

## **Environmental Report for Carrigoran House:**



### **Background:**

Carrigoran House is 114 bed Elderly Care Centre in County Clare employing over 100 staff; the facility recently agreed to participate in a resource efficiency programme sponsored by the EPA and managed locally by staff from Clare County Council & the Regional Waste Management Office (RWMO).

After an initial meeting with Sr. Christina a series of observations and measurements were taken on Wednesday June 15<sup>th</sup> 2011. This report outlines those findings & makes recommendations for further discussion on what elements a resource efficiency programme could focus on.

### **Waste:**

Waste management at the facility is well organised and up to date with current regulatory requirements; there is a dedicated waste compound to the rear of the service delivery area where receptacles for the different waste streams are located:

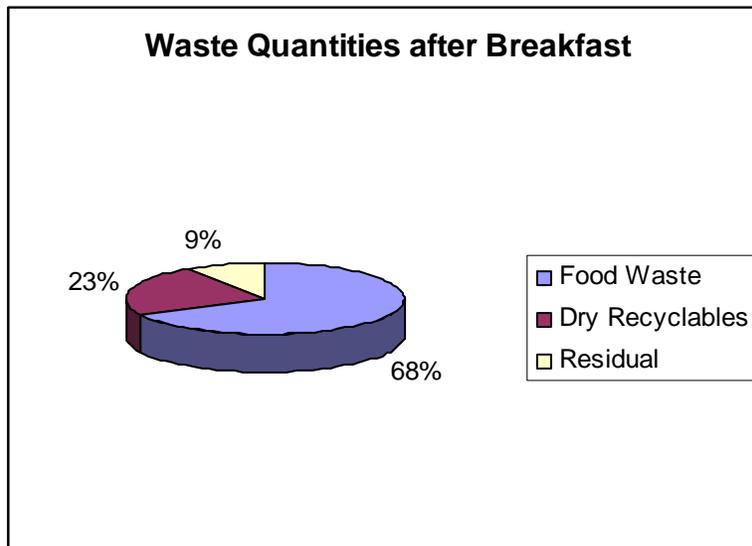
- ✚ Wheeled bins for glass
- ✚ Wheeled bins for compost
- ✚ Wheeled bins for dry recyclables
- ✚ A compactor for residual waste

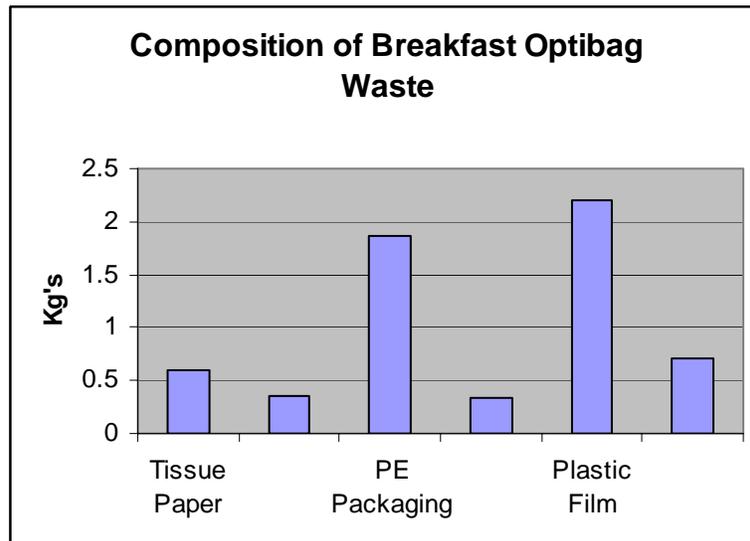
Internally in the main kitchen and ward level kitchens a 3 bin system is in operation and Staff appear to be well briefed and competent in segregating waste.

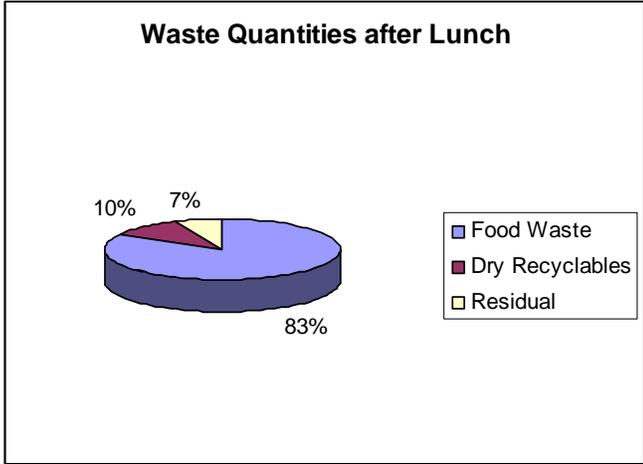
The purpose of the site visit on June 15<sup>th</sup> was two-fold:

1. To observe practices at kitchen & ward level
2. To determine what opportunities there exist in relation to food waste.

The waste related to food preparation and consumption was observed and recorded from both breakfast and lunch and the following results were recorded:







From a quick review of waste contractor invoices the brown bin for organic waste was lifted 76 times at a cost of €6 per lift in the first quarter of this year, we can therefore estimate that the cost of disposal of food waste for 2011 could = **€1824**.

However the cost of disposal of food is just one element when considering the case for preventing food waste we can also factor in the cost of purchase, chilling, cooking and serving food. For example the cost of condiments alone is significant over the course of a year. If 100 hundred butter bats are wasted every day for that item alone the annual cost = **€1460.00**

Recent data collected from a national Project would indicate a benchmark for Food Waste per day for a similar facility at: **0.8kg's per bed per day**. Carrigoran should aim to significantly produce less waste than this.

#### **Potential Prevention Opportunities:**

1. Condiments: Too many are being placed on each tray – reduce these but let patients know additional condiments are available:



**Acute Hospital in Northwest where additional condiments are supplied on demand**

2. Where appropriate provide a salt & pepper cellar for each room:



**Switch to cellars in a private hospital on foot of a food waste audit**

3. Review size of milk/sauce jugs – if larger jugs are used, these should only be partially filled:



4. Review quantities of bulk food such as porridge/sauce/soup etc as much of this remained unused:



5. Untouched Food: Probably difficult to influence but staff views should be sought:





Energy awareness training for all staff should also be considered including a comprehensive turn down/switch off campaign.

### **Water:**

Considerable effort has been undertaken at the facility to reduce water consumption with a leak detection and rationalisation programme. Some preliminary measurements of flow rates were undertaken in a limited number of sinks/basins & showers. A more comprehensive analysis of all flow rates should be conducted as part of this programme.

The benchmark flow rate to adequately wash hands or fill a jug or kettle = **6 litres/minute** and this was exceeded in the following locations:

**Therapy Room:** flow rates of 15 and 18 litres per minute were recorded in one tap & >25 litres in another for hot water – such flow rates should be restricted especially for hot water which can be up to 4 times more expensive than cold water.

**St Joseph's Patient Room no 139:** A flow rate of 20 l/min for hot and 15 l/min for cold was recorded.

**St Joseph's Kitchen:** A flow rate of 10 l/min was recorded in the cold tap.

### **Sustainable Products:**

As one would expect we observed a wide range of consumable products in use throughout the facility in particular for housekeeping, laundry and in the kitchen: a thorough review of these products could be undertaken as part of the resource efficiency programme should the facility wish to pursue such an approach.

Additionally more environmentally friendly options for certain products could be considered such as replacing air freshening aerosols with home-made natural alternatives.

Further discussion about this can take place as part of the project.

**Next Steps:**

After you have had an opportunity to review the findings and recommendations contained within this report our next step would normally be to meet and present further details on the observations which would include a visual presentation.

To proceed with developing elements of the resource efficiency programme and implementing them we would suggest that Carrigoran House establishes an "Environmental/Green Team" who can lead and oversee this work – their input into the recommendations would be vital in ensuring the project is realistic and achievable. Membership of this team can be discussed with you in due course.

**Joan Tarmey  
Pauline McDonogh  
June 29<sup>th</sup> 2011**