

Annual Environmental Report.

Waterford Plating Limited.

Unit 605/606/655 Northern Industrial Estate.

Waterford.

2010.

Prepared By:.....

Edward Roche.

General Manager.

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Summary

Environmental management and improvements in the Waterford Plating plant led to spending of €54550.00 during 2010. This is a substantial sum for a company employing only 10 staff.

Effluent and Laboratory Chemistry	€6000.00
Salaries and Wages.	€24,000.00
Exit Audit	€3,500.00
Repairs And Maintenance	€2000.00
Equipment	€2000.00
General Waste Disposal / Sludge	€16,550.00
Reports	€500.00
Total	€54550.00

The overall environmental achievements during 2010 are listed below:

- Reduction of mass loadings in vast majority of parameters.
- Good recycling procedures in place
- Improved environmental practice carried out at facility
- Hexavalent chrome reduced on Zinc plating operations.
- Completion of Exit Audit.

Section 1 Introduction

1.1 Description of Waterford Plating Company Ltd activity

Waterford Plating Company Ltd (WPL) is one of the leading sub-contract surface treatment facilities in Ireland, and was formed in 1991.

Site Description

WPL has grown from employing 3 to currently 12 full and part-time staff at our site. Waterford Plating Company Ltd consists of a 17,000 sq. ft. facility in the heart of the city's industrial area.

Manufacturing begins with customer components being delivered to the factory. These products are both ferrous and non ferrous metals. Once loaded on appropriate jigs components are transferred to the specified surface treatment processes.

There are several surface treatment processes provided including

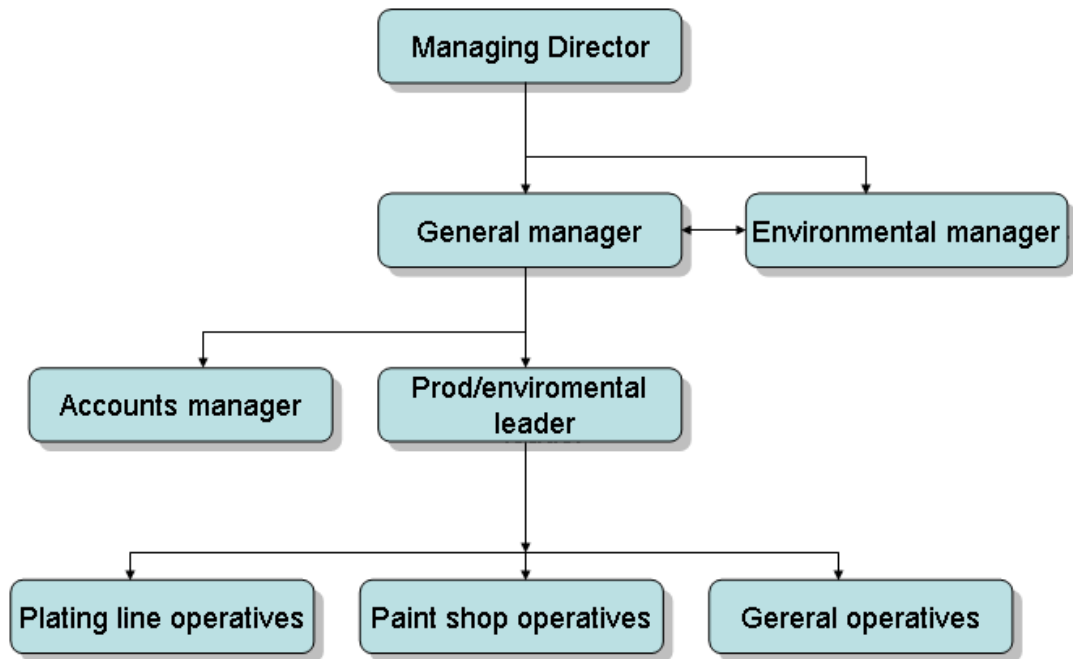
- Zinc plating with colour or clear passivation
- Phosphate conversion coating as a paint pretreatment.
- Chromate conversion coatings as a paint pretreatment.

Components are dried in a hot air oven. If painting is required components are transferred to the paint shop area, loaded on appropriate jigs and then they may be either

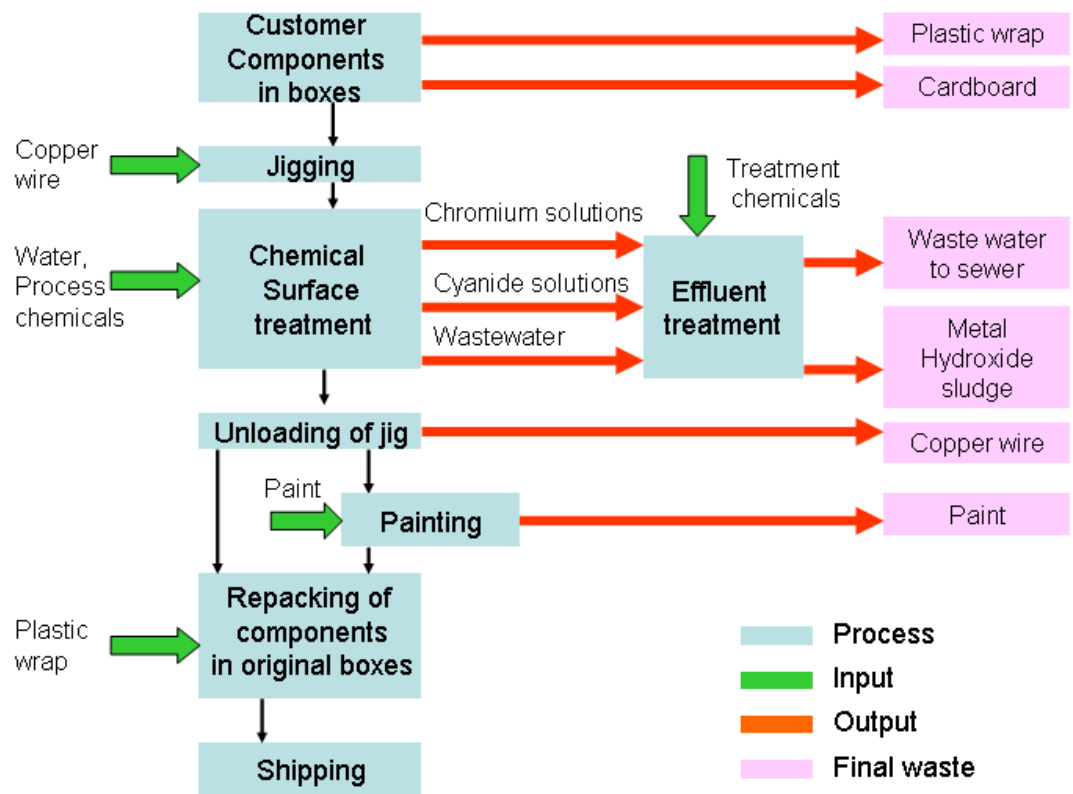
- Wet painted
- Powder painted.

Following painting components are passed through a conventional gas fired oven for curing. Quality control checks are performed; components are then repacked into returnable box or crate in which they arrived.

Site Organisational Chart



Flow Chart of Plant



1.2 Environmental policy

Waterford Plating Company Ltd **Environmental Policy**

It is the policy of Waterford Plating Company Ltd to conduct its business in a manner that protects the environment of the customers, employees and the communities in which it operates.

Waterford Plating Company Ltd is committed to complying with all national and European environmental legislation and regulations to prevent pollution at source.

By annual review of our Environmental Management System, Waterford Plating Company Ltd is dedicated to continuous improvement through waste minimisation.

Waterford Plating Company Ltd will provide services that cause minimum impact on the environment ensuring conservation of natural resources, by integrating and promoting environmental considerations into our surface treatment service.

This environmental policy will be communicated to all Waterford Plating Company Ltd employees and is available to the public.

Waterford Plating Company Ltd will endeavour to communicate to and train all employees in environmental awareness and relevant procedures.

Date _____

Jim Kelly
Managing Director

Eddie Roche.
General Manager

2 Summary Information

2.1 Emissions to sewer emissions point SE - 1

	Maximum licensed emission per year	2003	2004	2005	2006	2007	2008	2009	2010
Volume m ³	36500	7948	6465	4705	3231	2768	2023	2240	1570
Suspended Solids	4562.5	54.31	34.45	23.90	13.18	11.79	6.48	5.54	3.14
BOD	3650	15.9	12.12	13.01	4.85	5.09	4.05	4.48	3.14
COD	9125	51	60.64	48.61	38.52	21.08	17.17	11.32	9.81
Chloride		304.6		416	142.6	102.2	60.72	48.74	32.62
Nitrate	1095	41.6	21.39	17.22	11.95	10.33	7.01	5.82	3.64
Sulphate	3650	252.3	195.0	117.2	83.14	91.32	52.93	66.23	42.15
Cyanide	7.3	3.29	0.646	0.257	0.09	0.039	0.01	0.01	0.01
Fats, oils and greases	365	60.93	44.73	23.52	12.64	4.86	2.58	2.24	1.57
Total Chromium	18.25	0.62	0.581	0.235	0.24	0.08	0.05	0.01	0.01
Copper	18.25	0.32	0.258	0.325	0.07	0.09	0.24	0.28	0.03
Zinc	18.25	17.16	1.810	1.755	0.49	0.19	0.07	0.22	0.04
Phosphate	182.5	4.76	0.581	1.033	0.53	0.36	0.35	0.10	0.07
Aluminium		1.18		0.324	0.16	0.36	0.28	0.10	0.05

The figures above indicate a decrease in water consumption on 2010 due to the introduction of a cooling system with recycled water. The mass loadings emitted to sewer show a corresponding reduction on most elements.

2.2 Emissions To Air.

Emissions to atmosphere monitoring was completed in 2009 on the emission points A2-1, A2-2 and A2-3. There was no monitoring completed in 2010 due to the submissions on the licence surrender and the figures below are based on the 2009 monitoring.

Emission Point: A2-1. Wet Spray Booth.

Substance Monitored.	Emission Limit Value. Mg/Nm3	Results mg/Mm3	Stack Flow Rate Nm3/Hr.	Limit. Nm3/Hr.
TA Luft Organics Class I	20	<0.092	3655	5640
TA Luft Organics Class II	100	5.33		
TA Luft Organics Class III	150	8.92		

Emission Point A2-2. Dry Spray Booth.

Substance Monitored.	Emission Limit Value. Mg/Nm3	Results mg/Mm3	Stack Flow Rate Nm3/Hr.	Limit. Nm3/Hr.
Total Particulates	20	16.6	6473	7165
PM10	-	2		
Chromium	-	0.0243		
Lead	-	0.0024		
Zinc	-	0.3181		

Emission Point A2-3. Wet/Dry Spray Booth.

Substance Monitored.	Emission Limit Value. Mg/Nm3	Results mg/Mm3	Stack Flow Rate Nm3/Hr.	Limit. Nm3/Hr.
Total Particulates	20	8.0	8921	10270
PM10	-	0.7		
TA Luft Organics Class I	-	<0.086		
TA Luft Organics Class II	-	0.688		
TA Luft Organics Class III	-	<0.086		

2.3 Waste Produced

Non-hazardous

Waterford Plating segregates cardboard/paper, copper wire and chemical drums from general waste.

- Cardboard/paper and general wastes are removed off site by Veolia, who recycle the cardboard and paper, and transfer the general waste to Powers Town Landfill Carlow.
- Copper wire is recycled by Mr. Luke Mulrooney, scrap metal merchant working for Hegarty Metals Waste Permit No.WP05-04.
- Chemical drums are returned to the chemical supplier. Waste cyanide drums are cleaned, tested and recycled with waste metal management company Hegarty Metals.

The following table gives a break down of waste produced at Waterford Plating during 2010.

Waste	Quantity	Disposal Contractor
Cardboard/paper	1360 Kg.	Veolia. Lic. No. WO177-03
General waste	2140Kg.	Veolia
Copper wire	N/A	Hegarty Metals.
Steel	N/A	Hegarty Metals

Hazardous waste

Waterford Plating produces two forms of hazardous waste, paint sludge and metal hydroxide precipitate. Both wastes are removed off site by Rialta Environmental. During 2010 hazardous 2 batches of waste as listed below was removed from Waterford Plating by Rialta Environmental. C1 forms and certificates of disposal are available on site. The volumes of waste generated for 2010 was a direct result of the exit audit preparation and recommendations.

Waste Type. / EWC.	Disposal Contractor	2010
Paint Sludge (08 01 11)	Rialta Environmental Ltd.	5330 Kg.
Plating Sludge (11 01 09)	Rialta Environmental Ltd.	15640 Kg.

2.4 Energy and water used

Energy consumption

Waterford Plating uses natural gas and electricity to perform its work. Electricity is used to heat process tanks, run dosing equipment and drying ovens etc. Natural gas is used for dryer units. The table below shows the consumption of both resources over the past 8 years. 2001 to 2006 represents M³ liquid propane. 2007 onwards is M³ Natural Gas.

Resource	Unit	2003	2004	2005	2006	2007	2008	2009	2010
Gas	M ³ /yr	11.39	11.40	10.65	7.81	13652	14242	12333	10079
Electricity	MWhr	396.5	461.5	405.0	234.7	340	231.7	185.0	170.4

Water consumption

All water is supplied by Waterford Corporation and during 2010 the processed water amounted to 1570m³.

Parameter	Unit	2003	2004	2005	2006	2007	2008	2009	2010
Water Usage	m ³ /yr	7948	6465	4705	3231	2768	2023	2240	1570

2.5 Environmental Incidents and complaints

There were no Environmental Incidences or complaints in 2010.

2.6 Reports sent to EPA

Topic	Number
Audit Report	1.
Environmental Exit Audit	1.
General Correspondance	3.

3. Management Of The Activity.

3.1 Review of residuals management plan.

The Residual Management Plan was reviewed in conjunction with the current operations and there were no changes to the document.

3.2 Environmental Programme 2010 (report)

Introduction / Progress.

The main input for the first half of 2010 was the completion of the surrender of the IPPC licence. Further to correspondence received in September 2009 the company set about supplying all requested information on the surrender of the licence. At the request of the EPA a full Environmental Exit Audit was completed in April 2010 and a report submitted to the agency with all other requested information. A request for further information dated 29th. June was replied to in detail by the company on the 26th July. Following a site visit in September by Dr. Magnus Amajirionwu and a further request for information which was supplied by the company in November it was agreed that the licence surrender would be completed in early 2011. On writing this report the surrender of the licence has been accepted by the Agency and sealed by the seal of the agency on the 7th. February 2011.

3.3 Environmental Programme 2011 (proposal)

We will continue to implement environmental load minimisation and strengthen our efforts in recycling.



[PRTR# : P0280 | Facility Name : Waterford Plating Company Limited | Filename : P0280_2010.xls | Return Year : 2010]

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[Guidance to completing the PRTR workbook](#)

AER Returns Workbook

Version 1.1.12

REFERENCE YEAR	2010
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1. FACILITY IDENTIFICATION

Parent Company Name	Waterford Plating Company Limited
Facility Name	Waterford Plating Company Limited
PRTR Identification Number	P0280
Licence Number	P0280-02

Waste or IPPC Classes of Activity	No.	class name
	12.3	The surface treatment of metals and plastic materials using an electrolytic or chemical process where the volume of the treatment vats exceeds 30 m3.

Address 1	Unit 605/606/655
Address 2	Northern Industrial Estate
Address 3	Old Kilmeadan Road
Address 4	Waterford
Country	Ireland
Coordinates of Location	-7.14581 52.2556
River Basin District	IESE
NACE Code	2561
Main Economic Activity	Treatment and coating of metals
AER Returns Contact Name	Edward Roche
AER Returns Contact Email Address	edwroche@eircom.net
AER Returns Contact Position	General Manager
AER Returns Contact Telephone Number	051-378695
AER Returns Contact Mobile Phone Number	087-2355327
AER Returns Contact Fax Number	051-378778
Production Volume	0.0
Production Volume Units	
Number of Installations	1
Number of Operating Hours in Year	1950
Number of Employees	10
User Feedback/Comments	
Web Address	

2. PRTR CLASS ACTIVITIES

Activity Number	Activity Name
2(f)	Installations for surface treatment of metals and plastic materials using an electrolytic or chemical process

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

Is it applicable?	No
Have you been granted an exemption?	No
If applicable which activity class applies (as per Schedule 2 of the regulations)?	
Is the reduction scheme compliance route being used?	

4.1 RELEASES TO AIR

[Link to previous years emissions data](#)

IPRTA: PO280 | Facility Name: Waterford Plating Company Limited | File Name: PO280_2010.xls | Return Year: 2010

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SECTION A: SECTOR SPECIFIC PRTR POLLUTANTS

POLLUTANT		METHOD			Please enter all quantities in this section in KGs			QUANTIFY		
No. Annex I	Name	M/C/E	Method Code	Designation or Description	Emission Point 1	Emission Point 2	Emission Point 3	T (Total) KG/Year	A (Accidental) KG/Year	F (Fugitive) KG/Year
19	Chromium and compounds (as Cr)	M	EN 14385:2004	Estimate on previous year data	0.3	0.0	0.0	0.3	0.0	0.0
23	Lead and compounds (as Pb)	M	EN 14385:2004	Estimate on previous year data	0.63	0.0	0.0	0.63	0.0	0.0
86	Particulate matter (PM10)	M	OTH	Estimate on previous year data. USEPA M 201A	25.24	12.17	0.0	37.41	0.0	0.0
24	Zinc and compounds (as Zn)	M	EN 14385:2004	Estimate on previous year data	4.0	0.0	0.0	4.0	0.0	0.0

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

SECTION B: REMAINING PRTR POLLUTANTS

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

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

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

POLLUTANT		METHOD			Please enter all quantities in this section in KGs			QUANTIFY		
Pollutant No.	Name	M/C/E	Method Code	Designation or Description	Emission Point 1	Emission Point 2	Emission Point 3	T (Total) KG/Year	A (Accidental) KG/Year	F (Fugitive) KG/Year
230	TA Luft organic substances class 1	M	EN 13649:2001	Estimate on previous year data	0.655	1.49	0.0	2.145	0.0	0.0
231	TA Luft organic substances class 2	M	EN 13649:2001	Estimate on previous year data	37.98	11.96	0.0	49.94	0.0	0.0
232	TA Luft organic substances class 3	M	EN 13649:2001	Estimate on previous year data	63.57	1.49	0.0	65.06	0.0	0.0
244	Total Particulates	M	OTH	Estimate on previous year data: EN 13294-1	0.0	139.16	209.53	348.69	0.0	0.0

* Select a row by double-clicking on the Pollutant Name (Column B) then click the edit 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 at their facilities to accompany the figures for total methane generated. Operators should also report their total methane (CH4) emission to the environment under 'Total' KG/yr for Section A: Sector specific PRTR pollutants above. Please complete the table below:

Landfill: Waterford Plating Company Limited

Please enter summary data on the quantities of methane flared and/ or utilised

T (Total) kg/Year	M/C/E	Method Used		Facility Total Capacity m3 per hour
		Method Code	Designation or Description	
Total estimated methane generation (as per site model)	0.0			N/A
Methane flared	0.0			0.0 (Total Flaring Capacity)
Methane utilised in engines	0.0			0.0 (Total Utilising Capacity)
Net methane emission (as reported in Section A above)	0.0			N/A

4.3 RELEASES TO WASTEWATER OR SEWER

[Link to previous years emissions data](#)

[PRTR#: PO280 | Facility Name: Waterford Pulping Company Limited | Filename: PO280_2010.xls | 13/05/2011 11:12

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SECTION A: PRTR POLLUTANTS									
OFFSITE TRANSFER OF POLLUTANTS DESTINED FOR WASTE-WATER TREATMENT OR SEWER					Please enter all quantities in this section in KGs				
POLLUTANT		METHOD			QUANTITY				
No. Annex II	Name	M/C/E	Method Code	Designation or Description	SE-1 Emission Point 1	T (Total) KG/Year	A (Accidental) KG/Year	F (Fugitive) KG/Year	
78	Chlorides (as Cl)	M	CRM	Method 4500-Cl-E Colorimetry Standard Method For The Examination Of Water And Waste Water APHA.		32.82	32.82	0.0	0.0
19	Chromium and compounds (as Cr)	M	CRM	Method 3125B ICP-MS Standard Method For The Examination Of Water And Waste Water APHA.		0.01	0.01	0.0	0.0
20	Copper and compounds (as Cu)	M	CRM	Method 3125B ICP-MS Standard Method For The Examination Of Water And Waste Water APHA.		0.03	0.03	0.0	0.0
82	Cyanides (as total CN)	M	CRM	Method 4500-Norg D Colorimetry Standard Method For The Examination of Water And Waste Water APHA.		0.01	0.01	0.0	0.0
13	Total phosphorus	M	CRM	Method 4500-P-E Digestion/Colorimetry Standard Method For The Examination of Water and Waste Water APHA.		0.07	0.07	0.0	0.0
24	Zinc and compounds (as Zn)	M	CRM	Method 3125B ICP-MS Standard Method For The Examination Of Water And Waste Water APHA.		0.04	0.04	0.0	0.0

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

SECTION B: REMAINING POLLUTANT EMISSIONS (as required in your Licence)									
OFFSITE TRANSFER OF POLLUTANTS DESTINED FOR WASTE-WATER TREATMENT OR SEWER					Please enter all quantities in this section in KGs				
POLLUTANT		METHOD			QUANTITY				
Pollutant No.	Name	M/C/E	Method Code	Designation or Description	SE-1 Emission Point 1	T (Total) KG/Year	A (Accidental) KG/Year	F (Fugitive) KG/Year	
355	Aluminium	M	CRM	Method 3125B ICP-MS Standard Method For The Examination of Water and Waste Water APHA. Method 5210B.		0.05	0.05	0.0	0.0
383	BOD	M	CRM	Electrometry Standard Method For The examination of water and waste water APHA.		3.14	3.14	0.0	0.0
388	COD	M	CRM	Method 5220 D Colorimetry Standard Method For The Examination Of Water And Waste Water APHA.		9.81	9.81	0.0	0.0
388	Detergents (as MBAS)	M	CRM	Method 5540 C. Solvent Extraction / Gravimetry Standard Method For The Examination of Water And Waste Water APHA.		0.15	0.15	0.0	0.0
314	Fats, Oils and Greases	M	CRM	Method 5520 B. Solvent Extraction / Gravimetry Standard Method For The Examination Of Water And Waste Water APHA.		1.57	1.57	0.0	0.0
327	Nitrate (as N)	M	CRM	Method 4550-NO3H Colorimetry Standard Method For The Examination of Water And Waste Water APHA.		3.84	3.84	0.0	0.0

Please enter all quantities on this sheet in Tonnes

Transfer Destination	European Waste Code	Hazardous	Quantity (Tonnes per Year)	Description of Waste	Waste Treatment Operation	Method Used		Location of Treatment	Haz. Waste - Name and Licence/Permit No of Next Destination Facility Haz. Waste - Name and Licence/Permit No of Recover/Disposer	Non Haz. Waste - Address of Next Destination Facility Non Haz. Waste - Address of Recover/Disposer	Name and License / Permit No. and Address of Final Recoverer / Disposer (HAZARDOUS WASTE ONLY)	Actual Address of Final Destination i.e. Final Recovery / Disposal Site (HAZARDOUS WASTE ONLY)
						M/C/E	Method Used					
Within the Country	15 01 01	No	1.36	paper and cardboard packaging	R3	M	Weighed	Offsite in Ireland	Veolia,W0177-03	Carrigard,Six Cross Roads,Waterford,,Ireland		
Within the Country	20 03 01	No	2.14	mixed municipal waste	D1	M	Weighed	Offsite in Ireland	Veolia,W0177-03	Carrigard,Six Cross Roads,Waterford,,Ireland		
Within the Country	08 01 11	Yes	5.33	waste paint and varnish containing organic solvents or other dangerous substances	D9	M	Weighed	Offsite in Ireland	Rialta Environmental,192-2	Greenogue Business Park,Rathcoole,Co. Dublin,,Ireland	Avalstoffen Terminal Moerdijk B.V.,821780,Industrieterrein- Seaport M152,Vasweg 12,Moerdijk,NL 4782 PW,Netherlands Revatech SA,Not Available	Industrieterrein-Seaport M152,Vasweg 12,Moerdijk,NL 4782 PW,Netherlands
Within the Country	11 01 09	Yes	15.64	sludges and filter cakes containing dangerous substances	D9	M	Weighed	Offsite in Ireland	Rialta Environmental,192-2	Greenogue Business Park,Rathcoole,Co. Dublin,,Ireland	Available,Rue De l'Île Morsain 95,,B-4020 Liege,,Belgium	Rue De l'Île Morsain 95,,B-4020 Liege,,Belgium

* 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](#)