



# ANNUAL ENVIRONMENTAL REPORT

**REPORTING PERIOD: 1<sup>ST</sup> January 2014 – 31<sup>ST</sup> December 2014**

**WASTE LICENCE  
REGISTRATION NO:**

WL106-02

**LICENSEE:**

**BRUSCAR BHEARNA TEORANTA**

**LOCATION OF ACTIVITY:**

CARROWBROWNE,  
HEADFORD ROAD,  
CO. GALWAY.

**ATTENTION:**

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

**PREPARED BY:**

MR. CAMPBELL FINNIE  
(Barna Recycling)

**CONTRIBUTIONS FROM:**

MR. SEAN CURRAN  
(Managing Director)  
MR. DAMIEN MONAGHAN  
(Operations Manager)  
MR. NIALL JORDAN  
(Deputy Facility Manager)  
P.J. TOBIN CONSULTING ENGINEERS  
COMPLETE LABORATORY SOLUTIONS  
FITZ SCIENTIFIC  
ANUA ENVIRONMENTAL CONSOLUTANTS  
ECOLAB

**DECLARATION:**

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

*Campbell Finnie*

## 1.0 Introduction

The following is the Annual Environmental Report (AER) for **Barna Recycling** for the period **1<sup>st</sup> January 2014 to 31<sup>st</sup> December 2014** 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 Recycling 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 RECYCLING)

## *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 Recycling 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. 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 2013. 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 Department of Agriculture Food and the Marine under licence number COMP-40.

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. Bulky waste which is removed would be kept in storage in preparation for transfer in our own vehicles to landfill for disposal.
- Recoverable MSW – during this reporting period we introduced a new process of recovering MSW on site. The facility is approved by the Agency for the production of a mechanically treated EWC 191212 material. In effect this means our general waste is pre-sorted to remove bulky and recyclable material before being shredded and trommelled to remove organic fines and metals and finally is baled / wrapped in preparation for transfer. The material is stored on site until a bulk shipment accumulates (approximately 3000 tonnes) and then it is transferred to Galway Harbour for export in a ship for recovery in European outlets. All transfers out of the Country are done so via the TFS procedure.

- 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. During this reporting period a new Titech Optical Sorting Machine was added which has further enhanced our ability to produce good quality recyclables. 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 8 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 it 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. There is no requirement to process these materials through the picking station.
- 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. Alternatively timber can be sorted and sent off site in bulk trailers to OCR Waste Management in Roscommon where they carry out the shredding.
- Metal recycling – the processing of metal products is carried out within the transfer building in a dedicated area. We have a grab machine and baler available specifically used for baling this material into a form that can be easily sold as scrap to the UK or Irish metal markets. Alternatively material is stored in a specific area and transferred loose to a local recycler. 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 Recycling 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 (gypsum), street sweepings and RDF.

This section of the report was intended to give the reader a summary of the material types and the processing procedures used by Barna Recycling during the reporting period. Any additional information required is available by contacting the company directly.

## 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 Recycling 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 – 2014)

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 and written in our EPA Licence results for the current reporting year (2013) AND ALL PREVIOUS years are included therefore results for reporting periods 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013 and the current reporting period of 2014 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 and are in the new reporting format spreadsheet as published by the Agency although not mandatory we decided to implement them into this years report.

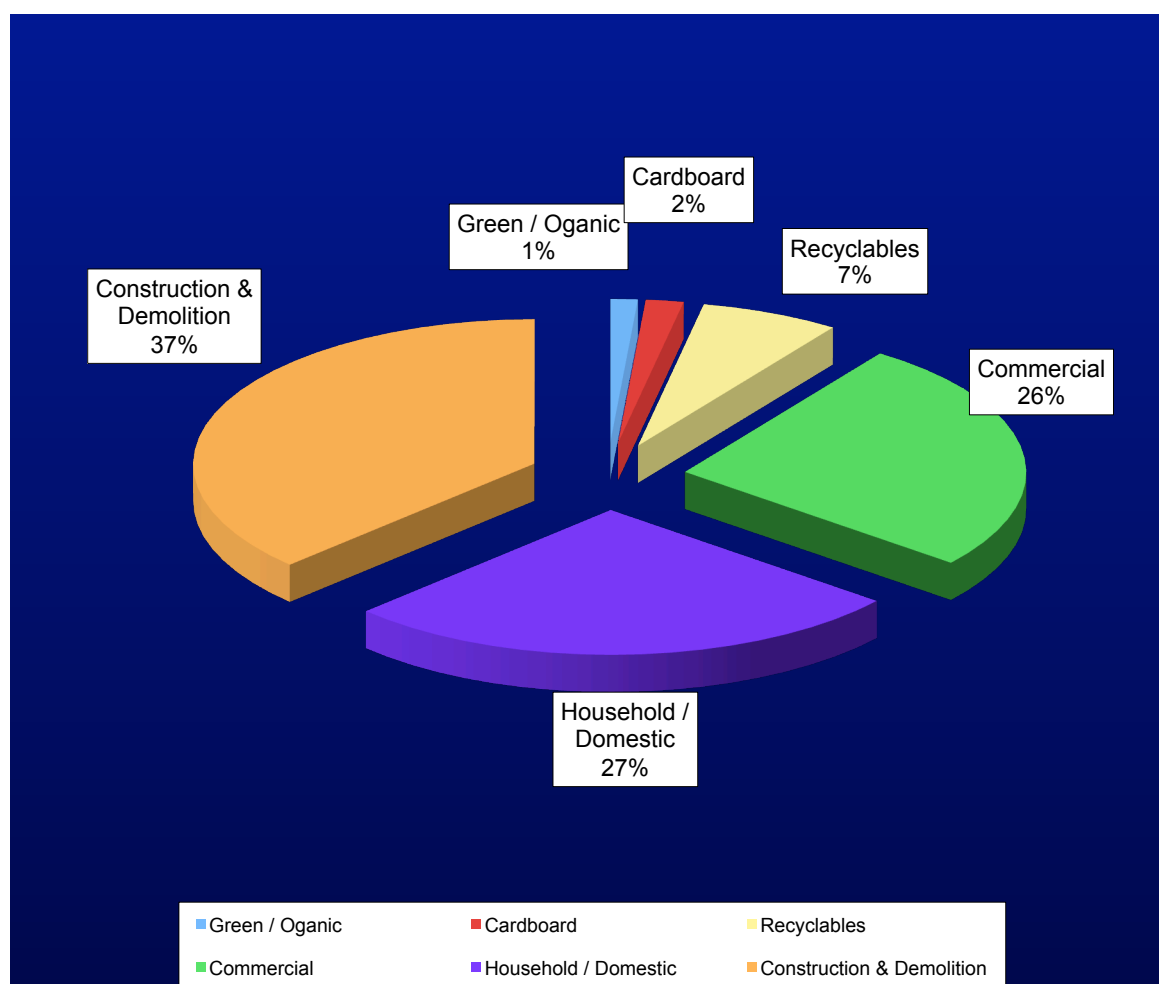
### Waste In / Out Results for 2002 Period

**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 Recycling 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.

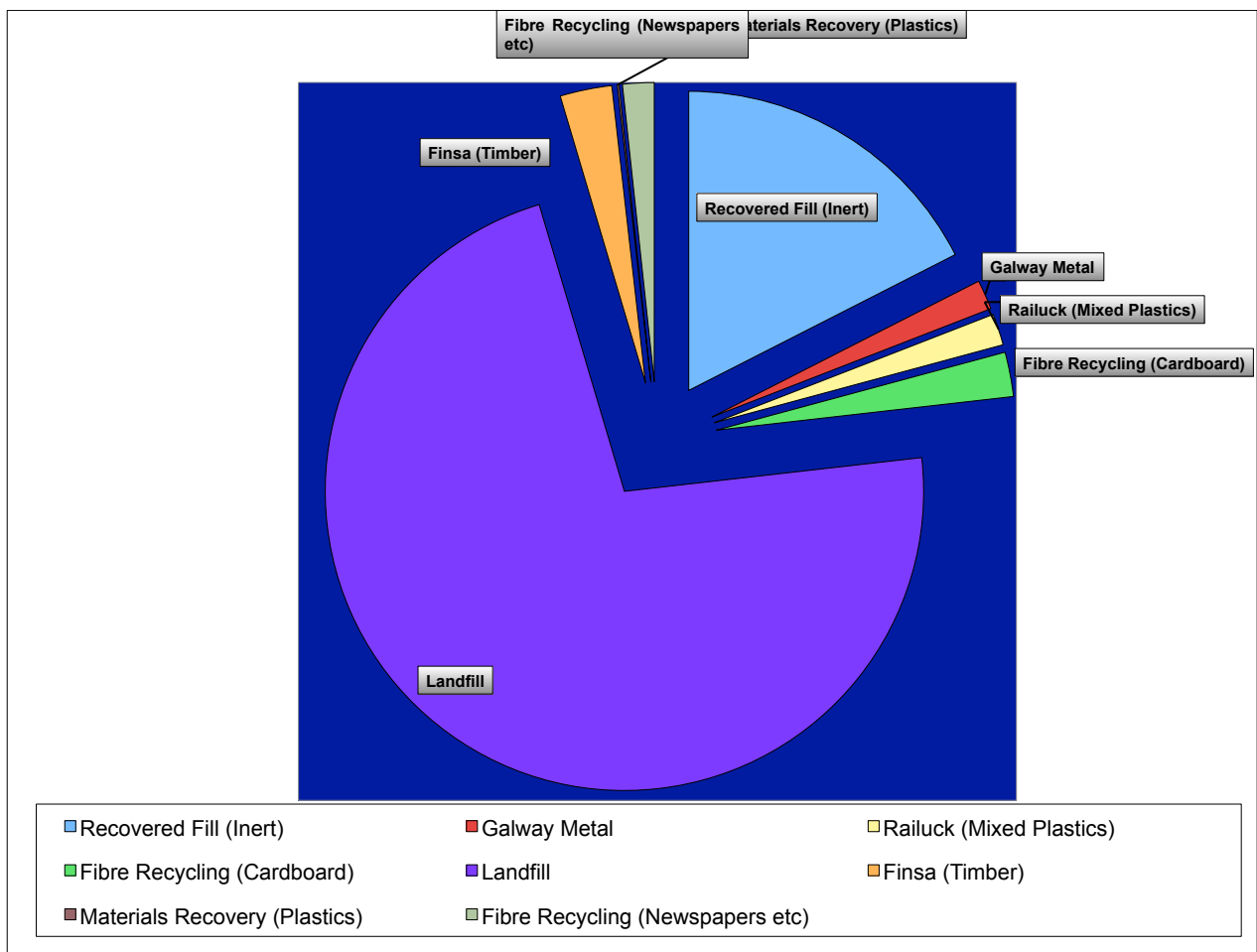


**Figure 2.4.2: Percentage Breakdown of Waste Received on site from 1<sup>st</sup> January – 31<sup>st</sup> December 2002**



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

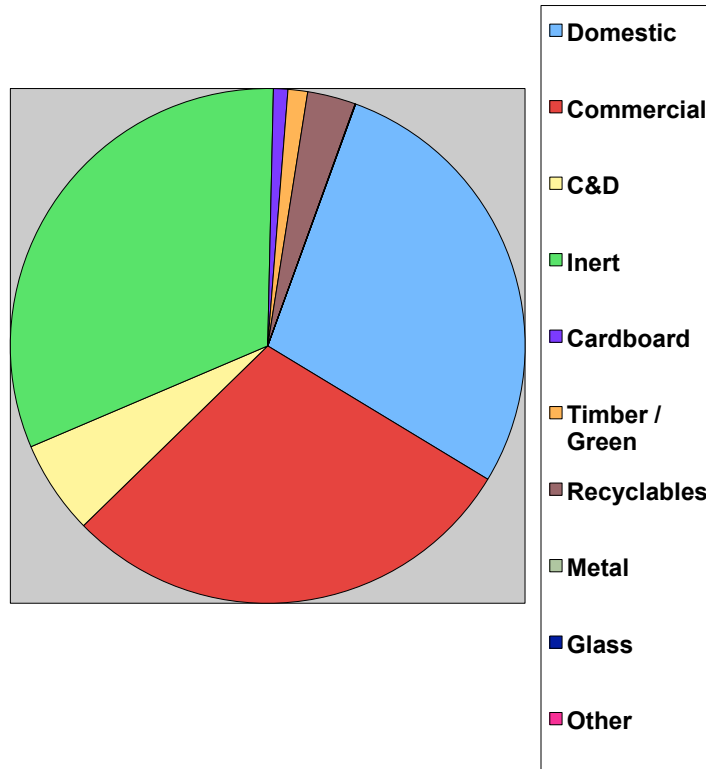
Waste Type	Tonnes	% of Waste In
Materials Recovery (Plastic)	37.17	0.1%
Galway Metal	639.5	1.6%
Railuck (Mixed Plastics)	662.91	1.7%
Fibre Recycling (Newspapers etc)	677.98	1.7%
Fibre Recycling (Cardboard)	919.50	2.4%
Finsa Products (Timber)	1,092.50	2.8%
Recovered Fill	6859.40	17.5%
Ballinasloe Landfill	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 / Out Reports for 2003

## Waste In 2003

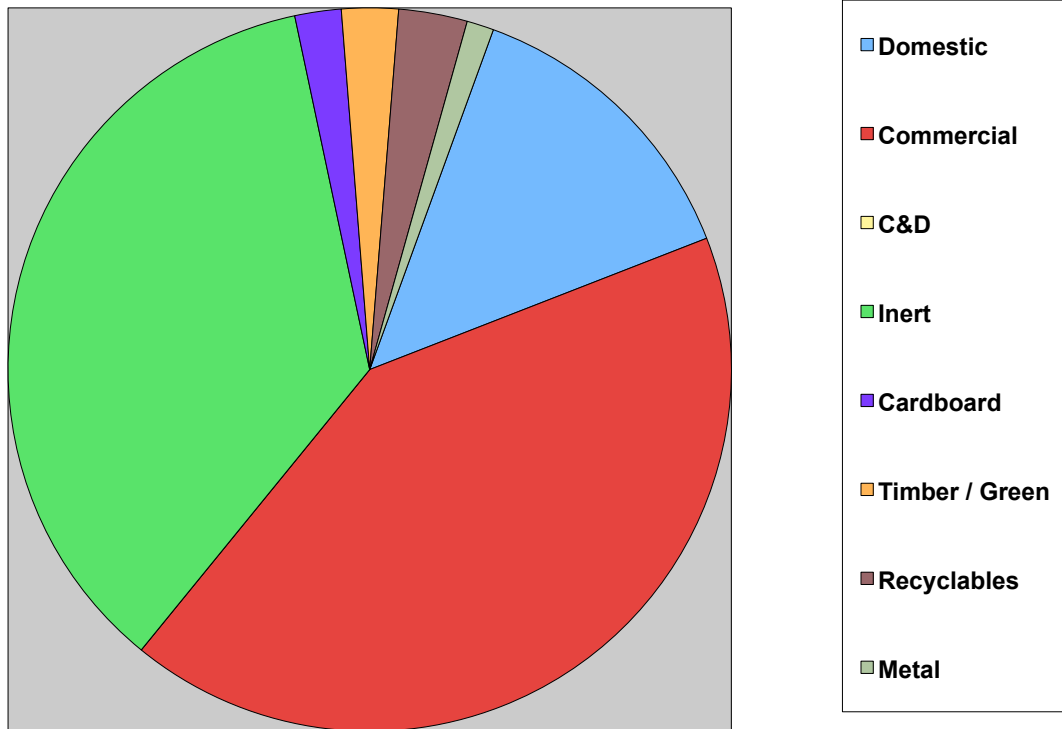


**Figure 2.4.5:**  
**Breakdown of Waste Received on site from 1<sup>st</sup> January – 31<sup>st</sup> December 2003**

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>

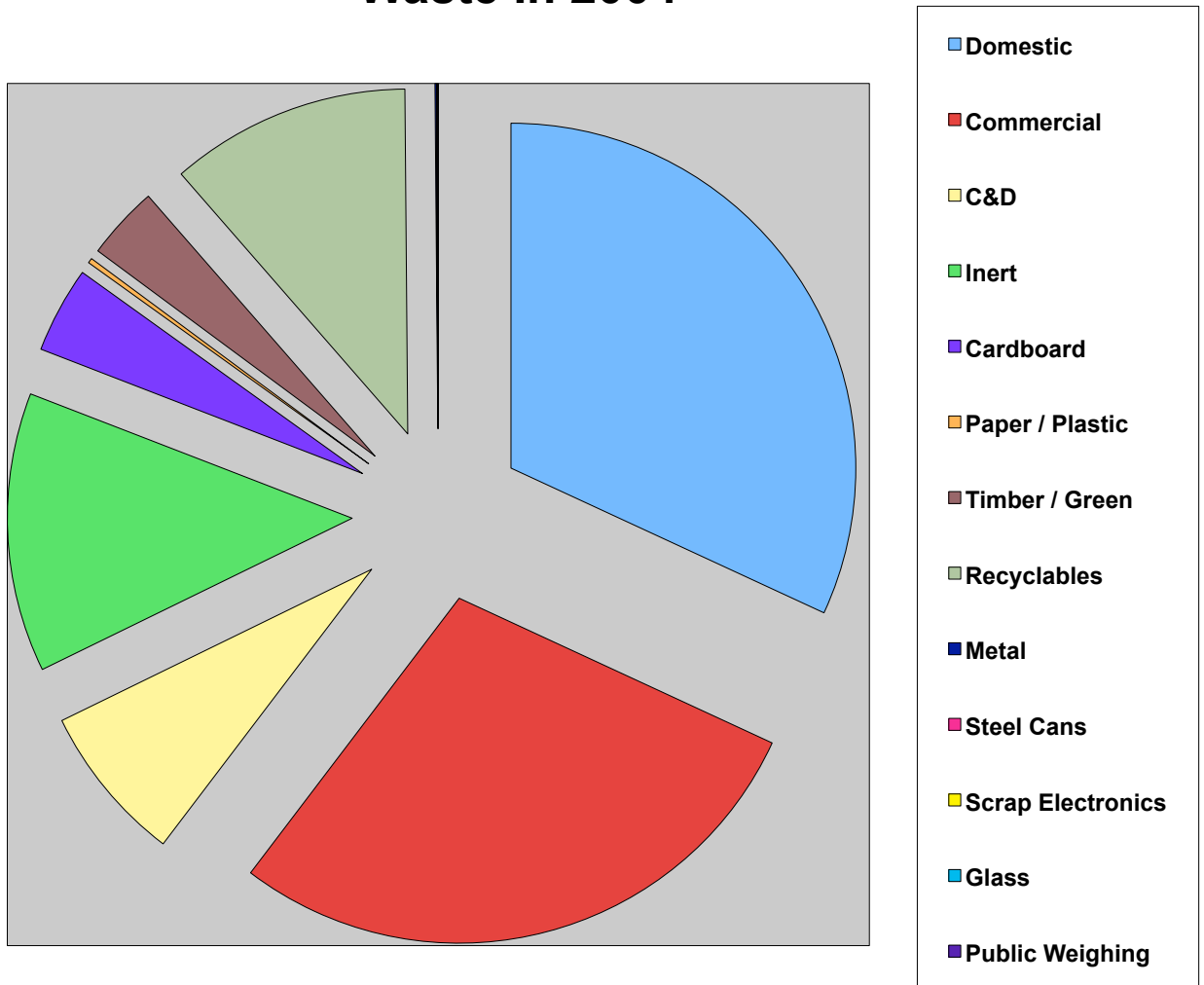
**Table 2.4.7: Total Wastes Outgoing 1<sup>st</sup> January 2003 – 31<sup>st</sup> December 2003**

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

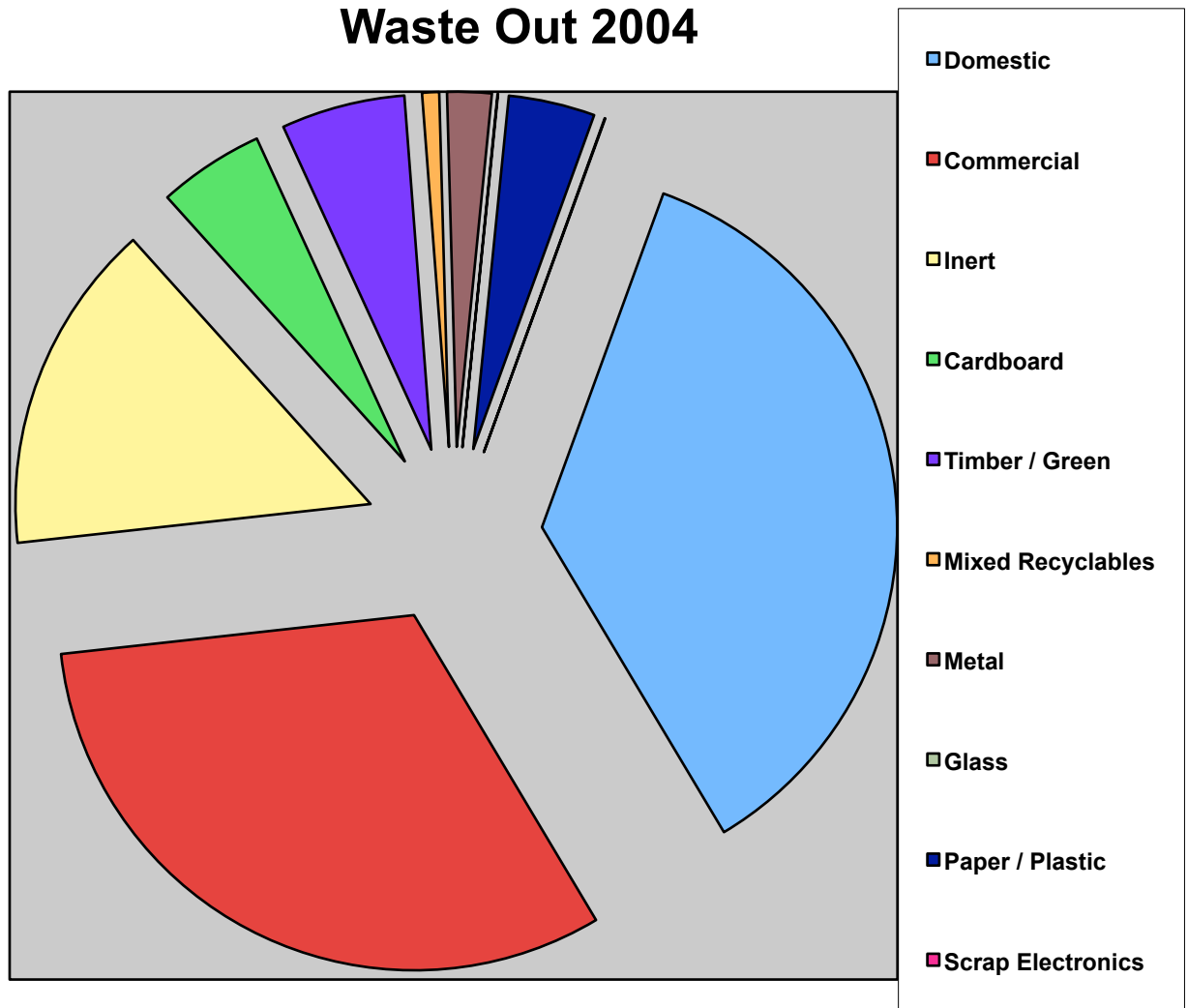


**Figure 2.4.9:**  
Breakdown of Waste Received on site from 1<sup>st</sup> January – 31<sup>st</sup> December 2004

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 Recycling also have Batteries collected by Returnbatt and send tyres as required to Crumb Rubber or to Crossmore Transport

Barna Recycling 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 2005

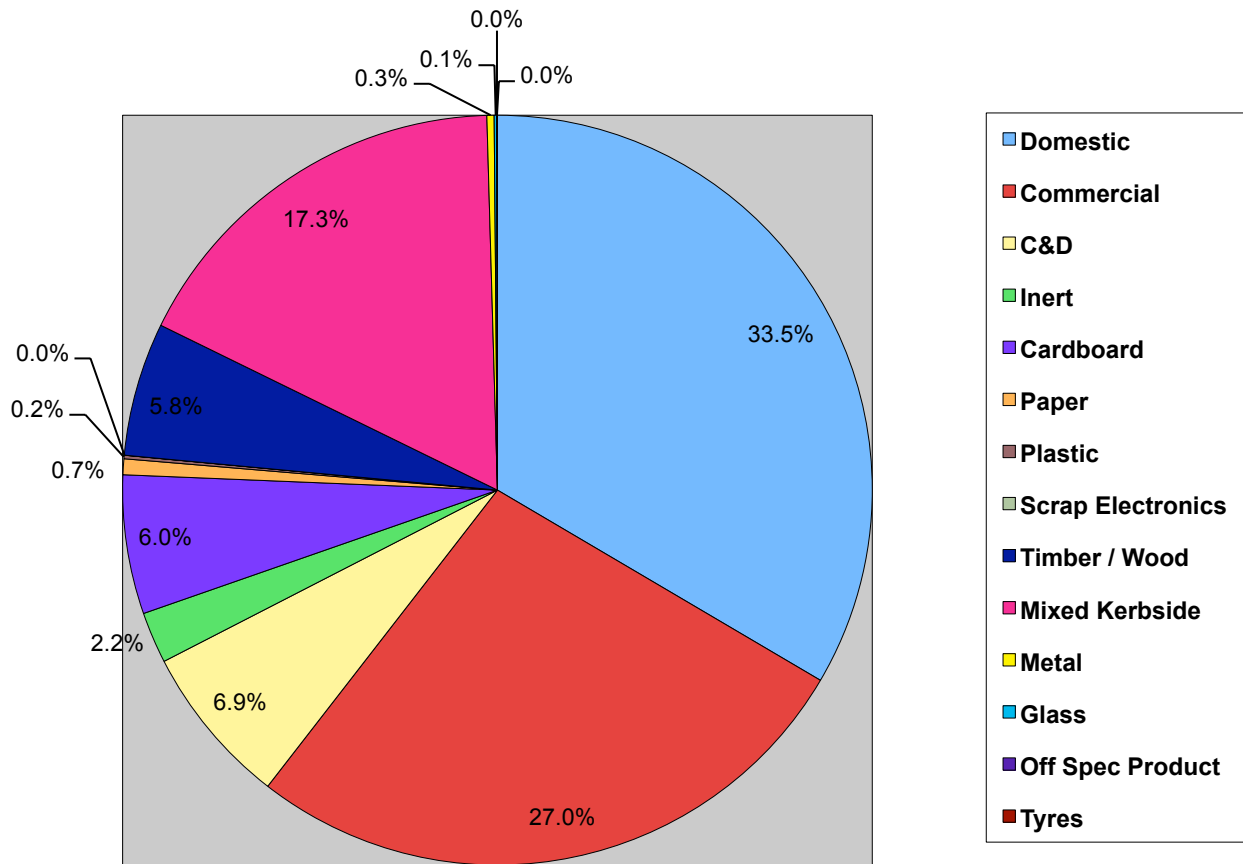
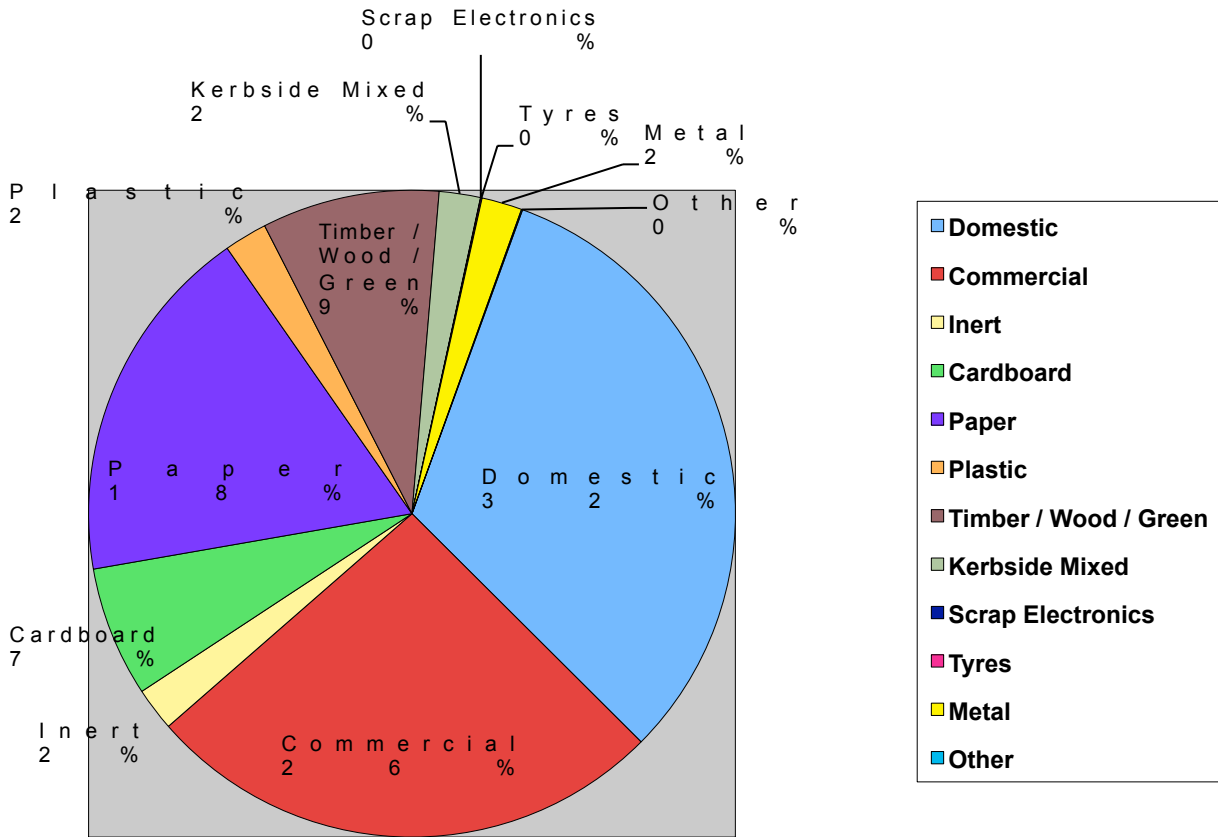


Figure 2.4.14: Breakdown of Waste Received on site from 1<sup>st</sup> January 2005 – 31<sup>st</sup> December 2005

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>	67666.01

**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 Recycling 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

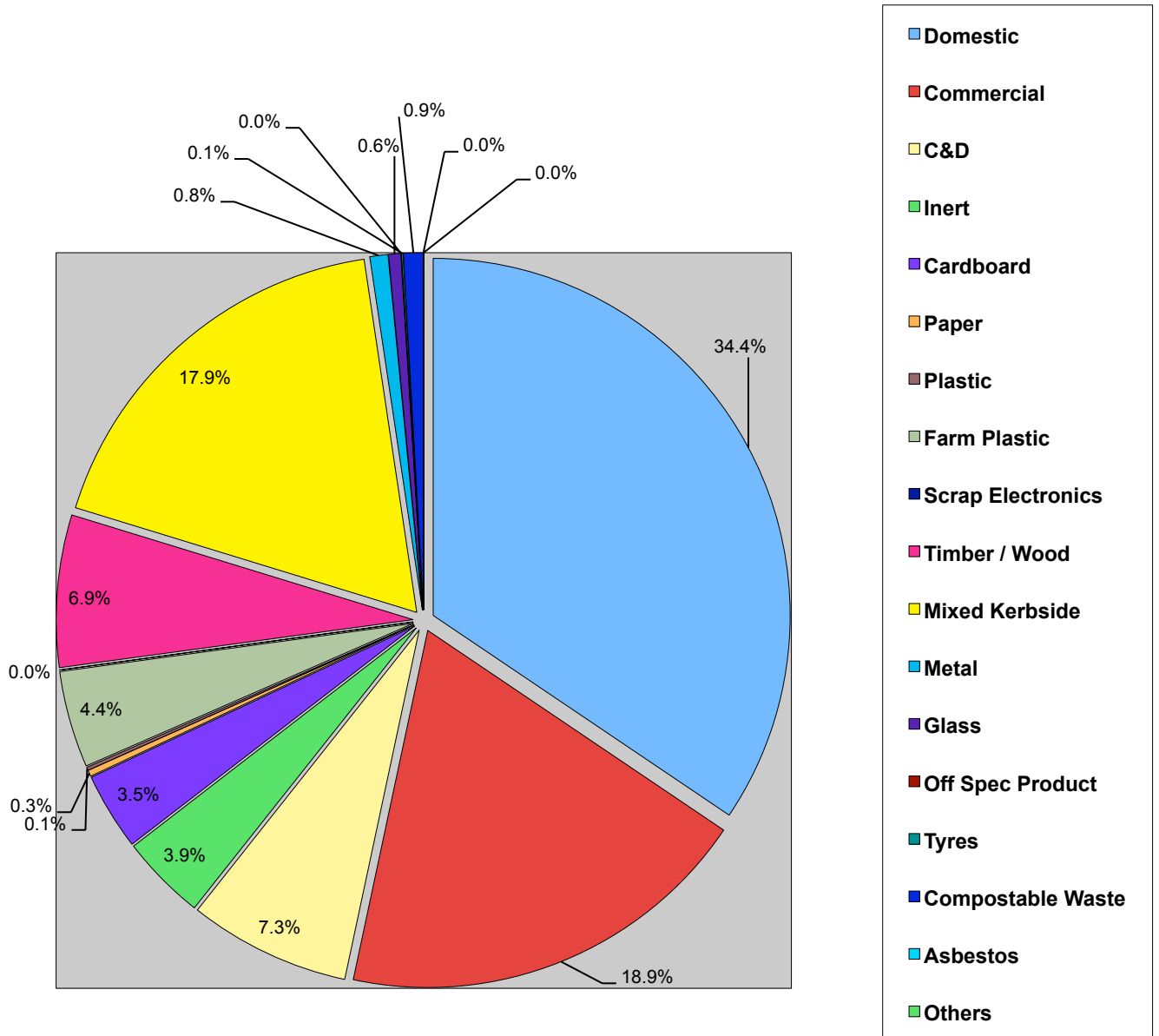
Barna Recycling requests and keeps on file recycling certificates from all the companies that take material from the premises for recycling / disposal / recovery.

<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

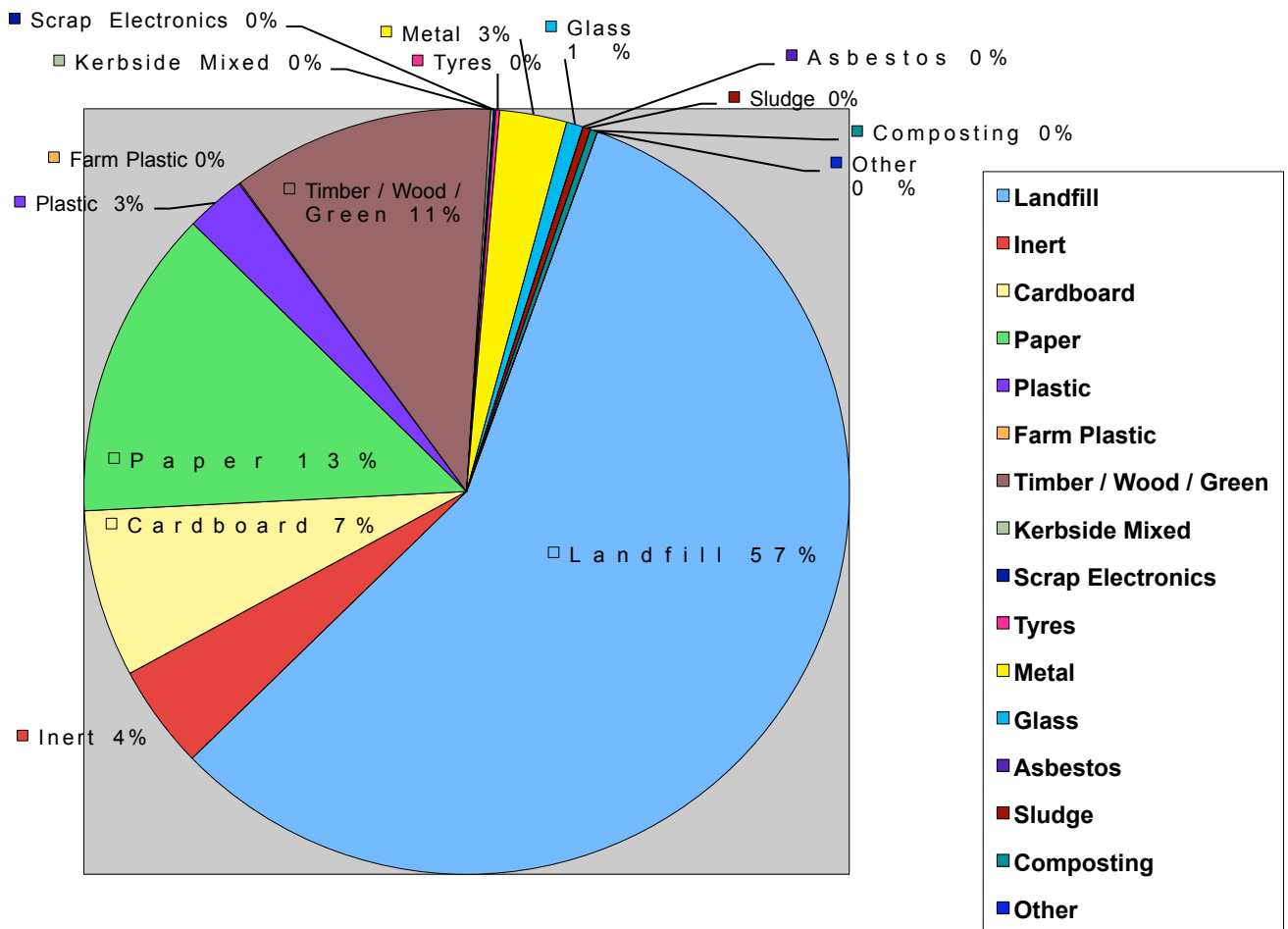


**Figure 2.6.0:**  
**Breakdown of Waste Received on site from 1<sup>st</sup> January 2006 – 31<sup>st</sup> December 2006**

<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**

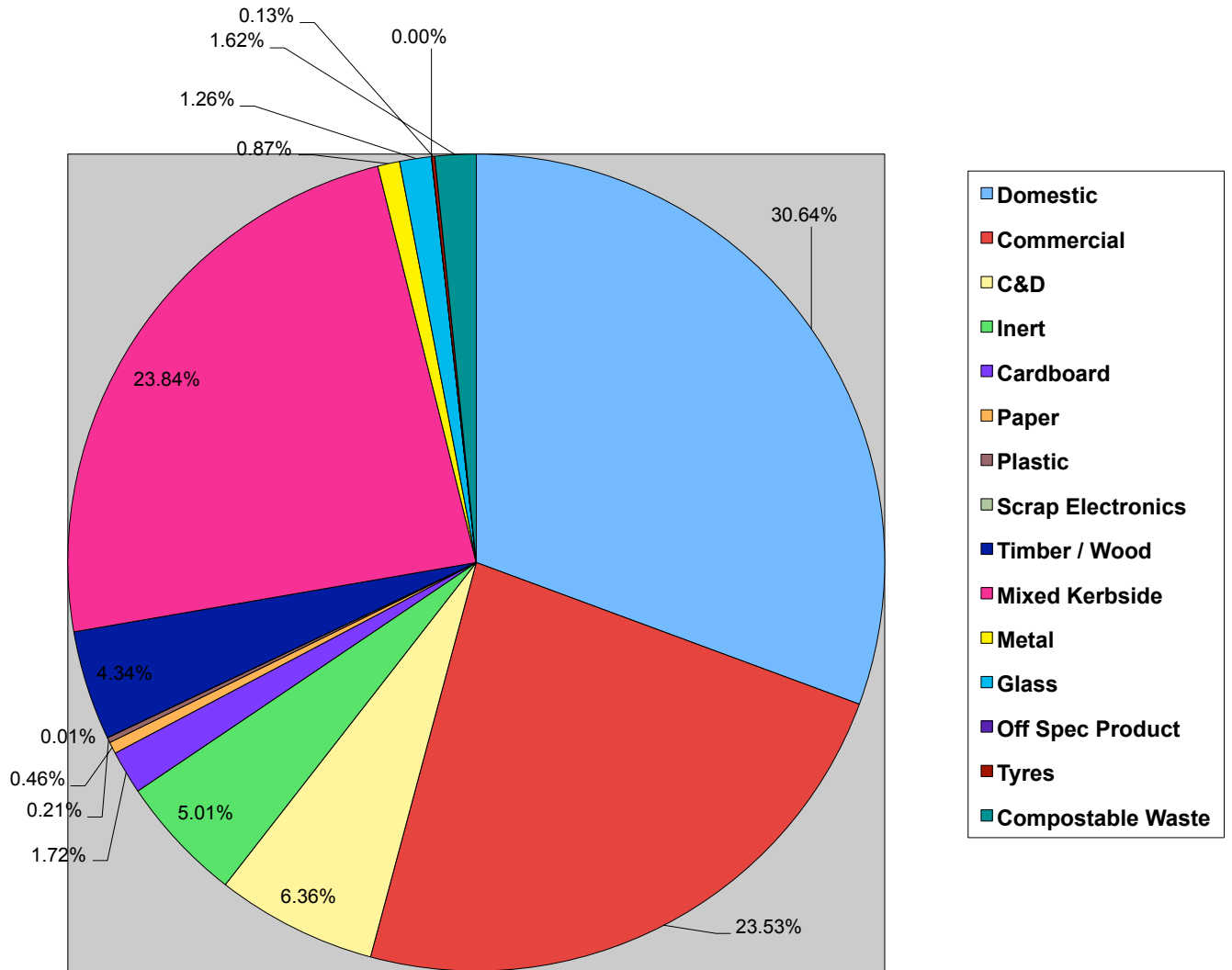
Breakdown of the recycling elements for 2006:

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**



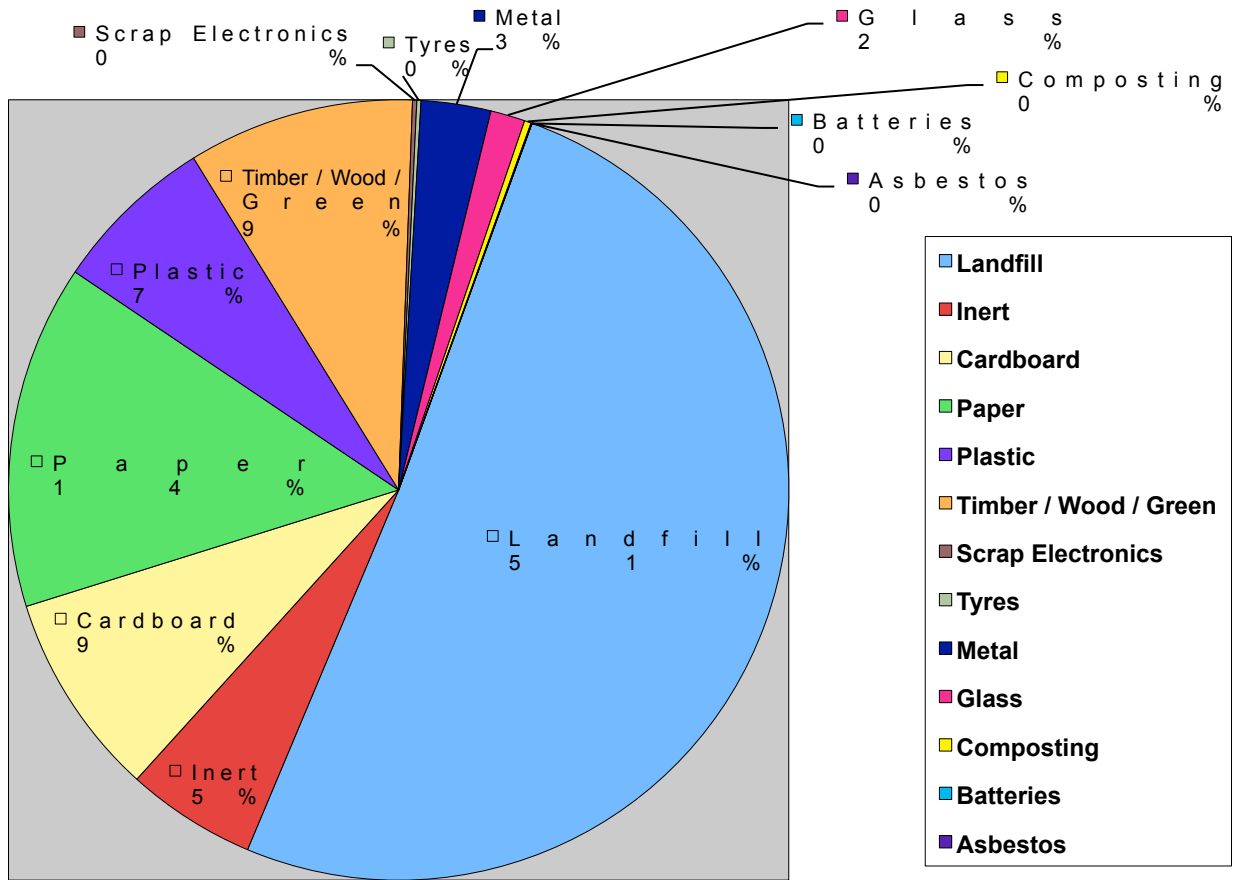
**Figure 2.7.0:**  
**Breakdown of Waste Received on site from 1<sup>st</sup> January 2007 – 31<sup>st</sup> December 2007**

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**

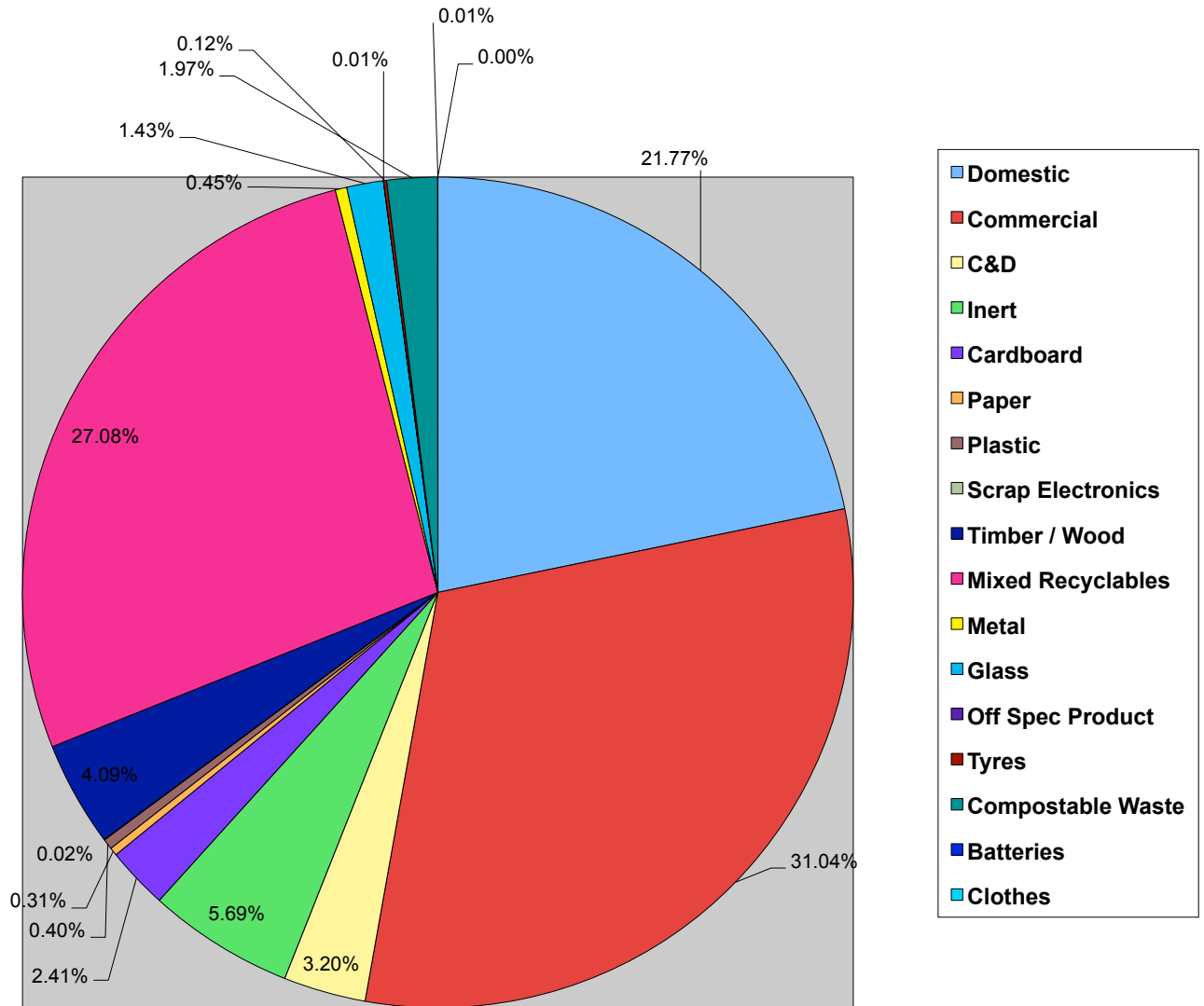
The following table shows the % breakdown of the recyclable materials sent off site for recovery / recycling during 2007:

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)**



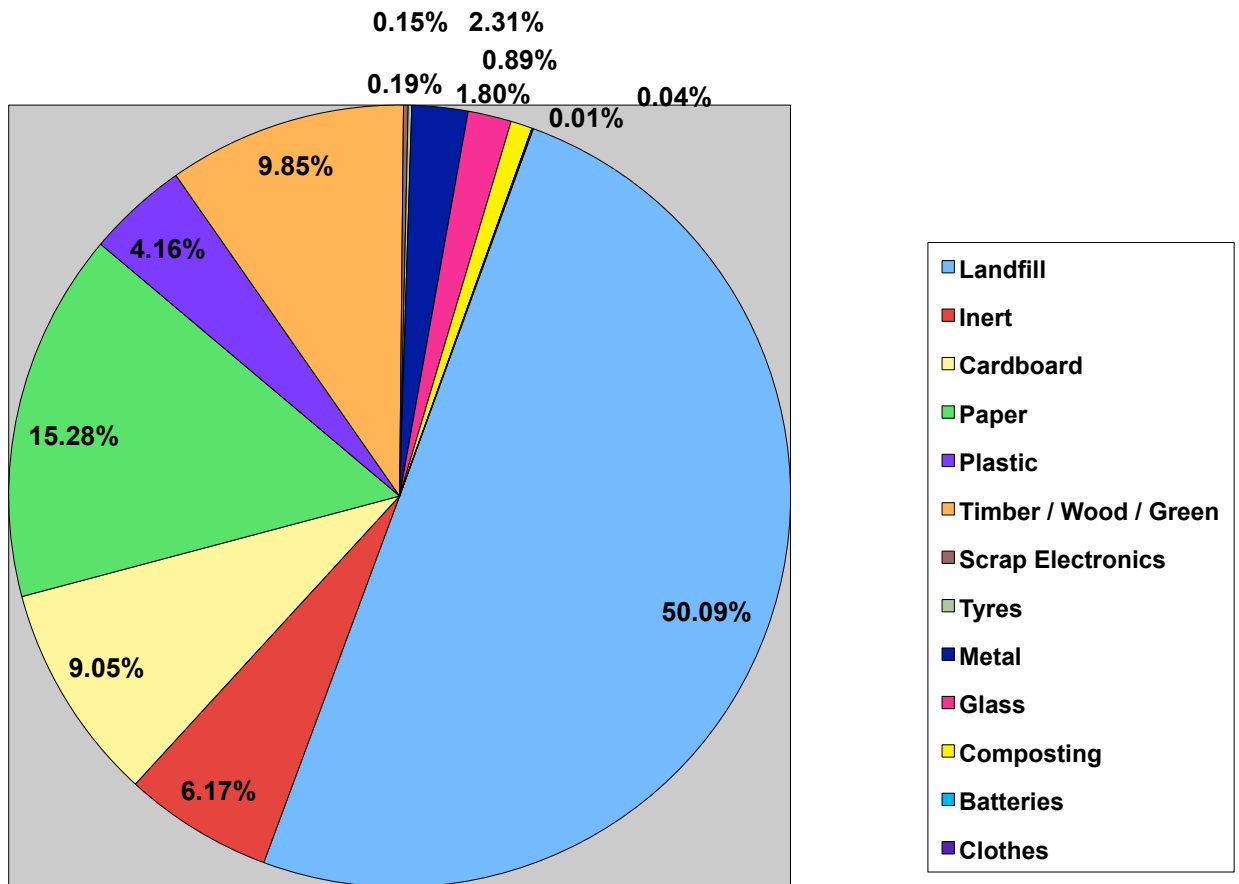
**Figure 2.8.0:**  
**Breakdown of Waste Received on site from 1<sup>st</sup> January 2008 – 31<sup>st</sup> December 2008**

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**

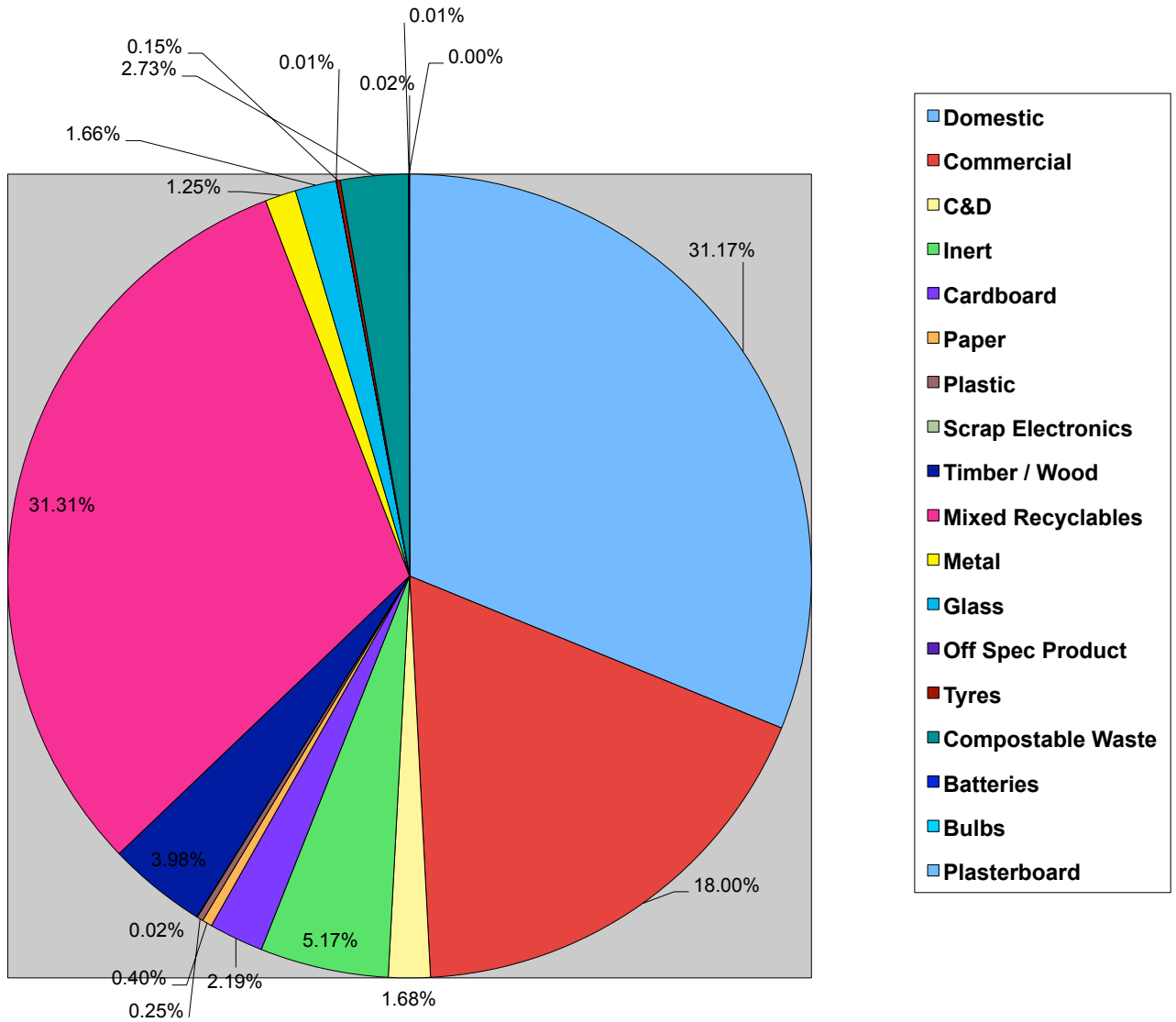
The following table shows the % breakdown of the recyclable materials sent off site for recovery / recycling during 2008:

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)



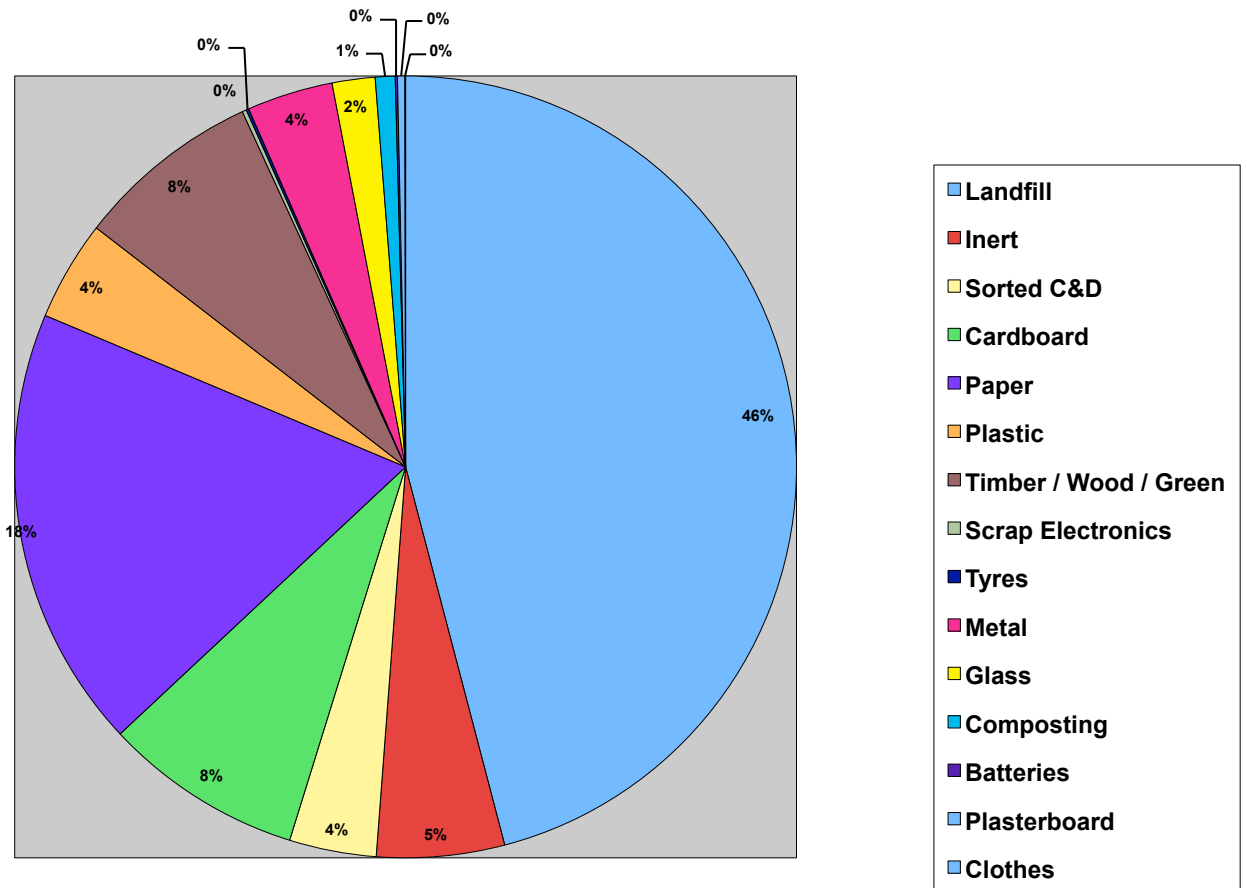
**Figure 2.9.0:**  
**Breakdown of Waste Received on site from 1<sup>st</sup> January 2009 – 31<sup>st</sup> December 2009**

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**

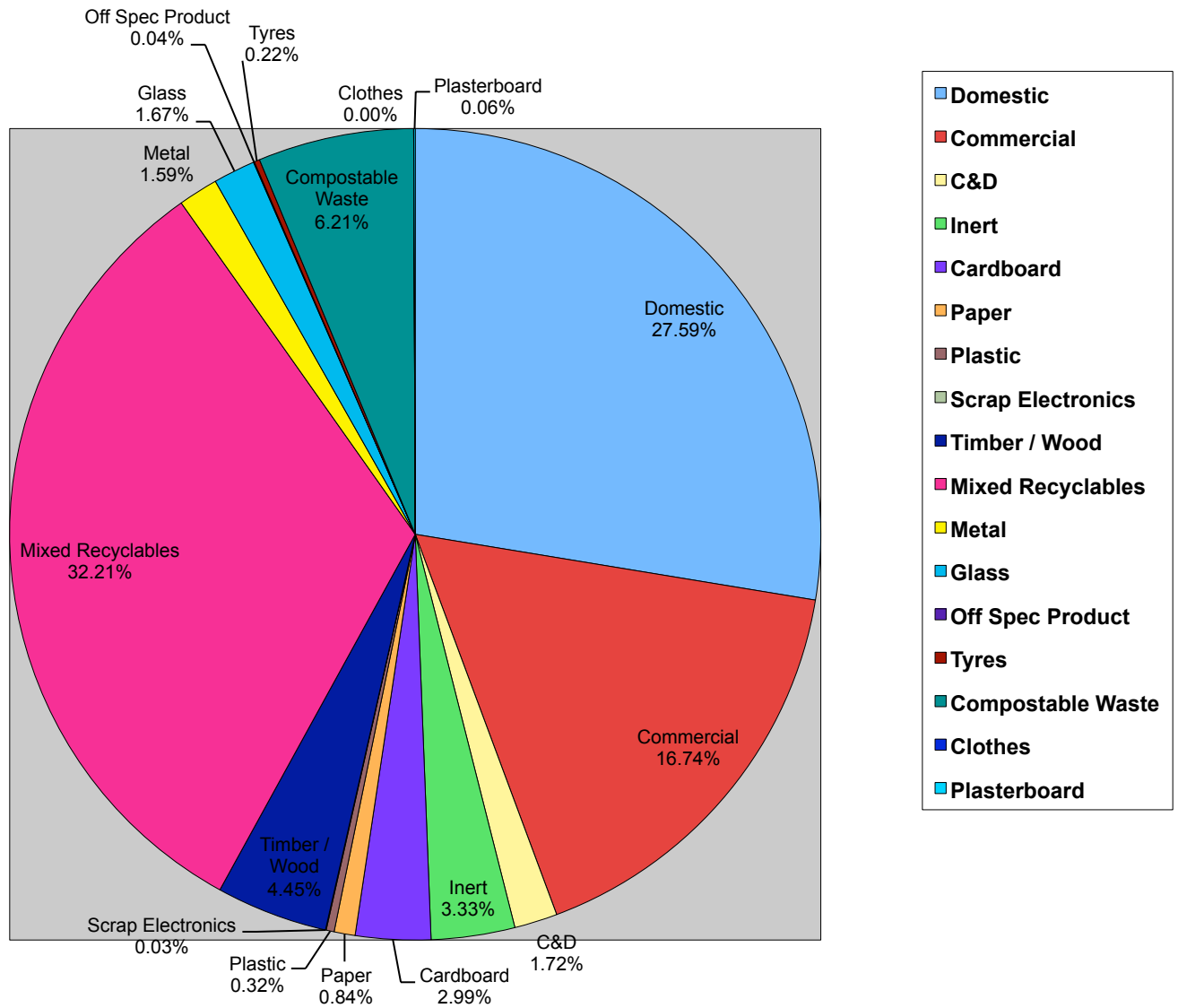
The following table shows the % breakdown of the recyclable materials sent off site for recovery / recycling during 2009:

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)**



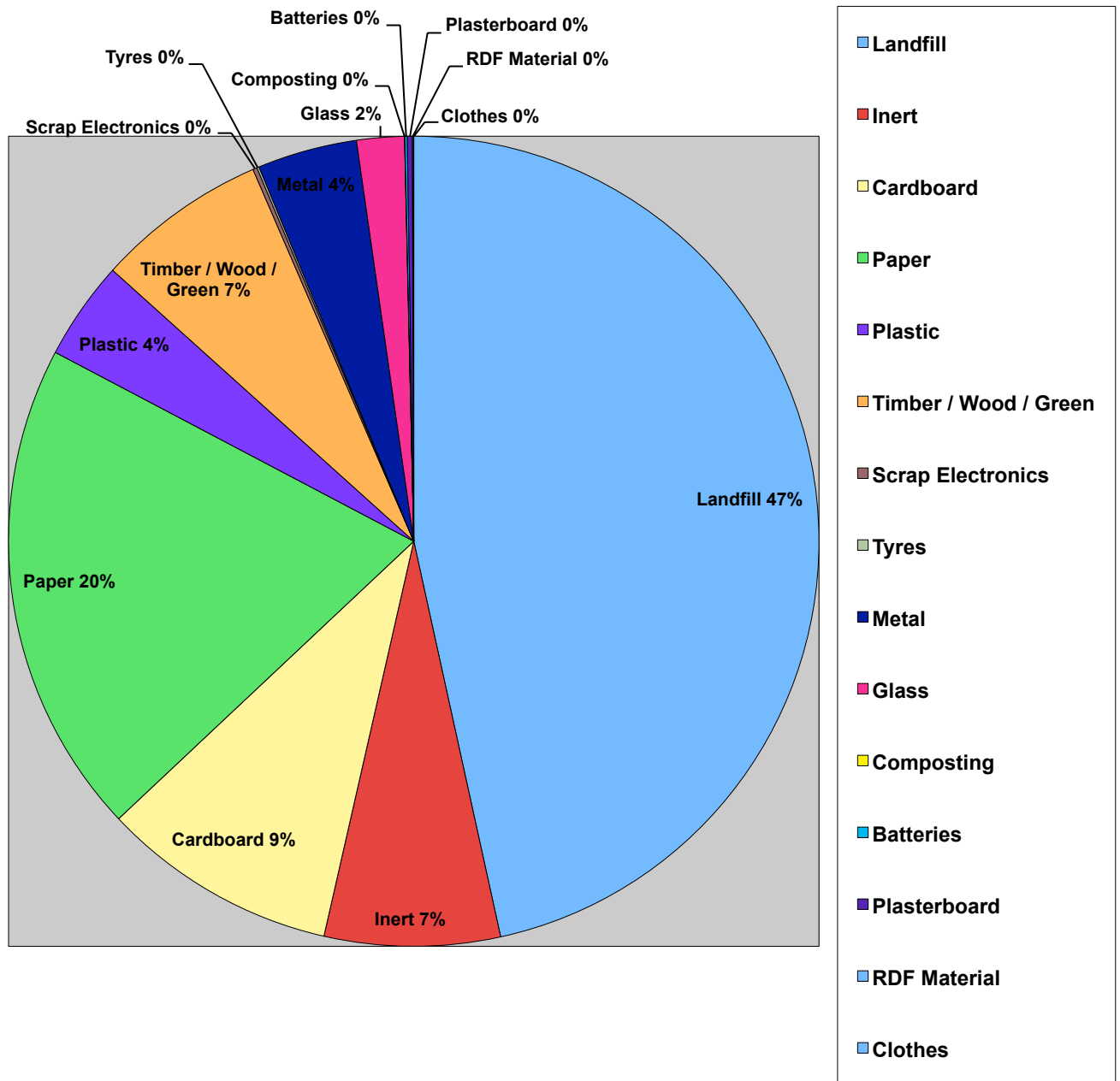
**Figure 2.10.0:**  
**Breakdown of Waste Received on site from 1<sup>st</sup> January 2010 – 31<sup>st</sup> December 2010**

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

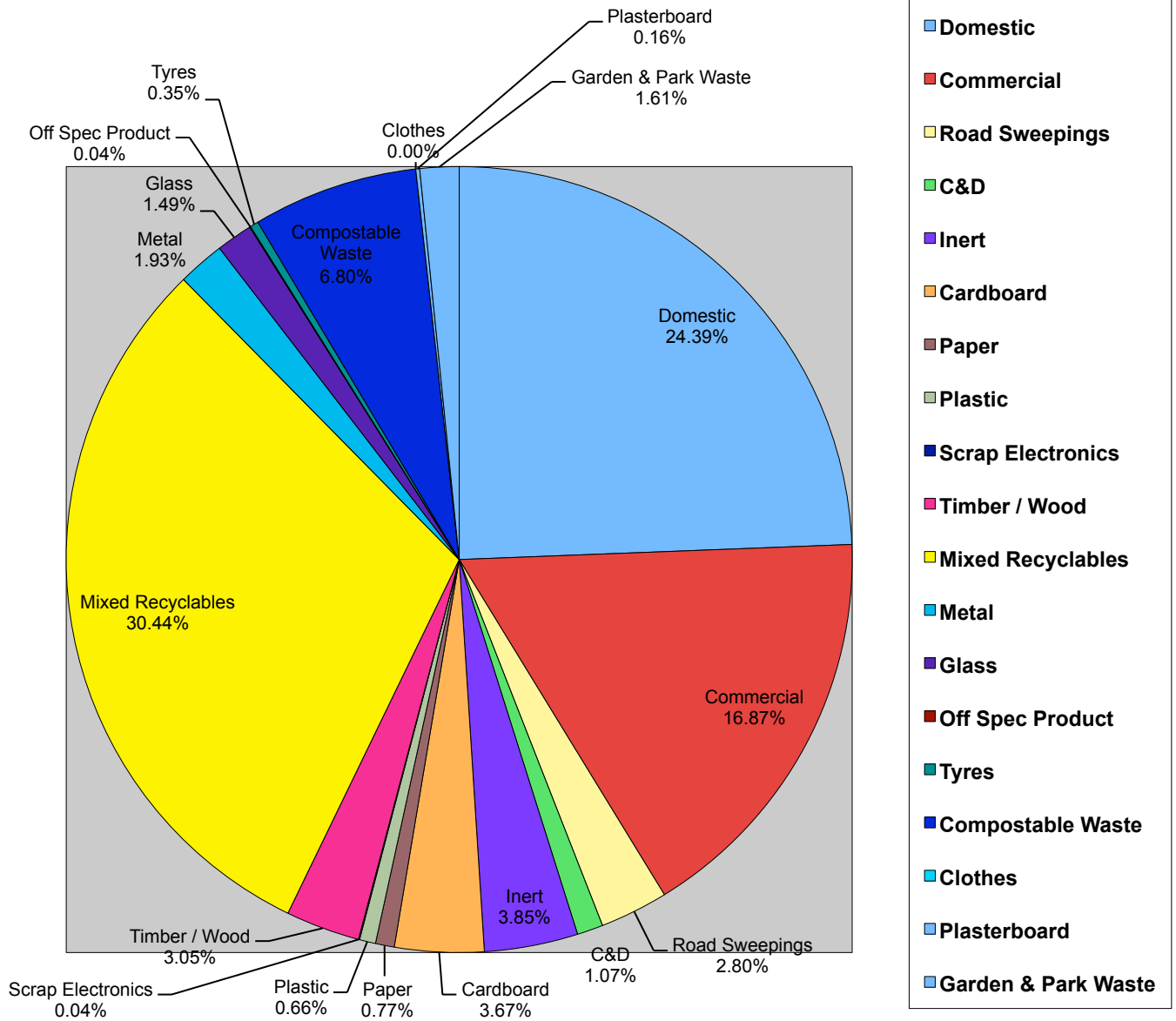
The following table shows the % breakdown of the recyclable materials sent off site for recovery / recycling during 2010. This table only shows the RECYCLABLE / RECOVERABLE material types and lists the total tonnage recycled during 2010 and the % split that each waste type provides towards the total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



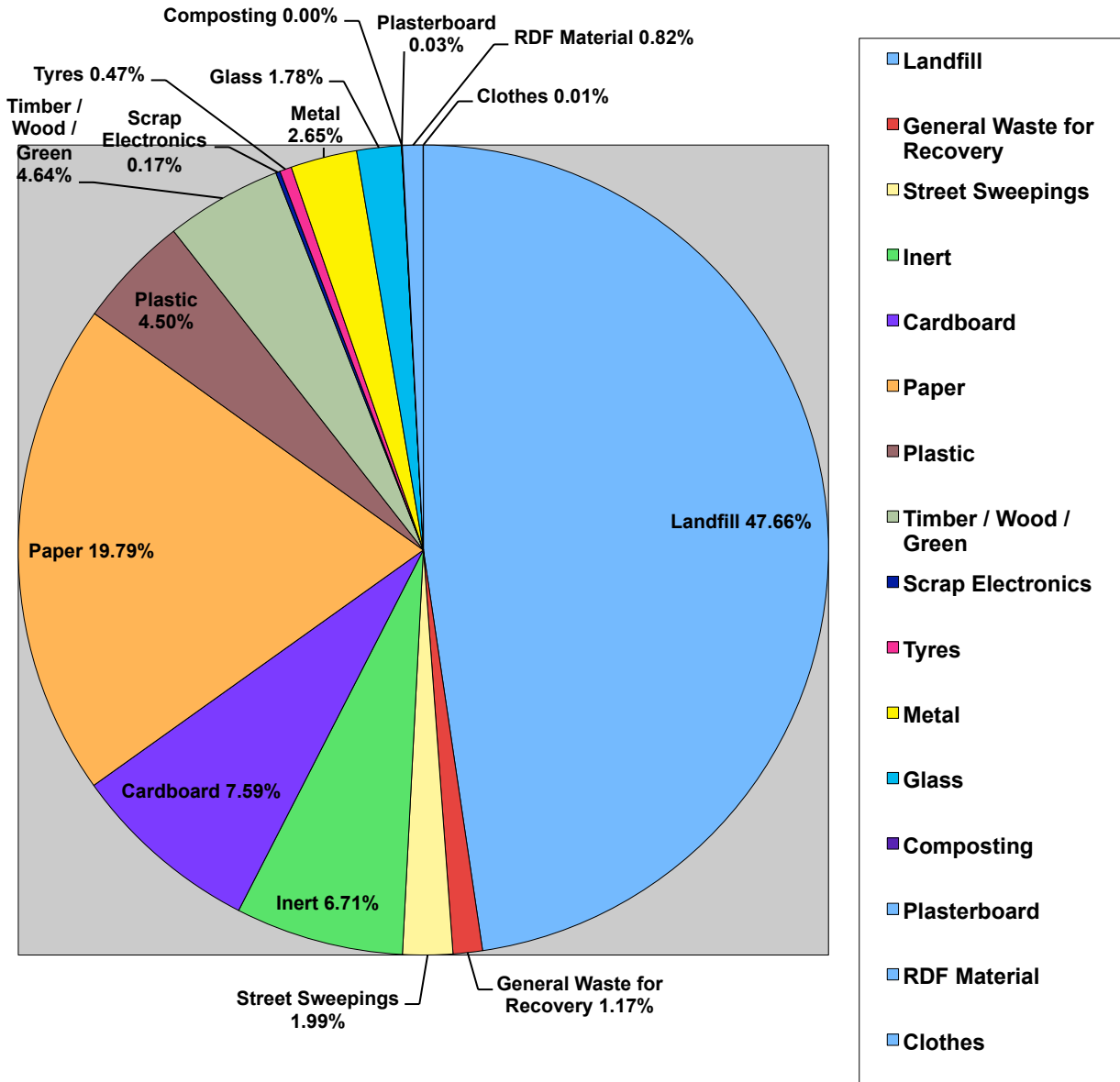
**Figure 2.11.0:**  
**Breakdown of Waste Received on site from 1<sup>st</sup> January 2011 – 31<sup>st</sup> December 2011**

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 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

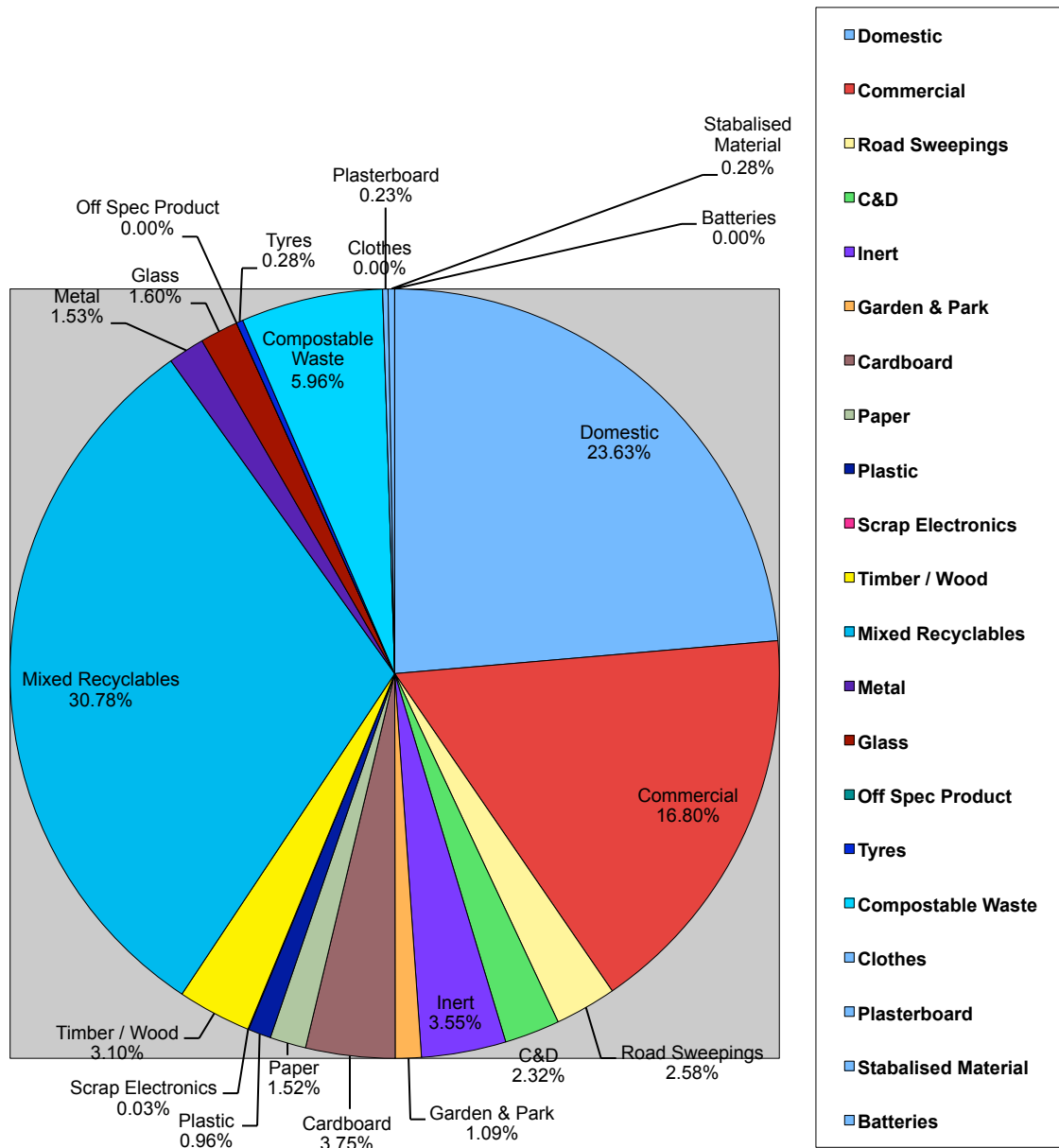
The following table shows the % breakdown of the recyclable materials sent off site for recovery / recycling during 2011. This table only shows the RECYCLABLE / RECOVERABLE material types and lists the total tonnage recycled during 2011 and the % split that each waste type provides towards the total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

<b>WASTE TYPE (Recyclable materials only)</b>	<b>RECYCLING (tonnes per annum)</b>	<b>% OF TOTAL RECYCLING</b>
<b>EWC 200202 Inert</b>	4520.28	13%
<b>EWC 191201 Cardboard</b>	5111.17	15%
<b>EWC 191201 Paper</b>	13328.88	39%
<b>EWC 191204 Plastic</b>	3031.88	9%
<b>EWC 191207 Timber / Wood / Green</b>	3125.35	9%
<b>EWC 160201 Scrap Electronics</b>	114.46	Less than 1%
<b>EWC 160103 Tyres</b>	318.36	1%
<b>EWC 191203 Metal</b>	1784.65	5%
<b>EWC 191205 Glass</b>	1199.26	4%
<b>EWC 191208 Clothes</b>	5.92	Less than 1%
<b>EWC 170802 Gypsum / Plasterboard</b>	19.50	Less than 1%
<b>EWC 200108 or EWC 200304 Compostable Material</b>	0.58	Less than 1%
<b>EWC 191210 Refuse Derived Fuel</b>	551.32	2%
<b>EWC 191212 Mechanically treated mixed waste for recovery (send to Indaver Meath Facility)</b>	788.14	2%
<b>EWC 200199 Mixed Recycling</b>	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 / Out Reports for 2012

### WASTE IN (2012)



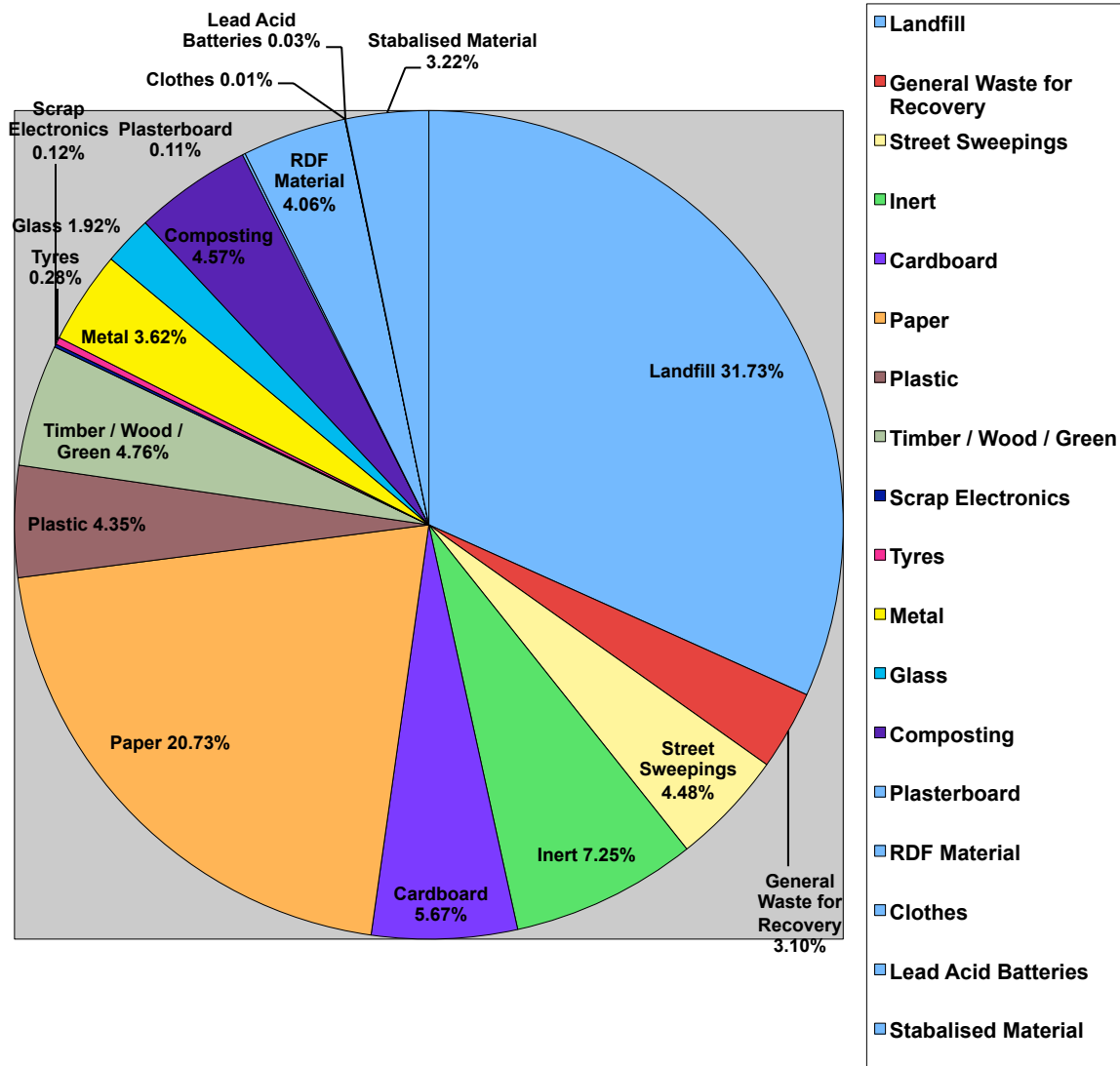
**Figure 2.12.0:**  
**Breakdown of Waste Received on site from 1<sup>st</sup> January 2012 – 31<sup>st</sup> December 2012**

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

## Waste Out 2012



**Figure 2.12.2:**  
**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 2.12.3: Total Wastes Outgoing 1<sup>st</sup> January 2012 – 31<sup>st</sup> December 2012**

## RECYCLING SUMMARY FOR 2012

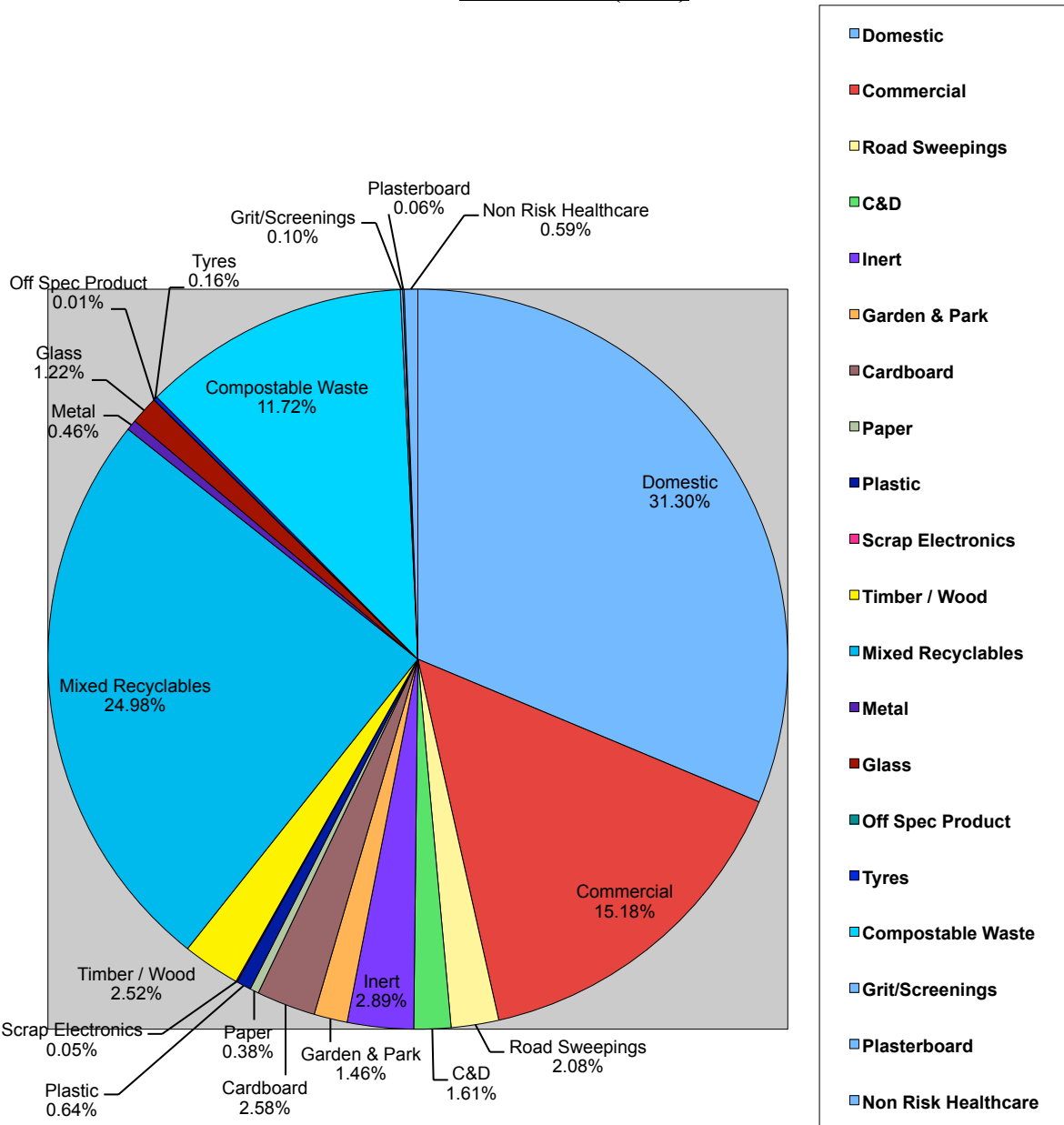
The following table shows the % breakdown of the recyclable materials sent off site for recovery / recycling during 2012. This table only shows the RECYCLABLE / RECOVERABLE material types and lists the total tonnage recycled during 2012 and the % split that each waste type provides towards the total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

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

**Table 2.12.4: Breakdown of recycling waste out for 1<sup>st</sup> January 2012 – 31<sup>st</sup> December 2012**

**Waste In / Out Reports for 2013**

**WASTE IN (2013)**



**Figure 2.13.0:**  
**Breakdown of Waste Received on site from 1<sup>st</sup> January 2013 – 31<sup>st</sup> December 2013**

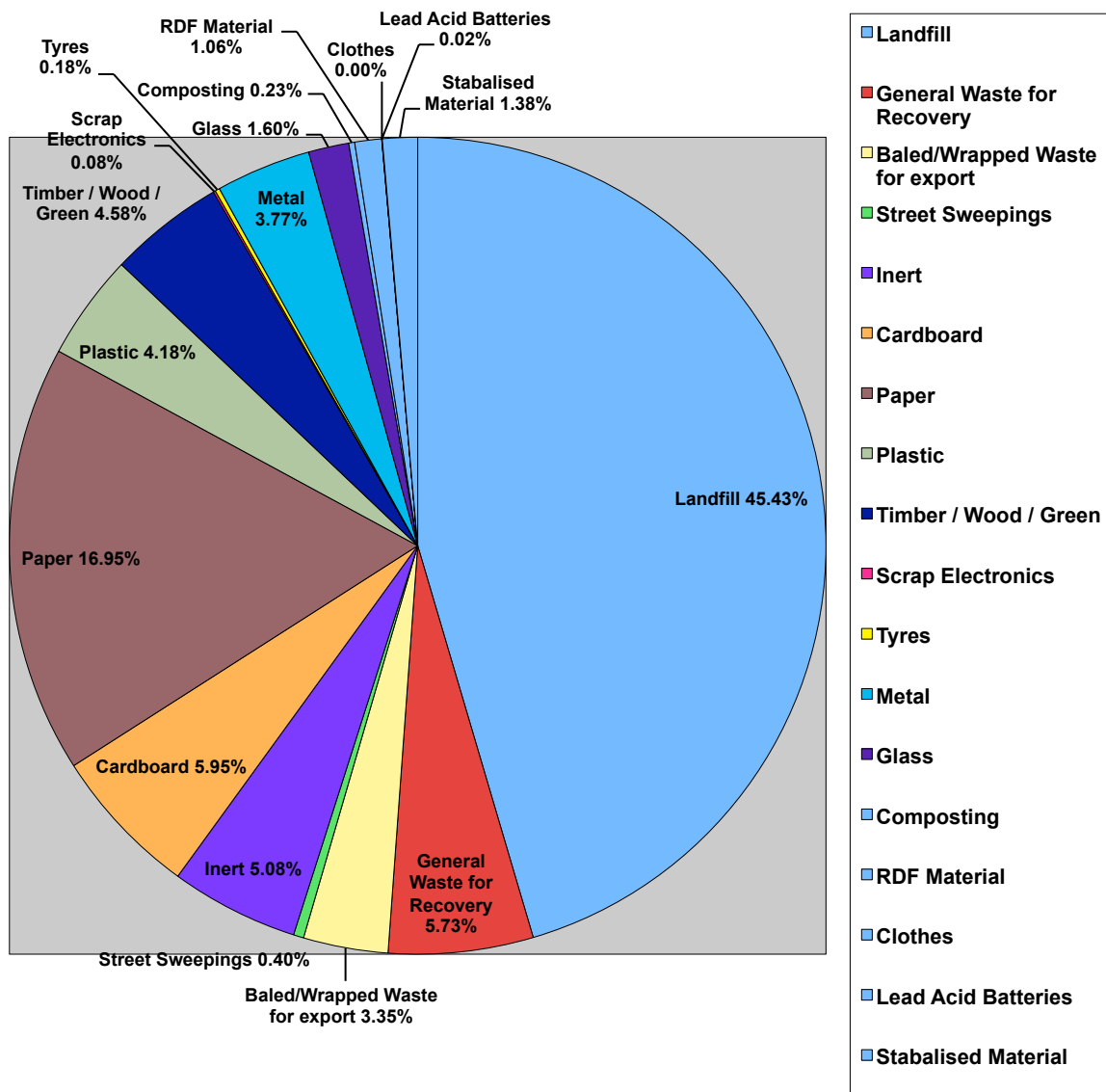


Waste in for 2013: Table of quantities by waste type

<b>WASTE TYPE</b>	<b>WASTE IN (tonnes per annum)</b>
<b>EWC 200301 Domestic</b>	<b>27986.41</b>
<b>EWC 200301 Commercial</b>	<b>13573.78</b>
<b>EWC 200303 Street / Road Sweepings</b>	<b>1857.32</b>
<b>EWC 170904 Mixed C &amp; D</b>	<b>1443.15</b>
<b>EWC 170107 Inert</b>	<b>2580.85</b>
<b>EWC 200201 Garden &amp; Park Waste</b>	<b>1302.56</b>
<b>EWC 150101 Cardboard</b>	<b>2305.97</b>
<b>EWC 200101 Paper</b>	<b>343.16</b>
<b>EWC 200139 Plastic</b>	<b>576.08</b>
<b>EWC 160201 Scrap Electronics / WEEE</b>	<b>45.66</b>
<b>EWC 200138 Timber / Wood</b>	<b>2250.91</b>
<b>EWC 200199 Mixed Kerbside Recyclables</b>	<b>22329.26</b>
<b>EWC 170407 Metal</b>	<b>409.81</b>
<b>EWC 200102 Glass</b>	<b>1093.22</b>
<b>EWC 160304 Off Spec Product</b>	<b>10</b>
<b>EWC 200108 Food Waste</b>	<b>10224.03</b>
<b>EWC 200304 Sludge</b>	<b>250.24</b>
<b>Compostable materials</b>	
<b>EWC 170802 Plasterboard / Gypsum</b>	<b>54.22</b>
<b>EWC 160103 Tyres</b>	<b>147.03</b>
<b>EWC 190801 Grit/screenings</b>	<b>92.68</b>
<b>EWC 180104 Non risk healthcare waste</b>	<b>526.53</b>
<b>TOTAL</b>	<b>89402.87TONNES</b>

**Table 2.13.1: Total Wastes Incoming 1<sup>st</sup> January 2013 – 31<sup>st</sup> December 2013**

## Waste Out 2013



**Figure 2.13.2:**  
**Breakdown of Waste going off site for Recovery or Disposal from**  
**1<sup>st</sup> January 2013 – 31<sup>st</sup> December 2013**

Waste out for 2013: Table of quantities by waste type:-

<b>WASTE TYPE</b>	<b>WASTE OUT (tonnes per annum)</b>
<b>EWC 200301 Mechanically treated mixed waste for landfill</b>	<b>34302.85</b>
<b>EWC 191212 Mechanically treated mixed waste for recovery (sent to Indaver Meath Facility)</b>	<b>4324</b>
<b>EWC 200301 Baled/Wrapped waste for export &amp; recovery</b>	<b>2532.58</b>
<b>EWC 200303 Road / Street Sweepings</b>	<b>305.6</b>
<b>EWC 200202 Inert</b>	<b>3834.37</b>
<b>EWC 191201 Cardboard</b>	<b>4494.68</b>
<b>EWC 191201 Paper</b>	<b>12796.88</b>
<b>EWC 191204 Plastics</b>	<b>3156.18</b>
<b>EWC 191207 Timber / Wood / Green</b>	<b>3460.42</b>
<b>EWC 160201 Scrap Electronics</b>	<b>62.92</b>
<b>EWC 160103 Tyres</b>	<b>136.88</b>
<b>EWC 191203 Metal</b>	<b>2844.99</b>
<b>EWC 191205 Glass</b>	<b>1208.76</b>
<b>EWC 191208 Clothes</b>	<b>3.18</b>
<b>EWC 200108 or EWC 200304 Compostable Material</b>	<b>176.56</b>
<b>EWC 191210 Refuse Derived Fuel</b>	<b>803.2</b>
<b>EWC 160601* Lead Acid Batteries</b>	<b>13.24</b>
<b>EWC Stabilised Material (Compost)</b>	<b>1045.22</b>
<b>TOTAL</b>	<b>75502.51 TONNES</b>

**Table 2.13.3: Total Wastes Outgoing 1<sup>st</sup> January 2013 – 31<sup>st</sup> December 2013**

### RECYCLING SUMMARY FOR 2013

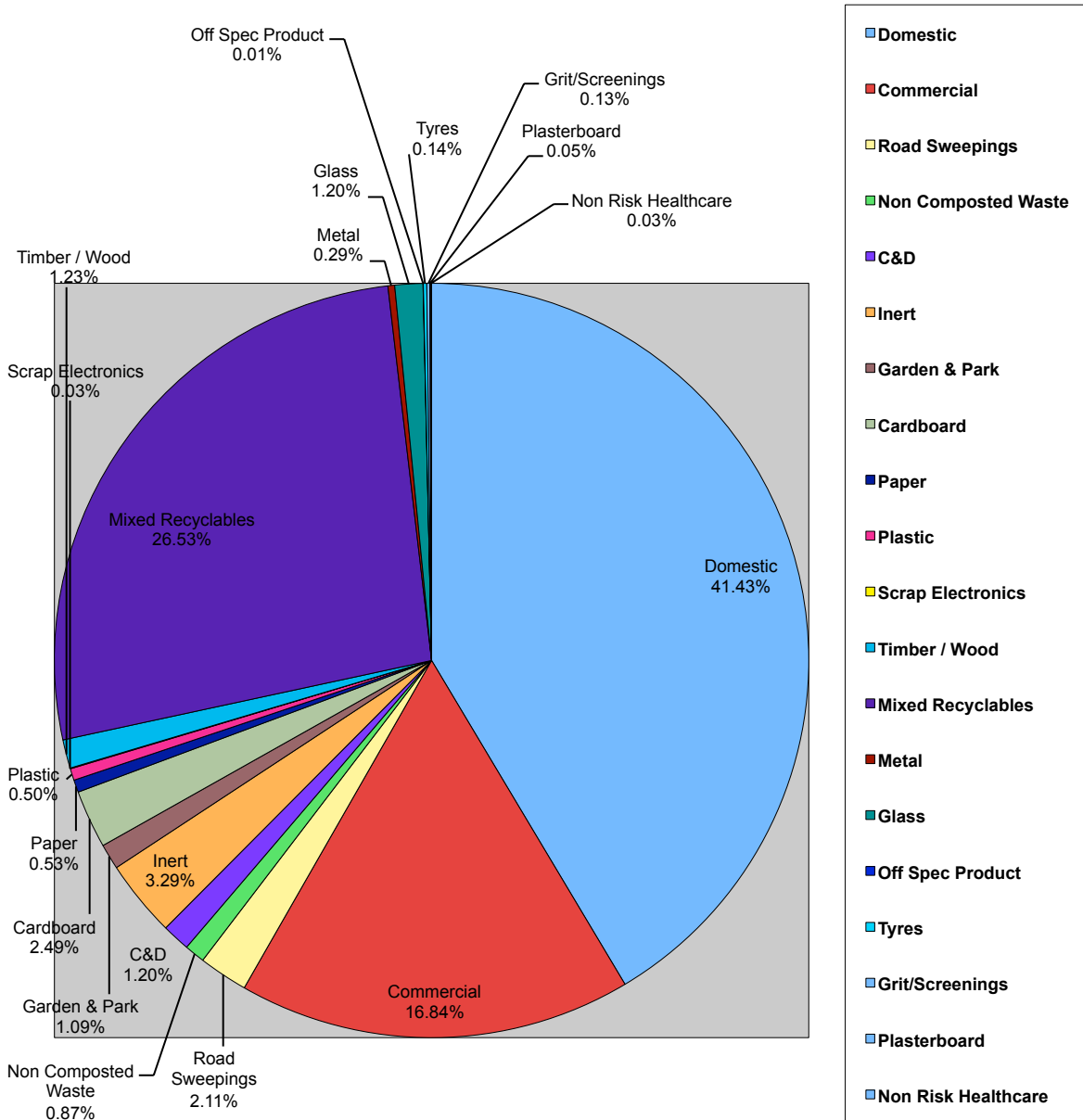
The following table shows the % breakdown of the recyclable materials sent off site for recovery / recycling during 2013. This table only shows the RECYCLABLE / RECOVERABLE material types and lists the total tonnage recycled during 2012 and the % split that each waste type provides towards the total recycling figure:-

<b>WASTE TYPE (Recyclable materials only)</b>	<b>RECYCLING (tonnes per annum)</b>	<b>% OF TOTAL RECYCLING</b>
<b>EWC 200202 Inert</b>	<b>3834.37</b>	9%
<b>EWC 191201 Cardboard</b>	<b>4494.68</b>	11%
<b>EWC 191201 Paper</b>	<b>12796.88</b>	31%
<b>EWC 191204 Plastic</b>	<b>3156.18</b>	8%
<b>EWC 191207 Timber / Wood / Green</b>	<b>3460.42</b>	8%
<b>EWC 160201 Scrap Electronics</b>	<b>62.92</b>	Less than 1%
<b>EWC 160103 Tyres</b>	<b>136.88</b>	Less than 1%
<b>EWC 191203 Metal</b>	<b>2844.99</b>	7%
<b>EWC 191205 Glass</b>	<b>1208.76</b>	3%
<b>EWC 191208 Clothes</b>	<b>3.18</b>	Less than 1%
<b>EWC 200301 Baled/Wrapped waste for export for recovery</b>	<b>2532.58</b>	6%
<b>EWC 200108 or EWC 200304 Compostable Material</b>	<b>176.56</b>	Less than 1%
<b>EWC 191210 Refuse Derived Fuel</b>	<b>803.2</b>	2%
<b>EWC 191212 Mechanically treated mixed waste for recovery (send to Indaver Meath Facility)</b>	<b>4324</b>	11%
<b>EWC 100601* Lead Acid Batteries</b>	<b>13.24</b>	Less than 1%
<b>EWC 190305 Stabilised Material</b>	<b>1045.22</b>	3%
<b>TOTAL</b>	<b>40894.06</b>	<b>54% of total waste in was sent for recycling or recovery for 2013</b>

**Table 2.13.4: Breakdown of recycling waste out for 1<sup>st</sup> January 2013 – 31<sup>st</sup> December 2013**

**Waste In / Out Reports for 2014 (New / Current Reporting Period)**

**WASTE IN (2014)**



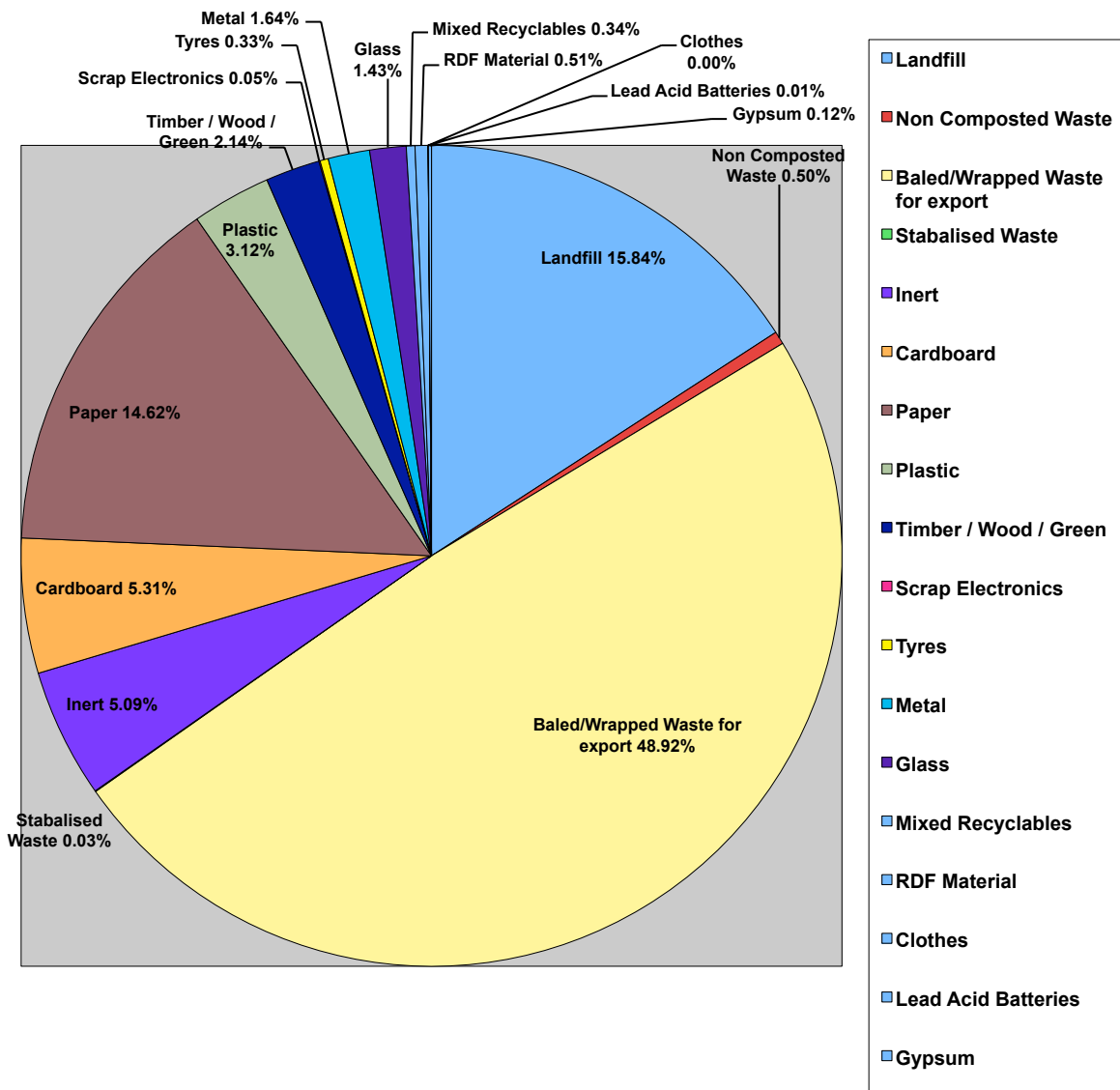
**Figure 2.14.0:**  
**Breakdown of Waste Received on site from 1<sup>st</sup> January 2014 – 31<sup>st</sup> December 2014**

Waste in for 2014: Table of quantities by waste type

<b>WASTE TYPE</b>	<b>WASTE IN (tonnes per annum)</b>
<b>EWC 200301 Domestic</b>	<b>36866.37</b>
<b>EWC 200301 Commercial</b>	<b>14988.20</b>
<b>EWC 200303 Street / Road Sweepings</b>	<b>1874.14</b>
<b>EWC 190501 Non Composted Fraction of Municipal Wastes</b>	<b>778.46</b>
<b>EWC 170904 Mixed C &amp; D</b>	<b>1068.71</b>
<b>EWC 170107 Inert</b>	<b>2928.46</b>
<b>EWC 200201 Garden &amp; Park Waste</b>	<b>971.86</b>
<b>EWC 150101 Cardboard</b>	<b>2213.77</b>
<b>EWC 200101 Paper</b>	<b>473.98</b>
<b>EWC 200139 Plastic</b>	<b>447.21</b>
<b>EWC 160201 Scrap Electronics / WEEE</b>	<b>28.40</b>
<b>EWC 200138 Timber / Wood</b>	<b>1090.60</b>
<b>EWC 200199 Mixed Kerbside Recyclables</b>	<b>23606.58</b>
<b>EWC 170407 Metal</b>	<b>256.80</b>
<b>EWC 200102 Glass</b>	<b>1068.46</b>
<b>EWC 160304 Off Spec Product</b>	<b>11.44</b>
<b>EWC 170802 Plasterboard / Gypsum</b>	<b>41.12</b>
<b>EWC 160103 Tyres</b>	<b>128.24</b>
<b>EWC 190801 Grit/screenings</b>	<b>111.88</b>
<b>EWC 180104 Non risk healthcare waste</b>	<b>28.96</b>
<b>EWC 200108 Food Waste / Grease (not compostable)</b>	<b>2.96</b>
<b>EWC 200303 Septic Tank Sludge</b>	<b>298.16</b>
<b>EWC 200134 Household Batteries</b>	<b>0.86</b>
<b>EWC 200110 Clothes / Textiles</b>	<b>0.04</b>
<b>TOTAL</b>	<b>89,285.66 tonnes</b>

**Table 2.14.1: Total Wastes Incoming 1<sup>st</sup> January 2014 – 31<sup>st</sup> December 2014**

## Waste Out 2014



**Figure 2.14.2:**  
**Breakdown of Waste going off site for Recovery or Disposal from**  
**1<sup>st</sup> January 2014 – 31<sup>st</sup> December 2014**

Waste out for 2014: Table of quantities by waste type:-

<b>WASTE TYPE</b>	<b>WASTE OUT (tonnes per annum)</b>
<b>EWC 200301 Pre-sorted waste for landfill</b>	<b>13,462.33</b>
<b>EWC 200301 Mechanically treated mixed waste for recovery (Baled / Wrapped MSW)</b>	<b>41,586.38</b>
<b>EWC 190501 Non Composted Municipal Waste (compost out throws)</b>	<b>428.94</b>
<b>EWC 190305 Stabilised Waste for Disposal</b>	<b>25.32</b>
<b>EWC 200202 Inert</b>	<b>4325.98</b>
<b>EWC 191201 Cardboard</b>	<b>4515.44</b>
<b>EWC 191201 Paper</b>	<b>12,428.92</b>
<b>EWC 191204 Plastics</b>	<b>2648.06</b>
<b>EWC 191207 Timber / Wood / Green</b>	<b>1821.42</b>
<b>EWC 160201 Scrap Electronics</b>	<b>40.82</b>
<b>EWC 160103 Tyres</b>	<b>277.28</b>
<b>EWC 191203 Metal</b>	<b>1391.58</b>
<b>EWC 191205 Glass</b>	<b>1217.30</b>
<b>EWC 191208 Clothes</b>	<b>1.24</b>
<b>EWC 190801 Grit/screenings</b>	<b>285.82</b>
<b>EWC 200303 Septic Tank Sludge</b>	
<b>EWC 170802 Gypsum / Plasterboard</b>	<b>103.28</b>
<b>EWC 200301 Mixed Recyclables (unsorted)</b>	<b>289.40</b>
<b>EWC 191210 Refuse Derived Fuel</b>	<b>433.82</b>
<b>EWC 160601* Lead Acid Batteries</b>	<b>8.14</b>
<b>TOTAL</b>	<b>85,291.47 tonnes</b>

**Table 2.14.3: Total Wastes Outgoing 1<sup>st</sup> January 2014 – 31<sup>st</sup> December 2014**



## **RECYCLING / RECOVERY SUMMARY FOR 2014**

The following table shows the % breakdown of the recyclable materials sent off site for recovery / recycling during 2013. 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:-

<b>WASTE TYPE (Recyclable materials only)</b>	<b>RECYCLING (tonnes per annum)</b>	<b>% OF TOTAL RECYCLING</b>
<b>EWC 200301 Mechanically treated mixed waste for recovery (Baled / Wrapped MSW)</b>	<b>41,586.38</b>	<b>58%</b>
<b>EWC 200202 Inert</b>	<b>4325.98</b>	<b>6%</b>
<b>EWC 191201 Cardboard</b>	<b>4515.44</b>	<b>6%</b>
<b>EWC 191201 Paper</b>	<b>12,428.92</b>	<b>17%</b>
<b>EWC 191204 Plastics</b>	<b>2648.06</b>	<b>4%</b>
<b>EWC 191207 Timber / Wood / Green</b>	<b>1821.42</b>	<b>3%</b>
<b>EWC 160201 Scrap Electronics</b>	<b>40.82</b>	<b>0%</b>
<b>EWC 160103 Tyres</b>	<b>277.28</b>	<b>0%</b>
<b>EWC 191203 Metal</b>	<b>1391.58</b>	<b>2%</b>
<b>EWC 191205 Glass</b>	<b>1217.30</b>	<b>2%</b>
<b>EWC 191208 Clothes</b>	<b>1.24</b>	<b>0%</b>
<b>EWC 190801 Grit/screenings EWC 200303 Septic Tank Sludge</b>	<b>285.82</b>	<b>0%</b>
<b>EWC 170802 Gypsum / Plasterboard</b>	<b>103.28</b>	<b>0%</b>
<b>EWC 200301 Mixed Recyclables (unsorted)</b>	<b>289.40</b>	<b>0%</b>
<b>EWC 191210 Refuse Derived Fuel</b>	<b>433.82</b>	<b>1%</b>
<b>EWC 160601* Lead Acid Batteries</b>	<b>8.14</b>	<b>0%</b>
<b>TOTAL</b>	<b>71,271.60</b>	<b>80% of total waste in was sent for recycling or recovery for 2014</b>

**Table 2.14.4: Breakdown of recycling waste out for 1<sup>st</sup> January 2014 – 31<sup>st</sup> December 2014**

### Explanation of Tonnage on Site at the end of 2014

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

Total Waste In:-	<b>89,285.66 tonnes</b>
Total Waste Out:-	<b>85,291.47 tonnes</b>

This gives a difference of 3,994.19 tonnes of a difference outlining stock on site at the end of the reporting year.

During the course of the reporting year as a company we would always hold a level of stock on site of various products waiting to be processed. As a rule we try to clear the site as much as possible of recyclables etc to reduce the value of stock held at the end of the reporting year. Due to insurance and licence restrictions it is not permitted that excessive stock levels are held in any one area of the site at anytime so stock rotation is an important part of our business.

As an example of typical main items of stock (not taking into account smaller items) at the end of 2014 the following stock was recorded:-

Mixed Recyclables:	950 tonnes
Landfill Waste (loose):	350 tonnes
Saleable Recycling Bales:	600 tonnes
Street Sweepings:	500 tonnes
Baled / Wrapped MSW:	2500 tonnes
RDF:	300 tonnes

All of these are typical stock items and vary in quantity during the reporting year and are only being used to give an example of the typical stock items that make up end of year counts on site.

It was decided because composting material naturally breaking down skews stock figures that compost and waste / recycling would be reported separately in order to give a better picture of waste movements on site.

## Compost Facility

### Waste In / Out 2014 Summary

Barna Recycling also operate a composting facility on site which is licenced by both the EPA under our existing waste licence 106/2 and in additional is accredited by the Department of Agriculture Fish and the Marine (DAFM) under licence number COMP 40.

The waste in / out of the composting facility is measured on a daily basis and tracked internally.

The material going into the composting facility is booked in using the same weighbridge as the other waste materials however it has it's own software so that those transactions can be kept completely separate from other waste transactions.

This decision was made due to the unique requirement for paperwork within the composting facility and having to produce a waste intake form for each delivery. All relevant information is still recorded for each load just on our own internal IMS system.

Tonnage received into the composting facility will never balance like normal waste types in terms of quantities of waste equating to quantities of end product removed from the site due the natural breakdown of the material.

A summary of waste in for the composting facility specific to 2014 is included below:-

#### 2014 INTAKE SUMMARY

<b>JANUARY</b>	975.24 tonnes
<b>FEBRUARY</b>	922.88 tonnes
<b>MARCH</b>	1225.16 tonnes
<b>APRIL</b>	1248.72 tonnes
<b>MAY</b>	1359.36 tonnes
<b>JUNE</b>	1380.21 tonnes
<b>JULY</b>	1314.38 tonnes
<b>AUGUST</b>	1275.86 tonnes
<b>SEPTEMBER</b>	1464.88 tonnes
<b>OCTOBER</b>	1408.95 tonnes
<b>NOVEMBER</b>	1132.52 tonnes
<b>DECEMBER</b>	1080.76 tonnes
<b>TOTAL</b>	14,788.91 tonnes
<b>Avg. PER MONTH</b>	1,232.41 tonnes

This intake tonnage was made up by the delivery of our own materials and also some third party tonnage.

The end product compost material once it has passed all relevant testing for E-Coli, F-Coli, Quality, Nutrition's, Salmonella and AT4 then it is stored in the clean area of the facility for shipment once the 21 day maturation period has passed.

The following compost produce was shipped during 2014:-

#### 2014 OUTGOING SUMMARY

**2014** 2594.22 tonnes

All end products were shipped to the agriculture industry for use by local farmers as either tillage of pasture land and all farms receiving end products are registered with the Department of Agriculture in advance of receiving their first load. All outgoing shipments are tracked using official commercial documents and these are on file as part of the HACCP plan for review during any inspections.

Finally a summary of typical stock levels that would be held in the composting site at anytime are included below to show stock levels at the end of the 2014 reporting period:-

Out throw for landfill in Storage:	30 tonnes
End product in Storage:	550 tonnes
Batches Screened (for tunnels):	250 tonnes
Batches in Pasteurisation Bunkers:	200 tonnes
In processing Aisles:	1800 tonnes
In reception Aisle (awaiting processing):	500 tonnes

This is shown to give an idea of stock still in the system so that a proper waste in versus waste out comparison can be looked at for 2014 however due to the nature of the material breaking down naturally this will never reach a point of balance.

Detail of the end destination outlets for each load shipped are detailed below:-

Date	Vehicle Reg	Customer/Destination	End Usage	Commercial Document Number	Batch Number	Nett Weight(kgs)
17/02/2014	05G8595	Enna Canavan, Beclare	Pasture Land	23	290713	11860
17/02/2014	05G8595	Enna Canavan, Beclare	Pasture Land	23	290713	13720
17/02/2014	05G8595	Enna Canavan, Beclare	Pasture Land	23	290713	15520
17/02/2014	05G8595	Enna Canavan, Beclare	Pasture Land	23	290713	14220
17/02/2014	05G8595	Enna Canavan, Beclare	Pasture Land	23	290713	14700
17/02/2014	05G8595	Enna Canavan, Beclare	Pasture Land	23	290713	14660
17/02/2014	05G8595	Enna Canavan, Beclare	Pasture Land	23	290713	14640
17/02/2014	05G8595	Enna Canavan, Beclare	Pasture Land	23	290713	16880
17/02/2014	05G8595	Enna Canavan, Beclare	Pasture Land	23	290713	18520
01/03/2014	03G10392	Enna Canavan, Beclare	Pasture Land	24	200813	13400
01/03/2014	05G8595	Enna Canavan, Beclare	Pasture Land	24	200813	10960
01/03/2014	03G10392	Enna Canavan, Beclare	Pasture Land	24	200813	14320
01/03/2014	05G8595	Enna Canavan, Beclare	Pasture Land	24	200813	12760
01/03/2014	03G10392	Enna Canavan, Beclare	Pasture Land	24	200813	16620
01/03/2014	05G8595	Enna Canavan, Beclare	Pasture Land	24	200813	11940
01/03/2014	03G10392	Enna Canavan, Beclare	Pasture Land	24	200813	14240
01/03/2014	03G10392	Enna Canavan, Beclare	Pasture Land	24	200813	10820
14/03/2014	03G10392	Tom Kilkelly, Ryehill	Tillage	51	200813	13520
14/03/2014	03G10392	Tom Kilkelly, Ryehill	Tillage	51	200813	14840
14/03/2014	03G10392	Tom Kilkelly, Ryehill	Tillage	51	200813	15460
15/03/2014	03G10392	Tom Kilkelly, Ryehill	Tillage	52	200813	12140
25/03/2014	05G8595	Tom Kilkelly, Ryehill	Tillage	53	170913	15240
26/03/2014	03G11202	Tom Kilkelly, Ryehill	Tillage	54	170913	16000
26/03/2014	03G11202	Tom Kilkelly, Ryehill	Tillage	54	170913	14000
26/03/2014	05G8595	Tom Kilkelly, Ryehill	Tillage	54	170913	15260
26/03/2014	03G11202	Enna Canavan, Beclare	Pasture Land	55	170913	14540
26/03/2014	03G11202	Enna Canavan, Beclare	Pasture Land	55	170913	14700
26/03/2014	03G11202	Enna Canavan, Beclare	Pasture Land	55	170913	14420
27/03/2014	03G11202	Enna Canavan, Beclare	Pasture Land	56	170913	16980
27/03/2014	03G11202	Enna Canavan, Beclare	Pasture Land	56	170913	15420

27/03/2014	03G11202	Enna Canavan, Beclare	Pasture Land	56	2102013	16140
27/03/2014	03G11202	Enna Canavan, Beclare	Pasture Land	56	2102013	17600
27/03/2014	03G11202	Enna Canavan, Beclare	Pasture Land	56	2102013	15620
01/04/2014	03G11202	Enna Canavan, Beclare	Pasture Land	57	2102013	14460
01/04/2014	03G11202	Enna Canavan, Beclare	Pasture Land	57	2102013	14300
02/04/2014	05G8595	Padraig Boyle, Monivea	Pasture Land	25	2102013	19100
02/04/2014	05G8595	Padraig Boyle, Monivea	Pasture Land	25	2102013	19020
02/04/2014	05G8595	Padraig Boyle, Monivea	Pasture Land	25	2102013	18040
03/04/2014	03G11202	Enna Canavan, Beclare	Pasture Land	58	5112013	19160
03/04/2014	03G11202	Enna Canavan, Beclare	Pasture Land	58	5112013	14400
03/04/2014	03G11202	Enna Canavan, Beclare	Pasture Land	58	5112013	14280
03/04/2014	03G11202	Enna Canavan, Beclare	Pasture Land	58	5112013	14100
03/04/2014	03G11202	Enna Canavan, Beclare	Pasture Land	58	5112013	15040
04/04/2014	03G11202	Enna Canavan, Beclare	Pasture Land	59	5112013	15120
04/04/2014	03G11202	Enna Canavan, Beclare	Pasture Land	59	5112013	14420
04/04/2014	03G11202	Enna Canavan, Beclare	Pasture Land	59	5112013	14440
04/04/2014	03G11202	Enna Canavan, Beclare	Pasture Land	59	5112013	16300
04/04/2014	03G11202	Enna Canavan, Beclare	Pasture Land	59	5112013	15180
18/04/2014	05G8595	Paul Gleeson, Tuam	Tillage	26	5112013	13900
18/04/2014	05G8595	Paul Gleeson, Tuam	Tillage	26	5112013	15320
22/04/2014	05G8595	Paul Gleeson, Tuam	Tillage	27	12112013	15040
22/04/2014	05G8595	Paul Gleeson, Tuam	Tillage	27	12112013	14140
22/04/2014	05G8595	Paul Gleeson, Tuam	Tillage	27	12112013	17220
22/04/2014	03G11202	Paul Gleeson, Tuam	Tillage	27	12112013	13980
23/04/2014	05G8595	Paul Gleeson, Tuam	Tillage	28	12112013	12220
23/04/2014	03G11202	Paul Gleeson, Tuam	Tillage	29	12112013	13860
24/04/2014	05G8595	Paul Gleeson, Tuam	Tillage	30	12112013	15540
24/04/2014	03G11202	Paul Gleeson, Tuam	Tillage	31	12112013	17100
24/04/2014	03G11202	Paul Gleeson, Tuam	Tillage	31	12112013	14060
24/04/2014	03G11202	Paul Gleeson, Tuam	Tillage	31	12112013	14840
24/04/2014	03G11202	Paul Gleeson, Tuam	Tillage	31	12112013	17920
24/04/2014	03G11202	Paul Gleeson, Tuam	Tillage	31	12112013	15940
08/05/2014	05G8595	Paul Gleeson, Tuam	Tillage	32	12112013	16300
22/05/2014	05G8595	Henry Walsh, Oranmore	Tillage	33	14012014	13800
22/05/2014	05G8595	Henry Walsh, Oranmore	Tillage	33	14012014	15220
22/05/2014	05G8595	Henry Walsh, Oranmore	Tillage	33	14012014	15660
27/05/2014	05G8595	Henry Walsh, Oranmore	Tillage	34	14012014	15620
28/05/2014	04G11236	Finnegans Farm - Cortoon	Tillage	61	14012014	18360
28/05/2014	05G8595	Henry Walsh, Oranmore	Tillage	35	14012014	15460
28/05/2014	05G8595	Henry Walsh, Oranmore	Tillage	35	14012014	16700
28/05/2014	05G8595	Henry Walsh, Oranmore	Tillage	35	14012014	14720
28/05/2014	05G8595	Henry Walsh, Oranmore	Tillage	35	14012014	13180
05/06/2014	05G8595	Henry Walsh, Oranmore	Tillage	36	14012014	15460
05/06/2014	05G8595	Henry Walsh, Oranmore	Tillage	36	14012014	16980
05/06/2014	05G8595	Henry Walsh, Oranmore	Tillage	36	14012014	20560
10/06/2014	03G11202	Henry Walsh, Oranmore	Tillage	37	20012014	15840
11/06/2014	03G11202	Henry Walsh, Oranmore	Tillage	38	20012014	16180
11/06/2014	03G11202	Henry Walsh, Oranmore	Tillage	38	20012014	17240
11/06/2014	03G11202	Henry Walsh, Oranmore	Tillage	38	20012014	2960
11/06/2014	03G11202	Henry Walsh, Oranmore	Tillage	38	20012014	15880
16/06/2014	03G11202	Henry Walsh, Oranmore	Tillage	39	20012014	17640
16/06/2014	05G8595	Henry Walsh, Oranmore	Tillage	39	20012014	18220
17/06/2014	03G11202	Henry Walsh, Oranmore	Tillage	40	20012014	18020
17/06/2014	03G11202	Henry Walsh, Oranmore	Tillage	40	20012014	15360

17/06/2014	03G11202	Henry Walsh, Oranmore	Tillage	40	20012014	17100
17/06/2014	03G11202	Henry Walsh, Oranmore	Tillage	40	20012014	15960
17/06/2014	03G11202	Henry Walsh, Oranmore	Tillage	40	20012014	17720
17/06/2014	03G11202	Henry Walsh, Oranmore	Tillage	40	20012014	16480
17/06/2014	05G8595	Henry Walsh, Oranmore	Tillage	40	20012014	15880
18/06/2014	04G11236	Finnegans Farm - Cortoon	Tillage	62	7032014	21760
18/06/2014	04G11236	Finnegans Farm - Cortoon	Tillage	62	7032014	19960
18/06/2014	03G11202	Michael Crowe, Corandulla	Pasture Land	42	11022014	17300
18/06/2014	03G11202	Michael Crowe, Corandulla	Pasture Land	42	11022014	16160
18/06/2014	05G8595	Finnegans Farm - Cortoon	Tillage	41	11022014	17320
19/06/2014	03G11202	Michael Crowe, Corandulla	Pasture Land	43	11022014	17800
19/06/2014	05G8595	Michael Crowe, Corandulla	Pasture Land	43	11022014	18620
19/06/2014	05G8595	Michael Crowe, Corandulla	Pasture Land	43	11022014	15940
19/06/2014	04G11236	Finnegans Farm - Cortoon	Tillage	63	11022014	20500
20/06/2014	04G11236	Finnegans Farm - Cortoon	Tillage	64	11022014	23600
01/07/2014	05G8595	Pat Burke, Oranmore	Pasture Land	44	7032014	16160
01/07/2014	05G8595	Pat Burke, Oranmore	Pasture Land	44	7032014	18260
01/07/2014	05G8595	Pat Burke, Oranmore	Pasture Land	44	7032014	14300
02/07/2014	05G8595	Pat Burke, Oranmore	Pasture Land	45	7032014	14880
02/07/2014	05G8595	Pat Burke, Oranmore	Pasture Land	45	7032014	16580
03/07/2014	05G8595	Pat Burke, Oranmore	Pasture Land	65	7032014	11900
03/07/2014	05G8595	Pat Burke, Oranmore	Pasture Land	65	7032014	15100
03/07/2014	05G8595	Pat Burke, Oranmore	Pasture Land	65	7032014	14740
04/07/2014	05G8595	Pat Burke, Oranmore	Pasture Land	66	7032014	13900
10/07/2014	03G11202	Michael Crowe, Corandulla	Pasture Land	67	11022014	12980
10/07/2014	03G11202	Michael Crowe, Corandulla	Pasture Land	67	11022014	13540
10/07/2014	03G11202	Michael Crowe, Corandulla	Pasture Land	67	11022014	13120
10/07/2014	03G11202	Michael Crowe, Corandulla	Pasture Land	67	11022014	12920
10/07/2014	03G11202	Michael Crowe, Corandulla	Pasture Land	67	11022014	12880
17/07/2014	03G11202	Michael Crowe, Corandulla	Pasture Land	68	7032014	13380
17/07/2014	03G11202	Michael Crowe, Corandulla	Pasture Land	68	7032014	14080
01/09/2014	05G8595	Michael Crowe, Corandulla	Pasture Land	69	7032014	28200
02/09/2014	05G8595	Michael Crowe, Corandulla	Pasture Land	70	20032014	14560
02/09/2014	05G8595	Michael Crowe, Corandulla	Pasture Land	70	20032014	13280
03/09/2014	05G8595	Michael Crowe, Corandulla	Pasture Land	71	20032014	14260
03/09/2014	05G8595	Tom Nohilly, Monivea	Pasture Land	72	20032014	14020
18/09/2014	03G11202	Larry Curran, Spiddall	Pasture Land	73	20032014	13280
18/09/2014	03G11202	Larry Curran, Spiddall	Pasture Land	73	20032014	12220
18/09/2014	03G11202	Larry Curran, Spiddall	Pasture Land	73	20032014	6760
24/09/2014	03G11202	Larry Curran, Spiddall	Pasture Land	46	20032014	15440
25/09/2014	03G11202	Larry Curran, Spiddall	Pasture Land	77	20032014	18080
25/09/2014	03G11202	Larry Curran, Spiddall	Pasture Land	77	20032014	19260
25/09/2014	03G11202	Larry Curran, Spiddall	Pasture Land	77	20032014	18760
25/09/2014	03G11202	Larry Curran, Spiddall	Pasture Land	77	20032014	19380
26/09/2014	03G11202	Larry Curran, Spiddall	Pasture Land	78	20032014	19200
26/09/2014	03G11202	Larry Curran, Spiddall	Pasture Land	78	20032014	18160
26/09/2014	03G11202	Larry Curran, Spiddall	Pasture Land	78	16042014	18180
26/09/2014	03G11202	Larry Curran, Spiddall	Pasture Land	78	16042014	18980
26/09/2014	04G11236	Larry Curran, Spiddall	Pasture Land	79	16042014	24860
26/09/2014	04G11236	Larry Curran, Spiddall	Pasture Land	79	16042014	23800
26/09/2014	04G11236	Larry Curran, Spiddall	Pasture Land	79	16042014	27080
24/10/2014	03G11202	Larry Curran, Spiddall	Pasture Land	47	16042014	14620
24/10/2014	03G11202	Larry Curran, Spiddall	Pasture Land	47	16042014	13740
12/11/2014	03G11202	Larry Curran, Spiddall	Pasture Land	48	16042014	16340

12/11/2014	03G11202	Larry Curran, Spiddall	Pasture Land	48	16042014	17880
12/11/2014	03G11202	Larry Curran, Spiddall	Pasture Land	48	16042014	18320
12/11/2014	03G11202	Larry Curran, Spiddall	Pasture Land	48	16042014	19080
12/11/2014	05G8595	Larry Curran, Spiddall	Pasture Land	80	24042014	15440
12/11/2014	05G8595	Larry Curran, Spiddall	Pasture Land	80	24042014	14080
12/11/2014	05G8595	Larry Curran, Spiddall	Pasture Land	80	24042014	14840
12/11/2014	05G8595	Larry Curran, Spiddall	Pasture Land	80	24042014	16200
13/11/2014	03G11202	Larry Curran, Spiddall	Pasture Land	49	24042014	20620
13/11/2014	03G11202	Larry Curran, Spiddall	Pasture Land	49	24042014	13180
13/11/2014	03G11202	Larry Curran, Spiddall	Pasture Land	49	24042014	18340
13/11/2014	03G11202	Larry Curran, Spiddall	Pasture Land	49	24042014	18020
13/11/2014	05G8595	Larry Curran, Spiddall	Pasture Land	81	24042014	15920
13/11/2014	05G8595	Larry Curran, Spiddall	Pasture Land	81	24042014	16060
13/11/2014	05G8595	Larry Curran, Spiddall	Pasture Land	81	24042014	14140
13/11/2014	05G8595	Larry Curran, Spiddall	Pasture Land	81	24042014	14320
13/11/2014	05G8595	Larry Curran, Spiddall	Pasture Land	81	24042014	15080
14/11/2014	03G11202	Larry Curran, Spiddall	Pasture Land	50	9062014	17680
14/11/2014	03G11202	Larry Curran, Spiddall	Pasture Land	50	9062014	16780
14/11/2014	03G11202	Larry Curran, Spiddall	Pasture Land	50	9062014	17100
14/11/2014	03G11202	Larry Curran, Spiddall	Pasture Land	50	9062014	18400
14/11/2014	05G8595	Larry Curran, Spiddall	Pasture Land	82	9062014	16740
14/11/2014	05G8595	Larry Curran, Spiddall	Pasture Land	82	9062014	16960
14/11/2014	05G8595	Larry Curran, Spiddall	Pasture Land	82	9062014	15760
14/11/2014	05G8595	Larry Curran, Spiddall	Pasture Land	82	9062014	17240
17/11/2014	03G10392	Oisin Kenny	Landscaping	N/A	9062014	17300
<b>TOTAL GOODS SHIPPED TO DATE</b>						<b>2594220</b>

Processed material must pass a quality test based on conditions set out in our EPA licence. Compost is checked for traces of metals, impurities and gravel or stones to ensure the composting process had produced a good quality material. There were no instances of quality failures of any batch during this reporting period.

All batches processed in 2014 were free from E-COLI and Salmonella following laboratory testing and therefore no rejected batches were recorded during the reporting period. All completed batches are allowed to mature for at least 21 days prior to consideration for shipment as per the requirements of our EPA licence.

Finally all material must be put through an AT4 test to determine if the material was stabilised and the composting process has been completed. The AT4 test must show that the material is <10mg/o2/g and once again all composting batches processed in 2014 reached the appropriate standard as specified in our EPA licence.

The following records are available on request in relation to our composting:

- E-Coli Test Results
- Salmonella Test Results
- AT4 Test Results
- Trace Element (Compost Quality) Test Results
- HACCP Plan and associated procedures

## **Waste In / Out 2014 Summary**

Tonnages through the facility in 2014 increased significantly in comparison to the previous reporting year to just over 100,000 tonnes from the 89,000 tonnes accepted in 2013. This was a significant rise and positive news for the company overall.

The main reasons behind this increase in tonnage are outlined below:

- 1) Composting - Tonnage through the composting facility was a significant focus for the company during 2014 and we increased tonnage here by almost 5,000 tonnes increasing to just under 15,000 tonnes overall.
- 2) Mixed Recycling – Tonnages of mixed recycling increased by over 1,000 tonnes in comparison with the previous year mainly due to the introduction of a full year of collections on our Galway City Council Contract
- 3) General Waste – Tonnages increased here also due to the introduction of the baling / wrapping programme with tonnages previously going to landfill coming to Galway for processing

In relation to tonnages it marks a significant milestone for the company to have it's first ever year accepting over 100,000 tonnes of material onto the facility. End of year stocks would be deemed to be at a very normal and acceptable level so it's credit to the plant, equipment and staff on site that the company was able to cope with the significant increase in tonnage from 2013 to 2014.

The compost tonnage was a large contributor and the facility which is licenced for 20,000 tonnes per annum is currently running at about 75% capacity and therefore scope for more growth during 2015. The extra tonnage collected here represents the material from Galway City Council areas which we now operate and a new outside contractor using the facility.

General waste which was always transferred to landfill sites for disposal is now being transferred back to the Galway Facility for baling / wrapping. This makes up the rest of the main change for 2013 to 2014 and this also has a significant impact on the overall positive upturn in tonnage.

Despite the excellent progress in 2014 we would not expect to see significant changes in tonnage from 2014 to 2015. If stock can be maintained as existing levels then this would be positive.

### **2.14.5 Summary of Recycling Outlets used in 2014**

Barna Recycling 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 currently quoting and purchasing material is included below:

#### **Metals**

Galway Metal (Galway) – WFP-G-09-0006-05



### **Cardboard & Paper**

Peute Papier Recycling (Holland) – IRE/G006/14  
Recycling UK (England) – IRE/G069/15  
Irish Packaging Recycling (Panda, Ireland) – IRE/G133/15  
Agnail Limited – IRE/AG117/16  
Cellmark (USA) – IRE/AG175/15  
Northwood recycling Limited – IRE/G282/15

### **Polystyrene**

WRC Recycling (Scotland) – IRE/G121/12  
Leinster Environmental – IRE/G127/15

### **Plasterboard**

Baron Recycling Limited – IRE/G213/15  
Macnabb Brothers – LN/09/111/M

### **Plastics**

WRC Recycling (Scotland) – IRE/G121/15  
Leinster Environmental – IRE/G127/15  
Peute Plastic Recycling (Holland) – IRE/G281/14  
Jayplas (England) – IRE/G058/12  
Shabra (Monaghan) – WFP-MN-08-0022-01  
Envirolink (England) – IRE/G134/12  
Materia Environmental Limited – IRE/AG161/15

### **Textiles**

Textile Recycling Ireland Limited - NWCPO-08-01225-01

### **Glass**

Rehab Glassco – WFP-KE-08-0957-01

### **Green Waste**

Barna Recycling Composting Site (Galway) – EPA 106/2

### **Wood**

Eirebloc, Lissarda, Co. Cork – WFP-CK-11-0087-02  
OCR Waste Management, Roscommon – WFP-RN-10-0001-01

### **WEEE**

Electrical Waste Management – WFP-DS-09-0012-01

### **Batteries**

Electrical Waste Management – WFP-DS-09-0012-01

### **Tyres**

Duffy Tyre Recycling - WCP-DL-10-236-01  
Agnail Limited – IRE/AG117/12

### **General Waste – Landfill**

Drehid Landfill – EPA 0201-03

Rathroeen Landfill – EPA 0067/02

### **Tyres**

Duffy Tyre Recycling - WCP-DL-10-236-01

Agnail Limited – IRE/AG117/12

### **Bulky Waste**

Barna Recycling (Galway) – EPA WL106/02

### **General Waste – For Recovery**

Indaver Ireland – EPA WO167/03

Cellmark (USA) – IRE/AG175/15

## **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 Recycling are registered as a shipper of green list material with the TFS office in Dublin and our broker's registration number for 2014 currently is:- **IRE/G032/15**.

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 Recycling 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 Recycling 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 Actual & Projected Waste Quantities

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				
	2005	2006	2007	2008	2009
Household	22134.78	29328.22	28840.92	18539.17	22356.82
Commercial	17874.97	16095.29	22150.64	26433.11	12905.46
Construction and Demolition	4594.86	6234.14	5988.48	2729.37	1202.76
Others	21526.33	33,489.19	35625.35	35784.14	33288.99
Biowaste	0	0	1525.88	1674.44	1,960.91
<b>Total</b>	<b>66130.94</b>	<b>85146.84</b>	<b>94,131.27</b>	<b>85,160.23</b>	<b>71,714.94</b>

WASTE TYPE	TONNES PER ANNUM					PROJECTION
	2010	2011	2012	2013	2014	2015
Household	19,140.78	18,335.45	16973.75	27,986.41	36,866.37	37,500
Commercial	11,613.86	14,637.36	12065.34	13,573.78	14988.20	15,000
Construction and Demolition	1,192.84	804.43	1667.91	1,443.15	1068.71	2,000
Others	33,117.07	34,936.09	36,828.40	36,175.50	36,362.38	37,500
Biowaste	4,303.09	6,469.91	4282.78	10,224.03	14,788.91	16,500
<b>Total</b>	<b>69,367.64</b>	<b>75,183.24</b>	<b>71,818.18</b>	<b>89,402.87</b>	<b>104,074.57</b>	<b>108,500</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 Recycling facility is outlined below. The site has been continually developed over the past thirteen years and at the end of the current reporting period was laid out as follows:

- **Site Accommodations:**

- 1) **Canteens** – all staff both in the yard areas and office areas have their own canteens equipped with modern electrical equipment, hot and cold water and changing facilities
- 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 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

**Section 8:** MSW BALING / WRAPPING AREA

**Section 9:** COMPOSTING BUILDING

**Section 10:** CIVIC AMENITY SITE

**Section 11:** WRAPPED BALE STORAGE 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 or for baling / wrapping. 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 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. During this reporting period we added an optical sorting machine which assists with the automated sorting of paper products. Material sorted from the picking station is then baled directly in the adjacent balers.
- Baling / Wrapping area is set-up in the new part of our site and allows us the ability to produce a mechanically treated MSW product for export to recovery outlets. This area is equipped with adequate storage space for the loose MSW, it has a shredder for shredding the MSW and removing metal, a trommel screen to remove organic fines and then a combined baling and wrapping machine to wrap the end produce ready for export.
- Wrapped Bale Storage Area was constructed during this reporting period which allows for the storage of up to 4000 bales of wrapped MSW product in the open yard area of the site
- 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. During this reporting period a new roof was constructed which links the baling area with the storage area and means this entire operation now takes place inside.
- 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 2015.

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.

### **Environmental Management System (EMS)**

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 Recycling were audited during 2014 and successfully retained the ISO14001 certification for another year. Details of the audit result are available on request from Barna Recycling.**

#### **Significant Change to EMS**

During this reporting period there was a significant change to our EMS which involved the incorporation of all procedures required to operate our new composting facility into the existing EMS. These procedures were all new and written specifically for our own composting facility and include forms for recording all necessary records within the facility. All composting procedures can be uniquely identified by the 'COM' in the filename of the procedure. The Compost Manager and Facility Manager are responsible for the maintenance and implementation of these new procedures.

The following details a complete list of the names / titles of all procedures and documents used at the facility at the end of 2014. 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 RECYCLING - EMS Contents Listing**

<b><u>Document Number</u></b>	<b><u>Document Title</u></b>	<b><u>Current Revision / Status</u></b>
1. BW/EMS/001	BW-EMS-001 EMS Manual (REV 6).DOC	6
2. BW/EMS/002	BW-EMS-002 BW Environmental Policy (REV 5).DOC	5
3. BW/EMS/003	I.E.R	0
4. BW/EMS/004	BW-EMS-004 Documentation Control Procedure (REV 1).DOC	1
5. BW/EMS/005	BW-EMS-005 Document Issuance Form (REV 2).XLS	2
6. BW/EMS/006	BW-EMS-006 Document Review Form (REV 2).XLS	2
7. BW/EMS/007	BW-EMS-007 EMS Programme Management Review Form (REV 1).XLS	1
8. BW/EMS/008	BW-EMS-008 BW Aspects Register (REV 12).xls	12
9. BW/EMS/009	BW-EMS-009 Records Management Procedure (REV 1).DOC	1
10. BW/EMS/010	BW-EMS-010 Management Team Roles & Responsibilities (REV 5).doc	5
11. BW/EMS/011	BW-EMS-011 Management Review Schedule (REV 10).XLS	10
12. BW/EMS/012	BW-EMS-012 Revision History Form (REV 1).XLS	1
13. BW/EMS/013	BW-EMS-013 Training Course Attendance Form (REV 1).XLS	1
14. BW/EMS/014	BW-EMS-014 Emergency Preparedness & Response Procedure (REV 3).DOC	

		3
15. BW/EMS/015	BW-EMS-015 Communications Procedure (REV 2).DOC	2
16. BW/EMS/016	BW-EMS-016 Waste Handling & Disposal Procedure (REV 3).docx	3
17. BW/EMS/017	BW-EMS-017 Accident Report Form (REV 2).doc	2
18. BW/EMS/018	BW-EMS-018 BW Health and Safety Equipment Form (Rev 2).DOC	2
19. BW/EMS/019	BW-EMS-019 BW Training Procedure (Rev 1).DOC	1
20. BW/EMS/020	BW-EMS-020 EMS Records Index (REV 2).DOC	2
21. BW/EMS/021	BW-EMS-021 Environmental Employee Feedback Form (REV 2).XLS	2
22. BW/EMS/022	BW-EMS-022 Approved Supplier Control Procedure (REV 2).DOC	2
23. BW/EMS/023	OBSOLETE – Approved Supplier List	Obsolete
24. BW/EMS/024	BW-EMS-024 EMS Programmes List (REV 13).doc	12
25. BW/EMS/025	BW-EMS-025 Programme Management Procedure (REV 2).DOC	2
26. BW/EMS/026	BW-EMS-026 Emergency Response Team Listing (REV 10).docx	10
27. BW/EMS/027	Legal Register - Barna Recycling Nov 1st 2013.doc	
N/A		
28. BW/EMS/028	BW-EMS-028 Register of Legislation Management Procedure (REV 4).doc	4
29. BW/EMS/029	BW-EMS-029 EMS Internal Audit Procedure (REV 1).DOC	1
30. BW/EMS/030	BW-EMS-030 Internal Audit Report Form (REV 1).XLS	1
31. BW/EMS/031	BW-EMS-031 Audit Non Conformance Form (REV 1).DOC	1
32. BW/EMS/032	BW-EMS-032 Employee Details Form (REV 1).DOC	1
33. BW/EMS/033	BW-EMS-033 EMS Internal Audit Schedule (REV 14).xls	14
34. BW/EMS/034	BW-EMS-034 Emergency Contact List (REV 5).docx	5
35. BW/EMS/035	BW-EMS-035 Barna Recycling Safety Statement Declaration (REV 0).doc	0
36. BW/EMS/036	BW-EMS-036 Internal Environmental Checklist (REV 0).doc	0
37. BW/Ops/001	BW-OPS-001 Company Organisation Chart (REV 17).doc	17
38. BW/Ops/002	BW-OPS-002 BW Monitoring and Recording Schedule (REV 2).XLS	2
39. BW/Ops/003	BW-OPS-003 Foul Water Discharge Meter Reading Form (REV 1).XLS	1
40. BW/Ops/004	BW-OPS-004 Waste Inspection Sheet (Rev 4).xls	4
41. BW/Ops/005	BW-OPS-005 Waste Processing Procedure (REV 4).DOC	4
42. BW/Ops/006	BW-OPS-006 Housekeeping & Nuisance Inspection Procedure (REV 2).DOC	2
43. BW/Ops/007	BW-OPS-007 Nuisance & Housekeeping Inspection Sheet (REV 2).DOC	2
44. BW/Ops/008	BW-OPS-008 BBT Procedure for General Monitoring (REV 2).DOC	2
45. BW/Ops/009	BW-OPS-009 Waste Profiling Form (REV 1).doc	1
46. BW/Ops/010	OBSOLETE – Bund Testing Results Form	Obsolete
47. BW/Ops/011	OBSOLETE - Bund Integrity Test Procedure	Obsolete
48. BW/Ops/012	BW-OPS-012 Drainage, Bund and Oil Interceptor Audit Sheet (Rev 2).xls	2
49. BW/Ops/013	BW-OPS-013 Environmental Incident investigation Form (REV 1).xls	1
50. BW/Ops/014	BW-OPS-014 Environmental Incident Investigation & Reporting Procedure (REV 1).doc	1
51. BW/Ops/015	BW-OPS-015 Environmental Complaints Form (REV 1).doc	1
52. BW/Ops/016	BW-OPS-016 Environmental Non Compliance Form (REV 1).doc	1
53. BW/Ops/017	BW-OPS-017 Environmental Non-Compliance Procedure (REV 1).DOC	1
54. BW/Ops/018	BW-OPS-018 Residuals Management Procedure (REV 1).doc	1
55. BW/Ops/019	BW-OPS-019 Barna Recycling Incoming Checklist (REV 1).doc	1
56. BW/Ops/020	BW-OPS-020 Barna Recycling Outgoing Checklist (REV 2).doc	2
57. BW/Ops/021	BW-OPS-021 Equipment Maintenance Procedure (REV 2).doc	2
58. BW/Ops/022	BW-OPS-022 Equipment Maintenance Schedule Checklist (REV 2).doc	2
59. BW/Ops/023	BW-OPS-023 Picking Station Procedure (REV 2).doc	2
60. BW/Ops/024	Obsolete - Boston Scientific Procedure	Obsolete
61. BW/Ops/025	Obsolete - Medtronic AVE Materials Procedure	Obsolete
62. BW/Ops/026	BW-OPS-026 Toolbox Training for Forklift Operators.doc	0
63. BW/Ops/027	BW-OPS-027 Battery Charging Health and Safety Procedure (REV 0).doc	0
64. BW/Ops/028	BW-OPS-028 Weekly Checklist for Excavator Grab (REV 0).doc.docx	0
65. BW/Ops/029	BW-OPS-029 Weekly Checklist for Forklifts (REV 0).doc.docx	0
66. BW/Ops/030	BW-OPS-030 Weekly Checklist for Loading Shovel (REV 0).doc.docx	0
67. BW/Ops/031	BW-OPS-031 BBT Noise Health and Safety Policy (REV 0).doc	0
68. BW/Ops/032	BW-OPS-032 Permit to Dig Form (REV 0).doc	0
69. BW/Ops/033	BW-OPS-033 Manual Handling Policy Procedure (REV 0).doc	0
70. BW/Ops/034	BW-OPS-034 Composting Odour Management Procedure (REV 0).docx	0
71. BW/Ops/035	BW-OPS-035 Barna Recycling Construction Safety Check List (REV 0).doc	0
72. BW/Ops/036	Number to be re-used no document	

73. BW/Ops/037 0).DOC	BW-OPS-037 Barna Recycling Facility Health & Safety Guidelines (REV 0).DOC	0
74. BW/Ops/038 Obsolete	OBSOLETE - Barna Recycling Fire Drill Guidelines	
75. BW/Ops/039 0).xlsx	BW-OPS-039 Barna Recycling Weekly Fire Equipment Checksheet (REV 0).xlsx	0
76. BW/Ops/040	BW-OPS-040 Barna Recycling First Aid Equipment Checklist (REV 0).doc	0
77. BW/Ops/041 0).doc	BW-OPS-041 Barna Recycling Weekly Health & Safety Checklist (REV 0).doc	0
78. BW/Ops/042	BW-OPS-042 Barna Recycling Hot Works Permit (REV 0).doc	0
79. BW/Ops/043	BW-OPS-043 BBT Hot Works Procedure (REV 0).DOC	0
80. BW/Ops/044	BW-OPS-044 Machine – Permit to Work Form (REV 0).doc	0
81. BW/Ops/045	Still to be used missed in error	
82. BW/Ops/046	BW-OPS-046 Health & Safety Records Index (REV 0).doc	0
83. BW/Ops/047	BW-OPS-047 Induction Checklist for Visitors to Barna Recycling (REV 0).doc	0
84. BW/Ops/048	Composting Waste Acceptance Form	Obsolete
85. BW/Ops/049	Compost Processing Procedure	Obsolete
86. BW/Ops/050	BW-OPS-050 Procedure for Handling a Rejected Load of SRF (REV 0).doc	0
87. BW/TRA/001	BW-TRA-001 Barna Recycling Training Matrix (REV 17).xls	17
88. BW/TRA/002	BW-TRA-002 Induction Training Procedure (REV 3).doc	3
89. BW/TRA/003	OBSOLETE - Employee Roll Call Listing	Obsolete
90. BW/TRA/004	OBSOLETE - Approved Forklift Drivers Listing	Obsolete
91. BW/TRA/005	BW-TRA-005 BBT Bin Lifting Equipment Training Document (REV 0).doc	0
92. BW/TRA/006	BW-TRA-006 Health & Safety Ear Muffs Fitting Instructions (REV 0).doc	0
93. BW/TRA/007	BW-TRA-007 Health & Safety Foam Plugs Fitting Instructions (REV 0).doc	0
94. BW/COM/001	BW-COM-001 Feedstock Acceptance Procedures (Rev 1).doc	1
95. BW/COM/002	BW-COM-002 Feedstock Supply Contact (Rev 0).doc	0
96. BW/COM/003	BW-COM-003 Guide to Barna Compost Acceptable Waste Types (Rev 0).doc	0
97. BW/COM/004	BW-COM-004 Rejected Waste Form (Rev 0).doc	0
98. BW/COM/005	BW-COM-005 Barna Compost Material Delivery Form (Rev 0).doc	0
99. BW/COM/006	BW-COM-006 Waste Inspection Log & Rejection Form (Rev 0).doc	0
100. BW/COM/007	BW-COM-007 Procedures in Relation to Transformation Parameter Achievement (Rev 0).doc	0
101. BW/COM/008	BW-COM-008 Batch Record Document (REV 1).doc	1
102. BW/COM/009	BW-COM-009 Particle Size Record Sheet (REV 0).doc	0
103. BW/COM/010	BW-COM-010 Superbatch Record Sheet (REV 0).doc	0
104. BW/COM/011	BW-COM-011 Barna Recycling Pasteurisation Procedure (REV 0).doc	0
<b>BW/COM/012</b>	<b>Not currently in use</b>	
<b>BW/COM/013</b>	<b>Not currently in use</b>	
105. BW/COM/014	BW-COM-014 Temperature Failure Investigation (Rev 0).doc	0
106. BW/COM/015	BW-COM-015 Sampling Procedures (Rev 1).doc	1
107. BW/COM/016	BW-COM-016 Sampling Record E. COLI (Rev 0).doc	0
108. BW/COM/017	BW-COM-017 Sampling Record Salmonella (Rev 0).doc	0
109. BW/COM/018	BW-COM-018 Microbial Failure Procedure (REV 0).doc	0
110. BW/COM/019	BW-COM-019 Microbial Sampling Failure Record Sheet (Rev 0).doc	0
111. BW/COM/020	BW-COM-020 Cleaning and Hygiene Procedures Personnel (Rev 1).doc	1
112. BW/COM/021	BW-COM-021 Hygiene Inspection Sheet (Rev 0).doc	0
113. BW/COM/022	BW-COM-022 Cleaning and Hygiene Procedures Facility (REV 1).doc	1
114. BW/COM/023	BW-COM-023 Vehicles Exiting via Emergency Exit Record Sheet (Rev 0).doc	0
115. BW/COM/024	BW-COM-024 Cleaning in Clean Area Record Sheet (Rev 0).doc	0
116. BW/COM/025	BW-COM-025 Procedures to Prevent Re-contamination of Compost (REV 0).doc	0
117. BW/COM/026	BW-COM-026 Barna Compost Vermin and Pest Control (Rev 0).doc	0
<b>BW/COM/027</b>	<b>Not currently in use</b>	
118. BW/COM/028	BW-COM-028 Barna Compost Records Maintenance & Calibration (Rev 0).doc	0
<b>BW/COM/029</b>	<b>Not currently in use</b>	
119. BW/COM/030	BW-COM-030 Cold Spots Check Record Sheet (Rev 0).doc	0



120. BW/COM/031	BW-COM-031 Maintenance Check Record Sheet (Rev 0).doc	0
121. BW/COM/032	BW-COM-032 Compost Dispatch Procedure (Rev 0).doc	0
122. BW/COM/033	BW-COM-033 Compost Dispatch Record Sheet (Rev 0).doc	0
<b>BW/COM/034</b>	<b>Not currently in use</b>	
<b>BW/COM/035</b>	<b>Not currently in use</b>	
123. BW/COM/036	BW-COM-036 HACCP Audit Procedure (Rev 0).doc	0
124. BW/COM/037	BW-COM-037 Barna Compost Internal Audit Checklist (Rev 0).doc	0
125. BW/COM/038	BW-COM-038 Barna Compost Training Procedure (Rev 0).doc	0
126. BW/COM/039	BW-COM-039 Record of Training by Barna Compost Personnel (Rev 0).doc	0
127. BW/COM/040	BW-COM-040 Barna Compost HACCP (Rev 0).doc	0
128. BW/COM/041	BW-COM-041 Barna Compost Vehicle Exiting Clean Area Record Log (Rev 0).doc	0

## 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 2014 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
- 2 x track machine excavators
- 3 x Liebherr grab machines for loading trucks and managing movements of waste
- 1 x Kabelco grab machine
- 2 x forklifts
- 2 x Teleporters
- 2 x Electric Scissor Lift
- 1 x Finger Screener
- 3 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
- 2 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 Mobile Power Washer
- 2 x Cherry Pickers
- 1 x Hoist
- 10 x 45ft storage containers
- 1 x Daewoo Clamp Loading Forklift
- 1 x JCB Clamp Loading Forklift
- 1 x Mitsubishi Clamp Loading Forklift
- 1 x Swarf Metal Baler / Briquetter
- 1 x Compost Turing Mobile Unit
- 2 x Compost Loading Shovels
- 1 x Titech Optical Sorting Machine
- 18 x Calibrated Temperature Probes

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

- 6 x arctic trucks
- 2 x rigid tankers
- 8 x skip lorries
- 4 x hook bin loaders
- 4 x curtainsider collection / delivery vehicles
- 42 x rear end loaders (standard bin lorries) incorporating twin packs
- 6 x collection delivery vans / jeeps
- 10 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 Recycling 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 2014.

Our main priorities at present are to ensure that we develop our twin pack collection vehicles to offer us the ability to collect both waste and recyclable material from our customers on the same thus reducing collections from weekly to fortnightly and reducing our costs and carbon footprint.

In addition last year we identified that we must improve the efficiency of our pay by weight through to invoicing structure to allow us access to good quality data and streamline this process. Investment in new systems for this took place in 2014 through the incorporation of MOBA data systems on the backs of most of our trucks and introduction of handheld devices for our drivers and helpers.

A review of the fleet and machinery in terms of age is also underway and a plan is in place to gradually reduce the age of the equipment over the next few years on a phased approach.

For the moment 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 / Specified Engineering Works**

The Barna Recycling Facility in Carrowbrowne has been in an almost constant state of change over the past 14 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.

#### **2014 Upgrades / Changes**

During the current reporting period the company again made changes to improve the site and the following is a summary of the main infrastructural changes:-

##### **New MSW Storage Area**

- In line with the Agencies and Insurance companies concern in relation to fire safety we decided with the agreement of all parties to construct an outside, open air storage area for our baled and wrapped MSW product. This involved the construction of a dedicated slab hardstand storage area on site which was constructed with new drainage so that any leachate drains via the foul water network. This construction proved to be a very worthwhile project and the slab has been a very important addition to the site in the last half of 2014. It allows us to store bales in a safe manner with a far less risk of fire and the storage of the bales outside also makes the removal of baled material to the port for shipping a much better and safer process to manage. This area comfortably holds up to 4,000 bales at anytime which is enough for each bulk shipment that we make. There have been no leachate or odour issues since we started storing the bales outside.

##### **Picking Station**

During this reporting period we added an optical sorting machine which assists with the automated sorting of paper products. The optical sorter takes in paper and plastics and using laser and air technology will separate the paper from the plastics as opposed to the previous method where these items had to be manually sorted. The optical sorter has allowed us to maintain good quality and throughput levels on the picking station.

##### **Lean To Roof at Baling Area**

- During this reporting period a new roof was constructed which links the baling area with the storage area and means this entire operation now takes place inside. This project was agreed in conjunction with the Agency not only to improve the storage facilities for our end products but this roof also improves litter and housekeeping in this part of the site. The roof also provides better working conditions for our staff and has increased storage capacity on site which is beneficial from time to time.

## **2015 Proposed Developments**

The company are committed to continuous improvement of the site and therefore at the beginning of each reporting year we identify areas on the site which are important to provide investment in and ensure they improve and progress. During discussions for 2015 the following have been set as priorities for improvement:-

### **Composting**

- During 2015 we will undertake a programme of improvement in relation to odour management in the compost area. The work will involve the construction of two new 30 metre enclosed concrete bunkers within the compost area which will be used to control incoming stock. The idea is that rather than stock sitting outside in the open plan area it will almost immediately be put into the enclosed bunkers where it can immediately be temperature controlled using air circulated by high speed fans and meaning raw materials are dealt with in a faster more efficient manner leaving no chance for odour to develop from unprocessed material early in the process. It is hoped that the bunkers will be full constructed and available for use by the end of Q2.

### **Picking Station**

- The picking station on site will be almost completely redeveloped to add some more modern equipment. During the last reporting period we added one Titech Optical Sorting system to one specific line and in 2015 we plan to add two more Titech machines on the other two lines. This project will also involve realigning some conveyor systems, upgrading (via maintenance) of our ballistic separators, the addition of a bag opening facility and introduction of another magnet. The project has been planned for completion by the end of Q3 with the overall aim of the project to increase throughput capability while maintaining the current quality standards.

### **Bale / Wrap Process**

- The upgrades to the bale / wrap process area will not involve much physical construction work more improvement to the layout and controls within the existing area. The change will involve setting up a defined factory like process where everything has a sequence within the area and defined storage bunkers for processed or unprocessed material will be put in place. In addition a process for controlling the fumes, steam and dust in this area will be put in place probably in the form of an extraction system. Having a defined process within this area will greatly improve efficiency and safety within this area.

### **Maintenance / Storage Compound**

- The changes here will have no impact on the licenced facility as all work will take place off the licenced site however it will lead to changes that will have a positive impact on the licenced area. This project will see construction of a new maintenance building and garage where all planned maintenance and repairs will be carried out in addition to storage compounds being created for items such as bins, skips and hook bins. Additional car parking for trucks and company vehicles overnight will also be created as part of this project. On completion of this project it means that all maintenance, storage and parking can be done out with the licenced facility greatly improving housekeeping on the licenced site and freeing up space which can be put to more productive use. It is hoped this project will be complete by the end of Q3.

### **Fire Water Retention Programme**

- During this reporting period we agreed a programme of improvements with the Agency in relation to managing fire water retention on site in the event of an emergency. This project involves a series of improvements at the site to ensure we are in the best position to manage fire water. The project involves as a summary the construction of a wall along the back of the facility to protect our highest risk area of the waterway at the back of the site. In addition kicker points or lips will be installed under all doors leading to outside areas and the hardstand area adjacent to the company loadings bays and another opposite the weighbridge area will be reconstructed to remove the cracks and general wear and tear in these areas. Completion of all actions will mean the company are in a strong position to effectively deal with any contaminated fire water in the event of an emergency. It is hoped to have all works completed by the end of Q2 2015.

### **5. Complaints Summary**

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

- Environmental Complaints Form (BW-OPS-015)

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 Complaint 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 by the EPA will be documented on the EDEN online management system and records of those will be kept on that system only.

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 2014 AER we can confirm the following:-**

- **No official complaints of an Environmental nature were received directly by the company. One unofficial complaint was made due to odour in the compost facility and that issue is already in the process of being fixed as a result.**
- **The EPA received two official complaints in relation to our facility.**

- **The first EPA complaint was in relation to odour from the composting facility which as a company we accepted and met the Agency following the complaint and have agreed a programme for improvement with the Agency which is detail in section 4.3 of this report and will be addressed fully by the end of Q3 2015.**
- **The second EPA complaint was in relation to an allegation by someone that as a company we were involved in activities with companies dumping material at sea. We immediately informed the Agency that this was not the case and that all companies we use to process our end products and registered and monitored by the Dublin TFS Office. Following our explanation there has been no further issue in relation to this matter.**

## **5.1 Environmental Incidents**

Barna Recycling are responsible under the Agencies new guidance in relation to Environmental Incidents to notify the Agency immediately or any serious occurrence on site or the exceedance of licence limits or pre-defined trigger levels as a result of environmental monitoring.

During this reporting period Barna Recycling had 1 notifiable incident which occurred in Q1 and was in relation to elevated readings of ammonia in surface water monitoring. The incident was notified to the Agency via the online Eden system. The trigger level activated was only just exceeded and there was no real cause for concern with the reading. We agreed with the Agency to retest in Q2 and fortunately there was no repeat on any other occasion in 2014.

There were no other notifiable incidents during 2014.

Barna Recycling have completed the EPA's published AER template in relation to summarising complaints and incidents and this is attached as Appendix A of this 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. The purpose of these nuisance checks is to verify that there are no issues at the facility with regards to vermin, birds, flies, dust, housekeeping or odours.

In this reporting period we also added waste stockpiles as a check on the daily nuisance processes. This was done with a view to ensuring stock was reviewed on a daily basis to maintain a focus on moving material off site as soon as possible and not allowing any materials to accumulate in excessive quantities and if they did they immediately came into focus.

Odour checks are also carried out as an individual assessment using the Agencies own guidance and these factor in all of our nearest sensitive receptors both upwind and downwind of the facility namely domestic dwellings or commercial premises. The method used is a 5 minute sniff test as these pre-determined locations on two occasions per week. We feel that given we have a composting facility on site it is necessary to carry out these checks this frequently. Results for odour checks during 2014 did highlight an odour issue on site during certain periods. By no means was there a daily issue with odour at the facility this was very much an intermediate problem that presented itself on occasion throughout 2014. As a result of these checks and a discussion with the Agency a programme for improvement of odours has been agreed for 2015 and this is detailed in section 4.3 of this report.

The other parameters such as dust on site we had no issues to report. During periods of dry weather on site there can always be a level of dust on site but we have misting equipment installed internally and water dosing pumps on our approach roads to control dust levels as required. As a results dust monitoring reports highlighted no dust issues on site for 2014. Daily nuisance checks are always valuable to highlight the need for having pumps on / off during any period and these daily checks will continue.

Vermin, birds and flies are monitored internally on a daily basis and again no major issues were evident during this reporting period. Barna Recycling partner with Ecolab is relation to the management of all types of vermin, birds and flies and have active controls on site for rats and mice as well as flies. There has been no need to put controls in place in relation to birds on site as all sheds are covered and the nuisance of birds has never been an issue.

The main issue in relation to vermin at present is control of flies especially in relation to the composting facility in warm weather. After meeting Ecolab on site we decided the best approach was to implement a serious of fogging treatments which are designed to wipe of a complete life cycle of flies and a repeat of this every four weeks will keep them at bay. This was implemented in the middle of 2014 and has proved extremely successful in controlling the flies. A programme of treatments has already been agreed for 2015.

All Ecolab reports are on file and up to date to show their own monitoring results.

During this reporting period a significant effort was made on site to improve housekeeping which had been an ongoing issue on some parts of the site in recent years and had been highlighted regularly on nuisance check sheets. A team of staff were put together to tackle the housekeeping on an area by area basis and this was carried out in the first half of 2014 with very beneficial results. The facility now is in a much better condition in relation to old redundant plant and equipment and stock of old scrap items which were all removed from the site. Apart from general monitoring on a regular basis housekeeping on site generally is no longer an issue but will always be ongoing to ensure that current levels are maintained.

In summary the nuisance checks still play a valuable role in the day to day monitoring of our facility and they are carried out properly to ensure we get the full benefit from them. In general the site is running well and can be considered on the basis of the daily results not to be causing any major nuisance to our neighbours or the environment in which we operate.



## **7. Environmental Monitoring**

The required monitoring programme at the Barna Recycling 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 (Quarterly)**

During 2014 reporting period sampling was carried out as follows:

- Surface & Foul Water Monitoring (carried out by Fitz Scientific) on the 21/03/2014
- Surface & Foul Water Monitoring (carried out by Fitz Scientific) on the 13/06/2014
- Surface & Foul Water Monitoring (carried out by Complete Lab Solutions) on the 08/09/2014
- Surface & Foul Water Monitoring (carried out by Complete Lab Solutions) on the 04/10/2014

### **Dust Monitoring (three times per year)**

During 2014 reporting period sampling was carried out as follows:

- Dust Monitoring (carried out by Complete Lab Solutions in periods 15/08/2014 to 15/09/2014, 15/09/2014 to 13/10/2014 and 13/10/2014 to 13/11/2014. 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 (annually)**

During 2014 reporting period sampling was carried out as follows:

- Noise Monitoring (carried out by Complete Laboratory Solutions) on 17/10/2014

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

Complete Lab Solutions and Fitz Scientific were employed as part of the Environmental Management Team to carry out and report on all monitoring requirements for 2014. They both won this business through a tender selection process which is run to identify the best possible company to partner with in relation to environmental monitoring. We have on file all the relevant names and qualifications held by the people carrying out the testing on our behalf.

The tender process is coordinated by the Facility Manager and he makes the decision on the awarding of the contracts. Barna Recycling 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.

## **7.1. Summary of Monitoring Results**

Environmental monitoring results are sent to the Agency within 10 days of quarter end for water monitoring and as soon as results are available for both dust and noise monitoring. All results are now uploaded via the Agencies online EDEN system which allows for the notification of any incidents or general issues in relation to the monitoring results.

A summary of the monitoring results for the current reporting period of 2013 have been transferred into the Agencies own AER template for monitoring results for all parameters (water, dust and noise) and these are included in that format as appendix A of this report.

## **7.2. Compost Monitoring Results**

The composting process has it's own requirements for monitoring on site and that involves emissions and as well as on the compost product itself. In relation to the compost product as already outlined in the report the following records are available on request in relation to our composting:

- E-Coli Test Results
- F-Coli Test Results
- Salmonella Test Results
- AT4 Test Results
- Trace Element (Compost Quality) Test Results

The above are all requirements we must carry out for either the EPA and / or Department of Agriculture. In addition to these we also carry out tests for the following:

- Nutrition Levels (NPK) on Compost
- PAH / PHP Levels

Any issues with monitoring results for compost must immediately be notified to the Agency and the Department and may result in a rejected batch of compost.

During this reporting period there were no such incidents and all compost batches passed all results.

These results have been checked during site audits by both the Agency and the Department.

Most importantly in relation to monitoring our internal results show that the scrubber system on site is adequately doing it's job. We use a Kitagawa monitoring system to measure the levels of Ammonia, Hydrogen Sulphide and Mercaptans from the system and none of the monitoring results for 2014 highlighted an exceedance of the limits specified in our EPA licence. Therefore from the results recorded it can be assumed that the scrubber system on site is performing it's duty adequately.

Barna Recycling will carry out bio-aerosol monitoring of it's processed per the Agencies new air monitoring guidance in the first half of 2014.

### **7.3. Bio Aerosol Air Monitoring**

As part of the Agencies new air monitoring requirements Barna Recycling carried out Bio Aerosol monitoring during 2014 to meet these requirements.

This monitoring was carried out by Anua Environmental Consultants who are part of the Board Na Mona group on the 4<sup>th</sup> April 2014.

The results reported for bio aerosols highlighted no issues at the facility in relation to the emission of bio aerosols as a result of our activities and readings were normal. There were no actions highlighted within the report and no recommendations for improvement.

### **7.4. Monitoring Locations**

A map of the monitoring locations at the site is attached as appendix D to this report as required by the Agency.

### **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 2014 (approximately): 759,743 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 and pumped into the scrubbers within the compost building	Composting Scrubber System
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 2013 – 31<sup>st</sup> December 2014**

Resource	Consumption for Reporting Period
Odour Control Chemicals	2012: Approximately 60litres 2013: Approximately 4,500 litres 2014: Approximately 5,200 litres
Electricity	2014: 2,204,366 (KW) 2013: 1,874,775 (KW) 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	1,261,660 (litres approx) including our fleet of on the road vehicles and on site plant / equipment
Hydraulic Oils	14,000 (litres approx)

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

The underground drainage pipeline and tank network was surveyed during reporting period (2011) as per the requirement of our licence

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.

A new survey will be carried out during 2015 on completion of the fire water retention works as the requirement within our licence is to assess this every 3 years and details will be included in next year's report.

### **Bund Test**

During 2013 we did carry out a bund test on the one bund we have on site and there were no issues highlighted as a result of this inspection. A full copy of this report is also on file and available for review from the Facility Manager. No corrective actions were necessary.

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

Barna Recycling are required by our licence to have an up to date financial provision in place which covers the cost of emergency clean up in the event of an environmental incident or restoration and aftercare work as a result of the company closing.

Financial provision for the company is outlined in our Environmental Liabilities Risk Assessment report which was prepared by Tobin Consulting Engineers. As it currently stands at end March 2015 a new proposal for 2015 is currently with the Agency who are considering it for approval.

The current Financial Provision for the Facility is: €1,202,202.12 (2014 / 2015)

The proposed Financial Provision for the Facility is €1,559,382.90 (2015 / 2016)

This new bond calculation was done through the submission of a full ELRA document which was produced in line with the new EPA guidance of Financial Provisions. The full document is available on request from Barna Recycling but was approved and the new bond put in place as soon as it's approved by the Agency.

For the 2014 reporting period we have completed the Agencies own AER template in relation to summarising the ELRA and Financial Provision data and this is included as part of appendix A of this report.

## **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.

The main changes since last year's report are the introduction of a new General Manager who sits in the organisation between the Managing Director and CEO and the main group of Departmental Managers. The executives of the company believe this is the best strategy to bring the company to the next level and achieve it's immediate and long term goals.

There have been some changes in major positions within the company namely in the Human Resources Position, the Transport Manager Position, IT Manager Position, Health & Safety Manager position and Financial Controller position all of whom are still in place but are different personnel than in the previous years report.

In relation to the Agencies main point of contact the Facility Manager remains unchanged.

The Management Structure is outlined fully in Appendix E of the Report.

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 Recycling 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. Campbell Finnie is the current Facility Manager and can be contacted on 091-745040.

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

Barna Recycling 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. This is available to small groups and adults only.

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

The setting of targets and objectives for the company is very important. Not only is it a requirement of our licence but it ensures the site and the company are always working towards continuous improvement in all areas of the business. The targets set should be ideally out with the scope of our licence.

The company recognise it is not only important to set these targets but to ensure during the reporting period it successfully works towards achieving the targets. As a result we produce a new Schedule of Targets and Objectives as part of our overall EMP and this is issued and re-defined on an annual basis to include both new targets which are relevant and also update on the success or otherwise of achieving the targets set for the previous reporting period.

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 Recycling have produced a new EMP for 2015 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 Recycling has made in all areas during this reporting period and outlines the major tasks ahead during the new reporting period.

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

A summarised version is also included in the EPA's own Excel format template as part of appendix A.

#### **15. AER / PRTR Emissions Data for 2014**

The EPA requires Barna Recycling 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 2014 AER / PRTR Emissions Report Database is included in this report as appendix B.

#### **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 2015 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 Recycling.

## **Final Comments**

This year's Annual Environmental Report has been compiled in very similar format as previous years to keep it consistent and we have also integrated the Agencies new Excel templates which although not mandatory for this year we found useful help compile the data.

All figures and updates quoted are specifically for the 2014 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 Recycling during 2014 in all areas of the business. We believe the report in its current format achieves this successfully. However Barna Recycling 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 Recycling 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 2015.

## **Appendices**

The following documents have been specifically requested by the Agency to be included in the Annual Environmental Report and are attached to this document and form part of the final report:

- Appendix A:** AER Summary Report in EPA's own Excel Format  
(this includes results and information in relation to Air, Water, Bunds, ELRA, EMP, Noise, Resource / Energy, Complaints / Incidents and Waste Quantities)
- Appendix B:** AER / PRTR Workbook for 2014
- Appendix C:** EMP & Schedule of Targets and Objectives 2015
- Appendix D:** Map of site monitoring locations
- Appendix E:** Current Company Management Structure

## **Next Submission**

The next submission of this report is due on 31<sup>st</sup> March 2016.


## **Contacts**

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



# Appendix A:

## AER Summary Report in EPA's own Excel Format (this includes results and information in relation to Air, Water, Bunds, ELRA, EMP, Noise, Resource / Energy, Complaints / Incidents and Waste Quantities)

Facility Information Summary	
AER Reporting Year	2014
Licence Register Number	W0106-02
Name of site	Barna Waste
Site Location	Carrowbrowne, Headford Road, Galway
NACE Code	3821
Class/Classes of Activity	D13, D14, D15, R3, R4, R5, R11, R12 and R13
National Grid Reference (6E, 6 N)	53.3301, -9.01825
<p>A description of the activities/processes at the site for the reporting year. This should include information such as production increases or decreases on site, any infrastructural changes, environmental performance which was measured during the reporting year <b>and an overview of compliance with your licence listing all</b> exceedances of licence limits (where applicable) and what they relate to. e.g. air, water, noise.</p> <p>The principal activities carried out on site are D13, D14, D15, R3, R4, R5, R11, R12 and R13. Tonnage of waste received in 2014 was 104,074.53 which was up approx. 16% on 2013 figures. 83% of waste received was sent for recycling / recovery in 2014 which compares to 46% in 2013. The facility maintained certification to ISO 14001, the international standard for Environmental Management Systems. During 2014 we undertook 2 infrastructure upgrades to the site. These were construction of a roof over our baling and recyclable storage areas and construction of a slab area for the external storage of wrapped MSW bales for export. There were 2 complaints during this year. One complaint in relation to odour for which a program of improvement is currently being implemented at the EPA's approval and therefore is ongoing. The 2nd complaint was an anonymous complaint alleging illegal dumping at sea. This complaint had no validity and we communicated that to the agency. In relation to environmental monitoring there were no issues in 2014.</p>	
<p><b>Declaration:</b> 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.</p>	
 Signature Group/Facility manager <small>(or nominated, suitably qualified and experienced deputy)</small>	13/04/15 Date

<b>AIR-summary template</b>	Lic No: W0106-02	Year	2014
Answer all questions and complete all tables where relevant			

Additional information

NO	Ambient dust monitoring was carried out at 4 No. locations three times during the reporting period - there were no breaches of the dust deposition limits.
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**Periodic/Non-Continuous Monitoring**

2	Are there any results in breach of licence requirements? If yes please provide brief details in the comment section of Table A1 below	NO
3	Was all monitoring carried out in accordance with EPA guidance note <a href="#">monitoring AG2</a> and using the basic air monitoring checklist? <a href="#">AG12</a>	YES

**Table A1: Licensed Mass Emissions/Ambient data-periodic monitoring (non-continuous)**

Emission reference no:	Parameter/ Substance	Frequency of Monitoring	ELV in licence or any revision thereof	Licence Compliance criteria	Measured value	Unit of measurement	Compliant with licence limit	Method of analysis	Annual mass load (kg)	Comments - reason for change in % mass load from previous year if applicable
	SELECT			SELECT		SELECT	SELECT	SELECT		
	SELECT			SELECT		SELECT	SELECT	SELECT		
	SELECT			SELECT		SELECT	SELECT	SELECT		
	SELECT			SELECT		SELECT	SELECT	SELECT		

Note 1: Volumetric flow shall be included as a reportable parameter





Does your site have licensed emissions, direct to surface water or direct to sewer? If yes please complete table W2 and W3 below for the current reporting year and answer further questions. If you do not have licensed emissions you only need to complete table W1 and W2 for storm water analysis and visual inspections

Was it a requirement of your licence to carry out visual inspections on any surface water discharges or watercourses on or near your site? If yes please complete table W2 below summarising only any evidence of contamination noted during visual inspections

Yes	Additional information
Yes	There is 1 No. SW discharge point, SW1 and 2 No. other SW sampling points, SW1 - upstream and SW2 - downstream of the discharge point. There is 1 No. wastewater monitoring location prior to where it discharges to sewer, FW1
Yes	Visual checks of the stream we carried out on a daily basis to check for visual evidence of contamination, dead plants, dead fish et and these visual checks also showed no sign of any contamination in the stream water.

Table W1 Storm water monitoring

Location reference	Location relative to site activities	PNIT Parameter	Licensed Parameter	Monitoring date	EIV or trigger level in licence or thereof	Licence Compliance criteria	Measured value	Unit of measurement	Compliant with licence	Comments
SW1	upstream	Fats, Oils and Grease	Fats, Oils and Grease	14/02/14	N/A	N/A	<1	mg/L	yes	
SW1	upstream	BOD	BOD	14/02/14	N/A	N/A	<2	mg/L	yes	
SW1	upstream	Suspended Solids	Suspended Solids	14/02/14	N/A	N/A	<2	mg/L	yes	
SW1	upstream	Ammonia (as N)	Ammonia (as N)	14/02/14	N/A	N/A	1.11	mg/L	yes	
SW1	upstream	Mineral oils	Mineral oils	14/02/14	N/A	N/A	<2.5	mg/L	yes	
SW1	upstream	pH	pH	14/02/14	N/A	N/A	7.7	ph units	yes	
SW1	upstream	Fats, Oils and Grease	Fats, Oils and Grease	16/07/14	N/A	N/A	<1	mg/L	yes	
SW1	upstream	Ammonia (as N)	Ammonia (as N)	16/07/14	N/A	N/A	<2	mg/L	yes	
SW1	upstream	Suspended Solids	Suspended Solids	16/07/14	N/A	N/A	0.15	mg/L	yes	
SW1	upstream	Mineral oils	Mineral oils	16/07/14	N/A	N/A	31.98	mg/L	yes	
SW1	upstream	pH	pH	16/07/14	N/A	N/A	8.7	ph units	yes	
SW1	upstream	Fats, Oils and Grease	Fats, Oils and Grease	02/10/14	N/A	N/A	<1	mg/L	yes	
SW1	upstream	Ammonia (as N)	Ammonia (as N)	02/10/14	N/A	N/A	0.21	mg/L	yes	
SW1	upstream	Mineral oils	Mineral oils	02/10/14	N/A	N/A	7.8	mg/L	yes	
SW1	upstream	pH	pH	02/10/14	N/A	N/A	<5	mg/L	yes	
SW1	upstream	Fats, Oils and Grease	Fats, Oils and Grease	10/12/14	N/A	N/A	<1	mg/L	yes	
SW1	upstream	BOD	BOD	10/12/14	N/A	N/A	4	mg/L	yes	
SW1	upstream	Suspended Solids	Suspended Solids	10/12/14	N/A	N/A	4	mg/L	yes	
SW1	upstream	Ammonia (as N)	Ammonia (as N)	10/12/14	N/A	N/A	0.87	mg/L	yes	
SW1	upstream	Mineral oils	Mineral oils	10/12/14	N/A	N/A	182	mg/L	yes	
SW1	upstream	pH	pH	10/12/14	N/A	N/A	7.5	ph units	yes	
SW2	downstream	Fats, Oils and Grease	Fats, Oils and Grease	14/02/14	N/A	N/A	<1	mg/L	yes	
SW2	downstream	BOD	BOD	14/02/14	N/A	N/A	<2	mg/L	yes	
SW2	downstream	Suspended Solids	Suspended Solids	14/02/14	N/A	N/A	<2	mg/L	yes	
SW2	downstream	Ammonia (as N)	Ammonia (as N)	14/02/14	N/A	N/A	1.12	mg/L	yes	
SW2	downstream	Mineral oils	Mineral oils	14/02/14	N/A	N/A	<2.5	mg/L	yes	
SW2	downstream	pH	pH	14/02/14	N/A	N/A	7.4	ph units	yes	
SW2	downstream	Fats, Oils and Grease	Fats, Oils and Grease	16/07/14	N/A	N/A	<2	mg/L	yes	
SW2	downstream	Ammonia (as N)	Ammonia (as N)	16/07/14	N/A	N/A	0.13	mg/L	yes	
SW2	downstream	Mineral oils	Mineral oils	16/07/14	N/A	N/A	2.08	mg/L	yes	
SW2	downstream	pH	pH	16/07/14	N/A	N/A	7.5	ph units	yes	
SW2	downstream	Fats, Oils and Grease	Fats, Oils and Grease	02/10/14	N/A	N/A	<1	mg/L	yes	
SW2	downstream	BOD	BOD	02/10/14	N/A	N/A	4	mg/L	yes	
SW2	downstream	Suspended Solids	Suspended Solids	02/10/14	N/A	N/A	0.289	mg/L	yes	
SW2	downstream	Ammonia (as N)	Ammonia (as N)	02/10/14	N/A	N/A	0.341	mg/L	yes	
SW2	downstream	Mineral oils	Mineral oils	02/10/14	N/A	N/A	182	mg/L	yes	
SW2	downstream	pH	pH	02/10/14	N/A	N/A	<5	mg/L	yes	
SW2	downstream	Fats, Oils and Grease	Fats, Oils and Grease	10/12/14	N/A	N/A	2	mg/L	yes	
SW2	downstream	BOD	BOD	10/12/14	N/A	N/A	1	mg/L	yes	
SW2	downstream	Suspended Solids	Suspended Solids	10/12/14	N/A	N/A	2	mg/L	yes	
SW2	downstream	Ammonia (as N)	Ammonia (as N)	10/12/14	N/A	N/A	0.341	mg/L	yes	
SW2	downstream	Mineral oils	Mineral oils	10/12/14	N/A	N/A	182	mg/L	yes	
SW2	downstream	pH	pH	10/12/14	N/A	N/A	<2	mg/L	yes	
SW2	downstream	Fats, Oils and Grease	Fats, Oils and Grease	16/07/14	N/A	N/A	0.053	mg/L	yes	
SW2	downstream	Ammonia (as N)	Ammonia (as N)	16/07/14	N/A	N/A	32.81	mg/L	yes	
SW2	downstream	Mineral oils	Mineral oils	16/07/14	N/A	N/A	0	mg/L	yes	
SW2	downstream	pH	pH	16/07/14	N/A	N/A	7.8	ph units	yes	
SW2	downstream	Fats, Oils and Grease	Fats, Oils and Grease	02/10/14	N/A	N/A	0	mg/L	yes	
SW2	downstream	BOD	BOD	02/10/14	N/A	N/A	<1	mg/L	yes	
SW2	downstream	Suspended Solids	Suspended Solids	02/10/14	N/A	N/A	5	mg/L	yes	
SW2	downstream	Ammonia (as N)	Ammonia (as N)	02/10/14	N/A	N/A	0.89	mg/L	yes	
SW2	downstream	Mineral oils	Mineral oils	02/10/14	N/A	N/A	182	mg/L	yes	
SW2	downstream	pH	pH	02/10/14	N/A	N/A	7.8	ph units	yes	
SW2	downstream	Fats, Oils and Grease	Fats, Oils and Grease	04/12/14	N/A	N/A	0	mg/L	yes	

AER Monitoring returns summary template-WATER/WASTEWATER(SSEWER)		WQDA6-02	2014	
SDI	on-site	04/12/14	N/A	N/A
SDI	on-site	04/12/14	N/A	22
SDI	on-site	04/12/14	N/A	2.1
SDI	on-site	04/12/14	N/A	3.8
SDI	on-site	04/12/14	N/A	7.8

Location reference	Date of inspection	Description of contamination	Source of contamination	Corrective action	Comments
			SELECT		
			SELECT		

**Licensed Emissions to water and/or wastewater (sewer) periodic monitoring (non-continuous)**

Was there any result in breach of licence requirements? If yes please provide brief details in the comment section of Table W3 below

No  Yes

Additional information

Was all monitoring carried out in accordance with EPA guidelines and checklists for Quality of Abatement Monitoring Data (QAMDA) to the EPA? If no please detail what areas require improvement in additional information box

[Annual/Annual](#) [Data Quality checks](#) [Assessment of results checklist](#)

**Table W3: Licensed Emissions to water and/or wastewater (sewer) periodic monitoring (non-continuous)**

Emission reference no.	Emission related to	Parameter/Substance/Code	Type of sample	Frequency of monitoring	Averaging period	ELV or trigger value in licence or any emission threshold**	License Compliance criteria	Measured value	Unit of measurement	Compliant with licence	Method of analysis	Procedural reference source	Procedural reference number	Annual mass load (kg)	Comments
FV1	Wastewater/Sewer	Fat, Oil and Grease	discrete	Quarterly - Results are an average of the 4 samples	Quarterly	100	All results < 1.2 x ELV	3	mg/L	yes	Other (please describe)	ISO	17025	2.279	ISO 17025 - Standard Method for the Examination of Water and Wastewater, 21 Oct. 2005
FV1	Wastewater/Sewer	COD	discrete	Quarterly - Results are an average of the 4 samples	Quarterly	1000	All results < 1.2 x ELV	18	mg/L	yes	Other (please describe)	ISO	17025	13.075	ISO 17025 - Standard Method for the Examination of Water and Wastewater, 21 Oct. 2005
FV1	Wastewater/Sewer	BOD	discrete	Quarterly - Results are an average of the 4 samples	Quarterly	350	All results < 1.2 x ELV	2.5	mg/L	yes	Other (please describe)	ISO	17025	1.899	ISO 17025 - Standard Method for the Examination of Water and Wastewater, 21 Oct. 2005
FV1	Wastewater/Sewer	Suspended Solids	discrete	Quarterly - Results are an average of the 4 samples	Quarterly	400	All results < 1.2 x ELV	13.25	mg/L	yes	Other (please describe)	ISO	17025	10.067	ISO 17025 - Standard Method for the Examination of Water and Wastewater, 21 Oct. 2005
FV1	Wastewater/Sewer	Ammonia (as N)	discrete	Quarterly - Results are an average of the 4 samples	Quarterly	N/A	All results < 1.2 x ELV	1.0028	mg/L	yes	Other (please describe)	ISO	17025	1.284	Sakylake method based on Methods for the examination of water and associated materials, Ammonia in waters, 1981
FV1	Wastewater/Sewer	Sulphate	discrete	Quarterly - Results are an average of the 4 samples	Quarterly	400	All results < 1.2 x ELV	5.005	mg/L	yes	Other (please describe)	ISO	17025	4.486	Based on Sulphate in Waters Effluents and Soils, 2nd Edition (1988), Method E
FV1	Wastewater/Sewer	volometric flow	composite	Continuous	Continuous	7	No flow value shall exceed the specific limit.	2.0815	m <sup>3</sup> /day	yes	Other (please describe)				Flow meter

Note 1: Volumetric flow shall be included as a reportable parameter

Note 2: Where emission limit values (ELV) do not apply to your licence please compare results against LOS for surface water or relevant receptor quality standards

**Continuous monitoring**

Does your site carry out continuous emissions to water/sewer monitoring?

Yes  No

Additional information

Volometric flow only

Does continuous monitoring equipment downtime occur during the reporting year? If yes please record downtime in table W4 below

No  Yes  No

Does your site have a proactive service contract for each piece of continuous monitoring equipment on site?

Yes  No

**Table W4: Summary of average emissions - continuous monitoring**

Emission reference no.	Emission related to	Parameter/Substance	ELV or trigger value in licence or any emission threshold	Averaging period	Compliance Criteria	Units of measurement	Annual Emission for current reporting year (kg)	% change of from previous reporting year	Monitoring Equipment downtime (hours)	Number of ELV exceedances in reporting year	Comments
FV1	Wastewater/Sewer	volometric flow	7	Continuous	Units of measurement shall not exceed the specific limit.	m <sup>3</sup> /day	7597.43	9%	0	0	

Note 1: Volumetric flow shall be included as a reportable parameter.

**Table W5: Abatement system bypass reporting table**

Date	Duration (hours)	Location	Resultant emissions	Reason for bypass	When was this report submitted?

\*Measures taken or proposed to reduce or limit bypass frequency

W0156-02
2014

**Bund/Pipeline testing template**

LE No: Additional information

**Bund testing** dropdown menu click to see options

Are you required by your licence to undertake integrity testing on bunds and containment structures? If yes, please fill out table B1 below listing all bunds and containment structures on site. In addition to all bunds which failed the integrity test all bunding structures which failed including mobile bunds must be listed in the table below, please include all bunds on site outside the licensed containment area (mobile bunds and chemstore included)

2 Please provide integrity testing frequency period

Does the site maintain a register of bunds, underground pipelines (including stormwater and foul), tanks, sumps and containers? (containers refer to "Chemstore" type units and mobile bunds)

3 and mobile bunds

4 How many bunds are on site?

5 How many of these bunds have been tested within the required test schedule?

6 How many of these bunds have failed the integrity test?

7 Are the mobile bunds included in the bund test schedule?

8 How many of these mobile bunds have been tested within the required test schedule?

9 How many sumps on site are included in the integrity test schedule?

10 How many sumps on site have failed the integrity test within the test schedule?

**Please list any sump integrity failures in table B1**

11 Do all sumps and chambers have high level liquid alarms?

12 If yes to Q11 are these failure systems included in a maintenance and testing programme?

13 If the Fire Water Retention hood included in your integrity test programme?

**Table B1: Summary details of bund/containment structure integrity test**

Bund/Containment structure ID	Type	Specify Other type	Product containment	Actual capacity	Capacity required*	Type of integrity test	Other test type	Test date	Integrity reports maintained on site?	Results of test	Integrity test failure explanation <50 words	Corrective action taken	Scheduled date for retest	Results of retest (if in current reporting year)
	SELECT					SELECT			SELECT	SELECT		SELECT		SELECT
<p><small>* Capacity required based on only with 75% or 100% containment tank is contained in your licence</small></p> <p>Has integrity testing been carried out in accordance with licence requirements and are all structures tested in line with 15/08/07/15A Guidance?</p> <p>16 Are there any containment systems that need to be removed or replaced to remove containment systems tested?</p> <p>17 Are channels/transfer systems compliant in both integrity and available volume?</p>														
<p>Commentary</p> <p>Yes</p> <p>No</p> <p>Yes</p> <p>3 years</p>														

**Pipeline/underground structure testing**

Are you required by your licence to undertake integrity testing on underground structures e.g. pipelines or sumps etc? If yes please fill out table 2 below listing all underground structures and pipelines on site which failed the integrity test and all which have not been tested within the integrity test period as specified

2 Please provide integrity testing frequency period

\* Please note integrity testing means water tightness testing for process and foul pipelines (as required under your licence)

**Table B2: Summary details of pipeline/underground structures integrity test**

Structure ID	Type system	Material of construction	Does this structure have Secondary containment?	Type of secondary containment	Type of integrity testing	Results of test	Integrity test failure explanation <50 words	Corrective action taken	Scheduled date for retest	Results of retest (if in current reporting year)
	SELECT		SELECT	SELECT	SELECT	SELECT		SELECT		SELECT
<p>Commentary</p> <p>Yes</p> <p>No</p> <p>3 years</p>										

Please use commentary for additional details not answered by tables/questions above

Comments	no	no	no
1 Are you required to carry out groundwater monitoring as part of your licence requirements?	no	no	no
2 Are you required to carry out soil monitoring as part of your licence requirements?	no	no	no
3 Do you extract groundwater for use on site? If yes please specify use in comment section	no	no	no
Do monitoring results show that groundwater generic assessment criteria such as GTVs or IGVs are exceeded or is there an upward trend in results for a substance? If yes, please complete the Groundwater Monitoring Guideline Template Report (link in cell G8) and submit separately through ALDER as a licensee return AND answer questions 5-12 below.	<a href="#">Groundwater monitoring template</a>	SELECT	
5 Is the contamination related to operations at the facility (either current and/or historic)	SELECT		
6 Have actions been taken to address contamination issues? If yes please summarise remediation strategies proposed/undertaken for the site	SELECT		
7 Please specify the proposed time frame for the remediation strategy	SELECT		
8 Is there a licence condition to carry out/update ELRA for the site?	SELECT		
9 Has any type of risk assessment been carried out for the site?	SELECT		
10 Has a Conceptual Site Model been developed for the site?	SELECT		
11 Have potential receptors been identified on and off site?	SELECT		
12 Is there evidence that contamination is migrating offsite?	SELECT		

Please enter interpretation of data here

**Table 1: Upgradient Groundwater monitoring results**

Date of sampling	Sample location reference	Parameter/Substance	Methodology	Monitoring frequency	Maximum Concentration++	Average Concentration+	unit	GTVs*	Upward trend in pollutant concentration over last 5 years of monitoring data
							SELECT		SELECT
							SELECT		SELECT

.\* where average indicates arithmetic mean

.\*+ maximum concentration indicates the maximum measured concentration from all monitoring results produced during the reporting year

**Table 2: Downgradient Groundwater monitoring results**

Date of sampling	Sample location reference	Parameter/Substance	Methodology	Monitoring frequency	Maximum Concentration	Average Concentration	unit	GTVs*	Upward trend in yearly average pollutant concentration over last 5 years of monitoring data
							SELECT		SELECT
							SELECT		SELECT

\*please note exceedance of generic assessment criteria (GAC) such as a Groundwater Threshold Value (GTV) or an Interim Guideline Value (IGV) or an upward trend in results for a substance indicates that further interpretation of monitoring results is required. In addition to completing the above table, please complete the Groundwater Monitoring Guideline Template Report at the link provided and submit separately through ALDER as a licensee return or as otherwise instructed by the EPA.

[Groundwater monitoring template](#)



Groundwater/Soil monitoring template	Lic No: WO106-02	Year	2014
<p>More information on the use of soil and groundwater standards/ generic assessment criteria (GAC) and risk assessment tools is available in the EPA published guidance (see the link in G31).</p>	<p><a href="#">Guidance on the Management of Contaminated Land and Groundwater at EPA Licensed Sites (EPA 2013).</a></p>		
<p>** Depending on location of the site and proximity to other sensitive receptors alternative Receptor based Water Quality standards should be used in addition to the GTV e.g. If the site is close to surface water compare to Surface Water Environmental Quality Standards (SWEQS). If the site is close to a drinking water supply compare results to the Drinking Water Standards (DWS)</p>	<p>Surface water EQS</p>		
	<p>Groundwater regulations</p>		
	<p>Drinking water (private supply) standards</p>		
	<p>Drinking water (public supply) standards</p>		

Table 3: Soil results

Date of sampling	Sample location reference	Parameter/ Substance	Methodology	Monitoring frequency	Maximum Concentration	Average Concentration	unit
							SELECT
							SELECT

Where additional detail is required please enter it here in 200 words or less

[Click here to access EPA guidance on Environmental Liabilities and Financial provision](#)

		Commentary
1	ELRA initial agreement status	Submitted and not agreed by EPA;
2	ELRA review status	Review required and not completed;
3	Amount of Financial Provision cover required as determined by the latest ELRA	€1,559,382.90 This is the total for both Closure 6693,495 and Unknown liabilities: ELRA 6865,887,90
4	Financial Provision for ELRA status	Submitted and not agreed by EPA;
5	Financial Provision for ELRA - amount of cover	€865,887.90 This is the total unknown liabilities - ELRA
6	Financial Provision for ELRA - type	bond
7	Financial provision for ELRA expiry date	01/01/16
8	Closure plan initial agreement status	Closure plan submitted and not agreed by EPA
9	Closure plan review status	Review required and not completed
10	Financial Provision for Closure status	Submitted and not agreed by EPA;
11	Financial Provision for Closure - amount of cover	€693,495.00 Amount for Closure Plan only
12	Financial Provision for Closure - Type	bond
13	Financial provision for Closure expiry date	01/01/16

Environmental Management Programme/Continuous Improvement Programme template		Lic No:	W0206-02	Year:	2014
Highlighted cells contain dropdown menu click to view		Additional Information			
1	Do you maintain an Environmental Management System (EMS) for the site. If yes, please detail in additional information	Yes	ISO 14001 accredited EMS. A full report on the progress of the company's objectives and targets is being submitted separately.		
2	Does the EMS reference the most significant environmental aspects and associated impacts on site	Yes	The EMP details the company's goals and who is responsible for implementing them. These goals cover operational, environmental, health and safety issues and any other related activities.		
3	Does the EMS maintain an Environmental Management Programme (EMP) as required in accordance with the licence requirements	Yes	Condition 2.3.2.2 of our Waste Licence (WL06-2) 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.		
4	Do you maintain an environmental documentation/communication system to inform the public on environmental performance of the facility, as required by the licence	Yes	Yes, this part of our ISO 14001 EMS system.		

Environmental Management Programme (EMP) report					
Objective Category	Target	Status (% completed)	How target was progressed	Responsibility	Intermediate outcomes
	Implement management systems and get certification to ISO 9001 and ISO 18001 standards	Ongoing	The Quality and Health & Safety Management Systems have been devised and are currently awaiting pre-audit by the NQA. Pre-audit scheduled for May 2015.		
Additional improvements	EMS system – ensure current ISO 14001 accreditation is maintained and the system further developed in 2014	Ongoing	Company successfully retained 14001 certification during this year	Section Head	
Additional improvements	Attain full Agency and TFS approval for the baling, wrapping and export of MSW material for recovery as opposed to disposal in Ireland	Complete	The company successfully submitted a proposal to the Agency which was approved and has made several successful TFS shipments from this process during 2014	Section Head	
Waste reduction/Raw material usage efficiency	Fully redevelop and reconstruct the facility picking station to make it more modern, add additional throughput and reduce overall operating costs of the sorting process	Complete	During 2014 a new Optical Sorting line was installed which has enhanced throughput levels on the picking line. This new line was part of the company's ongoing investment in the picking line.	Section Head	
Additional improvements	Devise plan and tonnage model to ensure the composting facility is capable of accepting and processing 20,000 tonnes of material per annum running at it's full capacity / potential	Ongoing	The company achieved significant growth in compost last year going from 10,000 tonnes to 14,500 tonnes throughput and plan further growth during 2015 to reach close to maximum capacity	Section Head	
Waste reduction/Raw material usage efficiency	Implement a fully approved and licensed MBT process which meets the conditions of the EPA and is approved as part of the current licence	Ongoing	Details of the MBT proposal have been fully submitted to the Agency and have been discussed in detail with them. Barna Waste have committed to completing an odour improvement programme in the composting plant and on completion the Agency will approve plans for the MBT process. This is planned for completion by end of Q2 2015.	Section Head	
Waste reduction/Raw material usage efficiency	Develop the area adjacent to the site toxic-assembly area into a storage area for the baled and wrapped MSW to reduce the fire risk of inside storage. Construction must be carried as per EPA approval when granted.	Ongoing	This process was approved by the Agency following a successful written submission and is now being used to store bales in an outside storage location.	Section Head	
Additional improvements	Roll out twin pack collection vehicles in all areas to reduce carbon footprint and increase the efficiency of the collection phase of our operation	Complete	Excellent progress was made on this during 2014. The company now has up to 8 twin pack vehicles out for collection each day and will develop this up to 12 by the end of 2015 with continued investment.	Section Head	
Materials Handling/Storage/Bunding	Increase pay by weight capability across all fleet and implement a system that offers capability to run from the 'back of truck' through to 'invoicing'	Ongoing	The company have implemented pay by weight options in most areas where it is applicable during 2014 and have a fleet in place equipped to handle pay by weight customers with weighing equipment on the vehicles.	Individual	
Materials Handling/Storage/Bunding	Route optimization – continue to review all commercial and domestic collection routes to ensure maximum potential is achieved from all routes	Complete	The company implement a Special Project in 2014 to review it's route optimization. A template has been defined to monitor all routes and this will be rolled out fully during 2015.	Section Head	
Materials Handling/Storage/Bunding	Develop a list of Top 100 companies in contact in terms of revenue and implement a process to establish contact with all 100 in relation to waste / recycling services	Ongoing	This top 100 list was produced and contact has been made with all companies with a varying degree of success. The list is reviewed quarterly to ensure regular contact is kept with these key customers or potential customers.	Section Head	
Additional improvements		Complete		Individual	

Environmental Management Programme/Continuous Improvement Programme template		Lic No:	W0106-02	Year	2014
	Traffic Management - review the traffic management plan for the entire facility and implement a new plan with no reversing vehicles and separation from vehicles and people	ongoing	A new traffic management plan was implemented during Q3 2014 and has vastly improved traffic movements on site. However further improvement can still be made and this will continue as a goal for 2015.		
Additional Improvements	Site Visits / Tours - continue the visits / tours to the site by local schools to increase promotion of the site and recycling in general.	ongoing	Due to H&S concerns the Company ceased the hosting of site visits during 2014.	Section Head	
Additional Improvements	Develop a company presentation which focuses on educating schools on recycling and conduct a programme of presentations with local schools	incomplete	The company now has a presentation in place and is actively working with local schools on an ongoing basis to promote recycling. The presentation is specifically geared towards schools.		
Additional Improvements	Housekeeping Litter controls - continue the process of assigning a member of each production shift to litter duty as part of site housekeeping and look at ways of developing this system further to reduce litter at source	Complete	This process continue to be in place and a Litter Manager is in place on each shift on site. Temporary fencing has also been introduced for periods of windy weather	Individual	
Waste reduction/Raw material usage efficiency	Housekeeping Dust control - continue the process of DAILY road sweeping at the site to maintain / improve on external dust levels in areas where traffic can rise dust in periods of dry weather	Complete	Roadsweeping is scheduled and carried out on a daily basis on site throughout the year.	Section Head	
Reduction of emissions to Air	Training - put another member of staff through the FAS Waste Management Course	Complete	This was not completed during 2014 and is rescheduled for 2015.	Section Head	
Additional Improvements	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	incomplete	This process is ongoing. The company have made switches to energy saving lighting throughout the site and have numerous smaller programmes going on including switching off all electrical equipment at night etc. Improvements can always be made and we will continue this as a programme for 2015.	Section Head	
Energy Efficiency/Utility conservation	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	ongoing	This is always a goal for us and Irish recyclers are always given priority over foreign brokers when it comes to bidding for material on site.	Section Head	
Waste reduction/Raw material usage efficiency	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.	ongoing	The company have rolled out brown bins now to around 50% of our domestic customers and this will continue during 2015. We are on target to meet all required deadlines in terms of brown bin implementation.	Section Head	
Materials Handling/Storage/Bunding	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.	Ongoing	An extensive programme of machine maintenance has been implemented and is managed by the company H&S Officer. All records are kept to back up the maintenance of equipment on site.	Individual	
Additional Improvements	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	Complete	The company did not complete this working during 2014 and has not yet developed a business plan for this permitted site.	Section Head	
Additional Improvements	Storage H&S / 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 pack of empty skips or bins awaiting distribution	incomplete	The company are still going to the planning process in relation to this new facility. An appeal was lodged to our initial planning application and we await the result of this appeal. As soon as approval is granted a budget is in place to complete the works.	Section Head	
Materials Handling/Storage/Bunding	Training - continue to support all staff training to ensure we meet health and safety and other compliance standards as well as develop our workforce	ongoing	All training scheduled for 2015 was completed with the exception of the FAS Waste Management Course.	Section Head	
Additional Improvements		Complete		Section Head	
SELECT		SELECT		SELECT	SELECT
SELECT		SELECT		SELECT	SELECT

1 Was noise monitoring a licence requirement for the AER period?  
If yes please fill in table N1 noise summary below

Yes

2 Was noise monitoring carried out using the EPA Guidance note, including completion of the "Checklist for noise measurement report" included in the guidance note as table 6?  
3 Does your site have a noise reduction plan  
4 When was the noise reduction plan last updated?

Noise  
Guidance  
note NG4

Yes  
SELECT  
Enter date  
SELECT

5 Have there been changes relevant to site noise emissions (e.g. plant or operational changes) since the last noise survey?

**Table N1: Noise monitoring summary**

Date of monitoring	Time period	Noise location (on site)	Noise sensitive location -NSL (if applicable)	LA <sub>eq</sub>	LA <sub>90</sub>	LA <sub>10</sub>	LA <sub>max</sub>	Tonal or Impulsive noise* (Y/N)	If tonal /impulsive noise was identified was 5dB penalty applied?	Comments (ex. main noise sources on site, & extraneous noise ex. road traffic)	Is site compliant with noise limits (day/evening/night)?
17/10/14	daytime	On site	N1	54	51	55.6	68.1	Yes	Yes		Yes
17/10/14	daytime	On site	N1	54.1	50.3	55.7	70.2	Yes	Yes		Yes
17/10/14	daytime	On site	N1	53.1	48.9	55.3	71.5	Yes	Yes		Yes
17/10/14	daytime	Off site	N2	44.6	42.6	46.1	57.9	No	No		Yes
17/10/14	daytime	Off site	N2	44.3	42	46.2	63.6	No	No		Yes
17/10/14	daytime	Off site	N2	45.4	42.7	46.6	63.3	No	No		Yes

\*Please ensure that a tonal analysis has been carried out as per guidance note NG4. These records must be maintained onsite for future inspection

SELECT

If noise limits exceeded as a result of noise attributed to site activities, please choose the corrective action from the following options?

\*\* please explain the reason for not taking action/resolution of noise issues?  
Any additional comments? (less than 200 words)

- When did the site carry out the most recent energy efficiency audit? Please list the recommendations in table 3 below
- Is the site a member of any accredited programmes for reducing energy usage/water conservation such as the SEAI programme linked to the right? if yes please list them in additional information
- Where Fuel Oil is used in boilers on site is the sulphur content compliant with licence conditions? Please state percentage in additional information

Additional Information	
Enter date of audit	
SEAI - Large Industry Energy Network (LIEN)	SELECT
	SELECT

Table R1: Energy usage on site

Energy Use	Previous year	Current year	Production +/- % compared to previous reporting year**	Energy Consumption +/- % vs overall site production*
Total Energy Used (MWhrs)				
Total Energy Generated (MWhrs)				
Total Renewable Energy Generated (MWhrs)				
Electricity Consumption (MWhrs)	1874.775	1725	-7.99%	
Fossil Fuels Consumption:				
Heavy Fuel Oil (m3)				
Light Fuel Oil (m3)	1675.45	1125.787	-32.81%	
Natural gas (m3)				
Coal/Solid fuel (metric tonnes)				
Peat (metric tonnes)				
Renewable Biomass				
Renewable energy generated on site				

\* where consumption of energy can be compared to overall site production please enter this information as percentage increase or decrease compared to the previous reporting year.  
 \*\* where site production information is available please enter percentage increase or decrease compared to previous year

Table R2: Water usage on site

Water use	Water Extraction		Water Emissions		Water Consumption	
	Water extracted Previous year m3/yr.	Water extracted Current year m3/yr.	Production +/- % compared to previous reporting year**	Energy Consumption +/- % overall site production*	Volume Discharged back to environment (m <sup>3</sup> /yr)	Volume used i.e not discharged to environment e.g. released as steam (m <sup>3</sup> /yr)
Groundwater						
Surface water						
Public supply						
Recycled water						
Total						Unaccounted for Water:

\* where consumption of water can be compared to overall site production please enter this information as percentage increase or decrease compared to the previous reporting year.  
 \*\* where site production information is available please enter percentage increase or decrease compared to previous year

Table R3: Waste Stream Summary

Table R3: Waste Stream Summary			
	Landfill	Incineration	Other
Hazardous (Tonnes)			
Non-Hazardous (Tonnes)			
Total			

Resource Usage/Energy efficiency summary						Lic No:	WO106-02	Year:	2014
Table R4: Energy Audit finding recommendations									
Date of audit	Recommendations	Description of Measures proposed	Origin of measures	Predicted energy savings %	Implementation date	Responsibility	Completion date	Status and comments	
			SELECT						
			SELECT						

Table R5: Power Generation: Where power is generated onsite (e.g. power generation facilities/food and drink industry) please complete the following information

	Unit ID	Unit ID	Unit ID	Station Total
Technology				
Primary Fuel				
Thermal Efficiency				
Unit Date of Commission				
Total Starts for year				
Total Running Time				
Total Electricity Generated (GWH)				
House Load (GWH)				
KWH per Litre of Process Water				
KWH per Litre of Total Water used on Site				



**Complaints and incidents summary template**

Lic No: W0106-02 Year: 2014

**Complaints**

Additional information

SELECT

Have you received any environmental complaints in the current reporting year? If yes please complete summary details of complaints received on site in table 1 below.

Table 1 Complaints summary

Date	Category	Other type (please specify)	Brief description of complaint (Free txt <20 words)	Corrective actions <20 words	Resolution status	Resolution date	Further information
	SELECT				SELECT		
	SELECT				SELECT		
	SELECT				SELECT		
	SELECT				SELECT		
Total complaints open at start of reporting year							
Total new complaints received during reporting year							
Total complaints closed during reporting year							
Balance of complaints end of reporting year							

**Incidents**

Additional information

2 incidents

Have any incidents occurred on site in the current reporting year? Please list all incidents for current reporting year in Table 2 below

\*For information on how to report and what constitutes an incident [What is an incident](#)

Table 2 Incidents summary

Date of occurrence	Incident nature	Location of occurrence	Incident category* please refer to guidance	Receptor	Cause of incident	Other cause (please specify)	Activity in progress at time of incident	Communication	Occurrence	Preventative action <20 words	Resolution status	Resolution date	Likelihood of recurrence
2014	Other (illegal dumping FALSE)	Other location (compost facility)	1. Minor	Air	Plant or equipment issues		Normal activities	EPA	New	Programme of improvement	Complete	Summer 2015	Low
	SELECT	SELECT	SELECT	Water	Other (anonymous false report)		Normal activities	EPA	New	No applicable - false report applicable	In/A		SELECT
	SELECT	SELECT	SELECT	SELECT	SELECT		SELECT	SELECT	SELECT		SELECT		SELECT
	SELECT	SELECT	SELECT	SELECT	SELECT		SELECT	SELECT	SELECT		SELECT		SELECT
Total number of incidents current year													
Total number of incidents previous year													
% reduction/ increase/ no change													

SECTION B - WASTE ACCEPTED ONTO SITE-TO BE COMPLETED BY ALL IPPC AND WASTE FACILITIES

Were any wastes accepted onto your site for recovery or disposal or treatment prior to recovery or disposal within the boundaries of your facility? (waste generated within your boundaries is to be captured through PRTR reporting)  
 If yes please enter details in table 1 below

2. Did your site have any rejected consignments of waste in the current reporting year? If yes please give a brief explanation in the additional information

3. Was waste accepted onto your site that was generated outside the Republic of Ireland? If yes please state the quantity in tonnes in additional information

Table 1 Details of waste accepted onto your site for recovery, disposal or treatment (do not include wastes generated at your site, as these will have been reported in your PRTR workbook)

Licensed annual tonnage limit for your site (total tonnes/annum)	EWC code	Source of waste accepted	Description of waste - enter an accurate and detailed description - which applies to relevant EWC code <a href="#">European Waste Catalogue EWC codes</a>	Quantity of waste accepted in current reporting year (tonnes)	Quantity of waste accepted in previous reporting year (tonnes)	Reason for reduction/increase over previous year +/- %	Reason for reduction/increase over previous year (tonnes)	Package Content (%) only applies if the waste has a packaging component	Recovery or treatment operation carried out at your site and the description of this operation	Quantity of waste remaining on site at the end of reporting year (tonnes)	Comments -
	20 03 01		20- MUNICIPAL WASTES (HOUSEHOLD WASTE AND SIMILAR COMMERCIAL INDUSTRIAL AND INSTITUTIONAL WASTES) INCLUDING SEPARATELY COLLECTED FRACTIONS <a href="#">European Waste Catalogue EWC codes</a>	21892.13	27866.41	-21.78% Market Demand			D13- Blending or mixing prior to submission to any of the operations numbered D1 to D12 0%	0	
	20 03 01		20- MUNICIPAL WASTES (HOUSEHOLD WASTE AND SIMILAR COMMERCIAL INDUSTRIAL AND INSTITUTIONAL WASTES) INCLUDING SEPARATELY COLLECTED FRACTIONS Commercial Municipal Waste	5359.98	13573.78	294.86% Market Demand			D13- Blending or mixing prior to submission to any of the operations numbered D1 to D12 0%	0	
	20 03 09		20- MUNICIPAL WASTES (HOUSEHOLD WASTE AND SIMILAR COMMERCIAL INDUSTRIAL AND INSTITUTIONAL WASTES) INCLUDING SEPARATELY COLLECTED FRACTIONS Street / Road Sweepings	1874.6	1874.32	0.91% Market Demand			R5- Recycling/reclamation or other inorganic materials which includes the soil and recycling of inorganic construction materials 0%	0	
	17 09 04		17- CONSTRUCTION AND DEMOLITION WASTES (INCLUDING EXCAVATED SOIL FROM CONTAMINATED SITES) Mixed C & D waste	1066.71	1443.15	-25.95% Market Demand			R5- Recycling/reclamation or other inorganic materials which includes the soil and recycling of inorganic construction materials 0%	0	
	17 02 01		17- CONSTRUCTION AND DEMOLITION WASTES (INCLUDING EXCAVATED SOIL FROM CONTAMINATED SITES) Wood / Timber	385.95	0	#DIV/0!			R5- Recycling/reclamation or other inorganic materials which includes the soil and recycling of inorganic construction materials 0%	0	
	20 02 01		20- MUNICIPAL WASTES (HOUSEHOLD WASTE AND SIMILAR COMMERCIAL INDUSTRIAL AND INSTITUTIONAL WASTES) INCLUDING SEPARATELY COLLECTED FRACTIONS Garden and Park Waste	971.86	1392.56	-25.39% Market Demand			R9- Recycling/reclamation or other inorganic materials which are not used as substrates including composting or other biological transformation processes which includes gasification and pyrolysis 0%	0	

Additional Information  
 SELECT

SELECT

SELECT

WASTE SUMMARY		LIC No: W0306-02		Year		2014		
15-01-01	15- WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED	Cardboard	2285.66	2395.97	-0.88%	Market Demand	0	R12-Exchange of waste for submission to any of the operations numbered R1 to R11 (if there is no other R code appropriate, this can include recovery including pre-processing such as amongst others, shredding, conditioning, repackaging, separating, blending or mixing prior to submission to any of the operations numbered R1 to R11)
20-01-01	20- MUNICIPAL WASTES (HOUSEHOLD WASTE AND SIMILAR COMMERCIAL, INDUSTRIAL AND INSTITUTIONAL WASTES) INCLUDING SEPARATELY COLLECTED FRACTIONS	Paper	402.09	343.16	17.1%	Market Demand	0	R12-Exchange of waste for submission to any of the operations numbered R1 to R11 (if there is no other R code appropriate, this can include recovery including pre-processing such as amongst others, shredding, conditioning, repackaging, separating, blending or mixing prior to submission to any of the operations numbered R1 to R11)
20-01-39	20- MUNICIPAL WASTES (HOUSEHOLD WASTE AND SIMILAR COMMERCIAL, INDUSTRIAL AND INSTITUTIONAL WASTES) INCLUDING SEPARATELY COLLECTED FRACTIONS	Plastic	82.1	576.08	-85.75%	Market Demand	0	R12-Exchange of waste for submission to any of the operations numbered R1 to R11 (if there is no other R code appropriate, this can include recovery including pre-processing such as amongst others, shredding, conditioning, repackaging, separating, blending or mixing prior to submission to any of the operations numbered R1 to R11)
16-01-20	16- WASTES NOT OTHERWISE SPECIFIED IN THE LIST	Sorted windscreen (not glass)	26.71	0	#DIV/0!	Market Demand	0	R12-Exchange of waste for submission to any of the operations numbered R1 to R11 (if there is no other R code appropriate, this can include recovery including pre-processing such as amongst others, shredding, conditioning, repackaging, separating, blending or mixing prior to submission to any of the operations numbered R1 to R11)
20-01-38	20- MUNICIPAL WASTES (HOUSEHOLD WASTE AND SIMILAR COMMERCIAL, INDUSTRIAL AND INSTITUTIONAL WASTES) INCLUDING SEPARATELY COLLECTED FRACTIONS	Timber / Wood	129.05	2250.91	-94.24%	Market Demand	0	R12-Exchange of waste for submission to any of the operations numbered R1 to R11 (if there is no other R code appropriate, this can include recovery including pre-processing such as amongst others, shredding, conditioning, repackaging, separating, blending or mixing prior to submission to any of the operations numbered R1 to R11)

WASTE SUMMARY		Year	2014					
Lic No:		V0108-02		Year				
20- MUNICIPAL WASTES (RESIDENTIAL AND SIMILAR COMMERCIAL WASTES) INCLUDING SEPARATELY COLLECTED FRACTIONS	Metals	162.74	0	RDV/01	Market Demanded	0	R12-Exchange of waste for submission to any of the operations numbered R1 to R11 (if there is no other R code appropriate, this can include preliminary operations prior to recovery including pre-processing such as amongst others, dismantling, sorting, crushing, compacting, pelleting, drying, shredding, conditioning, blending or mixing prior to submission to any of the operations numbered R1 to R11)	0
17- CONSTRUCTION AND DEMOLITION WASTES (INCLUDING EXCAVATED SOIL FROM CONTAMINATED SITES)	Metals	87.6	409.81	-78.62%	Market Demanded	0	R12-Exchange of waste for submission to any of the operations numbered R1 to R11 (if there is no other R code appropriate, this can include preliminary operations prior to recovery including pre-processing such as amongst others, dismantling, sorting, crushing, compacting, pelleting, drying, shredding, conditioning, blending or mixing prior to submission to any of the operations numbered R1 to R11)	0
20- MUNICIPAL WASTES (RESIDENTIAL AND SIMILAR COMMERCIAL WASTES) INCLUDING SEPARATELY COLLECTED FRACTIONS	Skips at treatment plants	298.16	0	RDV/01	Market Demanded	0	R12-Exchange of waste for submission to any of the operations numbered R1 to R11 (if there is no other R code appropriate, this can include preliminary operations prior to recovery including pre-processing such as amongst others, dismantling, sorting, crushing, compacting, pelleting, drying, shredding, conditioning, blending or mixing prior to submission to any of the operations numbered R1 to R11)	0
16- WASTES NOT OTHERWISE SPECIFIED IN THE LIST	Off-Site Product	11.44	16	14.40%	Market Demanded	0	R12-Exchange of waste for submission to any of the operations numbered R1 to R11 (if there is no other R code appropriate, this can include preliminary operations prior to recovery including pre-processing such as amongst others, dismantling, sorting, crushing, compacting, pelleting, drying, shredding, conditioning, blending or mixing prior to submission to any of the operations numbered R1 to R11)	0
20- MUNICIPAL WASTES (RESIDENTIAL AND SIMILAR COMMERCIAL WASTES) INCLUDING SEPARATELY COLLECTED FRACTIONS	Food Waste	1479.183	10224.03	44.68%	Market Demanded	0	R9-Recycling/reclamation or use as solvents (including composting or other biological transformation processes) which includes gasification and pyrolysis	0

WASTE SUMMARY		Year	2014	Year	2014	Year	2014	Year	2014
		W01.06.02	W01.06.02	Year	2014	Year	2014	Year	2014
15- WASTE PACKAGING AND FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED	segregated plastic packaging	365.11	0	#DV01	Market Demand	0	R12-Exchange of waste for submission to any of the operations numbered R1 to R11 (if there is no other R1 code appropriate, this can include recovery including pre-processing such as amongst others, dismantling, sorting, crushing, compacting, pelleting, drying, shredding, conditioning, separating, separating, blending or mixing prior to submission to any of the operations numbered R1 to R11)	0	R12-Exchange of waste for submission to any of the operations numbered R1 to R11 (if there is no other R1 code appropriate, this can include recovery including pre-processing such as amongst others, dismantling, sorting, crushing, compacting, pelleting, drying, shredding, conditioning, separating, separating, blending or mixing prior to submission to any of the operations numbered R1 to R11)
17- CONSTRUCTION AND DEMOLITION WASTES (INCLUDING EXCAVATED SOIL FROM CONTAMINATED SITES)	Plasterboard / Gypsum	41.12	54.22	-24.16%	Market Demand	0	R12-Exchange of waste for submission to any of the operations numbered R1 to R11 (if there is no other R1 code appropriate, this can include recovery including pre-processing such as amongst others, dismantling, sorting, crushing, compacting, pelleting, drying, shredding, conditioning, separating, separating, blending or mixing prior to submission to any of the operations numbered R1 to R11)	0	R12-Exchange of waste for submission to any of the operations numbered R1 to R11 (if there is no other R1 code appropriate, this can include recovery including pre-processing such as amongst others, dismantling, sorting, crushing, compacting, pelleting, drying, shredding, conditioning, separating, separating, blending or mixing prior to submission to any of the operations numbered R1 to R11)
16- WASTES NOT OTHERWISE SPECIFIED IN THE LIST	Tires	128.24	147.09	-12.78%	Market Demand	0	R12-Exchange of waste for submission to any of the operations numbered R1 to R11 (if there is no other R1 code appropriate, this can include recovery including pre-processing such as amongst others, dismantling, sorting, crushing, compacting, pelleting, drying, shredding, conditioning, separating, separating, blending or mixing prior to submission to any of the operations numbered R1 to R11)	0	R12-Exchange of waste for submission to any of the operations numbered R1 to R11 (if there is no other R1 code appropriate, this can include recovery including pre-processing such as amongst others, dismantling, sorting, crushing, compacting, pelleting, drying, shredding, conditioning, separating, separating, blending or mixing prior to submission to any of the operations numbered R1 to R11)
20- MUNICIPAL WASTES (HOUSEHOLD WASTE AND SIMILAR COMMERCIAL, INDUSTRIAL AND INSTITUTIONAL WASTES) INCLUDING SEPARATELY COLLECTED FRACTIONS	Clothes	0.04	0	#DV01	Market Demand	0	R12-Exchange of waste for submission to any of the operations numbered R1 to R11 (if there is no other R1 code appropriate, this can include recovery including pre-processing such as amongst others, dismantling, sorting, crushing, compacting, pelleting, drying, shredding, conditioning, separating, separating, blending or mixing prior to submission to any of the operations numbered R1 to R11)	0	R12-Exchange of waste for submission to any of the operations numbered R1 to R11 (if there is no other R1 code appropriate, this can include recovery including pre-processing such as amongst others, dismantling, sorting, crushing, compacting, pelleting, drying, shredding, conditioning, separating, separating, blending or mixing prior to submission to any of the operations numbered R1 to R11)
19- WASTES FROM WASTE MANAGEMENT FACILITIES, OFF-SITE WASTE WATER TREATMENT PLANTS AND THE PREPARATION OF WATER INTENDED FOR REUSE OR RECYCLING AND WASTES FOR INDUSTRIAL USE	Grit / Screenings	111.88	92.68	20.72%	Market Demand	0	R12-Exchange of waste for submission to any of the operations numbered R1 to R11 (if there is no other R1 code appropriate, this can include recovery including pre-processing such as amongst others, dismantling, sorting, crushing, compacting, pelleting, drying, shredding, conditioning, separating, separating, blending or mixing prior to submission to any of the operations numbered R1 to R11)	0	R12-Exchange of waste for submission to any of the operations numbered R1 to R11 (if there is no other R1 code appropriate, this can include recovery including pre-processing such as amongst others, dismantling, sorting, crushing, compacting, pelleting, drying, shredding, conditioning, separating, separating, blending or mixing prior to submission to any of the operations numbered R1 to R11)

WASTE SUMMARY		LIC No: W0106-02		2014		Year		
15- WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED	15 01 03	wood packaging	572	0	HDV/01	Market Demand	0	R12-Exchange of waste for submission to any of the operations numbered R1 to R11 (if there is no other R code appropriate, this can include preliminary operations prior to recovery including pre-processing such as smorgat others, dismantling, sorting, crushing, compacting, pelleting, drying, shredding, conditioning, repackaging, separating, blending or mixing prior to submission to any of the operations numbered R1 to R11) 0% to R11)
15- WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED	15 01 04	Aluminium cans	532	0	HDV/01	Market Demand	0	R12-Exchange of waste for submission to any of the operations numbered R1 to R11 (if there is no other R code appropriate, this can include preliminary operations prior to recovery including pre-processing such as smorgat others, dismantling, sorting, crushing, compacting, pelleting, drying, shredding, conditioning, repackaging, separating, blending or mixing prior to submission to any of the operations numbered R1 to R11) 0% to R11)
16- WASTES NOT OTHERWISE SPECIFIED IN THE LIST	16 06 04	Alkaline Batteries	0.86	0	HDV/01	Market Demand	0	R12-Exchange of waste for submission to any of the operations numbered R1 to R11 (if there is no other R code appropriate, this can include preliminary operations prior to recovery including pre-processing such as smorgat others, dismantling, sorting, crushing, compacting, pelleting, drying, shredding, conditioning, repackaging, separating, blending or mixing prior to submission to any of the operations numbered R1 to R11) 0% to R11)
15- WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED	15 01 07	sorted glass	1015.04	0	HDV/01	Market Demand	0	R12-Exchange of waste for submission to any of the operations numbered R1 to R11 (if there is no other R code appropriate, this can include preliminary operations prior to recovery including pre-processing such as smorgat others, dismantling, sorting, crushing, compacting, pelleting, drying, shredding, conditioning, repackaging, separating, blending or mixing prior to submission to any of the operations numbered R1 to R11) 0% to R11)
16- WASTES NOT OTHERWISE SPECIFIED IN THE LIST	16 02 13	TVs and Monitors	14.2	0	HDV/01	Market Demand	0	R12-Exchange of waste for submission to any of the operations numbered R1 to R11 (if there is no other R code appropriate, this can include preliminary operations prior to recovery including pre-processing such as smorgat others, dismantling, sorting, crushing, compacting, pelleting, drying, shredding, conditioning, repackaging, separating, blending or mixing prior to submission to any of the operations numbered R1 to R11) 0% to R11)







**SECTION D-TO BE COMPLETED BY LANDFILL SITES ONLY**

**Table 2 Waste type and tonnage-landfill only**

Waste types permitted for disposal	Authorised/licensed annual intake for disposal (tpa)	Actual intake for disposal in reporting year (tpa)	Remaining licensed capacity at end of reporting year (tpa)	Comments

**Table 3 General Information-Landfill only**

Area ID	Date landfilling commenced	Date landfilling ceased	Currently landfilling	Private or Public Operated	Hert or non-hazardous	Predicted date to cease landfilling	Licence permits asbestos	Is there a separate cell for asbestos?	Accepted asbestos in reporting year	Total disposal area occupied by waste	
										SELECT UNIT	SELECT UNIT

Cell 8

**Table 4 Environmental monitoring-landfill only**  
[Landfill Manual Monitoring Standards](#)

Was microbiological monitoring in compliance with Landfill Directive standard in reporting year?	Was leachate monitored in compliance with ID standard in reporting year?	Was Landfill Gas monitored in compliance with ID Standard in reporting year?	Was SW monitored in compliance with standard in reporting year?	Were CH release levels monitored in reporting year?	Were emission limit values agreed with the Agency (ELVs)?	Was topography of the site in compliance with the standard in reporting year?	Has the statement under SS(A)(5) of the standard been included in reporting year?	Comments

-> Please refer to landfill Manual lined above for relevant Landfill Directive monitoring standards

**Table 5 Capping-Landfill only**

Area unsuited*	Area with temporary cap	Area with final cap to ID Standard	Area capped other	Area with waste that should be permanently capped in the under house?	What materials are used in the cap	Comments
SELECT UNIT	SELECT UNIT	m <sup>2</sup> ha <sup>2</sup>				

\*please note this includes daily cover area

**Table 6 Leachate-Landfill only**

Is leachate from your site treated in a Waste Water Treatment Plant?	Is leachate released to surface water? If yes please complete leachate mass load information below

Volume of leachate in reporting year (m <sup>3</sup> )	Leachate (BOD) mass load (kg/annum)	Leachate (COD) mass load (kg/annum)	Leachate (NH <sub>4</sub> ) mass load (kg/annum)	Leachate (Bicarb) mass load (kg/annum)	Leachate treatment on-site	Specific type of leachate treatment	Comments
						SELECT	

Please ensure that all information reported in the landfill gas section is consistent with the Landfill Gas Survey submitted in conjunction with PRTR returns

**Table 7 Landfill Gas-Landfill only**

Gas Captured/Treated by LFG System m <sup>3</sup>	Power generated (MW / KWh)	Used on-site or to national grid	Was surface emissions monitored during the reporting year?	Comments

# Appendix B:

## AER / PRTR Workbook for 2014

Sheet : Facility ID Activities

AER Returns Workbook

13/4/2015 6:51



| PRTR# : W0106 | Facility Name : Bruscar Bhearna Teoranta | Filename : W0106\_2014 EPA PRTR - 08.04.2015 - APPENDIX B.xls | Return Year : 2014 |

[Guidance to completing the PRTR workbook](#)

### AER Returns Workbook

Version 1.1.15

REFERENCE YEAR 2014	
<b>1. FACILITY IDENTIFICATION</b>	
Parent Company Name	Bruscar Bhearna Teoranta
Facility Name	Bruscar Bhearna Teoranta
PRTR Identification Number	W0106
Licence Number	W0106-02
Classes of Activity	
No.	class_name
Refer to PRTR class activities below	
Address 1 Carrowbrowne	
Address 2 Headford Road	
Address 3 Galway	
Address 4	
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	
AER Returns Contact Name Campbell Finnie	
AER Returns Contact Email Address cfinnie@barnawaste.com	
AER Returns Contact Position Facility Manager	
AER Returns Contact Telephone Number 091-771919	
AER Returns Contact Mobile Phone Number 087-7408568	
AER Returns Contact Fax Number 091-771735	
Production Volume	87882.73
Production Volume Units	Tonnes
Number of Installations	1
Number of Operating Hours in Year	4160
Number of Employees	280
User Feedback/Comments	This year saw a significant change in the quantities of waste handled on site due to the introduction of our MSW baling and wrapping process which meant that rather than waste being transferred directly to landfill from our other sites a % of it came back to Galway. This was the main operational change during 2014. In addition composting tonnages rose steadily due to the addition of extra third party suppliers of that material. Most other materials remained on a pretty consistent level during 2014. Any questions in relation to any specific category can be answered directly by the Facility Manager.
Web Address	
<b>2. PRTR CLASS ACTIVITIES</b>	
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
<b>3. SOLVENTS REGULATIONS (S.I. No. 543 of 2002)</b>	
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?	
<b>4. WASTE IMPORTED/ACCEPTED ONTO SITE</b>	
<a href="#">Guidance on waste imported/accepted onto site</a>	
Do you import/accept waste onto your site for on-site treatment (either recovery or disposal activities)?	
This question is only applicable if you are an IPPC or Quarry site	

4.1 RELEASES TO AIR [LINK TO EXCEL WORKBOOK EMISSIONS DATA](#)

SECTION A - SECTOR SPECIFIC PRTR POLLUTANTS

POLLUTANT	RELEASERS TO AIR		QUANTITY	
	Name	Method Used	A (Accidental) KG/Year	F (Fugitive) KG/Year
No. Annex II			0.0	0.0

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

POLLUTANT	RELEASERS TO AIR		QUANTITY	
	Name	Method Used	A (Accidental) KG/Year	F (Fugitive) KG/Year
No. Annex II			0.0	0.0

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

POLLUTANT	RELEASERS TO AIR		QUANTITY	
	Name	Method Used	A (Accidental) KG/Year	F (Fugitive) KG/Year
Pollutant No.			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 provide this data in the table below. For the purposes of the National Inventory on Greenhouse Gases, landfill operators should provide summary data on landfill gas (methane) flared or utilised on their facilities to accompany the figures for total methane generated. Operators should provide this data in the table below. For the purposes of the National Inventory on Greenhouse Gases, landfill operators should provide summary data on landfill gas (methane) flared or utilised on their facilities to accompany the figures for total methane generated. Operators should provide this data in the table below.

Barna Recycling (Source: Emissions) (Return Year - 2014)	Methane flared and / or utilised		Facility Total Capacity m3 per hour
	T (Total) kg/Year	Method Used	
Total estimated methane generation (as per site model)	0.0		
Methane utilised in engines	0.0		
Methane utilised in other processes	0.0		
Net methane emission (as reported in Section A above)	0.0		

4.2 RELEASES TO WATERS [Link to previous years emissions data](#) [PRTR No. W0106] [Facility Name: Barnsley Braema Treatment] [Filename: W0106\_2014 EPA PRTR - 08-04-2015 - APPENDIX B.xls] [Return Year: 2014] 13/04/15 10:37  
 SECTION A : SECTOR SPECIFIC PRTR POLLUTANTS **Data on ambient monitoring of atmospheric water or groundwater conducted as set 4 or fence measurements should NOT be submitted under AER / PRTR. Reporting as the only concerns Releases from your facility**

**PLEASE enter all quantities in this section in KGs**

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

**PLEASE enter all quantities in this section in KGs**

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

**PLEASE enter all quantities in this section in KGs**

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

SECTION A : PPRR POLLUTANTS

No. Annex II	Name	MC/CE	Method Code	METHOD Description or Description	QUANTITY		
					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). Periodically, the table updates.

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

Pollutant No.	Name	MC/CE	Method Code	METHOD Description or Description	QUANTITY		
					Emission Point 1	T (Total) KG/Year	A (Accidental) KG/Year
305	COD	M	ALT	ISO 17025 - Based on ISO 17025 - Standard Method 8000 for the Examination Methods for the Examination of Water and Wastewater, 21ed, 2005	13,675	13,675	0.0
303	BOD	M	ALT	ISO 17025 - Standard Method 8000 for the Examination Methods for the Examination of Water and Wastewater, 21ed, 2005	1,899	1,899	0.0
314	Fats, Oils and Greases	M	ALT	ISO 17025 - Standard Method 8000 for the Examination Methods for the Examination of Water and Wastewater, 21ed, 2005	2,279	2,279	0.0
240	Suspended Solids	M	ALT	ISO 17025 - Standard Method 8000 for the Examination Methods for the Examination of Water and Wastewater, 21ed, 2005	10,067	10,067	0.0
343	Sulphate	M	ALT	ISO 17025 - Standard Method 8000 for the Examination Methods for the Examination of Water and Wastewater, 21ed, 2005	4,486	4,486	0.0
238	Ammonia (as N)	M	ALT	ISO 17025 - Standard Method 8000 for the Examination Methods for the Examination of Water and Wastewater, 21ed, 2005	1,264	1,264	0.0

\* Select a row by double-clicking on the Pollutant Name (Column B). Periodically, the table updates.

[Link to previous years emissions data](#)

[ PRTR# : W0106 | Facility Name : Bruscar Bheama Teeranta | Filename : W0106\_2014\_EPA\_PRTR\_08.04.2015--APPENDIX B.xls | Return Year : 2014 |

13/04/15 10:37

**4.4 RELEASES TO LAND**

**SECTION A : PRTR POLLUTANTS**

POLLUTANT		METHOD		Please enter all quantities in this section in KGs	
No. Annex II	Name	M/C/E	Method Code	Method Used Designation or Description	Quantity
					T (Total) KG/Year
					A (Accidental) KG/Year
					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	
Pollutant No.	Name	M/C/E	Method Code	Method Used Designation or Description	Quantity
					T (Total) KG/Year
					A (Accidental) KG/Year
					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: Buscar Bhearna Teoranta] | Filename: W0106\_2014EPA.PRTR-08.04.2015.xls | Return Year: 2014 | 13/04/2015 15:28

Please enter all quantities on this sheet in Tonnes

Transfer/Destination	European Waste Code	Quantity (Tonnes per Year)	Description of Waste	Waste Treatment Operation	Method Used		Location of Treatment	Haz. Waste Licence/Permit No of Next Party Name and Licence/Permit No of Licensed/Recoverer/Disposer	Name and License / Permit No. and Disposer (HAZARDOUS WASTE ONLY)	Actual Address of Final Destination (i.e. Final Recovery / Disposal Site) (HAZARDOUS WASTE ONLY)
					WCE	Method Used				
To Other Countries	17 01 07	126.86	Rubble / inert Material non-composted fraction of municipal and	R12	M	Weighted	Abroad	Drehid Waste Management Facility, W0201-01	Drehid, ... Co., Kildare, Ireland	
Within the Country	19 05 01	18.89	similar wastes	R12	M	Weighted	Offsite in Ireland	OTtoole Compost W0284-01 Duffy Tyre Recycling Ltd, Broker licence	Balmuccane, Pinnagh, Co Carlow, ... Ireland	
Within the Country	16 01 03	277.29	end-of-life tyres non-composted fraction of municipal and	R12	M	Weighted	Offsite in Ireland	WFP-DL-010-018-01 Drehid Waste Management Facility, W0201-01	Tonyhaboc, Newtowncumillyham, ... Co., Donegal, Ireland	
Within the Country	19 05 01	450.96	similar wastes	R12	M	Weighted	Offsite in Ireland		Drehid, ... Co., Kildare, Ireland	
Within the Country	16 06 01	8.14	lead acid batteries	R4	M	Weighted	Offsite in Ireland	ENVA Ireland Ltd, W0184-01	Clonminam Industrial Estate, Portlaoise, ... Co., Laois, Ireland	Clonminam Industrial Estate, Portlaoise, ... Co., Laois, Ireland
Within the Country	17 01 07	2929.46	Rubble / inert Material gypsum-based construction materials other	R5	M	Weighted	Offsite in Ireland	Barna Waste (Composting Facility), EPA Licence 1062	Carrowbrowne, Headford Road, Galway, Ireland	
Within the Country	17 08 02	26.02	than those mentioned in 17 08 01	R3	M	Weighted	Offsite in Ireland	Nurendale Ltd, W0140-04	Beauparc, Navan, Co Meath, ... Ireland	
To Other Countries	19 12 01	5842.72	Mixed Paper	R12	M	Weighted	Abroad	Peute Papier Recycling DO 02.2017 MCO Recycling UK Ltd (Broker), NSO/544843/B - Broker Number & Registration No	Veerplaat 40 3313 LJ Dordrecht Rotherdam, Netherlands	
To Other Countries	19 12 01	4970.66	Mixed Paper	R12	M	Weighted	Abroad		11 Alvaston Business Park, Middlewich Road, Nantwich Cheshire CW5 6PF, United Kingdom	
Within the Country	19 12 01	49.26	Mixed Paper	R12	M	Weighted	Offsite in Ireland	Agnall Ltd, Broker	Estate Balmuckin, Portlaoise e, Laois, Ireland	
To Other Countries	19 12 01	815.6	Mixed Paper	R12	M	Weighted	Abroad	WRC Recycling .IRE/G069/08	Auchans Road -Houston Johnstone Renfrewshire PA6 7EE, United Kingdom	
To Other Countries	19 12 01	99.2	Mixed Paper	R12	M	Weighted	Abroad	Anthony B Nielsen, Broker IRE/G 100/14	29 Rue D- Astord Paris, 75008...France	
To Other Countries	19 12 01	25.02	Newspaper	R12	M	Weighted	Abroad	Recycling UK Ltd (Broker).	11 Alvaston Business Park, Middlewich Road, Nantwich Cheshire CW5 6PF, United Kingdom	
To Other Countries	19 12 01	100.58	Cardboard - OCC	R12	M	Weighted	Abroad	Anthony B Nielsen, Broker IRE/G 100/14	Astord Paris, 75008...France	
To Other Countries	19 12 01	24.44	Shredded Office Paper	R12	M	Weighted	Abroad	Recycling UK Ltd (Broker) IRE/G 100/14	11 Alvaston Business Park, Middlewich Road, Nantwich Cheshire CW5 6PF, United Kingdom	
To Other Countries	19 12 01	1277.76	Cardboard - OCC	R12	M	Weighted	Abroad	Agpall Ltd, Broker Nantwich Recycling Ltd, Broker licence: IRE/G382/12	Estate Balmuckin, Portlaoise e, Laois, Ireland Nant House, Stafford Park 12, Telford, Shropshire TF3 3BL, United Kingdom	
To Other Countries	19 12 01	232.78	Multigrade paper	R12	M	Weighted	Abroad			



Transfer Destination	European Waste Code	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 Name and Licence/Permit No of Recover/Disposer	HAZ.Waste - Address of Next Non-Inst.Waste Address of Recover/Disposer	Name and License / Permit No. and Disposer (HAZARDOUS WASTE ONLY)	Actual Address of Final Destination (i.e. Final Recovery / Disposal Site) (HAZARDOUS WASTE ONLY)
					M/DE	M/WE					
To Other Countries	19 12 01	327.72	Shredded Office Paper	R12	M	Weighed	Abroad	Northwood Recycling Ltd./Broker licence: IRE/G28212	Grant House, Stafford Park 12, Telford, Shropshire TF3 3BJ, United Kingdom		
To Other Countries	19 12 01	621.08	Cardboard - OCC	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 Callmark (Broker), Irish TFS Broker Licence - IRE/G181/11 and Irish Waste (Broker), Irish TFS Brokers licence number IRE/G040/12	11 Alveston Business Park, Middlewich Road, Nantwich, Cheshire CW5 6PF, United Kingdom		
To Other Countries	19 12 01	375.46	Cardboard - OCC	R12	M	Weighed	Abroad	Novellis Recycling, WR/05	Novellis, BL6802LU		
To Other Countries	19 12 01	1557.62	Cardboard - OCC	R12	M	Weighed	Abroad	WRC Recycling, IRE/G069/08	Auchans Road, Houston, Renfrewshire, PA6 7EE, United Kingdom		
Within the Country	19 12 01	576.18	Cardboard - OCC	R12	M	Weighed	Offsite in Ireland	Wilton Waste Recycling Ltd, WFP-CN-10-0005-01	Kilnaght, Crossborough, Ballyja Cavan, Ireland		
Within the Country	19 12 02	734.6	Mixed Scrap Metal 90% ferrous	R12	M	Weighed	Offsite in Ireland	Galway Metal Recycling, WR/05	Orranmore, Co. Galway, Ireland		
Within the Country	19 12 02	118.26	Steel Cans	R12	M	Weighed	Offsite in Ireland		Lane, Warrington, WA4 1NN, United Kingdom		
To Other Countries	19 12 02	467.98	Steel Cans	R12	M	Weighed	Abroad		Auchans Road, Houston, Renfrewshire, PA6 7EE, United Kingdom		
Within the Country	19 12 02	70.74	Mixed Scrap Metal 90% ferrous	R12	M	Weighed	Offsite in Ireland				
To Other Countries	19 12 01	41.52	kriff paper / carborad bags	R12	M	Weighed	Abroad				
To Other Countries	17 08 02	77.26	gypsum-based construction materials other than those mentioned in 17 08 01	R12	M	Weighed	Abroad				
To Other Countries	19 12 04	21.74	Plastic Bottles - PET	R12	M	Weighed	Abroad				
Within the Country	19 12 04	26.38	Plastic Bottles - PET	R12	M	Weighed	Offsite in Ireland				
Within the Country	19 12 01	6.76	Cardboard - OCC	R12	M	Weighed	Offsite in Ireland				
To Other Countries	19 12 04	100.0	Clear plastic film	R12	M	Weighed	Abroad				
To Other Countries	19 12 04	172.2	Clear plastic film	R12	M	Weighed	Abroad				

Transfer Destination	European Waste Code	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 Name and Licence/Permit No of Recoverer/Disposer	Haz.Waste - Address of Next Non-Haz.Waste Address of Recoverer/Disposer	Name and Licence / Permit No. and Address of Hazardous Waste Disposer (HAZARDOUS WASTE ONLY)	Actual Address of Final Destination of Hazardous Waste (HAZARDOUS WASTE ONLY)
					IM/CE	Method Used					
To Other Countries	19 12 04	236.0	Plastic Trays/Cartons	R12	M	Weighted	Abroad	WRC Recycling IRE/G068/08 Matera	Auchans Road ,Houston Johnstone Renfrewshire PA6 7EE ,United Kingdom		
Within the Country	19 12 04	22.1	Plastic Trays/Cartons	R12	M	Weighted	Offsite in Ireland	Environmental Broker Licence IRE/AG161/15	House,Solly,Kinsale,Co. Cork,Ireland		
Within the Country	19 12 04	25.78	Plastic Trays/Cartons	R12	M	Weighted	Offsite in Ireland	Marwin Environmental Ltd,IRE/G027/15	Rubican Centre,CIT Campus,Bishopstown,Co Cork,Ireland		
To Other Countries	19 12 04	24.68	Mixed Coloured Plastic Bags (JAZZ Plastic)	R12	M	Weighted	Abroad	Peute Papier Recycling ,DO 02.2017 MDO	Veerplaat ,40 3313 LJ ,Dordrecht ,Rotherdam,Netherlands		
To Other Countries	19 12 04	730.04	Plastic Bottles - PET	R12	M	Weighted	Abroad	WRC Recycling IRE/G068/08 Matera	Auchans Road ,Houston Johnstone Renfrewshire PA6 7EE ,United Kingdom		
Within the Country	19 12 04	21.92	Plastic Bottles - PET	R12	M	Weighted	Offsite in Ireland	Environmental Broker Licence IRE/AG161/15	House,Solly,Kinsale,Co. Cork,Ireland		
Within the Country	19 12 04	20.16	Industrial plastics - mixed	R12	M	Weighted	Offsite in Ireland	Leinster Environmental,WP	Clermont Business Park ,Haggardstown ,Dundalk ,Co.Louth,Ireland		
To Other Countries	19 12 04	101.82	Industrial plastics - mixed	R12	M	Weighted	Abroad	WRC Recycling ,IRE/G068/08	Auchans Road ,Houston ,Johnstone Renfrewshire ,PA6 7EE ,United Kingdom		
Within the Country	19 12 04	18.94	Industrial plastics - mixed	R12	M	Weighted	Offsite in Ireland	Global Material Recycling (Electrical Waste Management Site),Licence Number WFP-DS-090012-01	416,Jordanstown Drive Greenogue, Rathcoole Co. Dublin ,Ireland		
To Other Countries	19 12 04	73.42	Hard Plastic	R12	M	Weighted	Abroad	WRC Recycling ,IRE/G068/08	Auchans Road ,Houston ,Johnstone Renfrewshire ,PA6 7EE ,United Kingdom		
To Other Countries	19 12 04	8.16	Industrial plastics - mixed	R12	M	Weighted	Abroad	G.S A.S Licence IRE/AG241/14	Avenue,Maynooth Co Wickare,Ireland		
Within the Country	19 12 04	73.42	Hard Plastic	R12	M	Weighted	Offsite in Ireland	GFSL Limited, Broker IRE/G217/12	County Durham,.....,United Kingdom		
To Other Countries	19 12 04	405.22	Mixed Coloured Plastic Bags (JAZZ Plastic)	R12	M	Weighted	Abroad	WRC Recycling ,IRE/G068/08	Auchans Road ,Houston ,Johnstone Renfrewshire ,PA6 7EE ,United Kingdom		
Within the Country	19 12 04	48.16	Mixed Coloured Plastic Bags (JAZZ Plastic)	R12	M	Weighted	Offsite in Ireland	Leinster Environmental,WP Matera	Clermont Business Park ,Haggardstown ,Dundalk ,Co.Louth,Ireland		
To Other Countries	19 12 04	24.04	Mixed Coloured Plastic Bags (JAZZ Plastic)	R12	M	Weighted	Abroad	Environmental Broker Licence IRE/AG161/15	House,Solly,Kinsale,Co. Cork,Ireland		
To Other Countries	19 12 04	26.24	HDPE Plastic Bottles	R12	M	Weighted	Abroad	Jayplas,17/12/2018	Cotton Way,Loughborough Leicestershire,LE11,United Kingdom		

Transfer/Destination	European Waste Code	Hazardous	Quantity (Tonnes per Year)	Description of Waste	Waste Treatment Operation	Method Used		Location of Treatment	Licence/Permit No of Next Destination Facility Licence/Permit No of Transferor/Disposer	Haz.Waste Address of Next Destination Facility Name and Address of Recipient/Disposer	Name and License / Firm/ No. and Address of Final Recipient/ Disposer (If Diff. From WASTE ON.V)	Actual Address of Final Destination (If Different From Regional Site (HAZARDOUS WASTE ON.V))
						M/O/E	Method Used					
To Other Countries	19 12 04	No	292.5	HDPE Plastic Bottles	R12	M	Weighted	Abroad	WRC Recycling .IRE/G06808	Auchans Road ,Houston .Johnstone ,Renfrewshire .PA6 7EE ,United Kingdom		
To Other Countries	19 12 04	No	25.62	Mixed Coloured Plastic Bags (JAZZ Plastic)	R12	M	Weighted	Abroad	Vanden Global.IRE/G274/16	Jnt 11A,Blaris Industrial Eggleston Road,Portugal		
To Other Countries	19 12 04	No	81.38	Mixed Coloured Plastic Bags (JAZZ Plastic)	R12	M	Weighted	Abroad	Jayplas.43451	Coton Way,Loughborough Kingdom		
To Other Countries	19 12 04	No	24.54	HDPE Plastic Bottles	R12	M	Weighted	Abroad	Peute Papier Recycling .DO 02.2017 MDO	Veerplaat ,40 3313 LJ .Dordrecht		
Within the Country	19 12 04	No	18.1	Plastic Trays/Carbons	R12	M	Weighted	Offsite in Ireland	G.S Agencies.IRE/AG241/14	Avenue,Maynooth.Co Kildare.,Ireland		
Within the Country	19 12 05	No	1083.1	glass bottles / jars	R12	M	Weighted	Offsite in Ireland	Rehab.Glassco.Ltd.Waste Permit No. WFF-KE-08- 0372-01	Jnt 4 Osberstown Industrial Park,Caragh Kildare.Co		
Within the Country	19 12 05	No	134.2	Window / flat glass	R12	M	Weighted	Offsite in Ireland	John Gannon Concrete Ltd,Permit Number WFF- WM-2005-0007-01	Spill Hill Quarry,Hazelwood Kilbeggan,County Westmeath,Ireland		
Within the Country	19 12 07	No	394.98	Shredded Timber	R3	M	Weighted	Offsite in Ireland	Drehd Waste Management Facility,W0201-01	Drehd,....Co. Kildare,Ireland Office		
Within the Country	19 12 07	No	1396.46	Shredded Timber	D15	M	Weighted	Offsite in Ireland	Management,WFF-RN-10- 0001-01	2,Roxborough,Roscommon, Co. Roscommon,Ireland		
Within the Country	19 12 07	No	16.7	Shredded Timber	R3	M	Weighted	Offsite in Ireland	Athgaine Mushrooms,Not applicable	Meath,....Ireland Jameson Business Park		
Within the Country	19 12 07	No	5.22	Timber pallets	R3	M	Weighted	Offsite in Ireland	Chep Pallets,Not applicable	Road Finglas,Dublin 11,Ireland		
Within the Country	19 12 07	No	8.06	Shredded Timber stabilised wastes other than those	R3	M	Weighted	Offsite in Ireland	Rathroeen Landfill,W0067- 02	Ballina,....County Mayo,Ireland		
Within the Country	19 03 05	No	2591.26	mentioned in 19 03 04	R3	M	Weighted	Offsite in Ireland	Local Farmers,Not Applicable	Various Addresses,....,Ireland		
Within the Country	19 12 09	No	1270.66	Inert Soil	R3	M	Weighted	Offsite in Ireland	Composting Site (Carrowbrowne),EPA Licence Number 13-1	Carrowbrowne ,Headford Road,Galway ,Ireland		
Within the Country	19 12 10	No	398.44	combustible waste (refuse derived fuel)	R1	M	Weighted	Offsite in Ireland	Fanda Finglas (Nunside Ld),W0261-02	Cappogue,Finglas,Dublin Dublin 11,Ireland 4E Finglas Business Park,Balbrigan,Co Dublin,....Ireland		
Within the Country	19 12 10	No	26.68	combustible waste (refuse derived fuel)	D1	M	Weighted	Offsite in Ireland	Pacon Waste & Recycling Ltd,Not applicable	Rathroeen Landfill,W0067- 02		
Within the Country	19 12 12	No	4700.85	General Waste - Landfill	D1	M	Weighted	Offsite in Ireland	Drehd Waste Management Facility,W0201-01	Drehd,....Co. Kildare,Ireland		
Within the Country	19 12 12	No	4427.57	General Waste - Landfill	D1	M	Weighted	Offsite in Ireland	Clean Ireland Refuse and Recycling Co Ltd,W025301	Quinn Road Business Park,Emis,Co Clare,Ireland		
Within the Country	19 12 12	No	50.26	General Waste - Landfill	D1	M	Weighted	Offsite in Ireland	Limeick County Council,EPA W0017-14	Coradroma hill,Co. Limerick,Ireland		
Within the Country	19 12 12	No	2807.55	General Waste - Landfill	D1	M	Weighted	Offsite in Ireland				

Transfer Destination	European Waste Code	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 (If Recovered/Disposer)	Haz.Waste Name and Licence/Permit No. of Next Destination Facility (If Recovered/Disposer)	Name and License / Permit No. and Address of Final Receiver / Disposer (Hazardous Waste ONLY)	Actual Address of Final Destination (If Recovered/Disposer) (Hazardous Waste ONLY)
					M/2/E	Method Used					
Within the Country	19 12 12	1483.5	General Waste - Landfill	D1	M	Weighed	Offsite in Ireland	Indaver Ireland, EPA Licence W0167-02	Indaver Ireland, EPA Licence W0167-02	Caranstown, Duleek, County Meath, Ireland	
Within the Country	19 12 12	41607.74	General waste - for export	R1	M	Weighed	Offsite in Ireland	Indaver Ireland, EPA Licence W0167-02	Caranstown, Duleek, County Meath, Ireland	Caranstown, Duleek, County Meath, Ireland	
Within the Country	20 01 08	285.82	Compostable Material - Food Waste	R3	M	Weighed	Offsite in Ireland	Envirogrid Ltd, WPA	Donegal Road, Peiligo, Co. Donegal, Ireland	Donegal Road, Peiligo, Co. Donegal, Ireland	
Within the Country	20 01 11	1.24	Clothing/Textiles	R12	M	Weighed	Offsite in Ireland	Textile Recycling Ltd, Permit Number WPR-014	Complex, Belgard Road, Talight, Dublin 24, Ireland	Complex, Belgard Road, Talight, Dublin 24, Ireland	
Within the Country	20 01 35	40.82	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 Dublin, Greenogue Rathcoole Co. Dublin	Global Material Recycling (Electrical Waste Management Site), Licence Number WFP-DS-090012-01, 648 Jordanstown Drive Dublin, Greenogue Rathcoole Co. Dublin, Ireland	
Within the Country	20 03 01	215.18	Baled and wrapped waste for export	R1	M	Weighed	Offsite in Ireland	Quality Recycling Ltd, WTP- Ballinrobe Waste Disposal, WFP-MO-12-MO-0024-01	Quality Recycling Ltd, WTP- Ballinrobe Waste Disposal, WFP-MO-12-MO-0024-01	Quality Recycling Ltd, WTP- Ballinrobe Waste Disposal, WFP-MO-12-MO-0024-01	
Within the Country	20 03 01	45.64	mixed municipal waste	D1	M	Weighed	Offsite in Ireland	Boost Recycling (Broker), IREG082/15	Knockglass, Ballinrobe, Co Mayo, Ireland	Knockglass, Ballinrobe, Co Mayo, Ireland	
Within the Country	19 12 04	24.5	Mixed Coloured Plastic Bags (JAZZ Plastic)	R12	M	Weighed	Offsite in Ireland	Boost Recycling (Broker), IREG082/15	47 Swaffham Rd, Burwell, Cambridgeshire, CB25 0AN, United Kingdom	47 Swaffham Rd, Burwell, Cambridgeshire, CB25 0AN, United Kingdom	

\* 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](#)  
[Link to Waste Guidance](#)

## Appendix C:

### EMP & Schedule of Targets and Objectives 2015



# Schedule of Targets and Objectives & Environmental Management Plan 2014 / 2015

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**Submitted March 2015**

WASTE LICENCE  
REGISTRATION NO: WL106-2

LICENSEE: **BRUSCAR BHEARNA TEORANTA  
(BARNA 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. DAMIEN MONAGHAN  
(Operations Manager)  
MR DEREK BRIEN  
(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 2015 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 2014 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>Current Status</b>	<b>Comment</b>
Implement management systems and get certification to ISO 9001 and ISO 18001 standards	Facility Manager	Q3 2014	Ongoing	The Quality and Health & Safety Management Systems have been devised and are currently awaiting pre-audit by the NQA. Pre-audit scheduled for May 2015.
EMS system – ensure current ISO 14001 accreditation is maintained and the system further developed in 2014	Facility Manager	Q3 2014	Complete	Company successfully retained 14001 creditation during this year
Attain full Agency and TFS approval for the baling, wrapping and export of MSW material for recovery as opposed to disposal in Ireland	Operations Manager Transport Manager Facility Manager	Q2 2014	Complete	The company successfully submitted a proposal to the Agency which was approved and has made several successful TFS shipments from this process during 2014
Fully redevelop and reconstruct the facility picking station to make it more modern, add additional throughput and reduce overall operating costs of the sorting process	Operations Manager Facility Manager Managing Director	Q3 2014	Complete	During 2014 a new Optical Sorting line was installed which has enhanced throughput levels on the picking line. This new line was part of the companies ongoing investment in the picking line.
Devise plan and tonnage model to ensure the composting facility is capable of accepting and processing 20,000 tonnes of material per annum running at it's full capacity / potential	Operations Manager Facility Manager CEO	Q2 2014	Ongoing	The company achieved significant growth in compost last year going from 10,000 tonnes to 14,500 tonnes throughput and plan further growth during 2015 to reach close to maximum capacity
Implement a fully approved and licenced MBT process which meets the conditions of the EPA and is approved	Managing Director Facility Manager	Q2 2014	Ongoing	Details of the MBT proposal have been fully submitted to the Agency and have been discussed in detail with them. Barna

as part of the current licence				Waste have committed to completing an odour improvement programme in the composting plant and on completion the Agency will approve plans for the MBT process. This is planned for completion by end of Q2 2015.
Develop the area adjacent to the site civic amenity area into a storage area for the baled and wrapped MSW to reduce the fire risk of inside storage. Construction must be carried as per EPA approval when granted.	Managing Director  Facility Manager	Q2 2014	Complete	This process was approved by the Agency following a successful written submission and is now being used to store bales in an outside storage location.
Roll out twin pack collection vehicles in all areas to reduce carbon footprint and increase the efficiency of the collection phase of our operation	Transport Manager	Q3 2014	Ongoing	Excellent progress was made on this during 2014. The company now has up to 8 twin pack vehicles out for collection each day and will develop this up to 12 by the end of 2015 with continued investment.
Increase pay by weight capability across all fleet and implement a system that offers capability to run from the 'back of truck' through to 'invoicing'	Management Team (All)	Q3 2014	Complete	The company have implemented pay by weight options in most areas where it is applicable during 2014 and have a fleet in place equipped to handle pay by weight customers with weighing equipment on the vehicles.
Route optimisation – continue to review all commercial and domestic collection routes to ensure maximum potential is achieved from all routes	Transport Manager	Q3 2014	Ongoing	The company implement a Special Project in 2014 to review it's route optimization. A template has been defined to monitor all routes and this will be rolled out fully during 2015.
Develop a list of Top 100 companies in Connacht in terms of revenue and implement a process to establish contact with all 100 in relation to waste / recycling services	Sales Manager	Q2 2014	Complete	This top 100 list was produced and contact has been made with all companies with a varying degree of success. The list is reviewed quarterly to ensure regular contact is kept with these key customers or potential



				customers.
Traffic Management – review the traffic management plan for the entire facility and implement a new plan with no reversing vehicles and separation from vehicles and people	H&S Manager Operations Manager Facility Manager	Q2 2014	Ongoing	A new traffic management plan was implemented during Q3 2014 and has vastly improved traffic movements on site. However further improvement can still be made and this will continue as a goal for 2015.
Site Visits / Tours – continue the visits / tours to the site by local schools to increase promotion of the site and recycling in general.	Ongoing	Q1 2014	Incomplete	Due to H&S concerns the company ceased the hosting of site visits during 2014.
Develop a company presentation which focuses on educating schools on recycling and conduct a programme of presentations with local schools	Sales Manager	Q1 2014	Complete	The company now has a presentation in place and is actively working with local schools on an ongoing basis to promote recycling. The presentation is specifically geared towards schools.
Housekeeping Litter controls – continue the process of assigning a member of each Production Shift to litter duty as part of site housekeeping and look at ways of developing this system further to reduce litter at source	Operations Manager	Q2 2014	Complete	This process continue to be in place and a Litter Manager is in place on each shift on site. Temporary fencing has also been introduced for periods of windy weather
Housekeeping 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	Q1 2014	Complete	Roadsweeping is scheduled and carried out on a daily basis on site throughout the year.
Training - put another member of staff through the FAS Waste Management Course	Facility Manager	Q3 2014	Incomplete	This was not completed during 2014 and is rescheduled for 2015.
Environmental Targets – continue to develop the energy and power saving programmes within the	Facility Manager Operations	Q4 2014	Ongoing	This process is ongoing. The company have made switches to energy saving lighting throughout the site

waste transfer station and all areas of the site to reduce the usage during both operational and non operating hours	Manager			and have numerous smaller programmes going on including switching off all electrical equipment at night etc. Improvements can always be made and we will continue this as a programme for 2015.
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	Ongoing	This is always a goal for us and Irish recyclers are always given priority over foreign brokers when it comes to bidding for material on site.
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.	Sales Manager	Q2 2014	Ongoing	The company have rolled out brown bins now to around 30% of our domestic customers and this will continue during 2015. We are on target to meet all required deadlines in terms of brown bin implementation.
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	Complete	An extensive programme of machine maintenance has been implemented and is managed by the company H&S Officer. All records are kept to back-up the maintenance of equipment on site.
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	Q3 2014	Incomplete	The company did not complete this working during 2014 and has not yet developed a business plan for this permitted site.
Storage Hub / Car Park – as a long term goal continue to look for a suitable location which	Management Team (All)	Q4 2014	Ongoing	The company are still going to the planning process in relation to this new facility. An appeal

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				was lodged to our initial planning application and we await the result of this appeal. As soon as approval is granted a budget is in place to complete the works.
Training – continue to support all staff training to ensure we meet health and safety and other compliance standards as well as develop our workforce	Management Team (All)	Ongoing	Complete	All training scheduled for 2015 was completed with the exception of the FAS Waste Management Course.

### **SUMMARY of 2014 PERFORMANCE**

The company performed very well towards achieving its list of targets and objectives for 2014 and we achieved most of our major goals that we set ourselves or in the least made progress on them.

Some examples of the major goals accomplished during 2014 are below:

- The retention and re-awarding of our ISO14001 accreditation was vitally important for the future of the company
- The initial progress made towards achieving ISO 9001 and 18001 accreditation by implementing an integrated quality / environmental and health & safety management system
- The full implementation of our new MSW processing area on site and subsequent approvals from the Agency to produce 19 12 12 material and to store the material in a controlled manner outside of the company buildings
- Upgrade of the company picking station to incorporate a new optical sorting machine
- Significant increase in compost intake during 2014 now has the facility running at 75% capacity with a two year period
- Implementation and construction with Agency approval in advance of the new MSW bale storage area outside at the Galway facility
- Successful deployment of more twin pac vehicles throughout our routes
- Improvement in traffic management standards on site making it a safer place
- Continued work with local schools to develop relationships with young people on the positive impacts of recycling and how to manage waste

Overall 2014 was a very positive year. This represented the first full year working under the new Management Team which had been put in place as a result of our Examinership process in 2013. Through setting new control measures and systems the company have been able to produce positive financial results and well as achieve most of its operational goals. The company now has a much more structured and planned approach in order to set goals and objectives and the introduction of weekly management meetings which have significantly improved communication and management of key projects within the company.

Any goals not achieved or only partly achieved in 2014 will be included again for 2015 as they are still important to the companies future plans

## **SECTION 2: New list of Targets and Objectives for 2015**

### **New Targets & Objectives for 2015**

The targets and objectives for 2015 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.

Any targets not achieved during 2014 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.

Since our new Investor came on board in 2014 the business has gone through a period of review and is now in a position where we have defined major areas that need to be developed to ensure the business can run successfully for many years to come. Therefore this year we have developed a shorter list of objectives but all are significant projects that will have a major impact on the future of the company. These targets have been fully agreed by the Management Team at the company and everyone on the team supports the projects listed below.

The company operates based on five fundamentals which are the cornerstone of our day to day business activities. The fundamentals are:

- Safety
- Compliance
- Productivity
- Preventative Maintenance
- Housekeeping

These fundamentals are key to everything we implement or manage in our business and as a result the following new targets and objectives have been set for 2015:-

<b>TARGET / OBJECTIVE</b>	<b>Owner</b>	<b>Completion Target</b>	<b>Current Status</b>
OPERATIONS - Implement integrated management systems to incorporate Quality, Environment and Health / Safety and get certification to ISO 9001, ISO 14001 and ISO 18001 standards	Facility Manager / Health & Safety Manager	Q2 2015	OPEN
OPERATIONS - Devise plan and tonnage model to ensure the composting facility is capable of accepting and processing 20,000 tonnes of material per annum running at it's full capacity / potential	Operations Manager Facility Manager CEO	Q4 2015	OPEN
OPERATIONS - Material Sorting Facility (picking station) – integrate more optical sorting units into the system to further enhance picking capabilities	Operations Manager / Managing Director	Q3 2015	OPEN
OPERATIONS - Submit a full application and obtain approval for a licenced MBT process which meets the conditions of the EPA and is approved as part of the current licence	Managing Director Facility Manager	Q3 2015	OPEN
OPERATIONS – carry out a full review of all groundworks and hardstanding areas on site and implement a programme for maintenance / improvement	Managing Director Facility Manager	Q3 2015	OPEN
OPERATIONS – develop a strategy / policy for phasing out older plant and machinery around the site and introducing fresh newer equipment	Management Team (All)	Q4 2015	OPEN
HOUSEKEEPING – implement a full cleaning schedule which will see maintenance of the internal sheeting panels in all sheds on a weekly basis. This will improve housekeeping and significantly reduce fire risk.	Operations Manager / Health & Safety Manager	Q2 2015	OPEN
IT SYSTEMS – implement a programme to synchronise weighing data across all 4 Barna Recycling Facilities with real time data and reporting	IT Manager	Q4 2015	OPEN
TRANSPORT - Roll out twin pack collection vehicles in all areas to reduce carbon footprint and increase the efficiency of the collection phase of our operation	Transport Manager	Q3 2015	ONGOING
TRANSPORT - Increase pay by weight capability across all fleet and implement a system that offers capability to run from the 'back of truck' through to 'invoicing'	Management Team (All)	Q4 2015	ONGOING
TRANSPORT - Route optimisation – continue to	Special Projects	Q2 2015	OPEN

review all commercial and domestic collection routes to ensure maximum potential is achieved from all routes	Manager		
HEALTH & SAFETY - Traffic Management – review the traffic management plan for the entire facility and implement a new plan with no reversing vehicles and separation from vehicles and people	H&S Manager Operations Manager Facility Manager	Q3 2015	ONGOING
TRAINING - put another member of staff through the FAS Waste Management Course	Facility Manager	Q4 2015	OPEN
ENVIRONMENTAL – 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	Q4 2015	ONGOING
ENVIRONMENTAL – 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	ONGOING
ENVIRONMENTAL – implement an improvement / monitoring programme on site for the management of odour during 2015 that will result in the elimination of any potential odour issues at the facility	Facility Manager Operations Manager Managing Director	Q2 2015	OPEN
SALES - 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.	Sales Manager	Q2 2015	OPEN
BUSINESS - 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	Q3 2015	OPEN
BUSINESS - 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	Management Team (All)	Q3 2015	OPEN
TRAINING – continue to support all staff training to ensure we meet health and safety and other compliance standards as well as develop our workforce	Management Team (All)	Q4 2015	OPEN

TRAINING – carry out chemical awareness training for compost operators	Health & Safety Manager	Q2 2015	OPEN
TRAINING – introduce daily safety huddles on site	Health & Safety Manager	Q2 2015	OPEN
TRAINING – introduce a programme of regular tool box talks within key areas of the business throughout 2015	Health & Safety Manager	Q1 2015	ONGOING

## **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 2015 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 2015 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 2015, if achieved will see us achieve the following:

- Improve our Management Systems by getting ISO 9001 and 18001 approval
- Have an improved picking station / sorting line in place
- Have an increased fleet of twin pack vehicles on the road streamlining collections
- Be regularly producing volumes of mechanically treated 191212 material for export
- Have significantly increased volumes of food waste being managed / recycled on site
- Have an EPA approved process in place for MBT
- Have improved our odour control efficiency at the facility
- Be at the forefront of recycling companies educating schools on the benefits of recycling
- Have a fully developed business plan and strategy for our two permitted sites
- Have an improved staff on site who are fully trained to do their jobs safely
- Have a safer environment at the site by the introduction of a new traffic management plan
- Improved housekeeping procedures on site that will see long term sustainable improvement in housekeeping
- Improved IT systems with real time links between all Barna Waste sites

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 2014 and redefines new targets and objectives for 2015. 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 2015. 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 2015. 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 2015 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> March 2016.



# Appendix D:

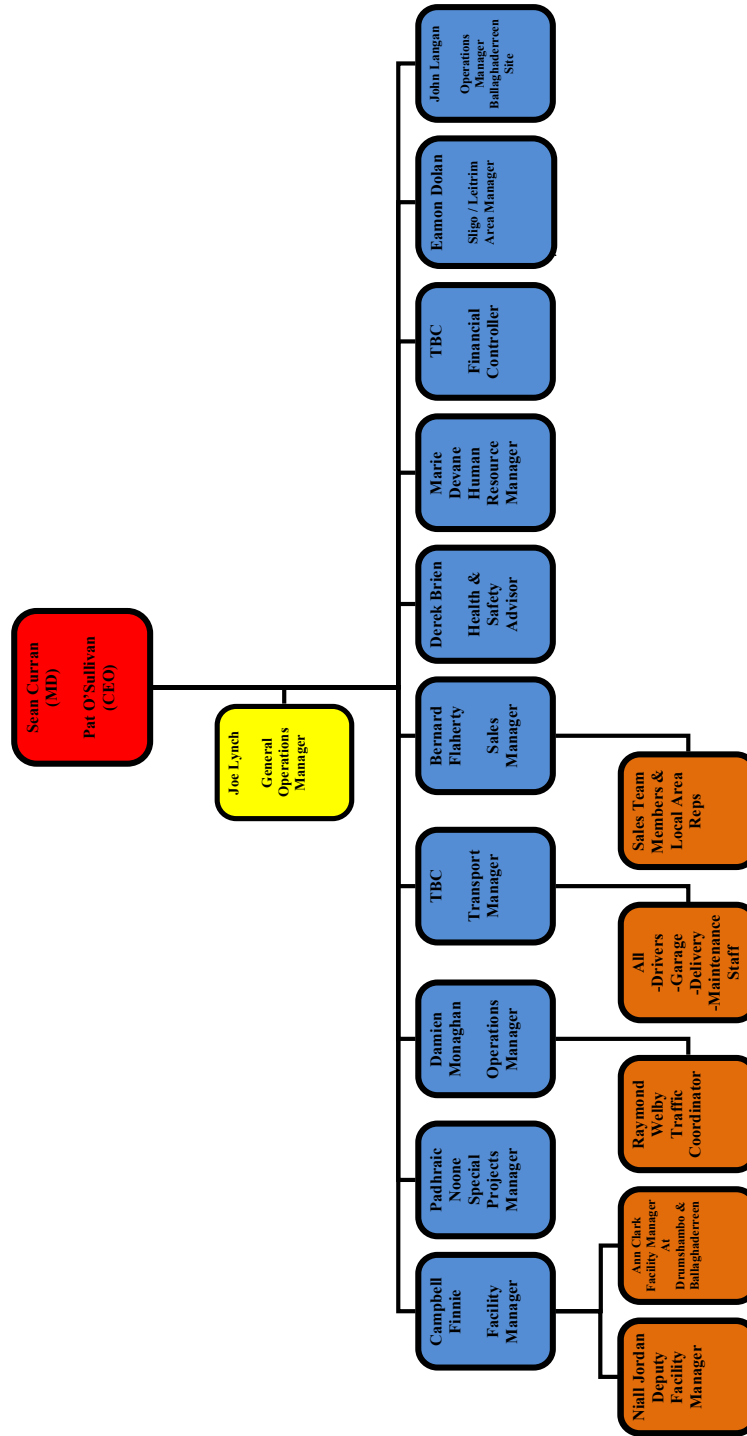
## Map of site monitoring locations




Client: BARNIA WASTE LTD.	Prepared by: K.G.	Consulting, Civil and Structural Engineers, Ferguson House, Ferguson Road, Carrigrohane, Co. Kerry Tel: +353 (0)21 565335 Email: info@tobin.ie www.tobin.ie	Sheet: A
Recycling depot & composting plant Carrowbrowne, Co. Galway	Scale: E.M.P. Date: 28.11.2015 Project Director: J.P. KELLY Scale @ A2: 1:500		
Title: LOCATION OF MONITORING POINTS			

# Appendix E:

## Current Company Management Structure



BW-OPS-001  
REV 19  
28<sup>th</sup> March 2015