

TED O' DONOGHUE & SONS WASTE DISPOSAL

KNOCKPOGE, WATERFALL, Co. CORK

COPY OF

ANNUAL ENVIRONMENTAL REPORT

Period: January 2009 - December 2009

Waste Licence Register Number:	W00214-1
Licensee:	Ted O' Donoghue & Sons Limited
Location of Facility:	Knockpoge, Waterfall, County Cork

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1. INTRODUCTION

This Annual Environmental Report (AER) for Ted O' Donoghue & Sons Limited covers the reporting period January 2000 to December 2009. Ted O' Donoghue & Sons received a waste licence (Register Number W214-1) on 26th September 2005. The AER has been prepared in compliance with Condition 11.10 of the Waste Licence.

The content of the AER is based on Schedule D of the Waste Licence and the report format follows guidelines set in the "Draft Guidance on Environmental Management Systems and Reporting to the Agency" issued by the Environmental Protection Agency (Agency). The Waste Licence allows *the facility* to accept Commercial, Household and Construction and Demolition non-hazardous waste on-site and recovered from the incoming waste streams. The various waste streams are processed and stored on-site pending removal to authorised off-site recycling and disposal facilities. The annual licensed waste throughput is limited to 23,000 tonnes. However in the past 2 years this figure has been exceeded and a waste licence review application was submitted to the Agency in November 2008.

2. MANAGEMENT OF THE FACILITY

2.1 Management of the Activity

The site is managed and operated by O' Donoghue family. Details of the management structure for the facility were submitted to the Agency as part of the Environmental Management Programme in March 2006.

2.2 Environmental Management System

An Environmental Management System (EMS) is in operation for the site and is updated annually in accordance with site requirements and conditions, as required under Condition 2.2 of the Waste Licence.

2.3 Environmental Management Programme

The objective of the EMP is to act as the site manual, which will assist the site in achieving its objectives and targets during the current and future operation of the site. The EMP has been prepared and was submitted to the Agency in March 2006.

2.4 Schedule of Environmental Objectives and Targets 2009

The schedule of Environmental Objectives and Targets for the forthcoming year is described in Section 5 of this report.

3. NOTIFICATION AND RECORD KEEPING

3.1. Information stored on-site

All copies of environmental data and prescribed reports obtained and prepared on behalf of the licensee are forwarded to the Agency. Copies of reports and correspondence are retained and available for inspection at the reception building.

The facility provide the following documentation to view:

- Waste Licence 214-1
- Waste Licence Application form
- Periodic reports
- All monitoring records
- Waste transfer and acceptance dockets
- Incident/Complaints reports
- Once-off reports submitted to the agency
- Rejected loads log
- Agency correspondence, EPA approvals and request for additional information
- Monitoring personnel, experience and training

- Audit records
- Rejected load, compliance, integrity of bunds
- Daily Site Log
- Weekly site inspection forms
- Surface Water Inspection forms

3.2. Waste Records

Records of all waste loads entering and leaving the site is kept electronically by the weighbridge operator. Details such as date, time, origin, waste type, contractors name, waste collection permit number, quantities and vehicle registration number are recorded. `Waste records are contained in Appendices I.

All waste materials accepted at the site are recorded on two separate documents, including a waste transfer document and a computer printout of the waste accepted. The following details are recorded:

Computer Printout:

- ◆ Ticket Number/Transaction Number
- ◆ Customer code
- ◆ Operator / driver signature
- ◆ Net weight
- ◆ Vehicle Registration Number
- ◆ Contractor Name
- ◆ Waste Code for site
- ◆ Waste Type
- ◆ Name of person who checked load
- ◆ Waste Source
- ◆ Accepted or rejected status
- ◆ Weight entering and weight of container leaving site

Waste Transfer Docket includes additional headings of:

- ◆ How waste is contained
- ◆ European waste catalogue number
- ◆ Physical description
- ◆ Odour/Description of odour
- ◆ Special problems/requirements of waste
- ◆ Knowledge with regard to waste
- ◆ Waste Producer
- ◆ Waste Collection Permit Number

All waste records are retained at the site office.

3.3. Report on Waste Recovery

The waste volumes have increased since 2003 from a figure of 9,318 tonnes to 29,911 tonnes in 2007, and 38,331 in 2008. Figure 3.1 below details the breakdown of material removed from the facility in 2009.

A total of 10,707 tonnes of waste was sent to landfill for disposal in 2009. This equates to a recovery rate in the Ted O' Donoghue & Sons Ltd facility of 69%. Figures 3.1 and 3.2 below detail the fractions of waste accepted and removed from the facility in 2009.

Figure 3.1 Waste Tonnes Accepted at Facility in 2009

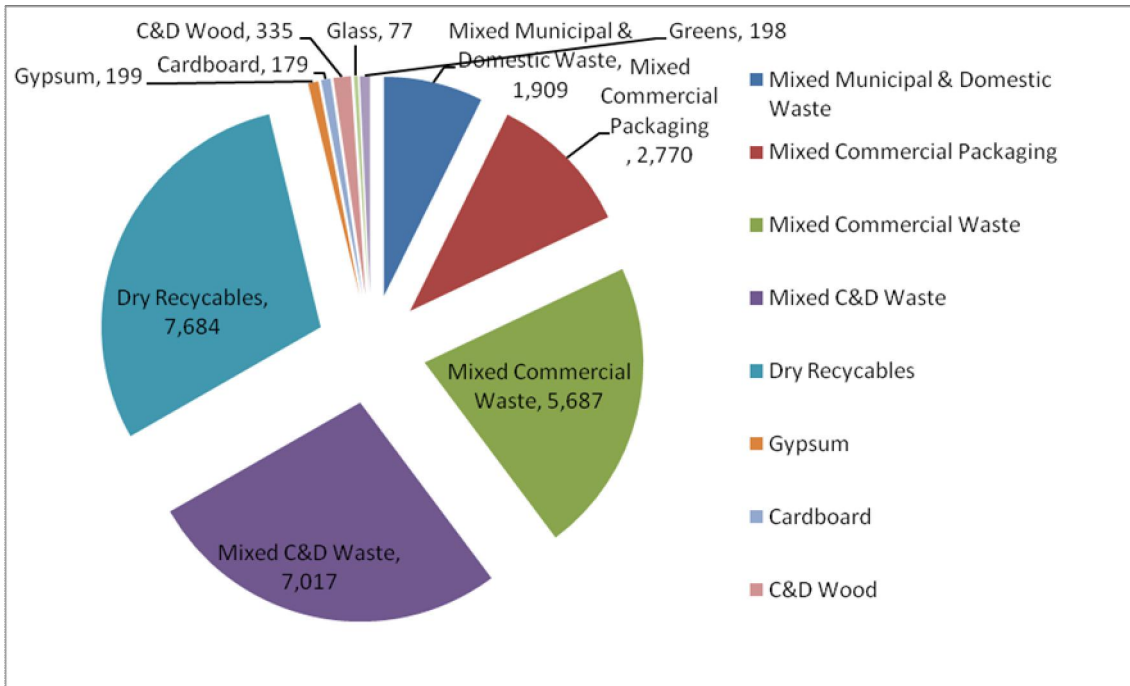
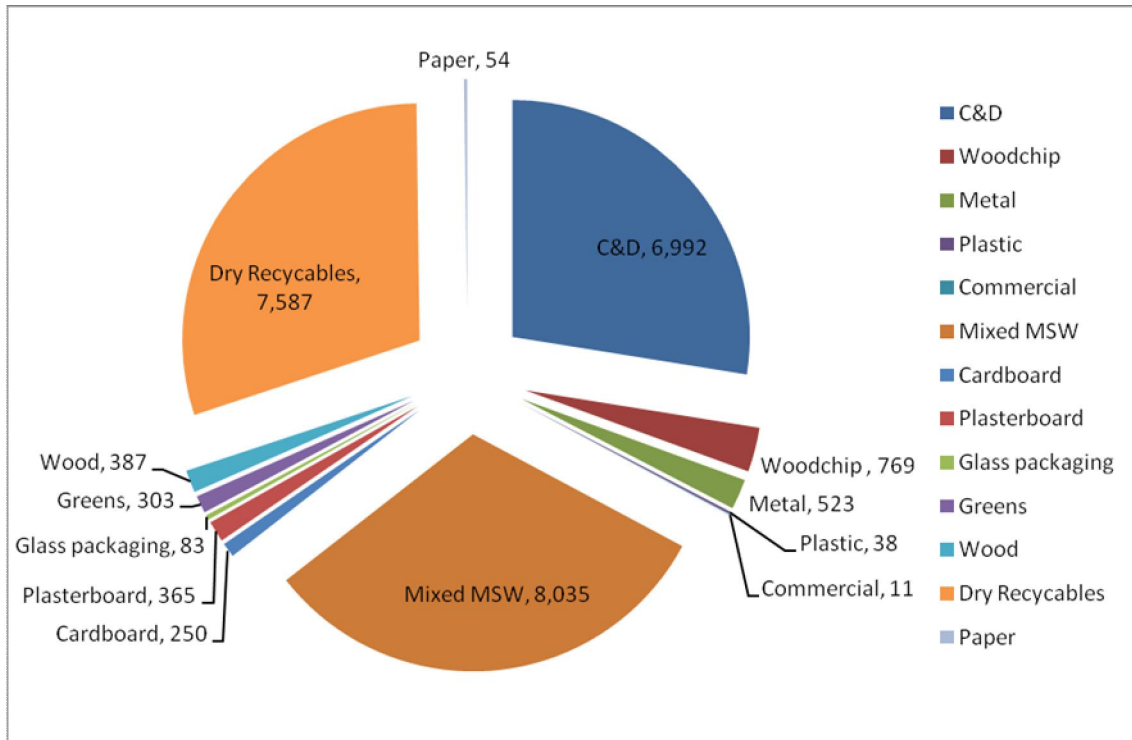


Figure 3.1 Waste Removed from Facility in 2009



3.4. Register of Complaints

Details of all complaints made by the public are recorded in a Complaints Register. Complaints can be registered by contacting the facility manager or staff at the site. The register includes the name of the complainant, the nature of the complaint, the date of the complaint and the actions taken to remedy the complaint. The facility manager signs off the completed form. Operational Procedure 9.3 details the recording of complaints.

3.5. Non-Compliances

Non-compliances were notified to the facility manager following site inspections.

1. Exceedance of licence tonnages.
2. Surface water monitoring at SW1.

3.6. Complaints summaries

No or complaints were received by the facility manager during the reporting period.

3.7. Summary of Resource & Energy Consumption

Table 3.1 presents an estimate of the resources used on-site during the reporting period.

Table 3.1: Estimate of Resources Used On-Site

Resources	Quantities
Diesel	106,000 litres
Hydraulic and Engine Oil	166 litres
Disinfectant	3 litres(concentrate)
Truck Wash Detergent	25 litres
Electricity	9,000 KWH

3.8. On-site Procedures

Current procedures relating to the handling and storage of waste are being developed and will be forwarded to the Agency when completed.

4. ENVIRONMENTAL MONITORING REPORT FOR PREVIOUS YEAR 2009

The following is a summary of the noise, dust, and groundwater quality monitoring and monitoring carried out at the site during 2009.

4.1. Noise Monitoring

The following are the details of the survey as carried out at Ted O' Donoghue and Sons Ltd premises on the 16th July 2009.

The following is a description of the noise sensitive locations monitored during the noise survey and the sources of noise in the area at the time.

The following is a description of the noise sensitive locations monitored during the noise survey and the sources of noise in the area at the time.

Table 4.1: Monitoring Locations

<u>Monitoring Location</u>	<u>Description</u>
N1	<u>Adjacent O Donoghue family residence</u>
N2	<u>South east corner of site adjacent transfer station and workshop</u>
N3	<u>North west corner of site, close to trailer parking area</u>
N4	<u>North east corner of site, close to timber shredder</u>
N5	<u>At sensitive dwelling, north east of site</u>

The results of the noise monitoring at locations N1-N5 is presented in Table 4.2.

Table 4.2 Ambient Measurements (Locations N1-N5)

Monitoring Location	Time and Date	L _{Aeq} , dB(A)	L _{A90} , dB(A)	L _{A10} , dB(A)	Main Noise Sources
N1	16/07/09 14:22-14:52	57.4	44.5	59.3	Trucks entering facility, local traffic.
N2	16/07/09 14:59-15:29	59.8	43.3	60.2	Vehicle movements. Noise from transfer building.
N3	16/07/09 15:36-16:06	58.8	45.5	60.2	Noise from transfer building, site truck movements
N4	16/07/09 16:11-16:41	62.2	47.4	60.3	Traffic on local road, no site noise
N5	16/07/09 16:45-17:15	60.9	46.6	58.9	Traffic on local road, no site noise

Measurements at location N1 were recorded adjacent to the O' Donoghue family residence adjacent to the entrance to the facility with traffic on the local road and access road influencing the ambient levels.

Noise measurements at N2 and N3 were recorded at the north-western and north-eastern corners of the site respectively. Site vehicle movements and the mechanical grab within the transfer station building contributed to the annual were the main noise sources. The average noise levels were recorded at N2 and N3 were 59.8dB(A) and 58.8dB(A) respectively.

The noise from the facility was not considered a major source at locations N4 and N5. Intermittent local traffic movements were the main noise source.

4.2. Dust Deposition Monitoring

The dust gauges were set up at the locations D1, D2, D3 and D4 as listed in Table E.2.2 of the waste licence. The gauges were erected such that the containers were 1.8m above the ground surface and free from any obstruction. The containers were exposed from 2nd June – 3rd July 2009.

The second round of sampling was conducted from 16th July – 17th August 2009.

- D1: This sample location is sited on the western boundary of the site close to the O' Donoghue family residence.
- D2: This sample location is positioned at the south-east corner of the site close to the workshop and transfer building.
- D3: This sample location is at the north-western side boundary
- D4: Located at the north-eastern corner of the facility

RESULTS:

The results of the dust monitoring event are outlined in the table below.

Table 2: Dust Monitoring Results 2nd June – 3rd July 2009

Location	Total Dust mg/m ² /day
D1	132
D2	112
D3	88
D4	239

Table 3: Dust Monitoring Results 16th July – 17th August 2009

Location	Total Dust mg/m ² /day
D1	73
D2	60
D3	91
D4	128

CONCLUSIONS:

The results of the both rounds of dust monitoring at the 4 locations are within the conditions stated in the EPA licence for the facility.

4.3. Groundwater Monitoring

A water sample from an external tap water source GW1 was sampled for analysis in September 2009. This sample is comparable with the drinking water quality in the O' Donoghue residence located adjacent the waste transfer activities. The sample was analysed for parameters as listed in the Schedule C of the waste licence for the facility.

The results of the water monitoring indicate a water quality that complies with the standards in the EC Drinking Water Directive [98/83/EC].

4.4. Storm Water Monitoring

Monthly samples were obtained and analysed from the storm water chamber at the separator. High levels of bacteria were detected in the monitoring chamber during the year. Plans are currently underway to install a waste treatment system to treat the run-off.

Table 5.1: Schedule of Objective and Targets 2010

No.	2010 Objective	Target	Responsibility	Timescale
1	Installation of wastewater treatment system for surface run-off.	Improvement of surface water run-off quality being discharged to land-drain	Facility Manager	Lodge planning application May 2010. Expected approval by August 2010.
2	Installation of equipment to comply with Landfill Directive.	Reduction in organic waste fraction going to landfill.	Facility Manager	August 2010
3	Review options for composting on-site	Reduction in organic waste fraction going to landfill.	Facility Manager	August 2010
4	Maintain and improve the EMS	Continue to hold quarterly and annual Environmental management review meetings at the site.	Environmental Compliance Manager	31 December 2010

4.5. Waste Management Activities

The facility is licensed to accept the following waste types as specified in Schedule A of the Waste Licence: -

- Household,
- Commercial,
- Construction & Demolition,
- Industrial Non-Hazardous Solids

Hazardous waste is not accepted at the facility, with the exception of small quantities of machinery batteries that inadvertently arrive in waste deliveries. Such batteries are stored in a designated skip pending collection by an off-site recycling organisation. Any other materials suspected either to be hazardous or not acceptable under licence conditions (e.g. gas cylinders, sheets of asbestos) are temporarily stored on-site in the waste quarantine area, before removal off-site for treatment/disposal at an appropriate facility.

4.5.1. Household and Commercial Waste Containing Putrescible Materials

Household and commercial wastes (originating in factories, hotels, pubs and supermarkets) containing an organic fraction are either deposited on the floor of the transfer building, or tipped directly into open trailers. All the household waste deposited on the floor is either pushed into an open trailer, or compacted for removal off-site for disposal at an off-site landfill, as agreed with the Agency. The commercial waste is inspected and segregated into recyclable cardboard, bottles, domestic waste, or compactor waste (supermarkets are generally the main origin of this waste). All uncontaminated cardboard and plastic packaging material, which is suitable for baling, is collected for recycling. Drink cans are collected, baled and stored on-site pending removal off-site for recycling. Glass bottles, which are either segregated prior to arrival on-site or deposited at the civic amenity area, are stored on-site pending removal for recycling off-site.

4.5.2. Non Putrescible Household and Commercial Waste

Non putrescible household wastes, arising from the kerbside collection, and non putrescible commercial/industrial waste is deposited onto the floor of the transfer building and inspected for disposable and/or recoverable fractions. Non-recyclable/recoverable waste is stored within the building before transfer for disposal to an off-site landfill, as agreed with the Agency.

4.5.3. Construction and Demolition Waste

All construction and demolition waste is inspected to determine if it is suitable for transfer and/or recovery. Wood and metal are separated using a mechanical grab and subsequently removed off-site to approved recovery/recycling facilities. The residual material is passed through a trommel to remove the fine fraction containing subsoil and topsoil. This material is either used on-site for restoration purposes, or is sold for agricultural and/or horticultural purposes. The heavy fraction from the trommel

containing concrete, brick etc is then passed through the crusher to produce a crushed inert aggregate.

4.5.4. Wood, Timber Waste

Wood delivered to and recovered on-site is shredded and removed off-site for disposal.

4.5.5. Other recovery Infrastructure

External storage bays are located at the facility for storing waste recovered for recycling. Concrete storage bays for soil, rubble green waste and chipped wood are located at the north east of the facility. At the south-west of the waste transfer building there will be bays for glass and scrap metal and also a quarantine area for white and electrical goods.

4.6. Quantity & Composition of Waste Recovered

Details of the quantities of waste recovered are contained in Appendix I.

5. REPORT ON ENVIRONMENTAL NUISANCES & CONTROLS

The site is inspected daily and weekly by the manager and recorded on separate inspection sheets as required by Condition 8.10. The daily inspection sheet records environmental nuisances such as flies, loose litter, vermin, birds, odour, dust, fires and complaints. The sheet also provides for the recording of descriptions of works on the day of inspection and provides for comments and required actions.

5.1. Litter Control

Litter picking is carried out daily and as required. Daily and weekly inspection sheets are maintained at the site office. The site manager carries out daily litter inspection in the area surrounding the waste transfer station. An overhead CCTV camera is located at the weighbridge to enable inspection of loads brought to the facility. The weighbridge operator inspects each load brought to the facility and ensures that they are covered with appropriate netting.

Weekly inspection sheet provides for the recording of nuisances as well as site security, infrastructure and housekeeping.

A road sweeper vehicle attachment has been procured for use on the site and for local access roads when required.

5.2. Odour Control

Operations at the waste transfer facility involve the transfer and compaction of solid waste only. No liquids, agricultural or sewage sludges will be accepted at the site.

Waste accepted at the facility will have generally undergone relatively little decomposition. The storage of waste in sealed containers following compaction and

fast turnaround times on site means that the potential for odour problems arising at the facility will be minimised.

5.3. Dust Control

In dry weather all site access roads will be sprayed with a water bowser to suppress dust. To minimise dust generation traffic restrictions on the site will be implemented including a speed limit of 15 mph. Dust deposition monitoring at the site show that present dust emissions are unlikely to cause a nuisance.

However management propose to implement the following mitigation measures:

- Sprinkling water by applying a fine water mist over dusty waste as it's unloaded inside the transfer building
- Covering/dampening any external dusty waste stockpiles of C&D waste
- Sweeping and washing down the transfer building floor regularly
- Using a road sweeper on the facility yard and local road during dry weather

Dust deposition levels were recorded twice a year using Bergerhoff gauges, during the period May to September.

5.4. Noise Control

Noise measurements have been recorded annually at the facility since 2003. The results from the monitoring indicate that noise from the facility is not a source of nuisance outside the perimeter of the facility. The doors of the waste transfer building remain closed during trommeling of waste. There have been no reports of noise nuisance complaints made to the facility manager.

Noise levels will continue to be monitored annually at locations. The L_{Aeq} , L_{A10} and L_{A90} are monitored at each location for a thirty-minute duration.

5.5. Vehicles and Road Sweeping

In accordance with licence conditions a wheel wash has been installed on site. All vehicles leaving the facility must use the dry wheel wash prior to exiting the site. Signs directing vehicles to the wheel wash will be erected. New waste hauliers entering the site will be informed by the weighbridge operator of on-site procedures.

In the event that mud and debris is carried from the site onto the public road the facility manager will arrange that the road be cleaned with the road sweeper.

The site roads will be maintained in a clean and tidy state at all times. This will eliminate any potential for soiling of the public road outside the site.

Environmental monitoring at the site will be carried out in accordance Schedule F of the waste licence. The following environmental parameters will be monitored:

- Dust
- Noise
- Surface Water
- Groundwater
- Odour

APPENDIX I

WASTE RECORDS

Transfer Destination	EWC Code	Quantity (Tonnes per Year)	Description of Waste	Waste Treatment Operation	Method Used	Location of Treatment	Name and Licence/Permit No of Recover/Disposer	Haz Waste : Address of Next Destination Facility Non Haz Waste: Address of Recover/Disposer
Within the Country	19 12 12	11.0	Mixed municipal	D1	Weighed	Onsite in Ireland	Cork Mini Skips,CK 62/01	Churchfield Industrial Estate,Cork,,,,Ireland
Within the Country	19 12 12	4387.0	Mixed municipal	D1	Weighed	Onsite in Ireland	Cork City Landfill Kinsale Road,W0012-02	Kinsale Road,Cork,,,,Ireland
Within the Country	19 12 12	3668.0	Mixed municipal	D1	Weighed	Onsite in Ireland	Youghal Landfill,W0068-01	Foxhole,Youghal,Cork,,Ireland
Within the Country	19 12 12	758.0	Mixed C&D	D1	Weighed	Onsite in Ireland	Youghal Landfill,W0068-01	Foxhole,Youghal,Cork,,Ireland
Within the Country	20 02 01	303.0	Green waste	R11	Weighed	Onsite in Ireland	CTO,W0012-02	Kinsale Road Landfill,Kinsale Road ,Cork,,Ireland
Within the Country	19 12 09	3063.0	Soil and stone	R10	Weighed	Onsite in Ireland	Kevin McCarthy,395/07	Cork,,,,Ireland
Within the Country	19 12 09	1937.0	Soil and stone	R10	Weighed	Onsite in Ireland	John A Wood,CK213111	Ballygarvan,Cork,,,,Ireland
Within the Country	19 12 09	1235.0	Rubble	R10	Weighed	Onsite in Ireland	Bernard O Mahony,CKS 509/07	,,Cork,,Ireland
Within the Country	19 12 07	387.0	Timber	R1	Weighed	Onsite in Ireland	Eras Eco,W0211-01	Foxhole,Youghal,Cork,,Ireland
Within the Country	19 12 07	762.0	Woodchip for sale locally	R5	Weighed	Onsite in Ireland	Various local farmers,Used for agricultural purposes	Local,,,,,Ireland
Within the Country	19 12 05	83.0	Glass	R5	Weighed	Onsite in Ireland	Jackie Whelan Quarries,15/05wpt/cl	Tullagower,Clare,,,,Ireland
Within the Country	19 12 04	38.0	Plastic	R5	Weighed	Onsite in Ireland	Bernard O' Brien,WP/CKS???	Waterfall,Cork,,,,Ireland
Within the Country	19 12 03	191.0	Scrap metal	R4	Weighed	Onsite in Ireland	Cork Metal,.	Dublin Hill,,,,,Ireland
Within the Country	19 12 03	115.0	Metal	R4	Weighed	Onsite in Ireland	National Recycling,1462/04	J Connelly Ind Estate,Churchfield ,Cork,,Ireland
Within the Country	19 12 03	217.0	Scrap metal	R4	Weighed	Onsite in Ireland	MSM Recycling,.	Mountmellick,,,,Co. Laois,Ireland
Within the Country	19 12 01	243.0	Cardboard	R3	Weighed	Onsite in Ireland	Gaelic Environmental,.	Whites Cross ,,Cork,,Ireland
Within the Country	19 12 01	54.0	Paper	R3	Weighed	Onsite in Ireland	Veolia,.	Forge Hill,,Cork,,Ireland
Within the Country	17 08 02	365.0	Plasterboard	R5	Weighed	Onsite in Ireland	Gypsum Recycling,.	Meath,,,,,Ireland
Within the Country	15 01 07	10.0	Glass packaging	R5	Weighed	Onsite in Ireland	Glass Recycling,.	Cco. Tyrone,,,,,Ireland
Within the Country	20 01 39	7587.0	Recyclables	R5	Weighed	Onsite in Ireland	Regen,.	Carnbane Ind Estate,Newry,,,,Ireland