 – 31<sup>st</sup> December 2009**



Waste out for 2009: Table of quantities by waste type

WASTE TYPE	WASTE OUT (tonnes per annum)
<i>EWC 191212 Mechanically treated mixed waste for landfill (Commercial / Domestic)</i>	32188.23
<i>EWC 200202 Inert</i>	6232.78
<i>EWC 200101 Cardboard</i>	5783.24
<i>EWC 200101 Paper</i>	12849.64
<i>EWC 200103 Plastic</i>	2906.97
<i>EWC 200138 Timber / Wood / Green</i>	5385.64
<i>EWC 160201 Scrap Electronics</i>	121.48
<i>EWC 160103 Tyres</i>	78.14
<i>EWC 170407 Metal</i>	2503.62
<i>EWC 200102 Glass</i>	1245.48
<i>EWC 160601 Batteries</i>	62.82
<i>EWC 200110 Clothes</i>	20.84
<i>EWC 170802 Gypsum / Plasterboard</i>	213.04
<i>EWC200108 or EWC 200304 Compostable Material</i>	575.88
<b>TOTAL</b>	<b>70167.80 tonnes</b>

**Table 2.9.3: Total Wastes Outgoing 1<sup>st</sup> January 2009 – 31<sup>st</sup> December 2009**

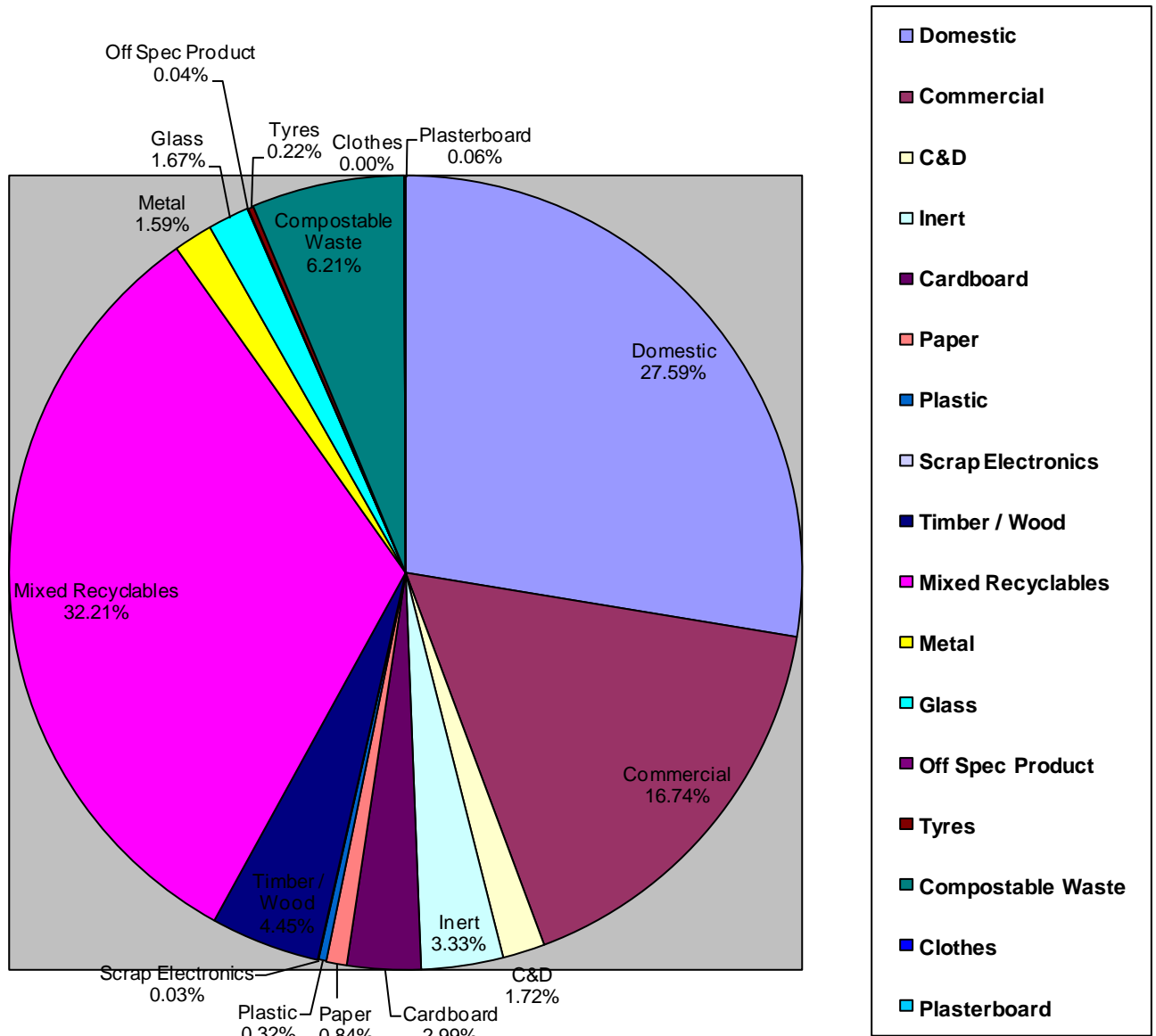
The following table shows the % breakdown of the recyclable materials sent off site for recovery / recycling during 2009:

WASTE TYPE (Recyclable materials only)	RECYCLING (tonnes per annum)	% OF TOTAL RECYCLING
<i>EWC 200202 Inert</i>	6232.78	16%
<i>EWC 200101 Cardboard</i>	5783.24	15%
<i>EWC 200101 Paper</i>	12849.64	34%
<i>EWC 200103 Plastic</i>	2906.97	8%
<i>EWC 200138 Timber / Wood / Green</i>	5385.64	14%
<i>EWC 160201 Scrap Electronics</i>	121.48	Less than 1%
<i>EWC 160103 Tyres</i>	78.14	Less than 1%
<i>EWC 170407 Metal</i>	2496.44	7%
<i>EWC 200102 Glass</i>	1245.48	3%
<i>EWC 160601 Batteries</i>	62.82	Less than 1%
<i>EWC 200110 Clothes</i>	20.84	Less than 1%
<i>EWC 170802 Gypsum / Plasterboard</i>	213.04	Less than 1%
<i>EWC200108 or EWC 200304 Compostable Material</i>	575.88	2%
<b>TOTAL</b>	<b>37,972.39</b>	<b>53% of total waste in was recycled for 2009</b>

**Table 2.9.4: Breakdown of recycling waste out details for 1<sup>st</sup> January 2009 – 31<sup>st</sup> December 2009**

**Waste In / Out Reports for 2010**

**WASTE IN (2010)**



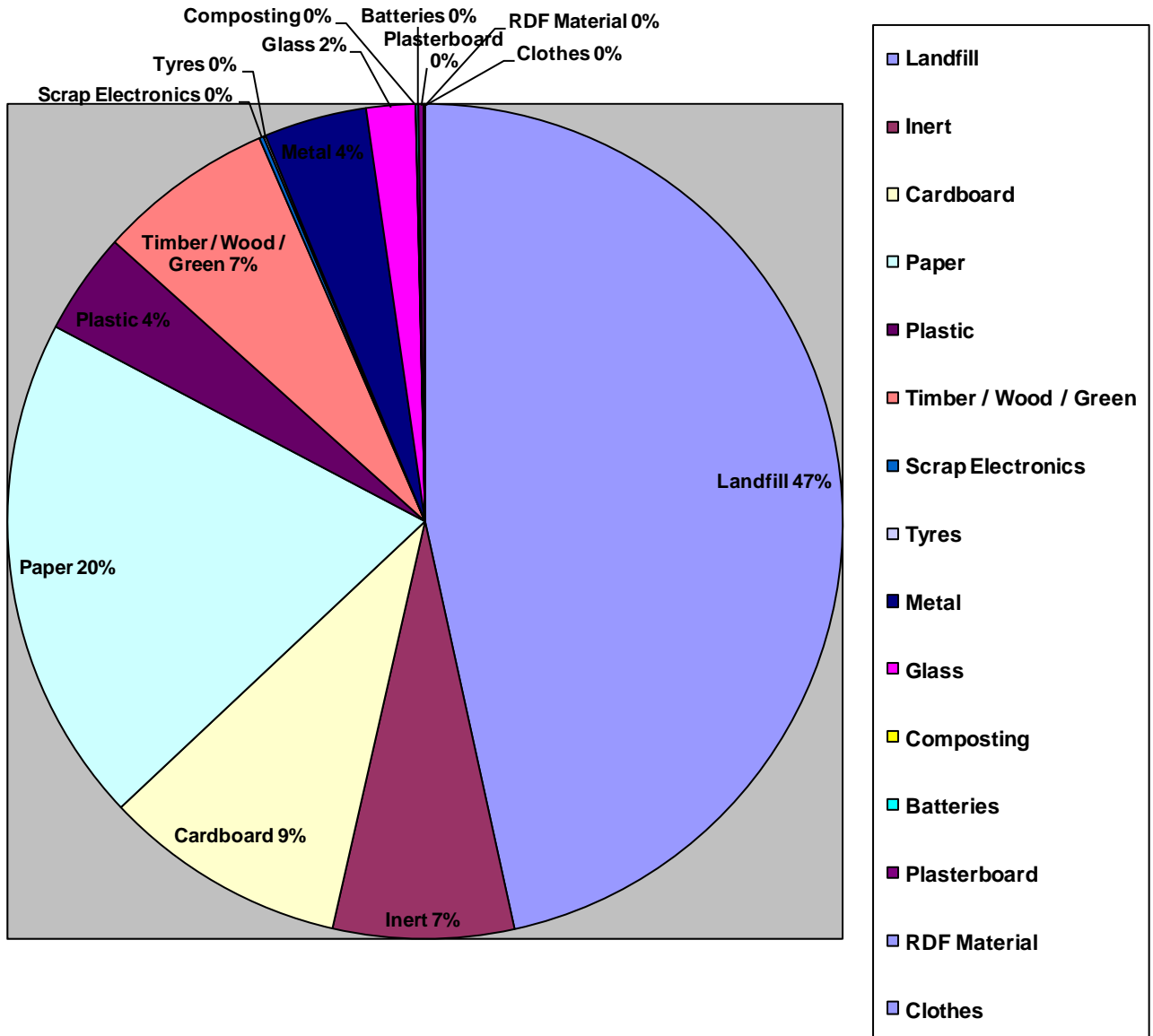
**Figure 2.10.0:**  
**Breakdown of Waste Received on site from 1<sup>st</sup> January 2010 – 31<sup>st</sup> December 2010**

Waste in for 2010: Table of quantities by waste type

<b>WASTE TYPE</b>	<b>WASTE IN (tonnes per annum)</b>
<b>EWC 200301 Domestic</b>	19,140.78
<b>EWC 200301 Commercial</b>	11,609.68
<b>EWC 170904 Mixed C &amp; D</b>	1,191.54
<b>EWC 170107 Inert</b>	2,310.09
<b>EWC 150101 Cardboard</b>	2,076.90
<b>EWC 200101 Paper</b>	580.54
<b>EWC 200103 Plastic</b>	220.34
<b>EWC 160201 Scrap Electronics</b>	19.98
<b>EWC 200138 Timber / Wood / Green</b>	3083.83
<b>EWC 200199 Mixed Kerbside Recyclables</b>	22342.70
<b>EWC 170407 Metal</b>	1101.82
<b>EWC 200102 Glass</b>	1160.39
<b>EWC 160304 Off Spec Product</b>	24.66
<b>EWC 200108 Food Waste</b>	4,309.15
<b>EWC 200201 Garden &amp; Park Waste</b>	
<b>EWC 200304 Sludge</b>	
<b>Compostable materials</b>	
<b>EWC 170802 Plasterboard / Gypsum</b>	42.42
<b>EWC 160103 Tyres</b>	152.54
<b>EWC 200110 Clothes</b>	0.28
<b>TOTAL</b>	<b>69,367.64 TONNES</b>

**Table 2.10.1: Total Wastes Incoming 1<sup>st</sup> January 2010 – 31<sup>st</sup> December 2010**

## Waste Out 2010



**Figure 2.10.2: Breakdown of Waste going off site for Recovery or Disposal from 1<sup>st</sup> January 2010 – 31<sup>st</sup> December 2010**

Waste out for 2010: Table of quantities by waste type:-

WASTE TYPE	WASTE OUT (tonnes per annum)
EWC 191212 Mechanically treated mixed waste for landfill	28,115.82
EWC 200202 Inert	4,227.79
EWC 191201 Cardboard	5,692.87
EWC 191201 Paper	11,916.14
EWC 191204 Plastic	2,382.34
EWC 191207 Timber / Wood / Green	4,131.03
EWC 160201 Scrap Electronics	100.92
EWC 160103 Tyres	51.78
EWC 191203 Metal	2402.76
EWC 191205 Glass	1145.88
EWC 160601 Batteries	56.36
EWC 191208 Clothes	8.18
EWC 170802 Gypsum / Plasterboard	122.44
EWC 200108 or EWC 200304 Compostable Material	7.50
EWC 191210 Refuse Derived Fuel	25.34
<b>TOTAL</b>	<b>60,387.15 TONNES</b>

Table 2.10.3: Total Wastes Outgoing 1<sup>st</sup> January 2010 – 31<sup>st</sup> December 2010

### RECYCLING SUMMARY FOR 2010

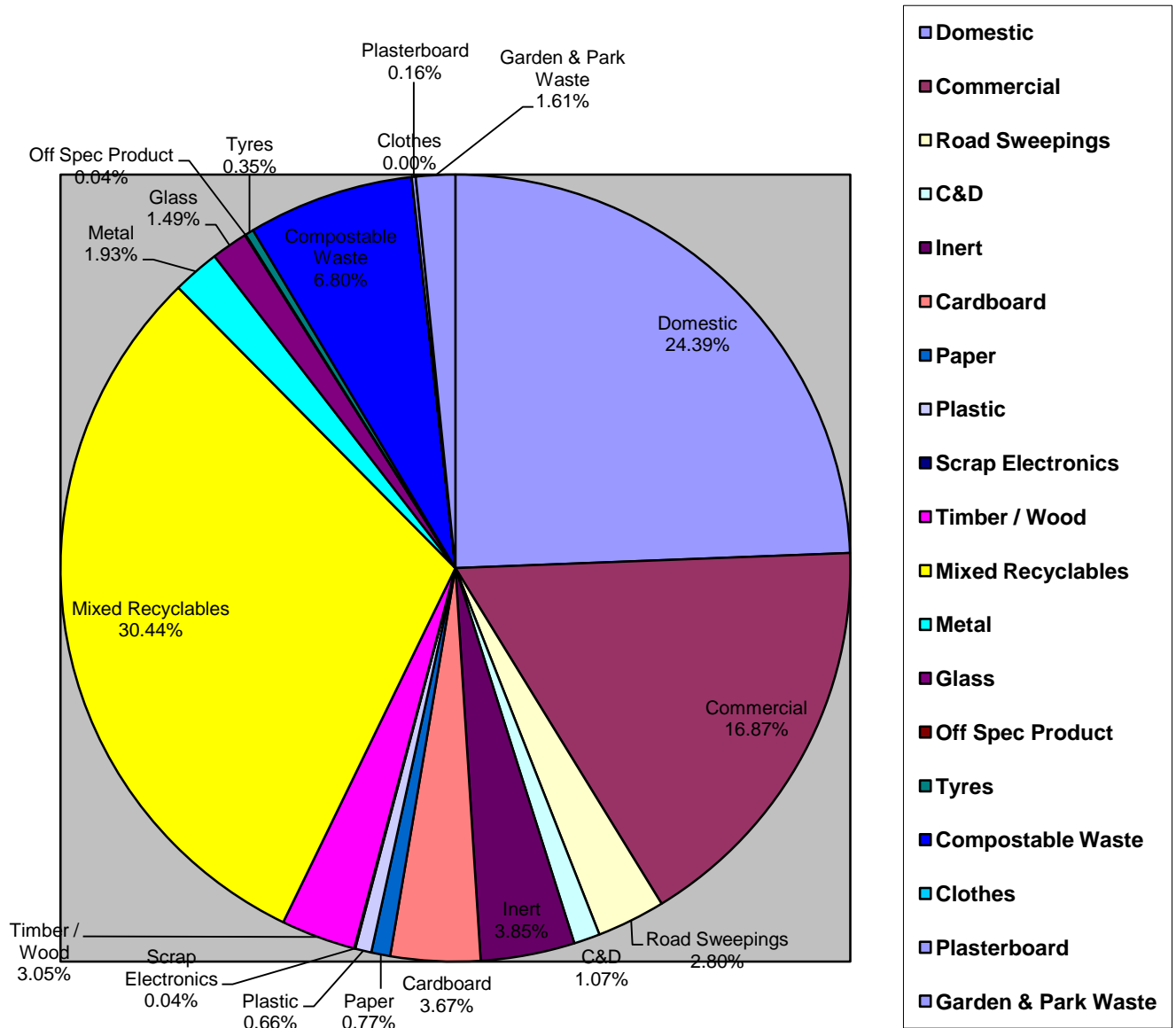
The following table shows the % breakdown of the recyclable materials sent off site for recovery / recycling during 2010. This table only shows the RECYCLABLE / RECOVERABLE material types and lists the total tonnage recycled during 2010 and the % split that each waste type provides towards the total recycling figure:-

WASTE TYPE (Recyclable materials only)	RECYCLING (tonnes per annum)	% OF TOTAL RECYCLING
EWC 200202 Inert	4,227.79	13%
EWC 191201 Cardboard	5,692.87	18%
EWC 191201 Paper	11,592.04	36%
EWC 191204 Plastic	2,706.44	8%
EWC 191207 Timber / Wood / Green	4,131.03	13%
EWC 160201 Scrap Electronics	100.92	Less than 1%
EWC 160103 Tyres	51.78	Less than 1%
EWC 191203 Metal	2,402.76	7%
EWC 191205 Glass	1,145.88	4%
EWC 160601 Batteries	56.36	Less than 1%
EWC 191208 Clothes	8.18	Less than 1%
EWC 170802 Gypsum / Plasterboard	122.44	Less than 1%
EWC 200108 or EWC 200304 Compostable Material	7.50	Less than 1%
EWC 191210 Refuse Derived Fuel	25.34	Less than 1%
<b>TOTAL</b>	<b>32,271.33</b>	<b>47% of total waste in was recycled for 2010</b>

Table 2.10.4: Breakdown of recycling waste out for 1<sup>st</sup> January 2010 – 31<sup>st</sup> December 2010

**Waste In / Out Reports for 2011**

**WASTE IN (2011)**



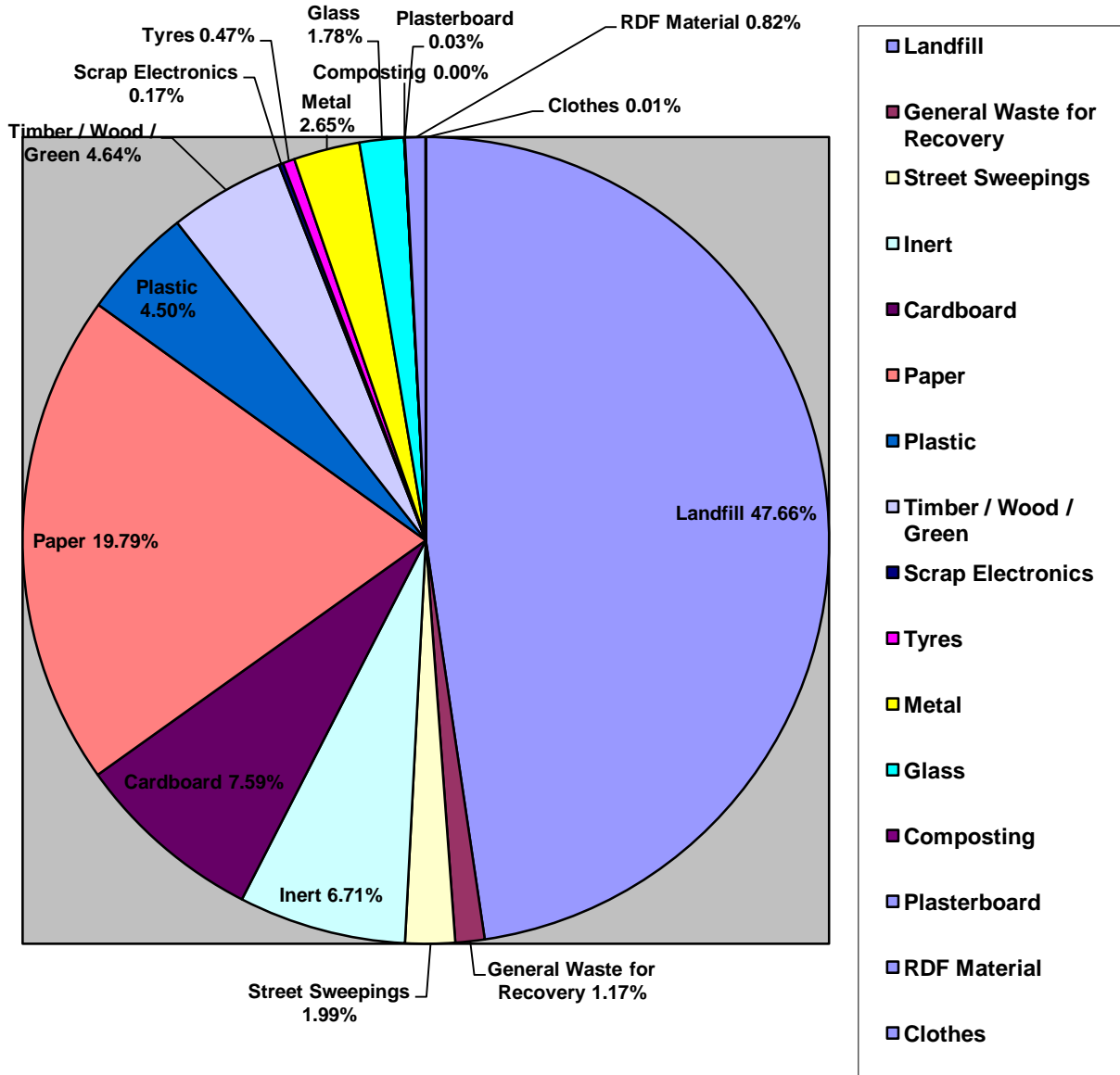
**Figure 2.11.0:**  
**Breakdown of Waste Received on site from 1<sup>st</sup> January 2011 – 31<sup>st</sup> December 2011**

Waste in for 2011: Table of quantities by waste type

<b>WASTE TYPE</b>	<b>WASTE IN (tonnes per annum)</b>
<b>EWC 200301 Domestic</b>	18335.45
<b>EWC 200301 Commercial</b>	12681.69
<b>EWC 200303 Street / Road Sweepings</b>	2108.55
<b>EWC 170904 Mixed C &amp; D</b>	804.43
<b>EWC 170107 Inert</b>	2894.68
<b>EWC 200201 Garden &amp; Park Waste</b>	1207.05
<b>EWC 150101 Cardboard</b>	2755.96
<b>EWC 200101 Paper</b>	582.18
<b>EWC 200103 Plastic</b>	498.60
<b>EWC 160201 Scrap Electronics / WEEE</b>	33.54
<b>EWC 200138 Timber / Wood / Green</b>	2295.07
<b>EWC 200199 Mixed Kerbside Recyclables</b>	22887.50
<b>EWC 170407 Metal</b>	1454.38
<b>EWC 200102 Glass</b>	1121.93
<b>EWC 160304 Off Spec Product</b>	30.12
<b>EWC 200108 Food Waste</b>	5109.98
<b>EWC 200304 Sludge</b> <b>Compostable materials</b>	
<b>EWC 170802 Plasterboard / Gypsum</b>	121.58
<b>EWC 160103 Tyres</b>	260.45
<b>EWC 200110 Clothes</b>	0.10
<b>TOTAL</b>	<b>75,183.24 TONNES</b>

**Table 2.11.1: Total Wastes Incoming 1<sup>st</sup> January 2011 – 31<sup>st</sup> December 2011**

## Waste Out 2011



**Figure 2.11.2:**  
**Breakdown of Waste going off site for Recovery or Disposal from 1<sup>st</sup> January 2011 – 31<sup>st</sup> December 2011**



Waste out for 2011: Table of quantities by waste type:-

<b>WASTE TYPE</b>	<b>WASTE OUT (tonnes per annum)</b>
<b>EWC 191212 Mechanically treated mixed waste for landfill</b>	32,094.62
<b>EWC 191212 Mechanically treated mixed waste for recovery (send to Indaver Meath Facility)</b>	788.14
<b>EWC 200303 Road / Street Sweepings</b>	1340.58
<b>EWC 200202 Inert</b>	4520.28
<b>EWC 191201 Cardboard</b>	5111.17
<b>EWC 191201 Paper</b>	13328.88
<b>EWC 191204 Plastic</b>	3031.88
<b>EWC 191207 Timber / Wood / Green</b>	3125.35
<b>EWC 160201 Scrap Electronics</b>	114.46
<b>EWC 160103 Tyres</b>	318.36
<b>EWC 191203 Metal</b>	1784.65
<b>EWC 191205 Glass</b>	1199.26
<b>EWC 191208 Clothes</b>	5.92
<b>EWC 170802 Gypsum / Plasterboard</b>	19.50
<b>EWC 200108 or EWC 200304 Compostable Material</b>	0.58
<b>EWC 191210 Refuse Derived Fuel</b>	551.32
<b>EWC 200199 Mixed Recycling</b>	108.06
<b>TOTAL</b>	<b>67,443.01 TONNES</b>

**Table 2.11.3: Total Wastes Outgoing 1<sup>st</sup> January 2011 – 31<sup>st</sup> December 2011**

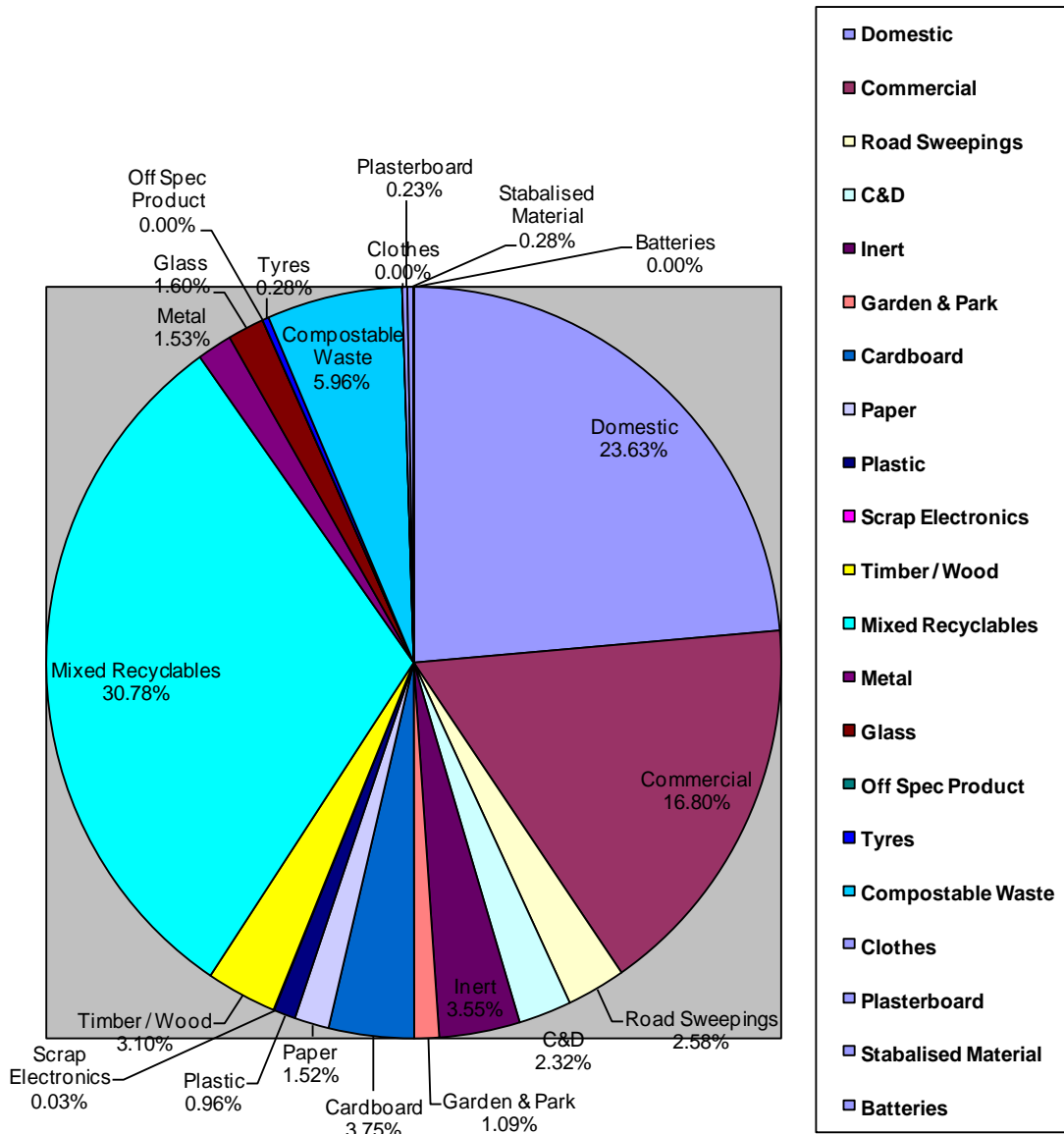
## RECYCLING SUMMARY FOR 2011

The following table shows the % breakdown of the recyclable materials sent off site for recovery / recycling during 2011. This table only shows the RECYCLABLE / RECOVERABLE material types and lists the total tonnage recycled during 2011 and the % split that each waste type provides towards the total recycling figure:-

WASTE TYPE (Recyclable materials only)	RECYCLING (tonnes per annum)	% OF TOTAL RECYCLING
EWC 200202 Inert	4520.28	13%
EWC 191201 Cardboard	5111.17	15%
EWC 191201 Paper	13328.88	39%
EWC 191204 Plastic	3031.88	9%
EWC 191207 Timber / Wood / Green	3125.35	9%
EWC 160201 Scrap Electronics	114.46	Less than 1%
EWC 160103 Tyres	318.36	1%
EWC 191203 Metal	1784.65	5%
EWC 191205 Glass	1199.26	4%
EWC 191208 Clothes	5.92	Less than 1%
EWC 170802 Gypsum / Plasterboard	19.50	Less than 1%
EWC 200108 or EWC 200304 Compostable Material	0.58	Less than 1%
EWC 191210 Refuse Derived Fuel	551.32	2%
EWC 191212 Mechanically treated mixed waste for recovery (send to Indaver Meath Facility)	788.14	2%
EWC 200199 Mixed Recycling	108.06	Less than 1%
<b>TOTAL</b>	<b>34007.81</b>	<b>45% of total waste in was recycled for 2011</b>

**Table 2.11.4: Breakdown of recycling waste out for 1<sup>st</sup> January 2011 – 31<sup>st</sup> December 2011**

**WASTE IN (2012)**



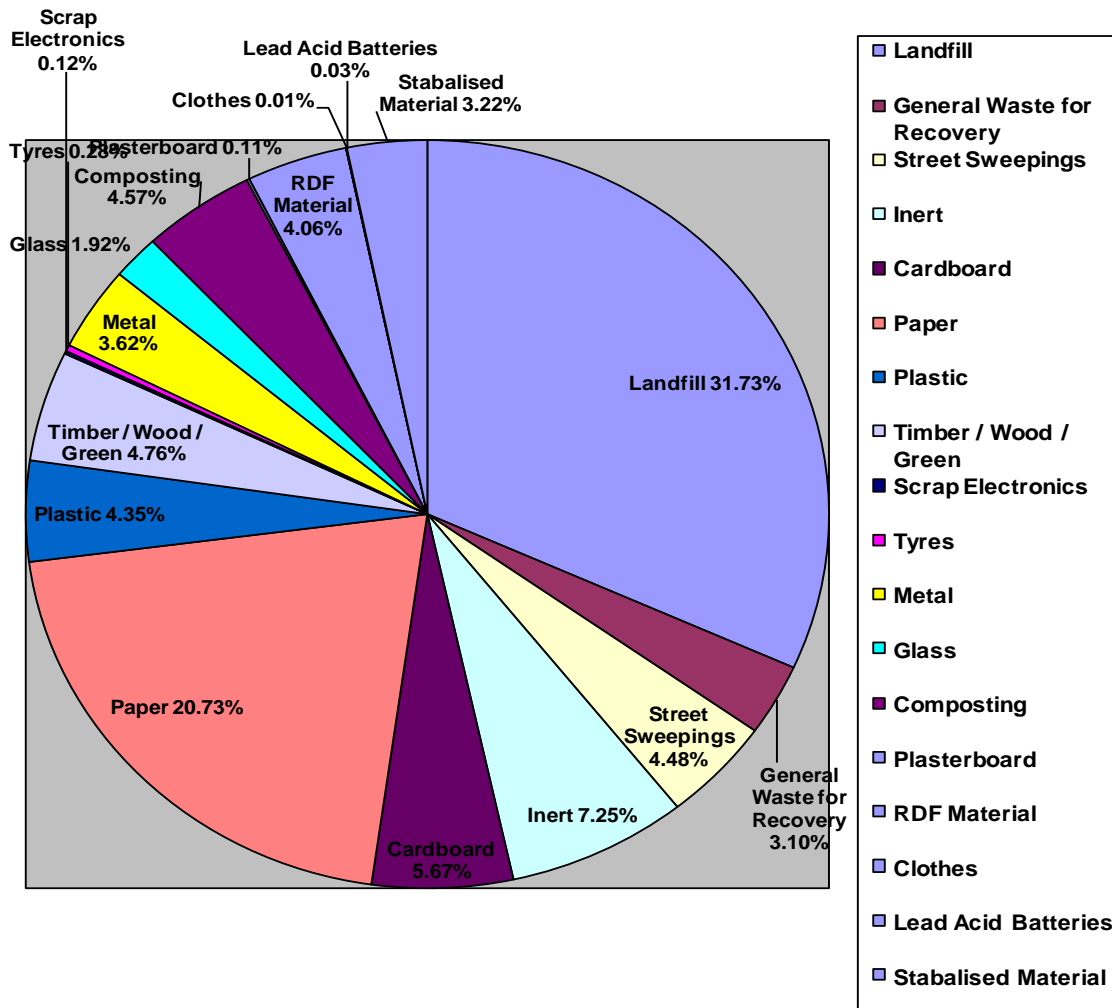
**Figure 2.11.0:**  
**Breakdown of Waste Received on site from 1<sup>st</sup> January 2012 – 31<sup>st</sup> December 2012**

Waste in for 2012: Table of quantities by waste type

<b>WASTE TYPE</b>	<b>WASTE IN (tonnes per annum)</b>
<b>EWC 200301 Domestic</b>	<b>16973.75</b>
<b>EWC 200301 Commercial</b>	<b>12065.34</b>
<b>EWC 200303 Street / Road Sweepings</b>	<b>1855.76</b>
<b>EWC 170904 Mixed C &amp; D</b>	<b>1667.91</b>
<b>EWC 170107 Inert</b>	<b>2550.56</b>
<b>EWC 200201 Garden &amp; Park Waste</b>	<b>782.98</b>
<b>EWC 150101 Cardboard</b>	<b>2689.79</b>
<b>EWC 200101 Paper</b>	<b>1088.49</b>
<b>EWC 200103 Plastic</b>	<b>689.21</b>
<b>EWC 160201 Scrap Electronics / WEEE</b>	<b>22.90</b>
<b>EWC 200138 Timber / Wood</b>	<b>2224.68</b>
<b>EWC 200199 Mixed Kerbside Recyclables</b>	<b>22106.40</b>
<b>EWC 170407 Metal</b>	<b>1100.56</b>
<b>EWC 200102 Glass</b>	<b>1151.56</b>
<b>EWC 160304 Off Spec Product</b>	<b>1.46</b>
<b>EWC 200108 Food Waste</b>	<b>3943.42</b>
<b>EWC 200304 Sludge</b>	<b>339.36</b>
<b>Compostable materials</b>	
<b>EWC 170802 Plasterboard / Gypsum</b>	<b>161.68</b>
<b>EWC 160103 Tyres</b>	<b>202.67</b>
<b>EWC 200110 Clothes</b>	<b>0.08</b>
<b>EWC 190305 Stabilised Material</b>	<b>198.06</b>
<b>EWC 160604 Alkaline Batteries</b>	<b>1.56</b>
<b>TOTAL</b>	<b>71818.18 TONNES</b>

**Table 2.11.1: Total Wastes Incoming 1<sup>st</sup> January 2012 – 31<sup>st</sup> December 2012**

## Waste Out 2012



**Figure 2.11.2:**  
**Breakdown of Waste going off site for Recovery or Disposal from 1<sup>st</sup> January 2012 – 31<sup>st</sup> December 2012**

Waste out for 2012: Table of quantities by waste type:-

<b>WASTE TYPE</b>	<b>WASTE OUT (tonnes per annum)</b>
<b>EWC 191212 Mechanically treated mixed waste for landfill</b>	<b>21779.16</b>
<b>EWC 191212 Mechanically treated mixed waste for recovery (sent to Indaver Meath Facility)</b>	<b>2126.82</b>
<b>EWC 200303 Road / Street Sweepings / Stabilised Material</b>	<b>3075.32</b>
<b>EWC 200202 Inert</b>	<b>4979.22</b>
<b>EWC 191201 Cardboard</b>	<b>3891.44</b>
<b>EWC 191201 Paper</b>	<b>14231.94</b>
<b>EWC 191204 Plastic</b>	<b>2982.70</b>
<b>EWC 191207 Timber / Wood / Green</b>	<b>3267.66</b>
<b>EWC 160201 Scrap Electronics</b>	<b>83.50</b>
<b>EWC 160103 Tyres</b>	<b>190.78</b>
<b>EWC 191203 Metal</b>	<b>2487.72</b>
<b>EWC 191205 Glass</b>	<b>1316.74</b>
<b>EWC 191208 Clothes</b>	<b>5.24</b>
<b>EWC 170802 Gypsum / Plasterboard</b>	<b>76.3</b>
<b>EWC 200108 or EWC 200304 Compostable Material</b>	<b>3138.16</b>
<b>EWC 191210 Refuse Derived Fuel</b>	<b>2787.04</b>
<b>EWC 160601* Lead Acid Batteries</b>	<b>18.74</b>
<b>EWC Stabilised Material</b>	<b>2207.52</b>
<b>TOTAL</b>	<b>68,646.00 TONNES</b>

**Table 2.11.3: Total Wastes Outgoing 1<sup>st</sup> January 2012 – 31<sup>st</sup> December 2012**

## RECYCLING SUMMARY FOR 2012

The following table shows the % breakdown of the recyclable materials sent off site for recovery / recycling during 2012. This table only shows the RECYCLABLE / RECOVERABLE material types and lists the total tonnage recycled during 2012 and the % split that each waste type provides towards the total recycling figure:-

WASTE TYPE (Recyclable materials only)	RECYCLING (tonnes per annum)	% OF TOTAL RECYCLING
EWC 200202 Inert	4979.22	8%
EWC 191201 Cardboard	3891.44	9%
EWC 191201 Paper	14231.94	34%
EWC 191204 Plastic	2982.70	7%
EWC 191207 Timber / Wood / Green	3267.66	8%
EWC 160201 Scrap Electronics	83.50	Less than 1%
EWC 160103 Tyres	190.78	Less than 1%
EWC 191203 Metal	2487.72	6%
EWC 191205 Glass	1316.74	3%
EWC 191208 Clothes	5.24	Less than 1%
EWC 170802 Gypsum / Plasterboard	76.3	Less than 1%
EWC 200108 or EWC 200304 Compostable Material	3138.16	7%
EWC 191210 Refuse Derived Fuel	2787.04	7%
EWC 191212 Mechanically treated mixed waste for recovery (send to Indaver Meath Facility)	2126.82	5%
EWC 100601* Lead Acid Batteries	18.74	Less than 1%
EWC 190305 Stabilised Material	2207.52	5%
<b>TOTAL</b>	<b>43,791.52</b>	<b>61% of total waste in was recycled or recycled for 2012</b>

**Table 2.11.4: Breakdown of recycling waste out for 1<sup>st</sup> January 2012 – 31<sup>st</sup> December 2012**

### Explanation of Tonnage on Site at the end of 2012

As can be seen from the waste in and out records outlined above the following are the annual totals for the Barna Waste site in Carrowbrowne:-

Total Waste In:-                   71818.18 tonnes  
Total Waste Out:-                   68646.00 tonnes

This gives a difference of 3172.18 tonnes of a difference outlining stock on site at the end of the reporting year. A stock take was carried out at the end of 2012 and confirmed that with a combination of processed material awaiting shipment and unprocessed material on site we had a total stock quantity of 6362 tonnes at year end. This is not an exact figure however it is a very good estimate carried out by three members of the Management Team on 02/01/2013.

This end of year stock was just standard material that had already been processed awaiting shipment or material waiting to be processed. There are no concerns over the level of stock or the ability to process and transfer all of it during Q1 of 2013.

## **Waste In / Out 2012 Summary**

Tonnages through the facility in 2012 fell slightly in comparison to the previous reporting year to just over 71,000 tonnes from the 75,000 tonnes accepted in 2011. Considering the current economic climate and the number of commercial premises closing or reducing their waste volumes we view the 2012 tonnage as a positive result.

During 2012 we introduced more detailed sorting on all deliveries of waste at the site to ensure that the maximum amount of material was diverted to landfill and as a result save the company valuable revenue. This was achieved successfully and we were able to turn a lot more of our waste deliveries into recycling during this reporting period.

Our composting process only opened very late in 2012 and a significant change in tonnages of compostable material processed through our own facility will be evident at the end of the next reporting period. During this reporting period it is evident that although this material was still collected by the company during 2012 we transferred it off site for processing at other composting facilities.

The picking station remains vital to our company and once again processed over 20,000 tonnes of material during 2012. The station alternates between a one and two shift pattern throughout the year to cope with the tonnages coming into the site.

The end of year stock was just standard material that had already been processed awaiting shipment or material waiting to be processed. There are no concerns over the level of stock or the ability to process and transfer all of it during Q1 of 2013.

The facility is more than adequately equipped to accept, process, store and transfer all material accepted in current volumes. We are happy with the level of staff and the capacity of the machinery to cope with the demands of the waste volume coming into the facility. No major changes are planned in relation to upgrading this during the new reporting period.



## Report on Composting Quality

As per our EPA licence we are required to include as part of the Annual Environmental Report a summary report on the quantity / quality of compost material being produced through our production process.

In this reporting period we have nothing to report in relation to compost quality because the facility was not accepting any fresh material for processing. In July of 2011 the Department of Agriculture requested that no new material be accepted into the Barna Waste facility until a series of issues highlighted by them were resolved. As a result the facility was closed and Barna Waste used third party facilities for the processing of our compostable waste.

Since July 2011 and through to December 2012 Barna Waste did not accept food waste into our own facility and instead the time was spent working on a new business plan with the Department of Agriculture. This new plan has been put into action during the second half of 2012 with the following changes made:-

- New delivery ramp and entrance has been constructed
- New Composting Operations Manager in place
- Dedicated / trained composting personnel in place
- Clean area and dirty area now segregated by a permanent wall
- Pasteurisation bunkers made smaller and now divided into two separate tunnels
- New HACCP plan in place
- New operating procedures in place

As a result of these changes the facility was approved to re-enter validation in December 2012 and will start processing material through the facility again under this validation during Q1 and Q2 of 2013.

All material which was originally processed through the facility in 2010 and up to July 2011 was stored in the clean area of the facility and had successfully passed E-coli and Salmonella tests to prove it had been stabilised. After working with the Department and the EPA it was agreed on completion of a successful AT4 test that this material be removed from the site and used a landfill cover material. After this was agreed Barna Waste successfully removed the full stock of this material (2200 tonnes) to approved landfill sites for use as cover as detailed in the waste in / out figures for 2012. This process resulted in the complete removal of all processed material from our composting facility. Only landfill cover was the approved use for this material.

In summary Barna Waste did not process any material at the facility during 2012 and therefore there is no report to be produced on the quality of compost at the site although material processed in 2010 and 2011 was removed completely from the facility and used only as a landfill cover.

### 2.11.5 Summary of Recycling Outlets used in 2012

Barna Waste are committed to finding new recycling markets in Ireland, Europe and Worldwide to ensure materials produced from the picking station and the other areas in our waste transfer station are sent to the best possible recycling outlets. All outlets for the materials going out have been approved in advance by the EPA. A summary of the major recycling outlets used for 2011 is included below:

<b><u>MATERIAL / COMMODITY</u></b>	<b><u>MARKET / TYPE</u></b>
<b>Metal</b>	Galway Metal (Galway) – recycler Howarth Metal (England) – recycler
<b>Steel Cans</b>	Boost Recycling (England) – broker WRC Recycling (Scotland) – broker
<b>Aluminium Cans</b>	WRC Recycling (Scotland) – broker Wilton Waste (Ireland) – broker / recycler
<b>Timber (shredded)</b>	Greenstar (Galway) – end user Galway City Council Composting Site – end user Eirebloc (Cork) – end user Local Farmers – end users
<b>Paper / Cardboard / Newspaper</b>	Highlander International (Glasgow) – broker Cellmark (USA) - broker Peute Papier Recycling (Holland) – end user Marwin (Cork) - broker Boost Recycling (England) – broker Recycling UK (England) – broker Irish Packaging Recycling (Panda, Ireland) – broker WRC Recycling (Scotland) – broker Ashley Paper (England) – broker
<b>Plastics</b>	Eco Plastics (Lincolnshire) – end user Leinster Environmentals (Dundalk) – broker Peute Papier Recycling (Holland) – end user WRC Recycling (Scotland) – broker J & A Young/Jayplas (England) – end user Polymer Recovery (Ireland) – end user JFC (Ireland) – end user Shabra Plastics (Monaghan) – end user
<b>WEEE and Scrap Electronics</b>	Electrical Waste Management (Ireland) – broker
<b>Glass</b>	Glassdon Recycling (Antrim, Northern Ireland) Rehab Glassco (Co Kildare) Gannon Eco (Kilbeggan)
<b>Tyres</b>	Global Materials Recycling (Galway) – broker Duffy Tyre Recycling (Donegal) – broker
<b>Inert Materials</b>	Barna Waste (permitted site – Headford Road)
<b>Landfill Material</b>	Connacht Residual Regional Landfill - Kilconnell Ballina Landfill – Co Mayo Drehid Landfill – Co Kildare
<b>RDF Material</b>	Greenstar (Millennium Pk, Dublin)
<b>General Waste for Recovery</b>	Indaver Waste to Energy (Meath)
<b>Gypsum / Plasterboard</b>	Gypsum Ireland (Dublin)
<b>Clothing / Textiles</b>	Textile Recycling Ireland (Dublin)
<b>Pallets</b>	Chep (England) Connaught Timber Products (Galway)

**Table 2.11.5: Major recycling markets used in 2012**

## **Paperwork / Certification for Recyclable Loads & National TFS Office**

Recycling certificates are requested and kept on file for most of the companies who take recyclable material from our site. These are requested on a monthly basis and are all on file in our offices. Details of all individual transactions of waste going off site are also available from our offices and paperwork for any individual load can be viewed on request. This paperwork includes weighbridge tickets, laydown / transfer documents and the annex vii forms which are required to accompany each waste movement. Loading pictures are normally available for materials loaded into containers for the export markets.

Barna Waste are registered as a shipper of green list material with the TFS office in Dublin and our broker's registration number for 2012 currently is:- **IRE/G032/12.**

The National TFS Office monitor, track and inspect loads of waste / recyclables being shipped from Ireland to destinations worldwide. This process has been welcomed by Barna Waste and ensures that everyone who we sell material to are also registered as an approved broker with the TFS office and that the end destinations which they use for our material are also registered and checked by the National TFS Office. The process of checking random containers at ports in Ireland means it is essential that we produce a good quality material via our picking station to ensure inspections are passed and no materials are rejected. The introduction of the National TFS Office has regulated the business of shipping recyclable material and everyone now works to the same process. All outlets used by Barna Waste are registered with the National TFS Office and therefore ensures all our material is looked after properly and by reputable companies.

As part of our internal procedures we do not sell material to any destination / broker unless that person makes an effort to personally visit our facility. This is done for two reasons, one to ensure that they see the material they propose to purchase in person and can confirm they are happy with the quality on show and in the way the material is processed. Secondly this gives us a feel for the proposed partner and how they work. We do not ship to anyone who does not make the effort to visit the facility even if they offer the best price and we feel this is the best way to ensure long term sustained partners, reliable payment and the avoidance of using companies who may not look after the material in a proper manner.

### 3.0 Report on the achievement of targets set out for:

- **Biodegradable waste**
- **Packaging waste**
- **Recovery of C&D Waste**
- **Recovery of Household, Industrial and Commercial waste.**

This section is included to update on the progress Barna Waste have made during the 2012 reporting period with regards to meeting our environmental targets. As stated in previous years it is the aim of the company to meet the targets set out by the “Waste Management - Changing Our Ways” Policy Document which was published by the Department of the Environment and Local Government in 1998. The relevant targets set out in this document are as follows:

- A diversion of 50% of overall household waste from landfill within the next 15 years
- A minimum 65% reduction in biodegradable waste consigned to landfill within the next 15 years
- The development of waste recovery facilities employing environmentally beneficial technologies, as an alternative to landfill, including the development of composting and other feasible biological treatment facilities capable of treating up to 300,000 tonnes of biodegradable waste per annum within the next 15 years
- Recycling of 35% of municipal waste within the next 15 years
- Recycling at least 50% of C&D Waste within a five year period, with a progressive increase to at least 85% over the next 15 years

As can be seen from the results above the overall percentage for waste recycled is 59% of the total waste into our facility across the weighbridge for the reporting period. This is 14% up on our performance in 2011. The increase in recycling tonnage can be attributed to an increase in waste tonnage sent for recovery during the first part of the reporting period and an increase in our efforts to remove as much recyclable material for mixed loads as possible during 2012. We have always sorted material from mixed loads to avoid sending it for disposal but due to the current financial climate we maximised those efforts during this reporting period and this has helped to increase our recycling figure. The clearance of our composting facility of stabilised material processed during 2010 and 2011 also had a significant impact on the recycling figure as this material was able to be recovered and used as a landfill cover material after approval by the Agency.

In relation to domestic composting which we started to introduce in 2010 in the form of offering customers in specific market areas a 3 bin system incorporating collections of general waste, sorted recyclables and sorted biodegradable materials mainly food and garden waste. To date we have over 5,400 domestic customers switched to a 3 bin collection system which equates to approximately 24% of our total customer base in this sector. The uptake on the bins has been almost 100% and has been well received and supported by the customers.

Obviously the fact that our own composting facility was closed during this reporting period hindered our plans to roll out more brown bins to domestic customers. This plan had to be put on hold until the issues in the composting building were resolved. Now that the facility is open again and in the validation stage this process will be begin again and brown bins will be rolled out further during 2013 to areas where the service is viable. All material collected from these brown bins is / will be delivered to our own composting facility for processing.

In relation to compost for commercial customers Barna Waste has implemented a 3 bin collection system for almost all commercial customers who have compostable material. New legislation came into effect in July of 2010 which insisted that commercial customers who place this type of waste onto the market 'must' have it collected in a segregated manner where it will be diverted from landfills. Our Sales team contacted all our commercial customers and almost all customers affected have now signed up to the 3 bin collection system. As a result Barna Waste has established food waste collection routes throughout Connacht as a result. Our pricing structure for these collections has and will remain structured in a manner that will encourage customers to make the effort to recycle. Very few commercial customers who place biodegradable material onto the market have refused to take up this service and in Q1 of 2012 the names of these customers were given to the Local Authority who will follow up with customers on the list to ensure they take up the service as soon as possible.

Due to the hard work put into these composting initiatives during 2010 and 2011 we managed to bring in excess of 10,000 tonnes of compostable material to our facility for processing. Due to the closure this was not increased during 2012 in terms of processing the material on site but we did still collect another 4,000 tonnes of material and divert it from landfill. In total since we started this process we have collected over 14,000 tonnes of material that would previously have gone to landfill.

As our process develops then our collection quantities will grow and can only result in having a positive impact on recycling figures for both the commercial and domestic sectors. We already know that we are headed in the right direction to achieve the target of diverting 50% of household waste away from landfill and in total 65% of biodegradable waste away from landfill over the next few years and we have made a significant investment to allow us to achieve that.

In relation to the national target for the development of waste recovery facilities employing environmentally beneficial technologies, as an alternative to landfill, including the development of composting and other feasible biological treatment facilities capable of treating up to 300,000 tonnes of biodegradable waste per annum within the next 15 years we have already demonstrated our commitment. As outlined earlier in this report Barna Waste opened our own composting facility on 1<sup>st</sup> January 2010 which is licenced to process up to 40,000 tonnes of compostable material per annum and 20,000 tonnes in its current set-up. The investment in this facility has been significant and has taken a number of years to complete the project but shows our own commitment to meeting the above targets. This composting process will run alongside our existing picking station for the processing of mixed dry recyclables and we believe that both processes fully equip our company to meet the targets outlined above by providing state of the art facilities to sort and process both recyclable waste streams within a 3 bin system (dry recyclables and biodegradable materials). If other similar facilities are opened / operated and are equipped to carry out the same level of activity as we can then the country should achieve its target of providing the required infrastructure that can manage the tonnage outlined above.

As a company we believe we have done our part in helping to achieve this goal. We are committed to ongoing investment in the best available technologies that will assist our business and we will continue to develop our site as we move forward.

The target set out to divert 35% of municipal waste from landfill over the next 15 years is also one we are striving to achieve. There are two ways in which we can achieve this target. One is by negotiating and supplying regular tonnages to the Indaver Incinerator in County Meath which will increase our general waste going for recovery by simply transferring it off site to this facility. It is unlikely this is the option we will use as tonnage to this facility will be limited for each contractor and therefore we will have to find an alternative solution.

The alternative solution is to put in place an internal process to manage our waste. During this reporting period we have invested in a new baler which includes a wrapper. This machine has been commissioned on site and is almost ready to start producing material. We are in the process of finalising a deal with a company in Europe who produce energy from waste with a view to shipping trial material during the second half of 2013. Firstly we must finalise a contract and then finalise the internal process by adding a trommel and some magnets to the front end of the baling process to ensure the material meets the requirements for export. This entire process is hoped to be finalised in Q1 of 2013 and sent for approval to the Agency before the end of Q1 also. Assuming the process can be successfully approved this will allow us to export large amounts of waste for recovery instead of disposal within this country before the end of 2013. Getting this process approved and running successfully will be a priority for early 2013 and if key to the future success of our company.

The targets in relation to C&D type waste have become difficult to monitor due to the significant drop in tonnages in relation to this type of waste. Tonnages of this material have dropped significantly in the past few years due to the major downturn in this industry and therefore trends are hard to establish due to the lack of volume. We are not in a position to predict construction waste tonnages moving into 2013 but tonnages will have to increase so that trends can be properly analysed. We will monitor and report on this through 2013 and in next year's annual environmental report. At present construction related wastes form a very low part of our business as a result of the economic situation.

### **Summary**

Overall the above updates show that Barna Waste are making good progress towards achieving the National and European recycling targets set out in 1998.

2013 will be an important year as the time has come to make a significant change in the way we manage our general waste and assuming the plans we have implemented this will see general waste being sent for recovery in large quantities rather than going to landfill. This waste will be recovered as energy and be much more environmentally friendly than the current landfill option. This change also has the potential to achieve significant savings for the company and ensure we go a very long way to achieving the targets outlined above. We are fully confident we will have significant progress to report in 2013 in relation to recovery of general waste targets.

In addition the newly developed composting facility should help us achieve all targets in relation to biodegradable waste from both commercial and domestic customers. We are fully confident that this new process will get us through validation and allow us to process as much food waste through the process as we can feed into the plant. Successfully completing the validation process during Q1 and Q2 2013 will allow us to significantly increase brown bin roll outs and therefore impact on the tonnage of segregated food waste available to us for recycling.

Further progress will be reported on these targets in the 2012 Annual Environmental Report.

The following are our projected waste quantities for next year:

Table 3.0.1 outlines some projected waste quantities for the next reporting year and onwards.

**Table 3.0.1: Actual and Projected Waste Quantities**

WASTE TYPE	TONNES PER ANNUM				
	2004	2005	2006	2007	2008
Household	19796.62	22134.78	29328.22	28840.92	18539.17
Commercial	17691.68	17874.97	16095.29	22150.64	26433.11
Construction and Demolition	12690.92	4594.86	6234.14	5988.48	2729.37
Others	19981.8	21526.33	33,489.19	35625.35	35784.14
Biowaste	0	0	0	1525.88	1674.44
<b>Total</b>	<b>71193.08</b>	<b>66130.94</b>	<b>85146.84</b>	<b>94,131.27</b>	<b>85,160.23</b>

WASTE TYPE	TONNES PER ANNUM				
	2009	2010	2011	2012	2013 – Projected
Household	22356.82	19,140.78	18,335.45	16973.75	16,500
Commercial	12905.46	11,613.86	14,637.36	12065.34	12,000
Construction and Demolition	1202.76	1,192.84	804.43	1667.91	1,500
Others	33288.99	33,117.07	34,936.09	36,828.40	36,500
Biowaste	1,960.91	4,303.09	6,469.91	4282.78	5,500
<b>Total</b>	<b>71,714.94</b>	<b>69,367.64</b>	<b>75,183.24</b>	<b>71,818.18</b>	<b>72,000 projected</b>

## **4. Site Infrastructure and Operations**

### **4.1 Existing Facility & Operations**

This section of the report is designed to give the reader an overview of our facility in relation to how it is set-up, the plant machinery available to us, the facilities on site and our key operational areas. Therefore the infrastructure and set-up of the existing Barna Waste facility is outlined below:-

The site has been continually developed over the past ten years and at the end of the current reporting period was laid out as follows:

- **Site Accommodations:**

- 1) **Canteens** – the staff canteens were significantly upgraded during this reporting period and staff canteens are now located in one central location close to parking and work stations. The canteens have been painted and installed with new electronic equipment, sinks and storage bays as well as changing and toilet facilities adjacent.
- 2) **Administration Offices** – comprises of a weighbridge office adjacent to our two weighbridges supported by a larger administration office building housing administration staff including Facility Manager, Operations Manager, Transport Manager and all Accounts and Sales staff, meeting rooms and archive storage . The main reception area is located within this office.
- 3) **Toilet Facilities** – toilet facilities in place at the front and rear of the facility
- 4) **Changing Facilities** – locker rooms, changing & washing facilities available for all staff on site both in Operations and Administration
- 5) **First Aid Room** – fully stocked first aid room and trained first aiders at the site.

- **Site Infrastructure:**

- Two calibrated weighbridges (weigh in / weight out) system at the entrance of the facility which are equipped with weighbridge software
- The main transfer building incorporates several areas separate areas for:
  - Section 1: NON RECOVERABLE LANDFILL WASTE STORAGE**
  - Section 2: MIXED RECYCLABLES STORAGE (pre-picking station)**
  - Section 3: PICKING STATION**
  - Section 4: BALING AREA**
  - Section 5: WASTE QUARANTINE AREA**
  - Section 6: BACK UP BALING AREA**
  - Section 7: PAPER SHREDDING AREA**
- The transfer building is equipped with adequate floor space to cope with the volume of waste and/or recyclables being handled at the facility. The building is split into two imaginary halves one side which handles the mixed general (non recoverable) waste and the other side of the building is used for managing the recyclable materials. Mixed general waste materials are sorted by hand and grab machine or loading shovel to ensure any materials that can be recovered are salvaged before the load is sent to landfill. In normal circumstances the floor is cleared at the end of each working day.



- Our picking station is equipped at the front end with ballistic separators which pre-sort the material before the manual sorting. Once through the front end of the process material is manually sorted by our operators who use positive and negative picking to sort material by grade. The picking process is supported by a magnet and edicurrent for sorting metal / aluminium. Generally mixed recyclables are the only material type fed through the picking station. Material sorted from the picking station is then baled directly in the adjacent balers.
- Steel and Timber processing areas - steel and timber are processed within the new composting building in separate bays. A member of staff is now designated to process these materials and maintain the machinery on a daily basis. This change has increased the efficiency of the facility greatly. Small amounts of steel and timber are still stored in the main transfer station because they are picked out of mixed deliveries and taken to the appropriate area at the end of each day. These changes have meant that no stockpiles of metal / timber have been allowed to build up on site in normal circumstances and the material is processed on a regular basis.
- End product storage shed – an enclosed building for storing products which are produced via our picking station which keeps them dry and in the best possible condition for selling to potential buyers. Baling wire stock is also kept in this area.
- Maintenance building and maintenance yard for carrying out maintenance work and storing equipment. This section has a full time on site mechanic, fitter and support team. This area is also kitted with a bunded oil storage area for fresh and used oil.
- Civic Amenity Site – located at the front of our facility next to our weighbridge office. The site is staffed during operational hours and allows the segregation of general waste, mixed recyclables, cardboard, glass, timber, stones, metal, clothes, batteries and all types of white goods and electrical items for members of the public.
- Composting Building – for the acceptance and processing of biodegradable material to a European Standard. This process is equipped with fans, scrubbers, curtains, air supplies and mobile plant to ensure composting can be produced at the back end of the facility.
- Wash Bay – this area is used for the washing of all trucks and mobile fleet, mobile plant and machinery within the facility and other equipment (such as bins / skips).
- Dock loading bays – the facility is equipped with loading bays which allow containers to be backed up to the entrance of our storage shed for loading. This has almost halved the loading times of containers at the site and significantly reduced litter at this area of the site
- Newly constructed shed on permitted area of the site which as yet is not in use but a business plan will be developed for this in 2012 and will allow us to create additional space in the current transfer station by relocating something to this new area

This current set-up allows us to accept and process the volumes and types of waste / recycling that we currently collect. The plant and equipment we have in place is adequate to support these processes and we have a good quality support staff in place to ensure our operations are able to be carried out as required. Changes to the facility and new investments are always being considered but the current site is equipped with the technology and equipment we require to manage the materials we have today.

## EMS System

The operation of our facility is supported by our EMS system as required by our EPA licence. The documents within our EMS outline how we carry out our daily operations and contains the forms used to record information from our processes / activities. This system is constantly under review and every document is fully reviewed on at least an annual basis.

**This system is ISO 14001 accredited by the NQA. Barna Waste were audited during 2011 and successfully retained the ISO14001 certification for another year. Details of the audit result are available on request from Barna Waste.**

The following is a list of the names / titles of all procedures and documents used at the facility at the end of 2011. This is included to give the reader of this report an overview of the policies / procedures we use internally and to provide evidence that an adequate and detailed EMS system is in place:

### BARNA WASTE - EMS Contents Listing

1. BW/EMS/001	E.M.S. Manual
2. BW/EMS/002	Environmental Policy
3. BW/EMS/003	I.E.R
4. BW/EMS/004	Document Control Procedure
5. BW/EMS/005	Document Issuance Form
6. BW/EMS/006	Document Review Form
7. BW/EMS/007	Programme Review Form
8. BW/EMS/008	Aspects Register
9. BW/EMS/009	Records Management Procedure
10. BW/EMS/010	Env. Management Rep. Job Description
11. BW/EMS/011	Management Review Schedule
12. BW/EMS/012	Revision History Form
13. BW/EMS/013	Training Course Attendance Record
14. BW/EMS/014	Emergency Preparedness & Response Proc.
15. BW/EMS/015	Communications Procedure
16. BW/EMS/016	Waste Handling & Disposal Procedure
17. BW/EMS/017	Accident Report Form
18. BW/EMS/018	Health and Safety Equipment Issue Form
19. BW/EMS/019	Training Procedure
20. BW/EMS/020	Env. Records Index
21. BW/EMS/021	Employee Env. Feedback Form
22. BW/EMS/022	Approved Supplier Control Procedure
23. BW/EMS/023	OBSOLETE – Approved Supplier List
24. BW/EMS/024	EMS Programme List
25. BW/EMS/025	EMS Programme Management Procedure
26. BW/EMS/026	Emergency Response Team Seniority List
27. BW/EMS/027	Register of Environmental Legislation
(NOTE:- The above document is stored in its own folder)	
28. BW/EMS/028	Register of Legislation Management Proc.
29. BW/EMS/029	EMS Audit Procedure
30. BW/EMS/030	Internal Audit Report Form
31. BW/EMS/031	Non Conformance Form
32. BW/EMS/032	Employee Details Form
33. BW/EMS/033	EMS Audit Schedule
34. BW/EMS/034	Emergency Contacts Listing
35. BW/EMS/035	Safety Statement Declaration Form
36. BW/EMS/036	Internal Environmental Checklist

37. BW/Ops/001	Organisation Chart
38. BW/Ops/002	Monitoring and Recording Schedule
39. BW/Ops/003	Foul Water Discharge Meter Reading Form
40. BW/Ops/004	Waste Inspection Check Sheet
41. BW/Ops/005	Waste Processing Procedure
42. BW/Ops/006	Housekeeping/Nuisance Inspection Procedure
43. BW/Ops/007	Housekeeping/Nuisance Check Sheet
44. BW/Ops/008	General Monitoring Procedure
45. BW/Ops/009	Waste Profiling Form
46. BW/Ops/010	OBSOLETE – Bund Testing Results Form
47. BW/Ops/011	OBSOLETE - Bund Integrity Test Procedure
48. BW/Ops/012	Drainage, Bunds & Interceptor Check Sheet
49. BW/Ops/013	Env. Incident Investigation Form
50. BW/Ops/014	Env. Incident Investigation & Reporting Proc.
51. BW/Ops/015	Env. Complaints Form
52. BW/Ops/016	Env. Non-Compliance Form
53. BW/Ops/017	Env. Non-Compliance Procedure
54. BW/Ops/018	Residuals Management Procedure
55. BW/Ops/019	Incoming Checklist
56. BW/Ops/020	Outgoing Checklist
57. BW/Ops/021	Equipment Maintenance Procedure
58. BW/Ops/022	Equipment Maintenance Schedule/Checklist
59. BW/Ops/023	Picking Station Procedure
60. BW/Ops/024	Obsolete - Boston Scientific Procedure
61. BW/Ops/025	Obsolete - Medtronic AVE Materials Procedure
62. BW/Ops/026	Toolbox Training Document for Forklift Safety
63. BW/Ops/027	BBT Battery Charging (Health and Safety) Procedure
64. BW/Ops/028	Weekly Preoperational Checklist for Excavator Grab
65. BW/Ops/029	Weekly Preoperational Checklist for Forklifts
66. BW/Ops/030	Daily Preoperational Checklist for Loading Shovels
67. BW/Ops/031	BBT Noise Health and Safety Policy
68. BW/Ops/032	Permit to Dig Form
69. BW/Ops/033	Manual Handling Policy Procedure
70. BW/Ops/034	BBT Composting Odour Management Procedure
71. BW/Ops/035	Barna Waste Construction Works Safety Checklist
72. BW/Ops/036	Number to be re-used no document
73. BW/Ops/037	Barna Waste Facility Health and Safety Guidelines
74. BW/Ops/038	OBSOLETE - Barna Waste Fire Drill Guidelines
75. BW/Ops/039	Barna Waste Weekly Fire Equipment Checksheet
76. BW/Ops/040	Barna Waste First Aid Equipment Checklist
77. BW/Ops/041	Barna Waste Weekly Health and Safety Checklist
78. BW/Ops/042	Hot Works Permit Form
79. BW/Ops/043	Hot Works Procedure
80. BW/Ops/044	Machine – Permit to Work Form
81. BW/Ops/045	Still to be used missed in error
82. BW/Ops/046	Health and Safety Records Index
83. BW/Ops/047	Induction List for Visitors to Barna Waste
84. BW/Ops/048	Composting Waste Acceptance Form
85. BW/Ops/049	Compost Processing Procedure
86. BW/TRA/001	Training Versatility Chart
87. BW/TRA/002	BW Induction Process
88. BW/TRA/003	OBSOLETE - Employee Roll Call Listing
89. BW/TRA/004	OBSOLETE - Approved Forklift Drivers Listing
90. BW/TRA/005	Bin Lorry Lifting Equipment Training Procedure
91. BW/TRA/006	Health & Safety Equipment - Ear Muffs Fitting Instructions
92. BW/TRA/007	Health & Safety Equipment - Foam Plugs Fitting Instructions

## 4.2. Plant & Machinery / Road Fleet

This section of the report details the plant and equipment available for use both on site and in relation to the collection of waste / recyclables. The plant and fleet are under constant review to ensure they meet the requirements of our business.

The current plant either in use or available for use on site consists of the following which demonstrates that we have the appropriate back-up equipment in place should any of the day to day equipment we have on site breaks down.

This is the current list of equipment for the end of the 2012 reporting period:-

- 3 x large loading shovels for managing waste in the transfer area
- 2 x mini loading shovels for managing waste in the picking station bays or main transfer station
- 3 x track machine excavators
- 3 x Liebherr grab machines for loading trucks and managing movements of waste
- 1 x Kabelco grab machine
- 3 x forklifts
- 1 x JCB Teletrucks (with clamps for lifting bales)
- 1 x Teleporters
- 2 x Electric Scissor Lift
- 1 x Finger Screener
- 5 x mobile trommels
- 1 x Extec Stone Shredder/Crusher
- 1 x Pre Shredder / Waste Reducing machine
- 1 x Shredder fitted with magnetic separator
- 2 x EXCEL Baler (1 with bottle piercer)
- 1 x Harris Twin-Ram Baler
- 1 x Metal baling machine
- 1 x Paper Shredding machines
- 3 x Picking Station Conveyers and 8 x Material Bunkers
- 4 x Ballistic Separating Machines
- 1 x Mobile road sweeper
- 2 x Fire Engines
- 1 x Diesel Tanker (used to fill all plant / machinery on site)
- 2 x Weighbridges with Computer system and software
- 1 x Power Washing Jetter Van
- 1 x Mobile Power Washer
- 2 x Cherry Pickers
- 1 x Hoist
- 10 x 45ft storage containers
- 1 x Daewoo Clamp Loading Forklift
- 1 x Swarf Metal Baler
- 1 x Compost Turing Mobile Unit

The following is an up to date listing of our road fleet:

- 8 x artic trucks
- 2 x rigid tankers
- 16 x skip lorries
- 7 x hook bin loaders
- 4 x curtainsider collection / delivery vehicles
- 46 x rear end loaders (standard bin lorries)
- 30 x collection delivery vans / jeeps
- 12 x trailers
- 8 x 30m<sup>3</sup> ejector trailers for the transfer of waste
- 1 x sludge treatment tanker / dewatering unit
- 2 x glass collection vehicle
- 2 x food collection vehicle
- Container lift
- Tractor unit with Crane Attachment

The above list of plant / machinery provides us with the equipment to manage our busy waste transfer station and waste collections. The above list of equipment is not in permanent use 100% of the time and some of the equipment acts as backup in times where we suffer breakdowns to ensure where possible there is no impact on production or collections. A Transport Manager is in place to ensure the collection fleet are well maintained and our Operations Manager is responsible for ensuring maintenance and proper use of the machinery within the transfer station. The management team are backed up by an onsite mechanic who repairs most defects in house.

A washing programme for all trucks, machinery and equipment is in place to ensure the appearance of our equipment / fleet is always of a high standard. Only in cases of a serious malfunction would our collections or production be seriously affected. Barna Waste try to invest some of our annual budget each year towards the upgrading of the above list of plant and equipment and this was evident again in 2012. We will continue to implement this policy.

We are comfortable that the above list of machinery / plant is able to manage the volumes of waste we are collecting and processing while providing the appropriate level of backup in the case of breakdown.

### **4.3. Proposed Future Developments**

The Barna Waste Facility in Carrowbrowne has been in an almost constant state of change over the past 10 years. We want the facility to continually develop to meet the demands of our customers and the ever changing legislation that affects us as well as being responsive to new technologies which come onto the market.

#### **2012 Upgrades / Changes**

During this reporting period mainly due to the financial constraints currently being experienced within the industry in general limited work was done in relation to upgrading of the facility.

The main piece of work took place within our composting facility with the construction of a new entrance and delivery ramp, the permanent concrete wall being built to segregate clean and dirty areas and the splitting of the pasteurisation bunker into two separate bunkers to aid the processing of the material at the back end. This work was successfully completed and has been approved by the Department of Agriculture. This work allowed for the re-opening of our composting facility in Q4.

The other major piece of work undertaken was in relation to the area out with our licence boundary where a new shed was constructed. The construction of this shed is complete however surrounding areas remain unfinished and therefore this building is currently not ready for use. Once construction around the building is finished the plan is to have this area integrated into our EPA Waste Licence at some stage during the new reporting period. A defined use for this building has yet to be finalised and will be advised to the Agency in due course.

In relation to construction that completes the summary for this reporting period. A lot of time was spent during 2012 maintaining all the equipment, buildings and hardstand areas that already existed around the site and that will continue into 2013. Significant construction or changes to the facility are not envisaged until such times as the financial situation allows us to do so.

#### **2013 Proposed Developments**

During the next 12 months we have no significant plans to make changes to the facility or carry out major construction work. The priority will continue to be that we maintain on a regular basis all the plant, equipment, buildings and hardstand that currently exist at the site. This will help us continue to operate at a high level without the need to invest in construction activities.

There is a plan to invest some money into the picking process during 2013 and that will be planned for Q3 or Q4 with a goal of increasing the throughput capacity without increasing staff numbers or reducing the quality of the product being produced. The exact detail of this work is not yet available and will be finalised with our Engineers nearer the time. The Agency will be advised of these changes in advance of them being implemented.

In addition we will revisit a project that we had hoped to make progress on through 2012 but due to investment in other priorities we did not complete the project. During this reporting period we have invested in a new baler which includes a wrapper. This machine has been commissioned on site and is almost ready to start producing material. We are in the process of finalising a deal with a company in Europe who produce energy from waste with a view to shipping trial material during the second half of 2013.

Firstly we must finalise a contract and then finalise the internal process by adding a trommel and some magnets to the front end of the baling process to ensure the material meets the requirements for export. This entire process is hoped to be finalised in Q1 of 2013 and sent for approval to the Agency before the end of Q1 also. Assuming the process can be successfully approved this will allow us to export large amounts of waste for recovery instead of disposal within this country before the end of 2013. Getting this process approved and running successfully will be a priority for early 2013 and if key to the future success of our company. The Management of Barna Waste recognise in order to meet our environmental targets it is essential to have a process in place to treat landfill waste and find alternate, more sustainable, affordable and environmentally friendly outlets for this material.

No other upgrades to the site facilities, amenities, plant or machinery are planned at the time of writing this report.

The Agency will be provided with updates on these projects as they develop throughout 2013.

## **5. Incidents and Complaints Summary**

All environmental incidents and complaints are documented through the Environmental Management System (EMS) procedures on the following documents:

- Environmental Complaints Form (BW-OPS-015)
- Environmental Incidents Form (BW-OPS-013)

Any environmental non-compliances are recorded and documented by the EPA via audits / site visits and are the responsibility of the Management Team to fix and ensure the appropriate corrective and preventive actions are put in place.

Internal audits are also carried out as part of our ISO 14001 certification and continual improvement plans. Internal audits are carried out by the Facility Manager who is qualified to conduct them. Results of these are recorded on:

- Environmental Non-Compliances Form (BW-OPS-016)

All results are on file and available for review via the Facility Manager.

All documented Complaints, Incidents or Non Compliances are recorded and kept on file as part of the EMS System and a file maintained of all open and closed records. Any complaints received will immediately be assigned to a member of the management team to find a solution / corrective action. They will be taken seriously and dealt with as a priority.

In relation to the 2012 AER we can confirm the following:-

- **There were no reported complaints received by the EPA or Barna Waste directly during 2012 in relation to our facility.**
- **There were no recorded or reported environmental incidents during the reporting period and therefore we have nothing to detail in this section of the report.**

## **6. Nuisance and Emission Controls**

Nuisance inspections are carried out on a daily basis by the Facility Manager or a delegate. Results are logged and are available for review at all times. These nuisance checks verify that there are no issues at the facility with regards to vermin, birds, flies, dust, housekeeping or odours.

In relation to the 2012 results for nuisance checks there are no major issues to report. Reports were carried out as required on a daily basis giving a full and comprehensive set of results to review. On individual days there were obviously issues logged that were reported to Management and fixed but these were normal minor issues that were fixed on the same day and did not need any serious action to be taken.

The Agency did record an observation in their annual inspection of the site requesting that a change be made in the way that housekeeping is recorded on the nuisance inspection form. To date the term 'ongoing work' has been used to describe housekeeping at the facility because as a company we felt that was the best way to describe the situation reflecting that work was being done but that housekeeping could always be improved. In light of these comments moving into 2013 this will be changed and specific areas of the site will be mentioned on a daily basis to better reflect exactly what concerns the person carrying out the inspection had.

In relation to vermin: nuisance checks did not show up any problem and this is backed up by the full set on annual results carried out by our third party contractor Ecolab which confirm vermin at the site is not a problem. Levels of activity in relation to vermin vary throughout the year and can be affected by various elements such as weather, amount of stock on site, hours of operation etc but we never had an issues during this reporting period where rats or any type of vermin were a problem at the facility.

A daily road sweeping programme is in place to ensure external dust does not accumulate in periods of dry weather and daily nuisance checks confirmed this programme was very successful in controlling and maintaining dust levels at the site. The road sweeping works in conjunction with our internal dust misting system to ensure dust is kept to a minimum level at all times.

We had no issues during 2012 in relation to odours at the facility and this was to be expected as we were not accepting or processing any food waste through our composting facility. General waste is moved normally within 24 hours and the rest of the material on site is clean recycling meaning that smell / odour from the facility would be a very rare and unusual occurrence. We will monitor this very closely during 2013 once the composting facility is back up and running and we have controls in place to ensure odour remains under control at the facility.

Overall nuisance check results for 2012 were positive and brought nothing major to light but we do recognise the need to implement the changed requested by the Agency in relation to housekeeping for the new reporting period.

Nuisance checks will continue on a daily basis throughout 2013 with results being logged and made available for inspection.

In relation to emission controls the processing areas are enclosed in most areas with the exception of the main transfer building but no waste processing is carried out in the immediate area adjacent to the open area. The enclosed nature of our processes ensures that emissions are kept to a minimum.



The dust misting system in the timber processing area, the dust pumps working in the external areas of the site and the daily road sweeping programme ensure that dust on site is not an issue. Noise from our processes has never been an issue and that continues to be the case. Emissions from our composting process are controlled and managed via the scrubbers and fans within that process. Water emissions to the adjacent stream were clean both upstream and downstream and therefore we have no major concerns at the site in relation to emission controls but will continue to monitor these vigilantly during 2013.

## **7. Environmental Monitoring**

The required monitoring programme at the Barna Waste Facility is set out in Schedule E of the Waste Licence. The reporting frequencies of reporting environmental monitoring data are indicated in Schedule C and D. The following monitoring was carried out for the reporting period:

- Surface & Foul Water Monitoring (carried out by Complete Lab Solutions) on the 30/03/2012
- Surface & Foul Water Monitoring (carried out by Complete Lab Solutions) on the 17/05/2012
- Surface & Foul Water Monitoring (carried out by Complete Lab Solutions) on the 20/07/2012
- Surface & Foul Water Monitoring (carried out by Complete Lab Solutions) on the 16/11/2012
- Dust Monitoring (carried out by Emerald Environmental Services) in periods 16/05/2012 to 15/06/2012, 18/07/2012 to 20/08/2012 and 20/08/2012 to 17/09/2012. Dust pots were left on site and lids taken away by contractor for a period of approximately 30 days as required by our licence.
- Noise Monitoring (carried out by Complete Laboratory Solutions) on 18/05/2012

All monitoring was carried out as per the requirements of our EPA waste licence.

Complete Lab Solutions are employed as part of the Environmental Management Team to carry out and report on the Surface and Foul Water monitoring and for the 2012 monitoring also took over the Noise Monitoring programme following a tender process run internally. We have on file all the relevant names and qualifications held by the people carrying out the testing on our behalf.

Emerald Environmental Services are employed as part of the Environmental Management Team to carry out and report on Dust levels at our site. We have on file all the relevant names and qualifications held by the people carrying out the testing on our behalf.

The selection and appointment of contractors to carry out these duties is awarded based on a tender programme being carried out each year. Up to 10 companies are invited to submit quotations and proposals for the environmental monitoring and Barna Waste review the tenders in relation to price and the ability to carry out the work required, willingness to provide the detail and structure of reporting we require and on reputation within the field.

The tender is coordinated by the Facility Manager and he makes the decision on the awarding of the contracts. Barna Waste recognise the importance of appointing the best possible contractor to ensure the environmental monitoring programme is carried out on schedule using the proper equipment / methods and that the reports supplied for submission to the EPA are of a high standard.

Complete Laboratory Solutions will continue to monitor our facility during 2013 as they have just been successful in the new tender for work.

## **7.1. Summary of Surface and Foul Water Results**

### Water Monitoring – Annual Summary

All surface and foul water monitoring was carried as per the schedule set out in EPA licence WL106-2 for 2012. The Agency have raised a concern in their recent annual audit that results must be turned around quicker moving into the new reporting period. A meeting has been hold with Complete Laboratory Solutions to this effect to ensure results are turned around very quickly during 2013.

In relation to this reporting period the dates of the collection of the samples are as listed above. In addition to this schedule the Agency also take their own samples at periodic times during the year.

Our main areas of concern in relation to water emissions would be the water that discharges from our site to the stream at the back of our facility. This waterway is a public waterway which is home to fish and other wildlife and many plants which must be protected and therefore emissions in this area are monitored closest. The sample at location SD1 is taken in the middle of our site at a collection point just before the water enters the stream and then monitoring points SW1 and SW2 are upstream and downstream of our site and samples are taken directly from the stream water itself.

In relation to critical locations at SW1 and SW2 for 2012 there were no problems to report in the readings taken at either of these locations and results were of no concern. No contamination was evident in the water readings and no trigger levels within the licence were breached and that would suggest no issues arising from our facility in relation to our water emissions.

Visual checks of the stream continue to be carried out diligently at the stream on a daily basis to check for visual evidence of contamination, dead plants, dead fish etc and these visual checks also showed no sign of any contamination in the stream water. No chemicals, oils, litter or any type of contamination you would associate with our facility were evident in any of the stream samples.

Overall all results for locations SW1 and SW2 for this reporting period were within specification.

In relation to monitoring location SD1 as during 2011 & 2012 the reports did show issues in relation to monitoring point SD1. These samples as always are taken directly from the underground pipe at monitoring point SD1 located just before the water goes into the stream at the back of the facility and after it passes through our oil interceptor. All four quarterly reports show levels of mineral oil being detected in the pipe at location SD1. As per findings for previous years the same comments apply for this reporting period. The area is monitored visually during every work day without fail to check for visible signs of oil or other similar products and the oil has not ever been visible in the pipe or in the samples taken from the pipe in the collection bottles, no discoloration of the sample or scum in the collection bottle . The oil interceptor has been checked and thoroughly cleaned internally again during the past 12 months and no issues were found with the functionality of the interceptor.

As a precautionary measure during 2010 we took the step of surrounding the pipe which discharges this water to the stream with a water boom / bund to ensure any traces of oil that do escape the pipe are contained in the immediate area outside of the pipe and can be identified during the daily visual checks. This boom / bund is replaced at regular intervals to ensure its effectiveness is maintained at the highest possible level. The visual checks of this area are carried out on a daily basis morning, to check the quality of the water and no visual evidence has EVER been apparent to suggest oil was leaking into the stream. No discoloration, scum or trace of any oil like substance has ever been apparent in the water and this area is shown to the EPA when they visit the site and they can verify this to be the case.

In addition to bunding the area we invested some money during 2010 asking Complete Laboratory Solutions to carry out a check on the results at this location (SD1) to see if further in depth analysis would shed any light on possible causes. The results of this investigation into SD1 were communicated to us in May of 2010. The findings were summarised as follows: “The results have been reviewed back to May 2009 for Mineral Oil. The extractable hydrocarbons C8 to C14 range from 168 to 962 ug/l (parts per billion) which is carried out initially prior to reporting mineral oil. There is similar hydrocarbon pattern which usually repeats for each time point. Interpretation indicates an unknown pattern. It is unlikely that the pattern is petroleum related which rules out products such as kerosene, JA1, white spirits, diesel, gasoil, HFO and lube oils. Finally the mineral oil result, although extremely low in part per billion is caused by extractable hydrocarbons which are unknown and unlikely to be petroleum related”.

To further investigate and try to find an answer during 2011 we also carried out an underground check of drains, tanks to ensure, especially in this area, there was nothing in the pipe further back from this location that potentially could be causing a problem away from what is visible at ground level. This independent survey was carried out on the full drainage network at the site and again showed no issues in this area that would lead to an issue where mineral oil is being detected in the sample.

The EPA’s own monitoring team have taken samples on a regular basis since 2010 for this location and there samples have never even shown any traces of mineral oil at this location.

All of the above investigations have confirmed for us that even though oil had been detected in the results by Complete Laboratory Solutions it was not likely to be caused by any of the materials or products that could possibly have been coming from our site drains and that our oil interceptor was doing its job successfully. Since visual checks show no visual trace of oil we can only assume that the results are from something within the water itself possibly the volume of plant life or water running off the adjacent bog land. Upstream and downstream monitoring results support the theory there is no cause for concern in this area. Having done everything possible to find a cause and having the results of the 2010 investigation to support us we are positive these results are not as a result of our own emissions. We will be diligent and continue to monitor the area on a daily basis until such times as results show an improvement.

Outside of the mineral oil being detected during Q2 we exceeded the trigger levels in our licence at location SD1 for BOD and Suspended Solids and in Q3 for Suspended Solids only. BOD levels were 176mg/l and Suspended Solids came in at 45mg/l for Q2 and 42mg/l for Q3 and these should have been reported to the Agency as incidents but were overlooked in the report in error. This was highlighted during our annual site audit and will be rectified for any future incidents. Results for Q4 were back under the trigger levels of the licence. These parameters will be monitored and focused on much more vigilantly during the new reporting period to ensure the trigger levels are not exceeded and if they are that an incident investigation is set-up immediately through the Agencies ALDER reporting system.

The other water monitoring point is at location FW1 where our foul water is discharged. There are no major concerns as this water is discharged directly to the adjacent leachate treatment lagoon operated by Galway City Council in the redundant landfill site and the water is treated before being discharged.

In Q1, Q2 results at this location showed no exceedance of any parameters outlined in our EPA licence and all results were within specification. During Q3 and Q4 the limit of our licence for fats, oils and greases is 100mg/l and the sample taken showed a level of 111mg/l (Q3) and 121mg/l (Q4). This was only slightly over the licence limit and we confirmed that during sampling on both occasions the wash bay was in operation and this was more than likely the cause of the exceedance in this area. The wash bay normally operates for a couple of hours per day but during both weeks these samples were taken the bay had been working full time to clean second hand bins. This was the only deviation from normal procedures that could have caused this problem. This will be watched closely during Q1 2013 results to ensure now that the wash bay is working strictly on a 2 hour per day basis that this issued has been resolved.

## **7.2. Summary of Dust Monitoring Results**

### Dust Monitoring – Annual Summary

Dust monitoring was carried out on the dates listed above during 2012. The frequency and number of samples were all carried out as per the requirements of our EPA licence WL106-2.

To assist with dust management on site we are equipped with a modern dust misting system in our timber processing area which is the major source of dust at the site and in our main transfer area close to the picking station. In addition during periods of dry weather we use our water pumps which dose the roads at the site with water to ensure traffic does not rise and spread dust. Finally we operate a daily road sweeping programme at the site which is managed by our Operations Manager which results in the main areas of the site being swept on a daily basis using our road sweeper. We hoped that these changes introduced in the first half of 2010 would have a positive effect when dust monitoring was carried out over the summer months. Monitoring results that came back to us for 2010 and 2011 were excellent and demonstrated that the work we carried to improve dust controls had made a significant impact on the dust levels at the site in a positive manner.

Moving into this reporting period we maintained the same level of focus and control on our dust management procedures. All dust results at all monitoring locations namely D1, D2, D3 and D4 were within specification for all three periods they were sampled even during the summer months of dry weather. As a result no corrective actions were required. Dust is no longer a major area of concern at the site but we will continue with our maintenance programmes at the site to ensure low levels of dust are maintained.

### Dust Monitoring – MAY / JUNE 2012

Dust Monitoring was carried out by Emerald Environmental for this period and dust pots were left in the stands on 16/05/2012 and collected again on 15/06/2012. Pots were left in stands at the monitoring locations and lids were removed and taken away by EE. Results for this period at all locations D1, D2, D3 and D4 were within specification with the highest level of dust recorded at location D4 of 65 mg/sqm/day which is well within the licence limit of 350. As a result no investigation / corrective action was required. Programmes of daily road sweeping, switching on of dust pumps and the misting system within the timber processing area will continue to be followed on a daily basis to maintain dust at these levels.

## Dust Monitoring – JULY / AUGUST 2012

Dust Monitoring was carried out by Emerald Environmental for this period and dust pots were left in the stands on 18/07/2012 and collected again on 20/08/2012. Pots were left in stands at the monitoring locations and lids were removed and taken away by EE. Results for this period at all locations D1, D2, D3 and D4 were within specification with the highest level of dust recorded at locations D3 & D4 of 342 mg/sqm/day and 281 mg/sqm/day which are both within the licence limit of 350. As a result no investigation / corrective action was required. Programmes of daily road sweeping, switching on of dust pumps and the misting system within the timber processing area will continue to be followed on a daily basis to maintain dust at these levels.

## Dust Monitoring – AUGUST / SEPTEMBER 2012

Dust Monitoring was carried out by Emerald Environmental for this period and dust pots were left in the stands on 20/08/2012 and collected again on 17/09/2012. Pots were left in stands at the monitoring locations and lids were removed and taken away by EE. Results for this period at all locations D1, D2, D3 and D4 were within specification with the highest level of dust recorded at location D2 of 174 mg/sqm/day which is well within the licence limit of 350. As a result no investigation / corrective action was required. Programmes of daily road sweeping, switching on of dust pumps and the misting system within the timber processing area will continue to be followed on a daily basis to maintain dust at these levels.

### **7.3. Summary of Noise Monitoring Results**

#### Noise Monitoring Results – Annual

Noise Monitoring was carried out by a new contractor Emerald Environmental Services as per the requirements of EPA licence WL106-2. This year's survey was carried out on 18<sup>th</sup> May 2012. As required by the licence we monitored noise levels at two sensitive locations one on the site boundary nearest the major processing area and the second at the nearest residence to our facility. Locations are known as N1 and N2. Our licence limit for noise levels is set at 55 dB(A)Laeq.

We can confirm there have been no issues or complaints regarding noise at our facility during the past year and our Health & Safety Manager is also happy with noise levels during day to day operations. Overall we are comfortable with the results reported and that we are having no impact on our employees or immediate neighbours in relation to noise despite the results taken adjacent to the transfer station being slightly over the licence limit and believe the results reflect the 'worst case scenario' given the location of the monitoring point. Given the location of the monitoring point and the location of the nearest sensitive location our conclusion is that no corrective action is required at this time. An independent consultants report carried out by our H&S Manager shows that ear protection on site is deemed to be optional and the lowest standard required (ie. ear plugs as opposed to ear muffs) and this re-enforces our opinion that noise levels both on site and in the surrounding areas are not an issue.

Readings at location N2 which is located adjacent to our nearest permanent residence show no evidence of noise from our site causing nuisance to the local residents and the only influencing noise at this location was traffic on the adjacent main Galway to Headford road. It is vitally important for our business that we do not affect the local environment in any way and this is a positive result in relation to noise levels.

Readings at location N1 on site show readings to be higher than the licenced limit and this has been attributed either to moving vehicles on site or to the leachate treatment lagoon operating at full capacity adjacent to the monitoring point. Further investigation would determine the exact cause but either way the noise level is of no concern to any local resident or adjacent businesses, our employees or customers.

In addition to licence monitoring on noise our Health & Safety Manager monitors noise levels on a regular basis to ensure we have a safe working environment for our employees and customers.

In summary / conclusion the following comment made previously by one of our independent contractor based on the results: “it can be determined that the operation of the waste transfer facility is not having any substantial negative effect on the nearest sensitive receptors. Although one of the measurements made were above the contractual limits, this was closest to the major on site activity areas and the nearest sensitive receptor was below the licence limit”.

#### **7.4. Incident Reporting**

The Agency highlighted during their recent site audit in December 2012 that any exceedance of trigger levels or limits set in the waste licence should be notified to the Agency through it's incident reporting process and not through written communications as had been carried out in the passed. Barna Waste have acknowledged misunderstanding this requirement and although results were submitted to the Agency no incidents had been raised.

The Facility Manager in Barna Waste will be responsible for notifying incidents to the Agency during 2013 and this process will be followed as required moving forward.

All monitoring results are available for review in full from Barna Waste.

#### **7.5. Compost Monitoring Results**

As a requirement of EPA Licence WL106-2 we are required to monitor the performance of our scrubbers and keep records of these for review. Our Composting Manager monitors the process and logs the results. Due to there being no activity in the compost building during this reporting period there are no results to report in this years AER.

#### **7.6. Monitoring Locations**

A map of the monitoring locations at the site is attached as an appendix to this report.

#### **8.0. Foul Water Discharge**

As required by schedule G of our EPA waste licence this section details the foul water emission levels for the current reporting period. Readings of foul water emissions are taken on a daily basis by the Facility Manager and results are logged and kept on file. Details of the volumes of surface water discharged during the reporting period are below.

**Total wastewater discharged via FW1 for 2012 (approximately): 734,428 litres**

These results are available for review on request and are recorded on a daily basis.

## 9. Resource and Energy Consumption Summary

The main resources consumed at the facility during the reporting period were electricity, diesel fuel and water. A summary of the significant resources consumed are tabulated below with a summary of the principal resource consumption.

**Table 9.1: Principal Areas of Resource Consumption**

Area of Use	Purpose	Principal Resource Consumed
Site Plant	Moving and processing of wastes and our fleet of on the road vehicles used for the collection and disposal of waste	Diesel, hydraulic oils
Site Operations	Road sweeper for maintenance of road surfaces and wash bay hose for washing bins, trucks	Water
Odour Controls	Used on an as required basis if any odours are detected at the facility	Chemical – diluted with water
Offices	Administration & Management of the facility usage of electricity for computers, phones etc	Electricity

**Table 9.2: Usage of Energy and Resources, 1<sup>st</sup> January 2011 – 31<sup>st</sup> December 2011**

Resource	Consumption for Reporting Period
<b>Site Management</b>	
Odour Control Chemicals	Approximately 60 litres
Electricity	2012: 1,695,879 (KW) 2011: 1,590,165 (KW) 2010: 1,327,372 (KW) 2009: 1,392,552 (KW) 2008: 1,304,972 (KW) 2007: 817,982 (KW) 2006: 71,689 (KW) 2005: 117,174 (KW) 2004: 120,900 (KW)
Diesel Fuel	1,675,450 (litres approx) including our fleet of on the road vehicles and on site plant / equipment
Hydraulic Oils	10,500 (litres approx)

## **10. Tank, Pipeline and Bund Testing and Inspection Report**

The underground drainage and tank network was surveyed during the last reporting period (2011) as per the requirement of our licence and requested by the EPA due to the readings of oil in the pipe at monitoring location SD1. This work was carried out during Q1 of 2011.

The report concluded that the site drainage and tanks were overall in a good condition and no immediate actions were necessary throughout the site. Some minor intrusions on pipelines were found but no cracks or leaks and they have recommended in the report a timeframe for the repair of the intrusions but as stated none were deemed as requiring action immediately. All actions are medium to long term and we will action as appropriate as recommended in the report.

Full copies of the report and DVD are on file and available from the Facility Manager on site.

## **11. Financial Provision for the Facility**

Financial provision for the company is outlined in our Environmental Liabilities Risk Assessment report which was prepared by Tobin Consulting Engineers. This was submitted and accepted by the EPA. There were no changes to the Financial Provision of the site during this reporting period.

During a recent audit of the facility the Agency have asked for this provision to be reviewed and that process will be carried out during Q1 of 2013 and submitted to the Agency for review / approval.

## **12. Management Structure at the Facility**

An up to date company organisation chart is included in the company EMS system and a current copy is attached to this report as an appendix as required by our licence.

During 2012 there was a significant change to the Management Structure of the company which resulted in an external consultancy firm being hired to assist with the strategy and structure of the company during the current tough financial climate. Sean Curran continues to own and operate the company and he is working alongside the consultants at the top level of the company on a daily basis to implement the required plan. A new Financial Controller and HR Manager were other significant changes during 2012 and these have all been reflected in the organisation chart attached to this report.

We believe the structure we have in place to be adequate for running an operation of this size and we have Managers in place responsible for all key areas of the business. All members of the Management Team play an important role in the decision making at the company at that is even more important during these tough financial times.

Any major changes in the Management Structure at the site will be advised to the agency immediately.



### **13. Public Information / Site Visits**

All official records kept by Barna Waste under the terms of our EPA licence or in relation to any of our activities from either the collection service or at the transfer station are available to any member of the public on request from our offices.

The Facility Manager is the contact person for any requests for information in relation to company records.

All reasonable requests by the public or any other interested party for information will be answered as a priority.

Barna Waste also operate an 'open door policy' in relation to our site and all customers, partners, members of the public or any interested party are welcome to visit our facility by arrangement to tour the facilities, carry out inspections or get answers to any issues they may have in relation to our operations / activities.

### **14. Environmental Management Plan & Targets / Objectives**

It is the purpose of the Environmental Management Plan (EMP) to set out the procedures necessary to meet the licence conditions. Specifically, the EMP is designed to:

- 1) Detail the methods by which the objectives and targets will be achieved in the coming year and the designation of responsibility for targets
- 2) Any other items required by written guidance issued by the agency

Barna Waste have produced a new EMP for 2013 which is a combined document along with our Schedule of Targets and Objectives. These updates are being submitted to the EPA alongside this Annual Environmental Report. The EMP details clearly the progress Barna Waste has made in all areas during this reporting period and outlines the major tasks ahead during the new reporting period.

This will show the Agency or reader of the document what progress was made in key elements of the business over the past 12 months and what targets have been set out for the next 12 months as a priority. Long term goals for the next five years are also included to ensure the long term progress of the company in relation to our products, services and the legislation we are governed by.

For EMP and Schedule of Targets & Objectives refer to appendix C.

## **15. AER / PRTR Emissions Data for 2012**

The EPA requires Barna Waste to complete an annual return called an AER / PRTR Emissions Data report where we declare both emissions data from our facility for the reporting period and declare tonnages of waste received at our facility. The tonnage data is already included in full in section two of this report.

This report is to be included in the company's full AER for the reporting period starting from 2008 onwards and therefore a full copy of the 2012 AER / PRTR Emissions Report Database will be completed before end of March 2012 as required.

The AER / PRTR will be included in this report as appendix D.

## **16. Full PDF AER**

The EPA's new reporting requirements introduced for 2008 have been designed to ensure public access to information is improved and therefore a full copy of this AER in PDF format will be updated to the Agency website as soon as the full report including the AER / PRTR is included which will be before end March 2013 as required by the Agency.

Access to the PDF version of the full report will then be available via the EPA website or on request directly to Barna Waste.

### **Final Comments**

This year's Annual Environmental Report has been compiled in the same format as previous years to keep it consistent. All figures and updates quoted are specifically for the 2012 reporting period unless otherwise stated in the particular section of the report. All information listed in schedule G of our EPA Waste Licence WL106-2 has been included somewhere in this report.

The intention of this report is to give the reader a detailed outline of the activities carried out by Barna Waste during 2012 in all areas of the business. We believe the report in its current format achieves this successfully. However Barna Waste welcomes constructive feedback on this report from any source and will endeavour to make any changes requested by customers, the Agency or members of the public in order to improve the reports for future submissions.

Updates on any of Barna Waste's activities are available at anytime during the year from our main offices in Carrowbrowne. Contact should be made with the Facility Manager.

A full copy of this report will also be made available on request to any person who requests it and as stated above will be made available in full in a downloadable format from the Agency website before end of March 2013.

## **Appendices**

The following documents have been requested by the Agency and are attached to this document and form part of the final report:

<b>Appendix A:</b>	Company Organisation Chart
<b>Appendix B:</b>	Map of site monitoring locations
<b>Appendix C:</b>	EMP & Schedule of Targets and Objectives
<b>Appendix D:</b>	AER / PRTR Workbook for 2012

## **Next Submission**

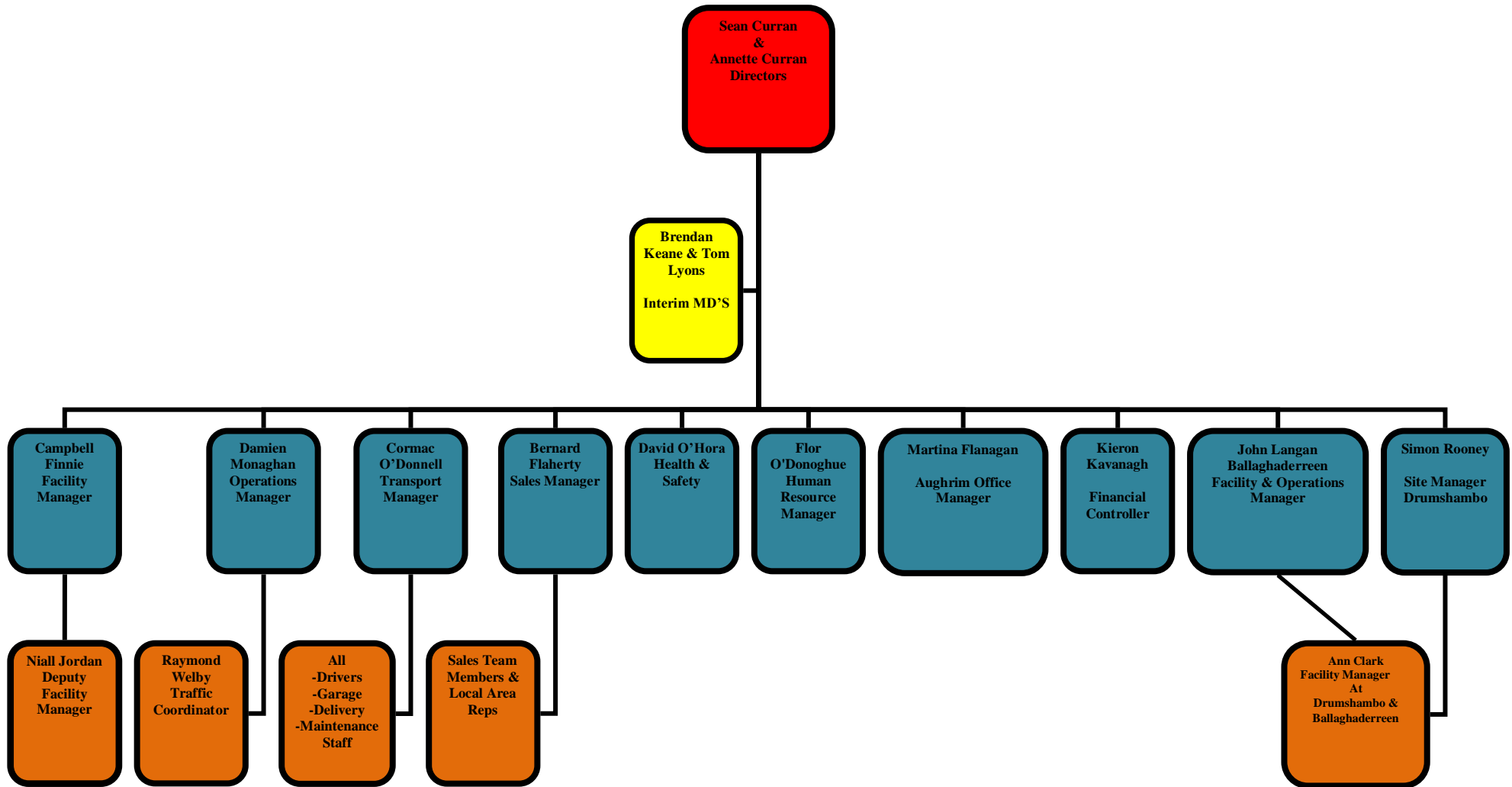
The next submission of this report is due on 31<sup>st</sup> January 2014 and it will be in the new format being adopted by the EPA.

## **Contacts**

Any issues, questions or requests for additional information with regards to this report can be requested from Campbell Finnie (Facility Manager).

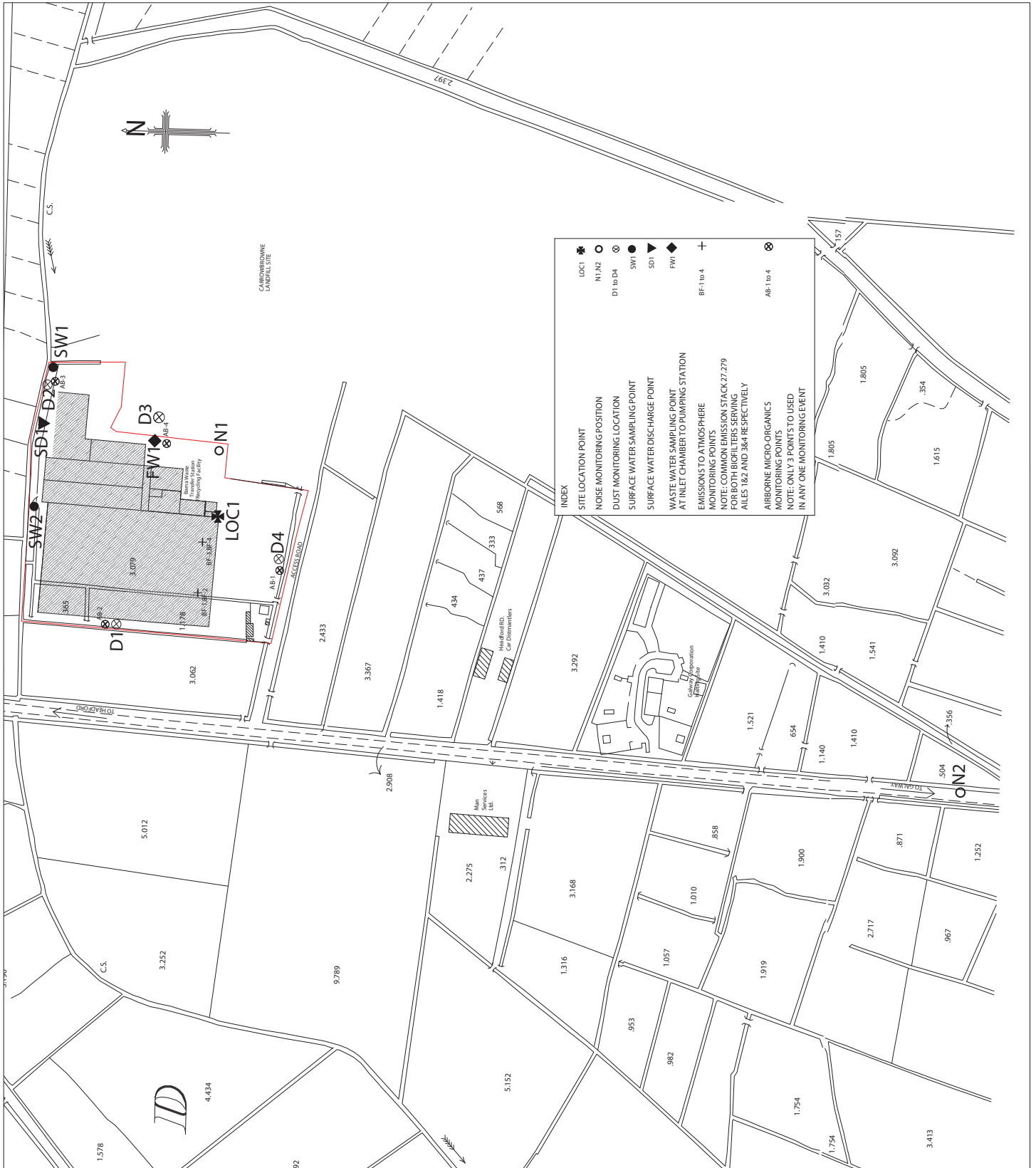
APPENDIX  
A

COMPANY ORGANISATION CHART



**APPENDIX  
B**

**SITE MONITORING LOCATIONS**




**INDEX**

LOC1	SITE LOCATION POINT
N1, N2	NOISE MONITORING POSITION
D1 to D4	DUST MONITORING LOCATION
SW1	SURFACE WATER SAMPLING POINT
SD1	SURFACE WATER DISCHARGE POINT
FW	WASTE WATER SAMPLING POINT AT INLET CHAMBER TO PUMPING STATION
BF-1 to 4	EMISSIONS TO ATMOSPHERE MONITORING POINTS
AB-1 to 4	MONITORING POINTS FOR AIRBORNE MICRO-ORGANISMS

NOTE: COMMON EMISSION STACK 27.279 FOR BOTH BOILERS SERVING AILES 182 AND 384 RESPECTIVELY

NOTE: ONLY 3 POINTS TO BE USED IN ANY ONE MONITORING EVENT

Issue	Date	Des	By	CHK
A	July 2005	Issued to EPA	K.G.	E.B.P.

Client: <b>BARNA WASTE LTD.</b>	Prepared by: <b>K.G.</b>	 Consulting, Civil and Structural Engineers, Fairgreen House, Fairgreen Road, Galway, Ireland. Tel: +353-(0)91-565211 Fax: +353-(0)91-565398 e-mail: info@tobin.ie www.tobin.ie	Issue: <b>A</b>
Project: <b>Recycling depot &amp; composting plant Carrowbrowne, Co. Galway</b>	Checked: <b>E.M.P.</b>		
Date: <b>JULY 2005</b>	Project Director: <b>J.P. KELLY</b>	Drawing No.: <b>1015-6001</b>	
Title: <b>LOCATION OF MONITORING POINTS</b>	Scale: <b>@ A2: 1:2000</b>		

## **APPENDIX C**

### **EMP & Schedule of Targets / Objectives for 2012**



# Schedule of Targets and Objectives & Environmental Management Plan 2012 / 2013

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## Submitted January 2013

WASTE LICENCE  
REGISTRATION NO: WL106-2

LICENSEE: **BRUSCAR BHEARNA TEORANTA  
(BARNNA WASTE)**

LOCATION OF ACTIVITY: **CARROWBROWNE,  
HEADFORD ROAD,  
CO. GALWAY.**

ATTENTION: **MICHELLE McKIMM  
EPA - Office of Environmental Enforcement  
CASTLEBAR OFFICE**

PREPARED BY: **MR. CAMPBELL FINNIE  
(Barna Waste)**

CONTRIBUTIONS FROM: **MR. SEAN CURRAN  
(Managing Director/Facility Manager)  
MR.CORMAC O'DONNELL  
(Transport Manager)  
MR. DAMIEN MONAGHAN  
(Operations Manager)  
MR DAVID O'HORA  
(Health & Safety Manager)  
MR. NIALL JORDAN  
(Deputy Facility Manager)  
MR. BERNARD FLAHERTY  
(Sales Manager)**



## **INTRODUCTION**

As a requirement of Waste Licence WL106-2 Barna Waste requires to have available a Schedule of Targets and Objectives as stated in condition 2.3.2 of our Waste Licence which states:-

*“The objectives shall be specific and measurable. The Schedule shall address a five year period as a minimum. The schedule shall include a time scale for achieving the objectives and targets and shall comply with any other written guidance issued by the Agency.”*

This report was initially submitted on 18<sup>th</sup> December 2001 and has been updated on an annual basis since then.

The submission for 2013 has been kept consistent in format with previous submissions.

## SECTION 1: Update on current list of Targets and Objectives

The next few pages of the report detail the Targets and Objectives that were set out by the company for 2012 and provides updates in detail as to exactly what actual progress was made for each action during the year and whether we achieved the targets or not:-

<b>TARGET / OBJECTIVE</b>	<b>Owner</b>	<b>Completion Target</b>	<b>Update</b>	<b>Update</b>
EMS system - continue the review and development of the EMS system ensuring all departments processes and procedures are included and that ISO 14001 accreditation is maintained in 2012	Facility Manager	Q4 2012	ISO 14001 is fully up to date and the company maintained it's ISO 14001 accreditation via an audit in October 2012	COMPLETE
Production – fully implement the new swarf briquetting machine into our production and identify good sustainable markets for the end product	Operations Manager Facility Manager	Q1 2012	This machine is fully operational and producing briquettes from the industrial swarf we collect	COMPLETE
Site infrastructure – make changes to the redundant area between both transfer stations and transform into an employee walkway to allow safer and better access to the canteens / toilets	Operations Manager Facility Manager	Q1 2012	This walkway is now in place and used by staff on a daily basis	COMPLETE
Site Visits / Tours – introduce the visits / tours to the site by local schools to increase promotion of the site and recycling i	Facility Manager	Q1 2012	The company successfully hosted several school and college visits during 2012 and actively encourage visitors	COMPLETE
Security – improve security measures on site by introducing site patrols ‘through the night’ during non operational hours. This should cover all areas of the site	Facility Manager Operations Manager	Q1 2012	Security staff now patrol the site on an hourly basis and scan at pre-determined points on site to show the patrols are actually carried out	COMPLETE

Training – carry out cross training on all areas of the compost to ensure proper trained ‘team’ of people is in place for this area	Composting Manager Operations Manager	Q2 2012	Two dedicated and trained operators are now in place within the composting building	COMPLETE
Marketing – carefully plan and utilise a full advertising campaign that fully promotes our products / services in the right geographical areas	Management Team	Q2 2012	During 2012 the company hired a marketing executive and the marketing programme for the company is in place. It was introduced during 2012 & will continue in 2013.	STARTED & ONGOING
Site Entrance – review the rise / drop off at the front end of weighbridge in and the back end of weighbridge out and even out the surface to improve access for vehicles coming in and going out of the site	Managing Director	Q4 2012	New concrete was laid in this area during the past year. Due to the volume of traffic and the surface in this area it is likely this work will have to be done on an annual basis but it was resolved for 2012.	COMPLETE
New site entrance – complete upgrades and changes to allow a new entrance to be opened giving access directly to the administration offices at the site without having to come through the transfer station	Managing Director	Q3 2012	This project was only partially completed and will be completed fully during 2013.	STARTED & ONGOING
Civic Amenity Site - continue to develop the civic amenity site via customer feedback to ensure the best possible service is being provided and that all waste streams are being catered for	Facility Manager	Ongoing	No significant changes were requested or made to the civic amenity site during 2013 and the site is more than adequate to meet the demands of our customers	COMPLETE
Litter controls – continue the process of assigning a member of each Production Shift to litter duty as part of site housekeeping	Operations Manager	Ongoing	This process continues every day at the end of the production shift and will continue as a practice permanently.	COMPLETE

Dust control – continue the process of DAILY roadsweeping at the site to maintain / improve on external dust levels in areas where traffic can rise dust in periods of dry weather	Operations Manager & Facility Manager	Ongoing	This process continues every day in the afternoon on all main hardstand areas of the site and this will continue as a permanent practice moving into 2013.	COMPLETE
Weighbridge – implement a maintenance programme on the two site weighbridges that will ensure the bridges are cleaned and maintained on a monthly basis to improve reliability / performance of both bridges	Operations Manager / Facility Manager	Ongoing	Cleaning of the weighbridges takes place on a monthly basis and we have experienced no problems with the performance of the bridges since it was introduced. We will continue this programme moving forward.	COMPLETE
Weighbridge – carry out a tender programme for the contracts in relation to weighbridge maintenance / repair / calibration for 2012. This will identify a preferred, suitably qualified candidate and be a cost saving initiative	Facility Manager / Financial Controller	Q4 2012	This process was implemented and relevant company's invited to tender. Precia Molen were successful for 2012/2013. This tender process will be carried out again in December 2013.	COMPLETE
Housekeeping – Complete work on extending the current bale storage shed to increase the capacity and allow space for more materials to be stored inside.	Operations Manager / Managing Director	Q4 2012	This work was not started during 2012 and will be included as a goal again for 2013.	INCOMPLETE
Housekeeping – continue to have someone within the garage area responsible for the housekeeping and cleaning of this area at the end of each working day especially in relation to the bund and oils	Operations Manager / Transport Manager	Ongoing	This process is fully in place and working successfully. We will continue this for the new reporting period.	COMPLETE

Environmental Targets – investigate and then establish a working process for Gypsum Material that will allow the material to be processed / recycled on site.	Facility Manager / Managing Director / Sales Manager	Q2 2012	Due to the closure of Gypsum Ireland and the limited qty's of gypsum coming into the site this work is not complete. We are in the process of trying to find a new and sustainable option for the gypsum material.	INCOMPLETE
Environmental Targets – continue to develop the energy and power saving programmes within the waste transfer station and all areas of the site to reduce the usage during both operational and non operating hours	Facility Manager & Operations Manager	Ongoing	This process is carried out on a daily basis and we are now much more aware of the need to reduce usage of lights / diesel etc during our daily operations.	COMPLETE & ONGOING
Environmental Targets – continue to search for regular outlets for the high grade metals to ensure this material moves regularly and is not stockpiled	Facility Manager / Managing Director	Ongoing	Barna Waste are now in contact on a daily basis with three of the biggest metal company's in the UK to ensure we can move high grade material whenever required	COMPLETE
Environmental Targets – continue the process of tendering all grades of plastic on a regular basis to ensure the best market price is achieved and no stockpiles are allowed to accumulate	Facility Manager / Operations Manager	Ongoing	This process was carried out successfully through 2012 and will continue into 2013.	COMPLETE
Environmental Targets – continue to review the Irish recycling market to identify possible recycling options for various materials within the Country to reduce our carbon footprint	Facility Manager	Ongoing	Barna Waste try to support local markets we do so for plastic bottles, metal, glass, tyres, WEEE, timber & batteries. We are currently exploring an option to recycle Gypsum and Hard Plastic within the State & will continue to try & support Irish markets moving forward.	ONGOING

Environmental Targets – improve drainage network at wash bay to ensure water readings are back within the specifications of our licence	Managing Director	Q1 2012	This work remains incomplete and will be completed during the first half of 2013.	INCOMPLETE
Environmental Targets – identify a solution to the reduction of market outlets for recycling timber and try to establish new outlets / contracts for this material	Facility Manager	Q2 2012	Barna Waste successfully negotiated a contract with Eirebloc in Cork during 2012 and have an agreement moving into 2013.	COMPLETE
Composting - identify markets (more than one) for the processed compost material as soon as possible	Composting Manager / Managing Director	Q2 2012	The composting process was not operational during 2012 and therefore this action will be kept open and be more relevant in 2013.	ONGOING
Composting - finalise a plan to introduce brown bins to all our domestic customers. Training programmes for the domestic customer should be developed as part of this project.	Composting Manager / Managing Director	Ongoing	The composting process was not operational during 2012 and therefore this project was put on hold and will be implemented during 2013.	ONGOING
Composting - continue to develop the commercial collection routes for composting and provide training to all commercial customers on how it works	Management Team	Ongoing	Our commercial routes for composting and now operated throughout Connacht and are working successfully.	COMPLETE
Operation Controls in relation to machine maintenance – continue to develop the maintenance programmes for all operational equipment (stationary and mobile plant) and ensure regular checks are carried out to improve performance / reliability.	Operations Manager / Health & Safety Manager	Ongoing	Our Health & Safety Manager introduced a programme of documenting maintenance records on a weekly basis and this process is working successfully. It will continue and will be expanded further during 2012.	COMPLETE

Permitted Site – complete construction of the new building and surrounding area on the permitted site	Managing Director	Q2 2012	The new building on this site has been constructed. Surrounding area are now finished and more work is needed to make this building operational during 2013.	STARTED & ONGOING
Permitted Site - Housekeeping: clear the permitted site of all scrap material and ensure all equipment removed is done so in a proper / approved manner and for the purpose of recycling where possible.	Operations Manager / Facility Manager	Q2 2012	This programme is not complete but worked has started on this. This programme is a priority for the first half of 2013.	STARTED & ONGOING
Permitted site – once this site is in a proper condition prepare a plan for the EPA with a proposal / application to have this site integrated into the EPA licence	Facility Manager / Operations Manager / Managing Director	Q2 2012	As soon as the above work is completed the company will apply to the EPA to have this site incorporated into our EPA licence.	INCOMPLETE
New Site – finalise plans for the new site purchased on the Headford Road and put together a detailed business plan for the use of this site. A report should be submitted to the Agency in this regard.	Facility Manager / Managing Director	Q2 2012	This programme is not complete but worked has started on this. This programme is a priority for the first half of 2013.	INCOMPLETE
Storage Hub / Car Park – as a long term goal continue to look for a suitable location which will allow a compound to be built off site to store / control empty bins or skips	Managing Director	Q4 2012	A new compound for the company’s skips was introduced during 2012 and is working successfully. We will continue this process for bins moving into 2013.	STARTED & ONGOING
Landscaping - begin and complete work on facility landscaping as per EPA licence requirements in Carrowbrowne	Managing Director / Facility Manager	Q4 2012	No work was carried out on this during 2012.	INCOMPLETE

Safety - continue the vaccination programme for employees against Hepatitis A&B.	Health & Safety Manager	Ongoing	This process was continued during 2012 and all relevant employees now have vaccinations up to date. This will be an ongoing programme moving forward.	COMPLETE
Safety – carry out daily checks of firefighting equipment to ensure everything is in good working order at all times in case of an emergency and fully equipped at all times for protection against a major incident	Health and Safety Manager	Ongoing	This process is carried out on a daily basis and results are logged. This will be an ongoing programme moving forward.	COMPLETE
Management Review – ensure a management review meeting is held at least once per annum to discuss training, staffing, budgets and progress in general. Minutes of the meeting should be recorded and kept for review	Management Team	Q3 2012	This meeting was held in October 2012 and minutes are available for review. The next meeting is scheduled for October 2013.	COMPLETE
Collection activities – continue to review and improve the structure of our domestic routes to make us more efficient / economical in this area	Transport Manager	Ongoing	A lot of work was carried out this during 2012. We introduced new twinpac collections and many of our routes changed as a result. Significant improvements were able to be made in this area and we will continue to develop this during 2013.	STARTED & ONGOING
Training - put another member of staff through the FAS Waste Management Course to provide further expertise in this area for the company moving forward (currently 2 people qualified)	Facility Manager / Managing Director	Q4 2012	This process was not completed.	INCOMPLETE



Monitoring – carry out a tender for monitoring programmes during 2012 to indentify the best partners for all types of monitoring and try to use the same contractors on all of Barna Waste’s sites. This should also been done with cost saving in mind.	Facility Manager	Q4 2012	This process was successfully carried out during 2012 and monitoring contractors have been appointed as a result of this process for 2013.	COMPLETE
Cost Saving – Work towards maximising cost savings in all areas due to current economic climate. This should incorporate all areas of the business. Review quarterly.	Management Team / All Staff	Ongoing	The company have implemented a weekly meeting between Management where company finances and cost saving programmes are discussed. Excellent progress has been made in some areas. This programme will be ongoing for the duration of 2013.	STARTED & ONGOING
IT – improve the IT links between all 4 of the company’s facilities so that systems are accessible and live data available in all locations	IT Consultant	Q4 2012	This project was successfully implemented during 2012.	COMPLETE

## **SUMMARY of 2012 PERFORMANCE**

The company performed very well towards achieving its list of targets and objectives for 2012 and we believe we achieved most of our major goals that we set ourselves. Some examples of the major goals accomplished during 2012 are below:

- The retention and re-awarding of our ISO14001 accreditation was vitally important for the future of the company
- The new access tunnel constructed between our two buildings has significantly improved safety on site and access to and from our production areas
- Hosting of site visits / tours has helped to advertise and sell our company and spread the message of recycling
- Improved night time security at the facility by introducing patrols
- Dedicated and trained composting staff in place
- Marketing Executive has been hired and put in place to ensure the company markets itself and advertises it's products / services much better moving forward
- Established a new and sustainable outlet for recycled timber
- Completed improvements to the composting building to allow material to start coming into the facility again
- New building constructed on permitted site which will be utilised to improve our site moving forward into the future
- Improved the IT links and access to data between all four of the company's facilities
- Regular Management meetings in place
- Significant cost saving programmes started which can be sustained to help protect the future of the company

Overall we would consider 2012 to be a positive year for the company. Like most company's it is essential to the future success of the company that some cost saving has to be made a priority and during 2012 we were able to focus as a Management Team on implementing important policies in relation to cost that will continue through into the new reporting period. Regular Management meetings are now in place which helps with communication and to focus on some specific goals which are important to the company.

The hiring of a new Marketing Executive is seen as a very positive step for the company as we must grow this side of our business and get 'our message' out into the public domain and better market and advertise our products and services. The company should reap the benefits of this decision in 2013 and beyond.

The changes made internally within our composting building will allow us to ensure this project is now a real focus of our business and is a success moving forward. A dedicated team of operators are now in place which should ensure the composting process works to it's full potential. It is essential for the future success of our company that this process get's through validation and that will be a major focus starting 2013.

The list of successes achieved during 2012 above are wide ranging and again shows the company's commitment to improving all areas of our business moving forward.

## SECTION 2: New list of Targets and Objectives for 2013

### New Targets & Objectives for 2013

The targets and objectives for 2013 are listed below. As advised by the EPA previously we have tried to identify actions that can be easily measured and also tried to ensure that most of the actions are related to issues outwith our Waste Licence.

For the purpose of this year's submission (as in previous years) targets are based on priorities for the next year but are obviously set with the long term goals of the facility in mind.

Any targets not achieved during 2012 have automatically been included again below. Targets / actions which are relevant on an ongoing basis but are deemed important enough to keep being included in this document are also listed. We feel it important to document them even although they will permanently be on the document to ensure focus is kept on achieving these targets.

The first batch of targets & objectives for 2013 are one's which were on the list last year and were either not achieved or are ongoing and important to document for the company to achieve again during this reporting period:-

<b>TARGET / OBJECTIVE</b>	<b>Owner</b>	<b>Completion Target</b>
EMS system - continue the review and development of the EMS system ensuring all departments processes and procedures are included and that ISO 14001 accreditation is maintained in 2013	Facility Manager	Q4 2013
Site Visits / Tours – continue the visits / tours to the site by local schools to increase promotion of the site and recycling in general	Facility Manager	Q4 2013
New site entrance – complete upgrades and changes to allow a new entrance to be opened giving access directly to the administration offices at the site without having to come through the transfer station area	Managing Director	Q4 2013
Litter controls – continue the process of assigning a member of each Production Shift to litter duty as part of site housekeeping programme	Operations Manager	Ongoing
Dust control – continue the process of DAILY roadsweeping at the site to maintain / improve on external dust levels in areas where traffic can rise dust in periods of dry weather	Operations Manager & Facility Manager	Ongoing
Weighbridge – continue maintenance programme on the two site weighbridges that will ensure the bridges are cleaned and maintained on a monthly basis to improve reliability / performance of both bridges	Operations Manager / Facility Manager	Ongoing
Environmental Targets – investigate and then establish a working process for Gypsum Material that will allow the material to be processed / recycled. Priority should be given to establishing a market within Ireland	Facility Manager / Managing Director / Sales Manager	Q1 2013

Environmental Targets – continue to develop the energy and power saving programmes within the waste transfer station and all areas of the site to reduce the usage during both operational and non operating hours	Facility Manager & Operations Manager	Ongoing
Environmental Targets – continue to review the Irish recycling market to identify possible recycling options for various materials within the Country to reduce our carbon footprint	Facility Manager	Ongoing
Environmental Targets – improve drainage network at the company wash bay	Managing Director	Q2 2013
Composting - identify markets (more than one) for the processed compost material in advance of the 6 <sup>th</sup> batch being completed for validation	Composting Manager / Managing Director	Q3 2013
Composting - finalise a plan to introduce brown bins to all our domestic customers. Training programmes for the domestic customer should be developed as part of this project.	Composting Manager / Managing Director	Ongoing
Composting - continue to develop the commercial collection routes for composting and provide training to all commercial customers on how it works	Management Team	Ongoing
Operation Controls in relation to machine maintenance – continue to develop the maintenance programmes for all operational equipment (stationary and mobile plant) and ensure regular checks are carried out to improve performance / reliability. Records of all inspections should be kept on file and reviewed on a regular basis.	Operations Manager / Health & Safety Manager	Ongoing
Permitted Site - Housekeeping: clear the permitted site of all scrap material and ensure all equipment removed is done so in a proper / approved manner and for the purpose of recycling where possible.	Operations Manager / Facility Manager	Q1 2013
Permitted site – once this site is in a proper condition prepare a plan for the EPA with a proposal / application to have this site integrated into the EPA licence	Facility Manager / Operations Manager / Managing Director	Q2 2013
New Site – finalise plans for the new site purchased on the Headford Road and put together a detailed business plan for the use of this site. A report should be submitted to the Agency in this regard.	Facility Manager / Managing Director	Q2 2013
Storage Hub / Car Park – as a long term goal continue to look for a suitable location which will allow a compound to be built off site to store / control empty bins or skips. This will not be a waste storage area it will be solely for storing the company’s stock of empty skips or bins awaiting distribution	Managing Director	Q4 2013
Landscaping - begin and complete work on facility landscaping as per EPA licence requirements	Managing Director / Facility Manager	Q4 2013
Safety - continue the vaccination programme for employees against Hepatitis A&B.	Health & Safety Manager	Ongoing

Safety – carry out daily checks of firefighting equipment to ensure everything is in good working order at all times in case of an emergency and fully equipped at all times for protection against a major incident	Health and Safety Manager	Ongoing
Management Review – ensure a management review meeting is held at least once per annum to discuss training, staffing, budgets and progress in general. Minutes of the meeting should be recorded and kept for review	Management Team	Q4 2013
Collection activities – continue to review and improve the structure of our domestic routes to make us more efficient / economical in this area	Transport Manager	Ongoing
Training - put another member of staff through the FAS Waste Management Course	Facility Manager / Managing Director	Q4 2013
Monitoring – carry out a tender for monitoring programmes during 2013 to indentify the best partners for all types of monitoring and try to use the same contractors on all of Barna Waste’s sites. This should also been done with cost saving in mind.	Facility Manager	Q4 2013
Cost Saving – Work towards maximising cost savings in all areas due to current economic climate. This should incorporate all areas of the business. Review quarterly.	Management Team / All Staff	Ongoing

The following are a list of **new** targets / objectives developed for 2013 to ensure continuous improvement of the site and the company moving forward.

<b>TARGET / OBJECTIVE</b>	<b>Owner</b>	<b>Completion Target</b>
Sales / Marketing – target the top 10 grossing multi-national organizations in Connacht and try to establish relationships with each	Sales Manager	Q2 2013
Sales / Marketing – carry out a full review of all commercial customer to maximize recycling % and the value of recyclable materials being collected	Sales Manager	Q2 2013
No Pay No Lift Policy – fully develop and implement on all trucks our new NPNL policy during 2013	Management Team / Engineering	Q2 2013
Fully roll-out Twin Pac collections for domestic waste / recyclables to all areas to reduce costs and carbon footprint	Management Team / Engineering	Q2 2013
Marketing – develop a full and detailed company brochure for commercial customers to help with marketing of the company’s products / services in this sector	Sales Manager Marketing Executive	Q1 2013
Marketing – re-develop and re-design the company’s website to modernise and add new features such as the ability to order and pay for our products and services on line	Sales Manager Marketing Executive	Q2 2013

Marketing – work with local schools who are seeking Green Flag approval to ensure Barna Waste are the major company young people associate with recycling	Sales Manager Marketing Executive	Q2 2013
Marketing – market the company’s composting facility with a view to ensuring maximum qty’s of material are available to the facility	Sales Manager Marketing Executive	Q1 2013
Training – put the Management Team through an extensive Management course to enhance skills and ensure the company Management has a common message moving forward at the top level	Management Team	Q1 2013
Environmental Targets – fully implement the project of ‘zero waste to landfill’ and find alternative recovery routes for the company’s general waste through baling, wrapping and export via TFS	Management Team	Q2 2013
Environmental Targets – successfully complete validation approval from DAFF within the composting process and have the composting fully operational	Operations Manager	Q2 2013
Management System – transfer the company’s Environmental Management System into a fully electronic and paperless model	Facility Manager	Q3 2013
Health & Safety Management System – prepare the H&S management system to a standard that will allow the company to pursue the ISO 18001 award	Health & Safety Manager	Q4 2013
Product Recycling – implement a quality review on all end products to try and make them more marketable and establish higher revenue streams for them	Operations Manager Facility Manager	Q3 2013
Housekeeping – carry out a full and detailed review in ALL areas of the site and remove all redundant products to improve housekeeping at the facility	Operations Manager Facility Manager	Q3 2013
Site Infrastructure – find a way of enclosing the area between the baling and bale storage areas to improve housekeeping and litter in this area of the site	Managing Director	Q2 2013

## **Environmental Management Plan**

Condition 2.3.2.2 of our Waste Licence (WL106-2) requires us to submit an Environmental Management Plan. The aim of this EMP is to provide a timescale for achieving the schedule of targets and objectives and the name of the people responsible for implementing these actions. As per last year's submission we are submitting this document as a joint document to cover the requirements for both the EMP and the Schedule of Targets and Objectives. The table above outlines the company's goals and who is responsible for implementing them during 2013 and these goals cover operational, environmental, health and safety issues and any other related activities which we think need some improvement.

We believe the targets set out above are the key elements to the company progressing again in 2013 and completion of the targets set above will see us improve our facility and our business. Targets have been kept measurable and where possible are unrelated to conditions of our waste licence but clearly show the company's desire for continual improvement in all aspects of the business.

In summary of the table above the targets and goals set for 2012, if achieved will see us achieve the following:

- Maintain ISO 14001 accreditation and have a high quality EMS system
- Have a fully operational composting facility
- Continue to focus on cost saving programmes to ensure the future of the company is strong
- Develop in a major way our advertising and marketing programmes
- Have a new and improved company website developed
- Significantly improve housekeeping at the facility
- Have a paperless Environmental Management System in place
- Be prepared to apply for ISO 18001 accreditation
- Establish ourselves in the local communities with schools and young people
- Be in a strong position to offer customers a 'zero waste to landfill' option
- Have a strong fleet of Twin Pac vehicles on the road
- Have implemented a No Pay No Lift policy which will save the company significant money

This is only a summary on some of the key points where we can improve because of the aggressive and wide ranging goals / objectives we have set for 2013.

Barna Waste are happy with the contents of this document and believe the targets set out above for the new reporting year are relevant to the overall goals of the company.

New targets can / will be added to this document as the year progresses or at the request of the EPA.

## **Management Support**

Barna Waste submit this document which as required by our EPA licence outlines progress made against all the targets set out for 2012 and redefines new targets and objectives for 2013. This document has been reviewed by the Management Team and all members of the team have given input into the areas being specifically targeted for 2013. The document has the full agreement of all of our Management Team.

We believe the targets / objectives cover all aspects of our business and will ensure the company develops in all aspects during 2013. The goal of continuous improvement / development of the site and our performance are the key factors in setting these targets.

Comments from the Agency on the content of the report are welcome and new targets can be added or changes made at their request if anything within the report is insufficient or inadequate.

## **Progress Reports**

Any queries regarding progress against the targets and objectives set out above for 2013 can be requested from our Facility Manager at all times throughout the reporting period.

Copies of this report are available on request from the Barna Waste.

## **Next Submission**

The next submission of this report is due to be submitted before 31<sup>st</sup> January 2014.



**APPENDIX D**

**AER / PRTR Completed Workbook for 2012**



| PRTR# : W0106 | Facility Name : Bruscar Bhearna Teoranta | Filename : Complete  
2012 AER PRTR Workbook.xls | Return Year : 2012 |

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[Guidance to completing the PRTR workbook](#)

# AER Returns Workbook

Version 1.1.15

<b>REFERENCE YEAR</b>	2012
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## 1. FACILITY IDENTIFICATION

Parent Company Name	Bruscar Bhearna Teoranta
Facility Name	Bruscar Bhearna Teoranta
PRTR Identification Number	W0106
Licence Number	W0106-02

### Waste or IPPC Classes of Activity

No.	class_name
3.13	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.
3.11	Blending or mixture prior to submission to any activity referred to in a preceding paragraph of this Schedule.
3.12	Repackaging prior to submission to any activity referred to in a preceding paragraph of this Schedule.
4.12	Exchange of waste for submission to any activity referred to in a preceding paragraph of this Schedule.
4.13	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.
4.2	Recycling or reclamation of organic substances which are not used as solvents (including composting and other biological transformation processes).
4.3	Recycling or reclamation of metals and metal compounds.
4.4	Recycling or reclamation of other inorganic materials.
Address 1	Carrowbrowne
Address 2	Headford Road
Address 3	Galway
Address 4	
	Galway
Country	Ireland
Coordinates of Location	-9.01825 53.3301
River Basin District	IEWE
NACE Code	3821
Main Economic Activity	Treatment and disposal of non-hazardous waste
<b>AER Returns Contact Name</b>	Campbell Finnie
<b>AER Returns Contact Email Address</b>	cfinnie@barnawaste.com
<b>AER Returns Contact Position</b>	Facility Manager
<b>AER Returns Contact Telephone Number</b>	091-771619
<b>AER Returns Contact Mobile Phone Number</b>	087-7408568
<b>AER Returns Contact Fax Number</b>	091-771735
<b>Production Volume</b>	68646.0
<b>Production Volume Units</b>	tonnes
<b>Number of Installations</b>	1
<b>Number of Operating Hours in Year</b>	4160
<b>Number of Employees</b>	280
<b>User Feedback/Comments</b>	
<b>Web Address</b>	www.barnawaste.com

## 2. PRTR CLASS ACTIVITIES

Activity Number	Activity Name
5(c)	Installations for the disposal of non-hazardous waste
5(c)	Installations for the disposal of non-hazardous waste
50.1	General

## 3. SOLVENTS REGULATIONS (S.I. No. 543 of 2002)

Is it applicable?	
Have you been granted an exemption ?	
If applicable which activity class applies (as per Schedule 2 of the regulations) ?	
Is the reduction scheme compliance route being used ?	

## 4. WASTE IMPORTED/ACCEPTED ONTO SITE

[Guidance on waste imported/accepted onto site](#)

Do you import/accept waste onto your site for on-site treatment (either recovery or disposal activities) ?	
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This question is only applicable if you are an IPPC or Quarry site

4.1 RELEASES TO AIR

[Link to previous years emissions data](#)

| PRTR# : W0106 | Facility Name : Bruscar Bhearna Teoranta | Filename : Complete 2012 AER PRTR Workbook.xls | Return Year : 2012 |

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**SECTION A : SECTOR SPECIFIC PRTR POLLUTANTS**

POLLUTANT		METHOD			QUANTITY			
No. Annex II	Name	M/C/E	Method Code	Designation or Description	Emission Point 1	T (Total) KG/Year	A (Accidental) KG/Year	F (Fugitive) KG/Year
						0.0	0.0	0.0

\* Select a row by double-clicking on the Pollutant Name (Column B) then click the delete button

**SECTION B : REMAINING PRTR POLLUTANTS**

POLLUTANT		METHOD			QUANTITY			
No. Annex II	Name	M/C/E	Method Code	Designation or Description	Emission Point 1	T (Total) KG/Year	A (Accidental) KG/Year	F (Fugitive) KG/Year
						0.0	0.0	0.0

\* Select a row by double-clicking on the Pollutant Name (Column B) then click the delete button

**SECTION C : REMAINING POLLUTANT EMISSIONS (As required in your Licence)**

POLLUTANT		METHOD			QUANTITY			
Pollutant No.	Name	M/C/E	Method Code	Designation or Description	Emission Point 1	T (Total) KG/Year	A (Accidental) KG/Year	F (Fugitive) KG/Year
						0.0	0.0	0.0

\* Select a row by double-clicking on the Pollutant Name (Column B) then click the delete button

**Additional Data Requested from Landfill operators**

For the purposes of the National Inventory on Greenhouse Gases, landfill operators are requested to provide summary data on landfill gas (Methane) flared or utilised on their facilities to accompany the figures for total methane generated. Operators should only report their Net methane (CH4) emission to the environment under T (total) KG/yr for Section A: Sector specific PRTR pollutants above. Please complete the table below:

Landfill:		Bruscar Bhearna Teoranta			
Please enter summary data on the quantities of methane flared and / or utilised		Method Used			Facility Total Capacity m3 per hour
		M/C/E	Method Code	Designation or Description	
Total estimated methane generation (as per site model)	0.0				N/A
Methane flared	0.0				0.0 (Total Flaring Capacity)
Methane utilised in engine/s	0.0				0.0 (Total Utilising Capacity)
Net methane emission (as reported in Section A above)	0.0				N/A

4.2 RELEASES TO WATERS

[Link to previous years emissions data](#)

| PRTR# : W0106 | Facility Name : Bruscar Bhearna Teoranta | Filename : Complete 2012 AER PRTR Workbook.xls | Return Year : 2012 |

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**SECTION A : SECTOR SPECIFIC PRTR POLLUTANTS**

Data on ambient monitoring of storm/surface water or groundwater, conducted as part of your licence requirements, should NOT be submitted under AER / PRTR Reporting as this only concerns Releases from your facility

RELEASES TO WATERS					Please enter all quantities in this section in KGs			
POLLUTANT		M/C/E	Method Used		QUANTITY			
No. Annex II	Name		Method Code	Designation or Description	Emission Point 1	T (Total) KG/Year	A (Accidental) KG/Year	F (Fugitive) KG/Year
					0.0	0.0	0.0	0.0

\* Select a row by double-clicking on the Pollutant Name (Column B) then click the delete button

**SECTION B : REMAINING PRTR POLLUTANTS**

RELEASES TO WATERS					Please enter all quantities in this section in KGs			
POLLUTANT		M/C/E	Method Used		QUANTITY			
No. Annex II	Name		Method Code	Designation or Description	Emission Point 1	T (Total) KG/Year	A (Accidental) KG/Year	F (Fugitive) KG/Year
					0.0	0.0	0.0	0.0

\* Select a row by double-clicking on the Pollutant Name (Column B) then click the delete button

**SECTION C : REMAINING POLLUTANT EMISSIONS (as required in your Licence)**

RELEASES TO WATERS					Please enter all quantities in this section in KGs			
POLLUTANT		M/C/E	Method Used		QUANTITY			
Pollutant No.	Name		Method Code	Designation or Description	Emission Point 1	T (Total) KG/Year	A (Accidental) KG/Year	F (Fugitive) KG/Year
					0.0	0.0	0.0	0.0

\* Select a row by double-clicking on the Pollutant Name (Column B) then click the delete button

4.3 RELEASES TO WASTEWATER OR SEWER

[Link to previous years emissions data](#)

| PRTR# : W0106 | Facility Name : Bruscar Bhearna Teoranta | Filename : Complete 2012 AER PRT 29/03/2013 18:18

SECTION A : PRTR POLLUTANTS

OFFSITE TRANSFER OF POLLUTANTS DESTINED FOR WASTE-WATER TREATMENT OR SEWER					Please enter all quantities in this section in KGs			
POLLUTANT		METHOD			QUANTITY			
No. Annex II	Name	M/C/E	Method Code	Designation or Description	Emission Point 1	T (Total) KG/Year	A (Accidental) KG/Year	F (Fugitive) KG/Year
					0.0	0.0	0.0	0.0

\* Select a row by double-clicking on the Pollutant Name (Column B) then click the delete button

SECTION B : REMAINING POLLUTANT EMISSIONS (as required in your Licence)

OFFSITE TRANSFER OF POLLUTANTS DESTINED FOR WASTE-WATER TREATMENT OR SEWER					Please enter all quantities in this section in KGs			
POLLUTANT		METHOD			QUANTITY			
Pollutant No.	Name	M/C/E	Method Code	Designation or Description	FW1 Emission Point 1	T (Total) KG/Year	A (Accidental) KG/Year	F (Fugitive) KG/Year
306	COD	M	ALT	ISO 17025 - Based on USEPA approved Hach Method 8000	352.839	352.839	0.0	0.0
303	BOD	M	ALT	ISO 17025 - Standard Methods for the Examination of Water and Wastewater, 21ed, 2005	158.086	158.086	0.0	0.0
314	Fats, Oils and Greases	M	ALT	ISO 17025 - Standard Methods for the Examination of Water and Wastewater, 21ed, 2005	48.839	48.839	0.0	0.0
240	Suspended Solids	M	ALT	ISO 17025 - Standard Methods for the Examination of Water and Wastewater, 21ed, 2005	206.741	206.741	0.0	0.0
343	Sulphate	M	ALT	Based on Sulphate in Waters Effluents and Soils, 2nd Edition (1988), Method E	62.261	62.261	0.0	0.0
238	Ammonia (as N)	M	ALT	Salicylate method based on Methods for the examination of water and associated materials, Ammonia in waters, 1981	21.085	21.085	0.0	0.0

\* Select a row by double-clicking on the Pollutant Name (Column B) then click the delete button

4.4 RELEASES TO LAND

[Link to previous years emissions data](#)

| PRTR# : W0106 | Facility Name : Bruscar Bhearna Teoranta | Filename : Complete 2012 AER PRTR Workbook.xls | Return Year : 2012 |

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**SECTION A : PRTR POLLUTANTS**

POLLUTANT			METHOD			Please enter all quantities in this section in KGs		
RELEASERS TO LAND			METHOD			QUANTITY		
No. Annex II	Name	M/C/E	Method Code	Method Used	Designation or Description	Emission Point 1	T (Total) KG/Year	A (Accidental) KG/Year
						0.0	0.0	0.0

\* Select a row by double-clicking on the Pollutant Name (Column B) then click the delete button

**SECTION B : REMAINING POLLUTANT EMISSIONS (as required in your Licence)**

POLLUTANT			METHOD			Please enter all quantities in this section in KGs		
RELEASERS TO LAND			METHOD			QUANTITY		
Pollutant No.	Name	M/C/E	Method Code	Method Used	Designation or Description	Emission Point 1	T (Total) KG/Year	A (Accidental) KG/Year
						0.0	0.0	0.0

\* Select a row by double-clicking on the Pollutant Name (Column B) then click the delete button

**5. ONSITE TREATMENT & OFFSITE TRANSFERS OF WASTE**

| PRTR# : W0106 | Facility Name : Bruscar Bhearna Teoranta | Filename : Complete 2012 AER PRTR Workbook.xls | Return Year : 2012 |

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Please enter all quantities on this sheet in Tonnes

0

Transfer Destination	European Waste Code	Hazardous	Quantity (Tonnes per Year)	Description of Waste	Waste Treatment Operation	Method Used		Location of Treatment	Haz Waste : Name and Licence/Permit No of Next Destination Facility		Haz Waste : Address of Next Destination Facility Non Haz Waste: Address of Recover/Disposer	Name and License / Permit No. and Address of Final Recoverer / Disposer (HAZARDOUS WASTE ONLY)	Actual Address of Final Destination i.e. Final Recovery / Disposal Site (HAZARDOUS WASTE ONLY)
						M/C/E	Method Used		Haz Waste : Name and Licence/Permit No of Recover/Disposer	Non			
Within the Country	19 12 04	No	23.94	Clear plastic film	R12	M	Weighed	Offsite in Ireland	Leinster Environmental,WP 2008/06		Clermont Business Park ,Haggardstown ,Dundalk ,Co.Louth,Ireland Cotton Way,Loughborough ,Leicestershire,LE11,United Kingdom		
To Other Countries	19 12 04	No	70.8	Clear plastic film	R12	M	Weighed	Abroad	Jayplas,43451		Denmark House Brick Close,Kiln Farm,Milton Keynes,Buckinghamshire MK11 3DP,United Kingdom		
To Other Countries	19 12 04	No	25.5	Clear plastic film	R12	M	Weighed	Abroad	Choice Waste Management Ltd.,CB/WE5536VU				
To Other Countries	19 12 04	No	90.82	Plastic Trays/Cartons	R12	M	Weighed	Abroad	WRC Recycling ,IRE/G068/08		Auchans Road ,Houston ,Johnstone Renfrewshire ,PA6 7EE ,United Kingdom Cotton Way,Loughborough ,Leicestershire,LE11,United Kingdom		
To Other Countries	19 12 04	No	100.12	Plastic Trays/Cartons	R12	M	Weighed	Abroad	Jayplas,43451		96 Toft Hill,Bishop Auckland,County Durham,DL14 0JA,United Kingdom		
To Other Countries	19 12 04	No	23.1	Plastic Trays/Cartons	R12	M	Weighed	Abroad	GFSL Limited,IRE/G217/12		Cotton Way,Loughborough ,Leicestershire,LE11,United Kingdom		
To Other Countries	19 12 04	No	325.82	Plastic Bottles - PET	R12	M	Weighed	Abroad	Jayplas,43451				
To Other Countries	19 12 04	No	44.22	Plastic Bottles - PET	R12	M	Weighed	Abroad	WRC Recycling ,IRE/G068/08		Auchans Road ,Houston ,Johnstone Renfrewshire ,PA6 7EE ,United Kingdom Killicard Industrial		
Within the Country	19 12 04	No	462.62	Plastic Bottles - PET	R12	M	Weighed	Offsite in Ireland	The Shabra Group,WFP-MN- 08-0022-01		Estate,Bree,Castleblayney,C o.Monaghan,Ireland 30 Lynton Gardens ,Darlington,Co. Durham,DL1 4PB,United Kingdom		
To Other Countries	19 12 04	No	89.32	industrial plastics - mixed	R12	M	Weighed	Abroad	EnviroLink Recycling ,IRE/AG134/12				
To Other Countries	19 12 04	No	214.74	industrial plastics - mixed	R12	M	Weighed	Abroad	WRC Recycling ,IRE/G068/08		Auchans Road ,Houston ,Johnstone Renfrewshire ,PA6 7EE ,United Kingdom Veerplaat ,40 3313 LJ ,Dordrecht		
To Other Countries	19 12 04	No	99.06	industrial plastics - mixed	R12	M	Weighed	Abroad	Peute Papier Recycling ,DO 02.2017 MDO		,Rotherdam,Netherlands		
To Other Countries	15 01 04	No	75.84	aluminium cans	R12	M	Weighed	Abroad	WRC Recycling ,IRE/G068/08		Auchans Road ,Houston ,Johnstone Renfrewshire ,PA6 7EE ,United Kingdom 81 Broadway,.,Peterborough,P E1 4DA Cambridgeshire,United Kingdom		
To Other Countries	15 01 04	No	40.28	aluminium cans	R12	M	Weighed	Abroad	Complete Recycling Solutions UK Ltd.,Broker licence ire/ag189/12		Kiffagh,Crosserlough,Ballyja mesduff,County Cavan,Ireland		
Within the Country	15 01 04	No	18.84	aluminium cans	R12	M	Weighed	Offsite in Ireland	Wilton Waste Recycling Ltd,WFP-CN-10-0005-01				

Transfer Destination	European Waste Code	Hazardous	Quantity (Tonnes per Year)	Description of Waste	Waste Treatment Operation	Method Used		Location of Treatment	Haz Waste : Name and Licence/Permit No of Next Destination Facility Non Haz Waste: Name and Licence/Permit No of Recover/Disposer	Haz Waste : Address of Next Destination Facility Non Haz Waste: Address of Recover/Disposer	Name and License / Permit No. and Address of Final Recoverer / Disposer (HAZARDOUS WASTE ONLY)	Actual Address of Final Destination i.e. Final Recovery / Disposal Site (HAZARDOUS WASTE ONLY)
						M/C/E	Method Used					
Within the Country	19 12 02	No	1724.68	Mixed Scrap Metal 90% ferrous	R12	M	Weighed	Offsite in Ireland	Galway Metal Recycling,WR/05	Oranmore ,Co.Galway ,Ireland		
Within the Country	19 12 02	No	50.92	Mixed Scrap Metal 90% ferrous	R12	M	Weighed	Offsite in Ireland	Wilton Waste Recycling Ltd,WFP-CN-10-0005-01	Kiffagh,Crosserlough,Ballyjamesduff,County Cavan,Ireland		
To Other Countries	19 12 01	No	4280.24	Mixed Paper	R12	M	Weighed	Abroad	Peute Papier Recycling ,DO 02.2017 MDO Recycling UK Ltd (Broker),NSO/544843/B - Broker Number & IRE/G069/08 TFS Registration No Cellmark (Broker),Irish TFS Broker Licence - IRE/G181/11 and IRE/G180/12	,Dordrecht ,Rotherdam,Netherlands		
To Other Countries	19 12 01	No	7456.54	Mixed Paper	R12	M	Weighed	Abroad	Highlander International (Broker),SCO/044794/CB	11 Alvaston Business Park , Middlewich Road ,Nantwich ,Cheshire CW5 6PF ,United Kingdom		
To Other Countries	19 12 01	No	173.04	Mixed Paper	R12	M	Weighed	Abroad	Boost Recycling (Broker),IRE/G082/08	,Glasgow G75 8UZ ,United Kingdom		
To Other Countries	19 12 01	No	248.7	Mixed Paper	R12	M	Weighed	Abroad	WRC Recycling ,IRE/G068/08	47 Swaffham Rd ,Burwell ,Cambridgeshire ,CB25 0AN,United Kingdom		
To Other Countries	19 12 01	No	151.58	Mixed Paper	R12	M	Weighed	Abroad	Peute Papier Recycling ,DO 02.2017 MDO	Auchans Road ,Houston ,Johnstone Renfrewshire ,PA6 7EE ,United Kingdom		
To Other Countries	19 12 01	No	50.74	Newspaper	R12	M	Weighed	Abroad	Recycling UK Ltd (Broker), Cellmark (Broker),Irish TFS Broker Licence - IRE/G181/11 and IRE/G180/12	Veerplaat ,40 3313 LJ ,Dordrecht ,Rotherdam,Netherlands		
To Other Countries	19 12 01	No	780.16	Newspaper	R12	M	Weighed	Abroad	WRC Recycling ,IRE/G068/08 Galway City Council - Composting Site (Carrowbrowne),EPA Licence Number 13-1	11 Alvaston Business Park , Middlewich Road ,Nantwich ,Cheshire CW5 6PF ,United Kingdom		
To Other Countries	19 12 01	No	305.28	Newspaper	R12	M	Weighed	Abroad	Global Material Recycling (Electrical Waste Management Site),Licence Number WFP-DS-090012-01	,Ireland		
To Other Countries	19 12 01	No	379.12	Newspaper	R12	M	Weighed	Abroad	WRC Recycling ,IRE/G068/08	Auchans Road ,Houston ,Johnstone Renfrewshire ,PA6 7EE ,United Kingdom		
Within the Country	20 02 01	No	49.92	Garden & Parks - biodegradable waste	R3	M	Weighed	Offsite in Ireland	Galway City Council - Composting Site (Carrowbrowne),EPA Licence Number 13-1	Carrowbrowne ,Headford Road,Galway ,Ireland		
Within the Country	20 01 35	Yes	83.5	Scrap Electronics - Mixed	R4	M	Weighed	Offsite in Ireland	Global Material Recycling (Electrical Waste Management Site),Licence Number WFP-DS-090012-01	648 Jordanstown Drive Greenogue Rathcoole Co. Dublin ,Greenogue Rathcoole Co. Dublin ,Co. Dublin ,Ireland	Global Material Recycling (Electrical Waste Management Site),Licence Number WFP-DS-090012-01,648 Jordanstown Drive ,Greenogue ,Rathcoole ,Co. Dublin ,Ireland	648 Jordanstown Drive ,Greenogue ,Rathcoole ,Co. Dublin ,Ireland
Within the Country	20 01 08	No	2625.66	Compostable Material - Food Waste	R3	M	Weighed	Offsite in Ireland	Envirogrind Ltd,WP4	Donegal Road,Pettigo,Co. Donegal,,Ireland		



Transfer Destination	European Waste Code	Hazardous	Quantity (Tonnes per Year)	Description of Waste	Waste Treatment Operation	Method Used		Location of Treatment	Haz Waste : Name and Licence/Permit No of Next Destination Facility	Non	Haz Waste : Address of Next Destination Facility	Name and License / Permit No. and Address of Final Recoverer / Disposer (HAZARDOUS WASTE ONLY)	Actual Address of Final Destination i.e. Final Recovery / Disposal Site (HAZARDOUS WASTE ONLY)
						M/C/E	Method Used		Haz Waste: Name and Licence/Permit No of Recover/Disposer	Non Haz Waste: Address of Recover/Disposer			
Within the Country	20 01 08	No	451.04	Compostable Material - Food Waste	R3	M	Weighed	Offsite in Ireland	Galway City Council - Composting Site (Carrowbrowne),EPA Licence Number 13-1		Carrowbrowne ,Headford Road,Galway ,Ireland Ballybeg,Littleton,,Co. Tipperary,Ireland		
Within the Country	20 01 08	No	61.46	Compostable Material - Food Waste	R3	M	Weighed	Offsite in Ireland	Acorn Recycling,W0249-01			ENVA Ireland Ltd.,W0184-01,Clonminam Industrial Estate,Portlaoise ,Co. Laois,Ireland	Clonminam Industrial Estate,Portlaoise ,Co. Laois,Ireland
Within the Country	16 06 01	Yes	18.74	lead acid batteries	R4	M	Weighed	Offsite in Ireland	ENVA Ireland Ltd.,W0184-01		Clonminam Industrial Estate,Portlaoise ,Co. Laois,Ireland	ENVA Ireland Ltd.,W0184-01,Clonminam Industrial Estate,Portlaoise ,Co. Laois,Ireland	Clonminam Industrial Estate,Portlaoise ,Co. Laois,Ireland
To Other Countries	19 12 04	No	103.7	Hard Plastic	R12	M	Weighed	Abroad	WRC Recycling ,IRE/G068/08		Auchans Road ,Houston ,Johnstone Renfrewshire ,PA6 7EE ,United Kingdom Clermont Business Park ,Haggardstown ,Dundalk ,Co.Louth,Ireland		
Within the Country	19 12 04	No	42.94	Hard Plastic	R12	M	Weighed	Offsite in Ireland	Leinster Environmental,WP 2008/06		648 Jordanstown Drive Greenogue Rathcoole Co. Dublin ,Greenogue Rathcoole Co. Dublin ,Rathcoole Co. Dublin ,Co. Dublin ,Ireland		
Within the Country	19 12 04	No	22.24	Hard Plastic	R12	M	Weighed	Offsite in Ireland	Global Material Recycling (Electrical Waste Management Site),Licence Number WFP-DS-090012-01				
To Other Countries	19 12 02	No	465.8	Steel Cans	R12	M	Weighed	Abroad	WRC Recycling ,IRE/G068/08		Auchans Road ,Houston ,Johnstone Renfrewshire ,PA6 7EE ,United Kingdom 96 Toft Hill,Bishop Auckland,County Durham,DL14 0JA,United Kingdom		
To Other Countries	19 12 02	No	53.62	Steel Cans	R12	M	Weighed	Abroad	GFSL Limited,IRE/G217/12		Highlander House ,1 Teign Grove ,East Kilbride ,Glasgow G75 8UZ ,United Kingdom		
To Other Countries	19 12 01	No	52.12	Shredded Office Paper	R12	M	Weighed	Abroad	Highlander International (Broker),SCO/044794/CB		Glen Abbey Complex,Belgard Road,Tallaght,Dublin 24,Ireland		
Within the Country	20 01 11	No	5.24	Clothing/Textiles	R12	M	Weighed	Offsite in Ireland	Textile Recycling Ltd,Permit Number WPR-014				
Within the Country	16 01 03	No	190.78	end-of-life tyres	R12	M	Weighed	Offsite in Ireland	Duffy Tyre Recycling Ltd,Broker licence IRE/G245/11. Site licence WFP-DL-010-0118-01		Tonyhabboc,Newtowncunningham,,Co. Donegal,Ireland		
To Other Countries	19 12 04	No	663.7	Mixed Coloured Plastic Bags (JAZZ Plastic)	R12	M	Weighed	Abroad	WRC Recycling ,IRE/G068/08		Auchans Road ,Houston ,Johnstone Renfrewshire ,PA6 7EE ,United Kingdom Clermont Business Park ,Haggardstown ,Dundalk ,Co.Louth,Ireland		
Within the Country	19 12 04	No	99.32	Mixed Coloured Plastic Bags (JAZZ Plastic)	R12	M	Weighed	Offsite in Ireland	Leinster Environmental,WP 2008/06		96 Toft Hill,Bishop Auckland,County Durham,DL14 0JA,United Kingdom		
To Other Countries	19 12 04	No	25.04	Mixed Coloured Plastic Bags (JAZZ Plastic)	R12	M	Weighed	Abroad	GFSL Limited,IRE/G217/12				

Transfer Destination	European Waste Code	Hazardous	Quantity (Tonnes per Year)	Description of Waste	Waste Treatment Operation	Method Used		Location of Treatment	Haz Waste : Name and Licence/Permit No of Next Destination Facility	Haz Waste : Name and Licence/Permit No of Recover/Disposer	Haz Waste : Address of Next Destination Facility	Name and License / Permit No. and Address of Final Recoverer / Disposer (HAZARDOUS WASTE ONLY)	Actual Address of Final Destination i.e. Final Recovery / Disposal Site (HAZARDOUS WASTE ONLY)
						M/C/E	Method Used		Non	Non Haz Waste: Address of Recover/Disposer			
To Other Countries	19 12 01	No	131.88	Multigrade paper	R12	M	Weighed	Abroad	Highlander International (Broker),SCO/044794/CB		Highlander House ,1 Teign Grove ,East Kilbride ,Glasgow G75 8UZ ,United Kingdom	Hageubar Road,Strines Entrance,High Peak,Derbyshire,United Kingdom	
To Other Countries	19 12 01	No	101.88	Multigrade paper	R12	M	Weighed	Abroad	Disley Tissue Limited,Broker licence IRE/G014/11		47 Swaffham Rd ,Burwell ,Cambridgeshire ,CB25 0AN,United Kingdom	Kings Court Beacon Road,Poulton Industrial Estate,Poulton le Fylde Lancashire,FY6 8JE, United Kingdom	
To Other Countries	19 12 01	No	24.9	Multigrade paper	R12	M	Weighed	Abroad	Boost Recycling (Broker),IRE/G082/08				
To Other Countries	17 04 11	No	30.93	Electrical Cable	R4	M	Weighed	Abroad	Ashvin Metals Ltd.,				
Within the Country	19 12 07	No	1456.66	Shredded Timber	R3	M	Weighed	Offsite in Ireland	Eirebloc Ltd,CK (S) 503/07		Lissarda,Co. Cork,,Ireland		
Within the Country	19 12 07	No	1174.48	Shredded Timber	D15	M	Weighed	Offsite in Ireland	Connacht Residual Regional Landfill ,EPA Licence Number 178/1 Galway City Council - Composting Site (Carrowbrowne),EPA Licence Number 13-1		Connacht Residual Regional Landfill ,Kilconnell ,Co.Galway ,,Ireland		
Within the Country	19 12 07	No	116.9	Shredded Timber	R3	M	Weighed	Offsite in Ireland			Carrowbrowne ,Headford Road,Galway ,,Ireland		
Within the Country	19 12 07	No	21.2	Shredded Timber	R3	M	Weighed	Offsite in Ireland	Barna Waste (Composting Facility),EPA Licence 106/2 Local Farmers,Not Applicable		Carrowbrowne,Headford Road,Galway,,Ireland	Various Addresses,,,,,Ireland	
Within the Country	19 12 12	No	14508.08	General Waste - Landfill	D1	M	Weighed	Offsite in Ireland	Connacht Residual Regional Landfill ,EPA Licence Number 178/1 Rathroeen Landfill,W0067-02		Connacht Residual Regional Landfill ,Kilconnell ,Co.Galway ,,Ireland	Ballina,,County Mayo,Ireland	
Within the Country	19 12 12	No	6060.22	General Waste - Landfill	D1	M	Weighed	Offsite in Ireland	Drehid Waste Management Facility,W0201-01 Greenstar Ltd,EPA Licence W0146-01		Drehid,,Co. Kildare,Ireland	Knockharley Landfill,,Co. Meath,Ireland	
Within the Country	19 12 12	No	20.38	General Waste - Landfill	D1	M	Weighed	Offsite in Ireland	Central Waste Management Facility,EPA Licence Number 109/2 Ballynacarrick Landfill,W0024-1		Ballyduffbeg,Inagh ,County Clare,,Ireland		
Within the Country	19 12 12	No	526.88	General Waste - Landfill	D1	M	Weighed	Offsite in Ireland					
Within the Country	19 12 12	No	2126.82	General waste - Recovery by Incineration	R1	M	Weighed	Offsite in Ireland	Indaver Ireland,EPA Licence W0167-02		Carranstown ,Duleek,County Meath,,Ireland		
Within the Country	19 12 12	No	224.24	General Waste - Recovery by baling / wrapping	R12	M	Weighed	Offsite in Ireland	Clean Ireland,Waste Permit No. 010/02/WP/CL		Cree,Kilrush,Co. Clare,,Ireland	Veerplaat ,40 3313 LJ ,Dordrecht ,Rotherdam,Netherlands	
To Other Countries	19 12 01	No	1259.98	Cardboard - OCC	R12	M	Weighed	Abroad	Peute Papier Recycling ,DO 02.2017 MDO				

Transfer Destination	European Waste Code	Hazardous	Quantity (Tonnes per Year)	Description of Waste	Waste Treatment Operation	Method Used		Location of Treatment	Haz Waste : Name and Licence/Permit No of Next Destination Facility Haz Waste: Name and Licence/Permit No of Recover/Disposer	Non Haz Waste : Address of Next Destination Facility Non Haz Waste: Address of Recover/Disposer	Name and License / Permit No. and Address of Final Recoverer / Disposer (HAZARDOUS WASTE ONLY)	Actual Address of Final Destination i.e. Final Recovery / Disposal Site (HAZARDOUS WASTE ONLY)
						M/C/E	Method Used					
To Other Countries	19 12 01	No	1289.02	Cardboard - OCC	R12	M	Weighed	Abroad	Recycling UK Ltd (Broker),NSO/544843/B - Broker Number & IRE/G069/08 TFS Registration No Cellmark (Broker),Irish TFS Broker Licence - IRE/G181/11 and IRE/G180/12	11 Alvaston Business Park , Middlewich Road ,Nantwich ,Cheshire CW5 6PF ,United Kingdom		
To Other Countries	19 12 01	No	408.7	Cardboard - OCC	R12	M	Weighed	Abroad	Highlander International (Broker),SCO/044794/CB	.....,Ireland Highlander House ,1 Teign Grove ,East Kilbride ,Glasgow G75 8UZ ,United Kingdom		
To Other Countries	19 12 01	No	99.46	Cardboard - OCC	R12	M	Weighed	Abroad	Boost Recycling (Broker),IRE/G082/08	47 Swaffham Rd ,Burwell ,Cambridgeshire ,CB25 0AN,United Kingdom		
To Other Countries	19 12 01	No	51.62	Cardboard - OCC	R12	M	Weighed	Abroad	WRC Recycling ,IRE/G068/08 Panda Waste (Broker),Irish TFS Brokers licence number IRE/G040/12	Auchans Road ,Houston ,Johnstone Renfrewshire ,PA6 7EE ,United Kingdom		
Within the Country	19 12 01	No	656.62	Cardboard - OCC	R12	M	Weighed	Offsite in Ireland	Greenstar Ltd,EPA Licence W0183-01	.....,Ireland Kings Court Beacon Road,Poulton Industrial Estate,Poulton le Fylde Lancashire,FY6 8JE,United Kingdom		
To Other Countries	19 12 03	No	26.81	Old Rolled Aluminium	R12	M	Weighed	Abroad	Ashvin Metals Ltd.,	Millenium Business Park,Grange,Ballycoolin,Dublin,Ireland		
Within the Country	19 12 10	No	2787.04	combustible waste (refuse derived fuel)	R1	M	Weighed	Offsite in Ireland	Connacht Residual Regional Landfill ,EPA Licence Number 178/1 Galway City Council - Composting Site (Carrowbrowne),EPA Licence Number 13-1 Galway City Council - Composting Site (Carrowbrowne),EPA Licence Number 13-1	Connacht Residual Regional Landfill ,Kilconnell ,Co.Galway ,,Ireland		
Within the Country	20 03 03	No	2873.06	street-cleaning residues	D1	M	Weighed	Offsite in Ireland	Rehab Glassco Ltd,Waste Permit No. WFP-KE-08-0357-01	Carrowbrowne ,Headford Road,Galway ,,Ireland Unit 4 Osberstown Industrial Park,Caragh Road,Naas,County Kildare,Ireland		
Within the Country	20 03 03	No	202.26	street-cleaning residues	R3	M	Weighed	Offsite in Ireland	Connacht Residual Regional Landfill ,EPA Licence Number 178/1 Rathroeen Landfill,W0067-02	Ballina,.....County Mayo,Ireland		
Within the Country	19 12 09	No	771.22	Inert Soil	R3	M	Weighed	Offsite in Ireland				
Within the Country	19 12 05	No	1235.46	glass bottles / jars	R12	M	Weighed	Offsite in Ireland				
Within the Country	19 03 05	No	1996.82	stabilised composted material - AT4 tested and approved for landfill cover	R10	M	Weighed	Offsite in Ireland				
Within the Country	19 03 05	No	210.7	stabilised wastes other than those mentioned in 19 03 04	R10	M	Weighed	Offsite in Ireland				

Transfer Destination	European Waste Code	Hazardous	Quantity (Tonnes per Year)	Description of Waste	Waste Treatment Operation	Method Used		Location of Treatment	Haz Waste : Name and Licence/Permit No of Next Destination Facility Haz Waste: Name and Licence/Permit No of Recover/Disposer	Non Haz Waste : Address of Next Destination Facility Non Haz Waste: Address of Recover/Disposer	Name and License / Permit No. and Address of Final Recoverer / Disposer (HAZARDOUS WASTE ONLY)	Actual Address of Final Destination i.e. Final Recovery / Disposal Site (HAZARDOUS WASTE ONLY)
						M/C/E	Method Used					
To Other Countries	19 12 01	No	21.2	Kraft paper / Cardboard Bags	R12	M	Weighed	Abroad	Recycling UK Ltd (Broker),NSO/544843/B - Broker Number & IRE/G069/08 TFS Registration No Connaught Timber ,Permit No. 593	11 Alvaston Business Park , Middlewich Road ,Nantwich ,Cheshire CW5 6PF ,United Kingdom	Tynagh,Loughrea,,County Galway,Ireland	
Within the Country	19 12 07	No	19.6	Timber Pallets	R12	M	Weighed	Offsite in Ireland				
Within the Country	17 01 07	No	4208.0	Rubble / Inet Material	R5	M	Weighed	Offsite in Ireland	Barna Waste (Composting Facility),EPA Licence 106/2 Joe McLoughlin Waste Disposal Ltd,W0216	Carrowbrownne,Headford Road,Galway,,Ireland	Ardcolum,Drumshanbo,,Co unty Leitrim,Ireland	
Within the Country	17 08 02	No	76.3	Plasterboard	R12	M	Weighed	Offsite in Ireland				
To Other Countries	19 12 04	No	79.74	HDPE Plastic Bottles	R12	M	Weighed	Abroad	Jayplas,17/12/2018		Cotton Way,Loughborough ,Leicestershire,LE11,United Kingdom	
To Other Countries	19 12 04	No	95.8	HDPE Plastic Bottles	R12	M	Weighed	Abroad	WRC Recycling ,IRE/G068/08		Auchans Road ,Houston ,Johnstone Renfrewshire ,PA6 7EE ,United Kingdom	
To Other Countries	19 12 04	No	103.14	HDPE Plastic Bottles	R12	M	Weighed	Abroad	The Shabra Group,WFP-MN-08-0022-01		Estate,Bree,Castleblayney,C o.Monaghan,Ireland	
To Other Countries	19 12 04	No	53.94	HDPE Plastic Bottles	R12	M	Weighed	Abroad	JFC Manufacturing Company Ltd,EA WML 100011		Hardwick Road,Astmoor Industrial Estate,Runcom,Cheshire,United Kingdom	
To Other Countries	19 12 04	No	74.62	HDPE Plastic Bottles	R12	M	Weighed	Abroad	Choice Waste Management Ltd.,CB/WE5536VU		Denmark House Brick Close,Kiln Farm,Milton Keynes,Buckinghamshire MK11 3DP,United Kingdom	
To Other Countries	19 12 04	No	23.32	HDPE Plastic Bottles	R12	M	Weighed	Abroad	Peute Papier Recycling ,DO 02.2017 MDO		,Dordrecht ,Rotherdam,Netherlands	
To Other Countries	19 12 04	No	25.14	Clear Plastic Film	R12	M	Weighed	Abroad	WRC Recycling ,IRE/G068/08		Auchans Road ,Houston ,Johnstone Renfrewshire ,PA6 7EE ,United Kingdom	
Within the Country	19 12 05	No	81.28	Window / flat glass	R12	M	Weighed	Offsite in Ireland	John Gannon Concrete Ltd,Permit Number WFP-WM-2009-0007-01		Split Hill Quarry,Hazelwood ,Kilbeggan,County Westmeath,Ireland	

\* Select a row by double-clicking the Description of Waste then click the delete button

[Link to previous years waste data](#)  
[Link to previous years waste summary data & percentage change](#)